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The Northwest Territories Epidemiology Newsletter

IN THIS ISSUE

Firearm Deaths in the NWT

Guest Editorial by Percy Kinney, *Chief Coroner for the NWT*

It is common knowledge that gun deaths in the US are an epidemic. In a country with over 200 million guns in the hands of the public, there are staggering stories of homicide and suicide rates involving firearms. Guns are in schools, in the workplace, even in automobile glove compartments. Gun ownership in the US is even seen as a "right" entrenched in their constitution.

Even given all of this, we should ask ourselves the following question:
"Which had the higher per capita number of firearm deaths in 2001, the Northwest Territories or the United States of America?" The shocking answer is the NWT.

Even more shocking is the fact that our rate of death by firearms was double that of the United States in 2001 (4 times the Canadian rate).[1]

According to data from the US National Centre for Health Statistics, (National Vital Statistics System), in the United States, the rate of death per 100,000 population for all deaths by firearm in 2000 was 10.4. In 2001, the NWT saw a rate of 21.4 deaths per 100,000 for an actual death toll of 9 for a population of just over 42,000 people.

Granted, 2001 was the worst year in a long time for firearm deaths in the NWT but it drives home the point that firearm deaths are a very real point of concern in the Northwest Territories.

Canadians significantly trail the US in gun ownership with 7 million guns estimated throughout the country compared to more than 223 million in the United States. However, we embrace gun ownership far more than our European counterparts.

In the NWT, we lead all Canadian provinces and Territories with 67% of households reporting firearms in the home. (based on averages from 1990 - 1998). This ties us with the Yukon as Canada's premier gun owners and significantly dwarfs the national average of 26%.[2]

Over that same eight year period, the NWT led all provinces and territories with an average of 16.6 firearm deaths (per 100,00) per year compared to 4.3 deaths in Canada as a whole. Even over this eight year period, we are significantly higher than the US average of 10.4 per year.

Of the 9 firearm deaths in 2001, 7 were classified as suicides and 2 were deemed homicides.

Suicide by firearm in the NWT has some unique characteristics. While we again exceeded the Canadian and American national averages in 2001 (16.6 deaths per 100,000 as compared to national averages in Canada (3.4) and the US (6.0)), we experienced no deaths by handguns. Many if not most of the firearm deaths in Canada and the US involved handguns.

Northwest Territories Health and Social Services

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The same is true for the two homicide firearm deaths in 2001; both were carried out by the firing of a rifle while in the rest of Canada and the US, handguns play a prominent role.

In fact, none of the firearm deaths in the NWT over the past 10 years have involved a handgun.

What we do know about gun deaths in the NWT is somewhat surprising. Although alcohol is often a factor in non-natural deaths in the NWT, only 4 of the 10 suicides in 2001 had alcohol as a contributing factor. This brings to light the alarming fact that many suicide victims whether they use firearms or not are sober when they take their own life. Similar numbers are represented in the statistics from other years.

Another alarming fact that has also come to light is the realization that many of the deaths were committed with unsecured weapons. As seen in the chart below, which shows a recent three year period (2001 - 2003), 10 of 16 firearm death were committed with unsecured weapons. Unsecured weapons are defined as weapons that were used by someone other than the owner but were still accessible. Some of the remaining 6 deaths may also have been from unsecured weapons but were accessed by the owner therefore their security status was not applicable.

Several recent studies indicate a correlation between the availability of firearms and the likelihood of suicide, homicide or accidental death or injury. One study concluded that having from 1 to 4 firearms in the home was associated with a 4.8 fold increased risk of suicide.[3] The risk increased even further where the guns were kept loaded and unsecured.[4] In terms of medical costs, one study suggests that the cost per firearm fatality is higher than for any other type of fatal injury or even any of the four most common causes of death.[5]

Some other interesting facts regarding the 16 cases from 2001-2003: As demonstrated in the graph below; the age of the victims was equally dispersed over the demographic age groups with four deaths occurring in each of the four age categories presented. The gender of victims over the three year period heavily favored males by a 15 to 1 ratio which is in keeping with the generalization that females in the NWT are less likely than males to commit suicide or homicide with a firearm.

We must also realize that for the most part, firearm deaths can be prevented. Legislation, education and enforcement are the cornerstones for preventing deaths by firearms.

The legislation pillar for the most part is in place. However, the process, implementation and excessive cost of Canada's current Gun

Figure 1: Firearm Security Status

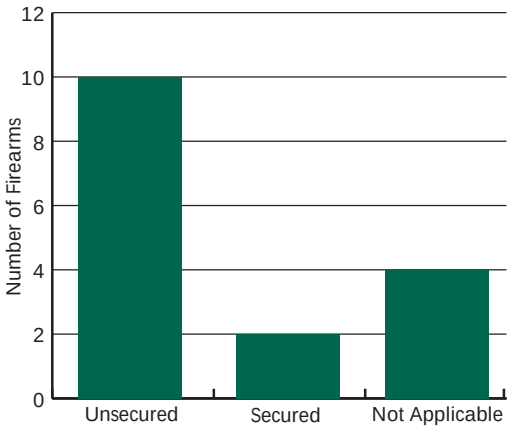
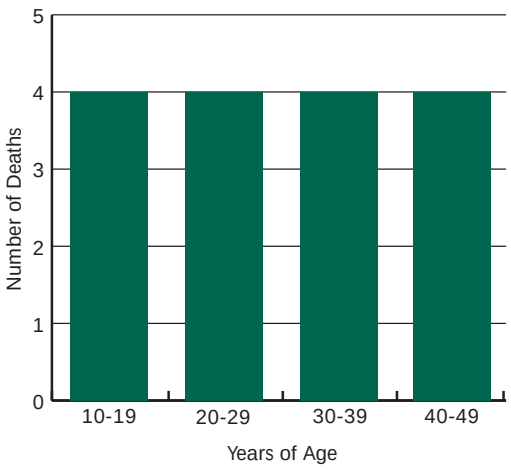


Figure 2: Deaths by Age Group



Registry Strategy has done little to enhance the effectiveness of any comprehensive effort to reduce the death toll from firearms.

Support for the crippled legislation has all but disappeared and the confidence of many Canadians, particularly northerners is non-existent. Several of the aspects of the legislation have no feasibility in the north and much of the design and criteria in the document have little relevance to the lifestyles or practicalities of living in the NWT. That being said, we are in danger of "throwing the baby out with the bathwater".

Although much of the legislation is unworkable in the NWT, components of the documents should be embraced. The areas concerning proper gun storage, enhanced weapon safety training and enhanced enforcement should be brought to the forefront and marketed vigorously to the public at large.

Gun safety and proper storage are at the heart of the problem regarding firearm deaths in the north in tandem with the relevant issues and circumstances surrounding the alarming suicide rate in the NWT. The legislation exists, we just need to embrace what makes sense and change what does not.

The education cornerstone of the solution is viewed as perhaps the easiest part of the process. The problem is jurisdiction. Although technically this area is probably the responsibility of the federal government, any plan for marketing a gun safety strategy will likely not have much relevance in the NWT. First of all, if only history serves as a guide, most of the focus will be targeted toward handguns. As stated earlier, although we have a huge problem concerning firearm deaths in the NWT, handguns (fortunately) have not been a large concern to date. It remains likely that any federal strategy aimed at rifle and shotgun owners will surround safe storage issues for urban dwellers and have little direction toward feasible safe storage in smaller northern rural communities.

The education component is where we can all make a difference. From the GNWT on down to the private citizen, we must get the message out about safe storage of firearms. We need to ask the questions, evaluate the risks and take the necessary steps to ensure that those at risk (i.e. children, persons with suicide ideation tendencies, etc.) are in environments where safe weapon storage issues have been addressed. It may be a federal responsibility but it is our citizens and neighbours who are dying.

The final pillar of the cornerstones is enforcement. Once you embrace the legislation and educate the public you must enforce the compliance. Laws are impotent if not fairly and adequately enforced. Even if most of us do not find the current gun legislation palatable, we must do our best to ensure that the parts of the legislation that make sense are widely distributed, understood and complied with. Only then can we reverse the trend and cease to be the leader in firearm related deaths.

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Suicide Attempts in the NWT:

A Case for Assessment, Intervention and Follow-Up

Sandy Little, *M.S.W., RSW, Mental Health Consultant*

"Ordinary people are realizing once again that they can make a difference... that they can take charge of their lives... that they can be effective change agents in their communities. They are realizing that they have within themselves, the ability to do something about suicide and suicidal behaviour." [1]

Suicide is a concern to each of us: youth, parents, friends, survivors, teachers, counselors, elders and community leaders. In the Northwest Territories (NWT), people are searching for innovative ways to prevent suicide and to heal from the impact of suicidal behaviour.

The Northwest Territories has a suicide rate approximately two times the national average.[2] In the NWT, people are more likely to die by violent and highly lethal means of suicide (hanging and gunshot). In small, remote communities, one suicide has a tremendous impact on every member of the community. Tragically, many suicides can be prevented. Psychological autopsies and coroners' reports indicate that many suicides or murder/suicides had multiple opportunities for prevention and intervention ("I knew he was talking about it") but many community members feel they have inadequate skills or supports to effectively intervene.

This article will focus on the significant and under-estimated issue of suicide attempts in the NWT.

Picture of Suicide Attempts in the NWT

Suicidal behaviour may include thoughts, threats, instrumental suicide-related behaviour (where the intent was to punish, communicate, but not to die), suicide attempt and completed suicide.[3]

- It is important to note the difference in intent between suicide attempt and self-mutilation. Self-mutilation (ie. Self-cutting) is understood as being a means for reducing tension and discomfort.
- For the purposes of this article, "suicide attempt" will refer to actions of self-inflicted injury where the intent was to end one's life.

Magnitude

- Worldwide, a person attempts to die every three seconds.[4]
- Each completed suicide has a serious impact on at least six other people.[5] Suicide attempts can be equally devastating, resulting in a range of feelings such as anxiety, grief, anger, confusion, panic and/or frustration in friends, family and caregivers.
- Some people who attempt suicide have no contact with RCMP, health centres, or hospitals. Caregivers estimate that recorded suicide attempts are likely highly under-reported. The World Health Organization estimates the rate of suicide attempts is 10-20 times higher than the actual number of suicide deaths.[6] Based on this international ratio, this would translate into an estimated 100-200 suicide attempts each year in the NWT.

It is challenging to track accurate numbers of suicide attempts in the NWT. It may be difficult to ascertain the intent behind the behaviour for two reasons:

- Health care staff do not always know, or ask, whether the injury was an accident or self-inflicted. In the case of life-threatening injury or loss of consciousness, medical treatment may take place and be subsequently coded, without the benefit of a mental health assessment. Coding may simply identify the physical injury, without reflecting the cause or intent behind the injury;[7] and,
- Not all suicide behaviours are brought to the attention of health professionals. Many individuals are helped by family or friends, or perhaps by no one at all.[8]

Given the challenges in tracking suicide attempts, how can we create an accurate picture of the magnitude of the problem? One way to measure suicide attempts is to count *hospitalizations for self-inflicted injury*. These statistics capture the significant injuries (such as gunshot wounds, poisoning through overdose) where medical staff are able to determine the cause of the injury to be a result of the clients' *intent* to harm him/herself.

Hospitalization for Self-Inflicted Injury:

Results from *Injury in the Northwest Territories: A Descriptive Report* show that between 1995/96 and 1999/2000, NWT hospitalization rates due to self-inflicted injury were 2.2 times higher than in Canada as a whole. After age-adjustment, the NWT female hospitalization rate was 2.5 times higher than the Canadian rate. Meanwhile, NWT men were 1.9 times more likely to be hospitalized due to a self-inflicted injury than were their Canadian counterparts. The greatest differences between the two jurisdictions occurred among younger age groups. The NWT self-inflicted injury hospitalization rate for children between 0 and 14 years of age was 3.9 times higher than the Canadian rate. The NWT rate among youth between 15 and 24 years of age was 2.8 times higher than the corresponding Canadian rate.[9]

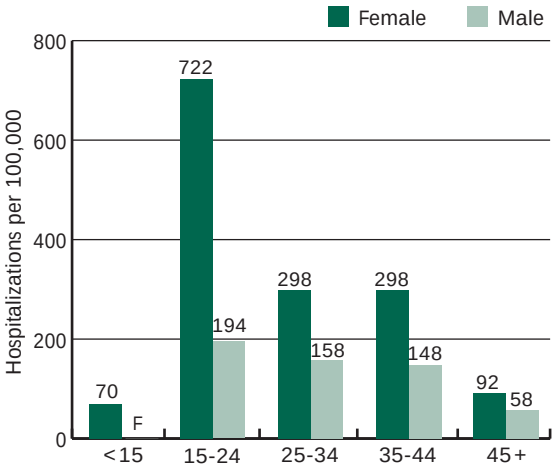
A review of hospitalizations due to self-inflicted injury for the five-year period 1998/99 to 2002/03 shows NWT high-risk groups. Females were 2.6 times more likely than males to be hospitalized because of self-inflicted injury - 257 vs. 99 hospitalizations per 100,000 person-years. Young females between 15 and 24 years of age had much higher hospitalization rates than any other age group of either sex (see figure 1).

In general youth and young adults between 15 and 24 had the highest hospitalization rate of any age group, nearly two times higher than those between 25 and 34, who had the next highest rate. Hospitalization rates due to self-inflicted injury were much lower for individuals 45 years of age and older and for children less than 15 years of age.[a]

The NWT statistics mirror Canadian statistics. In Canada, hospitalization for self-inflicted injuries show youth 15-24 years of age, and young adults 25-44 years of age, have the highest number of admissions to hospital.[10]

Hospitalization data must be interpreted with caution because it does not provide the entire picture of suicide attempts.

Figure 1: Hospitalization Rates due to Self-inflicted Injury by Age Group & Sex, NWT 1998/99 - 2002/03



Source: NWT Helth & Social Services: CIHI Discharge Abstract Database

F: Data suppressed

Assessment

Suicide Risk Assessment: Conducting a suicide risk assessment is not a guarantee of client safety. A risk assessment is merely a tool to guide the caregiver's questions, to help ensure that critical areas are explored. People are often fearful of inquiring into suicidal thoughts, feelings or plans, from the mistaken belief that to talk about suicide will trigger suicidal behaviour. More accurately, when a caregiver explores suicide plans with empathy and non-judgemental attitude, this allows the client to talk and access much needed help.

a Note hospitalizations count admissions, not individuals, one individual may be hospitalized on more than one occasion.

"All these questions must be asked with care, concern and compassion"
– WHO, 2002

Once the caregiver has established a rapport, and explored feelings of sadness, worthlessness, hopelessness, and future orientation, direct conversation about suicidal ideation must be opened.

Ask the question:

- "Are you thinking of suicide?"

Assess the current suicide plan:

- Location, method, access to means, timing

Ask about previous suicide history:

- Has the person attempted suicide before?
- Has the person lost close friends or family to suicide?

Assess risk and protective factors:

- What are stressors and challenges?
- What keeps the person healthy?

Assess thought process:

- How clear is the intent to die? Most people who attempt suicide experience deep ambivalence about dying, and need help to explore reasons for living.
- How impulsive is the person? Impulsivity is compounded by substance use when inhibitions are decreased.
- How rigid is the person's thinking? Rigid or black-and-white coping styles make it difficult for a person to entertain other options to deal with psychic pain.

"The presence of both alcoholism and depression in an individual enormously increase the risk of suicide"
– WHO, 2002

Additional Risks for Suicide Attempts: In addition to the obvious injury and trauma sustained through suicidal action(s), there are two related consequences that complicate recovery.

a) A suicide attempt is a significant risk factor for completed suicide. If suicide attempts are not treated, there is risk for repeat attempts and increasing lethality, which may result in a suicide death.

b) Suicide attempts may generate negative responses from friends, family, and/or caregivers. When exposed to repeated threats, gestures or attempts, caregivers may experience:
   - Vicarious trauma;
   - Desensitization to emotional pain; and/or
   - Mistaken tendency to frame the suicidal behaviour as "just seeking attention".

Risk factors for youth suicide include:[11]

- Mood disorders, substance use disorders, conduct disorder, and concurrent disorders;
- Previous history of suicidal behaviour;
- Family history of suicide or abuse;
- Current life stressors;
- Exposure to sensationalized media reports of others' suicidal behaviour; and,
- Access to lethal means for suicide (such as guns or medications in the home).

It is important to review "risk factors" to help identify those individuals who require more assertive outreach or more comprehensive care.

Action

The range of risk factors identified through risk assessment indicates many potential points of intervention, by a variety of community members.

Clinical staff have a key role to play in assessing and treating psychiatric and substance use disorders, particularly co-occuring mental health/addiction disorders.

Families need to create secure attachment, foster resiliency, model and support healthy lifestyles, teach positive ways to cope with stress, and nurture relationship skills.

Communities and home owners have a responsibility to restrict access to firearms and medications or provide safe storage in the home (see article by Chief Coroner of the NWT in this issue).

Leaders and Elders: can promote cultural and spiritual beliefs that discourage suicide and promote reasons for living.

Primary Health Care:

People in the NWT may seek help from a variety of health and social services front-line providers.

Each member of the Primary Community Care Team should:

- Be alert to signs/symptoms/talk of suicidal behaviour
- Take the time to explore feelings and build a caring, non-judgemental relationship
- Refer to mental health/medical/psychiatric experts as necessary, but provide follow-up to ensure the person makes the transition to another team member.[xii]

Counselling and Skill Building

Any suicide attempt (regardless of lethality) is serious. A suicide attempt indicates a person is struggling with psychic pain he/she cannot handle on his/her own.

Skill building begins in childhood, developing from secure attachment, nurturing relationships, emotional regulation and social competence. Too often, communities wait until youth are in school and expect that a "program" will protect them against suicidal ideation. Suicide prevention training programs need to promote both awareness and skills for caregivers, gatekeepers and youth. Youth are well positioned to support their peers. However, where youth are trained to provide peer support, they must have access to ongoing support and debriefing.

A recent study on the nature of suicidal behaviour in adolescents and young adults cites the long-term nature of suicidal feelings (average 5-7 years, with eventual recovery). Paulson and Everall (2004) identified several themes for youth that required longer-term investment to overcome (attachment, resilience, ability to use social support, sense of personal agency, and ability to resolve negative emotions).[13] Such research suggests that the crisis model of suicide intervention does not adequately address the underlying themes.

Dialectical Behaviour Therapy has been proven very useful for people who struggle to manage their emotions and social interactions, and for whom frustrations result in suicidal threats, self-harm and/or suicide attempts (for example, borderline personality disorder).[14]

Community Development

Suicidal behaviour is understood to be a multi-faceted phenomenon. Several reviews have highlighted the importance of supporting community-driven approaches.[15] "Suicide [in Aboriginal communities] is embedded in larger structural problems associated with colonization... Cultural continuity must be renewed and maintained as a central component of youth identity, self-esteem, hope and being invested in living."[16] An Aboriginal community's ability to maintain its culture and control and manage programs and services has been shown to have mitigating influences on suicide rates.[17]

"Depression is treatable, Suicide is preventable"
– WHO, 2002

Building Protective Factors from Many Angles

Research points to the effectiveness of more integrated approaches that combine both clinical and community development interventions.[18,19,20]

Protective factors buffer people from the risks associated with suicide. A number of protective factors have been identified in the literature:[21,22]

- Effective clinical care for mental, physical, and substance abuse disorders
- Easy access to a variety of clinical interventions and support for help seeking
- Family and community support
- Support from ongoing medical and mental health care relationships
- Skills in problem solving, conflict resolution, and nonviolent handling of disputes
- Resiliency in children/youth
- Cultural and religious beliefs that discourage suicide and support self-preservation instincts

Follow-Up

Seek Help

Recognize a suicide attempt as a serious plea for help. If you are not skilled in mental health assessment and treatment, work with the person to get them connected to a specialist.

Mental Health Treatment

Once the suicidal crisis appears to have passed/been resolved, family and friends are

often eager to "get back to normal". However, this is a critical time to pursue counseling or other mental health supports.

Dialectical Behaviour Therapy (DBT) occurs in stages and offers longer-term support to clients to reinforce their problem solving and competency.

Work with Survivors

Survivors of a completed suicide are at risk for suicidal thoughts/feelings/actions. Providing effective, timely and ongoing outreach to survivors is very important to prevent survivors from attempting suicide in response to their extreme grief.

Suicide Prevention Strategies

Does your community have a suicide prevention plan? Has the suicide prevention plan been developed with a wide range of stakeholders? What resources are dedicated to building community wellness? Is suicide prevention approached as crisis intervention or broad-based resiliency and wellness?

"State of the art research indicates that the prevention of suicide, while feasible, involves a whole series of activities, ranging from the provision of the best possible conditions for bringing up our children and youth, through effective treatment of mental disorders, to the environmental control of risk factors."[xxiii]

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Alcohol-Related Injury Deaths[a] in the Northwest Territories (1999-2003)

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Alcohol abuse is associated with a wide variety of adverse health outcomes in the area of morbidity, mortality, and disability. With new legislation since 2004 lowering the acceptable limit for blood-alcohol content (BAC) from .08% to .05% in drivers, it is hoped that the number of alcohol-related motor vehicle injuries and fatalities will decline. However there are many other negative effects from alcohol misuse. For example, a death can occur from accidental poisoning as a result of excessive drinking; from cold exposure; from unintentional actions when caregivers are too intoxicated to provide proper supervision, from violence, etc.

In the United States, a study revealed excessive alcohol consumption as the third leading preventable cause of death in the country, preceded by smoking, poor diet and physical inactivity.[1] Similarly, a Canadian study identified over 50% of all premature deaths each year can be prevented through the control of smoking, hypertension, elevated serum cholesterol, diabetes and alcohol abuse.[2]

This article addresses the characteristics of alcohol-related deaths among cases reviewed by the Chief Coroner's office. The primary focus of the coroner's office is to investigate sudden and unexpected deaths with the function of making recommendations so as to prevent similar deaths. It is important to note that alcohol is a risk factor for certain diseases. Examples of "natural" deaths resulting from alcohol-related disease can include cirrhosis of the liver, some forms of cancers, and cardiovascular diseases. Although the coroner may occasionally be called to investigate such natural deaths when they occur suddenly and unexpectedly, these cases were not included in the analysis since they do not encompass a sufficient sample of the alcohol-related deaths due to chronic disease. Alcohol-related injury deaths in which the injury occurred in the NWT but the death occurred in an out-of territory hospital, after medical transportation, are also not necessarily captured in these statistics. Albeit the numbers presented here strictly represent alcohol-related injury deaths reviewed by coroners and not all injury deaths per se, the data remains relevant towards demonstrating the impact of alcohol in a significant portion of sudden and unexpected deaths in the NWT.

Between the period of 1999 and 2003, the Chief Coroner's Office examined 409 cases of sudden and unexpected deaths in the Northwest Territories (NWT).[3] Of these reported deaths, 54% were due to natural causes and 46% were classified as accidental, suicide, homicide or undetermined.[b] Among the 190 deaths that were due to unnatural causes (i.e. primarily injuries), 65 cases involved alcohol. For the purpose of this article, an alcohol-related death is defined as alcohol found in a toxicology sample of the deceased only. As a consequence, the "true" number of alcohol-related deaths is underestimated since a sober pedestrian killed by a drunk driver will NOT show up as an alcohol related death in the database. For certain cases, the coroner is not privy to the alcohol levels found in the driver. Altogether, the 65 alcohol-related deaths represent 34% of all injury deaths in the NWT.

Trends

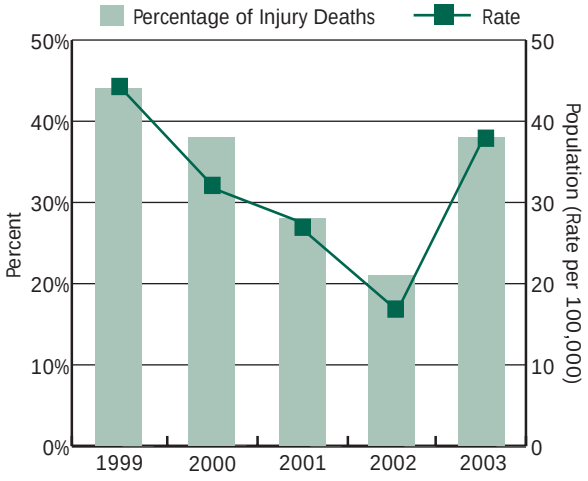
Between 1999 and 2003, an average of thirteen injury deaths involving alcohol occurred each year. Although it may appear in Figure 1 that the proportion and rates of alcohol-related injury deaths declined between 1999 and 2002 and then

a Alcohol-related injury deaths reviewed by the Coroner's Office. These deaths may not include out-of-territory hospital deaths in which the injury occurred inside the NWT. Furthermore, these deaths can include out-of-territory residents in which the injury occurred inside the NWT.

b Undetermined is any death which cannot be classified in any of the other categories. The actual cause of death may or may not be known in these cases. An example of an undetermined death would be a drug overdose if it were unclear if the victim intended to die.

followed by an increase in 2003, it is important to note that due to the small number of cases, year to year changes in proportions or rates can vary widely. As a consequence, the observed changes seen in Figure 1 may be primarily due to chance and do not necessarily represent a statistical significant change.

Figure 1: Alcohol-Related Injury Deaths*



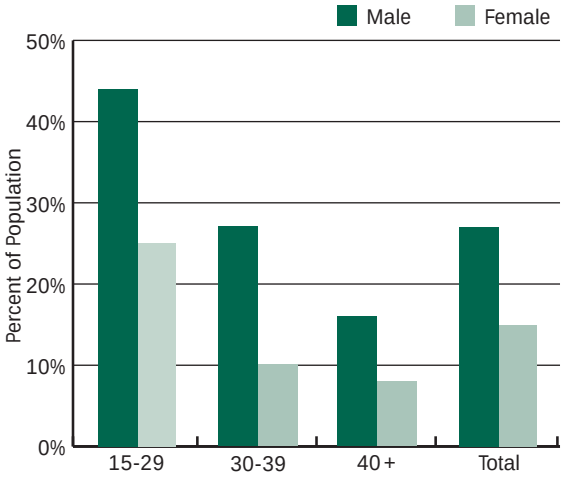
Source: Coroner's Database, Deptartment of Justice

*This statistic only represents deaths that occurred in the NWT, as a result of an injury. It may not include deaths, which occurred in an out-of-territory hospital after medical transportation, due to an injury in the NWT.

Gender

The risk for alcohol-related injury deaths in males is almost five times higher than the risk for females.[c] This is not surprising considering males are almost twice as likely to be regular heavy drinkers than females. (Figure 2) In the 2002 NWT Alcohol and Drug Survey, regular heavy drinkers are defined as individuals who said they drink alcohol at least once per month and who also indicated they normally consume five or more drinks on the days they drink. Furthermore, the mortality rate for injuries regardless of the involvement of alcohol was over three times higher in males than females (122 vs. 38 per 100,000 person-years).[4] Injuries are categorized as either intentional (i.e. situations when harm is intended, either to self or to others) or unintentional (i.e. instances when the harmful event occurs independent of human volition) events.

Figure 2: Regular Heavy Alcohol Use

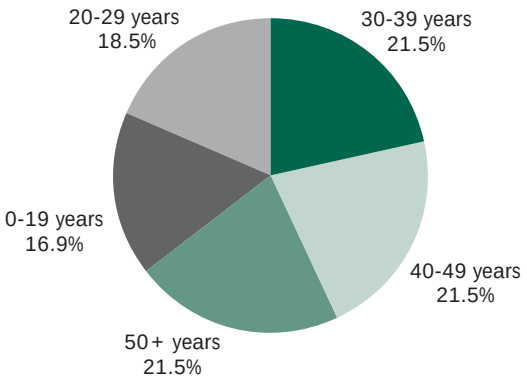


Source: 2002 NWT Alcohol and Drug Survey, Deptartment of Health and Social Services

Age Groups

When examining the data by age category, we find that the deaths were somewhat evenly distributed throughout the various age groups (Figure 3). This is somewhat surprising considering the incidence of regular heavy

Figure 3: Age Distribution of Alcohol-Related Injury Deaths (n=65)



Source: Coroner's Database, Deptartment of Justice

c The risk is not adjusted for age difference in the population.

alcohol use is higher among the younger age groups (Figure 2). However this may be counteracted by the fact that injury mortality rates, in general, are highest in the senior population and lowest among the younger age groups (0-14 years).[5]

Classification of Death

All deaths investigated by the Coroner's Office are classified in one of five distinct categories: Natural, Accident, Suicide, Homicide or Undetermined. As previously described, **natural** deaths include all deaths primarily resulting from a disease of the body and not resulting from injuries or abnormal environmental factors. Furthermore, it is important to note that coroner cases where the cause of death is listed "chronic ethanol abuse" are classified as natural. For the purpose of this article, these natural deaths were not included in the analysis.

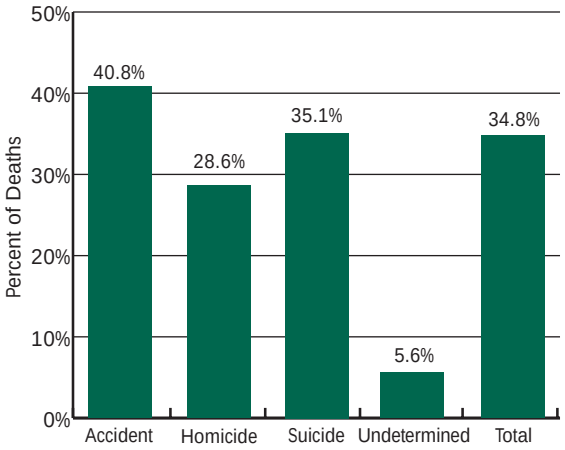
Accidental deaths include deaths resulting from an action(s) by a person that results in the unintentional death to him/herself, or any death to a person resulting from the intervention of a non-human agency. Among the 98 accidental deaths that took place in the NWT between 1999-2003, 40 involved alcohol (40.8%).

Suicide refers to any death from a self-inflicted injury where the intent is apparent. Thirty-five percent of the 57 suicides that occurred between 1999-2003 involved alcohol. Of these 20 cases, the most common method employed was through the use of firearms (n=13), hanging (n=5), and poisoning (less than five cases). Respectively, these represent more than 50% of all firearm suicides, 40% of suicides by poisoning and 19% of hangings.

Homicide includes any death resulting from injuries caused directly or indirectly by the actions of another person (with the exception of unintentional motor vehicle accidents). Homicide is a neutral term that does not imply fault or blame. Of the 14 homicides that took place, four involved the use of alcohol.

Undetermined is any death that cannot be classified in any of the other categories. Only one out of the 18 undetermined deaths involved alcohol.

Figure 4: Alcohol-Related Deaths by Classification



Source: Coroner's Database, Deptartment of Justice

Cause of Death

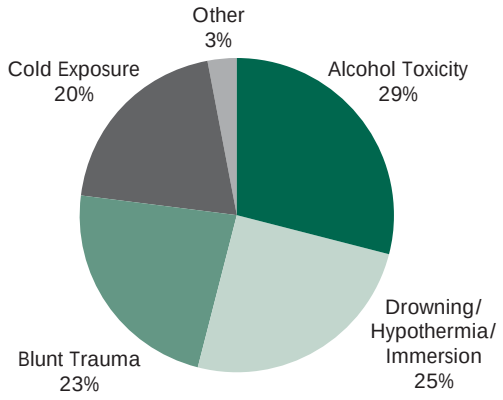
Upon examining the various causes of accidental death, the most frequent cause of alcohol-related mortality was due to alcohol toxicity followed by drowning/hypothermia/immersion, blunt trauma and cold exposure (Figure 5). Alcohol was involved in almost 60% of all investigated drowning/hypothermia/immersion deaths (total=17); 62% of cold exposure deaths (total=13); and 53% of blunt traumas (total=17).

Drowning/Hypothermia/ Immersion Deaths

Alcohol is a significant risk factor for drowning associated with recreational aquatic activity. In the north, alcohol combined with cold-water temperature is an additional risk for death. In a systematic review of studies that examine the role of alcohol in drowning,[6] alcohol was detected in the blood of 30-70% of people who drowned while involved in recreational aquatic activity.[d] This is almost similar to the NWT situation in which nearly 60% of all drowning/hypothermia/

d Recreational aquatic activities were defined as activities explicitly related to water that are undertaken for fun, pleasure or amateur sport, and included swimming, surfing, boating, water skiing, underwater diving, and fishing.

Figure 5: Distribution of Alcohol-Related Accidents by Cause (n = 40) in the NWT, 1999-2003



Source: Coroner's Database, Deptartment of Justice

immersion deaths involved alcohol. One study suggests that a person with a blood alcohol level of 0.10 g/100mL has about 10 times the risk of death associated with recreational boating compared with persons who have not been drinking. Even small amounts of alcohol can increase this risk.[7] Lastly, the study suggested that about 10-30% of all recreational drowning deaths could be attributed to alcohol.

Motor Vehicle Accidents (MVAs)

Most blunt traumas are the result of motor vehicle accidents. In the Coroner's database, MVA deaths include deaths as a result of injury from a motor vehicle travelling on public roads or highways, from snowmobiles or all terrain vehicles. Of the 33 individuals that died in motor vehicle crashes in the NWT between 1999 and 2003, alcohol was a factor in 14 of these deaths. This represents 42% of deaths in motor vehicle crashes. In a report from the Department of Transportation that examined all traffic accidents regardless of fatality, alcohol was a factor in 7% of all motor vehicle collisions and in 21% of all traffic casualties in 2003. Almost half of drinking drivers were between the ages of 25 and 44.[8] It is anticipated that the new legislation, which lowered the BAC in drivers from 0.08% to 0.05% and implemented tougher penalties, will discourage drivers from drinking and driving.

Another form of motorized accident include off-road machines such as the snowmobiles and all-terrain vehicles. Of the 33 MVA deaths that occurred between 1999-2003, 14 involved off-road machines. In Canada, more than 60% of fatally injured snowmobile operators had a BAC level greater than 0.08%.[9] Due to the frequency of injuries seen as a result of snow machine accidents, the Coroner's Office would like to see a snow machine legislation that is comprehensive, concise, and universal for all communities. Currently most communities do not have a legislation. The law should establish the level of competency and age limits, and the requirement for insurance, a helmet, and a survival skills certificate. Furthermore it would reinforce the law concerning the operation of these vehicles while intoxicated. Currently, the Criminal Code of Canada indicates that it is an offence to operate any type of motor vehicle-including motorized snow vehicles - while impaired or with a BAC in excess of 0.08%. It does not matter whether the vehicle is being operated on a public roadway or on private property. The law and its penalties are applied to snowmobile operators the same as they are to drivers of highway vehicles. The problem is that a major part of the sentence in drunk driving cases is a licence suspension. Since a driver's licence is not required to operate a snowmobile, the sentence is meaningless. Furthermore this law is difficult to enforce due to the vast expanse of landmass that snowmobiles can cover. Altogether, it is important to convey the message that driving off-road machines while intoxicated is dangerous and is not an accepted behaviour.

Cold Exposure

Alcohol raises the risk of dying from exposure to extremely cold temperatures as those encountered in the north. In a disoriented state, an inebriated person may not dress appropriately; will have poor blood circulation; is more likely to trip, fall and not get up; or else fall asleep or lose consciousness while outdoors. Among the 13 investigated deaths related to cold exposure, eight involved the use of alcohol.

Conclusion

Fatalities associated with alcohol use represent one of the leading preventable causes of death. This descriptive study, which examines unnatural deaths investigated by the Chief Coroner's office, provides some idea of the impact of alcohol on deaths in the NWT. It is hoped though targeted educational messages on the responsible use of alcohol, legislation and alcohol control policies that the number of alcohol-related deaths will decline in the population.

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Psychiatry Up Here

Suzanne Perkins, *MDCM, FRCPC, Psychiatrist, Stanton Territorial Hospital*

In nearly every survey of health needs in the North, mental health leads as the area of greatest unmet demand. Suicide rates in the territories far exceed twice those in the provinces. However, provision of mental health care transcends suicide prevention. It is estimated that about 90% of people who commit suicide have a mental illness as one of the factors contributing to their death, yet the common experience of mental health professionals in the NWT (i.e. psychotherapists, psychiatrists, psychiatry nurses) is that a majority of those who complete suicide have not received, or even sought, care for their psychiatric disorder.

Solid epidemiologic data on mental illness in the NWT is lacking for several reasons. Data has not been systematically gathered until the last decade. Numbers gathered from different settings (e.g. health centres, Stanton Territorial Hospital) are not aggregated, or grouped into similar diagnostic categories. Finally, the NWT's small population creates a lot of variability in any statistical analysis.

Nonetheless, the data available highlight a number of similarities and differences with southern populations. Such observations must be integrated into planning mental health services.

Availability of care providers is one way to assess adequacy of service. In Canada, psychiatrists (and many other physician specialists) are in short supply, particularly in remote areas. The NWT is served by a small handful of psychiatrists, most of whom work less than full-time and provide outreach from the South. Approximately 2.5 psychiatrists are available for a catchment of about 50,000 people (the NWT plus the Kitikmeot region of NU), i.e. one psychiatrist per 20,000 people. The Canadian Psychiatry Association recommends one psychiatrist per 8400 people. Surprisingly, wait times to see a psychiatrist for a non-urgent appointment is shorter in the NWT - ranging from 2 to 8 weeks. Meanwhile Southerners wait an average of 73 days. This statistic suggests either that the threshold to refer is lower in the South, or that case finding is less efficient in the North - which could in turn contribute to the higher suicide rates.

Many aboriginal people in the NWT will access traditional healers as their primary mental health care provider, or will use them to supplement their conventional care. (No statistics are available on these encounters.)

Many aboriginal people in the NWT will access traditional healers as their primary mental health care provider, or will use them to supplement their conventional care. (No statistics are available on these encounters.)

Suicide rates are a stark way to evaluate the mental health of a population. In 1996, in Canada, 12 per 100,000 population per year commit suicide - it is the second most common cause of death in 15 to 24 year olds. The NWT suicide rate for the period 1990 to 1999 was 19 per 100,000 person-years. Among the Dene in the 1990's the rate was 14 per 100,000, among the Inuit, 53 per 100,000.

Most suicide behaviours do not result in death, and often result in hospitalization and treatment. According to the GNWT DHSS Discharge Abstract Database, 418 admissions to hospitals in the NWT were documented in fiscal years 1995/96 to 1999/2000 for reasons of attempted suicide - or about 20.1 per 10,000 person-years.

Most suicide behaviours do not result in death, and often result in hospitalization and treatment.

Rates of hospital admissions in a population are a more subtle way to assess the state and management of the mental health in an area. Data from 2001-2003 indicate that there were 1,230 admissions to a NWT hospital with a "psychiatric diagnosis". Thirty-six percent or 438 hospital admissions had a diagnosis of alcohol or drug abuse, yielding an admission rate of 64 per 10,000 population for mental health reasons NOT dominated by substance abuse. The Canadian rate of admission to a general hospital for similar reasons stands at 32 per 10,000 population.[1]

Interestingly, while the average length of stay in hospitals in all of Canada was 15 to 20 days, in the NWT, the length of stay is 8 days. This suggests there may be, on average, less severity of illness among Territorial patients compared to the South, a concept which may, wholly or in part, account for the higher rates of admission here. In many communities, resources for care of mentally ill patients are minimal. Thus patients may be medivaced for admission because of absence of local alternatives rather than severity of illness per se. Patients who might have been managed by assertive community (out-patient) treatment in the South have little choice but hospital admission here in the Territories. Unfortunately, discontinuity of care (through rapid turn-over of health centre nurses or mental health workers) may also contribute to this phenomenon. Disrupting the therapeutic alliance established with a local caregiver allows for both destabilization of the patient, and less familiarity with the usual baseline function and effective coping strategies of the patient.

The proportion of various diagnoses of hospitalized patients also varies between North and South. In 2000, mood disorders (i.e. major depressive disorder and bipolar disorder) accounted for 12.5 admissions/10,000 in Canada, whereas the NWT rate was 25.7 per 10,000 population in 2000-01. (DHSS Database). Using data provided by Stanton Territorial Hospital (STH), there was a decrease in the proportion of psychiatric admissions with a primary diagnosis of mood or anxiety disorder (from 84% to 60%), an increase in the proportion of admissions for psychosis (usually schizophrenia) from 16% to 31%, overall there was a decrease in total admissions, from 285 in 2001 to 220 (est.) in 2004.

The subjective impression of mental health professionals is that the severity of illness of admitted Northern patients has increased, as suggested by the increase in proportion of psychotic patients, but at the same time, sicker patients than in the past are being maintained as out-patients by community resources. However, data to support this hypothesis is not available.

The most common ethnic background is Inuit (approx 35%), followed by non-native (almost 33%) and Dene (approximately 25%). A little over half of patients admitted to STH state that their home is in Yellowknife, despite the fact that the Kitikmeot accounts for less than 1/5 of admissions - many of these Inuit cite Yellowknife as their residence. This may reflect a tendency to permanently relocate individuals with high needs to regions where resources exist.

Nonetheless, the challenges of distance, the use of telepsychiatry, a trend to move towards outpatient management, the rapid reworking of aboriginal cultures, and additional factors, combined with the energy and flexibility of so many northern health professionals will continue to make the practice of psychiatry in the North unique and gratifying.

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A Descriptive Study of Motor Vehicle Land Transportation Injuries in the NWT

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Introduction

Injury is one of the leading causes of both death and hospitalization in the NWT. Between 1990 and 1999, injuries accounted for 23% of all deaths among NWT residents, about the same number as deaths due to cardiovascular diseases such as heart failure and stroke (23%), and cancer (24%). When hospitalizations due to pregnancy and childbirth are excluded, injury was the third leading reason for hospitalization between 1995 and 1999. It was the leading cause of death and the second leading reason for hospitalizations among residents one to forty-four years of age. After differences in the age distribution of the two populations are taken into account, we also find that NWT residents were 2.3 times more likely to die due to injury and 2.2 times more likely to be hospitalized due to an injury than were Canadians as a whole.[1]

This article takes a look at motor vehicle land transportation injury death and hospitalizations in the Northwest Territories. This includes all deaths resulting from motor vehicle traffic injuries involving automobiles, vans, trucks and motorcycles known or assumed to be traveling on public roads or highways. It also includes both passengers and drivers of these motorized vehicles, as well as pedal cyclist and pedestrians who were hit by a motor vehicle on a public road as well as incidents involving motor vehicles, excluding aircraft and watercraft, used off-road. The latter group includes, for the most part, snowmobiles and all-terrain vehicles (ATVs). Within the territory, snowmobiles and ATVs are used extensively for transportation, particularly in the smaller communities where they are often driven on public roads.

Incidents involving automobiles, trucks, snowmobiles, ATVs and other motorized land transportation vehicles accounted for 17% of all injury-related deaths in the Northwest Territories between 1993 and 2002. Making it the second leading cause of injury-related deaths following suicides, which accounted for 25%. Between 1998 and 2002, motor vehicle-related incidences accounted for 13% of all injury-related hospitalizations, making it the third leading cause following falls (29%) and assaults (14%). The following article identifies subgroups of the NWT population most at risk of this type of injury-related death and hospitalization.

Methods & Limitations

Data Sources & Counting Cases

The analysis of injury related deaths was based on vital statistics data obtained from Statistics Canada for all residents of the Northwest Territories for the period 1993 to 2002. The analysis of hospital separations was based on the Discharge Abstract Database provided by the Canadian Institute for Health Information for fiscal years 1998/99 to 2002/03. Population estimates used to calculate the rate of injury, death and hospitalization were obtained from the NWT Bureau of Statistics.

To describe the full population-based incidence of injury deaths and hospitalizations, all NWT residents who died or were hospitalized due to injury inside the territory along with NWT residents who died or were hospitalized due to injury in Edmonton, Alberta and Fort Nelson, British Columbia were included in the analysis. While including residents who died or were hospitalized outside of the NWT may slightly overestimate the risk of injury inside of the territory, excluding them would result in a much larger underestimation of risk. Residents of other jurisdictions who died or were hospitalized inside the territory were excluded.

Rates and Confidence Intervals

The effect of random variation on population parameters can be quite large when the population size and the actual number of observed events are both small. Therefore, this

analysis is based on ten years of mortality data and five years of hospitalization data. Combining multiple years of data does two things. First it increases the number of events and second it increases the effective population size, since the denominator is actually "person-time." In effect, the more stable rate represents an average of the years under study.

For deaths, which tend to be rare events, the Poisson probability distribution was used to calculate 95% confidence intervals. Because the same individual can be hospitalized due to a motor vehicle-related injury more than once, an adjustment was needed in the way confidence intervals were calculated to avoid underestimating their width. A Multiple Admission Factor (MAF) was calculated using the method outlined by Cain and Diehr (1992).[2] The confidence intervals themselves were calculated assuming normal approximation of the Poisson distribution.[3] Chi-square tests of independence were used to test statistically significant differences between sexes, age groups, ethnicity and community types.

Limitations

When injury rates were calculated, it was assumed that each person in the population was at equal risk of that injury. This assumption may not be true. For example, not everyone in the Northwest Territories rides in/on a motor vehicle. Moreover, the number of kilometers driven each year varies between individuals. The number of injuries per kilometer driven would be a more appropriate measure of the actual risk of motor vehicle rated injuries. However, estimates of kilometers driven for different sub-populations in the territory are not available.

It is important to keep in mind that the data represents the number of hospital discharges and not the number of people hospitalized due to injury. Comparisons of hospitalizations between community types should be made with some caution. Rates are good summary measures that help identify groups more at risk of being injured, and the risk of injury is normally associated with environmental or behavioral risk factors. However, observed variations between community types may in part be due to differences in registration practices, in addition to lifestyle or environmental factors. A robust estimation of injury severity was beyond the scope of this report. Instead, a rough estimate based on the length of hospital stay was used. Further research and analysis in this area is needed.

Results

Between 1993 and 2002, 55 territorial residents died as a result of injuries sustained from incidents involving automobiles, trucks, snowmobiles, ATVs and other motorized land transportation vehicles. The average annual mortality rate for this period was 13.4 per 100,000 person-years. There was no significant change in the rate during the ten-year period. It was 15.1 per 100,000 in 1993/97 compared to 11.7 in 1998/2002. Meanwhile, there were 382 hospitalizations in acute care facilities between fiscal years 1998 and 2002, for an average annual hospital separation rate of 187.0 per 100,000 person-years. While the rate declined slightly during this period from 215.5 per 100,000 in 1998/99 to 173.5 in 2002/03, the decrease was not statistically significant.

In 80% of the cases, the motor vehicle was known or assumed to be on a public road. This means 20% involved vehicles such as snowmobiles that were being operated off-road. However, 52% of hospitalizations involved motor vehicle traffic crashes, where the vehicle was on a public road, while 48% of the cases involved non-traffic incidents.

Table 1 provides information about which groups are at higher risk of death due to motor vehicle-related injury. With a mortality rate of 20.6 per 100,000 person-years, males were significantly more likely than females to die as a result of this type of injury.

Youth and young adults accounted for 33% of all motor vehicle-related injury deaths. This group

Table 1: Motor Vehicle-Related Injury Deaths by Various Characteristics, NWT 1993-2002

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	55	100%	13.4	(10.1, 17.5)
Female	11	20%	5.6	(2.8, 10.0)
Male*	44	80%	20.6	(15.0, 27.7)
0-14 Years	5	9%	4.4	(1.4, 10.3)
15-24 Years**	18	33%	28.2	(16.7, 44.6)
25-34 Years	11	20%	14.0	(7.0, 25.0)
35-44	13	24%	18.1	(9.6, 30.9)
45 and Older	8	15%	9.8	(4.2, 19.2)
Yellowknife	14	25%	7.9	(4.3, 13.2)
Regional Centres†	13	24%	13.5	(7.2, 23.1)
Smaller Communities****	28	51%	20.5	(13.6, 29.7)

Source: NWT Health and Social Services, NWT Vital Statistics

* Significantly higher than females ($p<0.05$)
** Significantly higher than other age groups combined ($p<0.05$)
*** Significantly higher than Yellowknife ($p<0.05$)
† Regional centres include the towns of Fort Smith, Hay River and Inuvik

Table 2: Motor Vehicle-Related Injury Hospitalizations by Various Characteristics, NWT 1998-2002

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	382	100%	187.0	(165.0, 209.0)
Female	110	29%	11.6	(87.7, 135.5)
Male*	272	71%	257.2	(220.9, 293.6)
0-14 Years	49	13%	89.2	(56.6, 121.8)
15-24 Years**	123	32%	391.5	(307.2, 475.8)
25-34 Years**	88	23%	241.5	(186.5, 296.5)
35-44	58	15%	158.2	(110.3, 206.1)
45-64	53	14%	145.0	(98.5, 191.5)
65 and Older	11	3%	133.0	(48.4, 217.7)
Yellowknife	77	20%	86.9	(65.0, 108.8)
Regional Centres****	152	40%	319.2	(257.0, 381.4)
Smaller Communities***	153	40%	223.0	(182.0, 263.9)
Hospital Stay Two Days or More				
Total	223	100%	109.2	(93.7, 124.7)
Yellowknife	47	21%	53.1	(36.7, 69.4)
Regional Centres*** †	174	33%	155.4	(115.8, 195.0)
Smaller Communities***	102	46%	148.6	(117.5, 179.8)

Source: CIHI Discharge Abstarct Database

* Significantly higher than females ($p<0.05$)
** Significantly higher than other age groups combined ($p<0.05$)
*** Significantly higher than Yellowknife ($p<0.05$)
**** Significantly higher than Yellowknife and smaller communities ($p<0.05$)
† Regional centres include the towns of Fort Smith, Hay River and Inuvik

was at greatest risk of dying from this type of injury between 1993 and 2002. Their mortality rate of 28.2 per 100,000 person-years was 1.6 times higher than the next highest rate of 18.1 per 100,000 for those between 35 and 44 years of age.

Residents of the smaller NWT communities accounted for 51% of motor vehicle-related injury deaths. Their risk was significantly higher than Yellowknife residents but not significantly different from residents of the regional centers of Fort Smith, Hay River and Inuvik.

Males were over two times more likely than females to be hospitalized due to a motor vehicle-related injury (257.2 vs. 111.6 per 100,000 person-years). Of the 382 hospitalizations due to injuries sustained from motor vehicle crashes, 32% of the cases involved individuals between 15 and 24 years of age and another 23% were between 25 and 34 years (see table 2). These two age groups had the highest risk of being hospitalized (391.5 and 241.5 per 100,000 respectively).

Residents of the three regional centers accounted for 40% of all hospitalizations due to motor vehicle crashes. The average annual hospitalization rate of 319.2 per 100,000 person-years was significantly higher than both the rate for Yellowknife (86.9 per 100,000) and the rate for the smaller communities (223.0 per 100,000). In turn, the rate for the smaller communities was significantly higher than the Yellowknife rate.

The difference between the regional centers and the smaller communities decreased significantly when hospitalization stays greater than one day were examined. However, the rates for both community types were still significantly higher than the Yellowknife rate.

Discussion

To plan effective injury prevention measures it is necessary to adequately understand why some people are more likely to be injured than others. In other words we need to look at aspects of personal behavior or lifestyle, environmental exposure, or other characteristic that is associated

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with an increased probability of being injured. Some groups may have greater risk of injury due to more frequent exposure to hazardous environments, equipment, or activities. For example, males are more likely than females to operate a snowmobile. Their greater exposure explains in part their higher rates of injury discussed in this article. However, the risk of injury associated with various activities can be reduced or increased depending on any number of other personal and environmental risk factors.[4] In the above example, the likelihood of sustaining an injury is also influenced by behavioral factors such as drinking alcohol and wearing protective equipment such as a seat belt and a helmet.

The benefits of seatbelt use in reducing the severity of injury resulting from a motor vehicle traffic crash is well established.[5] Seat belts should be worn every time a person is in a moving vehicle. While a law requiring the use of seat belts does exist in the Northwest Territories, compliance appears to be low. Results from a 1999 survey show that 62% of NWT residents 15 years of age and older said they always use a seatbelt when riding in a car or truck. This proportion dropped to 51% for residents of the smaller communities in the territory. It is also important to point out that studies that compared self-reported seat belt use from surveys with observed seat belt use from observational studies showed that the rate of self-reported use is substantially higher than observed.[6]

Injuries to the head or face accounted for 25% of snowmobile and 19% of ATV-related hospitalizations, yet evidence suggests that many NWT residents do not wear a helmet when operating these vehicles. Only 61% indicated they always wear a helmet when riding a snowmobile and this proportion is even lower among residents of smaller communities (33%). Meanwhile just 57% of person 15 years and older who ride ATVs indicated they always wear a helmet.

Youth and young adults are at particularly high risk of injuries from motor vehicle-related crashes. Immaturity and driving inexperience are important risk factors for this group. Youth are more likely to act impulsively, make poor decisions about the dangers in a hazardous driving situation, and engage in high-risk behaviors such as driving fast and overtaking other vehicles in a risky manner. Often the immaturity and inexperience factors interact. Risky driving leads young people into hazardous situations, and inexperience makes it difficult to cope successfully with such situations.[7]

Alcohol use is another important risk factor for injuries sustained in a motor vehicle traffic crash. On average between 1994 and 2001, alcohol was a factor in 22% of all injuries and 55% of all deaths resulting from motor vehicle traffic crashes.[8] Intoxication may also be a contributing factor in a large number of snowmobile and ATV-related injuries.

Summary

People living in the Northwest Territories rely on a variety of transportation methods including automobiles, trucks, snowmobiles and all-terrain vehicles to get around. However, injuries resulting from land transportation incidents are a major public health issue in the territory. Moreover there is no evident to suggest that the problem is improving. Both mortality and hospitalization rates have remained fairly stable over the past five to ten years. This article has shown that some groups in the territory are more at risk than others. Young males appear to have the highest risk of injury. The recent decision to introduce a graduated licensing program in the territory can be expected to have a positive impact among this group when the program comes into affect August 2005.[9] However, increased public awareness of injury prevention is also needed to reduce the consequences of these preventable injuries.

HEALTH.online
Mental Wellness Resources

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When I began to look for websites on mental health, I thought I would see what types of statistics there were on people affected by mental illnesses. According to the World Health Organization, 450 million people worldwide are affected by mental, neurological or behavioural problems at any time.[1] In Canada, 20% of Canadians will personally experience a mental illness in their lifetime, and approximately 8% will experience a major depression.[2]

The above statistics, made me begin to look at mental health in a whole new light. I know the importance of physical activity and how it helps reduce the risk of certain diseases (i.e. heart disease). However, up until now, I had not really given mental health that much thought. Now, I began to seek answers to the questions surfacing in my head - what is mental health? What can we do to optimize our mental health?

With these questions in my mind I used my trusty search engine Google to see what type of results I would get. Simply typing mental health in quotations generated 31,500,000 hits. This number was overwhelming at first but by checking the top 30, I found one website that not only answered my questions, but was also quite easy to navigate through.

The Canadian Mental Health Association (CMHA) launched their new website, www.cmha.ca, on April 18, 2005. This website is visually appealing and more importantly is user friendly. This website is also an excellent resource for anyone wanting to learn more about mental health and for people who are affected by a mental illness, as well as for health care providers who treat them.

Clicking on the *Your Mental Health* section will give information on how to improve mental health through mental fitness. This section has been divided into the following areas:

- Mind and Body Fitness;
- Stress;
- Emotional Wellness;
- Children's Mental Health;
- Mental Health and The Family;
- Aging & Mental Health.

It discusses ways of improving mental health to help cope with various challenges that may arise in various stages of life.

Another good section on this website is the *Support Centre*. The support centre allows individuals affected with a mental illness, their families, friends and health care professionals to connect with one another. The on-line discussion group, which is one of the great features in this section, offers a safe forum for anyone affected by a mental illness to share their concerns, challenges and successes, as well as keeping up to date on developments in treatment and research.

Another very helpful feature provided in this site is that it is accessible for individuals with poor or partial sight. The site provides the option to increase the font size to make reading easier. In addition, to ensure that the website is as user friendly as possible, it has print-friendly pages that print only the information and not the navigation menus.

For anyone who is interested in learning more about mental health issues, I would recommend this website as a great place to start. Also, by clicking on the *Helpful Links* (see Support Services), you will be directed to other websites dealing with mental health.

REFERENCES

1 www.who.int/mental_health/en/

2 Fast Facts: Mental Health and Mental Illness. Retrieved April 29, 2005, from http://www.cmha.ca/bins/content_page.asp?cid=6-20-23-43

NOTIFIABLE diseases

for the Northwest Territories (NWT) January - December 2004[a]

		January - December 2004	January - March 2005
		NWT	NWT
Vaccine Preventable Diseases	Hepatitis B	0	0
	Haemophilus Influenzae	0	0
	Influenzae A	0	10
	Influenzae B	0	0
	Pertussis	0	3
	Chicken Pox	41	1
Sexually Transmited/ Bloodborne Diseases	Chlamydia	649	142
	Gonorrhea	181	6
	Hepatitis C	34	3
	Hepatitis, Other	0	0
	Syphilis	0	0
Diseases by Direct Contact/ Respiratory Route	Invasive Group A Strep	3	0
	Invasive Group B Strep in neonates	0	0
	Invasive Group B Strepococcus	1	0
	Invasive Pneumococcal Disease	15	3
	Legionellosis	0	0
	Listeriosis	0	0
	Meningitis, Other Bacterial	0	0
	Meningitis, Unspecified	0	0
	Meningitis, Viral	1	0
	Meningococcal Infections	1	0
	Respiratory Syncytial Virus	41	16
	Tuberculosis	10	1
Enteric, Food and Waterborne Diseases	Botulism	0	0
	Campylobacteriosis	5	0
	Cryptosporidiosis	0	0
	E.Coli 0157:H7	3	1
	Giardiasis	12	1
	Hepatitis A	1	0
	Salmonellosis	3	0
	Shigellosis	0	0
	Tapeworm Infestation	0	0
	Trichinosis	0	0
	Yersinia	0	0
Vectorborne/Other Zoonotic Diseases	Brucellosis	0	0
	Malaria	2	0
	Rabies Exposure	10	2
Antibiotic Resistant Microorganisms	Methicillin-resistant Staph.Aureus	10	10
	Vancomycin-resistant Enterococci	0	0

NWT HIV Infections Reported from 1987 to 2004

	Age Group at Diagnosis								*Gender*		*Risk Category*					
Total	0-9	10-14	15-19	20-29	30-39	40-49	50-59	60+	Female	Male	MSM[b]	MSM/ IDU[c]	IDU	Hetero-sexual	Perinatal	Blood Products
26	1	0	0	4	15	5	0	1	4	22	11	1	6	6	1	1

a Statistics are based on currently available data and previous data may be subject to change
b Men who have sex with men
c Injection Drug User