Substance Use, Mental Health and Suicide among Inuit in Canada

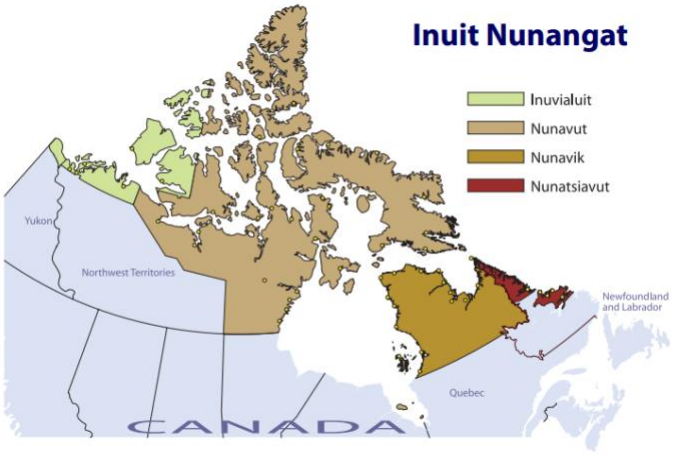
Key Messages

- Rates of suicide are five to 25 times higher among Inuit in Northern Canada compared to the Canadian average.
- Substance use, mental health and the social determinants of health influence suicide risk among Inuit. Monitoring the prevalence of these risk factors is important for informing suicide prevention activities.
- Substance use and harms related to substance use among Inuit are determined by unique geographical, historical and cultural contexts, including intergenerational trauma stemming from colonization.
- In 2017, 5.8% of the Inuit population (age 18+) reported having suicidal thoughts in the past year and 2.1% reported attempting suicide.
- In 2017, 13% of the Inuit population (age 15+) reported having a mental health condition, including anxiety, depression, bipolar disorder, substance use disorder or anorexia.
- Heavy episodic drinking is associated with suicide risk. Almost one-third of Inuit (age 15+) in Northern Canada reported heavy episodic drinking at least once a month in 2017.
- In 2017, 20% of the Inuit population (age 18+) reported daily or almost daily cannabis use. Daily or near daily cannabis use was associated with increased odds of reporting suicide thoughts or attempts in the past year.
- The use of other illegal substances among Inuit in Northern Canada is low. Approximately 1% reported monthly or more frequent use of other illegal substances such as cocaine or solvents.
- Improving the social determinants of health, including housing, education and access to culturally safe health care, is integral for mental well-being and suicide prevention at the population level.

Background

The majority of Inuit in Canada (73%) live in communities spread across the Inuvialuit Settlement Region (Northwest Territories), Nunavut, Nunavik (Northern Quebec) and Nunatsiavut (Northern Labrador). Collectively, these regions are known as Inuit Nunangat, meaning the “lands, waters, and ices of the [Inuit] people” (Inuit Tapiriit Kanatami, 2019). Inuit Nunangat has the highest suicide rates in Canada, ranging from five to 25 times higher than the Canadian average, depending on the Inuit region. Suicide prevention is one of the highest priorities for Inuit communities, organizations and governments.

Figure 1. Regions of Inuit Nunangat (image reproduced with permission from Inuit Tapiriit Kanatami)



The high rates of suicide in Inuit Nunangat are a downstream symptom of the effects of colonization, marginalization, the transition to permanent settlements and the loss of the traditional Inuit lifestyle of harvesting and gathering food on the land (Inuit Tapiriit Kanatami, 2016). These effects have led to intergenerational trauma and widespread social and economic inequities in Inuit Nunangat compared to other regions of Canada, creating an elevated risk for suicide in Inuit communities.

Inuit Tapiriit Kanatami (ITK), the national organization representing Inuit across Canada, released the National Inuit Suicide Prevention Strategy (NISPS) in July 2016 to provide a coordinated, evidence-based, national response to suicide prevention. The strategy aims to reduce the occurrence and prevalence of suicide risk factors, while increasing the occurrence and prevalence of protective factors (Table 1). The NISPS focuses on the impacts of historical trauma, social inequity, intergenerational trauma, childhood adversity, and mental and acute forms of stress, including substance use. ITK has undertaken several initiatives to collect statistics on the prevalence of these factors, which are important for monitoring the health and well-being of Inuit populations in Canada, and for informing ITK's research agenda and ongoing suicide prevention activities.

Suicide Risk and Protective Factors

Risk factors are characteristics or circumstances that increase the likelihood that someone will consider, attempt or die from suicide. Protective factors decrease the likelihood that someone will consider, attempt or die from suicide, and can help mitigate the negative effects of risk factors.

Table 1. Risk and protective factors for suicide among Inuit in Inuit Nunangat (Inuit Tapiriit Kanatami, 2016)

Risk factors	Protective factors
Historical trauma (e.g., impacts of colonialism)	Cultural continuity (e.g., connection to Inuit language, culture and history)
Community distress (e.g., social inequities such as crowded housing, food insecurity, lack of access to services)	Social inequity (e.g., adequate access to economic, educational, health and other resources)
Wounded family (e.g., intergenerational trauma, family violence, family history of suicide)	Family strength (e.g., safe, supportive and nurturing homes)
Traumatic stress and early adversity (e.g., prenatal stress, witnessing or experiencing physical or sexual assault)	Healthy development (e.g., providing safe and nurturing environments for children)
Mental distress (e.g., depression, substance use and mental health disorders, self-harm)	Mental wellness (e.g., access to Inuit-specific mental health services and supports)
Acute stress (e.g., intoxication, access to lethal means)	Ability to regulate and cope with acute stress

What We Did

Informed by ITK's data collection and research priorities, CCSA partnered with ITK to develop a report summarizing data on risk and protective factors for suicide among Inuit. In line with CCSA's priority to address harms related to substance use, statistics for alcohol, cannabis and other substance use are captured in this summary. The report also presents the results of an analysis linking cannabis use to mental health outcomes to better characterize the relationship between cannabis and mental health among Inuit, which has been identified as a knowledge gap (Mental Health Commission of Canada, Canada Centre on Substance Use and Addiction, & Inuit Tapiriit Kanami, 2019). The statistical summary is a resource for Inuit associations and affiliated organizations, including ITK, those working in suicide prevention, and researchers and policy makers who require the most recent statistics related to suicide risk and the broader mental well-being of Inuit in Canada.

These statistics and analyses are from the 2012 and 2017 Aboriginal Peoples Survey (APS), with estimates from the Inuit Health Survey 2007–2008 (IHS) included for reference. The APS is a national survey conducted by Statistics Canada on the social and economic conditions of First Nations people living off-reserve, Métis and Inuit. The APS survey design allows for the analysis of Inuit-specific data for Inuit Nunangat and each of the four Inuit regions. The prevalence of risk and protective factors related to mental health and suicide among Inuit are broken down by regions of Inuit Nunangat, as well as by age and sex, where possible. See the technical report, *Risk and Protective Factors for Suicide among Inuit in Canada: A Summary of Statistics Related to Suicide and Mental Health*, for details on data collection and analysis.

What We Found

The technical report presents statistics for a total of 17 factors related to suicide risk and five factors related to suicide protection that were available from the APS and IHS.[1] They included a wide range of factors, from individual risk factors, such as previous suicidal thoughts or attempts, to community-level factors related to social and economic well-being, such as food insecurity and access to health care. Most risk factors (11 out of 17) were related to mental distress and substance use. However, survey questions about substance use were not comprehensive and there were no recent statistics from the 2017 APS on substance-related health or social harms among Inuit. Substance-related harms include substance use disorder, family problems, violence, self-harm, injury and death.

Risk and protective factors related to suicide varied by gender, age, region and year (2012, 2017). Factors rooted in the social determinants of health varied by region, but were less likely to vary by gender or age. Statistical analyses showed that daily cannabis use was associated with past year suicidal behaviours (ideation and attempt) and self-reported mood disorder among Inuit (ages 15+).

Suicidal Behaviours

The development of suicidal thoughts and the progression to suicide attempts are two of the most important risk factors for suicide (Ribeiro et al., 2016; World Health Organization, 2019). In 2017, 22.5% of the population (age 18+) in Inuit Nunangat reported having suicidal thoughts in their lifetime, and 5.8% reported having suicidal thoughts in the past year (Table 2). In 2017, 11.6% of the Inuit (age 18+) in Inuit Nunangat reported attempting suicide in their lifetime, and 2.1% reported having attempted suicide in the past year, including 1.9% of males and 2.3% of females (Table 2).

1 All data in the following tables are for Inuit Nunangat and taken from the 2017 Aboriginal Peoples Survey.

Table 2. Prevalence of past year suicide ideation and attempt*

	Overall	Males	Females	Age 18-34	Age 35-54	Age 55+
Suicide ideation						
Past year	5.8%	4.6%	6.8%	7.7%	4.9% E	2.5% E
Lifetime	22.5%	20.8%	24%	24.5%	23.6%	14.9%
Suicide attempt						
Past year	2.1%	1.9% E	2.3% E	3.6%	F	F
Lifetime	11.6%	10.4%	12.6%	13.2%	11.3%	8%

* Suicidal ideation is defined as thinking about suicide or about taking one's own life. A suicide attempt is any nonfatal intent to take one's life.
"E" indicates high sampling variability; use with caution.
"F" indicates data is suppressed for reasons of reliability.

Across regions of Inuit Nunangat in 2017, the lifetime prevalence of having suicidal thoughts or attempting suicide was the lowest in Nunatsiavut and the highest in Nunavik. Between 2012 and 2017, the prevalence of lifetime suicide ideation increased in Nunavik (36%), particularly among males and those aged 18 to 34. In Nunatsiavut, a 43% decrease in lifetime suicide ideation between 2012 and 2017 was reported among females. There was a 252% increase in the lifetime prevalence of suicide attempts in Inuit Nunangat overall.

Mental Health

Suicidal behaviours are often associated with depression, mood disorders, anxiety disorders and other mental illnesses (Kumar, 2016). In 2017, 11.2% of the population (aged 15+) in Inuit Nunangat reported having a mood disorder,[2] including a significantly higher proportion of females (14.5%) compared to males (7.7%) (Table 3). 8.3% of the population in Inuit Nunangat reported having an anxiety disorder,[3] including a significantly higher proportion of females (12%) compared to males (4.4%) (Table 3). 13.4% reported having a mental health condition, including anxiety, depression, bipolar disorder, substance use disorder or anorexia. Females overall were more likely to report having a mental health condition (16.5%) compared to males (9.6%).

Table 3. Prevalence of mental health conditions

	Overall	Males	Females	Age 15-17	Age 18-34	Age 35-54	Age 55+
Mood disorder	11.2%	7.7%	14.5%	11.9% E	12.4%	10%	9.9%
Anxiety disorder	8.3%	4.4%	12%	7.7% E	7.9%	9.5%	7.1%
Any mental health condition*	13.4%	9.6% E	16.5% E	F	12.9% E	13.2%	9.4%

* Survey participants were asked, "Do you have any emotional, psychological or mental health conditions? These may include anxiety, depression, bipolar disorder, substance abuse, anorexia, etc."
"E" indicates high sampling variability; use with caution.
"F" indicates data is suppressed for reasons of reliability.

2 A mood disorder is a mental health disorder affecting a person's emotional state, causing significant impairment in daily life. The 2017 survey asks respondents, "Do you have a mood disorder such as depression, bipolar disorder, mania or dysthymia?" Self-reported mood disorder may not reflect whether someone has a clinical diagnosis from a health professional.

3 An anxiety disorder is a mental health disorder characterized by feelings of worry, anxiety or fear, causing significant impairment in daily life. The 2017 survey asks respondents, "Do you have an anxiety disorder such as a phobia, obsessive-compulsive disorder or a panic disorder?" Self-reported anxiety disorder may not reflect whether someone has a clinical diagnosis from a health professional.

Across regions of Inuit Nunangat in 2017, the prevalence of mental health conditions, like mood disorder and anxiety disorder, were consistently lowest in Nunatsiavut and highest in Nunavik. Between 2012 and 2017, there was a 143% increase in the prevalence of self-reported mood disorder in Inuit Nunangat, including a 196% increase among females and a 164% increase among those aged 18 to 34. There was a 159% increase in the prevalence of self-reported anxiety disorder, including a 216% increase among females and a 547% increase among those aged 18 to 34.

Alcohol Use

Alcohol is one of the most frequently used substances among Inuit and has been linked to suicide among them (Chachamovich, et al., 2015). Consumption of alcohol overall among Inuit is less common than the national average, but rates of heavy episodic drinking are much higher (Decaluwe, Fortin, Moisan, Muckle, & Belanger, 2019; Fortin, Bélanger, Boucher, & Muckle, 2015). Heavy episodic drinking,[4] also known as binge drinking, is more likely to be associated with violence, different kinds of abuse, self-inflicted injury and death, and other negative outcomes (Nunavut Liquor Act Review Task Force, 2012).

In 2017, approximately 61% of the population in Inuit Nunangat (age 15+) reported consuming alcohol in the past 12 months. Of those who reported alcohol use in the past year, 47.6% reported monthly or more frequent heavy episodic drinking, including 49.5% of males and 45.6% of females (Table 4).

Table 4. Frequency of heavy episodic drinking*

	Overall	Males	Females	Age 15-17	Age 18-34	Age 35-54	Age 55+
Never	22.1%	20.1%	24.2%	37% E	20.4%	19.2%	31%
Less than once per month	26.6%	25.9%	27.2%	21.2% E	28.4%	25.2%	25.6%
Once a month	16.7%	17.8%	15.5%	21.9% E	15.5%	18.5%	14%
2–3 times per month	16.1%	17.1%	15%	F	16%	18.1%	13.6%
Once a week	7.6%	7.4%	7.8%	F	8.2%	7.3% E	7.3%
More than once a week	7.2%	7.2%	7.3%	F	7.1%	8.9%	5.5% E

* Percentages are for those who reported any past-year alcohol use only.
"E" indicates high sampling variability; use with caution.
"F" indicates data is suppressed for reasons of reliability.

Nunavik had the highest levels of alcohol consumption, including past-year use and heavy episodic drinking. The prevalence of heavy episodic drinking was the lowest in Nunatsiavut. Between 2012 and 2017, there was a significant increase in heavy episodic drinking across Inuit Nunangat, including a 53% increase in the proportion reporting doing so more than once a week (from 4.7% to 7.2%). A larger shift to more frequent heavy episodic drinking occurred among females, including a 44% increase in heavy episodic drinking once a week and a 74% increase in heavy episodic drinking more than once a week.

4 Heavy episodic drinking is defined for males as having five or more drinks or females having four or more drinks on one occasion.

Cannabis Use

Although cannabis use has previously been linked to suicide among Inuit (Chachamovich, et al., 2015), there is little research examining the prevalence and impact of cannabis use among Inuit (Wolfson, et al., 2020). In 2017, 40% of the population in Inuit Nunangat (age 18+) reported using cannabis in the past year, including 52% of males and 29% of females. 20.4% of the population in Inuit Nunangat reported daily or almost daily cannabis use (Table 5). Daily or almost daily cannabis use was significantly lower in Nunatsiavut (2.7%) and the Inuvialuit region (15%), and significantly higher in Nunavik (28%).

Table 5. Frequency of past year cannabis use

	Overall	Males	Females	Age 18-34	Age 35-54	Age 55+
Never	59.2%	47.3%	69.7%	54.7%	55.4%	79.4%
Less than once per month	4.5%	5%	4% E	6.4%	3.1% E	2 % E
At least once a month	4.5%	6.1%	3.1% E	4.9%	4.7% E	2.9% E
At least once a week	10.6%	12.7%	8.7%	9.2%	14.2%	6.4%
Daily or almost daily	20.4%	28.2%	13.4%	23.9%	21.7%	8.2%

"E" indicates high sampling variability; use with caution.

The results of statistical analyses showed that daily cannabis use was associated with increased odds of reporting suicide ideation or attempt in the past year. Any past year cannabis use at all was associated with increased odds of reporting a mood disorder.

Other Substance Use

The use of illegal substances (e.g., cocaine, other stimulants, opioids, other depressants), including the non-medical use of prescription drugs, is associated with suicide ideation among Inuit in Canada (Chachamovich, et al., 2015). In 2017, 2.8% of the Inuit population (aged 18+) in Canada reported using illegal substances (excluding cannabis) in the past year, and 1.2% reported non-medical use of prescription drugs in the past year. Most respondents who reported other substance use (65% for illegal drug use and 59% for non-medical prescription drug use) lived outside Inuit Nunangat. Over 97% of the population (age 18+) within each region of Inuit Nunangat reported no past-year use of illegal drugs, and over 98% within each region reported no past-year non-medical use of prescription drugs.

Social Determinants of Health

Harms associated with substance use are a primary health and social concern in Inuit communities (Cameron, 2011; Fortin, et al., 2015; NVision Insight Group, 2018). However, issues around substance use in Inuit Nunangat are determined by unique geographical, historical and cultural contexts, which must be considered when evaluating the association between substance use, mental health and suicide. The technical report includes statistics on the intergenerational effects of residential schools and a range of inequities related to the social determinants of health.

What These Findings Mean

This summary provides an overview of factors related to substance use, mental health and suicide among Inuit, with implications for Inuit communities and organizations, including ITK, those working in suicide prevention, and researchers interested in the broader mental well-being of Inuit. The summary underscores the importance of public education efforts about safe and responsible ways to drink alcohol and use cannabis. Such education includes understanding the risks associated with frequent alcohol and cannabis use, including impacts on mental health.

The report highlights the importance of having an Inuit health survey governed and led by Inuit to help ensure that data reflect Inuit health and wellness accurately. It will, however, still be helpful to integrate Inuit indicators into other population health datasets, and for these datasets to improve data quality, comprehensiveness and timeliness. These other data collection and reporting platforms need to ensure that data is collected in consultation with Inuit rights holders and accessible to Inuit organizations and communities.

The report also highlights the need to collect information on the harms associated with substance use among Inuit, in addition to information on the prevalence and frequency of substance use. Research and data collection efforts need to recognize the importance of strengths-based approaches to limit stigmatizing narratives and to inform the development of programs that build on individual and community resilience.

To Learn More

Access the technical report, *Risk and Protective Factors for Suicide among Inuit in Canada: A Summary of Statistics Related to Suicide and Mental Health*, for the full results of the study. The ITK's National Inuit Suicide Prevention Strategy webpage has information about ongoing initiatives to improve the health and well-being of Inuit in Canada.

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ISBN 978-1-77178-868-7

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