COMMUNITY WELLNESS AND YOUTH SUICIDE IN NUNAVUT

by

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Abstract

Through an analysis of community demographics, this study examines effective community-level approaches to decrease the rate of attempted and completed suicide by Inuit youth aged 15 to 24. An analysis of the 2001 Nunavut Household Survey, the 2001 Census and mortality data, in coordination with seven key stakeholder interviews, reveals the demographic reality of three communities in Nunavut: Iqaluit, Whale Cove and Qikiqtarjuaq. An analysis of international suicide prevention strategies has provided information on successful community-based programs. Results from the analysis highlight the issues facing youth in Nunavut and draws parallels to the situation of indigenous youth internationally. It is proposed that community level determinants of health can be addressed to achieve a reduction in suicide by Inuit youth while increasing community wellness. The study concludes with an analysis of policy alternatives and recommendations.

Executive Summary

This study takes a community-based approach to addressing the high rates of suicide by Inuit youth aged 15 to 24 in Nunavut. Specifically, the goal is to reduce the rate of attempted and completed suicides by focusing on initiatives at the community level. The study has two objectives: (1) to identify community-level variables that contribute to youth suicide, and (2) to develop policy alternatives to address the identified community-level contributors. The policy problem addressed is a lack of effective policy addressing the issue of Inuit youth, aged 15 to 24, who are committing suicide at a rate much higher than their non-Inuit Canadian counterparts.

The social determinants of health are widely accepted as important to the health and well-being of individuals and communities. Five community level variables were investigated in three communities with varying rates of Inuit youth suicide: Iqaluit, Qikiqtarjuaq and Whale Cove. The variables selected include: the unemployment rate, quality of the built environment, quality of housing, extent of knowledge of indigenous language and extent of practice of traditional activities.

The study uses a combination of quantitative and qualitative data. Data from the 2001 Nunavut Household survey, the 2001 Census and mortality data reveal the risk factors that exist in the communities. Key findings from the data include:

- Qikiqtarjuaq, the community with the highest rate of suicide by Inuit youth, also had the highest level of dissatisfaction with their dwellings
- Completed suicides among Inuit youth are higher among males than females
- The method used in the majority of deaths is hanging
- Suicide rates vary by community and region
- Quantitative data must be used in combination with qualitative to accurately reflect the situation in the communities

The combination of survey data, case study analysis, and a review of the academic literature, reveals the required policy responses to addressing suicide by Inuit youth in Nunavut. The alternatives identified in the study include developing:

- *Community household maintenance workshops* that will address dwelling conditions and provide transferable skills.
- *Reducing access to instruments of suicide* which will limit the tools available to youth contemplating suicide.
- *Developing a system of apprenticeship programs* that will provide youth with employment opportunities and training.
- *Youth camps* that establish relationships between youth and the community through efforts to develop both life and cultural skills.

To assess the appropriateness of each policy alternative, a list of criteria and measurement is used. Criteria in the study include effectiveness, operational feasibility, cost, political feasibility, community control and Inuit traditional knowledge. Interviews with key stakeholders provide valuable information that contributes to both the development and evaluation of the policy alternatives. The following policy recommendations were made with respect to the alternative that scored the highest, the youth camp:

- Coordinate a founding meeting of interested parties to plan the program details for the youth camp;
- Hold a series of community discussions to incorporate thoughts and concerns for the development process;
- Create a working group to discuss strategies and implementation techniques;
- Gradual development of the initiative which allows for assessment and alteration;
- Finally, organize an annual evaluation of outcomes, to assess the success of the camp and the current situation for possible reassessment of the initiative.

Dedication

For the young Nunavummiut whose lives ended before they ever truly began

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Glossary

TERM	DEFINITION
Determinants of Health	The term used for factors that affect health at the individual or population level.
Employment Rate	The employment rate is the percentage of working-age people who have jobs.
Inuit Qaujimajutiqangit	Inuit traditional knowledge which is Inuit societal values. Loosely translated it means that which has long been known by Inuit.
Kivalliq Inuit Association	The Kivalliq Inuit Association represents the interests of all Inuit living in the Kivalliq Region, acts as a lobbying group, administers and monitors certain provisions of the Nunavut Final Agreement in the Kivalliq Region.
Nunavummiut	The inhabitants of Nunavut.
Nunavut Tunngavik Incorporated	Nunavut Tunngavik Incorporated was established to receive the lands and financial compensation under the Nunavut Land Claims Agreement. Controlled by the Inuit of Nunavut, it invests in its subsidiaries and affiliates, and represents the collective Inuit political interests.
Qallunat	Inuit term meaning white or southern non-Inuit.
Qammatiq	A traditional Inuit sled.
Qikiqtani Inuit Association	The Qikiqtani Inuit Association represents the interests of Inuit in the Baffin Region, the High Arctic, and the Belcher Islands.

1 Introduction

> *"If the populations of 'mainland' Canada, Denmark and the United States had suicide rates comparable to those of their Inuit populations, national emergencies would be declared".*
>
> - Upaluk Poppel, representative of the Inuit Circumpolar Youth Council, presentation to the United Nations' Permanent Forum on Indigenous Issues, May 18, 2005

Nunavut is Canada's newest territory and faces many physical, social, economic and cultural challenges given its geographic location and unique demographics. The territory and its inhabitants are vital to Canada's claim to the Northwest Passage, yet the many health challenges they face have gone unaddressed. Growing frustration over inaction, at both the federal and territorial levels, was recently expressed in a letter by Jack Hicks, the former Director of Evaluation and Statistics for the Government of Nunavut and current co-ordinator of the Qaujivallianiq inuusirijauvalauqtunik[1], to the editor of the Globe and Mail. The letter explains that:

> last year, a report by Justice Thomas Berger told Canadians most of what they need to know about Nunavut today. While many positive developments are taking place and many young people are taking advantage of the opportunities increasingly available to them, pervasive social problems limit the ability of many to do so. The response to Justice Berger's report speaks volumes. Territorial politicians seem almost embarrassed by it, complaining that it is "too harsh." This makes it easier for the federal government to refuse to provide the additional investments in the education system that Justice Berger strongly recommended. In public, [Department of Indian Affairs and Northern Development] Minister Jim Prentice says that the funding that Ottawa provides the Nunavut government is adequate. In private, he is understood to be appalled by the situation (Hicks, 2007)

Funding issues, tensions regarding jurisdictional responsibilities and embarrassment about the current situation in Nunavut have undermined the ability of both federal and territorial governments to address the problems plaguing Inuit youth with effective policies.

[1] Qaujivallianiq inuusirijauvalauqtunik is the 'Learning from lives that have been lived' suicide follow-back study currently underway in Nunavut

Despite the shocking figures, evidence of Nunavut's growing youth suicide problem does not garner much attention outside of the territory. The suicide rate among Inuit youth aged 15 to 24 (451.6/100 000) in 2001 was approximately forty times higher than the Canadian rate (11.4/100 000)[2]. Inuit youth are taking their lives at an alarming rate. Between April 1, 1999 and December 31, 2006, 145 Inuit youth, aged 15 to 24, committed suicide. This represents 67 percent of total suicides in the territory[3], which is a serious concern. While there are clear health and social implications that make suicide problematic in any area, there are reasons to be particularly concerned with the current rate of youth suicide in Nunavut as youth under the age of 25 comprise approximately 50 percent of the population and are at an increased risk of self-inflicted death. In addition, the deaths are concentrated in a relatively small population, but vary with respect to region, gender and age. The suicide rate is highest amongst those in the 15 to 24 age cohort, who live in the Baffin Region and who are Inuit males. Furthermore, suicidal behaviour can often be difficult to identify until after the fact, upon reflection as to visible signs, which serves to highlight the complexity of the problem facing Nunavut.

According to Jack Hicks, the high suicide rate in Nunavut cannot be viewed in isolation. Instead, the suicide rate must be seen as a symptom of a society experiencing sudden social, cultural and economic change under specific historic and political conditions. Nunavut is suffering from:

- high levels of violence and abuse;
- high rates of unemployment;
- high levels of unresolved traumas of various types;
- high rates of substance abuse;
- a 75% school drop-out rate; and, widespread poverty (Hicks, 2006).

Similar to the position espoused by Hicks, Nancy Karetak-Lindell, the current Member of Parliament (MP) for Nunavut, believes that we need to "think [about] how much change they have seen and the challenges each generation has seen. You can not have a group of people go through that kind of change in a lifetime and not suffer some sort of consequence" (Karetak-Lindell, 2007). This emphasises the need to address the issues that have had negative ramifications for Inuit over the last few decades.

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[2] The suicide rate was calculated using the number of suicides committed for the age cohort and the number of individuals in the respective age cohort

[3] See Figure 1 in Appendix A: The percentage of suicide by age group (*1999-2006)

Since the introduction of the Bathurst Mandate[4] in 1999, the Government of Nunavut has stated that one of its highest priorities is the goal of developing healthy communities. Nunavut's trend in the suicide rate is in direct odds with this stated Government goal. The recent 2007-2008 Budget Address, released on March 9, 2007, reaffirmed this commitment to healthy communities in stating "we cannot be blind to the challenges that face our territory as we work our way toward a better tomorrow" (Government of Nunavut, 2007: 1). Despite this reaffirmation, there was no mention of the challenge of youth suicide in the address. The budget did include funding for projects which could theoretically address suicide, such as an additional 750 affordable housing units over the next three years, infrastructure programs including community centres and sports arenas and the construction of a trade school in Rankin Inlet; however, these initiatives were not introduced as direct mechanisms to combat suicide and will not do enough to curb the current trend.

The issue of youth suicide has become a non-priority item on the Government of Nunavut's policy agenda. Repeatedly it has been overshadowed by what are deemed to be more pressing issues, such as a lack of housing, infrastructure, high fuel and health care costs and the shortage of health care professionals. While many problems and challenges exist in the territory, these should not overshadow the problem of suicide because it undermines the very future of the territory. Examining responses to the problem to date reveals that a crucial gap in knowledge remains – a comprehensive understanding of community level factors contributing to suicide by Inuit youth is needed because most policy responses have been developed and implemented by various levels of government without proper consideration of community-level factors or the input of the community. If we had a better understanding of the community-level factors contributing to the high rate of suicide by Inuit youth, community-based approaches could be developed to enhance the overall health of the community. The goal of this study is to reduce the rate of attempted and completed suicides, by Inuit youth, by focusing on initiatives at the community level. This goal will be achieved by focusing on two key objectives: (1) to identify community-level variables that contribute to youth suicide, and (2) to develop policy alternatives to address the identified community-level contributors. Achieving the goal of the study requires the recognition and incorporation of Inuit traditional knowledge in the policy development process. To be effective, policies targeting suicide by Inuit youth in Nunavut not only have to account for the needs of youth and their communities, but must also consider their unique historical past. Incorporating Inuit traditional knowledge, an integral part of Inuit culture, is

[4] The Bathurst Mandate was a set of priorities for the territory developed by the first legislature

important to policy development in Nunavut because it allows for the merging of the traditional and the modern.

Community-based variables are those variables that the communities can effectively address without requiring support from either the federal or territorial governments. A unique argument can be made for Nunavut and the ability of the communities to address issues that would normally require government assistance. The traditional culture and the existence of a subsistence economy allows for community-based approaches to addressing physical, cultural and economic determinants of health. The social and economic inequalities, coupled with the large distances, high costs of travel and vastly differing communities, make both formulating and implementing policies that address the various needs in each of the communities challenging for the various levels of government. Therefore, a community-based approach to addressing youth suicide would be effective in incorporating the unique characteristics and varying determinants of health that exist in each particular community.

Michael Chandler and Chris Lalonde (1998) have found that "the communities that have taken active steps to preserve and rehabilitate their own cultures are also those communities in which youth suicide rates are dramatically lower" (Chandler and Lalonde, 1998: 215). Despite attempts by the federal and territorial governments, the top-down strategies of the past have failed; therefore, it may be opportune and timely to consider that the strategy of the future for addressing the issue of youth suicide is a community-based approach.

1.1 Defining the Policy Problem

The policy problem examined in this study is ***that there is a lack of effective policy addressing the issue of Inuit youth, aged 15 to 24, who are committing suicide at a rate much higher than their non-Inuit Canadian counterparts***. Past initiatives at the federal and territorial level have not been effective at focusing on community-level variables, which have been shown to be key to any successful intervention by Chandler and Lalonde (1998) and in both the *Alaskan Suicide Prevention Strategy* and the New Zealand suicide prevention strategy for Māori youth, *Kia Piki Ora O Te Taitamariki – Strengthening Youth Wellbeing.*

Given the known link between the determinants of health and suicide, the development of effective community-based policies that address the underlying determinants, can increase community wellness and aid in the reduction of youth suicide. The study defines *Inuit youth* as those youth between the ages of 15 and 24 who identify as Inuit and live in Nunavut. Conversely,

non-Inuit youth are those aged 15 to 24 who do not identify as Inuit and live in Canada. *Suicide* is defined as "an act with a fatal outcome, which was deliberately initiated and performed by the deceased, in the knowledge or expectation of its fatal outcome, and through which the deceased aimed at realising changes he/she desired" (Ministry of Health, The Greenlandic Homerule, 2004:2).

1.2 Study Framework

Using three communities: Iqaluit, Qikiqtarjuaq and Whale Cove[5], the analysis aims to understand the impact of the community-level determinants of employment, housing, the built environment, language and traditional activities on the suicide rate of Inuit youth aged 15 to 24. The selection of the communities was based on their total rate of youth suicide in 2001 when compared to the other 24 communities in Nunavut[6]. The suicide rate in Whale Cove was zero per hundred thousand; therefore, it was selected as a base case. Qikiqtarjuaq was selected because historically it has had one of the highest rates of suicide and had a rate in 2001 of 1052.6/100 000. As the capital city, Iqaluit was selected because its rate of suicide in 2001 was located in the middle of the spectrum at 382/100 000.

It is important to acknowledge that the absence of a completed suicide in a community does not necessarily mean that there is an absence of suicidal behaviour or of attempted suicide. The data for attempted suicides are not available, therefore the study was completed with the most accurate data accessible – mortality data provided by Jack Hicks.

The study is comprised of 11 sections, beginning with the introduction of the policy problem in section 1. Section 2 provides background information on Nunavut. Section 3 outlines the rationale for a community-based approach, as well as a description of the communities studied. Section 4 follows with a literature review of suicide, the determinants of Inuit and Indigenous youth suicide and an examination of the community-based factors discussed. Section 5 describes the study methodology utilized in the research. Sections 6 and 7 analyze the quantitative and qualitative data, providing a description of the findings. Sections 8 and 9 offer an analysis of the policy alternatives using selected criteria and measurements. Section 10 highlights the implications for policy and provides recommendations for the communities. Finally, section 11 provides concluding thoughts on the issue. The intent of the study is to identify community-

[5] See Appendix A – Figure 4: Map of Nunavut
[6] See Appendix A – Figure 3: Total rate of youth suicide by community in Nunavut in 2001

level variables[7] that contribute to youth suicide in the communities and use information from successful international approaches to develop policy alternatives that will reduce the rate of attempted and completed suicide by Inuit youth. It is hoped that the information outlined in the study will initiate discussion among relevant stakeholders, particularly the various communities and groups, thereby resulting in community-based action to address the growing problem of youth suicide in Nunavut.

[7] The study does not undertake an examination of all community-level variables, but rather those that are possible to examine given the limited data in Nunavut.

2 Background on Nunavut

The establishment of Nunavut on April 1, 1999 was a pivotal moment in the progression of the relationship between the Government of Canada and Nunavummiut. The signing of the Nunavut Land Claim's Agreement (NLCA) and the development of a system of public governance has had an impact on the development, or lack thereof, of policies that directly address the issues of community wellness and youth suicide in the territory.

The population, approximately 30 000, is divided 85% Inuit and 15% non-Inuit. The territory is highly decentralized with approximately one fifth of the population located in the city of Iqaluit, the capital, and the remaining 24 000 dispersed across a large geographic area in 24 hamlets. Access to all of the communities is limited to aircraft, snowmobile or dogsled and, in the short summer, by boat. As such, the cost of food, clothing, gasoline, and other supplies are much higher than that south of 60°. In addition, the territory is fiscally dependent on the federal government for transfer payments with approximately 90% of the expenditure budget of the Government of Nunavut coming from the federal Department of Indian and Northern Affairs.

On October 21, 1999, the new government of Nunavut introduced 'The Bathurst Mandate', a statement that laid out the government's four main priorities. Applicable to this study is the first priority of 'Healthy Communities' which states that:

> the health of Nunavut depends on the health of each of its physical, social, economic and cultural communities, and the ability of those communities to serve Nunavummiut in the spirit of *Inuuqatigiittiarniq*; the healthy inter-connection of mind, body, spirit and environment (Government of Nunavut, 1999)

The guiding principles of the Mandate are that "people are responsible and accountable for their own well-being [and] building the capacity of communities will strengthen Nunavut" (Government of Nunavut, 1999). Accordingly, the vision of the mandate was that by 2020 Nunavut will be a place where:

- Self assured, caring communities respond to the need of individuals and families;
- Well informed individuals and communities have the capacity to exercise responsibility for decision-making; and
- The raising and teaching of children and the care of those in need 'Ilagiinniq' (kinship) and 'Inuuqatiginniq' (community kinship), are a collective community process (Government of Nunavut, 1999).

Significantly, at the foundation of the Mandate is the need for a community-based approach to address the issues of community well being and youth suicide.

It has been eight years since the NLCA came into fruition and the new problems of youth suicide, a housing crisis and lack of health care professionals have replaced the old problems of residential schools, not being able to vote and not having legal rights to the use of land and natural resources. The territorial and municipal governments face numerous economic and social challenges that they must address with limited resources. The only community that has the power to collect taxes from its residents is Iqaluit, which leaves the 24 hamlets dependent upon the territorial government for operating and programming funds (CBC News North, 2007). John Amagoalik, one of the individuals who worked on securing the creation of Nunavut, described the current situation and the challenges that Nunavut faces by saying that the "introduction of alcohol has left a lasting legacy, [s]erious housing shortages and overcrowding exist, substance abuse, a high suicide rate, unemployment, and low educational achievement are issues our leaders have to deal with" (Amagoalik, 2002: 203). As Amagoalik outlines, a number of economic, social and cultural factors, known to contribute to suicide, persist in the territory and need to be addressed in order to improve the health and well-being of Nunavummiut.

Recognizing that Nunavut is unique, with a very distinct culture, geography and lifestyle, one can understand that "its greatest strength [is] to be found in the wisdom of its traditional culture" (COVO, 2003: 2). In Nunavut, there is a need to incorporate Inuit traditional values, beliefs and knowledge into the policy-making process because:

> [t]oday's Inuit live in two worlds. Their traditional nomadic life has given way to a more community-based lifestyle complete with office jobs. They live in southern-style homes, watch cable television, fly by jet, and travel in snowmobiles, and through the Land Claims agreement are entitled to all of the health and social services available in the South (COVO, 2003: 4)

As a people, the Inuit have seen tremendous change and faced considerable challenges in a short amount of time. Today, individuals born at a time when everyone was still in igloos, lived in camps and tents over the summer and who do not read, write or speak English, now have credit and debit cards (Karetak-Lindell, 2007). This highlights the rapid cultural changes the Inuit have experienced. To study all 25 communities within Nunavut would be beyond the scope of this paper, as such this study focuses on three distinct communities: Iqaluit, Qikiqtarjuaq and Whale Cove.

2.1.1 Iqaluit

The city of Iqaluit is both the largest community and the capital of Nunavut with a population of 5 236 (Government of Nunavut, 2006). The majority of Iqaluit's inhabitants are Inuit (55%) and youth aged 15 to 24 comprise 23 percent of the total population. It was founded in 1942 as an American airbase and in 1949 the Hudson Bay Company moved in to take advantage of the airfield. The Canadian government established permanent services after 1959. They included full-time doctors, a school and social services. As the federal government encouraged Inuit to settle permanently, the Inuit population of the city increased (City of Iqaluit, 2007).

In term of opportunities for youth, there are more in Iqaluit than in other Nunavut communities; however, that does not necessarily mean that the opportunities are enough to address the many issues facing youth. Iqaluit does not have a central youth centre, but it does have more youth employment opportunities than other communities. The Government of Nunavut, the Government of Canada and Nunavut Tunngavik Incorporated all offer summer student programs, and there are many stores and private businesses which also employs youth (Anilniliak, 2007).

The issues facing youth in Iqaluit, as observed by Constable Jeff Henderson, a Royal Canadian Mounted Police (RCMP) officer in Iqaluit, include a lack of positive role models and alcohol and substance abuse witnessed by youth in their family and friends. Youths tend not to see their parents working; there is cyclical domestic violence and they lack the coping skills required to deal with their problems. He also indicated that, due to the hunting culture, firearms are easy to access (i.e. left on qammatiqs and unlocked in sheds) which can be problematic (Henderson, 2007).

The potential success of a community-based approach to addressing community wellness and youth suicide was alluded to by Rita Anilniliak, a young Inuk woman who currently lives in Iqaluit. In describing the difference between Iqaluit and the small community of Pangnirtung where she grew up, she acknowledged that when a family was going through a difficult time in Pangnirtung the community would come together to help. In Iqaluit it is the variety of sub-communities (i.e. an Anglican Church community, Francophone community and Newfoundland community) that come to help an individual or family, not the community-at-large (Anilniliak, 2007). Given the distinct characteristics that exist in each community, it is clear that there is a need for the community at-large and the various sub-communities to come together and decide who will take responsibility for the various policy alternatives.

2.1.2 Qikiqtarjuaq

The Inuit hamlet of Qikiqtarjuaq is located off the east coast of Baffin Island in Davis Strait. Inuit families moved to the island from Pangnirtung and Padloping Island. It is well known for its arctic wildlife, whale watching and as the northern access point for Auyuittuq National Park. The population of the community is 519 and the majority of residents are Inuit, 99%, with 29.5% comprised of youth between 15 and 24. The median age of the population is 23.9, which is slightly higher than the Nunavut median, but lower than that in both Iqaluit and Canada.

In 1994 Qikiqtarjuaq "had the highest suicide rate of any community in the Canadian Arctic, with 12 youth suicides taking place between 1986-1993" (Kral and Idlout, 2006:8). When the suicides stopped for several years, individuals questioned what had been done in the community to alter the behaviour. The Inuit in Qikiqtarjuaq acknowledged that two events had taken place. The first was the regular gathering of community members of all ages to talk about suicide and wanting to stop it. The second event, organized by the local Housing Committee, involved removing the closet bars from each house and removing the locks from the bedroom doors. Previously, it had been found that the primary method of suicide in the community was hanging oneself from the bar in the bedroom at night. To prevent the activity the bars were removed (Kral, 2006: 8). As evidenced by the actions of the hamlet of Qikiqtarjuaq, community-based initiatives can be successful in addressing the issue of youth suicide. While the community was successful in reducing the number of suicides, there is still the need for an effective policy intervention. The rate of youth suicide in 2001, when compared to other communities in Nunavut, was the highest, and therefore the problem continues to exist.

2.1.3 Whale Cove

The hamlet of Whale Cove, a community of approximately 305, is located on the west coast of Hudson Bay, just south of Rankin Inlet, a community of 2 177 (Government of Nunavut, 2006). The community is 93 percent Inuit with approximately 26 percent of the population being between the ages of 15 and 24. The median age of 19.4 is the lowest of the three communities, Nunavut and Canada.

The community faces many challenges. As in all northern communities, the cost of food in Whale Cove is very high. Adding to the problem is a lack of transportation for hunting which

is "a big set back because most people live on country food, [but] no one could really live on store bought food [due to the high cost], especially [those] who are on welfare" (Ford-Rogers, 2007). Youth in the community are particularly challenged. While receiving an education is an opportunity they enjoy, there is a lack of employment for those youth who do graduate. Existing jobs are held by individuals who began working 10 to 20 years ago and there are no new jobs being created. Hence, the people of Whale Cove, and especially the youth, have little to aspire towards.

Whale Cove has not had any reported incidence of completed suicide since April 1, 1999[8]. MP Karetak-Lindell spoke of how dedicated the people of Whale Cove are to their community. She noted that in the past they have been asked to relocate to Rankin Inlet, but have refused, instead remaining strong in their resolve to stay where they are. This resolve has shown that the inhabitants of Whale Cove are not afraid to stand up to outsiders who are trying to tell them how to live their lives (Karetak-Lindell, 2007).

When asked why she thought Whale Cove has not experienced a completed suicide since April 1, 1999, Amanda Ford-Rogers, an Inuk who grew up in Whale Cove, but currently lives in Iqaluit, said:

> I think there's been no suicide in Whale Cove because everybody knows everybody and everybody helps everybody, you're usually more then welcome to visit anyone. And when someone goes hunting they share country food with family and the community. They have the community radio which is used every day for communicating amongst each other. If people have problems they aren't shy to talk about or deal with them. The beautiful land, and the variety of animals, people are really into going out [on the] land. The access road that you could drive on 25 miles out of town by ATV, in the summer (Ford-Rogers, 2007)

Her thoughts on the issue allude that the sense of community present in Whale Cove, coupled with their participation in traditional activities acts as a protecting factor against the act of suicide.

[8] Between 1978 and April 1, 1999 there were four reported deaths from suicide in Whale Cove. The deaths took place in the years 1983, 1985, 1989 and 1992.

3 A Community-based Approach

A reality of policy-making in Nunavut is its small population, "dispersed throughout a number of small communities over a wide geographic area" (Abele, 2006: 4), which can make it difficult to develop overarching policies that incorporate the specific needs and unique traits of the 25 communities. Furthermore, the realities of the cultural and geographic characteristics of the North suggest that southern policy[9] will not always translate accurately; therefore, the policies and processes must be adapted to suit the unique needs of the North, and the distinctive communities themselves. As the goal of this study is to reduce the rate of attempted and completed suicides by focusing on initiatives at the community level, the risk factors, which can vary by community, must be addressed. In an effort to express the need for a community-based approach, a personal account of life growing up in the community of Pangnirtung has been included. The intent is to highlight the realities of the traditional and modern culture, geography and lifestyle.

In recounting life in Pangnirtung, the community in which she grew up, Rita Anilniliak said, "we would go out camping, hunting and gathering all year round and our purpose for each trip would be quite different, depending on the season" (Anilniliak, 2007). In the late fall they would hunt for caribou, gather berries and go clam digging. During winter, they would hunt caribou, ptarmigans and arctic hare only when there was a need for food. The spring time meant hunting for baby seals, which she enjoyed the most. She loved to sit in the qamotik with her mother and watch her dad hunt. She described the pride she had in her father, "a true, traditional Inuk hunter and an amazing provider" (Anilniliak, 2007). For Rita, the summer was special because her parents would drop her off at her grandparents' camp, as it was too dangerous for her out on the ice. Her father would take her baby brother with him because he wanted to pass on his hunting skills. She enjoyed the time with her grandparents because there was always something to do around the camp. Rita's grandparents were very faithful people and would always have Sunday Service at their tent with a lunch of either seal or caribou meat. In mid to late summer,

[9] "Southern policy" is defined as that policy which has been developed in areas south of the 60th parallel (i.e. in the rest of Canada). It does not always accurately account for the situation in the North and therefore cannot be adopted.

when her parents were back from their hunting and the ice had vanished, the camp would be full. In her words, it was:

> *a great time as we would have a big camp feast with freshly caught meat and lots of late night visits drinking tea, eating leftover sweets and listening to the chatter of my parents and our relatives. Our lives were quite simple in the sense that our lives did not seem to revolve around work but we were always on the go* (Anilniliak, 2007)

Rita believes that she was very fortunate to have such strong willed parents who loved being out on the land, to have seen such a variety of animal and marine life and to have experienced the wonder of the traditional Inuit culture. However, her life changed when she became a teenager. Rather than camping with her family, she would remain in Pangnirtung to work at summer jobs or baby-sit for her sister. While she did not enjoy being left behind, she recognized that "as a young woman, it was time for [her] to learn to take care of [herself]" (Anilniliak, 2007).

The unique traditional, subsistence lifestyle and the relative isolation in Nunavut mean that people can, and do, live their entire lives within their community. Therefore, a program that utilizes the community as the setting for the targeting of risk factors for youth suicide would be advantageous because individuals know each other and can take action without having to wait for bureaucrats to address the issue (Kral, 2006; COVO, 2003). While the education system, managed by the Government of Nunavut, would be the natural choice for the targeting of programming and information for youth, the 75% drop out rate among students creates a significant barrier for that route. Those most at risk, Inuit youth aged 15 to 24, may be overlooked by initiatives that aim to target them through the education system. A recent collaboration by the Government of Nunavut, Nunavut Tunngavik Incorporated and Health Canada, *Piliriqatiginngniq – Working Together For the Common Good* (2006), found "that any solution to such broad and diverse challenges must be rooted in the determination to integrate the activities and the resources – both human and capital – at the community level" (Health Canada, 2006).

The Royal Commission on Aboriginal People's report provided a case study analysis of five programs that highlighted factors that contribute to successful strategies among First Nations people. All of the activities in the case studies "were community-initiated, drew from the traditional knowledge and wisdom of elders, were dependent on consultation with the community, and were broad in focus" (Health Canada, 2003: 52). It found that strategies "aimed at community and social development should promote community pride and control" (Health

Canada, 2003: 52). Many Aboriginal groups in Canada suffer from similar issues of youth suicide, most recently in Kashechewan[10]; therefore, successful community-based strategies[11] may successfully translate to communities in Nunavut. For example, the 2003 National Inuit Youth Suicide Prevention Framework noted:

> little is known about efforts in various Inuit communities and regions that are achieving success in restoring mental wellness [and] in the absence of empirical evidence of what works, it is necessary to plan interventions based on what makes sense and is compatible with available resources and community aspirations (Stevenson, 2003: 16)

In each community, careful consideration must be given as to how any new policy initiative would be incorporated into the existing physical, economic, social and cultural environment. There may be individuals or organizations that resist the establishment of suicide prevention initiatives for fear that they will exacerbate the problem further. It is therefore necessary to gain their cooperation and support, while not losing sight of the objective, to develop policy alternatives that address the identified community-level contributors.

There are limitations to a community-based approach. First, without the resources of the federal and territorial governments, it would be difficult for the communities to raise the necessary funds to implement initiatives. Second, it may be difficult for larger communities to achieve community participations versus that of smaller communities. Finally, it is important to note that one of the limitations of the community-based approach undertaken by Chandler and Lalonde is that it looks solely at cultural continuity. As such, it does not include social determinants of health such as unemployment and education which are know contributors to suicide. It is essentially a univariate analysis using self-government as the sole explanatory variable. However, while it does not incorporate social determinants of health, it did find that the empowerment of communities was successful in addressing youth suicide.

[10] In January of 2007 21 young people aged 9 to 23 attempted suicide on the Kasheschewan reserve (Harries, 2007).

[11] After a cluster of suicides 8 years ago, the band council of the Innu of Sheshatshiu started programs to get families talking about suicide prevention. In the last two years there have been attempts, but no suicides in Sheshatshiu (CBC News North, 2007).

4 Literature Review

Suicide is a complex, multidimensional issue affected by an array of physical, social, cultural and genetic factors. The literature reviewed for the study provides an understanding of Inuit and indigenous youth suicide, risk and protective factors and the community-based variables which were used.

4.1 Inuit and Indigenous Youth Suicide

Nunavut's suicide rate is presently six times that of Canada's national rate, but the rate of suicide by Inuit youth is forty times the Canadian rate. With the majority of the population under the age of 25, and the suicide rate highest amongst those aged 15 to 24, the Government of Nunavut has an increased burden placed on it to provide services for at-risk children and youth. Currently, resources such as professional counselling, language appropriate services, adequate clinic hours, and available community and mental health care workers are lacking (Bender, 2007; Stakeholder 6, 2007).

As of December 1, 2006, there have been 220 suicides by residents of Nunavut since the creation of the territory on April 1, 1999. All but three of the 220 deaths have been by Inuit. In addition, of the 217 suicides by Inuit, 83% have been by men[12]. While the statistics show that this is a predominantly Inuit male issue, the policy alternatives will not focus solely on one gender. While males are committing suicide far more frequently than females, this does not mean that females are not attempting suicide at the same rate. Instead, they may be using less lethal measures such as overdose, rather than self-inflicted gunshot or hanging as a cry for help and/or attention than actual suicide attempts.[13]

In Arctic areas, the suicide rate differs from that of western countries because it is highest among youth. In western countries, the suicide rate generally increases with age (Greenland Suicide Strategy, 2004: 1). Inuit suicide traditionally occurred among older men whose

[12] See Figure 5: Deaths by suicide by Inuit in Nunavut by year and sex (1999-2006)

[13] While there is no statistical data to support this claim, anecdotal data from doctors, etc. suggests that (a) this is occurring and (b) is in line with what Alaska found when they implemented their Trauma Registry -- females attempt at up to twice the rate that makes do, but usually use less lethal means.

motivations included ill health, old age, or mourning. This form of suicide was positively endorsed in the culture and was undertaken following reflection and perhaps discussion with family members. A pattern has since merged in which youth are committing suicide. Their motivations are difficult to determine and their actions are not endorsed. While often associated with being intoxicated, frequently the behaviour arises in an unexpected manner (Hicks, 2006).

Further complicating matters, in Nunavut youth are more "likely to be alienated from traditional sources of well-being and social cohesion, particularly land-based activities" (Abele, 2006: 25). Reflecting on the suicide situation in Nunavut, Anilniliak spoke of the government's role, the impact at the community level, as well as the personal impacts. She said:

> *for a long time, the government tried to take care of the people and now it's trying to step aside and let the people take care of themselves. The confusing thing about that is that the people already knew how to take care of themselves but the government forced dependency. They created a dependant people. The government is trying to take a step back and let its children off the leash. The only problem is that it is abandoning its children before [they have] fully matured. There is a crisis happening in the communities, children are neglected by their parents, sexual assault, spousal assault, incest, teenagers having babies, alcohol and drug use and many parents buying [alcohol and drugs] before they buy any food or clothing for their kids. Suicide is a major concern, especially in Qikiqtarjuaq, for such a small community, they have lost many, many youth to suicide. The communities are in a constant state of grieving. One of my best friends committed suicide before we graduated. I've lost three first cousins and many of my friends and most recently, my godfather who was in his 60s Suicide has become so common up here and yet we are still stranded. We are in a crisis but it has not been acknowledged by the federal government who has helped to create this mess* (Anilniliak, 2007).

Failure on behalf of the federal and territorial governments to address the issue with effective policy interventions means that alternative approaches are required, specifically community-based approaches.

4.2 Determinants of Inuit and Indigenous Youth Suicide

The literature links youth suicide with the following determinants of health: income and social status, social support networks, education, employment and working conditions, physical and social environments, biology and genetic endowment, personal health practices and coping skills, substance abuse, mental illness, family history, healthy child development, health services, gender and culture (Health Canada, 1999; Freeman, 1998).

The literature has identified patterns of suicide in indigenous youth. The factors that place these indigenous youth at a higher risk of suicide have also been identified as contributing to the suicidal behaviour of Inuit youth. Such risk factors include social disadvantage, low

education, unhappy family and childhood backgrounds, mental health problems, adjustment issues, exposure to suicide, substance abuse, low self-esteem, relationship problems and peer pressure (Kirmayer, 2001; Lawson, 1998; Ministry of Youth Affairs, 1998; Stevenson & Ellsworth, 2003). In addition, there are risk factors that apply only to Inuit and other indigenous youth. They include rapid social and cultural change, cultural suppression, political disempowerment, confusion over identity and intergenerational trauma (Kirmayer, 2001; Lawson, 1998; Aster, 2005).

Mary Bender, a clinical supervisor for Community Health Nursing for the Government of Nunavut, has found that the risk factors in Nunavut differ from those 'down south', especially because they have more young males committing suicide. She explains that the impulsiveness of committing suicide is a bit different. In Nunavut, "you may see someone who is not at high risk for suicide and they may change quickly or you can medivac someone out and they are not suicidal when they get [to the hospital]" (Bender, 2007). She states that there are few resources to provide appropriate professional counselling in their own language [Inuktitut or Inuinnaqtun] and that they encounter issues such as sexual abuse, relationship and communication problems (Bender, 2007). The resource limitations facing the Government of Nunavut, particularly in areas such as health care, have resulted in a lack of policy that effectively addresses community need. This in turn, has reinforced the necessity for communities to implement their own policy initiatives. Moreover, while there are many factors that place youth at an increased risk of suicide, there are also protective factors.

Not all youth exposed to the risk factors develop suicidal behaviour, which suggests that there may be protective factors at play that mitigate the effects. A review of the literature surrounding resilience in children and youth by Dr. Annette Beautrais (2005), Principal Investigator with the Canterbury Suicide Project at the University of Otago's Christchurch School of Medicine & Health Sciences in New Zealand, identified three classes of individual and contextual protective factors:

1. Individual attributes – includes cognitive abilities, self-perceptions of competence, self-regulation skills and a positive outlook on life,
2. Relationships – includes the quality of parenting, close relationships with competent adults and connections to pro-social peers,

3. Community resources and opportunities – includes the quality of schools, connections to pro-social organizations, quality of the neighbourhood and the quality of social services and health care (Beautrais, 2005: 38).

While acknowledging that all of the determinants of health identified as contributing to youth suicide are important, my particular model for a community-based approach cannot attend to all determinants. Those determinants considered imperative to a community-based approach in Nunavut, as the communities can attend to them independently without having to rely on other levels of government for resources, were selected[14]. The determinants were categorized based on their economic, physical and cultural factors.

4.2.1 Economic Factors

Economic factors such as income and unemployment have been cited as determinants of health (Health Canada, 1998; Freeman, 1998). With respect to suicide, a study by Hamermesh (1974) found that "poverty can be an important cause of suicide in developed societies" (Hamermesh, 1974: 97). Given the community level focus of the research, the employment and unemployment rates will be discussed with respect to its impact on youth suicide in Nunavut.

A review by the World Health Organization found that high levels of unemployment and economic instability have an adverse affect on the mental and physical health of unemployed individuals, their families and their communities (Health Canada, 1999: 34). In addition, a Canadian study found "unemployed people have significantly more psychological distress, anxiety, depressive symptoms, disability days, activity limitations, health problems and hospitalization visits than do those that are employed" (Health Canada, 1999: 34). The combination of economic factors can have a negative impact on the health of children, who may encounter mental health problems, lowered self-esteem and a decreased ability to manage stress (Health Canada, 1999: 34).

Communities in Nunavut have the ability to address unemployment without the aid of the territorial or federal governments due to the nature of the traditional Inuit lifestyle. For work to be meaningful, it does not have to be supported in a wage economy. Many young Inuit "aspire to continue Inuit traditional lifestyles, skills and culture, and derive significant personal meaning, self-worth, accomplishment and pride from these traditional activities [subsistence hunting and gathering activities]" (Health Canada, 2006). For example, participation in the traditional economy can not be taken lightly. There are a high number of Nunavummiut who depend as

[14] The selection of determinants was also influenced by the availability of existing data.

much on work in the traditional economy as they do in the wage economy. The traditional economy "allows thousands of Nunavummiut to put nutritious country food on their tables. The estimated replacement value of harvested caribou alone is $30 million annually" (Okalik, 2000).

While both the federal and territorial government could address unemployment at their respective levels through industry or job creation programs, they have not. Unemployment, however, is a determinant of health which can also be addressed through a community-based approach. The communities may be limited in their capacity to do so, but they do have mechanisms and characteristics available to them which would make this possible. For example, the community of Cape Dorset is internationally renowned for its carving and printmaking and has been hailed as Canada's most artistic municipality (Hill Strategies Research Inc., 2006). Therefore, there are resources available within the community to teach youth the skills they require for this particular activity, as well as to provide them with a venue through which to sell their work.

4.2.2 Physical Factors

According to Health Canada (1999), the physical environment plays an important role in the development of a healthy child. Included are: the "housing in which children live, the air they breathe, the water they drink, the food they eat, the consumer products they use, and the parks and communities in which they play" (Health Canada, 1999: 75). The physical factors discussed in this study are the built environment and housing.

The ability to exercise and use public transportation is an opportunity that enhances the daily lives of children. The opportunity for children to gain independence is an important expression of growing up (Health Canada, 1999: 94); however, a lack of access to those opportunities can lead to adverse health outcomes for Inuit youth in the communities. Inuit are also at higher risk of poor health due to a loss of participation in a subsistence economy. The ability to access traditional foods, through participation in hunting and gathering, not only contributes to the physical well-being of Inuit, but it also has an impact on cultural activities. The loss of participation has resulted in a shift from a physically active lifestyle, and nutrient-dense diet, to a sedentary way of life, with a high-fat diet. There has also been a loss of recognition of the strong relationship Inuit have with the land and of the importance of country foods to social life, cultural expression and physical health (National Forum on Health, 1996; Raphael: 2004).

Many communities in Nunavut are composed of families who rent their homes rather than own them. In Nunavut, ninety-eight percent of social housing tenants are Inuit and over half of

Inuit in Nunavut live in social housing (Health Canada, 2006). It is widely known that there is a housing crisis Nunavut and wait times for housing can range from two years to seven years depending on the community (Carson, 2007; Stakeholder 6, 2007; Health Canada, 2006). Research in the community of Cape Dorset found that most dwellings there are overcrowded (CBC News North, 2006). In addition, as most substandard houses are often in need of repair, poor housing conditions have a direct effect on injuries (Health Canada, 1999: 90). Interviews conducted in the territory found anecdotal evidence which "suggests [that] in some communities, [there are] as many as 18 persons to a household suitable for 6-8 persons, [meaning] people eat and sleep in shifts" (Health Canada, 2006). Overcrowding can lead to ill physical health due to the spread of disease, tension, anger, violence and possibly suicide.

It is estimated that approximately $640 million in capital costs is required for the estimated 3500 new housing units required to meet demand over the next five years (Health Canada, 2006). Additional social housing cannot be provided by the communities, rather they must be provided by the Government of Nunavut. And, while the Government of Nunavut has committed to additional units in the current budget, this number falls significantly short of the estimated need. However, a community-based approach can address issues such as the physical condition of existing dwellings in an effort to increase the health and well-being of residents.

4.2.3 Cultural Factors

Dominant cultural values can lead to "marginalization, stigmatization, loss or devaluation of language and culture, lack of access to culturally appropriate health care and services, and lack of recognition of skills and training" (Health Canada, 1999: 165), which may result in Inuit facing additional health-related risks. The research by Chandler and Lalonde, among First Nations bands in British Columbia, has hypothesized that "steps being taken by certain First Nations communities to protect and rehabilitate the continuity of their own culture might be shown to work as protective factors against the current epidemic of suicide" (Chandler and Lalonde, 1998: 194). Further to the argument, youth suicide can be affected by the contribution of "specifically Aboriginal reasons, like loss of culture and language and discrimination experienced outside the reserve" (Aster, 2005:14). Cultural factors that were selected for the community-based approach include language and traditional activities.

Language is an important characteristic of culture, especially in Nunavut where, according to the 2001 Census, the majority of the population (72.4%) first learned and still understand a language other than English or French. However, there is growing concern over the

ability of youth to learn and retain Inuktitut. Many of the Elders are unilingual Inuktitut speakers and many youth communicate in English. The inability of youth to communicate with Elders in their communities due to the language barrier may result in the loss of Inuit Qaujimajatuqangit[15], which could lead to a loss of culture and increase the risk of suicide.

In his research on suicide in First Nations youth, Lawrence Kirmayer (1993) noted that a "breakdown in the transmission of cultural traditions appears to contribute substantially to the widespread demoralization and hopelessness of First Nations youth" (Kirmayer et al., 1993). Adapted to the situation in Nunavut, it could be hypothesized that a lack of instruction for youth on traditional activities such as hunting, gathering, carving, sewing, etc. could lead to an increased risk for suicidal behaviour.

The importance of culture can be addressed at the community level by incorporating aspects of Inuit traditional knowledge. The informal education of youth through the life experience of others has been valued because of the importance of logical thinking, intelligence and knowledge on survival (Health Canada, 2007). In addition, there must be an emphasis on the importance of "informal education in the lives of Inuit, [and] how their experiential knowledge might contribute to improved well-being and higher levels of health within the Inuit context" (Health Canada, 2007). The territorial government could address culture in the education system, but, as previously indicated, the high dropout rate for Inuit youth creates a barrier to the transmission of cultural knowledge. A community-based approach is capable of addressing all youth in the community, even those that are no longer in the education system.

[15] Inuit Qaujimajatuqangit is Inuit traditional knowledge.

5 Current Study Methodology

The rates of youth suicide vary by community and region in Nunavut. Some communities have relatively low levels of completed suicide, while others are experiencing much higher levels. It could be hypothesized that the communities with low levels of suicide are succeeding in addressing community-based determinants of health while the others are not. Community-based approaches to addressing issues of youth suicide are suggested by Chandler and Lalonde who note that "what is required instead is some handle on the problem of youth suicide that communities can successfully get hold of and over which they can exercise some real control" (Chandler and Lalonde, 1998: 215). Therefore, it must be possible to identify which determinants are contributing to increased levels and to understand how addressing the determinants can be effective in preventing youth suicide.

The large geographic size of Nunavut and the resources required to undertake a comprehensive analysis of youth suicide at the community level resulted in the selection of three communities for observation: Iqaluit, Whale Cove and Qikiqtarjuaq. In addition, a review of international suicide prevention strategies in New Zealand, Greenland and Alaska was conducted to determine which methods have been successful and have the potential to be adapted for a Nunavut specific approach. An examination of Inuit youth perspectives was undertaken from information gathered by the Qikiqtani Inuit Association to understand what youth feel is needed in their communities. Finally, following an analysis of the 2001 Nunavut Household Survey and the 2001 Census, to select variables associated with youth suicide, seven interviews with community health care workers, the RCMP, government employees and members of the community were conducted to discuss the issue of suicide in Nunavut and to explore policy options that could be implemented as a mechanism for a community-based approach to prevention.

5.1 Data

The availability of data meant that only a few selected determinants at the community-level could be examined. While this limits the range for investigation of contributing factors, it also means that the selected determinants, which are found to contribute to youth suicide, can be

used to create effective and focused policy alternatives that can be implemented at the community-level. Understanding how these community-level determinants of health affect the rate of youth suicide is crucial to the development of policy alternatives that address the goal of the study. A mixed methods approach, a combination of quantitative and qualitative research, was undertaken to gain the required information.

The quantitative approach is useful because it provides precise empirical evidence as to the economic, physical and cultural state of the communities. However, because a quantitative approach does not convey the local attitudes and cannot capture individual knowledge on suicide in Inuit youth, qualitative methods were also employed.

A qualitative approach allows for an in-depth understanding of youth suicide and the impact it has on the community. Issues were explored through interviews and individuals were able to provide knowledge, and first-hand accounts, of their experiences with youth suicide that could not have been captured in a quantitative analysis.

In an attempt to provide a descriptive analysis of youth suicide in Nunavut data were drawn from multiple sources, such as the 2001 Nunavut Household Survey (NuHS), census data, interviews, government reports, international strategies and other relevant literature. The qualitative interviews provided a means to understanding the issues currently facing youth in Nunavut and the opportunities available for them. In addition, the interviews allowed for a discussion of Nunavut specific issues that need to be considered when formulating policy, such as the incorporation of Inuit traditional knowledge.

5.1.1 Quantitative Data

The 2001 NuHS was the primary data source for the research, providing data on a number of known determinants of health. Supplementing the 2001 NuHS was the 2001 Census and mortality data provided by Jack Hicks, the former Director of Statistics for the Government of Nunavut. The data were used in a community comparison to determine which physical, economic and cultural variables were related to youth suicide in the communities of Iqaluit, Whale Cove and Qikiqtarjuaq.

The mortality data provided information on every incident of suicide recorded in the territory of Nunavut for the year 2001. The data were configured to determine the dependent variable of the rate of youth suicide in each community in 2001 as well as a profile for suicide in each of the communities. When disaggregated, the data identified the profiles of the suicide

completers in each community based on age, gender, ethnicity, date of death, community of affiliation and the means of death. The independent community-based variables were selected using the 2001 NuHS and the 2001 Census. The variables include: the unemployment rate, the built environment, housing, language and traditional activities. An analysis was undertaken to determine the relationship that exists between the dependent variable, the rate of youth suicide in each community, and the independent community-based variables.

5.1.2 Qualitative Data

A literature review of international suicide prevention programs was undertaken in order to determine which suicide prevention strategies were implemented, were successful and/or unsuccessful, as well as to identify problems that were experienced during the implementation. The indigenous populations of New Zealand, Greenland and the state of Alaska were the focus of the review due to the similarities between Inuit youth in Nunavut and the indigenous youth in these populations. In addition, a literature review of the determinants of health for indigenous populations and the risk factors for youth suicide was conducted to establish the best means of measuring the status of health in the respective community environments.

The secondary data source was information collected from key stakeholder interviews (n=7). The data collection involved semi-structured interviews with health care professionals, law enforcement, government officials and members of the community.[16] The interview questions varied, depending upon who the individual was, but all included similar key questions. The interviews were conducted in-person, over the phone and via email. Each individual agreed to the interview and all provided informed consent prior to participating. The findings from the interviews were used to inform the policy development process, as well as to support the evidence gained through the literature review.

5.1.3 Difficulties Encountered

The discussion on the selection of community-level determinants noted that that there is a lack of credible data and information in Nunavut which hinders research. It proved difficult to identify, and describe the health and social problems that exist because either the data does not exist or access to the data was not granted. In addition, existing measures used to identify health and social identifiers do not always accurately capture the situation in the North, thereby resulting in an inability to make sound national and international comparisons.

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[16] See Appendix C for the interview schedule.

Various barriers to the research process were encountered throughout the duration of the project. First, barriers such as interviewer fatigue, satellite location coordination and the requirement of attaining parental consent to talk with youth under the age of 19 resulted in the cancellation of a planned focus group to discuss issues facing youth in the communities. Second, the low interview response rate for individuals at various levels, a lack of co-ordinated research on the topic and the denial of access to the 2004 Nunavut Household Survey hindered regression attempts and limited input from stakeholders on the subject. Of the 70 individuals who were contacted for information and/or interviews only 30 responded. Of the 30, two declined to give information and/or interviews, five agreed to review my research and policy recommendations, ten agreed to be interviewed and seven interviews actually occurred. Travel to Nunavut to conduct research at the ground level was halted due to the high costs of travel. Moreover, a limited time frame, and the requirement of needing a research license in order to conduct research in Nunavut - a process that could have taken up to a year - limited the extent of the research.

6 Data Analysis

Nunavut has averaged approximately 18 suicides per year among Inuit youth, aged 15 to 24, between April 1, 1999 and December 31, 2006. In 2001, 21 Inuit youth committed suicide in Nunavut. Of those, four were in Iqaluit (382/100 000) and one in Qikiqtarjuaq (1052.6/100 000). Whale Cove did not report any suicide-related deaths.

6.1 Study Sample Characteristics

The 2001 NuHS consisted of 5 816[17] personal interviews with Inuit and non-Inuit adults[18] with 3 819 respondents from Iqaluit, 341 from Qikiqtarjuaq and 202 from Whale Cove. The majority of respondents for the 2001 NuHS in the three communities were Inuit (60.4%), male (54.6%) and were employed (71.2%). Descriptive characteristics for the mortality data for the year 2001 are provided in Table 1 below.

Table 1: 2001 Mortality data for Inuit youth aged 15 to 24

Community	Nunavut	Iqaluit	Qikiqtarjuaq	Whale Cove
Number of Suicides	17	3	1	0
Suicide Rate	451.6	382	1052.6	0
Male	17	3	1	-
Female	0	0	0	-
Inuit	17	3	1	-
Method				
Hanging	13	2	-	-
Gunshot	4	1	1	-

[17] Thirty five percent of the population
[18] Individuals 15 years of age and older

Community	Nunavut	Iqaluit	Qikiqtarjuaq	Whale Cove
Season				
Spring	6	1	-	-
Summer	8	1	-	-
Fall	9	1	1	-
Winter	10	-	-	-
Time of Week				
Weekday	13	2	1	-
Weekend	15	1	-	-

As indicated by Table 3, in 2001 seventeen Inuit males between the ages of 15 and 24 committed suicide in Nunavut. Three deaths occurred in Iqaluit and one in Qikiqtarjuaq. The majority of deaths were by hanging (76%), and were almost evenly distributed between the seasons and between the days of the week when the death took place.

6.2 Dependent Variable

An analysis aimed at reducing the rate of youth suicide should not only include the rate of lives lost, but also the rate of attempt. However, given that many attempts go unreported and because the Government of Nunavut Department of Health and Social Services does not collect data on suicide attempts, official data is not available. As such, the dependent variable studied here is the suicide rate in each of the three communities in 2001. It is also acknowledged that a potential underestimation of deaths by suicide may have occurred because "there is no clear and compelling reason to regard a given death as suicide, it is typically recorded as accidental, leading to a potential underestimation of the true incidence of suicide" (Chandler and Lalonde, 1998: 201). For the purpose of this study, it will be assumed that the number of suicides recorded is accurate because an investigation into each accidental death in the territory could not be undertaken.

6.3 Independent Variables

The independent community-based variables utilized in this study are those variables which can be addressed by the community-at-large or sub-community within without having to rely on the territorial or federal governments for resources. Therefore, a review of the determinants of health was undertaken to select community level determinants for analysis. The selected determinants were linked to variables found in the survey data and include the unemployment rate, housing, language, traditional culture and the built environment.

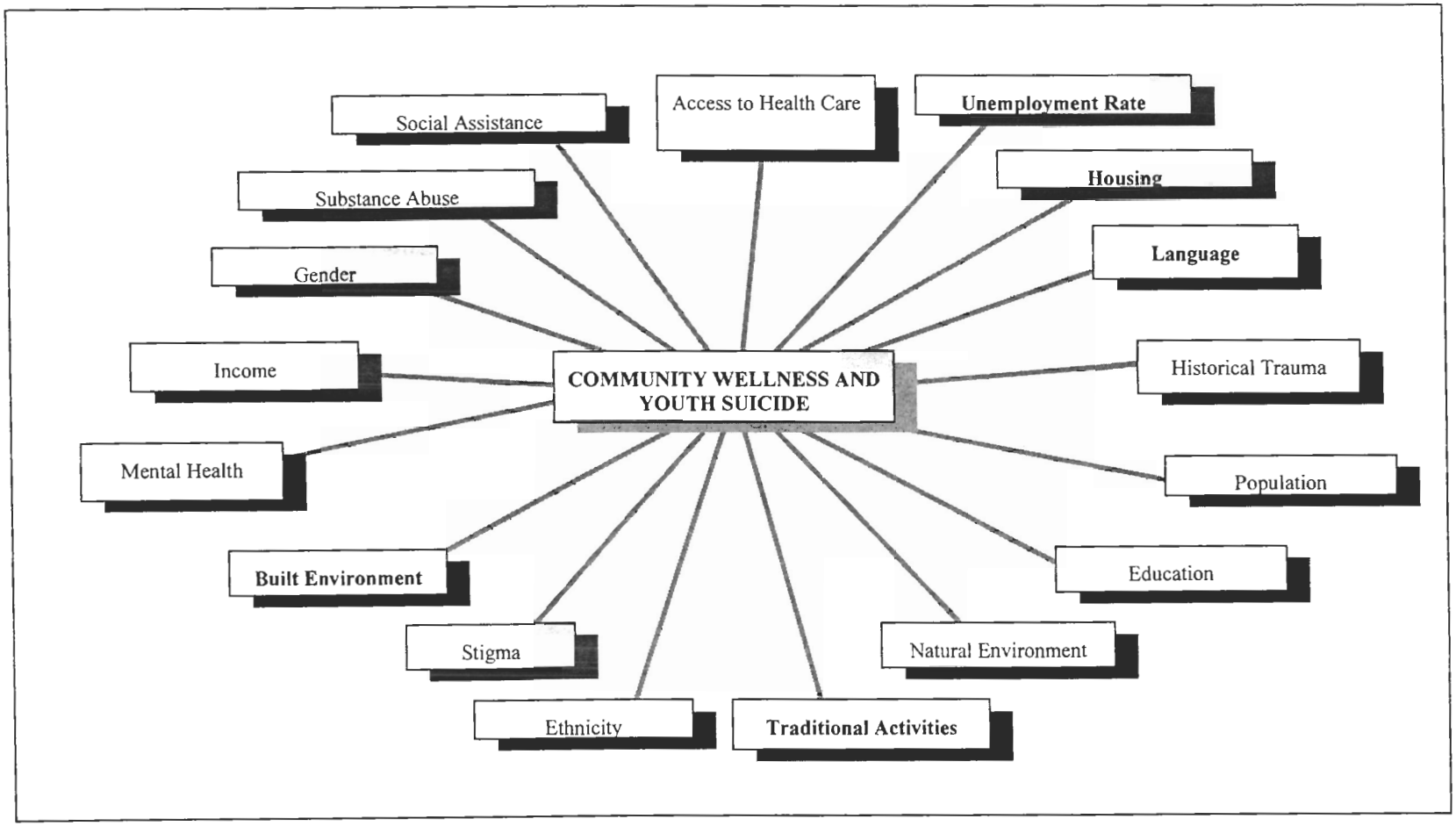
Figure 5 illustrates the determinants of health that were indicated in the literature as contributing to community wellness and youth suicide. However, the community-based model referred to in this study analyzes only those determinants that the community can address without having to rely on the federal or territorial governments for resources. The determinants include the unemployment rate, housing, language, traditional activities and the built environment, all of which have been indicated in Figure 5.

The territorial and federal governments can and do intervene in aspects of the selected determinants. However, using a community-based approach which incorporates aspects of Inuit traditional knowledge is an innovative method of addressing youth suicide in Nunavut. The importance of a community-based approach that extends beyond an assessment of traditional health status indicators is recognized. While an acknowledgement of traditional determinants of health is required, factors such as:

> the trauma left from the experience of residential schools, cultural dislocation, forced gathering of families into communities, and other historical events must be taken into account when assessing the health of Nunavut's Inuit population (Health Canada, 2006: 13)

A community-based approach which also includes determinants such as historical trauma would enhance current and future health research in Nunavut. Given the time frame for this research, however, only those community level variables for which data was available were selected.

Figure 1: Determinants of health that affect community wellness and youth suicide



6.4 Case Studies

A review of the suicide prevention strategies for New Zealand, Greenland and Alaska was conducted to identify effective community-level approaches. These case studies provide important insights into the components of promising practices that could be drawn on in the context of Nunavut. Suicide profiles in Greenland, Alaska and New Zealand suggest that indigenous populations who have lived through periods of acculturation and rapid change to their social and economic lives are coping with similar issues to Inuit in Nunavut (Henderson, 2003).

6.4.1 New Zealand

Context: The suicide profile for Māori youth is similar to that of Inuit youth in Nunavut. In 1997, the Government of New Zealand sought to create a suicide prevention policy. Cultural change has resulted in substance abuse, depression and family breakdown. In response, two strategies were developed: In Our Hands – The New Zealand Youth Suicide Prevention Strategy and Kia Piki Ora O Te Taitamariki – Strengthening Youth Wellbeing developed for Māori youth in New Zealand. For the purpose of this study, the focus will be on Kia Piki Ora O Te Taitamariki because Māori and Inuit youth face similar hurdles and because it is culturally appropriate.

Methodology and Scope: To inform the development of the suicide prevention policy the Department of Māori Development facilitated the creation of a Māori Reference Group. The group was responsible for ensuring that the national policy reflected the needs of the Māori population. To ensure that the group adequately understood the needs of Māori it focused on facilitating communication with individuals interested in suicide prevention. The group held community meetings and focus groups with members of the public. The reference group was particularly interested in hearing from young people. The public was also invited to make submissions. Four streams of best practices were considered in the development of a suicide prevention strategy for Māori youth. They include cultural development, community development, integrating mainstream and traditional healing, and education against suicide.

Outcome: Evidence from the activities suggested that suicide was associated with an erosion of cultural identity, that individuals felt alienated from their land and culture, and that they felt dispirited. Young people felt that they did not have anyone to go to for support, and they had

little understanding of what was expected of them. It was recommended that the suicide prevention strategy focus on strengthening participation in the community and strengthening a sense of Māori identity. It was argued that communities need better information about the causes and risks of suicide. Finally, it suggested that improved accuracy in the recording of attempts and deaths and a comprehensive evaluation of suicide prevention programs was necessary to ensure the effectiveness of the prevention strategy (Henderson, 2003). Since the implementation of the strategy, the Māori youth (15 to 24) suicide rate has decreased 24.3 percent from 45.6 deaths per 100 000 population in 1996-1998 to 34.5 deaths per 100 000 population in 2001-2003 (Ministry of Health, 2006: 8).

6.4.2 Greenland

Context: In the fall of 2004 a proposal for a national strategy for suicide prevention was presented to the Greenland Parliament. Since World War II, Greenland has seen a rise in the number of suicides. Following a peak in the 1980s, the number stabilised to approximately 50 per year in the 1990s. As such, the suicide rate is currently around 100 per 100 000. Similar to Nunavut, the population group with the highest rate of suicide in Greenland is young men aged 15 to 19 (Greenland, 2004: 1).

Methodology and Scope: The objective of the strategy, reducing the number of suicides and attempted suicides, will be achieved through "increased coordination and strengthening of initiatives at the three levels of prevention which the WHO has set for suicide prevention work" (Greenland, 2004: 3). Two working groups were created to make recommendations for the final proposal. The first group concentrated on initiatives related to identification, treatment and education. The second group focused on culture and society.

Outcome: The working groups noted that a large amount of the work must take place in the local communities. A key factor of a national strategy should be to empower local resource people and voluntary workers to conduct suicide prevention work. It was recommended that there be a reduction of social inequality at both the societal and community levels. The working groups believed that "both central and local government [should] formulate general, but quite specific objectives for social policy, family policy, education policy and business policy" (Greenland, 2004: 24). In doing so they are requiring all levels of society to contribute to the process of reaching the objectives laid out in the strategy and thus participate in working towards a solution.

Finally, they recommended that information campaigns on how to store firearms properly should be run at regular intervals.

6.4.3 Alaska

Context: In October 2001, the Alaska State Legislature created the State-wide Suicide Prevention Council. It was acknowledged that Alaska had one of the highest suicide rates in the United States at 20.9/100 000, which was twice the national average of 10.6 (State of Alaska, 2005), and the suicide rate was highest among those 20 to 24 years of age. It was found that the rate of suicide in Alaska varied by age, region, race and gender. Among Alaska Natives the rate of suicide in 2002 was 42.7/100 000, four times the national rate (State of Alaska, 2005). As such, a working Suicide Prevention Plan was created with the intent of allowing communities and groups to custom fit the plan to suit their individual needs.

Methodology and Scope: The plan examined factors related to suicide, statistics, graphs, regions and insight from Elders in Alaska. Strategies of prevention were broken done into thirteen goals and markers for success with the goals divided into four categories: Universal Prevention Goals (aimed at the general public), Selective Prevention Goals (aimed at specific vulnerable groups), Indicated Prevention Goals (aimed at high-risk individuals), and Program Evaluation and Surveillance Goals. Of the thirteen goals, five are applicable to the community-based approach desired in this study. They include:

> Goal 1: Alaskans understand that suicide is a preventable problem.
> Goal 4: Alaskans store firearms and other potential items of self-harm safely and insure that Alaskans, especially youth, are educated about their safe management.
> Goal 5: Alaskan communities support the development of protective factors and resiliency across the entire life span.
> Goal 6: Alaskans recognize the warning signs for suicide risk and respond appropriately.
> Goal 11: Alaskan communities respond appropriately to suicide attempts and suicide completions (Statewide Suicide Prevention Council, 2001).

Those involved in formulating the strategy believe that everyone has a role to play in suicide prevention. In addition, individuals and groups that address the physical, psychological, emotional and spiritual needs of individuals and communities in Alaska must work together if they are to be effective.

Outcome: A public health prevention model was adopted and included a continuum of universal, selective and indicated prevention approaches. The principles of the strategy are to:

1. Use evidence-based practices,
2. Use data,
3. Establish a time frame,
4. Evaluate,
5. Collaborate,
6. Pay attention to all age groups across the life span,
7. Be culturally appropriate,
8. Be appropriate to the community,
9. Recognize and build on strengths.

The principles of the Alaska Suicide Prevention Strategy are essential to the development and implementation of policy alternatives when implementing a community-based approach to youth suicide in Nunavut.

The suicide prevention program is based on the concept that empowered and active communities will produce healthy individuals. For each of the thirteen goals mentioned in the strategy, the communities complete the following:

1. the questions why and how are asked,
2. specific things that can be done are listed,
3. baseline data (if available) included,
4. markers for success are detailed,
5. the question "what does it look like in my community?" is asked,
6. suggested resources to assist the community and/or group in reaching their goal are provided.

An evaluation of the program suggests that communities that hold between six and nine activities are able to focus their efforts and resources in a way that provides for successful events. Communities in which the program operates have seen an overall decline in their suicide rate. While the number of First Nations suicides in Alaska has decreased overall by 22% recently, the communities with active programs have seen a 51% reduction in suicides (Henderson, 2003).

6.4.4 Themes from International Approaches

The themes from the three international strategies that have been incorporated into development of the policy alternatives for this research are shown in Table 2. They include community development, the integration of mainstream and traditional healing and education against suicide. The focus on the role of the community in developing and implementing an approach, as well as the incorporation of Inuit traditional knowledge is in keeping with the community-based model suggested in this study for addressing suicide by Inuit youth.

Table 2: Summary of themes from international indigenous suicide prevention programs

Themes	Potential Nunavut Approaches
Community Development	Successful prevention requires local planning and action by using Elders, Inuit traditional knowledge, training and skills.
Integrating Mainstream and Traditional Healing	The use of traditional healing techniques combined with Western medicine can enhance the success of policy alternatives.
Educating Against Suicide	Suicide prevention is everyone's responsibility; therefore, everyone in the community must be involved in the development and implementation of strategies to address it.

A review of outcomes in New Zealand found that "there is increasing evidence that indigenous people who are least susceptible to alcohol and drug abuse, mental illness, and behavioural problems, are those who can demonstrate competency in both traditional and contemporary contexts" (Lawson-Te Aho, 1998: 6). Therefore, an approach that combines traditional Inuit knowledge and skills with modern knowledge and technology may be the most effective approach. The community-based approach, desired in this study, has the potential to be successful because programs "designed and implemented by the indigenous communities concerned, and that are based on local networks, resources, skills and cultural processes are reporting significant reductions in indigenous youth suicide" (Lawson-Te Aho, 1998: 6).

It is evident from the literature that there are useful suicide prevention models elsewhere; however, northern challenges and strengths are distinctive. Policies addressing community wellness and youth suicide can incorporate successful approaches, but the policies should be "made in Nunavut". The policies must take into consideration the reality of the situation in Nunavut, the stakeholders involved, as well as the division of powers in Canada under the Constitution.

6.5 Inuit Youth Perspectives

The information provided by the Qikiqtani Inuit Association (QIA), illustrates the needs that youth in the communities of Qikiqtarjuaq and Iqaluit want addressed. Whale Cove is located in the Kivalliq Region and was not included because it falls under the jurisdiction of the Kivalliq Inuit Association (KIA). In keeping with the community-based focus of the study, the aspirations of the youth have been categorized in Table 1 using economic, physical and cultural identifiers.

Table 3 highlights the improvements that youth in Iqaluit and Qikiqtarjuaq would like to see in their communities. The aspirations were gathered at the 2006 QIA Region-wide Inuit Youth Annual General Meeting. Youth, adult-mentors and elders from every community in the Baffin region came together for a week to discuss issues and to set priorities. The information provided indicated that there are similar needs in each of the communities in the Baffin Region. In addition, those needs are not exclusive to the Baffin Region as other Inuit regions in Nunavut face similar challenges and have similar aspirations. As indicated by the table, the youth have a variety of aspirations whose incorporation is essential to the success of addressing youth suicide with a community-based approach.

Table 3: Community Aspirations of Youth

	Community Aspirations	
	Iqaluit	**Qikiqtarjuaq**
Economic Factors	More funding for youth centre	More opportunities for youth
	Proper training for Inuit getting into the workforce	More professional and accountable staff for youth centre
Physical Environment	Homelessness issue	New youth centre (renovations)
Cultural Factors	More youth involvement and volunteerism	Programs for sewing, hunting, traditional skills, survival skills
	Inuktitut language	More community encouragement
	Programs and resources on domestic abuse	More activities for youth
	Have youth learn and understand OUR reality, not southern	Volunteering
	Coping and life skills	

The policy alternatives in Section 8 have incorporated the issues that were addressed by Inuit youth from the Baffin Region.

6.6 Consultation with Key Stakeholders

Various individuals with connections to health, the communities, youth suicide and policy were interviewed to clarify issues and provide input on the subject of community wellness and youth suicide in Nunavut. The interviewees include: Constable Jeff Henderson of the RCMP in Iqaluit; Nancy Karetak-Lindell, the Member of Parliament for Nunavut; Robert Carson, the Assistant Deputy Minister of Intergovernmental Affairs for the GN; Mary Bender, the Clinical Supervisor of Community Health Nursing for the GN; Rita Anilniliak and Amanda Ford-Rogers, Inuit women living in Iqaluit; and, a community health nurse who declined identification. The following is a synopsis of observations gained though interviews with the seven individuals.

6.6.1 Issues Facing the Communities

The conversations with various individuals gave insight into the issues and obstacles that Inuit youth are currently facing. Three key themes arose from the interviews: 1) Youth are caught between two worlds, the traditional and the modern; 2) There needs to be healing of the wrongs that have been committed; and, 3) Youth are facing many challenges. Table 4 illustrates the themes and their implications.

Table 4: Themes from key stakeholder interviews

Theme	Implications
Youth are caught between two worlds, the traditional and the modern	Policy alternatives need to be able to mesh the traditional Inuit cultures with that of the modern world in which Inuit youth are living
There needs to be healing of the wrongs that have been committed	The impact of the forced movement to communities, residential schools, loss of culture and language need to be rectified in order to allow for healing among individuals, families, communities and the relationship with government
Youth are facing many challenges	Policies addressing Inuit youth suicide must directly address the challenges that youth are facing and provide all youth with opportunities for the future

In explaining the situation facing men and women in Nunavut today Rita Anilniliak stated:

> *traditional Inuit family structure, the hunters and gatherers of yesterday have been through so much change during such a short period of time that their children grow up confused about what they are supposed to do. Out on the land the men were so important to the camp, they provided so much. They had difficult jobs and they were highly respected in their communities. Today, the young men grow up confused because they do not know what is expected of them. The once strong and hands-on work and the pride that came with hunting is no longer there, now many of them seem to be spoiled by their families and when they face a difficult situation, they don't know how best to handle it. Women on the other hand have known for decades their role and many stayed behind to take care of the family and the camp and they took on many responsibilities. I believe that because women had to endure both physical and mental situations more often than men that they have been able to adapt to the changes a lot better than the Inuit men*
> (Anilniliak, 2007)

When speaking about the personal problems she faced growing up, Rita went on to add that bullying was a major problem because she was a quiet person and her family was different.

As a result, she would intentionally underachieve in school so as not to draw attention to herself (Anilniliak, 2007). Intentional underachievement could contribute to the high drop-out rate in Nunavut.

Mary Bender, a clinical supervisor of Community Health Nursing for the Government of Nunavut, spoke of the youth not belonging to either culture, the traditional Inuit hunter culture and the southern Qallunat[19] salaried worker culture. She went on to say, "[t]he men don't fit into the education system well because it is a passive learning system that doesn't value risk taking and traditional skills" (Bender, 2007).

MP Karetak-Lindell believes Nunavummiut are currently in a time of wonderment regarding where they fit in. She said, "[w]e can't go back to the way our ancestors lived, but we also want to retain where we came from, who we are and bring some of that into the modern environment we're in and know this is the environment we have to live in" (Karetak-Lindell, 2007). In recounting her experience growing up in Nunavut, she said it was a situation in which you had to choose between the traditional world and the modern world. Her parents were told that their language and culture, and the way [they] did things [was] not the way of the future. If you want your children to succeed, then they have to leave the community, go to school, etc (Karetak-Lindell, 2007). In addition, "it's taken a couple of generations to realize that it doesn't have to be that way. They can remain who they are and true themselves, but find their way within the new modern society" (Karetak-Lindell, 2007). As such, a community-based approach which addresses aspects such as language and traditional activities will give youth the opportunity to learn this lesson from previous generations without having to suffer many of the hardships of the past.

[19] Qallunat is an Inuit term for white or southern non-Inuit.

7 Results of Analysis

The available data sources, current literature and interviews with key individuals were used to understand the impact of the selected community-level determinants of health on suicide by Inuit youth. In the 2001 NuHS questions related to the various factors were selected for analysis and the results of that analysis is provided below.[20]

7.1 Economic Factors

The 2001 Census data indicated that the unemployment rate in Nunavut was 17.4%, while the unemployment rate in Canada was 7.4%. Qikiqtarjuaq had the highest rate of suicide by Inuit youth (1052.6/100 000) and the highest rate of unemployment (25.6%) among the three communities, which is in keeping with the literature. With a suicide rate of zero, the literature indicates that Whale Cove should have the lowest rate of unemployment, but it does not. The unemployment rate (17.4%) is higher that that of Iqaluit, which has the lowest unemployment rate (8.9%). As the capital, Iqaluit has a number of federal and territorial government employment opportunities, which would have an impact on the unemployment rate. What is not captured in the analysis is the percentage of unemployed Inuit in Iqaluit which could influence the rate of youth suicide. Disaggregating the data to look at solely Inuit unemployment was disregarded because: (1) an Inuit youth may have both an Inuit and non-Inuit parent; and, (2) various relationships exist within the community among both Inuit and non-Inuit that can influence the lives of youth. Therefore, the results for Iqaluit are to be viewed with caution due to the aggregated data which may distort the impact unemployment has on the rate of suicide by Inuit youth.

In remote communities, the idea of being unemployed is often imprecise, therefore the employment rate was also observed. In Qikiqtarjuaq, the employment rate was 42.6%, the lowest of the three communities. The employment rates in Iqaluit and Whale Cove were 74.5% and 54.3% respectively. The information is similar to that of the results for the unemployment rate.

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[20] For the complete list of questions and results see Appendix B.

The community with the highest rate of youth suicide has the lowest employment rate and Iqaluit's employment rate is high, despite the rate of suicide, due to the concentration of jobs in the capital.

The interviews, and the literature, have shown that youth in the communities would like to have more opportunities, and that an increase in employment opportunities can have a positive impact on both community wellness and the health of Inuit youth. The combination of data indicates that the unemployment rate in the communities does appear to contribute to the rate of youth suicide.

7.2 Physical Factors

The literature indicates that Qikiqtarjuaq is an island located off the eastern coast of Baffin Island and is the most northerly of the three communities, which one could hypothesize makes it more difficult to access and therefore susceptible to a higher rate of suicide due to the isolation. While flights are available Monday through Saturday from Iqaluit, travel in the north is expensive and therefore limited. Whale Cove is located along the western shore of Hudson Bay and is the most southern of the three communities. With its close proximity to Rankin Inlet, a major community, individuals can snowmobile there rather easily. Iqaluit is located on the southern portion of Baffin Island on Koojesse Inlet and, as the largest community in Nunavut, is the gateway to the Arctic from Eastern Canada. Daily flights are available from Ottawa and Montreal to Iqaluit (Government of Nunavut, 2004). Iqaluit experiences the least isolation of the communities which, given theory, should suggest it has the lowest rate of suicide. However, this is not the case.

The 2001 Census information suggested that of the three communities, only Iqaluit offers public transit services. Individuals in all three communities utilize modes of transportation such as driving a vehicle, walking, bicycling or other[21] to get to work. However, the data does not contain enough detail to form a linkage between community wellness and the various modes of transportation in each community.

The 2001 NuHS displayed high levels of satisfaction in all three communities with respect to their ability to eat country food when they so desire. Qikiqtarjuaq had the highest satisfaction, at 94.7%, and Iqaluit the lowest, 70.7%. Whale Cove also had 41.8% of respondents,

[21] In this instance it will be assumed that "other" means snowmobile.

a majority, indicate that their household consumes caribou or seal every/almost every day. Qikiqtarjuaq, with 17.3%, and Iqaluit, with 9.2%, had much lower levels of consumption.

The data indicate that the isolation of Qikiqtarjuaq may have an impact on youth suicide. Whale Cove, while a relatively small community with respect to population, has relatively easy access to the large community of Rankin Inlet. Qikiqtarjuaq does not have that access. While access is a difficult and expensive issue to address without the aid of territorial and federal funding, communities can take action by creating linkages with other communities via the mechanisms the less expensive mechanisms of radio, internet and mail.

When looking at the data from the 2001 NuHS, there is an indication that the majority of the respondents in the three communities are satisfied with the size of their dwelling. However, only Iqaluit had a majority of respondents who were satisfied with the condition of their dwelling. Qikiqtarjuaq had the highest percentage of dissatisfaction with 84.6% of respondents indicating that they were either dissatisfied or very dissatisfied with the condition of their dwelling. In contrast, 46.7% in Whale Cove and 19.1% of respondents in Iqaluit indicated the same level of dissatisfaction.

The literature found overcrowding contributed to ill health; however, the NuHS survey data did not find overcrowding to be a problem. The majority of respondents in all three communities indicated that the household contained one or two people per bedroom with most households containing five individuals or less. However, a 2006 survey of 91 homes in Cape Dorset, Nunavut, found that almost half of the homes are overcrowded and one in five Inuit say they are depressed due to their living situation (CBC News North, 2006).

Interviews have indicated that there is a housing crisis in Nunavut, but the combination of data does not allow us to state definitively that housing contributes to youth suicide. That said, the community with the highest rate of youth suicide also had the highest levels of dissatisfaction with the condition of their dwellings. As such, the conditions in which individuals live in Nunavut (i.e. the physical condition of their home) may create an unhealthy environment for many youth and lead to suicidal behaviour.

7.3 Cultural Factors

Both Qikiqtarjuaq and Whale Cove have the lowest median age, 23.9 and 19.4 respectively, and the highest percentage of the population that speaks Inuktitut relatively well, 94.2% and 81.3%. While one would expect this to be the case in Whale Cove, as they have the

lowest rate of youth suicide, the findings for Qikiqtarjuaq are contrary to the literature. The information collected in the 2001 NuHS regarding language indicated that Qikiqtarjuaq has the greatest percentage of the population that speaks Inuktitut most often at home, 91.7%, and most often in the community, 95.3%. Qikiqtarjuaq also has the smallest percentage of the population that feels they are losing their ability to speak their mother tongue, 19.5%, yet they have the highest rate of youth suicide. The literature has indicated that a link exists between language and culture. A loss in language can result in a loss of culture, which would increase the suicide rate. However, Inuktitut appears preserved in Qikiqtarjuaq, yet the suicide rate for Inuit youth is also the highest there.

While the literature would indicate that a loss of language relates to a loss of culture and negatively influences the rate of suicide, the results for Iqaluit are surprising. Iqaluit has the lowest percentage of the population that speaks Inuktitut relatively well, 49.4%, which could be explained by the number of non-Inuit individuals concentrated there, but it also has a relatively high rate of youth suicide. In Iqaluit, the language most often spoken at home, at work and in the community is English. The findings for Iqaluit are in keeping with the literature related to loss of culture, but not for employment and ethnicity. A possible explanation for the language variable is the not insignificant number of suicides which have occurred in Iqaluit by people who are from other communities, and who are "either passing through, running away from something at home, or very recent arrivals" (Hicks, 2007). As the capital, Iqaluit is the city centre which individuals migrate to within the territory which makes it difficult to determine community of affiliation.

The interviews indicated that there are communication problems between the youth and Elders because some youth cannot speak Inuktitut and some Elders cannot speak English. The language barrier can result in a loss of culture and tradition from a lack of transmission of oral history from the Elders to the youth.

The data from the 2001 NuHS indicated that the suicide rate among youth aged 15 to 24 does not appear to be impacted by the level of participation in traditional activities. However, given that only 23.9% of respondents were between the ages of 15 and 24, the data could be reflecting the participation of the other age cohorts. While Qikiqtarjuaq had the highest suicide rate among Inuit youth aged 15 to 24 (1052.6/100 000), it differs little with Whale Cove with respect to active participation in harvesting and having hunted/fished/gathered in 2000. Iqaluit's numbers do differ from those of Whale Cove and Qikiqtarjuaq; with less traditional activities conducted there, however, the increased percentage of non-Inuit may be influencing the data.

The interviews indicated that there is a decrease in youth participation in cultural activities such as hunting, carving, etc. Whether it be a lack of interest on behalf of the youth to participate, due to their interest in modern technology (i.e. video games, television, etc.), or an unwillingness and/or lack of time, on the part of the family, to teach them the skills necessary, youth do not appear to be participating as much in traditional Inuit activities.

The 2001 NuHS and Census analysis has indicated that potential risk factors for youth suicide in Qikiqtarjuaq, the community with the highest rate of youth suicide, include, but are not limited to: high unemployment, isolation, low levels of daily consumption of caribou or seal and dissatisfaction with dwelling conditions. In contrast, Whale Cove, the community with the lowest rate of youth suicide, has the protective factors of: a lower unemployment rate, less isolation and a high percentage of individuals who consume caribou or seal almost daily. Iqaluit is a special case because it contains the benefits of a capital city, but its youth are facing the same challenges as youth throughout the territory. However, the impact on the youth appears to be lost in the quantitative data.

To supplement the limitations of the quantitative data, the interviews with key individuals, case studies and the literature review indicated that aspects of culture and the provision of opportunities for youth should be addressed. It was found that traditional aspects of Inuit culture are not being passed between generations with consistency. The rapid change and cultural development experienced by Inuit has had negative impacts which have been transmitted from one generation to the next and we are now observing the detrimental impacts through high rates of suicide by Inuit youth.

By combining the results of case study analysis, literature review, interviews and survey analysis, the findings indicate that a community-based approach that focuses on the variables of employment and traditional activities, while creating opportunities for youth would be the most effective. The analysis has also shown that policies addressing issues such as youth suicide must involve data that extends beyond the official quantitative data. Qualitative data, specifically that gathered from individuals at the ground-level, is essential to creating well rounded and effective policy initiatives.

8 Policy Alternatives

This section of the study presents the policy alternatives that the communities of Iqaluit, Qikiqtarjuaq and Whale Cove should consider in addressing community wellness and youth suicide. Instrumental to the development and targeting of policy initiatives was the suggested three tiers of 'public health' approach by Hicks, which will allow for a community level approach that not only focuses on youth suicide, but also on community wellness. The tiers of the approach are:

- General initiatives for the general public - in this case that would be the residents of the communities
- Targeted initiatives for groups at elevated risk – the research has shown this to be Inuit between the ages of 15 and 24
- Specific initiatives for individuals at elevated risk – the statistics indicate this would be Inuit males between the ages of 15 and 24

The varying policy alternatives derive from current literature, the information garnered from interviews and the results of the 2001 NuHS and the 2001 Census. The information regarding the community aspirations of Inuit youth in the Baffin Region was incorporated to ensure that the alternatives are in keeping with what youth, themselves, believe is lacking in their communities.

8.1 Alternative 1: Community "household maintenance" workshops

In addition to the highest reported youth suicide rate of the communities observed, in the 2001 NuHS, 84.6% of respondents from Qikiqtarjuaq reported being dissatisfied with the condition of their dwelling. To facilitate change, communities would initiate "household maintenance" workshops. This is a general initiative meant to address the evidence from the 2001 NuHS regarding dissatisfaction with housing conditions. In addition, it incorporates youth aspirations for more youth involvement, proper training, community encouragement and programs on traditional skills.

The workshops, held in both English and Inuktitut, would not only teach individuals how to conduct repairs to their homes, they would provide individuals with a sense of accomplishment and transferable skills. Topics to address could include how to: install plumbing, paint/wallpaper, lay flooring and install insulation.

8.1.1 Key Issues

- Requires trained trades people to teach the workshops
- Could reduce business for local individuals who specialize in trades such as plumbing, electrical work and carpentry.
- Funding required for the workshops – including the resources for tools, materials, etc.
- It will provide individuals with transferable skills, a sense of self-worth and pride in their homes.

8.2 Alternative 2: Reduce access to instruments of suicide

The proposed alternative involves the development of strategies and regulations to reduce access to, and the lethality of, the instruments of suicide (i.e. rope, firearms, substances, etc.). This alternative is a targeted initiative that incorporates the concerns of those interviewed with respect to ready access to the means of suicide. The policy action will involve the monitoring of community trends with respect to instruments used. Between April 1, 1999 and December 31, 2006, 79% of suicides in Nunavut were committed by hanging, whereas 18% were by gunshot, 0.01% by overdose and 0.02% by other means. Each community will be required to limit access to the instrument(s) that they, as a collective – including the RCMP, health care professionals and members of the community - have identified as posing the greatest risk.

The RCMP, health care professionals and members of the community have previously been involved in discussion regarding suicide in the territory as they are all directly impacted by the action. As such, all have a vested interest in reducing the rate of attempted and completed suicide. A coordinated effort to monitor and control the instruments of suicide within each community would, at the very least, limit access to the instruments and circumvent emotionally charged responses to problems.

8.2.1 Key Issues

- Reducing access will involve monitoring trends of means of suicide, investigating methods by which to minimize the risk and implementing the selected method of reduction
- It is a community-wide effort which will involve the cooperation of the RCMP, health care professionals, Nunavut Housing Corporation, business, etc.

8.3 Alternative 3: Develop a system of apprenticeship programs

Developing a system of apprenticeship programs would involve implementing a community-based strategy to encourage the placement of youth apprentices with local businesses, organizations, individuals (such as artists, carvers, hunters, etc.) and agencies. This alternative is a targeted initiative that incorporates the desires of youth to have more employment opportunities and proper training to transition into the workforce. The apprenticeship program will provide the youth with work experience, transferable skills, income and a work ethic. Additionally, it will provide employment within the community and provide businesses with funding to employ a youth they may otherwise not have been able to afford.

8.3.1 Key Issues

- Must have businesses that are willing to take on an apprentice
- A pro-active campaign targeted at youth aged 15 to 24
- Involves co-operation at the community and sub-community level
- Funding required to supplement participating businesses

8.4 Alternative 4: Youth Camps

The proposed alternative is for a community-based strategy involving a youth camp which would be offered year-round and involve the participation of youth, elders and other community members for the development of both life and cultural skills. This is a targeted initiative that incorporates youth concerns regarding the availability of opportunities for youth, knowledge of Inuktitut, coping and life skills, the northern reality and programming related to sewing, hunting, traditional and survival skills. The community would develop a program that

would include taking youth out onto the land to teach traditional Inuit skills, and the Inuktitut language. At the same time the program would incorporate life skills advice and allow for the development of relationships between the youth, elders and other community members. The relationships would provide youth with individuals other than their family that they could talk to about their concerns, problems, etc.

8.4.1 Key Issues

- A coordinated effort on behalf of all members of the community
- Targeted at Inuit youth aged 15 to 24
- Funding required for the supplement of the costs for travel on the land, materials for skills development, etc.
- A message underscoring the importance and possibility of merging both the traditional Inuit world and the modern world is needed.

The policy alternatives did not focus on specific initiatives for individuals at an elevated risk because the data on suicide attempts is unavailable. This research cannot definitively state that Inuit males, aged 15 to 24, are at a higher elevation of risk for suicidal behaviour because, as previously mentioned, females are attempting suicide in the same numbers, but using less lethal methods. In a concerted effort not to overwhelm the communities with options, which could lead to debate and discussion, but not implementation, the number of alternatives was limited to four. While a number of alternatives could have been developed it is felt that the four suggested options contain measures to effectively address the determinants of health which have been identified as contributing to youth suicide in the communities.

9 Evaluation of Policy Alternatives

This section outlines the criteria and measurements utilized in the study. In addition, a presentation of the evaluation of the policy alternatives, with respect to the criteria, is included. Section 9.1 introduces a description of the criteria and measurement. Section 9.2 assesses the alternatives given the criteria. Section 9.3 provides a summary of the evaluation matrix and displays the score each alternative was awarded. Sections 9.4 through 9.7 offer an analysis and evaluation of each policy alternative.

9.1 Criteria and Measurements

The following criteria provide a basis for the evaluation of the proposed policy alternatives and should be considered by the communities.

Table 5: Criteria, Definitions and Measurements

Criteria	Definition	Measurement
Effectiveness	To what extent does the alternative incorporate best practices in achieving the objective of reducing youth suicide and promoting community wellness?	Low – 2 Medium -4 High – 6
Operational Feasibility	How complex is the alternative to implement?	Low – 1 Medium -2 High – 3
Cost	Relative to the other policy options, what is the cost of implementation?	Low – 3 Medium -2 High – 1
Political Feasibility	Will the stakeholders accept the proposed alternative as an appropriate course of action?	Low – 1 Medium -2 High – 3
Community Control	How much control will the communities have in the development and administration of the proposed alternative?	Low – 1 Medium -2 High – 3
Inuit Traditional Knowledge	Will the proposed alternative incorporate Inuit Traditional Knowledge?	Low – 2 Medium -4 High – 6

The criteria in Table 5 represent the most significant factors for the communities to consider when assessing the alternatives. Without actually testing or implementing each alternative the measurement has provided an estimation of possible outcomes with the purpose of aiding in the consideration of trade-offs. An assessment of the policy alternatives against the aforementioned criteria will allow the communities to engage in a decision-making process to determine the viability of each alternative. Recognizing that the communities may want to retain control over the evaluation of the alternatives, what has been provided is merely a suggested method of how to proceed. It is the prerogative of any given community to adjust the model to effectively achieve a community-based approach that specifically relates to their requirements. Provided in the section below is an analysis of the alternatives with respect to the criteria.

9.2 Evaluation Matrix

Table 6: Evaluation Matrix of Policy Alternatives

Criteria	Alternatives			
	Community Household Maintenance Workshops	**Reduce Access to Instruments of Suicide**	**Apprentice Programs in Community**	**Youth Camps**
Effectiveness	4	4	4	6
Operational Feasibility	2	3	3	3
Cost	2	2	1	2
Political Feasibility	3	2	3	2
Community Control	3	3	2	3
Inuit Traditional Knowledge	4	2	2	6

Table 6 provides an evaluation of the suggested policy alternatives. The criteria for each alternative has been assessed based upon responses from stakeholders, a literature review, case studies of international suicide prevention strategies and interviews with members of the communities. The key stakeholders include the RCMP, community health workers, government and local community members.

Effectiveness has been evaluated according to the extent to which the literature, best practices and stakeholders have assessed that an alternative will have an impact on the rate of

youth suicide, as well as the ability of the alternative to contribute to community wellness. A high score was attained if both goals were reached, achieving one of the goals earned a medium score and if neither goal was met a score of low was selected. Effectiveness was given an increased weighting, as it is an important criterion for evaluation. An option that ranks low on effectiveness, but high elsewhere will not have the desired impact on community wellness and youth suicide. Operational feasibility was assessed through consultation with government actors and members of the community, as well as through the complexity of implementation of the policy alternative. Cost was assessed by approximating the level of funding that would be required for each alternative and comparing it to the other options. It is also important to note that only the city of Iqaluit can collect taxes from its residents, therefore the other hamlets must rely on the territorial government to fund their projects. As such, for the purpose of the community-based model it is suggested that the communities investigate alternative sources of funding, fundraise and or have members donate their time, skills and materials for the alternatives. With respect to the criterion for cost, a high score was awarded to alternatives with low levels of cost and a low score was awarded for those with the highest levels. Political feasibility was determined based on whether or not the stakeholders considered the alternative to be an option that could be implemented by government. Community control was evaluated given the level of control each community will have in the implementation and administration of the policy option. Inuit traditional knowledge was graded according to the extent to which each alternative incorporated aspects of Inuit traditional knowledge. The need to incorporate traditional Inuit knowledge, as a mechanism for accurately reflecting the situation in the North, was deemed essential during the interview process. Therefore, it too was given an increased weight in the evaluation process.

9.3 Summary of Evaluation

Table 7: Summary of Evaluation Matrix (criteria are not equally weighted)

Criteria	Alternatives			
	Community Household Maintenance Workshops	Reduce Access to Instruments of Suicide	Apprentice Programs in Community	Youth Camps
Effectiveness	4	4	4	6
Operational Feasibility	2	3	3	3
Cost	2	2	1	2
Political Feasibility	3	2	3	2
Community Control	3	3	2	3
Inuit Traditional Knowledge	4	2	2	6
TOTAL SCORE	18	16	15	22

Table 7 provides a summary of the quantitative calculation that allows for a comparative analysis of the policy alternatives. The scores for each criterion have been assigned a point value. A high score will result in three points, a medium score earns two points and a low score merits one point. The increasing point value is necessary in order to allow for differentiation between the policy alternatives.

The summary matrix reveals that alternative 4: the youth camp, achieves the highest score with 22 points. Moreover, it is the only option to achieve high scores for both effectiveness and the incorporation of Inuit traditional knowledge. Alternative 3: apprenticeship programs in the community scored the lowest, earning a low score with both the incorporation of Inuit traditional knowledge and cost. Alternatives 1 and 2: community household maintenance workshops and reducing access to instruments of suicide achieved mid-level scores. Both achieved high scores for effectiveness and community control.

9.4 Evaluation of Alternative 1: Community Household Maintenance Workshop

Implementing the community household maintenance workshops received the second highest score of the four alternatives in part due to the moderate cost and high level of community control. It is also a politically feasible alternative. The data indicated that respondents in Qikiqtarjuaq had the highest level of dissatisfaction with the condition of dwellings, as well as the highest rate of unemployment.

The household maintenance workshops could increase satisfaction with dwelling conditions and possibly reduce unemployment by teaching valuable and transferable skills. However, neither the literature nor the case studies provided evidence of an effective initiative similar to the workshop. In effect, it would introduce youth to maintenance and repairs, while at the same time providing them with credible skills to place on their resumes. As it would be effective in providing youth with maintenance and construction skills, it received a moderate score for the criterion of effectiveness. While it received scores similar to that of the youth camp alternative, it scored slightly less than the camp on both effectiveness and Inuit traditional knowledge which led to the second placed ranking.

9.5 Evaluation of Alternative 2: Reduce Access to Instruments of Suicide

Reducing access to the instruments of suicide is a moderately effective means to addressing the policy problem. There is both a high level of community control and operational feasibility. However, it is both costly and only viewed to be moderately politically feasible. The interview with Constable Henderson indicated that youth have easy access to firearms due to the hunting culture that persists in Nunavut. While this alternative has a low level of Inuit traditional knowledge incorporated, is moderately costly and will take a coordinated effort on behalf of the community.

The initiative could decrease the rate of attempts and completed suicides by making it more difficult to access the instruments, but it is a band-aid solution to a deeper problem. The interview with Constable Henderson did maintain that limiting access would be helpful because instruments, specifically firearms, are readily available in the pervasive hunting culture. It has also proven to be effective in the past in Qikiqtarjuaq when removal of closet bars and locks from bedroom doors resulted in a decrease in the number of suicide. The third place ranking is partly

due to its lack of incorporation of Inuit traditional knowledge and the potential community level dispute that could arise regarding more stringent firearms regulations.

9.6 Evaluation of Alternative 3: Apprentice Programs in Communities

The apprenticeship program received the lowest score because it is the most expensive of the three alternatives and has a low level of Inuit traditional knowledge incorporated. It has a moderate level of community control, although it scored high for both political and operational feasibility. While it did score the lowest of the four alternatives, that should not dissuade communities from implementing it. An apprenticeship program would not only increase employment for youth, but also increase their income and skill levels. At the same time, it would give youth an opportunity to see if the chosen profession is the right fit for them. A barrier to the alternative is availability. Apprentice positions have to be available within the community for the youth.

The experience and employment opportunities that would be received led to the high scores for effectiveness, operational and political feasibility. It is a program initiative that does not blatantly claim to be acting to reduce youth suicide. Therefore, it may be more readily accepted than a method which is openly viewed as a measure to reduce suicide, such as reducing access to instrument. Some individuals are sensitive to the topics of suicide and would prefer it not be discussed directly for fear that youth may be influence or pushed by the discussion to commit suicide. All of the interviews, as well as the literature and case studies indicated the need for opportunities for youth. However, the apprenticeship option is one that would require fundraising at the community-level to support the wages of those youth involved.

9.7 Evaluation of Alternative 4: Youth Camp

The youth camp received the highest score overall, in part due to the high levels of effectiveness, operational and community feasibility, and incorporation of Inuit traditional knowledge. Effectiveness and incorporation of Inuit traditional knowledge were given a higher weighting than the other criteria because they were deemed the most important. In addition, the National Longitudinal Survey of Children and Youth (NLSCY) found there to be a correlation

between participation in extra-curricular activities and greater self-esteem, enjoyment of better social interactions with their friends and relatively higher scholastic results (Statistics Canada, 2003: 14). The camps would involve participation by Elders who would pass on their traditional knowledge and skills to youth. Analysis has found that "47% of Aboriginal children in non-reserve areas who spent time with Elders four times or more a week were reported doing really well in school" (Statistics Canada, 2003: 15). Participation in youth camps by both youth and Elders would have a positive impact on the health and well-being of Inuit youth.

10 Policy Implications

This section presents an analysis of the policy implications of using a community-based approach and the proposed alternative in Nunavut. The recommended next steps that the communities should consider to achieve the intended goal of a reduction in the rate of attempted and completed suicides by Inuit youth are also provided.

The criteria and evaluation outlined in the previous section provides a useful approach for measuring each of the proposed options objectively. As community control was used as a criterion it indicates the need for community involvement in the development and administration of the youth camp alternative. Community involvement in designing the format of the camp is essential given the political expectations of Nunavummiut. Those expectations have been shaped by two factors: colonialism and the recent political participation in the creation of the territory. As such, Nunavummiut expect to be involved in the policy process and new initiatives must build upon Inuit traditional knowledge, traditions and practices of the past, which are all part of the criterion of Inuit traditional knowledge (Abele, 2006). While this is a significant challenge, it is also a unique and innovative contribution to the policy process which can be useful in merging the traditional and the modern worlds. In addition, the policy process must engage the people for whom it is developed, in this case, Inuit youth and their communities. The engagement will allow for input and innovation in the development of the youth camps in each of the communities and feeds into the criteria of political and operational feasibility.

Addressing the issue of youth suicide from a community-based approach can lead to varying implications for policy. The federal and territorial governments must realize that while their past policies have not effectively addressed the problem, they should remain active participants in responding to youth suicide. For example, both the federal and territorial levels of government can work to actively address the determinants of health which underlie youth suicide as was done in both Alaska and New Zealand with their community-based program initiatives. Further, evidence from Chandler and Lalonde found community self-government, coupled with greater community control over various services, to be the greatest protective factor against suicide in First Nations communities in British Columbia (Chandler and Lalonde, 1998). While self-government is not an option for communities in Nunavut, greater control over their future by

empowering communities with bottom up initiatives, rather than top down, is an option. The responsibility for the health of individuals in the communities does not lie solely with the community. The federal and territorial governments need to work on addressing determinants of health that can be dealt with at the federal and territorial levels; however, by allowing communities to have a greater role they can shape their future initiatives based on the directions set by the communities themselves.

Following an assessment of the policy alternatives, the youth camp remained the strongest option for increasing community wellness and having an impact on the reduction of youth suicide. The following is a list of recommendations for the communities:

- Coordinate a founding meeting of interested parties to plan the program details for the youth camp,
- Hold a series of community discussions to incorporate thoughts and concerns for the development process,
- Create a working group to discuss strategies and implementation techniques,
- Gradual development of the initiative which allows for assessment and alteration,
- Finally, an annual evaluation of outcomes, meant to assess the success of the camp, its participants and the current rate of both attempts and completed suicide, for possible reassessment of the initiative is required (Abele, 2006: 20-24). The evaluation method would allow communities to be innovative in their evaluation framework, while providing for the specific needs of the community.

To be effective, the introduction and development of the youth camp should be gradual with community consultations that involve youth at each stage of development. As youth are the targeted group, their input is essential to the success of any program addressing their health and wellbeing.

After the youth camp has been implemented, the communities can work on incorporating the remaining alternatives to provide a multi-pronged community-based approach that would address various determinants within the community. Again, the communities can follow the steps listed above to ensure that the strategy is effective at addressing suicide by Inuit youth.

11 Conclusion

The aim of this study was not to solve the problem of suicide by Inuit youth in Nunavut. Rather, the goal was to reduce the rate of attempted and completed suicides, by Inuit youth, by focusing on initiatives at the community-level and recognising the importance of the incorporation of Inuit traditional knowledge in the policy development process. A review of the literature revealed information regarding the risk factors for youth in indigenous populations, but it was through stakeholder interviews that the observed risk factors for youth in Nunavut were confirmed as being comparable to those observed internationally. The literature indicated that a community-based approach to addressing youth suicide would not only be effective, but was also desirable.

The need for a community-based approach was confirmed in the qualitative interviews, which provided unique insight and perspective on the history, culture and reality of the territory and the communities, as well as the factors contributing to suicide by Inuit youth. Themes that emerged were: (1) youth are caught between two worlds, the traditional and the modern; (2) there needs to be healing of the wrongs committed; and, (3) youth are facing many challenges. Finally, as the suicide rate varies between communities, a community-based approach that incorporates the issues and needs of the respective community is required to effectively address the policy problem.

Following the collection and analysis of the data, in combination with the review of literature and international case studies, four policy options were developed. They include: (1) Community household maintenance workshops; (2) Reducing access to the instruments of suicide; (3) Apprenticeship programs in the communities; and, (4) Youth camps. While all four options address the risk factors in varying degrees, an analysis of the proposed options and the communities has revealed that the alternative that should be implemented is that of the youth camp. To be successful, the communities themselves must decide on the program and implementation technique for the camp. The options represent community-based approaches; however, it is acknowledged that much work is required at both the federal and territorial level to address other risk factors.

The community-based approach model for addressing youth suicide can serve as a framework for the creation of community-based approaches to addressing other social problems in the territory. By empowering communities with the resources and means to address the issues which they face, effective changes can be made by the community for the community. The basis of the Alaskan Suicide Prevention Strategy, that empowered and active communities will produce healthy individuals, and the successful outcome of their, as well as other, community-based initiatives should serve as justification for an expansion of the model to incorporate additional community woes. The innovative approach could begin with pilot testing in selected communities and evolve to a level that serves as a model for the Bathurst Mandate's priority of developing healthy communities.

Future efforts should focus on the creation of an effective base of knowledge transfer, regarding best practices between communities, within Nunavut, Canada and internationally. The research process revealed that there is limited communication between various stakeholders and therefore a process of knowledge sharing would greatly increase the effectiveness of future initiatives, while better informing policy makers. A coordinated effort could reduce the number of unsuccessful programs and increase innovative responses to addressing such an urgent problem and, hopefully, eventually eradicating the epidemic of youth suicide in Nunavut.

Appendices

Appendix A

*Figure 2: Percentage of Inuit suicide by age cohort (*1999-2006)*[22]

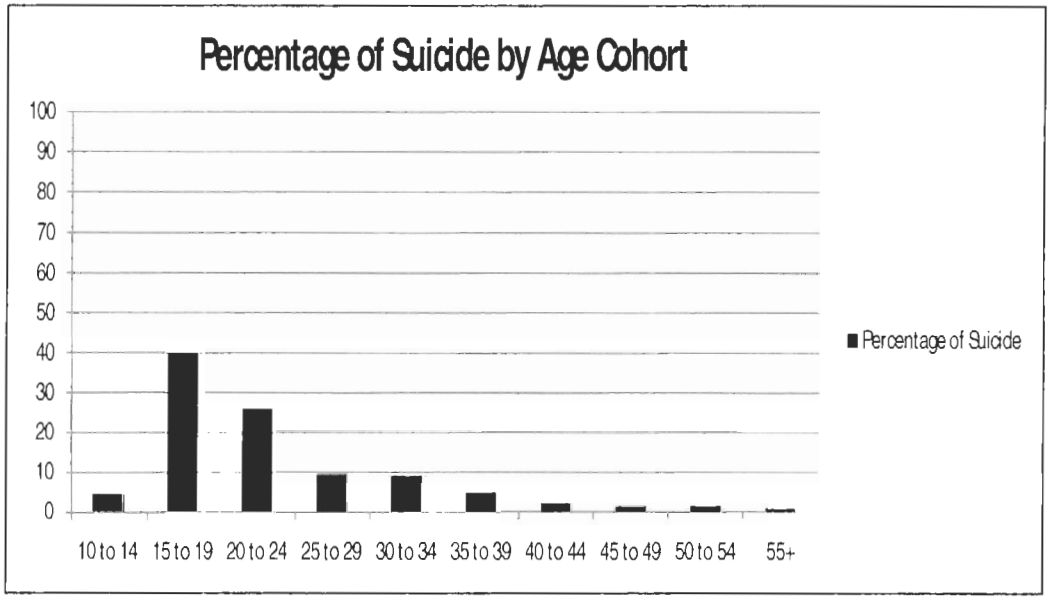
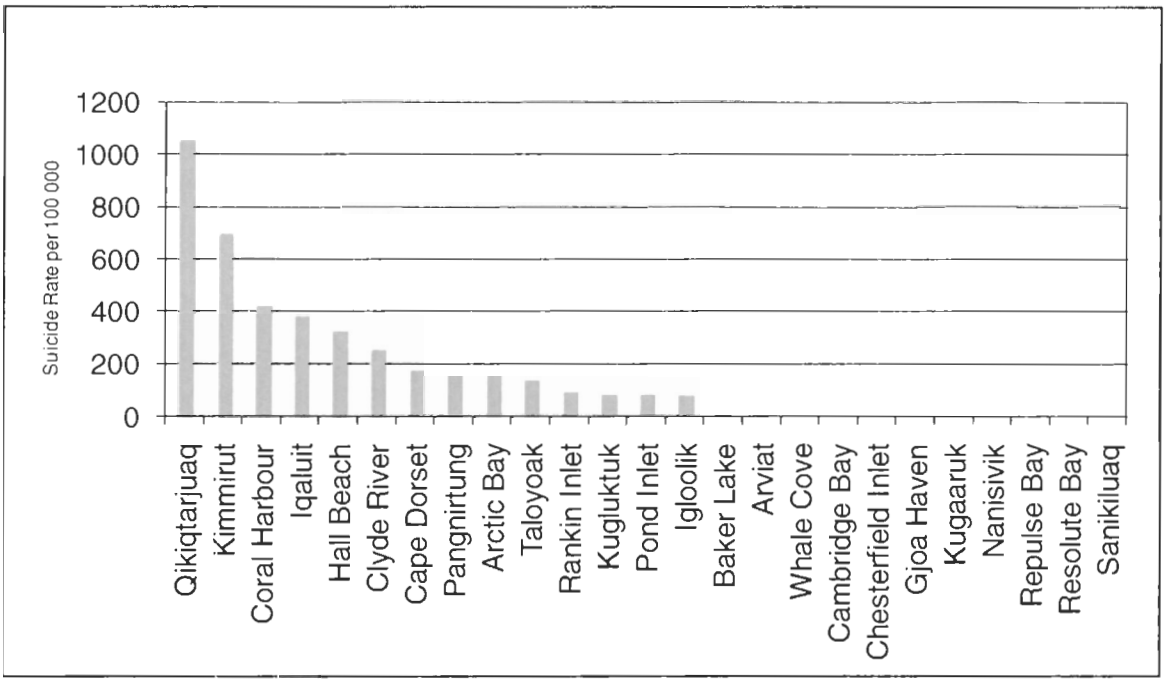


Figure 3: Rate of suicide by Inuit youth by community in 2001

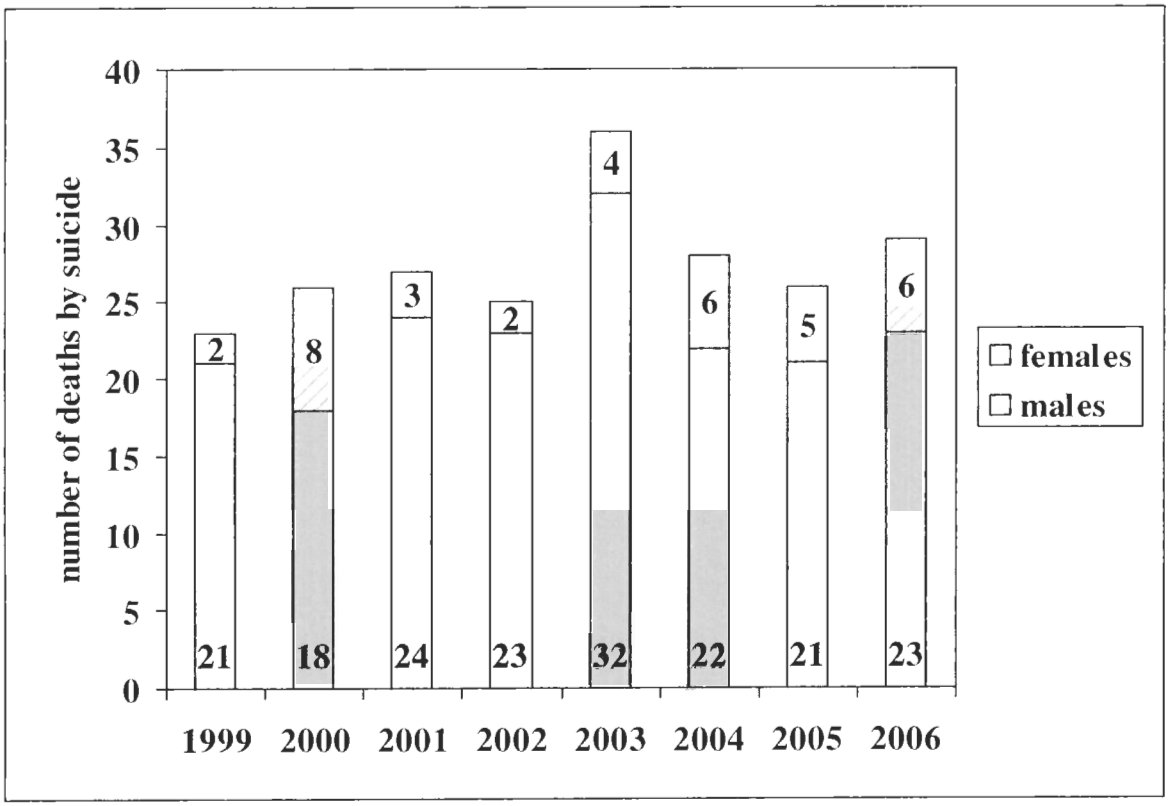


[22] * indicates that the data is taken from April 1, 1999

Figure 4: Map of Nunavut

Source: http://www.athropolis.com/map-nunavut.htm

*Figure 5: Deaths by suicide by Inuit in Nunavut by year and sex (*1999-2006)*



Appendix B

Table 8: Survey analysis questions and results

	Iqaluit	Qikiqtarjuaq	Whale Cove
Economic Factors			
Employment			
Unemployment Rate	8.90%	17.40%	25.60%
Employment Rate	74.5%	42.6%	54.3%
Physical Factors			
Built Environment			
Ability to Eat County Food When Want			
Satisifed	70.70%	94.70%	90.00%
Dissatisfied	7.10%	2.50%	0.50%
How Often Does the Household Eat Cariboo or Seal?			
Once or Twice/week	33%	46.60%	16.20%
3 or 4 Times/Week	13.60%	-	17.80%
Every/Almost Every Day	9.20%	17.30%	41.80%
Rarely/Never	43.20%	35.80%	12.40%
Housing			
Satisfied with condition of housing			
Satisfied	77.3%	15.4%	46.2%
Dissatisfied	19.1%	84.6%	46.7%
Tenure of Dwelling			
Owned by Resident	28.20%	29..3%	22.70%
Private Market Rental	11.60%	-	-
Public Housing Unit	23/1%	57.30%	74.30%

	Iqaluit	Qikiqtarjuaq	Whale Cove
GN Staff Housing	18.70%	4.50%	1.50%
Unit Provided by Employer Other Than GN	18.40%	8.50%	-
Nunavut Housing Corp.			
Yes	23.10%	57.30%	74.30%
No	76.90%	42.40%	20.60%
Persons Per Bedroom			
1	61.40%	55.90%	37%
2	30.90%	34.10%	51%
3	4.50%	9.70%	11.40%
4+	2.20%	-	-
Self Reported Condition of Dwelling			
Regular Maintenance Only	55.70%	65.60%	22.20%
Major Repairs	31.20%	19.90%	10.80%
Minor Repairs	10.90%	11.80%	47.00%
Cultural Factors			
Language			
Language Most often Spoken at Home			
English	54.60%	5.90%	8.10%
Inuktitut	25.70%	91.70%	59.70%
Both	11.00%	2.40%	32.30%
Language Most Often Spoken at Work			
English	56.70%	56.70%	16%
Inuktitut	4.80%	4.80%	18.60%
Both	4.40%	4.40%	18.70%

	Iqaluit	Qikiqtarjuaq	Whale Cove
Language Most Often Spoken at Other Place in Community			
English	56.80%	0.60%	13.00%
Inuktitut	29.50%	95.30%	66.30%
Both	9.50%	4.10%	18.10%
Important Children Taught Inuktitut/Innuinnaqtun in School			
Very/Somewhat Important	92.80%	99%	97.30%
Not Important	4.30%	-	-
Feel Losing Ability to Speak Mother Tongue			
Yes	20.90%	19.50%	37%
No	74.80%	69.60%	40.90%
Traditional Activities			
Harvesting Activities Participation			
Active	8.70%	26.30%	27.10%
Occasional	27.50%	18%	31%
Rarely/Never	9.30%	5.80%	2.40%
Hunted/Fished/Gathered in 2000			
Yes	-	72.20%	74.00%
No	-	25.40%	22.40%
Involved in Making Crafts/Art for Sale in 2000			
Yes	13.10%	3.20%	25.40%
No	85.70%	94.40%	71.10%

Appendix C

Key Informant Interview Schedule

Stage 1 Interview Schedule

1. What measures have the communities taken to prevent youth suicide?
2. What measures has the Government of Nunavut taken to prevent youth suicide?
3. What measures has the federal government taken to prevent youth suicide?
4. What measures have the various Inuit organizations taken to prevent youth suicide?
5. What efforts are needed?
6. What can communities do to combat youth suicide?
7. What can the youth do to prevent youth suicide?
8. Have international strategies been considered when formulating suicide prevention programs?

In addition, follow-up questions will be asked regarding barriers to implementing a strategy, what efforts have been made, why the issue is important, issues facing youth in the communities, community level efforts that have been successful/not successful, etc.

Stage 2 Interviews

I briefly described the research I had carried out and how it led to each policy option. I then asked the participants to provide a critique of the criteria used, the policy options, and to offer their suggestions and comments.

Appendix D

List of Key Stakeholder Participants

Stage 1 Participants:

1. Robert Carson
    - Assistant Deputy Minister of Intergovernmental Affairs for the Government of Nunavut
2. Nancy Karetak-Lindell
    - Member of Parliament
3. Mary Bender
    - Clinical Supervisor – Community Health Nursing, Government of Nunavut
4. Rita Anilniliak
    - Inuk woman living in Iqaluit
    - Grew up in Pangnirtung, Nunavut
5. Jeff Henderson
    - Constable with the Royal Canadian Mounted Policy in Iqaluit, Nunavut
6. Key Informant 6
    - Community health nurse
7. Amanda Ford-Rogers
    - Inuk woman living in Iqaluit
    - Grew up in Whale Cove, Nunavut

Stage 2 Interviews

1. Sinéad Tuite
    - Senior Policy Advisor, Strategic Policy and Planning Division, First Nations Inuit Health Branch – Health Canada
2. Derek McCall
    - Senior Policy Analyst, Policy Coordination Division, Health Policy Branch – Health Canada
3. Jennifer Palmer-Pugh
    - Policy Analyst, Federal Provincial Relations Division, Health Policy Branch – Health Canada

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