

**PRELIMINARY IDENTIFICATION OF PROTECTIVE AND RISK FACTORS FOR  
SUICIDAL BEHAVIOURS AMONG INDIGENOUS ADULTS LIVING IN TORONTO**

PARYA BAHRAMPOUR

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## **Abstract**

**Background:** Suicide rates for Indigenous people living in many areas in Canada are higher than those of the general Canadian population.

**Objective:** To identify protective and risk factors for suicidal thoughts and behaviours in the Indigenous community living in Toronto.

**Database:** *Our Health Counts Toronto* database, the largest urban Indigenous health study of 897 Indigenous adult participants (15+), was analyzed.

**Methods:** Conducted modified logistic regression utilizing R and SAS software across six domains:

- i) Self and Community Relationship
- ii) Social Determinants of Health
- iii) Health / Exercise
- iv) Family / Social Support
- v) Substance Use
- vi) Cultural Identity / Resources

**Results:** Factors associated with higher suicidality include substance use and challenges accessing cultural ceremonies, while protective factors include full-time employment, and education.

**Conclusion:** Socio-demographic factors are associated with risk of suicide. Cultural and structurally relevant factors and interventions may reduce the risk of suicide in the urban Indigenous community.

*Keywords:* Indigenous Peoples, suicide, suicidal thoughts, urban Indigenous

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## **List of Acronyms**

AHACs	Aboriginal Health Access Centers
CMHA	Canadian Mental Health Association
FNMI	First Nations, Métis, and Inuit
OHC	Our Health Counts
OHCT	Our Health Counts Toronto
OHC-UHDP	Our Health Counts - Urban Aboriginal Health Database Project
RDS	Respondent Driven Sampling
REB	Research Ethics Board
TARP	Toronto Aboriginal Research Project
WHO	World Health Organization

## **1. Introduction**

The Indigenous population in Canada (which for the purposes of this paper refers to First Nations, Inuit and Métis Peoples) faces many challenges. One serious challenge is suicidality, or suicidal thoughts and behaviours. According to the World Health Organization (WHO) (2016), the overall suicide rate for all Canadians was approximately 12-14 per 100,000 people. In Canada, suicide rates are two times higher among the Indigenous populations, compared to the general Canadian population (Crawford, 2018). McQuaid et al. (2017) found that in a nationally representative sample of First Nations adults living on-reserve in Canada from 2008 to 2010, 22% reported having suicidal thoughts, which is significantly larger than the general Canadian population's reported suicidal thoughts rate of 9%. Furthermore, within the study they found that 13% First Nations adults living on-reserve attempted suicide (McQuaid et al., 2017). In one particular Indigenous community in Nunavut, it was found that suicide accounted for 27% of all deaths since 1999, placing it as one of the highest concentrated suicide rates in the entire world (Khan, 2008). According to Khan (2008), the national First Nations suicide rate, for those living on-reserve and off-reserve, is estimated to be approximately double the average suicide rate for the general Canadian population, and there are indications that this rate will continue to rise, particularly among youth (Khan, 2008).

The high rates of suicide, violence and alcoholism can be understood as a result of historical and ongoing impacts of colonialism and land disruptions as well as subsequent impacts from the external dominant culture (Kirmayer, 2000). These consequences include the introduction of residential schools, the assimilation process and the annihilation of language and culture from the younger generations that caused a rift in families and the passing down of

traditions (Kirmayer, 2000). As a result, distress is transmitted among generations from these traumatic events and has also resulted in a state of high suicide rates (Kral, 2012).

Suicide as a social problem among Indigenous communities has been well explored in literature, including government interventions and the subsequent radical interference with kin relationship, roles, and responsibilities (Kral, 2012). In particular, colonialism, displacement, and land appropriations all have effects on the stability of a society and trickle into livelihoods, and translate into mental health challenges (Axelsson, Kukutai & Kippen, 2016). Elias et al. (2012) theorize that suicidal behaviors amongst Aboriginal peoples could be an effect of mass distress experienced from colonization. Physical displacement of Indigenous people from their Native lands can be traced back to as early as first contact with the Europeans (Henderson & Wakeham, 2009). Examples of such interventions also exist in more recent times, as in the case where the government relocated the Inuit communities from their land camps, which they had occupied for more than 800 years, into crowded settlements between the 1950s and 1970s (Kral, 2012). The subsequent impacts of the Inuit being forced to adapt to a different, external dominant culture and system greatly impacted social roles and responsibilities and by extension relationships amongst kin and beyond. For example, during the relocation program, the government placed children in day schools and others in residential schools. Furthermore, given the lack of hunting grounds many of the men were forced to pursue alternatives and become labourers, while the lack of jobs meant that many were unemployed and became welfare recipients (Kral, 2012).

Despite the challenges that result from such serious historical and ongoing experiences, there is also a lack of psychiatric and psychological support and resources (Elias et al., 2012). The gaps are accentuated by the fact that the communities and reserves oftentimes have



inequities in access to health programs, and lack of adequate services or resources to assist with these unique challenges (Elias et al., 2012). The underlying challenges and causes of poor health among the Indigenous communities are related to the ways in which colonialism continue to shape the social, political and economic status of the Indigenous people (Czyzewski, 2011). The marginalization that Indigenous people have experienced on all levels, including racism, are major factors that can contribute to high suicide rates.

The aim of this study is to investigate the protective and risk factors associated with suicidal thoughts and behaviors in the urban Indigenous community in Toronto. Following consultation with the literature and extensive discussion with our Indigenous community partners, six key domains within the *Our Health Counts Toronto* (OHCT) (2013) survey were selected for further investigation as explanatory variables for suicidal behaviour in our analysis. These six domains are:

- i) Relationship to self and community
- ii) Social determinants of health (income, etc.)
- iii) General health and exercise
- iv) Relationship to family and social support
- v) Substance use (smoking, alcohol, prescription drugs)
- vi) Relationship of identity to culture and cultural resources

The large-scale survey of the urban Toronto Indigenous population used for this analysis was derived using respondent driven sampling (RDS), which was an effective methodology to achieve a representative sample of the urban Indigenous community.

## **2. Manuscript**

### **Contributor Roles and Responsibilities**

Parya Bahrapour is the lead author of this study and was responsible for all aspects of the project, including data cleaning, coding, analyses and writing the initial draft of the manuscript. The manuscript was circulated to her supervisor, Michael Rotondi, committee members, Chris Ardern and Michelle Firestone, and Indigenous community partner, Cheryllee Bourgeois for their feedback, assistance with interpretations and approval. Permission to access this database was granted by the data custodians, Sarah Wolfe and Cheryllee Bourgeois of Seventh Generation Midwives Toronto (SGMT) in accordance with our community-based framework. Sarah Wolfe and Cheryllee Bourgeois both identified the area of suicide and its potential risk/protective factors as a community priority and supported identification of appropriate variables and interpretation in the Indigenous health context. The original Our Health Study was co-led by Janet Smylie and Sarah Wolfe and has been reviewed and approved by the research ethics board of St. Michael's Hospital (REB no: 14-083). As it was a planned analysis of this database, no further ethics approval was required from York University. Although this thesis has been vetted by Seventh Generation Midwives Toronto, the opinions in this thesis do not necessarily reflect those of SGMT and SGMT reserves the right to their own interpretations of this work and analyses.

### **2.1 Background**

Around the world, suicide rates are generally higher among Indigenous peoples than non-Indigenous peoples (Clifford, Doran & Tsey, 2013). In Canada, suicide-related risk factors, triggers, and preventive measures among Indigenous people had been examined among First Nations and Inuit communities, living both on and off reserve (e.g. Khan, 2008; Smylie et al.,

2011). However, there is minimal research on Indigenous peoples living in urban areas, despite the majority of Indigenous peoples now living in cities (Clifford, Doran & Tsey, 2013). Chandler and Lalonde (1998, 2008) conducted research on suicide rates within British Columbia and found that urban communities had a much higher rate than the rural and remote communities. However, their focus was on youth segments and though they did categorize the sample according to band and tribal council affiliation, language group, and population density, they did not delve as deep into other socio-demographic attributes (Chandler and Lalonde, 1998, 2008). Within the Indigenous community in Canada, suicidal thoughts and attempts have been associated with the mass trauma experienced by Indigenous people who attended the Residential School System, as well as by Indigenous people who have had a parent or grandparent who suffered the traumas of Residential School (Elias et al., 2012).

The aim of this study is to investigate the protective and risk factors associated with suicidal thoughts and behaviours in the urban Indigenous community in Toronto based on six key domains from the *Our Health Counts Toronto* (OHCT) (2013) study.

## **2.2 Methods and Procedures**

### **2.2.1 Project Overview**

In partnership with Indigenous community and academic partners, Seventh Generation Midwives Toronto and St. Michael's Hospital, this study draws on the OHCT (2013) data: the largest urban Indigenous health study of 897 Indigenous adults aged 15 and older (Smylie et al., 2011). In the OHCT (2013) data, population-based estimates were created using respondent driven sampling (RDS), which is a novel chain-referral sampling technique that provides valid estimates of population proportions (Heckathorn, 1997). This research examines the survey data

across six defined domains of life and their potential associations with suicidal thoughts and behaviour.

### **2.2.2 Domains of Study**

In consultation with our community partners and the literature, six domains were identified as being associated with suicidal thoughts and behaviours and were prioritized for further investigation in this research. Each domain was explored through various questions within the OHC-UHDP. A subset of questions has been included as illustrative examples for each domain described below.

#### **2.2.2.1 Relationship to Self and Community**

Kirmayer et al. (1999), identified collective and individual self-esteem as a significant protective factor against suicide among Indigenous adolescents and in their young adulthood, in many Native communities such as First Nation and Inuit. The importance of this area was further emphasized in our community consultations.

This research examined the Relationship to Self and Community based on respondent answers to a number of questions within the OHCT study covering: Aboriginal Identity, Gender and Sexuality, Relationship Status & Household Demographics, and Language.

A representative subset of the questions and possible responses analyzed across this domain are included for illustration below:

- (*Aboriginal Identity – Q2.1.1-Q2.1.3*): “How do you self-identify yourself?  
(Please check all that apply)”
  - [*Three possible responses: ‘First Nations’, ‘Métis’, ‘Inuit’*]
- (*Gender and Sexuality – Q2.7*): “How do you identify your sexual orientation?”

- *[Six possible responses: ‘Straight/Heterosexual’, ‘Lesbian’, ‘Gay’, ‘Bisexual’, ‘Asexual’, ‘Other’]*
- *(Relationship Status & Household Demographics – Q2.8): “What is your relationship status?”*
  - *[Five possible responses: ‘Single (Includes individuals who are never married, divorced or widowed AND who are currently not in one of the other relationship options below)’, ‘Married and cohabiting’, ‘Separated’, ‘Common law/cohabiting (e.g. living together)’, ‘Girlfriend/Boyfriend’]*
- *(Language – Q2.10): “Do you speak an Aboriginal language or languages? (e.g. Mohawk, Anishinaabemowin, Inuktitut, Michif, etc.)”*
  - *[Two possible responses: ‘yes’, ‘no’]*

#### **2.2.2.2 Social Determinants of Health**

In the book written by Reading and Wien (2009), they explore the social determinants of health as the circumstances, environments, structures, systems, and institutions influencing the development and maintenance of health, and underscore the negative health impacts that can arise from inequalities in such social determinants, including diminished physical, mental, and emotional health.

According to the Toronto Aboriginal Research Project (TARP) by McCaskill, FitzMaurice & Cidro (2011), the social determinants of health, such as income security, employment, education and adequate housing are acutely different between Aboriginal people in the greater GTA area versus the general Canadian populace. Given such large disparities between the groups, this research explores associations of different Social Determinants of

Health with suicidality, exploring the OHCT data pertaining to Education, Employment and Socioeconomic Status, Food Consumption & Security, Mobility, and Housing.

A representative subset of the questions and possible responses analyzed across this domain are included for illustration below:

- (*Education – Q3.1*): “What is the highest level of schooling you have ever completed?”
  - [*Nine possible responses: ‘Less than grade 9’, ‘Some high school’, ‘Completed high school’, ‘Some college or specialized training (i.e. trades)’, ‘Completed college or specialized training (i.e. trades)’, ‘Some university’, ‘Completed university’, ‘Some post-graduate education (i.e. Masters, PhD, MD, LLB)’, ‘Completed post-graduate education’]*]
- (*Employment and Socioeconomic Status – Q3.2*): “Which of the following best describes your current employment status?”
  - [*Ten possible responses: ‘Part-time’, ‘Full-time’, ‘Unemployed’, ‘Retired’, ‘Homemaker’, ‘Any other informal paid work such as babysitting, housekeeping’, ‘Student’, ‘Retired’, ‘Unemployed’, ‘Other’]*]
- (*Food Consumption & Security – Q3.6a-j*): “Thinking about the past week (on average), how often do you eat or drink the following foods? Please choose the answer that best describes the way you normally eat.”
  - [*Ten possible responses for foods: ‘Milk, cheese, yogurt and other milk products’, ‘Protein(Beef, Chicken, Pork, Fish, Lamb, Eggs, Beans, Tofu’, ‘Vegetables (Green salad and other vegetables) Excluding: French fries and potato chips’, ‘Fruit (Excluding fruit juice)’, ‘Bread, Cereal, Rice,*

*Pasta and Grains*, *Water*, *Juice*, *Soft Drinks/Pop*, *Fast food (e.g. burgers, hotdogs, pizza, frozen pizzas, French fries, etc.)*, *Sweets (e.g. candies, cookies and cake)*, and Five possible responses for frequency: *Several times a day*, *Once a day*, *A few times a week*, *About once a week*, *Never/hardly ever*]

- (Mobility – Q3.12): “Where did you live before you moved to Toronto?”
  - [Eight possible responses: *I have lived in Toronto all my life*, *First Nation reserve in Canada*, *Métis settlement in Canada*, *Inuit land claim territory in Canada*, *small town or rural area in Canada*, *Canadian city*, *US*, *International*]
- (Housing – Q3.15): “Which of the following best describes the type of residence you currently live in?”
  - [Sixteen possible responses: *I have my own house or apartment (i.e. can be living alone or sharing with partner/family)*, *Native/Aboriginal Housing (i.e. Wigwamen, Nishnawbe Homes, Gabriel Dumont)*, *Public Housing/Community Housing*, *Co-operative Housing*, *Stay at a friend’s/family/partner or ex-partner’s house or apartment*, *Rooming house/boarding home/Group home*, *Nursing Home*, *Homeless shelter*, *Student Housing*, *Motel or Hotel*, *Recovery House/Second Stage housing (i.e. Nekanaan)*, *Medical Hospital*, *Psychiatric Hospital*, *Drug/Alcohol/Addiction treatment or detox facility*, *Homeless (i.e. on the streets/living rough)*, *Other*]

### **2.2.2.3 General Health and Exercise**

Ring and Brown (2003) highlight significant differences between the health of Indigenous and non-Indigenous populations in developed nations such as Canada, United States, and New Zealand, and also reveal that the Indigenous populations who live in Canada have a lower life expectancy of 5-7 years versus non-Indigenous peoples. Greenwood and Naomi (2012), indicate that health inequities and higher suicide rates are not isolated to Indigenous adults, as Indigenous children experience a greater burden of ill health compared with other Canadian children, and also experience higher rates of suicide.

This research explores the association of General Health and Exercise, and suicidality based on the OHCT data. A representative subset of the questions and possible responses analyzed across this domain are included for illustration below:

- *(General Health & Exercise – Q4.1):* “Please rate your health. Compared to other people your age, would you say your health is:”
  - *[Five possible responses ranging from ‘Excellent’, ‘Very Good’, ‘Good’, ‘Fair’, ‘Poor’]*
- *(General Health & Exercise – Q4.2):* “How often do you feel that you are in balance in the four aspects (e.g. physical, emotional, mental, spiritual) of your life?”
  - *[Five possible responses ranging from ‘All of the time’, ‘Most of the time’, ‘Some of the time’, ‘A little of the time’, ‘None of the time’]*

### **2.2.2.4 Relationship to Family and Social Support**

Kirmayer et al. (1999) identified support from peers and family as a significant protective factor against suicide among Indigenous adolescent and in their young adulthood among most



Native communities such as First Nation and Inuit (p. 552). Furthermore, the authors cite research indicating that “local control and the preservation and continuation of culture among First Nations of British Columbia was associated with substantially lower youth suicide rates” (Mignone & O’Neil, 2005, p. 552). Richmond and Ross (2008) have suggested that although social support is commonly understood to be a protective measure against suicide, this may not be the case among First Nations people. This is because their relation to the non-Indigenous population in Canada, including the effects of the various systems and structures and of being marginalized and disenfranchised, may offset even the social support shared amongst each other (Richmond & Ross, 2008, p. 1423). This research further explores this domain through OHCT data related to parenting, and social support in particular.

A representative subset of the questions and possible responses analyzed across this domain are included for illustration below:

- (*Parenting – Q11.2*): “Which of the following best describes how you feel about how much time you spend with your child(ren)?”
  - [*Two responses: ‘I feel like I have plenty or just enough time with my child(ren)’ or ‘I wish I could spend more time with my child(ren)’*]
- (*Social Support – Q11.3*): “About how many close friends and close relative do you have, that is, people you feel at ease with and can talk to about what is on your mind?”
  - [*Five possible responses ranging from ‘0’, ‘1-2’, ‘3-5’, ‘6-10’, ‘More than 10’*]

#### 2.2.2.5 Substance Use

A number of studies support investigating further the link between substance use in Indigenous population and suicidality. Smylie et al. (2011) investigated the prevalence of cigarettes, alcohol, prescription and illicit drugs in the urban Indigenous population of Hamilton, Ontario. Results indicate that in the First Nations population, cigarette smoking is much more common than in the dominant culture with 87% of First Nations population smoking daily or occasionally, a rate that is three times the rate of the general Hamilton population (Smylie et al., 2011, p. 53). Also, secondary analysis of data on 203 Inuit youth aged 15 to 24 years old from random community survey conducted by Santé Quebec in 1992 shows that there is a positive relationship between cocaine or crack use, recent alcohol abuse, and increased risk of suicide attempts among females (Kirmayer, Boothroyd, & Hodgins, 1998). Moreover, the OHC study in Hamilton, shows that poverty, stress, and mental health are associated with drug use and high-risk behaviour (Firestone et al., 2015). In addition, research done by Lehti, Niemelä, Hoven, Mandell, and Sourander (2009) shows substance use in the Inuit population in northern Quebec as a risk factor for attempted suicide.

Based on the large body of literature and in consultation with our community partners, this research further explores this domain through examination of smoking, alcohol, and substance use. A representative subset of the questions and possible responses analyzed across this domain are included for illustration below:

- (*Smoking – Q19.1*): “At the present time, do you smoke cigarettes?”
  - [*Two possible responses: ‘yes’, ‘no’*]
- (*Alcohol – Q19.3*): “During the past 30 days, have you had a drink of beer, wine, liquor or any other alcoholic beverage?”

- *[Two possible responses: ‘yes’, ‘no’]*
- *(Other Substances – Q19.5a-i): “Have you used any of the following substances in the last 12 months...”*
  - *[Nine possible responses including: ‘Cannabis/Marijuana (weed, grass, hash...)', ‘Crack/Cocaine (rock, snow, freebase...)', ‘Sedatives or Sleeping pills (Valium, Xanax, Nembutal, Ambien, etc.)’, ‘Heroin’, ‘Prescription Opiates (Codeine, Morphine, Percodan’, ‘Tylenol 3, Fentanyl, Talwin, etc.)’, ‘ Hallucinogens (Acid, LSD, Ecstasy, Magic mushrooms, Speed, PCP, etc.)’, ‘Amphetamines (Adderall, methamphetamine: Crystal meth, Ritalin, etc.)’, ‘Inhalant/Solvents (Glue, gas paint, lighter fluid, cleaners’, ‘Other’]*

#### **2.2.2.6 Relationships to Culture and Cultural Resources**

Indigenous peoples’ claims and aspirations are diverse, but there is common ground for a cultural tie to ancestral land which distinguishes them from other communities or groups, including the dominant culture they may be a part of (Wiessner, 2011). Many years of government action, policies and established systems has led to the eradication of culture, including loss of language, values, and traditions, from years of shame and persecution (Elias, 2012; Kirmayer, 2007). According to Crooks et al. (2017), FNMI youth are disproportionately affected by a range of negative health outcomes including poor emotional and psychosocial well-being. At the same time, there is increasing awareness of culturally-specific protective factors for these youth, such as cultural connectedness and identity (p. 87). From this framework, we aim to investigate the role of cultural factors and their potential impact on suicidal thoughts and behaviour.

A representative subset of the questions and possible responses analyzed across this domain are included for illustration below:

- *(Culture and Cultural Resources – Q21.2): “Have you experienced any challenges in trying to access traditional ceremonies”*
  - *[Two possible responses: ‘yes’, ‘no’]*

### **2.2.3 Indigenous Community Leadership**

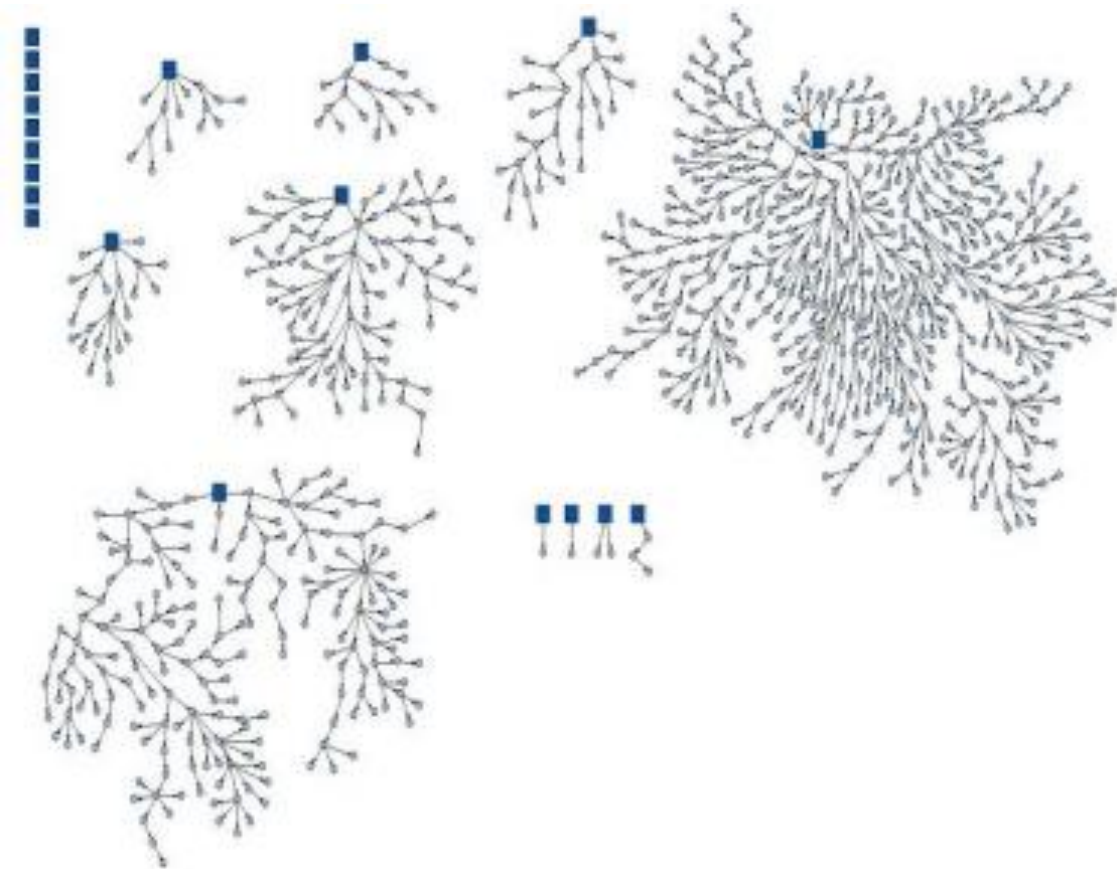
A shortage of social, psychological, cultural and demographic data exists specifically for the urban population of Indigenous people. The Our Health Counts surveys have been collecting data in different Indigenous communities throughout larger urban cities across Ontario, including Ottawa, 2008; Hamilton, 2008; Toronto, 2013; and London, 2014. These surveys represent an important attempt to gather high-quality, complete, and inclusive data for urban Indigenous populations in Canada. Our Health Count research project supports culturally-based, Indigenous community-driven efforts to assessing and improving the health of Aboriginal people. In particular, regarding suicidal thoughts and behaviors, the OHCT survey is notable for the way in which members of the Indigenous community contributed to the gathering of data, and participated in the process of researching their health (Well Living House, 2018 p. 2).

Our Health Counts study represents a systematic means of involving Indigenous health service providers, Indigenous health researchers, and urban Indigenous health policy makers and is grounded on established Indigenous principles of OCAP® (Ownership, Control, Access, and Possession), and will enable evidence-based policy initiatives emerging from the research. One of the key pillars of the OHCT study is that Indigenous community organizations fully own and control all of the data. Aligned with the principles of OCAP®, the Indigenous community owns and controls how their information is used, and how access to external researchers is facilitated.

Leadership is provided by Dr. Janet Smylie of Well Living House and midwives Sara Wolfe and Cherylee Bourgeois of Seventh Generation Midwives Toronto, and supported by an Indigenous and allied health research staff team and associated with over twenty health and social services organizations (Our Health Counts Toronto – Well Living House, 2018). This study has been reviewed and approved by the research ethics board of St. Michael's Hospital (REB no: 14-083).

#### **2.2.4 Respondent Driven Sampling (RDS)**

Traditional sampling methods, such as snowball sampling, may introduce bias into the recruitment process because of their non-random selection process (Gile & Handcock, 2010). The RDS method has been found to be reliable for sampling populations that are difficult to reach (Heckathorn, 2002). RDS utilizes an innovative sampling methodology that relies upon peer social networks, which generates asymptotically unbiased estimates of the underlying population (Heckathorn, 2002; Schonlau & Liebau, 2010). The first people to begin recruitment in their network are referred to as seeds. In the OHCT (2013), twenty people were identified to participate as seeds, and they subsequently invited additional participants for the survey. Ultimately, eighty-eight percent of the recruited participants were originated from three seeds (Seventh Generation Midwives Toronto, 2018, p. 2). Figure 1 below visually depicts the network 'seed trees' of participants for the OHCT study and helps to validate that the network chains are sufficiently established to overcome the sampling bias (i.e. participants were sufficiently independent of their seed to ensure robust statistical estimates). Seeds are represented by squares and recruits are represented by circles.



**Figure 1. Respondent driven sampling recruitment diagram from the OHCT study (Source: Seventh Generation Midwives Toronto, 2018, p. 2)**

Participants received financial incentives of \$20CAD for completing the OHCT survey and incentives of \$10CAD for each individual they recruited into the study. In this way, participants are compensated not only for their own participation, but also for successful recruitment. Successive generations of recruitment are called waves. Seeds are considered wave 0. The participants recruited by the seeds are considered wave 1, and these participants go on to recruit wave 2, and so on.

For hidden populations, RDS improves on traditional sampling approaches, such as convenience or snowball sampling, which may be subject to more than one source of bias such as selection bias, gatekeeper bias (Atkinson and Flint, 2001; Heckathorn, 1997; Place, 2012).

This is especially applicable to this research given there is no comprehensive registry of Indigenous people living in cities, like Toronto. Furthermore, RDS is one of the few systems that accounts for the possibility of non-random participant selection. Essentially, recording the degree of each participant allows researchers to weight their impact on the study based on this potential for non-random participant selection, helping strengthen the results of the study. Heckathorn (1997) showed that as recruitment chains grow longer in length, the RDS sample is less dependent on the initial seeds and more representative of the population it was meant to recruit. In this way, the research sample also becomes more representative of the target population. This holds true regardless of the choice of primary seeds for recruitment.

#### **2.2.5 Sample Size**

Sample size for the OHCT (2013) survey was estimated by the approach of Salganik (2006), in which it was estimated that RDS methodology requires a sample that is approximately twice the size of a sample achieved by simple random sampling. Thus, the sample size of the OHCT (2013) survey required approximately 1000 participants to accurately measure the desired traits in the population (Rotondi, et al., 2017).

#### **2.2.6 Statistical Methods**

This study used a modified logistic regression analysis in R statistical software and SAS to identify and assess the relationship between protective and risk factors, and the dependent variables: suicidal thoughts and suicidal behaviours. The dependent variables in this analysis, suicidal thoughts and suicidal attempts, were derived from the two questions in the OHCT (2013) survey as depicted below in Table 1:

	<b>RDS Prevalence Estimate</b>	<b>(95% Confidence Interval)</b>
<b>Have you ever thought about dying by suicide?</b>		
Yes	54.5%	(46.8, 62.2)
No	45.5%	(37.8, 53.2)
<b>Have you ever attempted to die by suicide?</b>		
Yes	37.5%	(29.7, 45.3)
No	62.5%	(54.7, 70.3)

**Table 1.** Two suicidality questions for dependent variable analysis (Source: Well Living House, 2018a, p. 7)

Table A1 in Appendix A contains the survey questions from the OHCT (2013) survey regarding suicidality. To identify the protective measures and risk factors for suicidal behaviours, the explanatory variables were analysed based on the participant's answers to the relevant questions in the OHCT Adult Survey:

Relationship to Self and Community (section 2 of the survey):

- Aboriginal identity: 2.1, 2.1a, 2.4
- Gender and sexuality: 2.5-2.7
- Relationship status and household demographics: 2.8-2.9
- Language: 2.10

Social Determinants of Health (section 3 of the survey):

- Education: 3.1
- Employment and socioeconomic status= 3.2-3.4, 3.6-3.11
- Mobility: 3.12, 3.12a, 3.13a, 3.14a
- Housing; 3.15-3.19

General Health and Exercise (section 4 of the survey):

- Health and Exercise: 4.1-4.4



Relationship to Family and Social Support (section 11 of the survey):

- Parenting: 11.1-11.2a
- Social support: 11.3-11.4

Substance Use (section 19 of the survey):

- Smoking: 19.1, 19.2
- Alcohol: 19.3
- Other substances: 19.5a-19.5i, 19.7-19.8a

Relationships to Culture and Cultural Resources (section 21 of the survey):

- Participation and access to traditional Indigenous ceremonies: 21.1-21.2a
- Traditional Indigenous medicines and practices for health and well-being: 21.3, 21.3a, 21.3b

In order to account for the higher possibility of people with greater social circles being recruited, respondents from the RDS sample were inversely weighted in relation to their particular social circle inside their larger social group. Given these sampling intricacies and the complexity of the data, it is necessary to utilize two advanced statistical methods for the correct analysis of data collected by RDS. The proposed regression models must account for both the unequal sampling probabilities and clustering within the data. For this reason, both survey-based and generalized linear mixed models are used. All analyses were performed using R and SAS statistical software.

## **2.3 Results**

Detailed statistical tables can be found in Appendix B, with preliminary statistical descriptive information, including frequencies, in Table A2 of Appendix B. The results address two aspects of the phenomena of suicide. The first aspect is the phenomenon of suicidal thoughts, with weighted associations between key variables and suicidal thoughts included in Table A3. The second aspect is the phenomenon of suicidal attempts, with weighted associations between key variables and suicidal attempts included in Table A4.

### **2.3.1 Suicidal Thoughts**

Weighted associations between key survey variables and suicidal thoughts were evaluated, with an odds ratio greater than one indicating increased risk of suicidal thoughts. The results of the survey-logistic regression modelling indicate activities that are protective and yield less suicidal thoughts with having odds ratio of less than one, as opposed to activities that yield more suicidal thoughts with having odds ratio of greater than one. Tables 2 and 3 below summarize key statistical variables with strong protective and risk factors associated with suicidal thoughts.

#### **2.3.1.1 Protective Factors for Suicidal Thoughts**

Table 2 summarizes statistically significant protective factors associated that were associated with a lower likelihood of suicidal thoughts:

**Table 2.** Statistical Summary for Protective Factors for Suicidal Thoughts among Indigenous adults living in Toronto:

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Total income for all household members, sources in past 12 months:</b>				
Wages and salaries (N=286) vs other (N=170)	1.05	(0.41, 2.67)	0.41	(0.2, 0.83)
Income from self-employment (N=70) vs other (N=170)	0.09	(0.02, 0.42)	0.12	(0.02, 0.79)
<b>Current employment status:</b>				
Full time (N=100) vs unemployed (N=463)	0.53	(0.24, 1.19)	0.53	(0.33, 0.84)
Seasonal (N=20) vs unemployed (N=463)	0.23	(0.05, 1.02)	0.25	(0.08, 0.81)
Student (N=80) vs unemployed (N=463)	0.64	(0.22, 1.92)	0.67	(0.46, 0.97)
<b>Best describes household:</b>				
A married or common law with children or One Adult with Children (N=169) vs One adult person living alone (N=313)	0.71	(0.3, 1.68)	0.55	(0.38, 0.78)
<b>Highest level of schooling completed:</b>				
Some post graduate education (masters, PhD, MD, LLB) completed post graduate education (N=13) vs some high school (N=284)	0.49	(0.09, 2.04)	0.25	(0.07, 0.90)

N: Sample frequency

### 2.3.1.2 Risk Factors for Suicidal Thoughts

Table 3 summarizes statistically significant risk factors associated that were associated with a higher likelihood of suicidal thoughts:

**Table 3.** Statistical Summary for Risk Factors for Suicidal Thoughts among Indigenous adults living in Toronto:

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Barrier(s) to spending more time with your child(ren):</b>				
I have limited access to my child(ren) because of a shared custody arrangement/ I have limited access to my child(ren) because of a custody order/I have limited access to my child(ren) because of child welfare involvement (N=62), vs other (N=72)	8.65	(1.86, 40.2)	8.65	(5.18, 14.45)
<b>Challenges experienced in accessing ceremonies:</b>				
Do not know enough about them (N=32) vs other (N=81)	16.67	(2.08, 133.53)	21.14	(1.99, 224.11)
Past negative experiences with ceremony (N=19) vs other (N=81)	4.51	(0.36, 57.3)	2.42	(1.14, 5.14)
<b>Past 12 months used Prescription Opiates:</b>				
Yes (N=182) vs. No (N=707)	3.55	(1.77, 7.08)	3.2	(1.61, 6.37)
<b>Past 12 months used Amphetamines:</b>				
Yes (N=49) vs. No (N=841)	3.94	(1.5, 10.34)	3.83	(2.25, 6.51)
<b>Past 12 months used Sedatives or Sleeping pills:</b>				
Yes (N=133) vs. No (N=758)	2.94	(1.28, 6.75)	2.7	(1.97, 3.69)
<b>Ever used a needle to inject any drug that wasn't prescribed to you:</b>				
Yes (N=188) vs. No (N=701)	3.08	(1.5, 6.35)	2.84	(2.41, 3.34)
<b>Type of residence currently live in:</b>				
Homeless Shelter (N=58) vs. I have my own house (N=342)	2.38	(0.97, 3.86)	2.46	(1.95, 3.10)
Homeless (living on the street) (N=42) vs. I have my own house (N=342)	3.36	(1.01, 11.22)	3.54	(1.06, 11.75)

N: Sample frequency

### 2.3.2 Suicidal Attempts

Table A3 in Appendix B shows the weighted associations between key Our Health Counts survey variables and suicidal attempts, and odds ratio greater than one indicates an

increased risk of suicide attempts. Tables 4 and 5 below summarize key statistical variables with strong protective and risk factors associated with suicidal attempts.

### 2.3.2.1 Protective Factors for Suicidal Attempts

Table 4 summarizes statistically significant protective factors associated that were associated with a lower likelihood of suicidal attempts:

[Table 4.](#) Statistical Summary for Protective Factors for Suicidal Attempts among Indigenous adults living in Toronto:

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Current employment status:</b>				
Part time (N=52) vs unemployed (N=463)	0.14	(0.06, 0.34)	0.12	(0.04, 0.38)
Full time (N=100) vs unemployed (N=463)	0.27	(0.12, 0.59)	0.39	(0.28, 0.55)
<b>Highest level of schooling completed:</b>				
Complete high school (N=167) vs some high school (N=284)	0.26	(0.11, 0.63)	0.25	(0.22, 0.29)
<b>Smoke free home:</b>				
Yes completely smoke free (N=206) vs yes there are smokers living in the home, but they smoke outside (N=354)	0.77	(0.35, 1.71)	0.52	(0.4, 0.68)

N: Sample frequency

### 2.3.2.2 Risk Factors for Suicidal Attempts

Table 5 summarizes statistically significant risk factors associated that were associated with a higher likelihood of suicidal attempts:

**Table 5.** Statistical Summary for Risk Factors for Suicidal Attempts among Indigenous Adults living in Toronto:

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Current employment status:</b>				
Self-employed (N=29) vs unemployed (N=463)	2.16	(0.5, 9.44)	2.65	(1.53, 4.61)
<b>Past 12 months used Prescription Opiates:</b>				
Yes(N=182) vs. No (N=707)	3.07	(1.37, 6.9)	2.3	(0.81, 6.49)
<b>Past 12 months used Amphetamines:</b>				
Yes (N=49) vs. No (N=841)	3.43	(1.38, 8.55)	3.17	(2.1, 4.79)
<b>Past 12 months used Crack/Cocaine:</b>				
Yes (N=205) vs. No (N=658)	2.86	(1.37, 5.97)	2.18	(0.74, 6.42)
<b>Past 12 months used Hallucinogens:</b>				
Yes (N=75) vs. No (N=816)	3.86	(1.37, 10.85)	4.25	(1.09, 16.47)
<b>How do you identify your sexual orientation:</b>				
Bisexual (N=55) vs Straight/Heterosexual (N=770)	4.36	(1.66, 11.45)	5.18	(1.74, 15.38)
Gay (N=21) vs Straight/Heterosexual (N=770)	4.56	(0.72, 28.77)	4.01	(1.76, 9.11)
<b>Barrier(s) to spending more time with your child(ren):</b>				
My child(ren) is/are being cared for by other family members (N=34) vs other (N=72)	9.44	(1.55, 57.55)	11.85	(6.3, 22.3)
I am often busy working/ I am often busy with school work/I am often busy taking care of other family or community members (N=27) vs other (N=72)	3.47	(0.75, 16.12)	4.84	(1.88, 12.47)
<b>Challenges experienced in accessing ceremonies:</b>				
Can't find ceremonies that are relevant to my people/nation (N=36) vs other (N=81)	1.79	(0.13, 24.09)	5.01	(1.04, 24.16)
<b>Ever used a needle to inject any drug that wasn't prescribed to you:</b>				
Yes (N=188) vs. No (N=701)	3.22	(1.46, 7.08)	2.58	(2.25, 2.96)
<b>Ever shared needles with anyone including spouse, partner, or close friend:</b>				
Yes (N=77) vs. No (N=809)	2.8	(1.18, 6.67)	2.76	(1.69, 4.5)
<b>Know where to get clean needles/clean works in Toronto: (q19_8)</b>				
Yes (N=562) vs. No (N=316)	3.17	(1.68, 5.96)	3.13	(2.15, 4.55)

N: Sample frequency

## 2.4 Discussion

This research examined potential risk and protective factors for Indigenous suicide with a special emphasis on the phenomena of suicidal thoughts (ideation) and attempts. Recognizing these protective factors and risk warning signs may further assist in identifying at-risk individuals and provide opportunities for effective intervention that is relevant, and structurally and culturally-aligned for the unique challenges faced by the Indigenous community. As we extrapolate implications based on the results, it is important to note that the study has a number of limitations. Given the cross-sectional nature of the data, we cannot ascertain causality. Moreover, the study is exploratory in nature and did not adjust for any confounders or multiple testing as it serves as a preliminary investigation into these factors. That being said, with its focus on the urban Indigenous community, this study provides a unique insight into factors that are associated with these conditions.

Moreover, this study focused on the socio-demographic context for suicide, as opposed to a biological one. This socio-demographic perspective is important to contextualize within colonial structures that have historically, and continue to shape the social, political and economic status of Indigenous people, and has been associated with suicide and its related conditions (Czyzewski, 2011). Colonialism along with the associated displacement of people and land appropriation inevitably affects the stability of a society and results in major impacts on livelihood (Axelsson, Kukutai and Kippen, 2016). The OHCT survey and the corresponding results of this study showcase the risk and protective factors of suicidal thoughts and attempts that are driven by factors outside of biology, an important consideration as the link to biology has historically been used as a claim shifting the responsibility, validating inaction, and allowing

human rights violations and social injustices against Indigenous peoples (Well Living House, 2018a).

In our study, employment, a critical aspect of livelihood and a social determinant of health, had a dichotomous relationship with suicide: part-time or full-time employment was associated with lower likelihood of suicidal attempts, while being self-employed was associated with a higher likelihood. This result can serve as an extra measure in support of the prioritization of addressing unemployment within the Indigenous population, specifically to support part-time or full-time employment, and calls for further investigation into the environment and challenges of the self-employed. In 2015, the Truth and Reconciliation Council (TRC) launched its report containing 94 Calls to Action, with the 92<sup>nd</sup> one titled “Business and Reconciliation”, addressing employment opportunities for the Indigenous population and responsibilities of the corporate sector and leadership, including calls to ensure that Indigenous populations have access to equitable jobs, education and training opportunities in the corporate sector (Delivery on Truth and Reconciliation Commission Calls to Action, 2018). This includes education to non-Indigenous populations in management positions, to address the challenge of finding employers and leaders with the knowledge of the historical context and present reality of the Indigenous experience or who can champion for support for employment of the Indigenous people throughout the workplace.

Education is another social determinant of health which can have a broader impact on employment and other aspects of life. For example, inadequate education, including poor literacy, can limit one’s ability to acquire info on proper nutrition or healthy food preparation, or diminish skills and abilities to offer in the labour market, which can subsequently result in low paying jobs, poverty, social exclusion, and family instability (Reading & Wien, 2009). This



study found that attending or completing post graduate education (Masters, PhD, MD, LLB) was associated as a protective factor to suicidal thoughts, and completing high school was associated as a protective factor to suicidal attempts. Education is oftentimes a formative experience not only from the context of an individual's development but also from a social standpoint in support of quality of life (Idris, Hassan, et al., 2012), and the results of this study suggest high school completion may serve as a protective factor against suicide. This insight supports prioritizing programs and funding to identify and address the barriers which may impede Indigenous people from completing high school, particularly given the large body of evidence suggesting the inequities faced by Indigenous students. As one example of the inequities, on-reserve schools have historically been significantly underfunded, in some cases receiving less than half the tuition of provincial schools, leading to difficulty or inability to provide competitive teacher salaries, fund school libraries, or extracurricular activities and vocational training (Laboucane, 2010). This inequity appears to span across student age groups, with claims that 90% of preschool Indigenous children lack access to appropriate early childhood education, and thousands of eligible Indigenous students being denied post-secondary education based on lack of available funding (Laboucane, 2010). As a result, in many communities there is simply not enough funding available to support the growing number of students who wish to pursue a university education (Archibald & Williams, 2010). This has culminated into a concerning national statistic where approximately 22% of Indigenous youth drop-out of high schools (both on-reserve and off-reserve), according to Labour Force Survey data for 2007-2010. (Trends in Dropout Rates and the Labour Market Outcomes of Young Dropouts, 2010). More recently, there have been some developments aimed at stemming the tide, beginning with the Truth and Reconciliation Commission's Calls to Action 6 to 12 and 62 to 65, which dealt with education,

and call for a joint education strategy and elimination of funding discrepancies between Indigenous children educated on-reserve and those educated off-reserve, and drafting new education legislation with full participation by Indigenous peoples that protects language and culture. The Canadian government's 2016 budget included a significant funding increase to support the transformation of the current on reserve system, with an investment of \$1.9 billion, representing an increase of 18.3% from the previous year, as well as additional funding for construction, repair and maintenance of First Nations education facilities (Aboriginal Affairs, 2018). Going beyond the focus of Indigenous student education, TRC chair Justice Murray Sinclair underscores the importance of engaging and teaching all Canadian children the history and legacy of residential schools, noting "we need to look at the way we are educating children... this is not an Aboriginal problem, it's a Canadian problem". (Truth and Reconciliation Commission urges Canada to confront 'cultural genocide' of residential schools, 2015).

Additionally, there are certain organizations aiming to support and address the education issues. The Martin Family Initiative (MFI), for example, is one program providing support to empower entrepreneurship amongst Indigenous students, as well as mentorship to improve literacy outcomes for elementary children, as well as for more senior students to go on to postsecondary education (Programs/Initiative MFI, 2016).

Another resulting theme was the importance of ceremonies, as challenges experienced in accessing ceremonies was one of the significant risk factors for both suicidal attempts and thoughts. Stress from acculturation (assimilating to a dominant culture) and marginalization (failing to acquire and value Indigenous values and identity, while also failing to identify with the cultural values of the larger society) which are direct results of colonial structures and

policies, are recognized as risk factors for Indigenous suicide (Kirmayer et al. 2007). The specific ceremony access challenges that were identified in this study appear diverse in nature. For example, risk factors for suicidal thoughts included awareness/education access challenges (*“Do not know enough about them”*) as well as past negative experiences with ceremonies, while the risk factor associated with suicidal attempts centered around the lack of access to relevant ceremonies (*“Can’t find ceremonies that are relevant to my people/nation”*). As Barker, Goodman, & DeBeck (2017) assert in their study, given the diversity among Indigenous communities, one type of treatment is not effective to standardize across all. Research by Chandler and Lalonde (1998, 2008) in British Columbia further underscores this, as they remarked stark differences in suicides within First Nations youth across different tribal communities of origin, with some communities showing rates hundreds of times above the national average, while in other community groups suicide is virtually unknown. While, further investigation to better understand the barriers of accessing ceremonies is required, particularly in an urban environment, community-based approaches have proven successful in positively impacting the social structures, collective self-esteem, and shared vision of Indigenous people. To promote more effective engagement with ceremonies, community engagement strategies can be leveraged, including central focus on enabling community cohesion and local control, collective esteem and identity, transmission of Indigenous knowledge, language, and traditions, and methods of addressing social problems that are culturally appropriate (Kirmayer et al. 2007). Indigenous individuals can be effectively referred to ceremonies through a few approaches, including: training youth as peer counsellors or ‘natural helpers’ and training other individuals with whom there is regular contact (nurses, primary care providers, clergy, parents, and other community leaders) to educate and refer to appropriate ceremonies or community resources

(Kirmayer et al. 2007). Research results by Horesh, Levi, & Apter (2012) found that isolation was amongst the top primary causes of suicidal attempts and thoughts, and the results of this study showed that relationship ties (both to self and to community) can have very strong associations as protective or risk factors for suicide.

Relationships composed of married or common law with children, or one adult with children, were less likely to be associated with suicidal thoughts, whereas barriers to spending time with children (for those having children) was a very significant risk factor associated with both higher likelihood of suicidal thoughts, and attempts. Specific barriers in spending time with children that were found in the study included challenges of shared custody arrangements, custody orders, or welfare situations (higher association with suicidal thoughts) or being too busy or having other family members care for the child or children (higher association with suicidal attempts). These findings align with results from existing literature. Zayas et al. (2009) conducted a study to explore the roles of acculturation and parent-child relations in controlling suicide attempts and found that 65 of every 75 adolescents who have been neglected by their parents encounter suicidal ideations, and the authors argue that the lack of family time and lowering empathy are common risk factors of suicide. Other studies in the literature show the importance of family structure in relation to suicide. Specifically, earlier age of separation from parents, poor communication with the mother or father, and parental psychopathology (depression in mothers, alcoholism, and anti-social behaviour in fathers) were strong risk factors for suicide, and controlling for this, there wasn't much additional risk associated with family breakdown or divorce, suggesting level of family functioning or distress and isolation are driving factors (Kirmayer et al. 2007). Conversely, protective factors contributing to individual resilience included family harmony and cohesion, involvement in family activities, effective

communication and feeling understood by one's family (Kirmayer et al. 2007). This underscores the importance of the role of family in an individual's life as a protective factor. Substance abuse was another risk factor having a strong association with suicidality in both thought and attempt. Firestone et al. (2015) maintain that substance abuse is disproportionately higher amongst the Indigenous population than the general population. Though there is no suggestion of causation with suicide, there is recognition that substance abuse can be a complex phenomenon, including as a confounding reaction to the broader environment and established systems, and further research is required for a culturally sensitive and relevant understanding of factors and opportunities. The Center for Addiction and Mental Health (CAMH), in Toronto has a program named 'Aboriginal Service' providing counselling and outpatient support for those experiencing substance use challenges, including Aboriginal social workers, elder/traditional healers, and cultural programming and ceremonies that can be used as part of a treatment plan. The Canadian Mental Health Association (CMHA) also provides culturally appropriate services specifically tailored for Indigenous Children and Youth. While the association between substance use and suicide was observed, there is an opportunity for future studies to explore substance abuse and treatments more deeply.

It is the hope of this study that with this information and the support of our community partners, suicidal tendencies and risks and the number of suicide attempts can be mitigated through prevention, early detection, and appropriate interventional support. Community programs and organizations such as the Canadian Mental Health Association have dedicated mental health and wellness services for Indigenous youth in many different settings including Aboriginal Health Access Centers (AHACs), which provide different types of health and social support services for FNMI communities, including in urban centres (as well as other on and off

reserve locations). Treating Indigenous suicide as a socio-demographic rather than a biological condition means that the potential solution needs to involve Canadians as a whole, rather than treating the issue as an isolated phenomenon of the Indigenous population. As the TRC asserts in its calls to action, many of the responsibilities fall with Canadians and established systems, including corporations, leaders, and educators to have broader awareness and context of the history and situation, embrace the diversity and eliminate discriminations and racial prejudices that are among the primary causes of suicide among the school going Indigenous children (Hunter & Harvey, 2002). It appears that Indigenous suicide tendencies are not isolated phenomena with simple triggers but rather reflections of the larger situation in which Indigenous adults find themselves without an adequate and positive social support system (King, Smith, & Gracey, 2009). A social support system that fosters the traditions of culture (including accounting for the diversity and differences amongst different Indigenous peoples), as well as recognizes the interactions with the broader dominant culture and systems is important to effectively tackle suicidal factors in an appropriate manner. These findings provide potential social and policy-based areas for further investigation and subsequent intervention to establish culturally relevant and appropriate interventions that contribute and support protective factors reducing the risk of suicidal thoughts and behaviours in the Indigenous community living in Toronto.

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## Appendix A: Suicide Statistics from OHCT (2013)

Table 1A. Suicidality questions from the OHCT (2013) survey:

	Point estimate	95% Confidence Interval
<b>Have been told that you have a psychological/mental health disorder by health care worker</b>		
Yes	44.3%	(49.6, 60.8)
No	55.2%	(38.7, 49.8)
<b>Have you ever experienced discrimination from others because of an emotional or mental health problem?</b>		
Yes	27.9%	(22.9, 32.9)
No	70.9%	(65.9, 75.9)
<b>Did this prevent or delay you from getting the care or support you needed?</b>		
Yes	58.0%	(47.2, 68.9)
No	41.3%	(30.4, 52.1)
<b>Amount of daily stress in your life</b>		
A bit stressful	45.2%	(39.5, 50.1)
Extremely stressful	9.0%	(5.4, 12.7)
Quit a bit stressful	22.2%	(17.6, 26.8)
Not very stressful	17.1%	(12.8, 21.4)
Not at all	6.0%	(32.1, 8.9)
<b>Has a close friend or family member ever died by suicide?</b>		
Yes	55.7%	(50.0, 61.3)
No	40.2%	(34.6, 45.9)
<b>Have you ever harmed yourself on purpose?</b>		
Yes	45.4%	(39.7, 51.0)
No	51.1%	(45.4, 56.8)
<b>Have you ever thought about dying by suicide?</b>		
Yes	53.7%	(47.0, 58.4)
No	43.8%	(38.0, 49.5)
<b>Have you attempted suicide?</b>		
Yes	36.3%	(31.2, 41.3)
No	60.1%	(54.8, 65.4)

## Appendix B: Statistical Tables

Table 2A. Frequency of the final sample for the Our Health Counts survey:

	Point estimate	95% Confidence Interval	Frequency
<b>How do you self-identify: (q2_1_1-q2_1_3)</b>			
First Nations	86.0%	(82.0, 90.0)	797
Metis	13.9%	(10.0, 18.0)	94
Inuit	0.3%	(0.0, 0.8)	10
<b>Are you status: (Q2_1a)</b>			
Yes	80.3%	(75.5, 85.1)	649
No	19.7%	(14.9, 24.5)	148
<b>Do you identify as mixed-race or mixed-ancestry: (q2_4)</b>			
Yes	55.4%	(49.7, 61.0)	418
No	44.2%	(38.5, 49.8)	473
<b>Do you identify as a Two-Spirit person: (q2_5)</b>			
Yes	17.6%	(13.5, 21.6)	147
No	81.6%	(77.4, 85.7)	739
<b>what is your gender: (q2_6)</b>			
Female (a woman)	48.3%	(42.6, 54.0)	464
Male (a man)	50.2%	(44.5, 55.9)	416
Other	0.5%	(0.0, 1.5)	4
<b>How do you identify your sexual orientation: (q2_7)</b>			
Straight/Heterosexual	85.8%	(82.0, 89.7)	770
Lesbian	1.3%	(0.0, 2.2)	14
Gay	4.2%	(1.6, 6.7)	21
Bisexual	4.4%	(2.6, 6.2)	55
Asexual	0.5%	(0.0, 1.7)	3
<b>What is your relationship status: (q2_8)</b>			
Single	64.2%	(58.7, 69.6)	552
Married and cohabitating	4.1%	(2.2, 6.0)	49
Separated	3.6%	(1.6, 5.5)	33
Common law/cohabitating	13.1%	(8.8, 17.3)	121
Girlfriend/Boyfriend	14.8%	(11.0, 18.5)	136

	Point estimate	95% Confidence Interval	Frequency
<b>Best describes household: (q2_8)</b>			
One adult person living alone	28.4%	(23.1, 33.6)	313
One adult with children	6.2%	(2.5, 8.9)	92
One adult with children and additional family (i.e. Parents, grandparents, sisters, brothers, aunts, uncles,	2.2%	(1.1, 3.3)	35
A married or common law couple with NO children	10.0%	(6.1, 13.8)	71
A married or common law couple with NO children and additional family (i.e. Parents, grandparents,	0.6%	(0.0, 1.3)	10
A married or common law couple with children	6.2%	(3.4, 8.9)	77
A married or common law couple with children and additional family (i.e. Parents, grandparents, sisters,	0.6%	(0.0, 1.5)	12
Two or more unrelated persons	25.5%	(21.1, 29.9)	145
Other	25.5%	(12.1, 23.3)	138
<b>Do you speak an Aboriginal language or languages: (q2_10)</b>			
Yes	41.4%	(35.9, 46.9)	283
No	58.6%	(53.1, 64.2)	324
<b>Highest level of schooling completed: (q3_1)</b>			
Less than grade 9	11.6%	(7.6, 12.7)	96
Some high school	37.6%	(32.2, 43.0)	284
Completed high school	17.9%	(13.2, 22.7)	167
Some college or specialized training (i.e. trades)/Completed college or specialized training (i.e. trades)	13.2%	(9.6, 16.8)	112
Some university;/Completed university	2.7%	(1.0, 4.3)	53
Some post-graduate education (i.e. Masters, PhD, MD, LLB)/Completed post-graduate education;	0.9%	(0.0, 2.1)	13
<b>Current employment status: (q3_2)</b>			
Part-time	6.0%	(3.4, 8.7)	52
Full-time	5.0%	(2.2, 7.8)	100
Seasonal	1.6%	(0.0, 3.1)	20
Self-employed	2.1%	(0.0, 4.2)	29
Homemaker	2.1%	(0.0, 3.5)	32
Any other informal paid work such as babysitting, housekeeping	0.6%	(0.0, 1.4)	7
Student	15.0%	(11.2, 18.8)	80
Retired	3.2%	(0.0, 5.8)	20
Unemployed	61.6%	(56.1, 67.1)	463
Other	2.6%	(1.0, 4.2)	75

	Point estimate	95% Confidence Interval	Frequency
<b>Total income for all household members, sources in past 12 months: (q3_3_1-q3_3_17)</b>			
Wages and salaries	27.1%	(22.2, 32.1)	286
Income from self-employment	6.2%	(3.4, 8.9)	70
Employment insurance	3.7%	(1.9, 5.4)	42
Worker's compensation	0.7%	(0.0, 1.4)	6
Child tax benefit	13.5%	(9.7, 17.4)	122
<b>Past 12 months, overall health and well-being affected by financial hardship: (q3_4)</b>			
Yes	60.4%	(46.2, 57.7)	508
No	47.5%	(41.7, 53.3)	384
<b>Past 12 months, ability to engage in preventative health activities affected by financial hardship: (q3_5)</b>			
Yes	52.0%	(46.2, 57.7)	508
No	47.5%	(41.7, 53.3)	383
<b>Past week (on average), how often eat/drink following foods - Milk, cheese, yogurt and other milk products: (q3_6a)</b>			
Several times a day	21.2%	(16.6, 25.8)	199
Once a day	42.7%	(37.0, 48.3)	381
A few times a week	23.3%	(18.6, 28.0)	226
About once a week	9.8%	(6.2, 13.3)	58
Never/hardly ever	3.0%	(0.0, 5.1)	31
<b>Protein: (q3_6b)</b>			
Several times a day	21.2%	(16.6, 25.8)	199
Once a day	42.7%	(37.0, 48.3)	381
A few times a week	23.3%	(18.6, 28.0)	226
About once a week	9.8%	(6.3, 13.3)	58
Never/hardly ever	3.0%	(0.0, 5.1)	31
<b>Vegetables Excluding: French fries and potato chips: (q3_6c)</b>			
Several times a day	21.6%	(16.9, 26.4)	241
Once a day	36.5%	(31.1, 42.0)	331
A few times a week	28.0%	(22.9, 33.2)	203
About once a week	5.5%	(2.9, 8.1)	63
Never/hardly ever	8.3%	(5.2, 11.4)	58
<b>Fruit: (q3_6d)</b>			
Several times a day	20.5%	(16.0, 25.0)	227
Once a day	30.3%	(25.2, 35.3)	270
A few times a week	24.6%	(19.4, 29.8)	227
About once a week	11.2%	(7.7, 14.6)	91
Never/hardly ever	13.4%	(9.3, 17.4)	80

	Point estimate	95% Confidence Interval	Frequency
<b>Bread, Cereal, Rice, Pasta and Grains: (q3_6e)</b>			
Several times a day	30.1%	(24.5, 35.6)	281
Once a day	44.6%	(39.0, 50.3)	371
A few times a week	17.4%	(13.7, 21.1)	160
About once a week	3.8%	(1.7, 5.8)	46
Never/hardly ever	4.0%	(2.1, 6.0)	36
<b>Water: (q3_6f)</b>			
Several times a day	74.4%	(69.0, 79.8)	695
Once a day	13.1%	(8.8, 17.4)	108
A few times a week	5.4%	(2.7, 8.0)	43
About once a week	2.5%	(0.0, 4.9)	19
Never/hardly ever	4.6%	(1.9, 7.3)	30
<b>Juice: (q3_6g)</b>			
Several times a day	23.0%	(17.9, 28.2)	200
Once a day	24.5%	(19.6, 29.4)	191
A few times a week	20.4%	(16.1, 24.6)	167
About once a week	10.9%	(7.4, 14.3)	99
Never/hardly ever	21.2%	(16.4, 25.9)	237
<b>Soft Drinks/Pop: (q3_6h)</b>			
Several times a day	18.3%	(13.6, 23.0)	119
Once a day	14.2%	(10.6, 17.7)	117
A few times a week	13.1%	(8.9, 17.3)	141
About once a week	16.6%	(12.7, 20.5)	130
Never/hardly ever	37.7%	(32.1, 43.2)	385
<b>Fast food (e.g. burgers, hotdogs, pizza, frozen pizzas, French fries etc.): (q3_6i)</b>			
Several times a day	3.4%	(1.3, 5.5)	32
Once a day	8.2%	(5.5, 10.8)	71
A few times a week	28.5%	(23.2, 33.8)	200
About once a week	21.3%	(16.5, 26.1)	244
Never/hardly ever	38.5%	(33.0, 44.0)	346
<b>Sweets (e.g. candies, cookies and cake): (Sq3_6j)</b>			
Several times a day	9.2%	(5.6, 12.8)	91
Once a day	15.3%	(10.6, 20.0)	138
A few times a week	22.3%	(17.7, 26.8)	188
About once a week	24.7%	(20.0, 29.4)	187
Never/hardly ever	28.3%	(23.3, 33.3)	287



	Point estimate	95% Confidence Interval	Frequency
<b>Past 12 months, how often eaten traditionally hunted/gathered/grown and/or country foods: (q3_7)</b>			
Often	10.6%	(7.3, 13.9)	132
A few times	39.4%	(33.8, 45.0)	395
Not at all	49.6%	(43.8, 55.3)	365
<b>Traditional/country foods have eaten: (q3_7a_1-q3_7a_11)</b>			
Land-based animals	80.9%	(75.1, 86.7)	420
Fresh water fish	55.5%	(47.9, 63.0)	313
Salt water fish/	18.4%	(13.6, 23.1)	114
Other water based foods	14.9%	(10.6, 19.2)	71
Sea-based animals	3.2%	(1.6, 4.9)	16
Game birds (e.g. goose, duck, etc.)	29.6%	(22.7, 36.5)	145
Small game (e.g. rabbit, muskrat, etc.)	14.6%	(9.8, 19.4)	95
Berries or other wild vegetation	48.3%	(40.8, 55.7)	278
Wild rice	47.1%	(39.6, 54.6)	304
Corn soup	49.5%	(42.0, 57.0)	304
Other	12.6%	(8.6, 16.5)	82
<b>The food eaten in your household in the past 12 months: (q3_9)</b>			
You and others always had enough of the kinds of food you wanted to eat	19.6%	(15.3, 23.9)	185
You and others had enough to eat, but not always the kinds of food you wanted	54.2%	(48.4, 59.9)	459
Sometimes you or others did not have enough to eat	18.5%	(13.9, 23.0)	165
Often you or others did not have enough to eat	7.2%	(0.0, 1.2)	79
<b>Would you prefer eating more traditional/country foods: (q3_8)</b>			
Yes	73.6%	(69.0, 78.1)	748
No	12.7%	(9.2, 16.1)	56
<b>Past 12 months, have a place to go if you/your family doesn't have enough to eat: (q3_10)</b>			
Yes	82.7%	(78.1, 87.2)	766
No	9.8%	(5.8, 13.8)	66
I have never needed to go to such a place	7.5%	(4.8, 10.1)	62
<b>Does anyone in your household grow food: (q3_11)</b>			
Yes	12.8%	(9.0, 16.7)	120
No	85.1%	(80.7, 89.4)	761

	Point estimate	95% Confidence Interval	Frequency
<b>Where did you live before you moved to Toronto: (q3_12)</b>			
I have lived in Toronto all my life	18.4%	(13.6, 23.2)	201
First Nation reserve in Canada	22.2%	(17.6, 26.9)	171
Inuit land claim territory in Canada	0.1%	(0.0, 0.0)	3
Small town or rural area in Canada	16.3%	(12.2, 20.4)	150
Canadian city	41.1%	(35.5, 46.8)	329
US	1.2%	(0.0, 1.9)	22
International	0.5%	(0.0, 1.9)	4
<b>Reasons for moving to Toronto: (q3_12a_1-q3_12a_7)</b>			
Family/ Friends/ Social Networks	39.8%	(33.5, 46.2)	258
Employment	33.1%	(27.2, 39.1)	228
Education	26.7%	(21.4, 32.0)	139
Housing	4.9%	(2.6, 7.2)	42
Healthcare	11.6%	(7.7, 15.6)	67
Safety	9.4%	(6.1, 12.5)	60
Other	30.4%	(24.5, 36.3)	211
<b>Were these moves within the city past one year: (q3_13)</b>			
All	55.2%	(46.3, 65.8)	246
Some	18.6%	(11.9, 25.2)	53
None	25.8%	(17.7, 33.9)	45
<b>Were these moves within the city past 5 years: (q3_14)</b>			
All	37.1%	(28.4, 45.8)	183
Some	44.8%	(35.7, 53.9)	125
None	18.1%	(10.0, 26.3)	31

	Point estimate	95% Confidence Interval	Frequency
<b>Type of residence currently live in: (q3_15)</b>			
I have my own house or apartment	35.2%	(29.6, 40.8)	342
Native/Aboriginal Housing	16.8%	(12.2, 21.5)	186
Public Housing/Community Housing;/Co-operative Housing	2.2%	(7.1, 13.3)	108
Stay at a friend's/family/partner or ex-partner's house or apartment	12.5%	(9.7, 15.2)	52
Rooming house/ boarding home/Group home	6.4%	(3.9, 8.9)	58
Homeless Shelter	8.3%	(5.5, 11.0)	58
Student Housing	0.1%	(0.0, 0.0)	2
Motel or Hotel	1.0%	(0.0, 2.4)	8
Recovery House/Second Stage housing/Medical Hospital /Psychiatric Hospital/Drug/Alcohol/Addiction treatment or detox facility	0.1%	(0.0, 0.0)	3
Homeless (living on the street)	6.0%	(3.1, 8.9)	42
other	2.2%	(0.0, 4.1)	24
<b>Is your home: (q3_15a)</b>			
Owned without a mortgage	0.02%	(0.0, 0.0)	1
Owned with a mortgage	4.1%	(1.1, 7.0)	19
Rented	95.7%	(92.7, 98.6)	621
<b>Including yourself, how many people currently live/stay in your household: (q3_17)</b>			
1 person	29.0%	(22.9, 35.1)	244
2 people	29.8%	(24.3, 35.4)	179
3 people	20.4%	(15.4, 25.3)	125
4 people	12.4%	(7.9, 16.9)	76
5 people	0.0%	(1.8, 4.9)	35
6 people	2.7%	(0.0, 5.1)	18
7 people	0.5%	(0.0, 1.5)	4
8 people	0.9%	(0.0, 1.5)	6
9 people	0.03%	(0.0, 0.1)	1
10 or more people	0.9%	(0.0, 2.0)	9
<b>Is your dwelling in need of any major repairs: (q3_18)</b>			
Yes	26.2%	(20.6, 31.8)	217
No	73.4%	(67.8, 79.0)	477

	Point estimate	95% Confidence Interval	Frequency
<b>How often do you give up important things to meet shelter-related/housing costs: (q3_19)</b>			
Several times a month	12.2%	(7.8, 16.7)	114
Once a month	23.6%	(18.2, 29.1)	137
A few times a year	23.1%	(18.3, 28.0)	139
Never	40.4%	(34.0, 46.7)	303
<b>Compared to other people your age, your health is: (q4_1)</b>			
Excellent	10.2%	(6.8, 13.7)	79
Very Good	17.9%	(13.6, 22.3)	162
Good	34.6%	(29.2, 40.0)	304
Fair	26.9%	(21.6, 32.2)	250
Poor	10.2%	(7.4, 13.0)	97
<b>How often do you feel that you are in balance in the four aspects of your life: (q4_2)</b>			
All of the time	7.1%	(4.1, 10.0)	85
Most of the time	29.2%	(24.3, 34.1)	270
Some of the time	44.1%	(38.4, 49.7)	349
A little of the time	14.6%	(10.2, 19.1)	142
None of the time	4.7%	(2.1, 7.4)	41
<b>How often do you feel strong in your relationship to the land/ Mother Earth: (q4_3)</b>			
All of the time	25.8%	(20.8, 30.7)	279
Most of the time	27.3%	(22.2, 32.4)	262
Some of the time	24.0%	(19.0, 29.1)	212
A little of the time	18.9%	(14.6, 23.2)	103
None of the time	3.7%	(16.8, 5.7)	32
<b>Average days per week you do 30 minutes of moderate or hard physical activity: (q4_4)</b>			
1	3.7%	(1.2, 6.2)	44
2	7.1%	(4.5, 9.7)	64
3	13.2%	(9.3, 17.0)	97
4	8.4%	(5.1, 11.7)	70
5	10.1%	(6.7, 13.5)	78
6	4.3%	(2.3, 6.2)	27
7	46.0%	(40.4, 51.7)	452
0	7.1%	(3.9, 10.3)	60
<b>Do you have children under the age of 18 years: (q11_1)</b>			
Yes	26.6%	(21.6, 31.5)	242
No	73.2%	(68.3, 78.2)	383

	Point estimate	95% Confidence Interval	Frequency
<b>How you feel about amount of time you spend with your child(ren): (q11_2)</b>			
I feel like I have plenty or just enough time with my child(ren)	35.7%	(26.3, 45.1)	128
I wish I could spend more time with my child(ren)	63.5%	(54.1, 73.0)	182
<b>Barrier(s) to spending more time with your child(ren): (q11_2a_1-q11_2a_11)</b>			
I am often busy working/	22.1%	(11.0, 33.2)	45
I am often busy with school work	10.4%	(3.4, 17.4)	21
I am often busy taking care of other family or community members	0.9%	(0.0, 3.6)	6
My child(ren) is/are being cared for by other family members	17.2%	(5.9, 28.5)	34
My health prevents me spending as much time as I would like with my child(ren)	4.7%	(0.0, 11.6)	9
I have limited access to my child(ren) because of a shared custody arrangement/	11.2%	(4.5, 17.8)	20
I have limited access to my child(ren) because of a custody order/	22.7%	(11.3, 34.0)	21
I have limited access to my child(ren) because of child welfare involvement	7.2%	(1.2, 13.2)	21
I do not have access to my child(ren) because of a custody order/	3.3%	(0.0, 9.6)	10
I do not have access to my children because of child welfare involvement	9.1%	(2.6, 15.6)	11
Other	43.4%	(30.0, 56.8)	72
<b>Number of close friends/close relatives can talk to about what is on your mind: (q11_3)</b>			
1-2	30.0%	(25.0, 35.1)	250
3-5	42.1%	(36.5, 47.7)	315
6-10	9.6%	(6.0, 13.3)	101
<b>Relationship to those you go to for support: (q11_4_1- q11_4_12)</b>			
Partner/Husband/wife/common law Partner	22.4%	(17.7, 27.1)	212
Son or daughter (15 years or older)	7.9%	(5.2, 10.6)	108
Father or mother	35.5%	(30.0, 41.1)	246
Brother or sister	43.2%	(37.1, 49.3)	366
Grandfather or Grandmother	7.5%	(4.7, 10.3)	44
Other relatives (e.g. Aunties, Uncles, Cousins)	26.9%	(21.1, 32.6)	259
Friends, neighbours, coworkers	75.2%	(70.2, 80.3)	605
Employer	1.6%	(1.0, 2.4)	25
Elders	7.9%	(4.8, 11.0)	129
Clergy or religious/spiritual figure;	1.2%	(0.0, 2.1)	26
Community/friendship centres or circles you attend (peer;	5.1%	(3.3, 6.9)	97
Other	8.3%	(4.6, 12.0)	46

	Point estimate	95% Confidence Interval	Frequency
<b>At the present time, do you smoke cigarettes: (q10_1)</b>			
Yes	62.5%	(56.8, 68.3)	605
No	36.5%	(30.8, 42.3)	285
<b>Smoke free home: (q19_2)</b>			
Yes completely smoke free	19.6%	(14.6, 25.5)	206
yes there are smokers living in the home, but they smoke outside	41.4%	(35.9, 46.9)	354
No	35.0%	(29.6, 40.4)	311
<b>Past 30 days, had a drink of beer, wine, liquor or any other alcoholic beverage: (q19_3)</b>			
Yes	67.6%	(62.0, 73.1)	595
No	32.1%	(26.5, 37.7)	296
<b>Cannabis/ Marijuana: (q19_5a)</b>			
Yes	63.7%	(58.1, 69.2)	517
No	36.0%	(30.5, 41.6)	375
<b>Crack/Cocaine: (q19_5b)</b>			
Yes	21.9%	(17.9, 26.0)	205
No	77.5%	(73.4, 81.6)	658
<b>Sedatives or Sleeping pills: (q19_5c)</b>			
Yes	17.0%	(13.0, 21.1)	133
No	82.6%	(78.6, 86.7)	758
<b>Heroin: (q19_5d)</b>			
Yes	2.0%	(0.0, 3.3)	35
No	97.7%	(96.3, 99.0)	856
<b>Prescription Opiates: (q19_5e)</b>			
Yes	17.9%	(14.1, 21.6)	182
No	81.5%	(77.7, 85.3)	707
<b>Hallucinogens. (q19_5f)</b>			
Yes	9.7%	(6.3, 13.1)	75
No	90.0%	(87.6, 93.4)	816
<b>Amphetamines: (q19_5g)</b>			
Yes	5.3%	(2.8, 7.8)	49
No	94.2%	(91.6, 96.8)	841
<b>Inhalants/Solvents: (q19_5h)</b>			
Yes	2.7%	(1.0, 4.5)	7
No	96.3%	(94.5, 98.1)	881
<b>Other (Please specify): (q19_5i)</b>			
Yes	0.9%	(0.0, 2.2)	9
No	98.8%	(97.4, 100.0)	881
<b>Ever used a needle to inject any drug that wasn't prescribed to you: (q19_6)</b>			
Yes	18.6%	(14.7, 22.4)	188
No	79.7%	(75.6, 83.9)	701

	Point estimate	95% Confidence Interval	Frequency
<b>Ever shared needles with anyone including spouse, partner, or close friend: (q19_7)</b>			
Yes	7.2%	(4.3, 10.1)	77
No	91.4%	(88.1, 94.6)	809
<b>Know where to get clean needles/clean works in Toronto: (q19_8)</b>			
Yes	56.5%	(50.7, 62.3)	562
No	41.1%	(35.3, 46.9)	316
<b>Information about where to get clean needles/clean works in Toronto: (q19_8a)</b>			
Yes	0.9%	(0.0, 2.3)	9
No	93.7%	(88.0, 99.4)	308
<b>Do you participate in traditional Indigenous ceremony: (q21_1)</b>			
Yes	65.1%	(59.4, 70.8)	679
No	34.6%	(29.0, 40.3)	214
<b>experienced challenges in accessing traditional Indigenous ceremonies: (q21_2)</b>			
Yes	37.2%	(31.2, 43.2)	203
No	62.7%	(56.7, 68.8)	475
<b>Challenges experienced in accessing ceremonies: (q21_2a_1-q21_2a8)</b>			
Do not know where to access	45.0%	(34.2, 55.9)	62
Too far to travel	36.5%	(25.4, 47.6)	121
Can't find ceremonies that are relevant to my people/nation;	20.0%	(10.5, 29.5)	36
Do not know enough about them	29.3%	(19.9, 38.7)	32
Not available	12.0%	(5.1, 19.0)	29
Don't have time	9.6%	(3.1, 16.1)	36
Past negative experiences with ceremony	14.4%	(6.4, 22.4)	19
OTHER	27.2%	(17.9, 36.4)	81
<b>For which aspects do you use traditional Indigenous medicines: (q21_3a_1-q21_3a_5)</b>			
Physical	55.1%	(47.9, 62.2)	380
Mental	71.1%	(64.3, 77.8)	429
Emotional	68.7%	(61.9, 75.4)	427
Spiritual	91.9%	(87.6, 96.2)	514
Specific health condition(s) (Please name)	9.1%	(5.6, 12.5)	74

	Point estimate	95% Confidence Interval	Frequency
<b>Where knowledge about traditional Indigenous medicines/practices come from: (q21_3b_1-q21_3b_10)</b>			
Family member	52.4%	(45.4, 59.5)	295
Elders/traditional knowledge keepers;	77.1%	(71.1, 83.0)	445
Indigenous teacher or mentor	28.0%	(22.5, 34.4)	207
Other Indigenous peoples	44.8%	(37.8, 51.7)	259
Indigenous health and social service organizations in the city	22.9%	(17.2, 28.5)	214
I learned traditional Indigenous medicines/practices while incarcerated	6.3%	(3.6, 9.0)	44
Non-Indigenous people	2.2%	(0.0, 3.8)	18
Internet	19.6%	(14.1, 25.2)	80
Books	23.2%	(17.6, 28.7)	108
Others	4.9%	(2.1, 7.8)	31
<b>estimate in which group household income falls: (q23_2)</b>			
\$20,000 to less than \$30,000	18.7%	(14.4, 23.0)	134
\$30,000 to less than \$40,000	3.3%	(1.5, 5.1)	52
\$40,000 to less than \$50,000	3.1%	(1.4, 4.7)	37
\$50,000 to less than \$60,000	1.5%	(0.0, 3.1)	28
\$60,000 to less than \$70,000	0.2%	(0.0, 2.2)	17
\$70,000 to less than \$80,000	0.3%	(0.0, 0.0)	5
\$80,000 to less than \$90,000	0.3%	(0.0, 0.0)	6
\$90,000 to less than \$100,000	0.7%	(0.0, 1.5)	9

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*Note:*  $p < .05$ .



[Table 3A](#). Weighted analysis of association between key Our Health Counts survey variables and suicidal thoughts:

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>How do you self-identify: (q2_1_1-q2_1_3)</b>				
Metis vs First Nations	0.73	(0.29, 1.86)	0.82	(0.23, 2.91)
Inuit vs First Nation	1.28	(0.30, 5.4)	0.55	(0.12, 2.41)
<b>Are you status: (Q2_1a)</b>				
No vs Yes	0.78	(0.40, 1.53)	0.74	(0.62, 0.88)
<b>Do you identify as mixed-race or mixed-ancestry: (q2_4)</b>				
No vs Yes	0.82	(0.45, 1.49)	0.82	(0.62, 1.07)
<b>Do you identify as a Two-Spirit person: (q2_5)</b>				
Yes vs. No	1.81	(0.84, 3.9)	1.77	(1.2, 2.61)
<b>What is your gender: (q2_6)</b>				
Male (a man) vs female (a woman)	1.01	(0.54, 1.88)	1.01	(0.79, 1.27)
Trans (e.g.: transgender, transsexual, gender queer) and other vs Female ( a woman)	2.15	(0.28, 16.3)	2.43	(0.34, 17.39)
<b>How do you identify your sexual orientation: (q2_7)</b>				
Lesbian vs Straight/Heterosexual	0.08	(0.02, 0.42)	0.12	(0.06, 0.22)
Gay vs straight/Heterosexual	4.72	(0.95, 23.54)	2.70	(1.38, 9.86)
Bisexual vs Straight/Heterosexual	2.20	(0.82, 5.95)	2.31	(1.21, 4.39)
Asexual vs Straight/Heterosexual	9.97	(2.24, 44.34)	12.46	(4.18, 37.127)
<b>What is your relationship status: (q2_8)</b>				
Married and Cohabiting vs Single	2.25	(0.82, 6.16)	2.15	(1.25, 3.68)
Separated vs Single	1.58	(0.4, 6.29)	1.63	(0.71, 3.74)
Common law, Cohabiting vs Single	0.76	(0.3, 1.95)	0.72	(0.54, 0.95)
Girlfriend/Boyfriend vs Single	0.85	(0.34, 2.15)	0.75	(0.27, 2.08)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est- imate	95% Confidence Interval	Point Est- imate	95% Confidence Interval
<b>Best describes household: (q2_8)</b>				
One Adult with Children vs One adult person living alone	0.64	(0.28, 1.49)	0.59	(0.29, 1.20)
One adult with children and additional family vs One adult person living alone	0.9	(0.24, 3.44)	0.70	(0.41, 1.20)
A married or common law couple with No children vs One adult person living alone	1.01	(0.29, 3.5)	0.83	(0.64, 1.06)
A married or common law couple with no children and additional family vs One adult person living alone	2.09	(0.38, 11.43)	1.74	(0.17, 17.72)
A married or common law with children or One Adult with Children vs One adult person living alone	0.71	(0.3, 1.68)	0.55	(0.38, 0.78)
A married or common law with children or additional family One Adult with Children vs One adult person living alone	1.53	(0.32, 7.42)	1.35	(0.14, 12.78)
Two or more unrelated persons vs One Adult with Children vs One adult person living alone	1.35	(0.53, 3.44)	1.05	(0.65, 1.70)
Other vs One Adult with Children vs One adult person living alone	0.76	(0.33, 1.75)	0.61	(0.43, 0.87)
<b>Do you speak an Aboriginal language or languages: (q2_10)</b>				
Yes vs. No	2.77	(1.57, 4.88)	2.7	(2.07, 3.51)
<b>Highest level of schooling completed: (q3_1)</b>				
Less than grade 9 vs some high school	1.01	(0.42, 2.4)	1.14	(0.61, 2.14)
Complete high school vs some high school	0.36	(0.15, 0.86)	0.35	(0.30, 0.42)
Some college or specialized training/completed college of specialized training vs some high school	1.91	(0.82, 4.44)	2.21	(1.57, 3.12)
Some university completed vs some high school	1.05	(0.43, 2.56)	1.17	(0.83, 1.64)
Some post graduate education (masters, PhD, MD, LLB) completed post graduate education vs some high school	0.49	(0.09, 2.04)	0.25	(0.07, 0.90)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est- imate	95% Confidence Interval	Point Est- imate	95% Confidence Interval
<b>Current employment status: (q3_2)</b>				
Part time vs unemployed	0.62	(0.25, 1.55)	0.64	(0.24, 1.69)
Full time vs unemployed	0.53	(0.24, 1.19)	0.53	(0.33, 0.84)
Seasonal vs unemployed	0.23	(0.05, 1.02)	0.25	(0.08, 0.81)
Self-employed vs unemployed	2.74	(0.74, 10.23)	3.07	(1.37, 6.88)
Homemaker vs unemployed	1.10	(0.37, 3.3)	1.27	(0.42, 3.80)
Any other informal paid work such as babysitting housekeeping vs unemployed	2.99	(0.46, 19.2)	2.77	(0.98, 7.81)
Student vs unemployed	0.64	(0.22, 1.92)	0.67	(0.46, 0.97)
Retired vs unemployed	0.57	(0.21, 1.53)	0.66	(0.20, 2.24)
Other vs Unemployed	0.22	(0.06, 0.79)	0.25	(0.04, 1.48)
<b>Total income for all household members, sources in past 12 months: (q3_3_1-q3_3_17)</b>				
Wages and salaries vs other	1.05	(0.41, 2.67)	0.41	(0.2, 0.83)
Income from self-employment vs other	0.09	(0.02, 0.42)	0.12	(0.02, 0.79)
<b>Past 12 months, overall health and well-being affected by financial hardship: (q3_4)</b>				
Yes vs. No	2.97	(1.55, 5.7)	3.07	(2.28, 4.13)
<b>Past 12 months, ability to engage in preventative health activities affected by financial hardship: (q3_5)</b>				
Yes vs. No	2.27	(1.24, 4.15)	2.37	(1.34, 4.20)
<b>Past week (on average), how often eat/drink following foods - Milk, cheese, yogurt and other milk products: (q3_6a)</b>				
Several times a day vs once a day	1.69	(0.70, 4.07)	1.65	(1.32, 2.06)
A few times a week vs once a day	1.32	(0.57, 3.08)	1.35	(0.78, 2.34)
About once a week vs once a day	0.87	(0.34, 2.21)	0.84	(0.61, 1.15)
Never/hardly ever vs Once a day	2.71	(1.22, 6.03)	2.83	(1.59, 5.05)
<b>Protein: (q3_6b)</b>				
Several times a day vs once a day	1.28	(0.55, 3.00)	1.43	(0.96, 2.13)
A few times a week vs once a day	1.52	(0.72, 3.21)	2.07	(0.78, 5.49)
About once a week vs once a day	3.09	(1.15, 8.27)	5.30	(3.01, 9.33)
Never/hardly ever vs Once a day	4.82	(1.54, 15.1)	3.19	(0.90, 11.3)
<b>Vegetables Excluding: French fries and potato chips: (q3_6c)</b>				
Several times a day vs once a day	1.36	(0.69, 2.70)	2.11	(1.55, 2.88)
A few times a week vs once a day	1.35	(0.59, 3.09)	0.89	(0.69, 1.13)
About once a week vs once a day	1.38	(0.48, 3.96)	1.58	(0.58, 4.32)
Never/hardly ever vs Once a day	0.80	(0.22, 2.95)	1.04	(0.95, 1.13)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>Fruit: (q3_6d)</b>				
Several times a day vs once a day	0.93	(0.43, 2.03)	0.88	(0.63, 1.24)
A few times a week vs once a day	1.02	(0.42, 2.44)	0.87	(0.53, 1.43)
About once a week vs once a day	1.51	(0.54, 4.21)	1.50	(0.78, 2.89)
Never/hardly ever vs Once a day	0.98	(0.32, 3.01)	1.03	(0.65, 1.64)
<b>Bread, Cereal, Rice, Pasta and Grains: (q3_6e)</b>				
Several times a day vs once a day	0.65	(0.31, 1.36)	0.63	(0.38, 1.04)
A few times a week vs once a day	1.13	(0.44, 2.93)	1.33	(0.94, 1.86)
About once a week vs once a day	1.32	(0.43, 4.09)	1.35	(0.90, 2.01)
Never/hardly ever vs Once a day	0.74	(0.19, 2.84)	0.88	(0.58, 1.34)
<b>Water: (q3_6f)</b>				
Once a day vs several times a day	0.81	(0.38, 1.70)	0.84	(0.5, 1.40)
A few times a week vs several times a day	0.93	(0.31, 2.81)	0.93	(0.57, 1.50)
About once a week vs several times a day	0.62	(0.11, 3.39)	0.67	(0.47, 0.96)
Never, hardly ever vs several times a day	0.39	(0.08, 1.88)	0.46	(0.13, 1.57)
<b>Juice: (q3_6g)</b>				
Several times a day vs never/hardly ever	0.29	(0.13, 0.66)	0.26	(0.15, 0.44)
Once a day vs never/hardly ever	0.39	(0.18, 0.82)	0.38	(0.21, 0.70)
A few times a week vs Never/hardly ever	0.70	(0.30, 1.63)	0.61	(0.46, 0.81)
About once a week vs Never/hardly ever	1.07	(0.40, 2.85)	0.88	(0.54, 1.41)
<b>Soft Drinks/Pop: (q3_6h)</b>				
Several times a day vs never/hardly ever	0.63	(0.25, 1.62)	0.70	(0.26, 1.92)
Once a day vs never/hardly ever	1.09	(0.42, 2.84)	1.00	(0.29, 3.50)
A few times a week vs Never/hardly ever	0.84	(0.39, 1.82)	0.85	(0.27, 2.66)
About once a week vs Never/hardly ever	1.87	(0.80, 4.38)	1.82	(0.80, 4.15)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Fast food (e.g. burgers, hotdogs, pizza, frozen pizzas, French fries etc.): (q3_6i)</b>				
Several times a day vs never/hardly ever	1.26	(0.37, 4.23)	1.39	(0.77, 2.51)
Once a day vs never/hardly ever	1.73	(0.55, 5.42)	1.70	(0.70, 4.13)
A few times a week vs Never/hardly ever	0.62	(0.27, 1.44)	0.59	(0.45, 0.77)
About once a week vs Never/hardly ever	1.24	(0.64, 2.41)	1.21	(0.90, 1.62)
<b>Sweets (e.g. candies, cookies and cake): (Sq3_6j)</b>				
Several times a day vs never/hardly ever	1.37	(0.56, 3.34)	1.65	(1.21, 2.26)
Once a day vs never/hardly ever	1.67	(0.81, 3.45)	1.85	(0.66, 5.22)
A few times a week vs Never/hardly ever	4.08	(1.95, 8.54)	4.54	(2.58, 8.00)
About once a week vs Never/hardly ever	1.27	(0.52, 3.13)	1.34	(0.21, 8.48)
<b>Past 12 months, how often eaten traditionally hunted/gathered/grown and/or country foods: (q3_7)</b>				
Often vs a few times	1.63	(0.58, 4.57)	1.70	(1.25, 2.31)
Not at all vs a few time	0.94	(0.49, 1.8)	1.05	(0.55, 2.00)
<b>Traditional/country foods have eaten: (q3_7a_1-q3_7a_11)</b>				
Land-based animals vs Berries or other wild vegetation/ Wild rice/ Corn soup	0.69	(0.21, 2.24)	0.71	(0.36, 1.42)
Fresh water fish Salt water fish/ Other water based foods vs Berries or other wild vegetation/ Wild rice/ Corn soup	1.32	(0.44, 3.91)	1.22	(0.53, 2.82)
Game birds (e.g. goose, duck, etc.)/ Small game (e.g. rabbit, muskrat, etc.) vs Berries or other wild vegetation/ Wild rice/ Corn soup	3.21	(0.75, 13.71)	4.00	(3.09, 5.19)
Other vs Berries or other wild vegetation/ Wild rice/ Corn soup	1.88	(0.5, 7.02)	1.14	(0.56, 2.32)
<b>Would you prefer eating more traditional/country foods: (q3_8)</b>				
No vs Yes	0.71	(0.19, 2.67)	0.57	(0.35, 0.93)
Neutral vs Yes	1.99	(0.89, 4.47)	1.87	(0.97, 3.59)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>The food eaten in your household in the past 12 months: (q3_9)</b>				
You and others always had enough of the kinds of food you wanted to eat vs You and others had enough to eat, but not always the kinds of food you wanted	0.74	(0.3, 1.81)	0.66	(0.19, 2.27)
Sometimes you or others did not have enough to eat vs You and others had enough to eat, but not always the kinds of food you wanted	1.02	(0.52, 2.03)	0.85	(0.37, 1.98)
Often you or others did not have enough to eat vs You and others had enough to eat, but not always the kinds of food you wanted	2.21	(0.92, 5.27)	2.21	(1.00, 4.91)
<b>Past 12 months, have a place to go if you/your family doesn't have enough to eat: (q3_10)</b>				
No vs Yes	2.02	(0.72, 5.64)	1.95	(1.67, 2.29)
I have never needed to go to such a place vs Yes	3.48	(0.83, 14.57)	3.56	(2.37, 5.36)
<b>Does anyone in your household grow food: (q3_11)</b>				
Yes vs. No	1.87	(0.78, 4.46)	1.68	(1.04, 2.71)
<b>Where did you live before you moved to Toronto: (q3_12)</b>				
I have lived in Toronto all my life vs Canadian city	0.96	(0.46, 1.99)	0.96	(0.61, 1.50)
First Nation reserve in Canada vs Canadian city	1.50	(0.63, 3.55)	1.52	(0.80, 2.90)
Inuit land claim territory in Canada vs Canadian city	1.90	(0.14, 25.05)	1.38	(0.17, 10.98)
Small town or rural area in Canada vs Canadian city	1.72	(0.69, 4.29)	1.65	(1.06, 2.57)
US vs Canadian city	0.56	(0.11, 2.79)	0.53	(0.11, 2.68)
International vs Canadian city	31.67	(2.85, 352.23)	25.58	(1.63, 402.16)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est- imate	95% Confidence Interval	Point Est- imate	95% Confidence Interval
<b>Reasons for moving to Toronto: (q3_12a_1-q3_12a_7)</b>				
Family/ Friends/ Social Networks vs Other	0.34	(0.13, 0.92)	0.38	(0.18, 0.82)
Employment vs Other	0.85	(0.37, 1.94)	1.03	(0.81, 1.30)
Education vs Other	1.67	(0.58, 4.80)	2.13	(1.27, 3.57)
Housing vs Other	0.60	(0.16, 2.24)	0.64	(0.31, 1.34)
Healthcare vs Other	0.41	(0.13, 1.32)	0.52	(0.33, 0.82)
Safety vs Other	0.44	(0.08, 2.46)	0.50	(0.13, 1.92)
<b>Were these moves within the city past one year: (q3_13)</b>				
Some vs all	1.51	(0.47, 4.81)	1.30	(0.66, 2.55)
None vs all	0.72	(0.19, 2.75)	0.62	(0.27, 1.41)
<b>Were these moves within the city past 5 years: (q3_14)</b>				
Some vs all	2.24	(0.86, 5.86)	1.89	(1.13, 3.17)
None vs all	0.60	(0.13, 2.65)	0.61	(0.25, 1.46)
<b>Type of residence currently live in: (q3_15)</b>				
Native/Aboriginal Housing vs I have my own house or apartment	1.23	(0.59, 2.55)	0.32	(0.80, 2.18)
Public Housing/Community Housing;/Co-operative Housing vs I have my own house or apartment	0.92	(0.34, 2.49)	0.98	(0.43, 2.24)
Stay at a friend's/family/partner or ex-partner's house or apartment vs I have my own house or apartment	5.14	(1.64, 16.14)	4.97	(3.45, 7.15)
Rooming house/ boarding home/ Group home, nursing home vs I have my own house or apartment	2.07	(0.82, 5.24)	2.30	(1.83, 2.90)
Homeless Shelter vs I have my own house or apartment	2.38	(0.97, 5.84)	2.46	(1.95, 3.10)
Motel or Hotel vs I have my own house or apartment	0.61	(0.10, 3.86)	0.63	(0.45,0.87)
Recovery House/Second Stage housing/Medical Hospital /Psychiatric Hospital/Drug/Alcohol/Addiction treatment or detox facility vs I have my own house or apartment	0.13	(0.01, 1.74)	0.16	(0.14, 0.17)
Homeless (living on the street) vs I have my own house or apartment	3.36	(1.01, 11.22)	3.54	(1.06, 11.75)
Other vs I have my own house or apartment	4.39	(1.29, 12.94)	05.5 0	(3.85, 7.88)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>Is your home: (q3_15a)</b>				
Owned without a mortgage vs Rented	<0.001	(<0.001, <0.001)	0.00	(<0.001, 0.01)
Owned with a mortgage vs Rented	1.62	(0.38, 6.93)	1.54	(0.62, 3.84)
<b>How many rooms are there in your home/place you are staying: (q3_16)</b>				
1 room vs 3 or more than 3	1.56	(0.61, 4.01)	1.76	(1.21, 2.58)
2 rooms vs 3 or more than 3	1.37	(0.59, 3.19)	1.84	(1.13, 3.01)
<b>Including yourself, how many people currently live/stay in your household: (q3_17)</b>				
2 people vs 1	1.44	(0.57, 3.61)	1.27	(0.90, 1.41)
3 people vs 1	0.61	(0.19, 1.94)	0.51	(0.39, 0.66)
4 people vs 1	0.83	(0.3, 2.27)	0.58	(0.23, 1.48)
5 people vs 1	0.68	(0.23, 2.02)	0.76	(0.48, 1.20)
6 people vs 1	0.44	(0.09, 2.22)	0.40	(0.24, 0.67)
7 or more people vs 1	1.53	(0.37, 6.41)	1.23	(0.41, 3.72)
<b>Is your dwelling in need of any major repairs: (q3_18)</b>				
Yes vs. No	2.73	(1.31, 5.65)	2.98	(1.71, 5.19)
<b>How often do you give up important things to meet shelter-related/housing costs: (q3_19)</b>				
Several times a month vs Never	1.16	(0.52, 2.58)	1.04	(0.67, 1.62)
Once a month vs Never	1.90	(0.65, 5.56)	1.53	(0.89, 2.65)
A few times a year vs Never	1.25	(0.44, 3.58)	1.16	(0.90, 1.50)
<b>Compared to other people your age, your health is: (q4_1)</b>				
Excellent vs Good	0.32	(0.11, 0.93)	0.32	(0.12, 0.87)
Very Good vs Good	0.90	(0.39, 2.06)	0.91	(0.54, 1.51)
Fair vs Good	1.3	(0.61, 2.78)	1.38	(0.92, 2.07)
Poor vs Good	2.26	(0.73, 7.07)	2.37	(1.58, 3.56)
<b>How often do you feel that you are in balance in the four aspects of your life: (q4_2)</b>				
All of the time vs Some of the time	0.54	(0.21, 1.42)	0.25	(0.22, 1.26)
Most of the time vs Some of the time	1.14	(0.53, 2.46)	1.17	(0.53, 2.56)
A little of the time vs Some of the time	0.59	(0.24, 1.46)	0.67	(0.32, 1.41)
None of the time vs Some of the time	2.42	(0.8, 7.29)	2.13	(0.77, 5.94)



Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>How often do you feel strong in your relationship to the land/ Mother Earth: (q4_3)</b>				
Most of the time vs All of the time	0.90	(0.4, 2.04)	0.96	(0.85, 1.09)
Some of the time vs All of the time	1.25	(0.59, 2.62)	1.25	(0.58, 2.68)
A little of the time vs All of the time	0.71	(0.24, 2.14)	0.81	(0.32, 2.06)
None of the time vs All of the time	0.75	(0.21, 2.69)	0.66	(0.42, 1.03)
<b>Average days per week you do 30 minutes of moderate or hard physical activity: (q4_4)</b>				
None vs 7 days/Week	4.54	(1.52, 13.53)	4.20	(2.38, 7.42)
1 day	1.05	(0.38, 2.93)	0.91	(0.21, 3.99)
2 days	2.97	(0.89, 9.95)	2.96	(1.32, 6.63)
3 days	1.26	(0.45, 3.51)	1.13	(0.38, 3.36)
4 days	3.30	(1.05, 10.39)	2.79	(1.38, 5.67)
5 days	1.10	(0.34, 3.56)	1.22	(0.79, 1.89)
6 days	2.77	(0.7, 10.97)	2.52	(0.51, 12.39)
<b>Do you have children under the age of 18 years: (q11_1)</b>				
Yes vs. No	0.77	(0.41, 1.47)	0.77	(0.56, 1.07)
<b>How you feel about amount of time you spend with your child(ren): (q11_2)</b>				
Yes vs. No	0.78	(0.3, 2.05)	0.87	(0.53, 1.41)
<b>Barrier(s) to spending more time with your child(ren): (q11_2a_1-q11_2a_11)</b>				
I am often busy working/ I am often busy with school work/I am often busy taking care of other family or community members vs other	1.41	(0.28, 7.18)	1.41	(0.56, 3.57)
My child(ren) is/are being cared for by other family members vs other	2.12	(0.3, 15.24)	2.12	(1.11, 4.04)
My health prevents me spending as much time as I would like with my child(ren) vs other	4.83	(0.28, 82.2)	4.83	(0.3, 78.22)
I have limited access to my child(ren) because of a shared custody arrangement/ I have limited access to my child(ren) because of a custody order/I have limited access to my child(ren) because of child welfare involvement, vs other	8.65	(1.86, 40.2)	8.65	(5.18, 14.45)
I do not have access to my child(ren) because of a custody order/ I do not have access to my children because of child welfare involvement vs other	46.06	(6.35, 334.41)	46.06	(19.09, 111.12)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>Number of close friends/close relatives can talk to about what is on your mind: (q11_3)</b>				
No friends vs 3-5 friend	1.43	(0.61, 3.38)	1.59	(1.19, 2.11)
1-2 friends vs 3-5 friends	2.25	(1.12, 4.52)	2.56	(1.91, 3.43)
6-10 friends vs 3-5 friends	0.67	(0.22, 2.00)	0.75	(0.55, 1.03)
More than 10 friends vs 3-5 friends	1.43	(0.56, 3.66)	1.73	(1.27, 2.35)
<b>Relationship to those you go to for support: (q11_4_1- q11_4_12)</b>				
Partner/Husband/wife/common law partner vs friends, neighbours, coworkers	4.09	(0.51, 32.56)	3.17	(1.70, 5.93)
Son or daughter vs friends, neighbours, coworkers	10.19	(0.88, 118.7)	8.80	(4.16, 18.62)
Father or mother vs friends, neighbours, coworkers	1.74	(0.18, 16.56)	1.07	(0.12, 9.85)
Brother or sister vs friends, neighbours, coworkers	3.39	(0.66, 17.44)	2.13	(0.72, 6.26)
Grandfather or grandmother vs friends, neighbours, coworkers	0.31	(0.03, 3.57)	0.23	(0.04, 1.25)
Ether relatives (e.g. aunties, uncles, cousins) vs friends, neighbours, coworkers	1.05	(0.19, 5.82)	0.89	(0.49, 1.61)
Employer vs friends, neighbours, coworkers	1.42	(0.36, 5.62)	0.34	(0.10, 1.15)
Elder vs friends, neighbours, coworkers	0.46	(0.04, 6.15)	2.67	(1.74, 4.11)
Clergy or religious/spiritual figure vs friends, neighbours, coworkers	3.31	(0.76, 14.46)	1.36	(0.27, 6.96)
Community vs friends, neighbours, coworkers	1.59	(0.19, 13.23)	0.83	(0.47, 1.47)
Other vs friends, neighbours, coworkers	0.97	(0.23, 4.16)	0.79	(0.40, 1.54)
<b>At the present time, do you smoke cigarettes: (q10_1)</b>				
Yes vs. No	1.84	(0.95, 3.57)	1.91	(1.38, 2.66)
<b>Smoke free home: (q19_2)</b>				
Yes completely smoke free vs yes there are smokers living in the home, but they smoke outside	0.87	(0.42, 1.80)	0.80	(0.35, 1.84)
No vs yes there are smokers living in the home, but they smoke outside	1.17	(0.56, 2.42)	0.90	(0.42, 1.92)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>Past 30 days, had a drink of beer, wine, liquor or any other Alcoholic beverage: (q19_3)</b>				
Yes vs. No	0.78	(0.43, 1.45)	0.70	(0.42, 1.19)
<b>Cannabis/ Marijuana: (q19_5a)</b>				
Yes vs. No	1.04	(0.57, 1.91)	0.98	(0.52, 1.84)
<b>Crack/Cocaine: (q19_5b)</b>				
Yes vs. No	2.59	(1.32, 5.05)	2.30	(0.93, 5.71)
<b>Sedatives or Sleeping pills: (q19_5c)</b>				
Yes vs. No	2.94	(1.28, 6.75)	2.70	(1.97, 3.69)
<b>Heroin: (q19_5d)</b>				
Yes vs. No	1.08	(0.4, 2.92)	1.18	(0.83, 1.66)
<b>Prescription Opiates: (q19_5e)</b>				
Yes vs. No	3.55	(1.77, 7.08)	3.2	(1.61, 6.37)
<b>Hallucinogens: (q19_5f)</b>				
Yes vs. No	3.69	(1.32, 10.33)	3.64	(1.71, 7.79)
<b>Amphetamines: (q19_5g)</b>				
Yes vs. No	3.94	(1.5, 10.34)	3.83	(2.25, 6.51)
<b>Inhalants/Solvents: (q19_5h)</b>				
Yes vs. No	2.09	(0.18, 24.16)	2.61	(1.57, 4.35)
<b>Other (Please specify): (q19_5i)</b>				
Yes vs. No	0.16	(0.02, 1.43)	0.22	(0.03, 1.40)
<b>Ever used a needle to inject any drug that wasn't prescribed to you: (q19_6)</b>				
Yes vs. No	3.08	(1.5, 6.35)	2.84	(2.41, 3.34)
<b>Ever shared needles with anyone including spouse, partner, or close friend: (q19_7)</b>				
Yes vs. No	2.43	(0.99, 5.95)	2.61	(1.34, 5.08)
<b>Know where to get clean needles/clean works in Toronto: (q19_8)</b>				
Yes vs. No	2.36	(1.28, 4.33)	2.59	(1.27, 5.3)
<b>Information about where to get clean needles/clean works in Toronto: (q19_8a)</b>				
Yes vs. No	1.99	(0.35, 11.39)	2.01	(0.63, 6.39)
<b>Do you participate in traditional Indigenous ceremony: (q21_1)</b>				
Yes vs. No	2.66	(1.43, 4.95)	2.68	(2.12, 3.39)
<b>Experienced challenges in accessing traditional Indigenous ceremonies: (q21_2)</b>				
Yes vs. No	2.78	(1.40, 5.54)	2.22	(1.50, 3.29)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>Challenges experienced in accessing ceremonies: (q21_2a_1-q21_2a8)</b>				
Do not know where to access vs other	0.59	(0.09, 3.86)	0.51	(0.27, 0.96)
Too far to travel vs other	0.65	(0.12, 3.52)	0.67	(0.41, 1.09)
Can't find ceremonies that are relevant to my people/nation vs other	0.71	(0.06, 8.44)	0.78	(0.45, 1.34)
Do not know enough about them vs other	16.67	(2.08, 133.53)	21.14	(1.99, 224.11)
Not available vs other	0.77	(0.08, 7.08)	1.49	(0.86, 2.59)
Don't have time vs other	0.57	(0.09, 3.7)	0.8	(0.12, 5.5)
Past negative experiences with ceremony vs other	4.51	(0.36, 57.3)	2.42	(1.14, 5.14)
<b>For which aspects do you use traditional Indigenous medicines: (q21_3a_1-q21_3a_5)</b>				
Physical vs. Specific health condition(s)	0.43	(0.06, 3.35)	0.42	(0.04, 4.05)
Mental vs. Specific health condition(s)	0.21	(0.04, 1.11)	0.19	(0.09, 0.37)
Emotional vs. Specific health condition(s)	1.63	(0.23, 11.54)	1.42	(0.4, 5.02)
Spiritual vs. Specific health condition(s)	0.66	(0.26, 1.72)	0.55	(0.49, 0.62)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Est-imate	95% Confidence Interval	Point Est-imate	95% Confidence Interval
<b>Where knowledge about traditional Indigenous medicines/practices come from: (q21_3b_1-q21_3b_10)</b>				
Family member vs Indigenous health and social service organizations in the city	1.01	(0.3, 3.42)	1.02	(0.38, 2.68)
Elders/traditional knowledge keepers vs. Indigenous health and social service organizations in the city	1.12	(0.42, 2.99)	1.12	(0.83, 1.51)
Indigenous teacher or mentor	0.66	(0.19, 2.37)	0.53	(0.19, 1.46)
Other Indigenous peoples vs. Indigenous health and social service organizations in the city	0.99	(0.36, 2.74)	0.82	(0.37, 1.85)
I learned traditional Indigenous medicines/practices while incarcerated vs Indigenous health and social service organizations in the city	5.93	(1.19, 29.48)	5.99	(2.64, 13.58)
Non-Indigenous vs. Indigenous health and social service organizations in the city	1.78	(0.19, 16.84)	1.41	(0.10, 20.67)
Internet vs. Indigenous health and social service organizations in the city	0.50	(0.12, 2.11)	0.46	(0.13, 1.57)
Books vs. Indigenous health and social service organizations in the city	1.68	(0.54, 5.20)	1.65	(0.74, 3.71)
Other vs. Indigenous health and social service organizations in the city	0.91	(0.26, 3.22)	0.74	(0.20, 2.81)
<b>Estimate in which group household income falls: (q23_2)</b>				
\$30,000 to less than \$30,000 vs less than \$20,000	0.39	(0.18, 0.87)	0.40	(0.24, 0.66)
\$30, 000 to less than \$100,000 and more than \$100,000 vs less than \$20,000	0.74	(0.38, 1.44)	0.67	(0.34, 1.32)

Note:  $p < .05$

Table 4A. Weighted analysis of association between key Our Health Counts survey variables and suicidal attempts:

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>How do you self-identify: (q2_1_1-q2_1_3)</b>				
Metis vs First Nations	0.47	(0.18, 1.22)	0.50	(0.90, 2.93)
Inuit vs First Nation	1.50	(0.36, 6.36)	0.25	(0.04, 1.68)
<b>Are you status: (Q2_1a)</b>				
No vs Yes	0.64	(0.32, 1.29)	0.61	(0.46, 0.79)
<b>Do you identify as mixed-race or mixed-ancestry: (q2_4)</b>				
No vs Yes	0.66	(0.34, 1.28)	0.64	(0.57, 0.72)
<b>Do you identify as a Two-Spirit person: (q2_5)</b>				
Yes vs. No	2.76	(1.27, 6.02)	2.57	(1.58, 4.18)
<b>What is your gender: (q2_6)</b>				
Male (a man) vs female (a woman)	0.72	(0.36, 1.44)	0.70	(0.57, 0.87)
Trans (e.g.: transgender, transsexual, gender queer) and other vs Female ( a woman)	1.16	(0.25, 5.4)	1.14	(0.24, 5.37)
<b>How do you identify your sexual orientation: (q2_7)</b>				
Lesbian Vs Straight/Heterosexual	3.73	(0.47, 29.35)	5.82	(0.71, 47.58)
Gay vs straight/Heterosexual	4.56	(0.72, 28.77)	4.01	(1.76, 9.11)
Bisexual vs Straight/Heterosexual	4.36	(1.66, 11.45)	5.18	(1.74, 15.38)
Asexual vs Straight/Heterosexual	2.84	(0.9, 8.99)	4.09	(2.39, 7.01)
<b>What is your relationship status: (q2_8)</b>				
Married and Cohabiting vs Single	1.36	(0.47, 3.94)	1.52	(0.83, 2.78)
Separated vs Single	2.13	(0.49, 9.21)	2.27	(0.53, 9.70)
Common law , Cohabiting vs Single	0.73	(0.28, 1.88)	0.76	(0.49, 1.19)
Girlfriend/Boyfriend vs Single	1.24	(0.45, 3.4)	1.15	(0.36, 3.69)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Best describes household: (q2_8)</b>				
One Adult with Children vs One adult person living alone	0.77	(0.29, 2.03)	0.77	(0.36, 1.68)
One adult with children and additional family vs One adult person living alone	1.29	(0.31, 5.27)	0.89	(0.59, 1.34)
A married or common law couple with No children vs One adult person living alone	1.35	(0.43, 4.25)	1.30	(0.91, 1.87)
A married or common law couple with no children and additional family vs One adult person living alone	0.87	(0.13, 5.94)	0.81	(0.05, 13.34)
A married or common law with children or One Adult with Children vs One adult person living alone	0.33	(0.13, 0.84)	0.30	(0.18, 0.49)
A married or common law with children or additional family One Adult with Children vs One adult person living alone	0.86	(0.17, 4.42)	0.82	(0.09, 7.29)
Two or more unrelated persons vs One Adult with Children vs One adult person living alone	2.00	(0.78, 5.16)	1.55	(0.98, 2.45)
Other vs One Adult with Children vs One adult person living alone	0.79	(0.34, 1.85)	0.68	(0.44, 1.05)
<b>Do you speak an Aboriginal language or languages: (q2_10)</b>				
Yes vs. No	2.02	(1.05, 3.86)	2.05	(1.37, 3.07)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Highest level of schooling completed: (q3_1)</b>				
Less than grade 9 vs some high school	1.46	(0.61, 3.54)	1.84	(0.80, 4.23)
Complete high school vs some high school	0.26	(0.11, 0.63)	0.25	(0.22, 0.29)
Some college or specialized training/completed college of specialized training vs some high school	1.02	(0.41, 2.53)	1.22	(1.01, 1.47)
Some university completed vs some high school	0.51	(0.19, 1.34)	0.69	(0.28, 1.74)
Some post graduate education (masters, PhD, MD, LLB) completed post graduate education vs some high school	1.28	(0.26, 6.67)	0.75	(0.40, 4.38)
<b>Current employment status: (q3_2)</b>				
Part time vs unemployed	0.14	(0.06, 0.34)	0.12	(0.04, 0.38)
Full time vs unemployed	0.27	(0.12, 0.59)	0.39	(0.28, 0.55)
Seasonal vs unemployed	0.33	(0.06, 1.71)	0.37	(0.09, 1.50)
Self-employed vs unemployed	2.16	(0.5, 9.44)	2.65	(1.53, 4.61)
Homemaker vs unemployed	0.89	(0.3, 2.62)	1.28	(0.58, 2.83)
Any other informal paid work such as babysitting housekeeping vs unemployed	2.23	(0.36, 13.91)	2.15	(0.94, 4.87)
Student vs unemployed	0.72	(0.22, 2.35)	1.02	(0.74, 1.40)
Retired vs unemployed	0.41	(0.14, 1.19)	0.42	(0.07, 2.42)
Other vs Unemployed	0.92	(0.17, 4.83)	1.14	(0.91, 1.44)
<b>Total income for all household members, sources in past 12 months: (q3_3_1-q3_3_17)</b>				
Wages and salaries vs other	0.39	(0.16, 0.95)	0.94	(0.40, 2.21)
Income from self-employment vs other	0.13	(0.02, 0.71)	0.09	(0.03, 0.35)
<b>Past 12 months, overall health and well-being affected by financial hardship: (q3_4)</b>				
Yes vs. No	2.88	(1.35, 6.17)	2.80	(1.73, 4.53)



Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Past 12 months, ability to engage in preventative health activities affected by financial hardship: (q3_5)</b>				
Yes vs. No	2.15	(1.09, 4.23)	2.22	(1.64, 3.00)
<b>Past week (on average), how often eat/drink following foods - Milk, cheese, yogurt and other milk products: (q3_6a)</b>				
Several times a day vs once a day	2.99	(1.17, 7.63)	3.15	(2.2, 4.51)
A few times a week vs once a day	2.56	(1.07, 6.09)	2.70	(1.63, 4.47)
About once a week vs once a day	1.06	(0.4, 2.83)	1.05	(0.46, 2.4)
Never/hardly ever vs Once a day	3.92	(1.68, 9.16)	4.14	(3.1, 5.53)
<b>Protein: (q3_6b)</b>				
Several times a day vs once a day	1.58	(0.62, 4.06)	1.22	(0.81, 1.83)
A few times a week vs once a day	2.06	(0.89, 4.80)	1.60	(1.15, 2.23)
About once a week vs once a day	6.27	(2.29, 17.16)	2.92	(0.76, 11.27)
Never/hardly ever vs Once a day	2.85	(0.83, 9.82)	4.96	(2.70, 9.13)
<b>Vegetables Excluding: French fries and potato chips: (q3_6c)</b>				
Several times a day vs once a day	1.75	(0.84, 3.63)	1.41	(1.08, 1.85)
A few times a week vs once a day	1.02	(0.39, 2.70)	1.26	(1.02, 1.57)
About once a week vs once a day	1.68	(0.54, 5.17)	1.43	(0.36, 5.65)
Never/hardly ever vs Once a day	0.92	(0.27, 3.10)	0.93	(0.57, 1.50)
<b>Fruit: (q3_6d)</b>				
Several times a day vs once a day	1.50	(0.64, 3.53)	1.41	(0.75, 2.68)
A few times a week vs once a day	1.00	(0.37, 2.71)	0.79	(0.25, 2.49)
About once a week vs once a day	2.02	(0.62, 6.59)	2.13	(1.44, 3.14)
Never/hardly ever vs Once a day	1.34	(0.43, 4.19)	1.26	(1.00, 1.58)
<b>Bread, Cereal, Rice, Pasta and Grains: (q3_6e)</b>				
several times a day vs once a day	0.86	(0.37, 2)	0.92	(0.66, 1.29)
a few times a week vs once a day	1.5	(0.59, 3.77)	1.72	(1.17, 2.53)
about once a week vs once a day	0.98	(0.24, 4.08)	0.99	(0.49, 1.98)
Never/hardly ever vs Once a day	4.17	(1.19, 14.64)	5.42	(1.76, 16.73)
<b>Water: (q3_6f)</b>				
Once a day vs several times a day	0.58	(0.25, 1.33)	0.64	(0.27, 1.53)
A few times a week vs several times a day	2.04	(0.7, 5.93)	2.20	(0.40, 12.12)
About once a week vs several times a day	0.89	(0.13, 6.09)	1.06	(0.77, 1.45)
Never hardly ever vs several times a day	0.50	(0.11, 2.32)	0.63	(0.31, 1.28)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Juice: (q3_6g)</b>				
Several times a day vs never/hardly ever	0.37	(0.16, 0.86)	0.28	(0.18, 0.43)
Once a day vs never/hardly ever	0.60	(0.28, 1.32)	0.59	(0.21, 1.65)
A few times a week vs Never/hardly ever	1.44	(0.58, 3.57)	1.25	(0.73, 2.14)
About once a week vs Never/hardly ever	1.13	(0.34, 3.74)	0.93	(0.36, 2.40)
<b>Soft Drinks/Pop: (q3_6h)</b>				
Several times a day vs never/hardly ever	0.87	(0.34, 2.2)	0.95	(0.28, 3.25)
Once a day vs never/hardly ever	0.94	(0.25, 3.55)	0.82	(0.12, 5.75)
A few times a week vs Never/hardly ever	0.72	(0.32, 1.67)	0.80	(0.27, 2.43)
About once a week vs Never/hardly ever	2.85	(1.17, 6.91)	2.49	(0.55, 11.23)
<b>Fast food (e.g. burgers, hotdogs, pizza, frozen pizzas, French fries etc.): (q3_6i)</b>				
Several times a day vs never/hardly ever	0.58	(0.16, 2.18)	0.64	(0.41, 1.00)
Once a day vs never/hardly ever	1.88	(0.57, 6.17)	2.06	(0.9, 4.75)
A few times a week vs Never/hardly ever	0.40	(0.15, 1.05)	0.38	(0.29, 0.5)
About once a week vs Never/hardly ever	0.46	(0.22, 0.95)	0.44	(0.34, 0.58)
<b>Sweets (e.g. candies, cookies and cake): (Sq3_6j)</b>				
Several times a day vs never/hardly ever	2.29	(0.93, 5.65)	2.81	(1.01, 7.81)
Once a day vs never/hardly ever	0.87	(0.39, 1.97)	1.13	(0.51, 2.50)
A few times a week vs Never/hardly ever	1.84	(0.74, 4.59)	2.13	(0.80, 5.65)
About once a week vs Never/hardly ever	1.30	(0.51, 3.33)	1.35	(0.20, 9.28)
<b>Past 12 months, how often eaten traditionally hunted/gathered/grown and/or country foods: (q3_7)</b>				
Often vs a few times	1.03	(0.25, 4.35)	0.91	(0.41, 2.03)
Not at all vs a few time	1.06	(0.52, 2.14)	1.07	(0.89, 1.27)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Traditional/country foods have eaten: (q3_7a_1-q3_7a_11)</b>				
Land-based animals vs Berries or other wild vegetation/ Wild rice/ Corn soup	0.40	(0.10, 1.55)	0.48	(0.09, 2.49)
Fresh water fish Salt water fish/ Other water based foods vs Berries or other wild vegetation/ Wild rice/ Corn soup	0.34	(0.11, 1.10)	0.23	(0.04, 1.34)
Game birds (e.g. goose, duck, etc.)/ Small game (e.g. rabbit, muskrat, etc.) vs Berries or other wild vegetation/ Wild rice/ Corn soup	6.28	(1.49, 26.53)	10.21	(5.97, 17.45)
Other vs Berries or other wild vegetation/ Wild rice/ Corn soup	2.59	(0.53, 12.62)	1.97	(1.00, 3.91)
<b>Would you prefer eating more traditional/country foods: (q3_8)</b>				
No vs Yes	1.42	(0.37, 5.44)	0.99	(0.65, 1.50)
Neutral vs Yes	1.94	(0.75, 5.00)	1.63	(0.62, 4.30)
<b>The food eaten in your household in the past 12 months: (q3_9)</b>				
You and others always had enough of the kinds of food you wanted to eat vs You and others had enough to eat, but not always the kinds of food you wanted	0.77	(0.27, 2.15)	0.71	(0.33, 1.52)
Sometimes you or others did not have enough to eat vs You and others had enough to eat, but not always the kinds of food you wanted	1.02	(0.48, 2.18)	0.85	(0.49, 1.47)
Often you or others did not have enough to eat vs You and others had enough to eat, but not always the kinds of food you wanted	2.29	(0.91, 5.78)	2.12	(1.76, 2.55)
<b>Past 12 months, have a place to go if you/your family doesn't have enough to eat: (q3_10)</b>				
No vs Yes	0.55	(0.21, 1.47)	0.68	(0.40, 1.14)
I have never needed to go to such a place vs Yes	1.31	(0.30, 5.70)	1.68	(0.82, 3.47)
<b>Does anyone in your household grow food: (q3_11)</b>				
Yes vs. No	1.90	(0.73, 4.93)	1.80	(0.54, 6.03)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Where did you live before you moved to Toronto: (q3_12)</b>				
I have lived in Toronto all my life vs Canadian city	0.67	(0.30, 1.49)	0.73	(0.63, 0.85)
First Nation reserve in Canada vs Canadian city	1.40	(0.54, 3.64)	1.52	(0.9, 2.57)
Inuit land claim territory in Canada vs Canadian city	21.65	(1.73, 271.3)	38.14	(4.29,339.28)
Small town or rural area in Canada vs Canadian city	1.61	(0.64, 4.07)	1.57	(1.02, 2.41)
US vs Canadian city	0.47	(0.09, 2.4)	0.42	(0.07, 2.67)
International vs Canadian city	0.14	(0.01, 1.62)	0.08	(0.00, 1.36)
<b>Reasons for moving to Toronto: (q3_12a_1-q3_12a_7)</b>				
Family/ Friends/ Social Networks vs Other	0.46	(0.16, 1.26)	0.49	(0.19, 1.29)
Employment vs Other	0.74	(0.29, 1.89)	1.00	(0.37, 2.69)
Education vs Other	0.88	(0.22, 3.45)	1.23	(0.33, 4.59)
Housing vs Other	1.14	(0.29, 4.46)	1.31	(0.72, 2.36)
Healthcare vs Other	0.96	(0.28, 3.35)	1.30	(0.74, 2.27)
Safety vs Other	0.73	(0.13, 4.15)	0.87	(0.36, 2.15)
<b>Were these moves within the city past one year: (q3_13)</b>				
Some vs all	2.94	(0.9, 9.63)	2.23	(0.45, 11.05)
None vs all	0.98	(0.24, 4.04)	0.52	(0.23, 1.15)
<b>Were these moves within the city past 5 years: (q3_14)</b>				
Some vs all	1.82	(0.67, 4.97)	1.24	(0.67, 2.29)
None vs all	0.64	(0.15, 2.72)	0.40	(0.13, 1.25)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Type of residence currently live in: (q3_15)</b>				
Native/Aboriginal Housing vs I have my own house or apartment	0.68	(0.32, 1.45)	0.70	(0.48, 1.01)
Public Housing/Community Housing;/Co-operative Housing vs I have my own house or apartment	0.82	(0.32, 2.12)	0.90	(0.57, 1.45)
Stay at a friend's/family/partner or ex-partner's house or apartment vs I have my own house or apartment	4.97	(1.52, 16.18)	4.07	(0.98, 8.37)
Rooming house/ boarding home/ Group home vs I have my own house or apartment	1.59	(0.61, 4.10)	1.47	(1.15, 1.87)
Homeless Shelter vs I have my own house or apartment	1.36	(0.51, 3.63)	1.34	(0.39, 4.58)
Motel or Hotel vs I have my own house or apartment	3.6	(0.21, 61.08)	5.03	(0.20,128.62)
Recovery House/Second Stage housing/Medical Hospital /Psychiatric Hospital/Drug/Alcohol/Addiction treatment or detox facility vs I have my own house or apartment	0.07	(0.01, 0.67)	0.07	(0.05, 0.10)
Homeless (living on the street) vs I have my own house or apartment	0.23	(0.02, 3.03)	1.92	(0.26, 14.15)
Other vs I have my own house or apartment	2.34	(0.6, 9.23)	4.45	(2.13, 9.29)
<b>Is your home: (q3_15a)</b>				
Owned without a mortgage vs Rented	<0.001	(<0.001, <0.001)	0.00	(<0.001, 0.02)
Owned with a mortgage vs Rented	0.11	(0.01, 0.89)	0.12	(0.02, 0.85)
<b>How many rooms are there in your home/place you are staying: (q3_16)</b>				
1 room vs 3 or more than 3	2.29	(0.85, 6.2)	2.37	(1.7, 3.32)
2 rooms vs 3 or more than 3	0.60	(0.25, 1.44)	0.69	(0.45, 1.06)
<b>Including yourself, how many people currently live/stay in your household: (q3_17)</b>				
2 people vs 1	1.85	(0.71, 4.84)	1.71	(0.89, 3.31)
3 people vs 1	0.68	(0.16, 2.81)	0.56	(0.36, 0.89)
4 people vs 1	1.06	(0.37, 3.08)	1.05	(0.55, 2.01)
5 people vs 1	0.80	(0.24, 2.62)	0.87	(0.25, 3.00)
6 people vs 1	1.03	(0.19, 5.79)	1.19	(0.59, 2.41)
7 or more people vs 1	0.45	(0.1, 1.95)	0.43	(0.14, 1.36)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Is your dwelling in need of any major repairs: (q3_18)</b>				
Yes vs. No	1.89	(0.81, 4.39)	1.81	(1.21, 2.72)
<b>How often do you give up important things to meet shelter-related/housing costs: (q3_19)</b>				
Several times a month vs Never	0.67	(0.28, 1.61)	0.75	(0.36, 1.59)
Once a month vs Never	1.44	(0.48, 4.27)	1.21	(0.96, 1.54)
A few times a year vs Never	1.10	(0.35, 3.51)	1.19	(0.69, 2.06)
<b>Compared to other people your age, your health is: (q4_1)</b>				
Excellent vs Good	0.15	(0.05, 0.46)	0.17	(0.11, 0.26)
Very Good vs Good	0.47	(0.17, 1.3)	0.48	(0.24, 0.97)
Fair vs Good	1.06	(0.48, 2.33)	1.18	(0.84, 1.66)
Poor vs Good	3.43	(1.14, 10.25)	3.49	(1.11, 10.99)
<b>How often do you feel that you are in balance in the four aspects of your life: (q4_2)</b>				
All of the time vs Some of the time	0.72	(0.27, 1.95)	0.68	(0.51, 0.89)
Most of the time vs Some of the time	0.85	(0.37, 1.96)	0.82	(0.37, 1.82)
A little of the time vs Some of the time	0.52	(0.21, 1.35)	0.59	(0.36, 0.97)
None of the time vs Some of the time	1.87	(0.57, 6.15)	1.47	(0.85, 2.57)
<b>How often do you feel strong in your relationship to the land/ Mother Earth: (q4_3)</b>				
Most of the time vs All of the time	1.12	(0.46, 2.75)	1.20	(0.98, 1.47)
Some of the time vs All of the time	0.88	(0.39, 1.98)	0.91	(0.41, 2.01)
A little of the time vs All of the time	0.53	(0.14, 1.94)	0.54	(0.22, 1.36)
None of the time vs All of the time	1.09	(0.27, 4.34)	0.81	(0.49, 1.33)
<b>Average days per week you do 30 minutes of moderate or hard physical activity: (q4_4)</b>				
None vs 7 days/Week	2.92	(1.05, 8.12)	2.66	(1.32, 5.37)
1 day	0.49	(0.18, 1.35)	0.65	(0.27, 1.56)
2 days	3.63	(1.04, 12.72)	4.27	(1.51, 12.04)
3 days	0.90	(0.25, 3.31)	0.80	(0.33, 1.97)
4 days	2.54	(0.74, 8.68)	2.21	(1.13, 4.30)
5 days	0.76	(0.22, 2.58)	0.93	(0.51, 1.70)
6 days	0.31	(0.05, 1.84)	0.22	(0.06, 0.74)
<b>Do you have children under the age of 18 years: (q11_1)</b>				
Yes vs. No	0.70	(0.36, 1.36)	0.72	(0.45, 1.15)
<b>How you feel about amount of time you spend with your child(ren): (q11_2)</b>				
Yes vs. No	0.80	(0.29, 2.22)	1.03	(0.60, 1.77)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Barrier(s) to spending more time with your child(ren): (q11_2a_1-q11_2a_11)</b>				
I am often busy working/ I am often busy with school work/I am often busy taking care of other family or community members vs other	3.47	(0.75, 16.12)	4.84	(1.88, 12.47)
My child(ren) is/are being cared for by other family members vs other	9.44	(1.55, 57.55)	11.85	(6.30, 22.3)
My health prevents me spending as much time as I would like with my child(ren) vs other	0.28	(0.02, 3.86)	0.32	(0.03, 3.57)
I have limited access to my child(ren) because of a shared custody arrangement/ I have limited access to my child(ren) because of a custody order/I have limited access to my child(ren) because of child welfare involvement, vs other	2.83	(0.54, 14.82)	1.91	(1.39, 2.61)
I do not have access to my child(ren) because of a custody order/ I do not have access to my children because of child welfare involvement vs other	10.85	(1.29, 91.03)	5.60	(1.29, 24.43)
<b>Number of close friends/close relatives can talk to about what is on your mind: (q11_3)</b>				
No friends vs 3-5 friend	1.42	(0.56, 3.56)	1.58	(0.86, 2.88)
1-2 friends vs 3-5 friends	2.06	(0.93, 4.56)	2.47	(1.08, 5.64)
6-10 friends vs 3-5 friends	0.52	(0.18, 1.53)	0.67	(0.34, 1.31)
More than 10 friends vs 3-5 friends	0.95	(0.3, 3.02)	1.16	(0.75, 1.80)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Relationship to those you go to for support: (q11_4_1- q11_4_12)</b>				
Partner/Husband/wife/common law partner vs friends, neighbours, coworkers	4.52	(0.89, 22.92)	4.84	(3.74, 6.27)
Son or daughter vs friends, neighbours, coworkers	12.31	(1.54, 98.12)	16.83	(7.00, 40.47)
Father or mother vs friends, neighbours, coworkers	2.49	(0.37, 16.83)	1.97	(0.30, 12.77)
Brother or sister vs friends, neighbours, coworkers	2.43	(0.7, 8.46)	2.16	(0.64, 7.35)
Grandfather or grandmother vs friends, neighbours, coworkers	0.45	(0.05, 3.79)	0.66	(0.14, 3.03)
Other relatives (e.g. aunties, uncles, cousins) vs friends, neighbours, coworkers	0.40	(0.12, 1.35)	0.49	(0.18, 1.29)
Employer vs friends, neighbours, coworkers	<0.001	(<0.001, <0.001)	0.00	(<0.001, 0.12)
Elder vs friends, neighbours, coworkers	1.61	(0.63, 4.15)	2.15	(0.87, 5.31)
Clergy or religious/spiritual figure vs friends, neighbours, coworkers	0.19	(0.02, 1.75)	0.21	(0.08, 0.55)
Community vs friends, neighbours, coworkers	0.73	(0.28, 1.85)	0.93	(0.58, 1.49)
Other vs friends, neighbours, coworkers	0.87	(0.24, 3.22)	1.18	(0.62, 2.22)
<b>At the present time, do you smoke cigarettes: (q10_1)</b>				
Yes vs. No	2.11	(0.99, 4.5)	1.9	(0.82, 4.39)
<b>Smoke free home: (q19_2)</b>				
Yes completely smoke free vs yes there are smokers living in the home, but they smoke outside	0.77	(0.35, 1.71)	0.52	(0.4, 0.68)
No vs yes there are smokers living in the home, but they smoke outside	1.79	(0.82, 3.92)	0.66	(0.44, 0.97)
<b>Past 30 days, had a drink of beer, wine, liquor or any other alcoholic beverage: (q19_3)</b>				
Yes vs. No	0.63	(0.33, 1.23)	0.46	(0.22, 1.00)
<b>Cannabis/ Marijuana: (q19_5a)</b>				
Yes vs. No	1.04	(0.55, 1.96)	0.99	(0.33, 2.95)



Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Crack/Cocaine: (q19_5b)</b>				
Yes vs. No	2.86	(1.37, 5.97)	2.18	(0.74, 6.42)
<b>Sedatives or Sleeping pills: (q19_5c)</b>				
Yes vs. No	2.33	(0.96, 5.65)	1.79	(0.88, 3.63)
<b>Heroin: (q19_5d)</b>				
Yes vs. No	1.64	(0.6, 4.49)	1.81	(1.16, 2.82)
<b>Prescription Opiates: (q19_5e)</b>				
Yes vs. No	3.07	(1.37, 6.9)	2.30	(0.81, 6.49)
<b>Hallucinogens: (q19_5f)</b>				
Yes vs. No	3.86	(1.37, 10.85)	4.25	(1.09, 16.47)
<b>Amphetamines: (q19_5g)</b>				
Yes vs. No	3.43	(1.38, 8.55)	3.17	(2.10, 4.79)
<b>Inhalants/Solvents: (q19_5h)</b>				
Yes vs. No	1.05	(0.11, 9.99)	1.30	(0.68, 2.51)
<b>Other (Please specify): (q19_5i)</b>				
Yes vs. No	0.03	(0, 0.23)	0.05	(0.01, 0.45)
<b>Ever used a needle to inject any drug that wasn't prescribed to you: (q19_6)</b>				
Yes vs. No	3.22	(1.46, 7.08)	2.58	(2.25, 2.96)
<b>Ever shared needles with anyone including spouse, partner, or close friend: (q19_7)</b>				
Yes vs. No	2.80	(1.18, 6.67)	2.76	(1.69, 4.50)
<b>Know where to get clean needles/clean works in Toronto: (q19_8)</b>				
Yes vs. No	3.17	(1.68, 5.96)	3.13	(2.15, 4.55)
<b>Information about where to get clean needles/clean works in Toronto: (q19_8a)</b>				
Yes vs. No	1.99	(0.35, 11.39)	2.01	(0.63, 6.39)
<b>Do you participate in traditional Indigenous ceremony: (q21_1)</b>				
Yes vs. No	1.78	(0.91, 3.48)	1.77	(1.24, 2.55)
<b>Experienced challenges in accessing traditional Indigenous ceremonies: (q21_2)</b>				
Yes vs. No	2.11	(0.94, 4.76)	1.65	(0.70, 3.87)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Challenges experienced in accessing ceremonies: (q21_2a_1-q21_2a8)</b>				
Do not know where to access vs other	0.68	(0.09, 5.24)	0.52	(0.33, 0.81)
Too far to travel vs other	0.37	(0.04, 3.46)	0.31	(0.16, 0.60)
Can't find ceremonies that are relevant to my people/nation vs other	1.79	(0.13, 24.09)	5.01	(1.04, 24.16)
Do not know enough about them vs other	5.55	(0.58, 52.97)	9.89	(0.86,113.94)
Not available vs other	0.11	(0.01, 1.63)	0.31	(0.20, 0.48)
Don't have time vs other	0.16	(0.02, 1.27)	0.24	(0.02, 3.58)
Past negative experiences with ceremony vs other	6.55	(0.52, 82.4)	2.20	(0.67, 7.24)
<b>For which aspects do you use traditional Indigenous medicines: (q21_3a_1-q21_3a_5)</b>				
Physical vs. Specific health condition(s)	0.59	(0.07, 5.22)	0.58	(0.12, 2.88)
Mental vs. Specific health condition(s)	0.46	(0.09, 2.49)	0.37	(0.22, 0.63)
Emotional vs. Specific health condition(s)	2.76	(0.41, 18.7)	1.87	(0.74, 4.77)
Spiritual vs. Specific health condition(s)	0.67	(0.23, 1.93)	0.53	(0.32, 0.87)

Effect	Survey Logistic		Glimmix	
	Odds Ratio Estimates		Odds Ratio Estimates	
	Point Estimate	95% Confidence Interval	Point Estimate	95% Confidence Interval
<b>Where knowledge about traditional Indigenous medicines/practices come from: (q21_3b_1-q21_3b_10)</b>				
Family member vs Indigenous health and social service organizations in the city	0.16	(0.04, 0.68)	0.28	(0.10, 0.83)
Elders/traditional knowledge keepers vs. Indigenous health and social service organizations in the city	0.95	(0.33, 2.73)	1.86	(0.89, 3.88)
Indigenous teacher or mentor	0.61	(0.16, 2.28)	1.17	(0.39, 3.45)
Other indigenous peoples vs. Indigenous health and social service organizations in the city	0.96	(0.3, 3.02)	1.60	(0.75, 3.4)
I learned traditional Indigenous medicines/practices while incarcerated vs Indigenous health and social service organizations in the city	1.74	(0.4, 7.52)	2.33	(0.87, 6.29)
Non-Indigenous vs. Indigenous health and social service organizations in the city	0.59	(0.05, 7.04)	3.12	(1.17, 8.27)
Internet vs. Indigenous health and social service organizations in the city	0.22	(0.05, 0.94)	1.84	(0.3, 11.34)
Books vs. Indigenous health and social service organizations in the city	1.73	(0.52, 5.75)	0.55	(0.33, 0.93)
Other vs. Indigenous health and social service organizations in the city	0.42	(0.11, 1.59)	4.32	(1.90, 9.85)
<b>Estimate in which group household income falls: (q23_2)</b>				
\$30,000 to less than \$30,000 vs less than \$20,000	0.41	(0.18, 0.94)	0.45	(0.20, 0.97)
\$30, 000 to less than \$100,000 and more than \$100,000 vs less than \$20,000	0.28	(0.13, 0.61)	0.32	(0.25, 0.40)

Note:  $p < .05$