Injury in the Northwest Territories

A Descriptive Report





#### **EXECUTIVE SUMMARY**

Injury is one of the leading causes of mortality and morbidity for all residents of the Northwest Territories. It is the leading cause of death and one of the top three reasons for hospitalization for those between one and 44 year of age. Each year an estimated 30 residents die as a result of an injury and about 530 are hospitalized. Meanwhile, many more seek treatment from medical and other health professionals. The high incidence of injury-related events makes injury prevention a public health priority in the territory.

This report is intended to provide insight into the incidence and patterns of injury in the Northwest Territories. There are many ways the data can be presented and many comparisons that can be made. *Injury in the Northwest Territories: A Descriptive Report* is not meant to be exhaustive in the analysis of the data, but rather aims to provide a first look at the extent and nature of injuries in the Northwest Territories. To provide some indication of the extent to which injuries are a public health problem in the territory, injuries are compared to other causes of death and hospitalization. Moreover, mortality and hospitalization rates for unintentional and intentional injuries are compared with Canadian rates. The profile also presents trends in intentional and unintentional injury rates over time.

In the next section of the report, unintentional and intentional injury mortality and hospitalization rates are presented according to age, gender, ethnicity and community type. This analysis provides an indication of some of the groups in the territory who are most at risk of death or hospitalization due to injury.

The third section of the report examines in more detail the leading causes of injury death and hospitalization. Injuries arise from a wide range of external causes or mechanisms. Overall, suicide is the principal cause of injury death in the NWT, while falls is by far the most common cause of injury-related hospitalization. While there are many similarities in the leading causes of death and hospitalization between the sexes, age groups, ethnic groups and community of residence, there are also some differences.

Six leading causes of injury death and hospitalization, self-inflicted injuries, motor vehicle traffic crashes, other transportation-related incidents, drownings, falls, and interpersonal violence, are analyzed in more detail in the next section of the report. Comparisons are made with Canada, at risk groups within the NWT are identified and trends over time are presented. A number of risk factors are also identified and potential injury prevention strategies are identified.

Three appendices are included in this report. Appendix A provides a discussion of the methodology used, appendix B contains a number of data tables and appendix C presents a description of the Haddon Matrix, a tool often used in planning injury prevention initiatives.

Taken as a whole, the data contained in this report draw a profile of injuries in the NWT. This information provides a starting position from which to develop programs and strategies aimed at injury control. Below is a list of key findings found throughout the report presented in point form.

# **Key Findings**

#### Magnitude of the Problem

- Between 1990 and 1999, injuries accounted for 23% of all deaths among NWT residents, about the same proportion as deaths due to cancer and deaths due to cardiovascular diseases such as heart attacks and strokes.
- Injury was the leading cause of premature death, accounting for 30% of all deaths among residents less than 74 years of age, followed by cancer at 24%. More NWT residents between one and 44 years of age died as a result of injury than from all other causes combined.
- When hospitalizations due to pregnancy and childbirth are excluded, injury was the third leading reason for all hospitalizations among NWT residents between fiscal years 1995/96 and 1999/2000. It was the second leading cause of hospitalization for those between one and 44 years of age.
- After differences in the age distribution of the two populations were taken into account, NWT residents were 2.3 times more likely to die because of an injury than were Canadians as a whole.
- The injury hospitalization rate for NWT residents was 2.2 times higher than the age-adjusted Canadian rate.

# Trend in Injury Rates

- While there appeared to be a slight decline in the overall injury mortality rate in the NWT during most of the 1990s, the decrease was not statistically significant.
- There was no significant change in the hospitalization rate for all injuries between fiscal years 1995/96 and 1999/2000.

# At Risk Groups

- Injuries in the NWT tend to cluster among different groups of people determined by age, sex, ethnicity and community of residence.
- In general, over half of injury deaths and hospitalizations occur among individuals between 15 and 44 years of age. However, injuries remain a significant cause of death throughout life.
- Seniors had the highest injury related mortality and hospitalization rates. The high rate is due to the number of deaths and hospitalizations relative to the small number of people in this age category. Moreover, when injuries do occur in this group, their consequences and potential complications are often more severe
- Children less than 15 years of age had the lowest risk of injury death or hospitalization. The risk of injury death and hospitalization jumped dramatically for youth and young adults. Youth and young adults between 15 and 24 years of age had the second highest injury mortality rate and the third highest injury-related hospitalization rate.

- Males accounted for 78% of all injury deaths and 60% of all injury-related hospitalizations. The injury mortality rate for males was over three times higher than the rate for females. And men were 1.4 times more likely than women to be hospitalized due to an injury.
- The injury mortality and hospitalization rates among Inuit and Dene were over two times higher than the rates for other NWT residents.
- Individuals living in one of the smaller communities in the NWT or in one of the regional centers of Hay River, Fort Smith or Inuvik were more likely to die or be hospitalized due to an injury than were residents of Yellowknife.

# Leading Causes of Injury

- The term "injury" encompasses many types of injuries (e.g. head injuries, fractures, burns), any of which arise from a wide range of external causes or mechanisms. Suicide was the leading cause of injury mortality in the NWT, accounting for 24% of deaths.
- Motor vehicle traffic crashes involving automobiles, trucks and motorcycles know or assumed to traveling on public roads or highways accounted for 17% of all injury-related deaths.
- Injuries associated with other means of transportation including snowmobiles, other off-road motor vehicles not in traffic, and aircraft accounted for 6% of deaths. Therefore, combined, incidents involving motorized transportation accounted for 23% of all injury-related deaths in the NWT during the study period.
- Drowning was another important causes of injury mortality, accounting for 11% of deaths.
- Unintentional falls were the main cause of injury-related hospitalization, accounting for 28% of all cases.
- Self-inflicted injury was the second leading cause of injury-related hospitalization (13%) followed closely by injuries sustained from interpersonal violence (12%).
- Motor vehicle traffic crashes accounted for 8% and crashes of off-road vehicles such as snowmobiles and all terrain vehicles accounted for another 5% of injury-related hospitalizations.

#### Suicide and Self-inflicted Injury

- Across all age groups, NWT residents between 15 and 24 years of age were at the greatest risk of dying from suicide and for being hospitalized for self-inflicted injury.
- Males had a greater risk than females of suicide while females were more likely than males to be hospitalized for self-inflicted injury.
- Inuit had the highest rates of both suicide and hospitalization due to self-inflicted injury.
- The use of firearms (65%) and suffocation (hanging) (18%) were the two most common methods of suicide, followed by poisoning (14%).
- Poisoning (mainly from medication) was the most common method used in self-inflicted injury that resulted in hospitalization, accounting for 84% of the cases. Self-inflicted cuts accounted for 10%.

#### Motor Vehicle Traffic Crashes

- People between 15 and 24 years of age were at greatest risk of dying or being hospitalized as a result of motor vehicle traffic-related injuries.
- Dene had the highest risk of both deaths and hospitalizations due to motor vehicle traffic crashes.
- Residents of the regional centers and smaller communities were at higher risk of hospitalization due to this cause of injuries.

# Falls

- While falls were not a leading cause of injury mortality for NWT residents, accounting for 2% of deaths, it was one of the leading causes of injury deaths for seniors 65 years of age and older. Moreover, falls were by far the leading cause of injury-related hospitalizations. Again, seniors were at greatest risk.
- Dene and Inuit were at greater risk than other ethnic groups of being hospitalized due to fallrelated injuries. And residents of the smaller communities and regional centers were at greater risk than were residents of Yellowknife.
- Falls on the same level caused by slipping or tripping were the most common type of fall, accounting for 33% of fall-related hospitalizations. Falls from one level to another such as falls from furniture or down an embankment accounted for 20% of the cases. Meanwhile, falls from stairs or steps accounted for 13%.

# Drowning

- Drowning was one of the leading causes of injury death, however, very few hospitalizations were due to near drowning.
- Across all age groups, adults between 25 and 34 were at greatest risk of dying as a result of drowning.
- Males were much more likely than females to die from drowning. Dene and Inuit were at greater risk than other ethnic groups. Meanwhile, residents of smaller NWT communities were at greater risk than were residents of Yellowknife and the regional centers of Hay River, Fort Smith and Inuvik.
- Drowning can be classified into three major groups. Incidents that occurred while boating accounted for 42% of the cases, incidents that occurred during recreational aquatic activities such as swimming and playing in water accounted for 14%, and those that occurred when the person fell into water during non-aquatic activities such as walking or playing near water or on ice accounted for 22% of the cases.

#### Other Transportation

- Injuries resulting from the operation of snowmobiles, all-terrain vehicles and aircraft were the eight leading cause of injury death and fifth leading cause of injury hospitalization in the NWT.
- Aircraft crashes accounted for 63% of deaths in this category followed by snowmobilerelated incidents (32%). Meanwhile snowmobile incidents were the leading cause of hospitalization in this category (65%), followed by other off-road motor vehicles (17%).
- Individuals between 15 and 24 were at greater risk than other age groups of being hospitalized due to injuries sustained during the operation of an off-road motor vehicle.
- The risk of hospitalization among males was almost three times higher than the risk among females.
- Dene and Inuit were at greater risk than other ethnic groups. And residents of smaller communities were at greatest risk of being hospitalized due to injuries sustained during the operation of off-road vehicles.

# Interpersonal Violence

- Males accounted for 92% of all deaths and 68% of all hospitalizations due to interpersonal violence.
- Residents living in one of the smaller communities were at greater risk than those living in Yellowknife or one of the regional centers of being hospitalized due to injuries sustained from interpersonal violence.
- Dene and Inuit were at greater risk of than other ethnic groups to be hospitalized due to interpersonal violence.
- Injuries sustained in armed fights or brawls accounted for 68% of hospitalizations in this category, followed by cuts or stabbings (10%) and maltreatment (11%).

# **Table of Contents**

INTRODUCTION	1
Why is Injury an Important Public Health Issue?	1
Scope of the Report	2
What is an Injury?	4
Injuries in Relation to Other Health Problems	5
Comparisons with Canada	8
TRENDS IN INJURY RATES	
Mortality	11
Hospitalizations	12
WHO GETS INITIBED?	14
Age	
Gender	
Ethnicity	
Community of Residence	20
TVPES OF INITIRIES	24
Mortality	24
Hospitalizations	28
	24
SUICIDE & SELF-INFLICTED INJURY	
Low & Whe	
Historical Trends	
Risk Factors	
Implications for Prevention	
	40
MUTUR VEHICLE TREFFIC CRASHES	
Who	
Historical Trends	
Risk Factors	
Implications for Prevention	49
DROWNING	51
Comparisons with Canada	
How & Who	
Historical Trends.	
Risk Factors	54
Implications for Prevention	55
FALLS	56
Comparisons with Canada	
How & Who	
Historical Trends	60
Risk Factors	60
Implications for Prevention	61
OTHER TRANSPORTATION	
Comparisons with Canada	
How & Who	63

Historical Trends	67
Risk Factors	
Implications for Prevention	69
INTERPERSONAL VIOLENCE	
Comparisons with Canada	70
How & Who	72
Historical Trends	76
Risk Factors	76
Implications for Prevention	77
CONCLUSION	
Overview of Main Results	
Risk Factors	80
Injury Control	
APPENDIX A - Methodology	
APPENDIX B – Tables	95
APPENDIX C – The Haddon Matrix & 10 Countermeasures	
REFERENCES	171

# List of Figures

Figure 1.	PYLL Before Age 75 by Cause, NWT 1990 – 1999	1
Figure 2.	Average Annual Burden of Injury in NWT (1995 – 1998)	3
Figure 3.	Leading Causes of Death, NWT 1990 – 1999	5
Figure 4.	Leading Causes of Hospitalization, NWT 1995/96 – 1999/2000	7
Figure 5.	Injury Mortality Rates by Intent, NWT (1990- 1999) & Canada Age-adjusted (1996)	9
Figure 6.	Injury Hospitalization Rates by Intent, NWT (1995/96-1999/2000) & Canada Age-adjusted (1996/97)	10
Figure 7.	Crude Injury Mortality Rates by Year, NWT 1990 – 1999	11
Figure 8.	Age Standardized Injury Mortality Rates, NWT 1990-92 to 1997-99 (three-year rolling averages)	12
Figure 9.	Age Standardized Injury Hospitalization Rates by Year, NWT 1996/96 to 1999/2000	13
Figure 10.	Injury Mortality Rates by Age & Intent, NWT 1990 – 1999	15
Figure 11.	Injury Hospitalization Rates by Age & Intent, NWT 1995/96 – 1999/2000	16
Figure 12.	Injury Mortality Rates by Sex & Intent, NWT 1990 – 1999	17
Figure 13.	Injury Hospitalization Rates by Sex & Intent, NWT 1995/96 – 1999/2000	18
Figure 14.	Injury Mortality Rates by Ethnicity & Intent, NWT 1990 – 1999	19
Figure 15.	Injury Hospitalization Rates by Ethnicity & Intent, NWT 1995/96 - 1999/2000	20
Figure 16.	Injury Mortality Rates by Community Type & Intent, NWT 1990 – 1999	21
Figure 17.	Injury Hospitalization Rates by Community Type & Intent, NWT 1995/96 – 1999/2000	22
Figure 18.	Injury Hospitalization Rates by Community Type & Intent, NWT 1995/96 – 1999/2000 (Stay Two Days or More)	23
Figure 19.	Leading Causes of Injury Mortality, NWT 1990 – 1999	25
Figure 20.	Leading Causes of Male Injury Mortality, NWT 1990 – 1999	27
Figure 21.	Leading Causes of Female Injury Mortality, NWT 1990 – 1999	27
Figure 22.	Leading Causes of Injury Hospitalization, NWT 1995/96 - 1999/2000	29
Figure 23.	Leading Causes of Male Injury Hospitalization, NWT 1995/96 – 1999/2000	31
Figure 24.	Leading Causes of Female Injury Hospitalization, NWT 1995/96 - 1999/2000	31
Figure 25.	Suicide Rates by Sex, NWT (1990 – 1999) & Canada Age-adjusted (1996)	34
Figure 26.	Self-inflicted Injury Hospitalization Rates by Sex, NWT (1995/96 – 1999/2000) & Canada Age-adjusted (1996/97)	35
Figure 27.	Suicides by Method Used, NWT 1990 – 1999	36

Figure 28.	Self-inflicted Injury Hospitalizations by Method Used, NWT 1996/96 – 1999/2000	38
Figure 29.	Suicide Rates, NWT 1990-92 to 1997-99 (three-year rolling averages)	40
Figure 30.	Self-inflicted Injury Hospitalization Rates by Year, NWT 1995/96 to 1999/2000	40
Figure 31.	Motor Vehicle Traffic Mortality Rates by Sex, NWT 1990 – 1999 & Canada Age-adjusted 1996	42
Figure 32.	Motor Vehicle Traffic Hospitalization Rates by Sex, NWT 1995/96 – 1999/2000 & Canada Age-adjusted 1996/97	43
Figure 33.	Motor Vehicle Traffic Deaths by Person Injured, NWT 1990 – 1999	44
Figure 34.	Motor vehicle Traffic Hospitalizations by Person Injured, NWT 1995/96 – 1999/2000	46
Figure 35.	Motor Vehicle Traffic Mortality Rates, NWT 1990-92 to 1997-99 (three-year rolling averages)	48
Figure 36.	Motor Vehicle Traffic Hospitalization rates by Year, NWT 1995/96 to 1999/2000	48
Figure 37.	Drowning Rates, NWT 1990 –1999 & Canada Age-adjusted 1996	51
Figure 38.	Drownings by Activity of Deceased, NWT 1990 – 1999	52
Figure 39.	Drowning Rates, NWT 1990-92 to 1997-99 (three-year rolling averages)	54
Figure 40.	Hospitalization Rates due to Falls by Sex, NWT 1995/96 – 1999/2000 & Canada Age-adjusted 1996/97	56
Figure 41.	Hospitalizations due to Falls by Type, NWT 1996/96 – 1999/2000	57
Figure 42.	Hospitalization Rates due to Falls by Year, NWT 1995/96 to 1999/2000	60
Figure 43.	Other Transportation Mortality Rates, NWT 1990 – 1999 & Canada Age-adjusted 1996	62
Figure 44.	Other Transportation Hospitalization Rates, NWT 1995/96 – 1999/2000 & Canada Age-adjusted 1997/98	63
Figure 45.	Other Transportation Injury Deaths by Type, NWT 1990 – 1999	64
Figure 46.	Other Transportation Injury Hospitalizations by Type, NWT 1995/96 – 1999/2000	66
Figure 47.	Other Transportation Hospitalization Rates by Year, NWT 1995/96 to 1999/2000	68
Figure 48.	Homicide Rates, NWT 1990 – 1999 & Canada Age-adjusted 1996	71
Figure 49.	Hospitalizations due to Assaults by Sex, NWT 1995/96 – 1999/2000 & Canada Age-adjusted 1996/97	72
Figure 50.	Homicides by Method Used, NWT 1990 – 1999	72
Figure 51.	Hospitalizations due to Assaults by Method Used, NWT 1995/96 - 1999/2000	74
Figure 52.	Interpersonal Violence Hospitalizations by Year, NWT 1995/96 to 1999/2000	76

# List of Tables

Table 1:	Leading Causes of Death by Age Group, NWT 1990 – 1999	6
Table 2:	Leading Causes of Hospitalization by Age Group, NWT 1995/96 – 1999/2000 (except pregnancy related)	8
Table 3:	Leading Causes of Injury Death by Age Group, NWT 1990 – 1999	26
Table 4:	Leading Causes of Injury Death by Ethnicity & Community Type, NWT 1990 – 1999	28
Table 5:	Leading Causes of Injury Hospitalization by Age Group, NWT 1995/96 – 1999/2000	30
Table 6:	Leading Causes of Injury Hospitalization by Ethnicity & Community Type, NWT 1995/96 – 1999/2000	32
Table 7:	Suicides by Various Characteristics, NWT 1990 – 1999	37
Table 8:	Self-inflicted Injury Hospitalizations by Various Characteristics, NWT 1995/96 – 1999/2000	39
Table 9:	Motor Vehicle Traffic Deaths by Various Characteristics, NWT 1990 – 1999	45
Table 10:	Motor Vehicle Traffic Hospitalizations by Various Characteristics, NWT 1995/96 – 1999/2000	47
Table 11:	Drowning Deaths by Various Characteristics, NWT 1990 – 1999	53
Table 12:	Deaths due to Falls by Various Characteristics, NWT 1990 – 1999	58
Table 13:	Hospitalizations due to Falls by Various Characteristics, NWT 1995/96 – 1999/2000	59
Table 14:	Other Transportation Deaths by Various Characteristics, NWT 1990 – 1999	65
Table 15:	Other Transportation Hospitalizations by Various Characteristics, NWT 1995/96 – 1999/2000	67
Table 16:	Deaths due to Interpersonal Violence by Various Characteristics, NWT 1990 – 1999	73
Table 17:	Hospitalizations due to Interpersonal Violence by Various Characteristics, NWT 1995/96 – 1999/2000	75
Table A1:	Injury Mortality Rates by Age Groups & Intent, NWT 1990 – 1999 & Canada 1996	96
Table A2:	Injury Hospitalization Rates by Age Group & Intent, NWT 1995/96 – 1999/2000 & Canada 1996/97	97
Table A3:	Injury Mortality by Year & Intent, NWT 1990 to 1999	98
Table A4:	Age Standardized Injury Mortality Rates by Year & Intent (three-year rolling averages), NWT 1990/92 to 1997/99	99
Table A5:	Injury Hospitalizations by Fiscal Year & Intent, NWT 1995/96 to 1999/2000	100
Table A6:	Injury Mortality by Age Group & Intent, NWT 1990 – 1999	101
Table A7:	Injury Hospitalizations by Age Group & Intent, NWT 1995/96 - 1999/2000	102

Table A8:	Injury Mortality by Age Group, Sex & Intent, NWT 1990 – 1999	103
Table A9:	Injury Hospitalizations by Age Group, Sex & Intent, NWT 1995/96 – 1999/2000	104
Table A10:	Injury Mortality by Age Group, Ethnicity & Intent, NWT 1990-1999	105
Table A11:	Injury Hospitalizations by Age Group, Ethnicity & Intent, NWT 1995/96 – 1999/2000	106
Table A12:	Injury Morality by Age Group, Community Type & Intent, NWT 1990 – 1999	107
Table A13:	Injury Hospitalizations by Age Group, Community Type & Intent, NWT 1995/96 – 1999/2000	108
Table A14:	Injury Hospitalizations by Age Group, Community Type & Intent, Total Hospita Stay Two Days or More, NWT 1995/96 – 1999/2000	l 109
Table A15:	Injury Mortality by Mechanism & Intent, All Ages, NWT 1990 – 1999	110
Table A16:	Injury Mortality by Mechanism & Intent, 0 – 14 Years of Age, NWT 1990 – 1999	111
Table A17:	Injury Mortality by Mechanism & Intent, 15 – 24 Years of Age, NWT 1990 – 1999	112
Table A18:	Injury Mortality by Mechanism & Intent, 25 – 34 Years of Age, NWT 1990 – 1999	113
Table A19:	Injury Mortality by Mechanism & Intent, 35 – 44 Years of Age, NWT 1990 – 1999	114
Table A20:	Injury Mortality by Mechanism & Intent, 45 – 64 Years of Age, NWT 1990 – 1999	115
Table A21:	Injury Mortality by Mechanism & Intent, 65 Years & Older, NWT 1990 – 1999	116
Table A22:	Injury Mortality by Mechanism & Intent, Males, NWT 1990 – 1999	117
Table A23:	Injury Mortality by Mechanism & Intent, Females, NWT 1990 – 1999	118
Table A24:	Injury Mortality by Mechanism & Intent, Dene, NWT 1990 – 1999	119
Table A25:	Injury Mortality by Mechanism & Intent, Inuit, NWT 1990 – 1999	120
Table A26:	Injury Mortality by Mechanism & Intent, Metis & Non-Aboriginal, NWT 1990 – 1999	121
Table A27:	Injury Mortality by Mechanism & Intent, Yellowknife, NWT 1990 – 1999	122
Table A28:	Injury Mortality by Mechanism & Intent, Regional Centers, NWT 1990 – 1999	123
Table A29:	Injury Mortality by Mechanism & Intent, Smaller Communities, NWT 1990 – 1999	124
Table A30:	Injury Hospitalizations by Mechanism & Intent, All Ages, NWT 1995/96 – 1999/2000	125
Table A31:	Injury Hospitalizations by Mechanism & Intent, 0 – 14 Years of Age, NWT 1995/96 – 1999/2000	126

Table A32:	Injury Hospitalizations by Mechanism & Intent, 15 – 24 Years of Age, NWT 1995/96 – 1999/2000	.127
Table A33:	Injury Hospitalizations by Mechanism & Intent, 25 – 34 Years of Age, NWT 1995/96 – 1999/2000	.128
Table A34:	Injury Hospitalizations by Mechanism & Intent, 35 – 44 Years of Age, NWT 1995/96 – 1999/2000	.129
Table A35:	Injury Hospitalizations by Mechanism & Intent, 45 – 64 Years of Age, NWT 1995/96 – 1999/2000	.130
Table A36:	Injury Hospitalizations by Mechanism & Intent, 65 Years & Older, NWT 1995/96 – 1999/2000	.131
Table A37:	Injury Hospitalizations by Mechanism & Intent, Males, NWT 1995/96 – 1999/2000	.132
Table A38:	Injury Hospitalizations by Mechanism & Intent, Females, NWT 1995/96 – 1999/2000	.133
Table A39:	Injury Hospitalizations by Mechanism & Intent, Dene, NWT 1995/96 – 1999/2000	.134
Table A40:	Injury Hospitalizations by Mechanism & Intent, Inuit, NWT 1995/96 – 1999/2000	.135
Table A41:	Injury Hospitalizations by Mechanism & Intent, Metis & Non-Aboriginal, NWT 1995/96 – 1999/2000	.136
Table A42:	Injury Hospitalizations by Mechanism & Intent, Yellowknife, NWT 1995/96 – 1999/2000	.137
Table A43:	Injury Hospitalizations by Mechanism & Intent, Regional Centers, NWT 1995/96 – 1999/2000	.138
Table A44:	Injury Hospitalizations by Mechanism & Intent, Smaller Communities, NWT 1995/96 – 1999/2000	.139
Table A45:	Mortality Rates, NWT (1990 – 1999) & Canada (1996) Self-inflicted Injury Hospitalization Rates, NWT (1995/96 – 1999/2000) & Canada (1996/97)	.140
Table A46:	Suicides by Various Characteristics, NWT 1990 –1999	.141
Table A47:	Hospitalizations due to Self-inflicted Injury by Various Characteristics, NWT 1995/96 – 1999/2000	.142
Table A48:	Suicide Rates by Year (three-year rolling averages), NWT 1990/92 to 1997/99	.143
Table A49:	Self-inflicted Injury Hospitalization Rates by Year, NWT 1995/96 – 1999/2000	.144
Table A50:	Mortality Rates due to Motor Vehicle Traffic Crashes, NWT (1990 – 1999) & Canada (1996) & Hospitalization Rates due to Motor Vehicle Traffic Crashes, NWT (1995/96/2000) & Canada (1996/97)	.144
Table A51:	Motor Vehicle Traffic Mortality by various Characteristics, NWT 1990 – 1999	.145

Table A52:	Motor Vehicle Traffic Hospitalizations by Various Characteristics, NWT 1995/96 – 1999/2000	146
Table A53:	Motor Vehicle Traffic Mortality Rates by Year (three-year rolling averages) NWT 1990 – 1999	147
Table A54:	Motor Vehicle Traffic Hospitalizations by Year, NWT 1995/96 – 1999/2000	147
Table A55:	Use Seatbelts when Riding in a Car or Truck by Selected Characteristics, NWT 1999	148
Table A56:	Drowning Rates, NWT 1990 – 1999 & Canada 1996	149
Table A57:	Drowning Mortality by Various Characteristics, NWT 1990 – 1999	150
Table A58:	Drowning Deaths by Year (three-year rolling averages), NWT 1990 – 1999	151
Table A59:	Use of Lifejacket in a Boat by Selected Characteristics, NWT 1999	152
Table A60:	Mortality Rates due to Falls, NWT (1990 – 1999) & Canada (1996); Hospitalization Rates due to Falls, NWT (1995/96 – 1999/2000) & Canada (1996/97)	on 153
Table A61:	Deaths due to Falls by Various Characteristics, NWT 1990 – 1999	154
Table A62:	Hospitalizations due to Falls by Various Characteristics, NWT 1995/96 – 199/2000	155
Table A63:	Hospitalizations due to Falls by Year, NWT 1995/96 – 1999/2000	156
Table A64:	Mortality Rates due to Other Transportation, NWT (1990 – 1999) & Canada (1996) & Hospitalization Rates due to Other Transportation, NWT (1995/96 – 1999/2000) & Canada (1997/98)	157
Table A65:	Other Transportation Mortality by various Characteristics, NWT 1990 – 1999	158
Table A66	Other Transportation Hospitalizations by Various Characteristics, NWT 1995/96 – 1999/2000	159
Table A67:	Other Transportation Hospitalization Rates by Year, NWT, 1995/96 – 1999/2000	160
Table A68:	Use a Helmet when Riding a Snowmobile by Selected Characteristics, NWT 1999	161
Table A69:	Use a Helmet when Riding an ATV by Selected Characteristics, NWT 1999	162
Table A70:	Mortality Rates due to Interpersonal Violence, NWT (1990 – 1999) & Canada (1996) & Hospitalization Rates due to Interpersonal Violence, NWT (1995/96 – 1999/2000) & Canada (1997/98)	163
Table A71:	Interpersonal Violence Mortality by Various Characteristics, NWT 1990 – 1999	164
Table A72:	Interpersonal Violence Hospitalizations by Various Characteristics, NWT 1995/96 – 1999/2000	165
Table A73:	Interpersonal Violence Hospitalization Rates by Year, NWT 1995/96 – 1999/2000	166
Table C1:	Haddon matrix; Factors Associated with Motor Vehicle Crashes in Rural Areas	168
Table C2:	Haddon Matrix Applied to the Problem of Motor vehicle Crashes in Rural Areas	169

#### **INTRODUCTION**

#### Why is Injury an Important Public Health Issue?

Injury is one of the most serious public health issues affecting residents of the Northwest Territories. About one quarter of all deaths between 1990 and 1999 were due to injuries. It was the leading cause of death for residents between one and 44 years of age. When hospitalizations due to pregnancy and childbirth are excluded, injuries were the main third leading cause of all hospitalizations among NWT residents between 1995 and 1999.

A serious injury affects everyone who is involved in the injured person's life. With a fatal injury, family, friends and other members of the community feel the loss. In addition to experiencing grief, families may experience the loss of income or a primary caregiver as well. Serious non-fatal injuries sometimes result in long-term or permanent disability, chronic pain and a change in lifestyle. If family members are called upon to care for the injured person, this can result in stress, time away from work and possible loss of income. The community and society at large is also impacted by injuries. A community may lose the contribution a person makes to its social, political and cultural life. Moreover, society in general must bear the financial costs of injuries. For the fiscal year 2001, injuries cost the NWT health care system an estimated \$7.5 million. This estimate includes costs associated with hospital and physician care, nursing care in community health centers and the transportation of injured patients to receive medical attention.<sup>1</sup>

Injuries also have significant indirect costs. One of the most important is the lost of productivity associated with premature death of community members. The potential years of life lost (PYLL) indicator provides a useful statistical measure of premature death and, thus, the loss of productivity to society, as it assigns a heavier weight to deaths occurring at younger ages. Between 1990 and 1999, there were 28,699 potential years of life lost in the Northwest Territories. Because of the relatively large number of deaths occurring at a relatively younger age, injuries accounted for 43% of them, compared to 15% for cancer and 10% for circulatory diseases.

#### Figure 1



#### PYLL Before Age 75 by Cause, NWT 1990 - 1999 (PYLL=28,699)

Source: NWT Vital Statistics

Contrary to the popular belief, injuries are not the result of random chance over which individuals and communities have little or no control. Rather, injuries are both predictable and preventable. "While the exact moment of any injury event may not be predictable, injuries generally result from combinations of adverse environmental conditions, equipment, behaviour and personal risk factors, any or all of which can be changed."<sup>2</sup> Greater understanding of the nature and cause of injury is required to form the basis of a public health approach that can, in turn, inform the development of injury control programs. Opportunities to control injuries occur through a range of educational, environmental, and legislative approaches. We need to fully mobilize these opportunities to save lives and improve the health of residents in the Northwest Territories.

#### **Scope of the Report**

Before public health problems – including injuries – can be addressed, it is important to know how big the problem is, where it is, and whom it affects. Using information generated from routinely available data sources, the main aim of this report is to highlight the magnitude of injury as a public health problem within the Northwest Territories and to describe the pattern of injury occurrence. Comprehensive and accurate information about injury is required in order to formulate injury prevention initiatives that focus programs and resources where they are needed.

*Injury in the Northwest Territories: A Descriptive Report* presents information on injury deaths for the period 1990 to 1999, and injury related hospitalizations for the period 1995/96 to 1999/2000.<sup> $\Delta$ </sup> It was necessary to aggregate the data over several years due to the relatively small number of annual cases. When numbers are too small the rates used to summarize the burden of injury are too unstable to reliability predict what is actually happening in the population. Moreover, in the case of hospitalization data, small annual numbers along with the small population size in the Northwest Territories can potentially lead to a breach of confidentiality.

Mortality data used in this report was derived from the NWT Vital Statistics Mortality Database maintained by the Department of Health and Social Services, Government of the Northwest Territories. Hospitalization data was based on an extract of the Discharge Abstract Database maintained by the Canadian Institute for Health Information. Throughout the report the International Classification of Diseases – ninth revision (ICD-9) was used to classify deaths and hospitalizations. Events associated with injuries are classified using the codes for external cause of injury and poisoning (E-codes).

A death was counted if a valid E-code was the defined underlying cause of death, the event that initiated the chain of events leading to the death. A hospitalization was counted if a valid E-code appeared anywhere in the discharge abstract record. If a hospital separation had more than one E-code recorded, the cause of injury was reported by the first valid E-code on the record. A more detailed description of the methodology used in this report can be found in Appendix A.

There are many ways the data can be presented and many comparisons that can be made. *Injury in the Northwest Territories: A Descriptive Report* is not meant to be exhaustive in the analysis of the data, but rather aims to provide a first look at the extent and nature of injuries in the Northwest Territories. To provide some indication of the extent to which injuries are a public health problem in the territory, injuries are compared to other causes of death and hospitalization. Mortality and hospitalization rates for unintentional and intentional injuries are also compared with Canadian rates.

<sup>&</sup>lt;sup>A</sup> Hospitalization data is based on fiscal rather than calendar years.

Unintentional and intentional injury mortality and hospitalization rates are presented according to age, gender, ethnicity and community type.<sup>Δ</sup> This analysis provides an indication of some of the groups in the territory who are most at risk of death or hospitalization due to injury. The leading causes of injury death and hospitalization are also presented for each of these groups.

It is important to point out that mortality and hospitalizations represents the tip of the injury iceberg. Between 1995 and 1998, for every NWT resident who died from injury, about 18 were admitted to hospital and about 280 were seen at a community health center, hospital emergency room or physician's office.<sup>3</sup> A much larger number of less serious injuries are treated at home and not seen by a health care professional. On average during any given year during this period, 30 NWT residents died due to injury, about 530 were hospitalized and about 8,400 were seen in a hospital emergency room, community health center or physician's office.



#### Figure 2 Average Annual Burden of Injury in NWT (1995 – 1998)

Along with knowing what type of injury affects whom, it is also important to know what factors put people at risk for different types of injury? The network of risk factors that produce injuries is complex and, in most cases, involves the community in which the person lives. Cohort studies based on approaches that take into account the interaction of social, cultural and environmental factors and the impact these population variables have on individual behaviour are the best means to understand injury risk and etiology. These types of studies are beyond the scope of this report. However, using data from one cross-sectional survey of NWT residents and findings from coroners' investigations, this report does suggest major risk factors for a number of injury types. While more research is needed in this area, it is hoped that this limited analysis of behavioural risk factors will shed some light on why some NWT residents are at greater risk of injury. At the very least, this report should contribute to a more complete understanding of injuries as a public health issue in the Northwest Territories.

<sup>&</sup>lt;sup>A</sup> Ethnicity is categorized into the following three groups: Dene, Inuit and Non-Aboriginal/Metis. Community type refers to the place of residence at the time of death or hospitalization and includes the following three groups: Yellowknife, "Regional Centers" (Hay River, Fort Smith and Inuvik), and "Smaller Communities" (the remaining communities in the territory).

After the burden of injury, at risk groups and risk factors have been identified, the development of injury prevention or control initiatives can be considered. It is not the intent of this report to describe the evidence supporting various injury prevention and control strategies. Rather, the data are presented in order to help identify some possible priorities and opportunities for action. *Injuries in the Northwest Territories: A Descriptive Report* is not a strategy document. Rather, it is an information resource that should prove useful to program planners, policy makers, community leaders and members of the general public interested in injuries. Further analysis can be carried out to obtain information about particular groups of individuals or regions not presented in this report. Interested individuals should contact the Government of the Northwest Territories.

#### What is an Injury?

An injury results from the exchange of energy with human tissue outside of human tolerance. The energy can be one of many forms including: mechanical (e.g., motor vehicle collision), thermal (e.g., burn), chemical (e.g., poisonings), electrical (e.g., electrocution), and radiation (e.g., radiation sickness from excessive exposure). Injury may also result from the absence of necessary elements such as oxygen or heat.<sup>4</sup> For example, drowning results from a lack of oxygen and frostbite from the lack of heat.

In general, injuries can be divided into two major groups based on the intent of the person(s) involved. Unintentional injuries, as the name implies, refers to those instances when the harmful event occurs independent of human volition. The term does not imply that the event was not preventable or anticipatory. Rather, unintentional injuries are often due to behaviours or circumstances that increase the risk of an incident leading to injury. For example, drunk driving is a major risk factor for injuries due to motor vehicle traffic crashes.<sup>5</sup> Intentional injuries describe those situations when the person intends harm, either to themselves (suicide or self-inflected injury) or harm to others (assaults, abuse or homicide). It is sometimes difficult to determine the intent of an injury. Another category, undetermined intent, is used where intent is not clear.

Although the events leading to intentional and unintentional injuries differ, the mechanisms of injury and the injuries themselves are typically similar. Ingesting a toxic substance produces the same outcome even though the spectrum of behaviour leading up to the injury can range from completely unintentional to overtly suicidal. In addition, some of the most effective preventive strategies involve changes to the environment and these can be applied regardless of intent.<sup>6</sup> For example, storing medicines and firearms in a secure location will not only reduce the likelihood of children unintentionally injuring themselves, but may also decrease suicides among distraught teenagers.

Between 1990 and 1999, 68% of injury deaths in the NWT were unintentional and 31% were intentional - suicide accounted for 24% and homicide 7%. In 1% of the cases the intention was not determined. Meanwhile, between the fiscal years 1995/96 and 1999/2000, 73% of all injury hospitalizations were unintentional, 25% were intentional – self-inflicted (13%) and assaults (12%) – and 2% were of undetermined intent.

#### **Injuries in Relation to Other Health Problems**

Measuring the overall magnitude of injury as a public health problem is important in order to outline a basis for resource allocation and develop suitable intervention strategies. While many NWT residents might consider cancer, heart disease and infectious disease as more serious threats to their health and well-being, injury is one of the leading causes of both deaths and disability in the territory.

#### Mortality

Between 1990 and 1999, injuries accounted for 23% of all deaths among NWT residents (331 individuals), about the same number as deaths due to cardiovascular diseases such as heart failure and stroke (23%), and cancer (24%). Sixteen percent of all deaths were due to unintentional injuries, while intentional injuries accounted for 7% of all deaths between 1990 and 1999.

#### Figure 3



#### Leading Causes of Death, NWT, 1990-1999 (n=1,432)

Source: NWT Vital Statistics

Further breakdowns of the leading causes of death by age provide interesting additional information on the burden of injury. Unlike cancer, heart disease and stroke, injury is more likely to affect the young. Between 1990 and 1999, the average age of injury death was 37.8 years, compared to an average age of 63.4 for all other causes (p < 0.05). Injury was the leading cause of death among NWT residents between the ages of one and 44 - a time of life when individuals are usually healthy. During the 1990's, injuries accounted for 67% of all deaths in these age groups as a whole.

More NWT residents between one and 34 years of age died as a result of injury than from all other causes combined. Injuries accounted for 81% of all deaths among residents 15 to 24 years of age and 77% among those between 25 and 34 years of age. For residents between the ages of 45 and 64, injuries ranked third behind cancer and cardiovascular disease. The number of injury deaths in this age group is still high – 58 individuals between 1990 and 1999. For residents 65 and older, injuries were the fourth leading cause of death - 47 individuals accounting for 7% of all

deaths. Among those less than one year of age, injuries ranked fourth, along with respiratory diseases – five deaths each.

# Table 1Leading Causes of Death in the NWT by Age1990-1999

				Age			
R a n k	< 1 (n = 69)	1-14 (n = 36)	15-24 (n = 84)	25-34 (n = 95)	35-44 (n = 118)	45-64 (n = 352)	65 + (n = 678)
1	Conditions in perinatal (29%)	<b>Injury</b> (69%)	<b>Injury</b> (81%)	<b>Injury</b> (77%)	<b>Injury</b> (47%)	Cancer (36%)	Cardiovascular diseases (33%)
2	Congenital anomalies (23%)	Congenital anomalies (8%)	Cardiovascular diseases (5%)	Cancer (8%)	Cancer (21%)	Cardiovascular diseases (26%)	Cancer (26%)
3	Sudden infant death syndrome (14%)	Cancer (6%)	Diseases of nervous system (4%)	Cardiovascular diseases (3%)	Cardiovascular diseases (10%)	<b>Injury</b> (16%)	Respiratory diseases (15%)
4	Injury (7%)	Various others (3%)	Cancer (4%)	Infectious diseases (3%)	Respiratory diseases (7%)	Respiratory diseases (6%)	Injury (7%)

# **Hospitalizations**

There were 3,220 hospital admissions due to injury during fiscal years 1995 to 1999. When hospitalizations due to pregnancy and childbirth are excluded, injuries were the main reason for 12% of all hospitalizations among NWT residents during this time, making it the third leading cause. Diseases of the respiratory system such as pneumonia, asthma and acute bronchitis; along with diseases of the digestive system including dental caries, diseases of the oral cavity, gastroenteritis and colitis were the two leading causes of hospitalizations. Unintentional injuries accounted for 9% and intentional injuries accounted for 3% of all hospitalizations during this period of time.

#### Figure 4

#### Leading Causes of Hospitalizations, NWT 1995/96 -

**1999/2000** (except pregnancy related) (n=22,395)



Source: CIHI, Discharge Abstract Database

Injuries requiring hospitalization were also more likely to affect children, youth and young adults. Between 1995/96 and 1999/2000, the average age of those hospitalized due to injury was 33.6 years compared to an average of 37.7 years for all other causes - excluding pregnancy related conditions (p < 0.05). NWT residents between the ages of one and 44 were more frequently hospitalized due to injury than other age group. Injury was the third leading cause of hospitalizations among children between one and 14 years of age (14%). For youth and young adults, injury was the main reason for 19% of all hospitalizations, making it the second leading cause following mental disorders (20%). Injury was the third leading cause of hospitalizations for those between 25 and 34 years of age (17%) and those 35 to 44 years of age (13%). For NWT residents between 45 and 64 years of age, injury ranked fifth at 8%. And injury accounted for 7% of all hospitalizations among seniors (the fourth leading reason).

# Table 2Leading Causes of Hospitalization in the NWT by Age1995/96-1999/2000 (except pregnancy related)

R a n k	< 1 (n = 1,816)	1-14 (n = 3,156)	15-24 (n = 2.373)	25-34 (n = 3,121)	35-44 (n = 3,200)	45-64 (n = 5,024)	65 + (n = 3,704)
1	Respiratory Conditions (51%)	Digestive Conditions (69%)	Mental Disorders (20%)	Mental Disorders (19%)	Mental Disorders (19%)	Digestive Conditions (14%)	Respiratory Conditions (19%)
2	Symptoms & Ill-defined Conditions (8%)	Respiratory Conditions (24%)	<b>Injury</b> (19%)	Digestive Conditions (18%)	Digestive Conditions (14%)	Cardiovascular Conditions (12%)	Cardiovascular Conditions (17%)
3	Digestive Conditions (7%)	<b>Injury</b> (14%)	Digestive Conditions (19%)	<b>Injury</b> (17%)	<b>Injury</b> (13%)	Mental Disorders (10%)	Digestive Conditions (11%)
4	Conditions Originating in Perinatal (6%)	Symptoms & Ill-defined Conditions (5%)	Respiratory Conditions (10%)	Genitourinary Conditions (8%)	Genitourinary Conditions (9%)	Respiratory Conditions (10%)	Injury (7%)

Age

# **Comparisons with Canada**

The magnitude of the injury problem can also be seen when the NWT is compared to Canada as a whole. Canada-wide, injuries were the cause of 6% of all deaths in 1996, compared to 23% in the NWT for the period 1990 to 1999. Unintentional injuries such as motor vehicle crashes and drowning made up 17% of all deaths in the NWT, compared to 4% in Canada. Meanwhile, intentional injuries accounted for 7% of all NWT deaths, compared to 2% in Canada.

For hospitalizations the differences between the NWT and Canada were not as great but still significant.<sup>Δ</sup> Injuries accounted for 12% of all hospitalizations in the NWT compared to 10% in Canada. Intentional injury accounted for most of this difference. In the NWT, 3% of all hospitalizations were due to assault or a self-inflicted injury, compared to 1% in Canada.<sup>7</sup> Unintentional injuries were the main reason for 9% of all NWT hospitalizations and 8% of all Canadian hospitalizations. The differences between the two jurisdictions are further highlighted when injury mortality rates and hospitalization rates are compared.

Since people in different age groups differ with respect to their risk of dying due to injury, any differences in crude rates between populations may be due to differences in their age structures

<sup>&</sup>lt;sup> $\Delta$ </sup> The term "significant" refers to statistically significant differences in rates (p < 0.05).

rather than differences in the risk of injury. To remove this effect and still provide one summary measure for the total population, it is necessary to control for differences in age distribution of the two populations. An age-adjusted rate is a common measure used to make fairer comparisons between different populations. In this study, the 1996 Canadian rates were adjusted using the NWT 1990-1999 population age distribution as the standard. (See Appendix A for a discussion of age standardization.)

#### Mortality

After differences in the age distribution of the two populations were taken into account, NWT residents were 2.3 times more likely to die because of an injury than Canadians as a whole. The average annual crude mortality rate from all injuries for the period 1990 to 1999 was 81.9 per 100,000 person-years compared to the 1996 Canadian age-adjusted rate of 35.3 per 100,000.<sup>Δ</sup> The difference between the two populations was even greater for unintentional injury deaths. The NWT crude rate of 55.7 per 100,000 was 2.7 times higher than the Canadian age-adjusted rate of 20.3 per 100,000. Meanwhile, NWT residents were 1.8 times more likely to die due to an intentional injury than Canadian as a whole (25.2 compared to 14.0 per 100,000). All of these differences are statistically significant.

Moreover, the NWT overall injury and unintentional injury mortality rates were significantly higher than the Canadian rates for every age group examined. Some of the biggest differences in overall injury rates were observed for children aged 0 to 14 years and among seniors 65 years of age and older (see Table A1, Appendix B).

#### Figure 5



# Injury Mortality Rates by Intent, NWT (1990 - 1999) & Canada Age-adjusted (1996)

\* Significant difference between NWT and Canada (p <0.05) Sources: NWT Vital Statistics & Statistics Canada

<sup>&</sup>lt;sup>A</sup> National mortality rates tend to vary little from year to year over a short period as a result the 1996 Canadian rates were used for comparison purposes.

#### **Hospitalizations**

The average annual crude hospital separation rate for NWT residents for fiscal years 1995/96 to 1999/2000 was 1,549.8 per 100,000 person-years; 2.2 times higher than the 1996/97 Canadian age-adjusted rate of 717.6 per 100,000. Meanwhile, the NWT crude unintentional injury rate for this period was 1,131 per 100,000 person-years: two times the 1996 Canadian age-adjusted rate of 579.5 per 100,000. The differences between the NWT and Canada were greater for intentional injuries. At 382.5 per 100,000 person-years, the NWT rate was 3.1 times higher than the Canadian age-adjusted rate of 125.3 per 100,000. These differences were observed across all age groups (see Table A2, Appendix B).

#### Figure 6



#### Injury Hospitalization Rates by Intent, NWT (1995/96 - 1999/2000) & Canada Age-adjusted (1996/97)

\* Significant difference between NWT and Canada (p <0.05) Sources: CIHI Discharge Abstract Database & Health Canada

#### TRENDS IN INJURY RATES

#### Mortality

Figure 16 presents the crude annual mortality rates for the total, unintentional and intentional injures between 1990 and 1999. It is evident that the rates fluctuate from year to year. For all injuries, the mortality rates ranged from a high of 102.7 per 100,000 in 1993 to a low of 62.2 in 1997. No significant trend was observed over the ten-year period. The 1999 overall injury mortality rate was similar to rates in 1990, 1991, 1994 and 1996 (see Table A3, Appendix B).

The annual mortality rates for unintentional injuries followed a similar pattern. The rates fluctuated between 1994 and 1999 from a high of 71.2 per 100,000 in 1994 to a low of 38.3 in 1997. While there appeared to a general decline in unintentional mortality rates during this six-year period, the trend was not statistically significant.

Intentional injury mortality rates tended to follow a curvilinear pattern, they were higher in the early 1990s, lower in the mid 1990s and higher again in the latter part of the 1990s. The intentional injury mortality rate was 37.3 per 100,000 in 1990, 12.3 per 100,000 in 1994 and 38.4 per 100,000 in 1999. The upward trend between 1994 and 1999 was statistically significant.

#### Figure 7





Source: NWT Vital Statistics

If rates based on a small number of cases within a small population fluctuate dramatically from year to year, it is often difficult to observe possible trends over the entire period of study. Recognizing this limitation, Figure 8 provides mortality rates based on three-year rolling averages. The calculation of rolling averages is a method sometimes used to reduce variability when the number of observations for any particular time period is small. The rates were also age standardized to control for potential changes in the age distribution of the NWT population over the ten-year period.

A gradual decline in the overall injury mortality rate in the NWT during most of the 1990s was observed, from an annual average rate of 95.2 per 100,000 person-years for the period 1992-1994 to an annual average rate of 69.1 per 100,000 person-years for the period 1997-1999. However, the decrease was not statistically significant.

There was also no significant overall trend for unintentional injury deaths during the 1990s. The rates increased from an annual average of 55.0 per 100,000 for the period 1990-92 to 67.3 per 100,000 person-years in 1992-94 and decreased again to 41.8 per 100,000 in 1997-99. Neither the rise nor decline was statistically significant.

Meanwhile, mortality rates for intentional injuries declined during the early 1990s from an annual average of 30.5 per 100,000 person-years in 1990-93 to 14.6 per 100,000 person-years in 1994-96, but rose again to 27.4 per 100,00 by 1997-99.<sup> $\Delta$ </sup> In this case, both the downward trend during the early 1990s and the upward trend during the later part of the 1990s were statistically significant (p <0.05).

#### Figure 8



#### Age Standardized Injury Mortality Rates, NWT 1990-92 to 1997-99 (three-year rolling averages)

Source: NWT Vital Statistics

#### Hospitalizations

There was no significant change in the hospitalization rate for all injuries between fiscal years 1995/96 and 1999/2000. The age standardized hospitalization rate for all injuries was 1,663.5 per 100,000 in 1995/96 compared to 1,692.6 per 100,000 in 1999/2000. Hospitalization rates due to unintentional injuries also showed no significant change during this period – 1,251.6 per 100,000 in fiscal year 1995/96 and 1,178.0 per 100,000 in 1999/2000.

The overall trend in hospitalizations due to intentional injury did not show a significant change between 1995/96 and 1999/2000. The rates were fairly constant between fiscal years 1995/96 and 1998/99 fluctuating between 316.0 per 100,000 and 385.5 per 100,000. However, the

 $<sup>^{\</sup>Delta}$  Unintentional and intentional do not add to all injuries for all time periods because rates for undetermined are not shown.

hospitalization rate due to intentional injuries jumped to 487.7 per 100,000 in 1999/2000, significantly higher than the rates for the two preceding years.<sup> $\Delta$ </sup>

#### Figure 9





Source: CIHI Discharge Abstract Database

 $<sup>^{\</sup>Delta}$  Unintentional and intentional do not add to all injuries for all time periods because rates for undetermined are not shown.

#### WHO GETS INJURED?

While injuries can potentially affect everyone, injuries tend to cluster among different groups of people. Injuries are not random events; rather, there are patterns regarding who is injured and the risk factors associated with injuries. The NWT population can by divided into different groups according to age, sex, ethnicity and where they live. All of these characteristics influence a person's life experiences and beliefs that in turn affect risk factors as well as how he or she responds to prevention efforts. By looking at which groups are affected most by injuries, it is possible to target prevention efforts where they will have the greatest impact and design prevention programs that are tailored to the needs, preferences and particular circumstance of the group.

#### Age

Injury mortality and hospitalizations differ by age and by gender. In general, most deaths and hospitalizations occur among youth and younger adults between 15 and 44 years of age. However, injuries remain an important cause of death and hospitalization throughout life. In fact, seniors have the greatest risk of dying or admission to a hospital because of an injury. The mortality rate and the hospitalization rate from injuries are actually higher among the elderly than among younger people.

#### Mortality

The number and rate of deaths from injuries varies greatly with age. The lowest number of injury deaths occurred among children less than 15 years of age (30 cases or 9% of the total). Almost all of the deaths in this age group were unintentional in nature (see Table A6, Appendix B). After the age of 15, the number of injury deaths rises dramatically, due in large part to a large increase in the number of intentional injury deaths. Youth and young adults between 15 and 24 years of age accounted for 21% of all injury deaths (68 cases) and 31% of all intentional injury deaths. A large number of injury deaths also occurred to people between 25 and 34 years of age – 73 deaths or 22% of the total. Both unintentional and intentional injuries were important for this group. The number of injury deaths declined among older age groups. The decrease was mainly due to fewer intentional injury deaths among older adults.

However, when injury mortality rates are examined, seniors older than 65 years have the highest rate (335.1 per 100,000 person-years). The high rate is due to the number of deaths relative to the small number of people in this age category. While seniors made up 3% of the NWT population during this period, they accounted for 14% of all injury deaths. The higher mortality rate may be due in part to the fact that when injuries do occur in this group, their consequences and potential complications are more severe. Almost all of the injury deaths among seniors were unintentional in nature. The unintentional injury rate for this age group was 313.3 per 100,000.

Children between 0 and 14 years of age had the lowest overall injury mortality rate at 26.3 per 100,000 person-years. Like seniors, almost all of the injury deaths in this age group were unintentional in nature. The injury mortality rate jumps dramatically to 104.5 per 100,000 person-years for those between 15 and 24 years of age. This increase is due to a jump in both unintentional and intentional rates (53.8 and 49.2 per 100,000 person-years respectively). The overall injury mortality rate declined slightly for those between 25 and 34 (87.7 per 100,000) and those between 35 and 44 (80.7 per 100,000) as a result of a decrease in the intentional injury rate

for these groups. Meanwhile, the overall injury mortality rate for those between 45 and 64 increased to 99.2 per 100,000, due primarily to an increase in the unintentional rate to 68.4 per 100,000 person-years.

#### Figure 10

#### Injury Mortality Rates by Age & Intent, NWT 1990 - 1999



\* Significant difference between unintentional and intentional injury rates (p <0.05). Source: NWT Vital Statistics

#### Hospitalizations

The greatest number of overall injury hospitalizations occurred to residents between 25 and 34 years of age (667 cases or 20%). The high number for this group was due to a large number of both unintentional and intentional injuries (see Table A7, Appendix B). The number of injury hospitalizations was about the same (approximately 550) for all other age groups expect seniors 65 years of age and older who had the lowest number (345 or 11% of all injury hospitalizations). Children less than 15 years of age had the highest number of hospitalizations due to unintentional injuries (483 cases or 21%), followed closely by residents between 45 and 64 years of age (20% or 470 cases). Meanwhile, most (58%) of the hospitalizations due to intentional injuries occurred among residents between 15 and 34 years of age.

Children between 0 and 14 had the lowest rate of injury related hospitalization (950.7 per 100,000 person-years). The rate for youth and young adults was almost two times greater (1,717.9 per 100,000 person-years). The higher rate in this group was primarily due to the higher rate of intentional injury hospitalization (708.5 per 100,000 – the highest rate of any age group). The overall injury hospitalization rate declined slightly for the next two age groups, due to a decrease in the number of intentional injury admissions. The overall rate increased again to 1,746.4 per 100,000 person-years for those between 45 and 64 years of age. At 4,495.1 per 100,000, NWT seniors had the highest injury hospitalization rate during the fiscal years 1995/96 to 1999/2000. This was almost three times higher than the NWT rate as a whole. Most of the injuries for this group were unintentional in nature.

#### Figure 11



# Injury Hospitalization Rates by Age & Intent, NWT 1995/96 - 1999/2000

\* Significant difference between unintentional and intentional injury rates (p <0.05). Source: CIHI Discharge Abstract Database

# Gender

More males died from injury than females. Between 1990 and 1999, males accounted for 78% of all injury deaths. Males made up 72% of unintentional and 89% of intentional injury deaths.<sup> $\Delta$ </sup> Among children less than 15 years of age, the number of injury deaths was about the same for both males and females (16 and 14 respectively). However, among residents between 15 and 64 years of age, the difference between males and females is dramatic. In this age group, males accounted for 84% of all injury deaths - 80% of unintentional and 90% of intentional injury deaths. For seniors, the difference between males and females narrows. Men make up 61% of injury deaths in this age group (see Table A8, Appendix B).

Figure 12 presents the overall, unintentional and intentional injury mortality rates for males and females, age-specific rates are provided in Table A8, Appendix B. The injury mortality rate for males was over three times the rate for females (122.0 vs. 37.9 per 100,000 person years). The male unintentional injury mortality rate was 2.4 times higher than the female rate (77.1 vs. 32.2 per 100,000). Meanwhile the risk of dying from an intentional injury was over seven times greater among males than females (43.0 vs. 5.7 per 100,000 person-years).

The injury mortality rate for children aged 0 to 14 years was about the same for both males and females (27.4 and 25.1 per 100,000 person-years respectively). After the age of 14, male rates were higher than female – this is so for nearly all types of injury. In general, males between the ages of 15 and 44 were 6 times more likely to die as a result of an injury than females in the same age range. The differences between the sexes were not as great for the 65 and older age group. While, the injury mortality rate among men was 1.5 times higher than the rate among women (393.2 vs. 272.8 per 100,000), the difference was not statistically significant due to the small number of cases for this group.

<sup>&</sup>lt;sup>A</sup> All four of the injury deaths of undetermined intent occurred among males.

#### Figure 12



#### Injury Mortality Rates by Sex & Intent, NWT 1990 - 1999

\* Significant difference between sexes (p <0.05) Source: NWT Vital Statistics

# **Hospitalizations**

Overall males accounted for 60% of all injury related hospitalizations, outnumbering females for all age group, except seniors. The greatest difference between the sexes occurred among residents between 25 and 34 where men made up 69% of admissions compared to 31% for women. Among seniors, women accounted for 55% of all injury related hospitalizations (see Table A9, Appendix B). Meanwhile, males accounted for 63% of unintentional injury hospitalizations. And males between 15 and 34 years of age made up 73% of hospitalizations due to this type of injuries while women accounted for 56% of unintentional injury hospitalizations among seniors. Men and women had about the same number of hospitalizations due to intentional injuries (400 vs. 395 admissions). A closer examination of intentional injuries revealed that males accounted for 68% of hospitalizations due to assaults while females accounted for 66% of hospitalizations due to self-inflicted injuries. Girls accounted for 71% of intentional injury hospitalizations in among children less than 15 years of age.

The overall hospitalization rate for males was 1,778.0 per 100,000 person-years, compared to 1,300.9 per 100,000 person-years for women. While this difference is statistically significant, in general, the differences between male and female injury hospitalization rates were not as great as the differences in injury mortality rates. Overall, men were 1.4 times more likely than women to be hospitalized due to an injury. The greatest difference between men and women occurred among those between 25 and 34 years of age; men were over two times more likely to be hospitalized due to injury (2,226.1 vs. 1,041.9 per 100,000). Hospital separation rates were higher for females over 64 years of age in comparison with males of the same age (5,044.0 vs. 3,974.5 per 100,000). However, the difference was not significant.

Males were also more likely than females to be hospitalized due to unintentional injury (1,370.4 vs. 871.3 per 100,000 person-years). However, there was no significant difference between males and females in the rate of hospitalization for intentional injuries. The male rate was 369.6 per 100,000 and the female rate was 396.5 per 100,000. There were some differences between males and females for different age groups. Girls less than 15 were more likely to be hospitalized due to intentional injury than were boys (155.6 vs. 60.9 per 100,000). Males between 25 and 34 were

more likely to be hospitalized due to intentional injury than were females in this age group (716.2 vs. 448.0 per 100,000 person-years).

#### Figure 13





\* Significant difference between sexes (p <0.05) Source: CIHI Discharge Abstract Database

# Ethnicity

The population of the NWT can be divided into four major ethnic groups: Dene or First Nations, Inuit, Metis and Non-Aboriginal. Dene mainly live in smaller communities throughout the territory and during the 1990s made up 29% of the total population. Inuit live mainly in the northern-most communities and comprised 10% of the total territorial population. For the purposes of this report, the Metis and Non-Aboriginal population were combined. These two groups live mainly in the southern part of the territory in large regional centers and Yellowknife and together comprised 61% of the total population.

# **Mortality**

Between 1990 and 1999, 42% of all injury deaths occurred among the Dene population. Meanwhile, Inuit made up 20%, and Metis and Non-Aboriginal groups (referred to as "Other") accounted for 38%. Most of the injury deaths among children 0 to 14 years of age and seniors occurred among the Dene population (see Table A10, Appendix B). The same pattern was observed for unintentional injury deaths - Dene accounted for 48%, Inuit 28%, and Metis and Non-Aboriginals 33%. However, Metis and Non-Aboriginals accounted for 47% of intentional injury deaths while Inuit made up 25%, and Dene 27%.

Between 1990 and 1999, the Inuit had the highest overall average annual injury mortality rate (162.2 per 100,000 person-years) followed by Dene (121.4 per 100,000).<sup> $\Delta$ </sup> These two rates,

 $<sup>^{\</sup>Delta}$  The apparent discrepancy between the lower number of injury cases and higher injury rates among the Inuit can be explained by the fact that this ethnic group makes up a smaller proportion of the population of

although not significantly different from each other, were both significantly higher than the rate of 50.6 per 100,000 for other NWT residents. There were differences between ethnic groups not only in the overall death rate but also in age-specific patterns. The Inuit injury mortality rate for persons 15 to 64 years of age was 232.8 per 100,000 person years - significantly higher than both the Dene rate (126.9) and the rate for Metis and Non-Aboriginals (60.5). Meanwhile, at 50.5 per 100,000 person-years, the Dene had the highest mortality rate for children less than 15 years of age. They also had the highest rate among seniors, 65 and older (501.4 per 100,000 person-years).

For unintentional injuries, Dene and Inuit had almost identical mortality rates (95.9 and 99.2 per 100,000 person-years respectively). Both rates were significantly higher than the rate of 30.1 per 100,000 for Metis and Non-Aboriginals. However, Inuit were about three times more likely than the other ethnic groups to die due to intentional injuries. The overall Inuit intentional injury mortality rate was 62.9 per 100,000 compared to 24.6 for Dene and 19.3 for Metis and Non-Aboriginals. The differences were especially pronounced for youth and young adults.

#### Figure 14





\* Dene and Inuit significantly higher than Other; ^ Inuit significantly higher than Dene and Other (p<0.05) Source: NWT Vital Statistics

#### **Hospitalizations**

Dene accounted for 43% of all injury hospitalizations between fiscal years 1995/96 and 1999/2000. Inuit accounted for 17%, and Metis and Non-Aboriginals 40%. For Dene the greatest number of injury related hospitalizations occurred to people between 25 and 34 years of age. For Metis and Non-Aboriginals the largest number of injury related admissions occurred among people aged 25 and 34 and among those aged 35 to 44. Youth and young adults between 15 and 24 years of age had the highest number of injury related hospitalizations for Inuit (See table A11, Appendix B).

the Territory. During the study period they accounted for 10% of the total population but 20% of all injury deaths.

At 2,455.2 admissions per 100,000 person-years, Inuit had the highest hospitalization rate due to injuries, followed closely by Dene with a rate of 2,283.0 per 100,000. The rates for both of these groups were over two times higher than the Metis and Non-Aboriginal rate of 1,031.2 per 100,000 person-years. The hospitalization rates were lowest among children 0 to 14 years of age but jumped dramatically among youth and young adults between 15 and 24 years of age for all three ethnic groups. For Inuit the highest hospitalization rate for all injuries occurred among people between 35 and 44 years of age (3,779.6 per 100,000) followed closely by seniors (3,539.7 per 100,000). Senior had the highest rate among Metis and Non-Aboriginals (3,359.8 per 100,000). And at 5,746.1 separations per 100,000 person-years, Dene seniors had the highest rate of any group.

Dene and Inuit had similar average annual hospitalization rates for unintentional injuries (1,601.2 and 1,523.2 per 100,000 respectively). Both were significantly higher than the rate for the other ethnic groups (832.5 per 100,00). For Dene hospitalization rates due to unintentional injuries tended to increase with age. For the other ethnic groups there was a small spike for persons between 15 and 24, but the rates were highest for individuals 45 years of age and older (See table A11, Appendix B).

Intentional injury hospitalization rate was highest for Inuit (877.5 per 100,000). This rate was significantly higher than the Dene rate of 611.3 per 100,000, which in turn was significantly higher than the rate of 183.5 per 100,000 for the other ethnic groups. Inuit between 35 and 44 years of age had the highest hospitalization rate due to intentional injuries (1,889.8 per 100,000), three times higher than Dene in the same age group and 10 times higher than Metis and Non-Aboriginals.

#### Figure 15



# Injury Hospitalization Rates by Ethnicity & Intent, NWT 1995/96 - 1999/2000

\* Dene and Inuit significantly higher than Other; ^ Inuit significantly higher than Dene (p < 0.05) Source: CIHI Discharge Abstract Database

#### **Community of Residence**

The population size of most communities in the Northwest Territories is too small to allow individual community analysis. Therefore, the communities were grouped into three categories: Yellowknife, regional centers (Hay River, Fort Smith, and Inuvik), and other smaller

communities (the remaining communities in the NWT). The three community types group communities with similar socio-demographic characteristics. During the study period 33% of the territorial population lived in one of the smaller communities, 24% lived in one on the regional centers and 43% lived in Yellowknife.

#### Mortality

Residents of the smaller communities in the NWT accounted for nearly half (47%) of all injury deaths between 1990 and 1999, individuals living in the regional centers of Fort Smith, Hay River and Inuvik accounted for 25%, and Yellowknife residents accounted for 28% of all injury deaths. There were some variations in this distribution between age groups. For example, residents of the smaller communities accounted for the majority of overall injury deaths for children less than 15 years of age (73%) and seniors 65 and older (59%). Meanwhile, youth and young adults living in Yellowknife accounted for 41% of injury deaths for this age group. Generally, the same distribution was observed for both unintentional and intentional injuries (see Table A12, Appendix B).

Individuals who live in one of the smaller communities in the NWT or in one of the regional centers of Hay River, Fort Smith or Inuvik were more likely to die from an injury than those who live in Yellowknife. The injury mortality rates for these three community types were 117.5 per 100,000 person-years for the smaller communities, 86.5 per 100,000 for the regional centers and 53.2 per 100,000 for Yellowknife residents.

The same pattern was observed for unintentional injuries where the mortality rates for residents of the smaller communities and the regional centers were significantly higher than the rates for residents of Yellowknife (82.1, 60.4 and 33.5 per 100,000 respectively). While residents of the smaller communities also had the highest intentional injury morality rate (35.4 per 100,000), compared to 24.0 for the regional centers and 18.5 for Yellowknife, the differences were not statistically significant.

#### Figure 16





\* Smaller communities and regional centers significantly higher than Yellowknife (p < 0.05) Source: NWT Vital Statistics

#### **Hospitalizations**

The number of hospital separations due to injury was evenly divided between the three community types. Thirty-one percent of all separations involved Yellowknife residents, the regional centers account for 33%, and residents of the remaining smaller communities made up 36%. This general distribution was observed for all age groups except seniors (see Table A13, Appendix B). For those 65 years of age and older, Yellowknife residents made up 17% of all injury related hospitalizations compared to 48% for residents of the smaller communities and 36% for the regional centers.

Residents of the smaller communities accounted for 34% of hospitalizations due to unintentional injury, residents of the regional centers accounted for 33% and residents of Yellowknife 33%. Seniors who live in the smaller communities accounted for nearly half (47%) of unintentional injury hospitalizations compared to 37% for regional centers and 17% for Yellowknife. Residents of the smaller communities made up 38% of intentional injury hospitalizations – compared to 31% for residents of the regional centers and 31% for Yellowknife residents.

The overall injury hospitalization rate was highest among residents of the regional centers (2,198.2 per 100,000 person-years) followed by residents of the smaller communities (1,660.1 per 100,000) and Yellowknife (1,126.0 per 100,000). This pattern was observed across all age groups. In general, residents of the regional centers were two times more likely to be hospitalized due to an injury than residents of Yellowknife and 1.3 times for likely than residents of the smaller communities.

The same was true for unintentional injuries where residents of the regional centers were 1.9 times more likely to be hospitalized than residents of Yellowknife and 1.4 times more likely than residents of the smaller communities (1,619.2 per 100,000 person-years compared to 850.6 and 1,164.8 per 100,000 respectively). For intentional injuries, residents of the regional centers and the smaller communities had similar hospitalization rates (506.6 and 443.0 per 100,000 respectively), both nearly two times higher than the rate among Yellowknife residents (272.0 per 100,000).

#### Figure 17





\* Smaller communities and regional centers significantly higher than Yellowknife;

^ Regional centers significantly higher than smaller communities (p < 0.05)

Source: CIHI Discharge Abstract Database
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. For example, the same person may be admitted several times for follow-up treatment of the same injury and would be counted in each case. Individuals living in communities where a hospital is located may be more likely to be hospitalized for follow-up treatment of the same injury and/or observation/treatment of more minor injuries than residents who live in the smaller communities where follow-up and/or treatment of more minor injuries can be done at the community health center.<sup> $\Delta$ </sup> On the other hand, limited evidence suggests that for some types of injuries – for example, fracture of a limb without complications – hospitalization may be more likely for residents of smaller communities than residents of towns where a hospital is located who receive treatment on an outpatient basis.

It is difficult to determine what impacts these factors have on differences in injury hospitalization rates for residents of the three types of communities examined. However, the system for transferring seriously injured patients from smaller communities to hospitals is well established in the NWT. Therefore, hospitalization data should provide a good record of the overall patterns of more severe nonfatal injuries. 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.

When the analysis is limited to hospitalizations where the patient's length of stay was two or more days – a rough indicator of more serious injuries – the differences between the regional centers and the smaller communities disappeared. In this case, the hospitalization rate for regional center residents was 1,021.6 per 100,000 person-years compared to a rate of 1,055.9 per 100,000 for residents of the smaller communities; both were significantly higher than the rate for Yellowknife residents – 604.1 per 100,000 person-years –(see Table A14, Appendix B).

#### Figure 18

# Injury Hospitalization Rates by Comunity Type & Intent, NWT 1995/96 - 1999/2000 (Stay 2 Days or More)



\* Regional centers and smaller communities significantly higher than Yellowknife; ^ Smaller communities significantly higher than regional centers (p < 0.05) Source: CIHI Discharge Abstract Database

 $<sup>^{\</sup>Delta}$  There are four hospitals in the NWT, one in Yellowknife and one in each of the three regional centres. Community health centre are located in most of the smaller communities.

# **TYPES OF INJURIES**

The following section provides the percentage of injury deaths and hospitalizations for specific groups of Northwest Territory residents. The proportions of injury deaths and hospitalizations show the relative importance of different causes among specific groups but do not tell which groups have the highest *rates* or risk of injury. For example, motor vehicle traffic crashes cause 23% of all injury deaths for ages 0 to 14 years compared with 12% for ages 25 to 34, but the mortality *rate* from this cause is higher among the 25 to 34 year olds (10.8 vs. 6.1 per 100,000 person-years). The analysis of the major causes of injury death and hospitalization found later in this report provides rates for specific groups where there are adequate numbers to permit the calculation. In this way it would be possible to identify high-risk groups for the specific major causes of injury examined.

The International Classification of Diseases (ICD-9) was used to classify deaths and hospitalizations. Events associated with injuries are classified using the codes for external cause of injury and poisoning (E-codes). Various E-codes were grouped together to form the categories described below. These categories are based on the framework developed by the Centers for Disease Control and the National Center for Health Statistics in the United States.<sup>8</sup> The framework forms a matrix with the mechanism along one axis and intent along the other axis (e.g., poisoning as the mechanism with suicide as the intent). The categories within the matrix are mutually exclusive. A number of additional categories were included for presentation of the NWT data. The list of E-codes found in each category can be found in Appendix C.

#### Mortality

Suicide was the leading cause of injury death between 1990 and 1999, based on 78 recorded deaths (24%). Motor vehicle traffic crashes were the second leading cause of injury deaths (55 cases or 17%). This category 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 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.

Drowning was the third leading cause (11%). This category includes deaths from drowning and submersion where the person fell into the water while boating. It also includes incidents where the person fell into the water from shore or through ice or drowned while swimming.

Unintentional poisoning was the fourth leading cause of injury death (9%). This category includes unintentional deaths due to the toxic effects of drugs and other medicinal substances, alcohol, food, other solid and liquid substances as well as gases such as carbon monoxide. It does not include deaths resulting from "drugs, medicinal and biological substances causing adverse effects in therapeutic use."

Environmental factors made up 7% of all injury deaths and almost all were due to exposure to excessive cold weather conditions. This category also includes deaths caused by bites and stings of insects and animals, deaths associated with cataclysmic storms including floods, deaths due to excessive heat, and deaths due to hunger.

Fires and burns also accounted for 7% of all injury deaths. This category includes deaths caused by fire and flames, including those from smoke inhalation, and deaths from hot objects and substances. It does not include burns from electric current, from exposure to radiation, or from explosions of combustible material. Structural fires, mainly in private residences, are the major cause of fire and flame related deaths. Homicide also accounted for 7% of all injury deaths.

Other transport-associated deaths include those from various means of transportation including snowmobiles and all terrain vehicles as well as other off-road motor vehicles not in traffic. It also includes deaths associated with aircraft, railway and watercraft where the person did not drown. Six percent of injury deaths fell in this category.

#### Figure 19



# Leading Causes of Injury Mortality, NWT 1990 - 1999 (n=331)

Source: NWT Vital Statistics

The relative importance of various causes of fatal injury varied substantially with age (Table 3). House fires, motor vehicle traffic crashes and drowning were the main causes of death for children less than fifteen year of age. Suicide was the leading cause of injury deaths among NWT residents between the ages of 15 and 64. Motor vehicle traffic crashes were also a leading cause of injury death for this age group, ranking second for the 15 to 24 year olds and the 35 to 44 year olds, and ranking third for the 25 to 34 year olds and the 45 to 64 year olds.

Drowning was also an important cause of injury death for NWT adults, ranking third among person between 15 and 24, second among 25 to 34 year olds and fourth among the three older age groups. Homicide was in the top five causes of injury deaths for all age groups between 15 and 64 years of age. Unintentional poisoning was an important cause, ranking third among 35 to 44 year olds (18%) and second among 45 to 64 year olds (14%).

For seniors, the cause of injury death was unspecified in 35% of cases. Complications following fractures of the hip or upper leg accounted for 11 of the 16 deaths in this category, yet nothing is known about the cause of these fractures. If we assume that all of these fractures resulted from falls, complications due to falls would by far be the main cause of injury deaths among seniors (37%). Greater efforts at documenting the circumstances of injury is needed to reduce the substantial number of unspecified deaths in order to provide more useful data for injury prevention activities. Falls have been identified as the cause of 13% of injury related deaths

among seniors in the current mortality database. Exposure to excessive cold weather conditions was another important contributing cause of injury deaths for this age group accounting for 17% of the total.

Table 3		
Leading Causes of Injury Death NWT by Age Group,	NWT 1990 ·	- 1999

R a n k	0 - 14 (n = 30)	15 - 24 (n = 68)	25 - 34 (n = 73)	35 - 44 (n = 56)	45 - 64 (n = 58)	65 + (n = 46)
1	Fire & burns (30%)	Suicide (40%)	Suicide (25%)	Suicide (30%)	Suicide (19%)	Unspecified unintentional (35%)
2	Motor vehicle traffic (23%)	Motor vehicle traffic (26%)	Drowning (18%)	Motor vehicle traffic (21%)	Poisoning (14%)	Environmental (17%)
3	Drowning (17%)	Drowning Environmental Homicide (7%) each	Motor vehicle traffic Homicide Other transport (12%) each	Poisoning (18%)	Motor vehicle traffic (12%)	Falls (13%)
4	Suffocation (10%)	Other transport (6%)	Fire & burns Poisoning (5%) each	Drowning (7%)	Fire & burns Homicide Drowning (10%) each	Drowning Poisoning (9%) each
5	Other transport Suicide (7%) each	Poisoning (3%)	Environmental (4%)	Homicide (5%)	Environmental (9%) each	Suicide (7%)

Age Group

Suicide was the leading cause of injury death for males, accounting for 27% of all injury related deaths. The second leading cause of injury related death was motor vehicle traffic crashes (14%). Drowning ranked third for males, accounting for 13%, followed by unintentional poisoning and homicide.

Motor vehicle traffic crashes were the leading cause of injury related death among females accounting for 27%. Suicide ranked second (12%), followed by fire and burns – primarily house fires (10%). Meanwhile, unintentional poisoning and environmental factors – mainly exposure to cold weather conditions – each accounted for 8% of all injury related deaths among females.

#### Figure 20

# Leading Causes of Male Injury Mortality, NWT 1990-1999 (n=258)



Source: NWT Vital Statistics

#### Figure 21

# Leading Causes of Female Injury Mortality, NWT 1990-1999 (n=73)



Source: NWT Vital Statistics

Table 4 provides the leading causes of injury deaths for the three ethnic groups and community types identified in the previous section. Suicide accounted for about 33% of all injury deaths for the Inuit and 32% for Metis and Non-Aboriginal. It was the third leading cause for Dene (12%). Motor vehicle traffic crashes was the leading cause for Dene (19%), and the second leading cause for both Inuit (12%), and other ethnic groups (17%). Drowning was the second leading cause of death for Dene (16%), the third leading cause for Inuit (10%). Environmental factors such as exposure to cold weather conditions was the third leading cause for Dene (13%) and accounted for 7% for Inuit.

Suicide was the leading cause of injury death in all three community types with motor vehicle traffic crashes the second leading cause. Unintentional poisoning was the third leading cause in Yellowknife (14%). Meanwhile, drowning was the third leading cause in the smaller communities (16%), and environmental factors were the third leading cause in the regional centers (12%). Homicide was also an important cause of injury death in Yellowknife (8%) and the smaller communities (10%).

# Table 4Leading Causes of Injury Death by Ethnicity & by Community TypeNWT 1990 - 1999

	Ethnicity		<b>Community Type</b>			
R a n k	Dene (n=138)	Inuit (n=67)	Metis & Non- Aboriginal (n=126)	Yellowknife (n = 92)	Regional Centres (n = 83)	Smaller Communities (n = 156)
1	Motor vehicle traffic (19%)	Suicide (33%)	Suicide (32%)	Suicide (27%)	Suicide (27%)	Suicide (20%)
2	Drowning (16%)	Motor vehicle traffic (12%)	Motor vehicle traffic (17%)	Motor vehicle traffic (18%)	Motor vehicle traffic (18%)	Motor vehicle traffic (15%)
3	Environmental (13%)	Drowning Poisoning (10%) each	Poisoning (9%)	Poisoning (14%)	Environmental (12%)	Drowning (16%)
4	Suicide (12%)	Other transport Fire & burns (9%) each	Drowning Homicide Other transport (6%) each	Drowning Homicide (8%) each	Unspecified unintentional (8%)	Homicide (10%)
5	Homicide (9%)	Environmental (7%)	Fire & burns (5%)	Unspecified unintentional (5%)	Fire & burns (7%)	Fire & burns (9%)

# Hospitalizations

Overall, falls were the main cause of injury-related hospitalization (920 separations between fiscal years 1995/96 and 1999/2000, or 28% of all injury-related hospitalizations). This category includes falls involving steps and stairs, ladders and scaffolds, playground equipment, furniture, and other falls from one level to another. Falling as a result of slipping or tripping is also included in this category.

Self-inflicted injury was the second leading cause of injury-related hospitalizations, accounting 13% of the cases. Injuries resulting from assaults were also a significant cause, accounting for 12% of all injury-related hospitalizations. Motor vehicle traffic crashes accounted for 8%, and crashes of off-road vehicles such as snowmobiles and all terrain vehicles (ATVs) accounted for another 5%.

#### Figure 22

## Leading Causes of Injury Hospitalization, NWT 1995/95 - 1999/2000 (n=3,220)



Source: CIHI Discharge Abstract Database

The leading causes of injury-related hospitalization varied by age group. For children less than 15 years of age, falls was the leading cause (36%). Unintentional poisoning and self-inflicted injuries were also important causes for this group (8% each). Self-inflicted injuries were the leading cause for youth and young adults (26%), followed by assaults (16%). Meanwhile, assaults were the leading cause for 25 to 34 year olds (20%) followed by self-inflicted injury (16%). Falls and motor vehicle traffic crashes were also important causes for these two age groups.

Unintentional falls were the leading cause of injury-related hospitalization for persons 35 years of age and older. Self-inflicted injuries ranked second for 35 to 44 year olds, making up 16% of the cases and assaults was third at 14%. Unspecified unintentional was the second largest category for person 45 years and older and the fourth largest category among 35 to 44 year olds. About one third of the cases in this category were listed as fracture cause unspecified "E887." If most of the unspecified fractures were actually due to falls, the percentage of hospitalizations due to falls would increase considerably. More care should be taken when documenting the cause of fractures. Motor vehicle traffic crashes were also an important cause of injury hospitalization for person 35 years and older.

# Table 5 Leading Causes of Injury Hospitalizations by Age Group, NWT 1995/96 - 1999/2000

R a n k	0 - 14 (n = 550)	15 - 24 (n = 548)	25 - 34 (n = 667)	35 - 44 (n = 534)	45 - 64 (n = 576)	65 + (n = 345)
1	Falls (36%)	Self-inflicted (26%)	Assault (20%)	Falls (24%)	Falls (33%)	Falls (68%)
2	Poisoning Self-inflicted (8%) each	Assault (16%)	Self-inflicted (16%)	Self-inflicted (16%)	Unspecified unintentional (11%)	Unspecified unintentional (8%)
3	Environment Other transport Motor vehicle traffic	Falls Motor vehicle traffic (12%) each	Falls (15%)	Assault (14%)	Assault (9%)	Motor vehicle traffic Assault (4%) each
4	Struck by object (5%) each	Other transport (7%)	Motor vehicle traffic (10%)	Unspecified unintentional (7%)	Motor vehicle traffic (8%)	Overexertion Environmental Other transport
5		Cut, pierce (5%)	Unspecified unintentional (7%)	Motor vehicle traffic (6%)	Self-inflicted (7%)	(2%)

Age Group

Unintentional falls were the leading cause of injury hospitalizations for both males (27%) and females (32%). However, females were more likely than males to be hospitalized due to self-inflicted injury. Between the fiscal years 1995/96 and 1999/2000, this category made up 21% of all injury hospitalizations among females compared to 7% among males. Meanwhile, males were more likely than females to be hospitalized due to assault (13% vs. 9% of all injury related admissions).

Motor vehicle traffic crashes accounted for 8% of all injury hospitalizations for males and 7% among females. Crashes of off-road motorized vehicles accounted for 6% of all injury-related hospitalizations among males<sup> $\Delta$ </sup> compared to 3% among women. Another 3% of injury related hospitalizations among women were due to unintentional poisoning - mainly the unintentional misuse of medicinal substances - and overexertion and strenuous movement also caused 3%. Injuries sustained from being unintentionally stuck by an object or another person while engaged in sports or other activities accounted for 5% of all injury related hospitalizations among males. Meanwhile, cuts sustained from hand tools or other cutting instruments made up 4%.

 $<sup>^{\</sup>Delta}$  Snowmobile crashes accounted for most (70%) of these cases.

#### Figure 23

## Leading Causes of Male Injury Hospitalizations, NWT 1995/96 - 1999/2000 (n=1.924)



Source CIHI Discharge Abstract Database

#### Figure 24

# Leading Causes of Female Injury Hospitalizations, NWT 1995/96 - 1999/2000 (n=1,296)



Source: CIHI Discharge Abstract Database

Falls were the most frequent reason for injury-related hospitalizations for Dene (31%), and Metis and Non-Aboriginal (29%). Self-inflicted injuries along with falls were the leading causes for Inuit (21% each). Assault was the second leading cause for Dene (15%) and Inuit (14%) while self-inflicted injury ranked second for Metis and Non-Aboriginal (11%). Injury sustained in a motor vehicle traffic crash was in the top five causes of injury-related hospitalizations for all three ethnic groups. Incidents involving off-road motor vehicles were among the leading causes of injury hospitalizations for both Dene and Inuit.

The leading causes of injury-related hospitalization were similar for each of the three community types. Falls were the leading cause for all three (28% in Yellowknife, 28% in the regional centers,

and 29% in the smaller communities). Self-inflicted injury and injuries sustained during an assault were second and third for each community type. Motor vehicle traffic crashes were the fifth leading cause of injury hospitalization among Yellowknife residents (7%) and the fourth leading cause among the residents of regional centers (9%) and smaller communities (7%). Injuries sustained while riding in/on an off road motorized vehicle – primarily snowmobiles - was the fifth leading cause for residents of the smaller communities.<sup> $\Delta$ </sup>

# Table 6

# Leading Causes of Injury Hospitalization by Ethnicity & by Community Type NWT 1995/96 – 1999/2000

		Ethnicity		C		Community Type		
R a n k	Dene (n=1,393)	Inuit (n=540)	Metis & Non- Aboriginal (n=1,287)		Yellowknife (n = 1,014)	Regional Centers (n = 1,063)	Smaller Communities (n = 1,143)	
1	Falls (31%)	Falls Self-inflicted (21%) each	Falls (29%)		Falls (28%)	Falls (28%)	Falls (29%)	
2	Assault (15%)	Assault (14%)	Self-inflicted (11%)		Self-inflicted (13%)	Self-inflicted (13%)	Assault (14%)	
3	Self-inflicted (12%)	Motor vehicle traffic Other transport Unintentional unspecified (6%) each	Motor vehicle traffic (9%)		Assault (11%)	Assault (10%)	Self-inflicted (13%)	
4	Motor vehicle traffic Unintentional unspecified (7%) each	Unintentional poisoning (4%)	Assault Unintentional unspecified (7%) each		Unspecified unintentional (8%)	Motor vehicle traffic (9%)	Motor vehicle traffic (7%)	
5	Other transport (4%)	Environmental (3%)	Struck by object (6%)		Motor vehicle traffic (7%)	Unspecified unintentional (7%)	Other transport Unspecified unintentional (6%) each	

 $<sup>^{\</sup>Delta}$  This cause accounted for 4% for Yellowknife residents and 4% for residents of regional centers.

The following section of the report examines the leading causes of injury death and hospitalization in more detail. In each case, the NWT rates are compared to the Canadian rates. A more detailed description of each category is also provided. Groups within the NWT who are at a higher risk of dying or being hospitalized due to each cause of injury are identified. Finally, a brief discussion of possible risk factors and possible preventive measures is provided. This section is not intended to be comprehensive. The identification of risk factors and possible preventive measures would require further study in each case. Nor is it intended to imply that causes of injury not covered in this section are not important. If information on other topics is required, contact the Planning, Accountability and Reporting Division at the Department of Health and Social Services (867) 920-8946.

#### SUICIDE & SELF-INFLICTED INJURY

Between 1990 and 1999, 78 NWT residents died as a result of suicide, according to the vital statistics registry. This number equaled 24% of all injury deaths during this period. Between fiscal years 1995/96 and 1999/2000, NWT residents were admitted 418 times to hospital due to self-inflicted injury. This number equaled 13% of all injury-related hospitalizations, making self-inflicted injury the second leading cause of injury hospitalization in the NWT during this period.

## **Comparisons with Canada**

#### Suicides

When differences in the age structure of the two jurisdictions were taken into account, the NWT average annual crude mortality rate of 19.3 per 100,000 person-years was 1.6 times higher than the Canadian age-adjusted rate of 12.2 per 100,000. The difference between the NWT and Canada was observed for males only. The female suicide rate of 4.7 per 100,000 was very similar to the Canadian age-adjusted rate of 5.4 per 100,000. Meanwhile, males living in the NWT were 1.7 times more likely to die from suicide than were males in Canada as a whole (32.6 vs. 19.5 per 100,000).

The most significant difference between the two jurisdictions was observed for males between the ages of 15 and 24. In this group the NWT rate of 41.5 per 100,000 person-years was almost three times higher than the Canadian rate of 14.4. No statistically significant difference was observed for the other age groups (see Table A45, Appendix B).

#### Figure 25



#### Suicide Rates by Sex, NWT (1990 - 1999) & Canada Age-adjusted (1996)

\* Significant difference between NWT and Canada (p <0.05) Sources: NWT Vital Statistics & Statistics Canada

## Self-inflicted Injury Hospitalizations

With an overall crude hospitalization rate of 201.1 per 100,000 person-years, the NWT rate was 2.2 times higher than the 1996 Canadian age-adjusted rate of 90.4 per 100,000. In contrast to suicides, the greatest difference between the NWT and Canada in self-inflicted injury hospitalizations rates occurred among women. 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 (72.6 vs. 18.8 per 100,000). The NWT rate among youth between 15 and 24 years of age was 2.8 times higher than the corresponding Canadian rate (see Table A45, Appendix B).

#### Figure 26

#### Self-Inflicted Injury Hospitalization Rates by Sex, NWT (1995/96 - 1999/2000) & Canada Age-adjusted (1996/97)



\* Significant difference between NWT and Canada (p <0.05) Sources: CIHI Discharge Abstract Database & Health Canada

# How & Who

## Suicides

Fifty-one of the 78 injury deaths due to suicide (65%) were committed using a firearm. Suffocation (hanging) was the second most common method, 18%. Almost all of the remaining suicides, 14%, resulted from poisoning. Nine of the 11 individuals who took their own lives in this manner did so by taking an overdose of medication.

Within the NWT, males were nearly seven times more likely to die due to suicide than were females (32.6 vs. 4.7 per 100,000 person-years). Males accounted for 94% of all suicide by firearms and 86% of all suicide by suffocation. For females, the method of suicide most often used was poisoning.

# Figure 27 Suicides by Method Used, NWT 1990-1999 (n=87)



Source: NWT Vital Statistics

Thirty five percent of all suicide deaths occurred among persons between 15 and 24 years of age. With a mortality rate of 41.5 per 100,000, they were the highest risk age group. Firearms was the most common method by persons in this age group (67%) followed by strangulation/suffocation (26%). Firearms was also the most common method used for persons between 25 and 44 (69%). Meanwhile, 50% of older individuals took their own lives using a firearm.

Overall, Inuit had a suicide rate of 53.3 per 100,000 person years, over three times higher than other ethnic groups. Firearms was the method used in 73% of all Inuit suicides, compared to 63% for both Dene and, Metis and Non-Aboriginals. Suicide by strangulation/suffocation was the second most common method used for both Inuit and Dene, while poisoning was the second most common method used for Metis and Non-Aboriginals.

There were no statistically significant differences in the suicide rates between communities types. Firearms and suffocation were used in almost all suicides in the smaller communities, while poisoning was more common in the regional centers and Yellowknife.

Suicides by Various Characteristics NWT 1990 - 1999					
	Number	(%)	Crude Rate per 100,000		
Total	78	100%	19.3		
Female <sup>†</sup>	9	12%	4.7		
Male *	69	88%	32.6		
0 - 14 Years	2	3%	#		
15 - 24 Years **	27	35%	41.5		

18

17

14

16

22

40

25

22

31

23%

22%

18%

21%

28%

51%

32%

28%

40%

# Table 7

Source: NWT Vital Statistics

Other Communities

† Reference category

25 - 34 Years

35 - 44 Years

Other Ethnicity

Yellowknife<sup>†</sup>

Regional

45 & Older

Dene<sup>†</sup>

Inuit \*

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# Less than five cases, rate not calculated.

#### Hospitalizations due to Self-inflicted Injuries

Poisoning from drugs and medicinal substances was by far the most common method used in self-inflicted injuries that resulted in hospitalization, accounting for 75% of all cases. Another 9% were due to poisoning from other or unspecified substances. Meanwhile, 10% were due to selfinflicted cuts. A small percent (3%) of self-inflicted hospitalizations were due to injuries sustained when individuals tried to suffocate themselves.

21.6

24.5

19.4

14.1

53.3

16.1

14.4

22.9

23.3

#### Figure 28



# Self-inflicted Injury Hospitalization by Method, NWT 1995/96 - 1999/2000 (n=418)

Source: CIHI Discharge Abstract Database

Females were hospitalized for attempted suicide at a rate two times that of males (276.0 vs. 132.1 per 100,000 person-years). It seems that suicidal behaviour cannot be characterized as either a predominantly male or female phenomenon. Poisoning was the most common method of self-inflicted injury used by females and males. However, males were more likely to use other methods such as a sharp object.

Youth and young adults (15 to 24 years of age) was the highest risk age group for hospitalizations due to self-inflicted injury (rate of 438.9 per 100,000 person-years). Persons between the ages of 25 and 34 were also at an increased risk (261.5 per 100,000). Poisoning was the most common method of suicide attempt used by all age groups. Person between 15 and 34 were more likely than other age groups to intentionally injury themselves using a sharp object, 81% of all hospitalizations due to self-inflicted cuts or pierces occurred in this age group.

Inuit had the greatest risk of being hospitalized for self-inflicted injury. Their hospitalization rate of 522.9 per 100,000 person-years was significantly higher than both Dene (272.1 per 100,000) and Metis and Non-Aboriginal (109.8 per 100,000). Dene accounted for 40% of all self-inflicted injury hospitalizations and the rate for this group was also significantly higher than the Metis and Non-Aboriginal rate. Poisoning ranked as the leading method, and sharp objects the second most common method used by all three ethnic groups.

Residents of the three regional centers and the smaller communities were more likely to be hospitalized due to self-inflicted injury than were residents of Yellowknife. Overall, residents of the regional centers had the highest hospitalization rate (279.2 per 100,000 person-years). However, when hospitalization stays greater than one day were examined, residents of the smaller communities had the highest rate (136.5 per 100,000). Again, poisoning was the most common method used by residents of all three community types.

# Table 8 Self-inflicted Injury Hospitalizations by Various Characteristics, NWT 1995/96 - 1999/2000

	Number	(%)	Crude Rate per 100,000
Total	418	100%	201.1
Male <sup>†</sup>	143	34%	132.1
Female *	275	66%	276.0
0 - 14 Years	42	10%	72.6
15 - 24 Years **	140	33%	438.9
25 - 34 Years **	106	25%	261.5
35 - 44 Years	83	20%	225.0
45 & Older	47	11%	115.6
Dene *	169	40%	272.1
Inuit *	118	28%	522.9
Other Ethnicity <sup>†</sup>	131	33%	109.8
Yellowknife <sup>†</sup>	136	33%	151.0
Regional *	135	32%	279.2
Other Communities *	147	35%	213.5
Hospital Stay Two Days	or More		
Yellowknife <sup>†</sup>	67	31%	74.4
Regional *	58	26%	119.9
Other Communities *	94	43%	136.5

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# **Historical Trends**

#### **Mortality**

The trend in suicides is presented in figure 29. Because of the small number of annual suicides in the NWT, three year rolling averages were calculated to stabilize the estimated rates. Over the ten-year period the suicide rate did not change significantly. It was 19.9 per 100,00 person-years for the period 1990-92 and 24.1 per 100,000 for the period 1997-99. However, the suicide rates tended to be lower during the mid 1990s and there was a significant increase in the rate between

1994-96 and 1997-99 from 11.3 per 100,000 person-years to 24.1 per 100,000. The high rate for the period 1997-199 was due mainly to a higher than normal number of suicides in 1999.

#### Figure 29



Crude Suicide Rates: NWT 1990-92 to 1997-99 (three-year rolling averages)

Source: NWT Vital Statistics

#### **Hospitalizations**

Overall, there was no significant trend in the hospitalization rate due to self-inflicted injuries between fiscal years 1995/96 and 1999/2000. In 1995/96, there were 87 hospitalizations due to self-inflicted injury at a rate of 210.0 separations per 100,000. In 1999/2000 there were 104 hospitalizations with a rate of 249.6 per 100,000. There was a statistically significant increase between 1998/99 and 1999/2000 from 153.2 to 249.6 per 100,000.

#### Figure 30





Source: CIHI Discharge Abstract Database

#### **Risk Factors**

Suicide and self-inflicted harm are associated with a complex array of factors: psychological, social, and cultural characteristics of individuals and groups, along with environmental factors. Specific known risk factors include: social isolation, mental disorders, previous suicide attempts, suicide of family members or significant others, substance abuse, family violence, impulsiveness and/or aggressive tendencies, pending criminal proceedings, relationship loss or difficulties, easy access to lethal methods, local epidemics of suicide that have a contagious influence, and physical illness.<sup>9, 10</sup>

Poverty and the erosion of aboriginal cultures may also be contributing factors. Some individuals may be particularly vulnerable to suicide and suicidal self-injury because they have more than one risk factor, such as depression and alcohol abuse. They may also be impulsive and use highly lethal methods to attempt suicide. The importance of certain risk factors and their combination varies by age, gender and ethnicity. For example, men are less likely to seek emotional help and as a result they tend to be more socially isolated and vulnerable to suicide. Moreover, males attempting suicide are more likely to use more lethal means, such as firearms, which increase their likelihood of completing the act.

## **Implications for Prevention**

Measures that enhance resilience or protective factors are important. These protective factors could include: appropriate clinical care for mental and substance abuse disorders, easy access to clinical interventions and support, family and community support, learned skills in problem solving and conflict resolution.<sup>11</sup> Restricting access to highly lethal methods of suicide is one fairly simple measure that can be taken. This could include gun-storage boxes, trigger locks, storing guns unloaded and storing guns and ammunition in separate locations.

# **MOTOR VEHICLE TRAFFIC CRASHES**

Motor vehicle traffic crashes were the second leading cause of all injury deaths in the NWT and the leading cause of unintentional injury deaths. Between 1990 and 1999, 55 individuals died as a result of motor vehicle traffic crashes - an average of 5.5 per year. Motor vehicle traffic crashes were the second leading cause of hospitalizations due to unintentional injuries. Between fiscal years 1995/96 and 1999/2000, motor vehicle traffic crashes accounted for 246 hospitalizations or an average of 49.2 per year.

#### **Comparisons with Canada**

#### Mortality

The NWT average annual crude mortality rate of 13.6 per 100,000 person-years was significantly higher than the 1996 Canadian age-adjusted rate of 9.0 per 100,000. In other words, after controlling for differences in the age distribution of the two populations, NWT residents were 1.5 times more likely to die in motor vehicle traffic crashes than Canadians as a whole. While the NWT male mortality rate (17.0 per 100,000) was higher than the Canadian age-adjusted rate of 12.7, the difference was not statistically significant. However, the NWT female crude rate of 9.9 per 100,000 person-years was significantly higher than the Canadian age-adjusted rate of 5.4 per 100,000.

The greatest differences between the NWT and Canada occurred among individuals between 25 and 44 years of age and those between 0 and 14 years of age (see Table A50, Appendix B).

#### Figure 31

Motor Vehicle Traffic Crashes Mortality Rates by Sex, NWT (1990-1999) & Canada Age-adjusted (1996)



\* Significant difference between NWT and Canada (p <0.05) Sources: NWT Vital Statistics & Statistics Canada

# **Hospitalizations**

The NWT crude hospitalization rate of 118.4 per 100,000 person-years was significantly higher the 1996 Canadian age-adjusted rate of 90.2 per 100,000. The NWT male hospitalization rate due to motor vehicle traffic crashes was 1.3 times higher than the Canadian age-adjusted rate (146.9 vs. 112.4 per 100,000 person-years). The NWT female rate was also 1.3 times higher (87.3 vs. 67.7 per 100,000) (see Table A50, Appendix B).

#### Figure 32

Motor Vehicle Traffic Crashes Hospitalization Rates by Sex, NWT (1995/96 - 1999/2000) & Canada Ageadjusted (1999/2000)



\* Significant difference between NWT and Canada (p <0.05) Sources: CIHI Discharge Abstract Database & Health Canada

## Who

# Deaths due to Motor Vehicle Traffic Crashes

The category motor vehicle traffic crashes includes injuries resulting from motor vehicles known or assumed to be traveling on public roads or highways. Five major subcategories identifying the injured person's involvement in the traffic-related incident are presented in figure 33. These subcategories include: a) occupant of the vehicle as driver or passenger; b) motorcyclist as driver or passenger; c) pedal cyclist whose injury resulted from a collision with a motor vehicle on a public road; d) pedestrian whose injury resulted from being hit by a motor vehicle on a public road; and e) unspecified person.

In 24% of the deaths due to motor vehicle traffic incidents, the injured person was identified as an occupant of the motor vehicle. Pedestrians hit by a motor vehicle accounted for 15% of all motor vehicle traffic deaths. Among children less than 15 years of age, pedestrians accounted for 29% of motor vehicle traffic deaths. Pedal cyclists accounted for 2% of motor vehicle traffic deaths. Again, children less than 15 were more likely to be injured in this way.

In 57% of all motor vehicle traffic deaths the injured person was not identified. It is likely that when it was unknown whether the injured person was the driver or passenger in a motor vehicle, the cause of injury was coded as "unspecified person." In which case the vast majority of the injuries listed as unspecified actually occurred to occupants of a motor vehicle. This is

particularly likely in the case of a death if the death registration form was completed several days after the event. However, greater attention needs to be paid to recording detailed information surrounding an injury to facilitate better injury control measures.

#### Figure 33

# Motor Vehicle Traffic Deaths by Person Injured, NWT 1990 - 1999 (n=55)



Source: NWT Vital Statistics

Youth and young adults accounted for 33% of deaths due to motor vehicle traffic crashes. This group was at greatest risk of dying from this type of injury between 1990 and 1999. Their mortality rate of 27.7 per 100,000 person-years was 1.6 times higher than the next highest rate of 17.3 per 100,000 for those between 35 and 44 years of age.

Overall, the difference between male and female motor vehicle traffic crash mortality rates was not significantly different. However, males made up 78% of the cases for person between 15 and 34 years of age. Male mortality rate for this age group was over three times the female rate (27.4 vs. 8.4 per 100,000) and the difference was significant. It is evident that young males are one of the highest risk groups for death due to motor vehicle traffic crashes.

Dene accounted for nearly half (47%) of all injury deaths in this category. Their mortality rate of 22.9 per 100,00 person-years was nearly three times higher than the rate of 8.4 per 100,000 for Metis and Non-Aboriginals. The rate for Inuit (19.4 per 100,000) was also higher than the Metis and Non-Aboriginal rate but not significantly so. Dene residents were more likely than members of the other ethnic groups to die as a result of being stuck by a motor vehicle while standing or walking on a public road.

While residents of the smaller communities and the regional centers had higher mortality rates due to motor vehicle traffic crashes than residents of Yellowknife, the differences were not significant. Pedestrian deaths were more common in the first two groups of communities.

	Number	(%)	Crude Rate per 100,000
Total	55	100%	13.6
Female <sup>†</sup>	19	35%	9.9
Male	36	65%	17.0
0 - 14 Years	7	13%	6.1
15 - 24 Years **	18	33%	27.7
25 - 34 Years	9	16%	10.8
35 - 44 Years	12	22%	17.3
45 & Older	9	16%	12.5
Dene *	26	47%	22.9
Inuit	8	15%	19.4
Other Ethnicity $^{\dagger}$	21	38%	8.4
Yellowknife <sup>†</sup>	17	31%	9.8
Regional	15	27%	15.6
Other Communities	23	42%	17.3

# Table 9Motor Vehicle Traffic Deaths by Various CharacteristicsNWT 1990 - 1999

Source: NWT Vital Statistics

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# Hospitalizations due to Motor Vehicle Traffic Crashes

The injured person was identified as an occupant in 64% of the hospitalizations due to a motor vehicle traffic crash. Pedestrians hit by a motor vehicle accounted for 13%. And pedestrians made up 37% of motor vehicle traffic crash hospitalizations among children less than 15 years of age. Pedal cyclist accounted for 2% of hospitalizations. Again, children less than 15 were more likely to be injured in this way.

#### Figure 34

# Motor Vehicle Traffic Hospitalizations by Person Injured NWT 1995/96 - 1999/2000 (n=246)



#### Source: CIHI Discharge Abstract Database

Males were nearly twice as likely as females to be hospitalized due to a motor vehicle traffic crash (146.9 vs. 87.3 per 100,000 person-years). Of the 246 hospitalizations due to motor vehicle traffic crashes, 26% of the cases were between 15 and 24 years of age and another 26% were between 25 and 34 years. These two age groups had the highest risk of being hospitalized (200.6 and 157.9 per 100,000 respectively). The vast majority of these cases involved occupants of motor vehicles.

Dene accounted for 38% of all hospitalizations due to motor vehicle traffic crashes. They had the highest average annual hospitalization rate (154.2 per 100,000 person-years), significantly higher than the rate for Metis and Non-Aboriginals (97.4 per 100,000) who accounted for 49% of all hospitalizations in this category. The hospitalization rate for Inuit was 138.1 per 100,000, and a large proportion of hospitalizations for this group involved pedestrians.

Residents of the three regional centers accounted for 38% of all hospitalizations due to motor vehicle traffic crashes. The average annual hospitalization rate of 192.3 per 100,000 person-years was significantly higher than both the rate for Yellowknife (76.6 per 100,000) and the rate for the smaller communities (122.0 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.

# Table 10 Hospitalizations due to Motor Vehicle Traffic Crashes by Various Characteristics NWT 1995/96 - 1999/2000

	Number	(%)	Crude Rate per 100,000
Total	246	100%	118.4
Male *	159	65%	146.9
Female <sup>†</sup>	87	35%	87.3
0 - 14 Years	27	11%	46.7
15 - 24 Years **	64	26%	200.6
25 - 34 Years **	64	26%	157.9
35 - 44 Years	32	13%	86.7
45 - 64 Years	44	18%	133.4
65 & Older	15	6%	195.4
Dene *	96	39%	157.3
Inuit	30	12%	138.1
Other Ethnicity $^{\dagger}$	120	49%	96.2
Yellowknife <sup>†</sup>	69	28%	76.6
Regional *	93	38%	192.3
Other Communities *	84	34%	122.0
Hospital Stay Two Days	or More		
Yellowknife <sup>†</sup>	39	28%	43.3
Regional *	45	33%	93.1
Other Communities *	54	39%	78.4

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# **Historical Trends**

# Mortality

The trend for mortality rates due to motor vehicle traffic crashes is presented in figure 35. There was no significant change during the 1990s. In 1990-92 the annual average rate was 16.4 per 100,000 person-years compared to 11.2 per 100,000 in 1997-99.

#### Figure 35

# Motor Vehicle Traffic Mortality Rates, NWT 1990-92 to 1997-99 (three-year rolling averages)



Source: NWT Vital Statistics

#### **Hospitalizations**

The motor vehicle traffic crash hospitalization rate remained relatively stable from fiscal years 1995/96 to 1999/2000. In 1995/96, there were 58 hospitalizations at a rate of 140.0 per 100,000 compared to 55 hospitalizations in 1999/2000 at a rate of 132.0 per 100,000.

#### Figure 36

## Motor Vehicle Traffic Hospitalization Rates by Year, NWT 1995/96 to 1999/2000



Source: CIHI Discharge Abstract Database

#### **Risk Factors**

The benefits of seatbelt use in reducing the severity of injury resulting from a motor vehicle traffic crash is well established.<sup>12</sup> 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 (see Table A55, Appendix B). 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.<sup>13</sup>

Youth and young adults are at particularly high risk of injuries from motor vehicle traffic 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 behaviours 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.<sup>14</sup>

The Dene population also appears to have a higher risk of injury from motor vehicle traffic crashes, possibly due in part to greater average distances traveled over rural roads. Moreover, in rural areas, immediate access to advanced emergency medical care is limited and when an injury occurs. Another important risk factor is the non-use of seat belts when in a motor vehicle; only 58% of Dene indicated they always use a seat belt.<sup>15</sup>

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.<sup>16</sup>

## **Implications for Prevention**

Driving a motor vehicle is a complex task requiring several years to become proficient. As a result, beginning drivers are at a higher risk of crashing. On the other hand, driving practice is a required step toward becoming an experienced driver. Graduated licensing systems are meant to address this conundrum. The objective of these systems is to keep beginning drivers out of higher risk situations while they are learning. Typically, beginning drivers are first required to practice driving with an adult supervisor in the vehicle. When first licensed, unsupervised driving is allowed but restrictions are placed on higher risk driving activities such as driving after a specified time in the evening and driving with other teen passengers in the vehicle. Only after experience is gained in lower risk settings can beginners graduate to a full-unrestricted license. Systematic reviews of various studies of graduated licensing programs have concluded that the empirical basis for graduated licensing programs appear sound.<sup>17</sup>

Drinking and driving is a major risk factor for young driver. The combination of inexperience in driving with inexperience in drinking puts young drivers on two learning curves that can have dangerous consequences. Even low consumption of alcohol increases the risk among young drivers. Evidence suggests that legislation setting the blood alcohol concentration (BAC) for young drivers who are under the legal drinking age to zero can have a positive impact.<sup>18</sup>

Sobriety checkpoints have been shown to be effective in reducing the incidence of drinking and driving. These programs not only apprehend offending drivers but increase the perceived risk of apprehension by those who might otherwise decide to drink and drive. To have maximum deterrent effect, sobriety checkpoints are best used on a frequent but unpredictable schedule – maybe several times per month. If previous checkpoints are well publicized, relatively small operations involving a small number of officers have been shown to be effective. Publicity is an important factor in the deterrence value of this measure.<sup>19</sup>

There is also extensive evidence that lowering the BAC to 0.05% leads to a reduction in alcohol related crashes, injuries and deaths, as well as overall decreases in drinking and driving.<sup>20</sup> Enforcement of existing seat belt laws and campaigns to encourage seat belt use may also be of benefit.

#### DROWNING

Drowning was the third leading cause of all injury death among NWT residents and the second leading cause of unintentional injury death.

#### **Comparisons with Canada**

The NWT average annual drowning mortality rate for the period 1990 to 1999 was 9.2 per 100,000 person-years, 6.1 times higher than the 1996 Canadian age-adjusted rate of 1.5 per 100,000. Males in the NWT were 6.5 times more likely to die because of drowning than their Canadian counterparts. The average annual NWT male mortality rate due to drowning was 16.3 per 100,000 person-years, compared to the 1996 Canadian age-adjusted rate of 2.5 per 100,000 (see Table A56, Appendix B).

#### Figure 37



Drowning Rates, NWT (1990 - 1999) & Canada Age-adjusted (1996)

\* Significant difference between NWT and Canada (p <0.05) Source: NWT Vital Statistics & Statistics Canada

## How & Who

Drowning can be classified into three major groups – incidents that occur while boating, those that occur during recreational aquatic activities such as swimming and playing in water, and those that occur when the person falls into water during non-aquatic activities such as walking or playing near water or on ice.<sup>21</sup> A total of 37 individuals died unintentionally from drowning between 1990 and 1999, 42% drowned after falling out of or overturning a boat. In 14% of the cases the person drowned while engaged in recreational swimming. The person drowned after falling through ice or falling into the water from the shore in 22% of the incidents.<sup> $\Delta$ </sup>

Unfortunately, the circumstances surrounding a large number of drownings are not well documented in the vital statistics registry. The activity the drowning victim was engaged in prior

 $<sup>^{\</sup>Delta}$  The number of boating drownings may be undercounted. Nationally it is estimated that the vital statistics data undercounts boating drownings by 33-43% because of misclassification of many boating drownings as non-boating drownings.

to falling into the water was not recorded in 19% of the cases. Drowning prevention programs can best be formulated when the circumstances surrounding the incident are well documented. For example, prevention programs aimed at reducing the number of boating incidents would be very different from programs aimed at reducing the number of children who fall through thin ice.

#### Figure 38



# Drowning Deaths by Activity of Deceased, NWT 1990 - 1999 (n=37)

Source: NWT Vital Statistics

It is also important to point out that another group of drownings includes those that occur as a result of a motorized vehicle incident. Examples of these types include snowmobiles breaking through ice, automobiles plunging into a body of water, and aircraft crashing into a lake. Snowmobile incidents are of particular interest in the NWT. Drowning was the cause of death in four of the six snowmobile-related deaths during the 1990s. If these cases were classified as drowning rather than transportation-related incidents, the number of deaths due to drowning would increase to 41 and the average annual drowning injury classification frameworks used in other jurisdictions, in this report all motorized vehicle-related deaths, including those where the victim drowned, are categorized as off-road transportation crashes or motor vehicle traffic crashes. Snowmobile-related drownings are classified as a subcategory within the category of Other Transport.

Between 1990 and 1999, males accounted for 92% of all drowning fatalities in the NWT (34 of the 37 cases). Due to the small number – three cases - a female mortality rate was not calculated. Males between 25 and 34 years of age accounted for 35% of all drowning deaths in the NWT and over half (56%) of all recorded boating related drowning. Meanwhile, male youth between 15 and 24 years of age were more likely to drown as a result of recreational swimming, accounting for three of the five (60%) drowning deaths of this type. Three of the four downing deaths in this age group were a result of recreational swimming.

Drowning rates were highest among residents of rural areas. Residents of the smaller communities had a drowning mortality rate of 18.8 per 100,000 compared to a rate of 5.2 for residents of the three regional centers and 4.0 per 100,000 for residents of Yellowknife. Boating incidents were the most common type of drowning death in both the smaller communities (44% of all drownings) and in the regional centers (60% of all drownings). The circumstance

surrounding the drowning was not recorded in 28% of the cases for residents of the smaller communities.

Dene and Inuit had the highest average annual drowning rates (19.3 and 16.9 per 100,000 personyears respectively). Both rates were significantly higher than the rate for other NWT residents (3.2 per 100,000). Thirty six percent of the Dene, 43% of the Inuit, and 63% of the Metis and Non-Aboriginal drowning deaths occurred as a result of a boating incident. The circumstances surrounding 32% of the drowning fatalities for Dene were not documented.

# Table 11 Drowning Deaths by Various Characteristics NWT 1990 - 1999

	Number	(%)	Crude Rate per 100,000
Total	37	100%	9.2
Female	3	8%	#
Male	34	92%	16.1
0 - 14 Years	5	14%	4.4
15 - 24 Years	5	14%	7.7
25 - 34 Years **	13	35%	15.6
35 - 64 Years	10	27%	7.8
65 & Older	4	11%	#
Dene *	22	59%	19.3
Inuit *	7	19%	16.9
Other Ethnicity $^{\dagger}$	8	22%	3.2
Yellowknife <sup>†</sup>	7	19%	4.0
<b>Regional</b> Centers	5	14%	5.2
Other Communities *	25	68%	18.8

Source: NWT Vital Statistics

† Reference category

\* Rate significantly higher than reference category

\*\* Rate significantly higher than other age groups

# Number of cases less than five, rate not calculated.

#### **Hospitalizations**

Drowning is unique in that most people who survive submersion in water have few injuries as a direct result. During fiscal years 1995/96 through 1999/2000, just seven hospitalizations were due to near drowning. It is not possible to determine the number of other hospitalizations due to exposure or hypothermia that resulted from submersion in cold water.

## **Historical Trends**

The crude drowning death rate declined between from 14.4 per 100,000 person-years in 1991-93 to 4.8 per 100,000 person-years in 1997-99. While the difference between these two points in time was significant, overall due to the small number of cases recorded each year along with fluctuations in the number of cases from year to year, the decline in drowning rates throughout the 1990s was not statistically significant.

Figure 39

Drowning Rates: NWT 1990-92 to 1997-99 (three-year rolling averages)



Source: NWT Vital Statistics

## **Risk Factors**

Northerners are at a higher risk of drowning due to the proximity of many communities to rivers and lakes. Boats are often used during activities of daily living. Moreover, people are more likely to engage in recreational boating. The low water temperatures also increase the likelihood of hypothermia and consequent death. Soon after submersion in cold water, muscle coordination and manual dexterity is affected making swimming or holding onto an overturned boat more difficult. Cold water also makes it difficult to control breathing which leads to the inhalation of water.

Behaviour also plays a role. Failure to wear a personal flotation device (PFD) while in a boat is one of the most significant risk factors for drowning. According to coroner's reports, none of the drowning victims involved in boating incidents between 1992 and 1996 were wearing a PFD.<sup>22</sup> In a recent survey, just 53% of residents of the smaller communities in the NWT indicated they always wear a PFD when in a boat (see Table A59, Appendix B).

Alcohol use is also an important risk factor for boating related drowning, particularly among recreational boaters. A review of coroner's reports for the period 1992 to 1996 showed that alcohol was involved in 50% of all boat related drowning in the NWT.

A number of risk factors are associated with drowning while swimming, wading or playing in water. Weak swimmers may be overconfident or decide to swim in places with hazardous

currents. Teenage and young adult males are the highest risk group for swimming drownings and alcohol may be a significant factor for this group. Younger children who play in shallow water near shore are at increased risk if left unsupervised.

A non-aquatic drowning involves a victim who had not intended to be in the water, i.e., an unintentional fall into the water. During the spring, the banks of rivers and lakes may be soft and unstable or wet and slippery and children can easily lose their footing and fall in. Children are also more likely to overestimate the strength of ice and venture out onto ice that is too thin.

# **Implications for Prevention**

Educating the public is essential to developing healthy attitudes and behaviours concerning drowning prevention. The causes of drowning vary with age. For children, drowning is often associated with falling into unsupervised bodies of water or through ice. It is important that young children be supervised around water hazards. For adults drowning is more likely to result from boating incidents, sometimes in conjunction with alcohol use. Public education programs should emphasize the importance of properly using PFDs for all boaters, simply having a PFD in the boat is not enough. It is almost impossible for a boater to find and put on a PFD once immersed in water. The use of floater-suits or other hypothermia protective clothing should be encouraged for cold water boating. Since alcohol use is associated with many water-related injuries, particularly during recreational activities, interventions that make the use of alcohol socially unacceptable while boating should be explored. Sobriety checks at areas with high concentrations of recreational powerboats may be appropriate.

#### FALLS

Between 1990 and 1999, seven NWT residents died as a result of injuries sustained in an unintentional fall. The vast majority of deaths due to falls occur among seniors 65 years and older who are more at risk of dying due to complications arising from fall injuries. In the NWT, six of the seven unintentional deaths due to falls (86%) occurred among seniors over the age of 65. Between fiscal years 1995/96 and 1999/2000, NWT residents were admitted 920 times to hospital admissions due to injuries sustained in a fall. This number equaled 28% of all injury-related hospitalizations, making falls the leading cause of injury hospitalization in the NWT during this period.

#### **Comparisons with Canada**

#### Mortality

The average annual NWT crude mortality rate during this period was 1.7 per 100,000 personyears. The 1996 Canadian age-adjusted rate was 1.8 per 100,000. For seniors, the NWT mortality rate was 43.7 per 100,000 - not significantly different from the Canadian rate of 31.1 per 100,000.

#### **Hospitalizations**

With an overall crude hospitalization rate of 442.7 per 100,000 person-years, the NWT rate was significantly higher than the 1996 Canadian age-adjusted rate of 243.3 per 100,000. The difference between the NWT and Canada was observed for both males and females. After age-adjustment, the NWT female hospitalization rate was 1.8 times higher than the Canadian rate. NWT men were also 1.8 times more likely to be hospitalized due to a fall than Canadian men as a whole. The greatest difference between the two jurisdictions was observed for persons between 25 and 44. NWT hospitalization rate for NWT residents for this age group was two times higher than the Canadian rate (see Table A60, Appendix B).

#### Figure 40

## Hospitalization Rates due to Falls by Sex, NWT (1995-1999) & Canada Age-adjusted (1996)



\* Significant difference between NWT and Canada (p <0.05) Sources: CIHI Discharge Abstract Database & Health Canada

## How & Who

Of the seven deaths that occurred as a result of a fall, the nature or circumstances of the fall (for example, a fall down stairs or a fall from a ladder) was not specified in five cases. In the other two cases, the fall occurred on or from stairs. Falls on the same level after tripping or slipping were the most common type of fall resulting in hospitalization (33%). Falls from one level to another such as falls from chairs or other furniture, falls from an embankment, or from playground equipment, accounted for 20 percent of the cases. Falls on or from stairs or steps accounted for 13% of fall related injury hospitalizations. However, 28% of all fall-related hospitalizations were coded as unspecified. The age pattern of the unspecified falls resembles the pattern for falls of the same level suggesting that most of the unspecified falls occurred due to slipping or tripping on the same level.

#### Figure 41



# Hospitalizations due to Falls by Type, NWT 1995/96 - 1999/2000 (n=920)

#### Deaths due to Falls

Four of the seven fall related injury deaths (57%) occurred among females, Dene also accounted for 57% of injury deaths in this category while residents of the smaller communities accounted for 71%. As noted above, six of the seven fall related injury deaths occurred among seniors 65 years of age and older.

Source: CIHI Discharge Abstract Database

	Number	(%)	Crude Rate per 100,000
Total	7	100%	1.7
Female	4	57%	#
Male	3	43%	#
0 - 14 Years	-	-	-
15 - 24 Years	-	-	-
25 - 34 Years	-	-	-
35 - 44 Years	1	14%	#
45 - 64 Years	-	-	-
65 & Older	6	86%	43.7
Dene	4	57%	#
Inuit	1	14%	#
Other Ethnicity	2	29%	#
Yellowknife	1	14%	#
Regional	1	14%	#
Other Communities	5	71%	7.3

# Table 12Deaths due to Falls by Various CharacteristicsNWT 1990 - 1999

Source: NWT Vital Statistics

# Number of cases less than five, rate not calculated

## Hospitalizations due to Falls

Males accounted for 56% of all hospitalizations due to falls. Their average annual hospitalization rate of 472.2 per 100,000 person-years was significantly higher than the female rate of 410.6 per 100,000. The type/circumstance of falls for both male and female were similar. Both were hospitalized most often for falls caused by slipping or tripping on the same level, followed by falls from one level to another. Males were more likely than females to be injured due to a fall from a ladder or a building.

Residents 65 years and older were at greatest risk of being hospitalized for a fall-related injury between 1995/96 and 1999/2000. With an average annual rate of 3,061.9 per 100,000 per-years, seniors were 5.3 times more likely to be hospitalized from an injury sustained in a fall than were persons between 45 and 64 who had the next highest hospitalization rate at 579.1 per 100,000. For these two age groups and for all other except children less than 15 years of age, falls on the same level after slipping or tripping were most the common type, followed by unspecified falls and falls from or on stairs. Children less than 15 years of age were hospitalized most often after a fall from one level to another, mainly falls from playground equipment and falls from chairs and other furniture.
Dene residents made up nearly half (47%) of all hospitalizations due to a fall. This ethnic group along with Inuit had a higher risk of being hospitalized due to a fall injury than other NWT residents. This pattern was observed when differences in the age distribution of the ethnic groups were taken into account. Overall, residents of the regional centers had the highest hospitalization rate due to falls (624.5 per 100,000 person-years) followed by residents of the smaller communities (480.8). Both of these rates were significantly higher than the rate for Yellowknife residents (318.7 per 100,000). However, when more serious injuries, those where the person was hospitalized for two or more days, were examined, the rate for the regional centers were almost identical to the rate for the smaller communities (297.8 and 299.2 per 100,000 respectively). Both were still significantly higher than the Yellowknife rate.

	Number	(%)	Crude Rate per 100,000
Total	920	100%	442.7
Female <sup>†</sup>	409	44%	410.6
Male *	511	56%	472.2
0 - 14 Years	198	22%	342.3
15 - 24 Years	64	7%	200.6
25 - 34 Years	103	11%	254.1
35 - 44 Years	129	14%	349.7
45 - 64 Years **	191	21%	579.1
65 & Older **	235	26%	3,061.9
Dene *	433	47%	709.6
Inuit *	115	13%	522.9
Other Ethnicity $^{\dagger}$	372	40%	298.1
Yellowknife <sup>†</sup>	287	31%	318.7
Regional *	302	33%	624.5
Other Communities *	331	36%	480.8
Total Stay Two or More Days			
Yellowknife <sup>†</sup>	162	32%	179.9
Regional *	144	28%	297.8
Other Communities *	206	40%	299.2

# Table 13Hospitalizations due to Falls by Various CharacteristicsNWT 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# **Historical Trends**

## Mortality

With seven deaths recorded for the ten-year period, 1990 to 1999, it was not possible to analyze trends in mortality rates due to falls. Three of the seven deaths in this category occurred between 1990 and 1994, the other four cases were fairly evenly distributed from 1995 to 1999.

#### **Hospitalizations**

The hospitalization rate due to falls was relatively stable from fiscal years 1995/96 to 1999/2000. During that five-year period there were between 175 and 200 hospitalizations each year due to falls. In fiscal year 1995/96 the hospitalization rate was 424.9 per 100,000 compared to 468.0 per 100,000 in 1999/2000. This was not a statistically significant difference (see table A63 in Appendix B).

#### Figure 42

# Hospitalization Rates due to Falls by Year, NWT 1995/96 - 1999/2000



Source: CIHI Discharge Abstract Database

## **Risk Factors**

In general, the severity of injuries from falls is affected by the distance fallen, the nature of the surface impacted upon, and the resistance of the victim's tissues, including bones, to damage. Given the climate in the NWT, ice can make surfaces slippery for periods of the year. Hospitalizations due to falls from slipping or tripping are more likely to occur between October and April.

A number of other environmental factors can increase a person's risk of falling. Poorly designed stairs and the lack of appropriate handrails will increase the risk of fall from stairs. Poor lighting in and around the home and public places can also be a factor. The structure that a person falls on

or against can also be a risk factor. Falling against a narrow sharp, or pointed structure or on a hard surface increases the chance of injury.

As we have seen, age is a significant risk factor for falls. Seniors are at the greatest risk of injury as a result of a fall because of several concomitants of age including: increased fragility of bones; impairment of vision, gait, and balance; reduction in reaction time, agility and alertness. Seniors are also more likely to fall due to various other medical problems and are more susceptible to complications following injury.

#### **Implications for Prevention**

Modifying the environment may have the greatest beneficial impact on the number of injuries due to falls. Hazards in and around the home should be examined. The steps on stairs should be at least one foot wide and all risers between each step should be the same height. Removing clutter, securing rugs and electrical cords, improving illumination; and installing handrails, grab bars, and nonskid strips in high-risk areas can also reduce the risk of falls in the home. The condition and design of playgrounds should also be examined for potential problems. Building playground slides into hillsides where possible and placing energy-attenuating surfaces under playground equipment can be effective. In sports, proper protective equipment and maintenance of playing surfaces are important.

Exercise programs, especially for older persons, can improve gait and balance, and increase bone density and muscle strength. The provision of appropriate safety devices such as walkers for persons with difficulties walking along with programs aimed at encouraging adequate calcium intake may also be effective. Multi-factorial strategies that combine a number of the above elements into one program directed at a wide range of risk factors appear to be effective in reducing falls and fall-related injuries.<sup>23</sup>

In view of the advanced age and imperfect health of many residents of nursing homes and other facilities for the elderly, a large number of falls should be anticipated in these institutions. The design of nursing homes and other facilities for the elderly should be considered. A number of injury prevention measure can be taken in these facilities including: structural changes such as placing energy-attenuating surfaces on the floors, appropriate handrails and grab bars in high risk areas, rounding of likely contact points such as table edges, and stair edges to spread impact force. Other measures include monitoring and the proper use of medications such as psychotropic drugs – used to treat anxiety and insomnia – that affect mental function and balance, and the introduction of an exercise program.<sup>24</sup>

## **OTHER TRANSPORATION**

Injuries resulting from the operation of snowmobiles, all terrain vehicles and aircraft were the eighth leading cause of injury deaths and fifth leading cause of injury hospitalization in the NWT. This category accounted for 6% of all injury deaths and 5% of all injury hospitalizations.

#### **Comparisons with Canada**

#### Mortality

Residents of the NWT were 7.1 times more likely than Canadians as a whole to die from injuries sustained in vehicles intended for operation off public roads. The average annual NWT crude rate for the period 1990 to 1999 was 4.7 per 100,000 person-years compared to the 1996 Canadian age-adjusted rate of 0.7 per 100,000. The difference between the two jurisdictions was greatest for persons between 15 and 34 years of age. The mortality rate due to other transportation crashes was 13.2 times among NWT residents (see Table A64, Appendix B).

#### Figure 43

#### Other Transportation Mortality Rates: NWT (1990-1999) & Canada Age-Adjusted (1996)



\* Significant difference between NWT and Canada (p <0.05) Sources: NWT Vital Statistics & Statistics Canada

#### Hospitalizations

A direct comparison between NWT and Canadian hospitalization rates due to other transportation crashes was not possible. The report *Canadian Injury Data* produced by Health Canada utilized the same method of categorizing injuries as the one used in this report and this report provided the comparison for the other injury types discussed above.<sup>25</sup> However, the Health Canada report did not present data for other transportation crashes. As a result age specific hospitalization data from the Canadian Institute for Health Information's National Trauma Registry for fiscal year 1997/98 were grouped in a way similar to the grouping method used in this report.<sup>26</sup> While every attempt was made to group the injury codes using the same strategy, this was not possible in all

cases, especially watercraft-related injuries. Caution should be used when interpreting the data comparing the NWT with Canada in this section.

After adjusting for differences in the age distributions of the two populations, residents in the NWT were 3.5 times more likely to be hospitalized due to an injury sustained in an off-road vehicle. The NWT crude rate was 76.0 per 100,000 person-years compared to the estimated Canadian age-adjusted rate of 21.6 per 100,000. This difference was observed for all age groups (see table A64 in Appendix B).

Figure 44

Other Transportation Hospitalization Rates, NWT (1995/96 -1999/2000) & Canada Age-adjusted (1997/98)



\* Significant difference between NWT and Canada (p <0.05) Sources: CIHI Discharge Abstract Database & CIHI National Trauma Registry 1999 Report

## How & Who

#### Deaths

Small aircraft are used extensively throughout the NWT, both for commercial transportation and for work-related activities. The large number of small aircraft along with adverse weather conditions means a potential for crashes. Moreover, the chances of surviving an aircraft crash are not that great. As a result, incidents associated with aircraft crashes accounted for 63% of injury deaths in this category. Snowmobile crashes accounted for 32%. Drowning was the actual cause of death in four of the six snowmobile related facilities.

#### Figure 45

# Other Transportation Injury Deaths by Type, NWT 1990-1999 (n=19)



Source: NWT Vital Statistics

Males accounted for 84% of all deaths in this category. The three female deaths involved incidents with aircraft. Males between 25 and 34 years of age accounted for half of all aircraft and snowmobile incidents.

Inuit had the highest morality rate due to other transportation injuries (14.5 per 100,000), nearly three times higher than Dene and over five times higher than the other ethnic groups. Aircraft incidents accounted for 67% of the Inuit cases, snowmobile incidents accounted for the rest. Meanwhile, half of the Dene deaths were due to snowmobile drownings and 86% of the Metis and Non-Aborignal deaths involved an aircraft.

Eleven of the nineteen injury deaths due to off-road transportation crashes occurred among residents of the smaller NWT communities. Three of the four snowmobile-related drownings occurred to residents in these communities. They also accounted for 54% of all aircraft incidents.

# Table 14Other Transport Deaths by Various CharacteristicsNWT 1990-1999

	Number	(%)	Crude Rate per 100,000
Total	19	100%	4.7
Female	3	16%	#
Male	16	84%	7.6
0 - 14 Years	2	11%	#
15 - 24 Years	4	21%	#
25 - 34 Years	9	47%	10.8
35 - 64 Years	1	5%	#
46 - 64 Years	3	16%	#
65 Years 7 Older	-	-	-
Dene	6	32%	5.3
Inuit *	6	32%	14.5
Other Ethnicity $^{\dagger}$	7	37%	2.8
Yellowknife	4	21%	#
Regional Centers	4	21%	#
Other Communities	11	58%	8.3

Source: NWT Vital Statistics

† Reference category

\* Rate significantly higher than reference category

# Number of cases less than five, rate not calculated.

#### Hospitalizations

Snowmobile crashes accounted for 65% of all hospitalizations due to injuries in this category. In most of these cases the nature of the injury was a broken limb (38%) or a head injury (23%). Incidents involving other off-road motor vehicles made up 17% of hospitalizations in this category. Unlike snowmobiles, there is no defined ICD-9 code for incidents involving all-terrain vehicles (ATVs). However, given the widespread use of these vehicles in the NWT, it seems safe to assume that most of the cases in involving other off-road vehicles were broken limbs (44%) and head injuries (19%). Fifteen percent of the hospitalizations in the "other transport" category were due to injuries sustained in incidents involving various other types of off-road modes of transportation, for example being hit or crushed by an object while on a boat.

#### Figure 46

## Other Transportation Hospitalizations by Type, NWT 1995/96 - 1999/2000 (n=158)



#### Source: CIHI Discharge Abstract Database

Males were nearly three times more likely than females to be hospitalized due to an injury sustained from an off-road motor vehicle. The average annual hospitalization rate for males was 110.9 per 100,000 person-years compared to 38.1 for females. Snowmobile-related injuries accounted for 70% of all injury hospitalizations in this category among males and 53% among females.

Youth and young adults between 15 and 24 years of age were at a higher risk of hospitalization than other age groups (112.9 per 100,000). Snowmobile incidents accounted for 75% of the hospitalizations for this age group. Meanwhile, persons between 25 and 34 accounted for 25% of all hospitalizations due to other transportation injuries. Incidents involving ATVs made up a relatively higher proportion of cases for this group (28%).

Both Dene and Inuit had significantly higher hospitalization rates than other NWT residents (94.6 and 136.4 respectively vs. 56.1 per 100,000 person-years). Snowmobile-related incidents accounted for 80% of the Inuit injuries in this category, compared to 67% for Dene and 59% for other residents.

Residents of the smaller NWT communities accounted for nearly half of the hospitalizations due to injuries sustained in other transportation-related incidents. They also had the highest annual rate (107.5 per 100,000 person-years), significantly higher than the rate for Yellowknife residents (41.1 per 100,000). Residents of the three regional centers were also more likely than Yellowknife residents to be hospitalized for this reason (97.2 per 100,000). Snowmobile incidents accounted for 76% of the cases in the smaller communities, 60% in the regional centers and 54% in Yellowknife.

	Number	(%)	Crude Rate per 100,000
Total	158	100%	76.0
Female <sup>†</sup>	38	24%	38.1
Male *	120	76%	110.9
0 - 14 Years	30	19%	51.9
15 - 24 Years **	36	23%	112.9
25 - 34 Years	39	25%	96.2
35 - 44 Years	24	15%	65.1
45 & Older	29	18%	71.3
Dene *	58	37%	94.6
Inuit *	30	19%	136.4
Other Ethnicity $^{\dagger}$	70	44%	56.1
Yellowknife <sup>†</sup>	37	23%	41.1
Regional Centers *	47	30%	97.2
Other Communities *	74	47%	107.5
Total Stay Two or More	e Days		
Yellowknife <sup>†</sup>	20	24%	22.2
Regional Centers	17	20%	35.2
Other Communities *	48	56%	69.7

# Table 15Other Transport Hospitalizations by Various CharacteristicsNWT 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category

\*\* Rate significantly higher than other age groups

#### **Historical Trends**

#### **Mortality**

There was no significant trend for deaths due to other transportation injuries between 1990 and 1999. Due to the small number of injury deaths reported in this category, the ten-year period (1990-1999) was divided into two blocks (1990-1994 and 1995-1999) and the crude rate for each period was calculated to determine if the rate in the early 1990s was different from the rate in the later part of the 1990s. There was no significant difference between the two periods.

#### **Hospitalizations**

There were no significant changes in the hospitalization rates due to injuries sustained in non-traffic transportation crashes between fiscal years 1995/96 and 1999/2000. During this period, the annual number of hospitalizations ranged between 25 and 37. While the rate increased from 60.4 per 100,000 in 1995/96 to 81.6 per 100,000 in 1999/2000, the increase was not significant (see Table A67, Appendix B).

#### Figure 47



Other Transport Hospitalization Rates: NWT 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

## **Risk Factors**

Residents of the Northwest Territories live in communities scattered over a huge land mass. They rely on a variety of transportation methods including snowmobiles, all-terrain vehicles, and small planes. At the same time cold, darkness, ice, and vast distances between communities contribute to travel risk. Heavy use of ATVs and snowmobiles increase the risk of injury from the use of these higher risk vehicles. ATVs tend to roll over easily due to their high center of gravity while snowmobiles present risks due to their lower maneuverability, particularly for young children. Also snowmobiles present increased risks if driven at high speed or over unsafe ice conditions. Injuries often occur on ATVs when the vehicle overturns, the rider is ejected, or the rider falls off and is struck by the vehicle. Snowmobile injuries often occur when the machine collides with another object or another vehicle, or when the rider is ejected. Intoxication may be a contributing factor in a large number of snowmobile and ATV-related injuries.

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 Dene (42%), Inuit (15%) and residents of smaller communities (33%). Meanwhile just 57% of person 15 years and older who ride ATVs indicated they always wear a helmet (see Tables A68 and A69, Appendix B).

# **Implications for Prevention**

Measures to encourage the use of protective equipment such as helmets when riding a snowmobile or ATV as well as floater suits when operating snowmobiles over ice should be considered. Interventions to inform the public about the dangers children face when permitted to operate snowmobiles and ATVs on their own can be considered. Efforts to enforce legislation prohibiting the operation of these vehicles while intoxicated may be more difficult to enforce given the fact they are not restricted to public roads but travel over wide tracks of land. However, one program in northern Ontario targeting recreational snowmobile users on established trails did show some success.<sup>27</sup>

### INTERPERSONAL VIOLENCE

Interpersonal violence has traditionally been viewed as a criminal justice rather than a public health issue. However, given the extent and nature of interpersonal violence, a public health approach can make a valuable contribution to the understanding and prevention of this major cause of injury. Homicide was among the leading causes of death for NWT residents between 15 and 34 years of age and injury sustained from interpersonal violence was the third leading cause of hospitalization for NWT residents between 1995/96 and 1999/2000. Typically, interpersonal violence involves two people who know each other and who, under the influence of alcohol, get into an argument that escalates. Few injuries due to interpersonal violence occur in the context of other criminal activity. The violence that emerges from nagging frustrations and disputes in the context of personal relationships is more difficult for the criminal justice system to deal with than stranger-inflicted violence associated with robbery and burglary.

Moreover, the criminal justice system is designed to respond to violent crimes after they have been committed. While deterrence may produce some preventative results, it is more reactive than preventative in its basic orientation. The public health approach is based on the identification of risk factors related to interpersonal violence and the development of interventions to reduce these factors in an effort to prevent the violence form occurring. For example, if heavy alcohol consumption is a major risk factor in interpersonal violence, then public health strategies designed to reduce heavy alcohol consumption could also prevent interpersonal violence. Public health has a long history of encouraging behavioural changes through public educational campaigns.

# **Comparisons with Canada**

#### Homicides

With an average annual crude mortality rate of 5.9 per 100,000 person-years, the NWT crude rate was significantly higher than the 1996 Canadian age-adjusted rate of 1.8 per 100,000. There were no observable differences in homicide rates between NWT and Canadian females. However, among males, the NWT rate was 4.3 times higher than the 1996 Canadian age-adjusted rate (10.5 vs. 2.4 per 100,000).

One event - a deliberate explosion at a local gold mine during a labour dispute in 1992 - accounted for 25% of all of homicide cases between 1990 and 1999. Excluding this single event from the analysis decreases the number of individuals who died as a result of interpersonal violence from 24 to 18 during this period. The mortality rate would be 4.5 per 100,000, still significantly higher than the 1996 Canadian age-adjusted rate of 1.8 per 100,000.

#### Figure 48

#### Homicide Rates, NWT (1990 - 1999) & Canada Ageadjusted (1996)



\* Significant difference between NWT and Canada (p <0.05) Sources: NWT Vital Statistics & Statistics Canada

#### Hospitalizations due to Interpersonal Violence

After controlling for differences in the age distributions of the NWT and Canada, the hospitalization rate due to interpersonal violence in the NWT was 5.2 times higher than the 1996/97 Canadian age-adjusted rate (181.4 vs. 34.9 per 100,000 person-years).

Women in the NWT were more likely to be hospitalized due to interpersonal violence than were their Canadian counterparts. After age-adjustment, the NWT female hospitalization rate was 8 times higher than the Canadian rate (120.5 vs. 15.0 per 100,000). Meanwhile, NWT men were 4.4 times more likely to be hospitalized due to interpersonal violence than Canadian men as a whole (237.5 compared to the Canadian age-adjusted rate of 54.2 per 100,000 person-years). The greatest differences between the two jurisdictions occurred among older individuals (the NWT rate for person 45 years of age and older was 9.9 times older than the Canadian age-adjusted rate (see Table A70, Appendix B).

#### Figure 49

#### Injury Hospitalization Rates due to Assaults by Sex, NWT (1995-1999) & Canada Age-Adjusted (1996)



\* Significant difference between the NWT & Canada (p <0,05) Sources: CIHI Discharge Abstract Database

## How & Who

#### Homicides

As outlined above, 25% of all interpersonal violence deaths in the NWT between 1990 and 1999 occurred during one instance, a deliberately set explosion at a local mine. In one third of the homicide cases, the victim was stabbed or cut. In another 13% of the cases, the victim was struck with a blunt object. Assault by poisoning, assault by strangulation and assault by firearms were the other methods in 13% of the cases. The injury mechanism was unspecified in 17% of the cases.

#### Figure 50

#### Homicides by Method Used, NWT 1990-1999 (n=24)



Source: NWT Vital Statistics

Almost all of the NWT residents who died from interpersonal violence were male. Of the 24 interpersonal violence deaths between 1990 and 1999, 58% were between 15 and 34 years of age (61% if the mine explosion was excluded). This age group appeared to be at greatest risk of dying from a homicide, but the rates are unstable due to the small number of cases involved.

One half of all homicides occurred among the Dene population, this proportion increased to 67% when the mine explosion was excluded from the analysis. Dene were 3.3 times more likely to die due to interpersonal violence than were Metis and Non-Aboriginals, and the relative risk increased substantially if deaths from the mine explosion were excluded.

Residents of the smaller communities in the NWT were more likely to die from interpersonal violence. The homicide rate among residents in these communities was three times higher than among residents of Yellowknife (12.0 vs. 4.0 per 100,000 person-years). Almost all (89%) of the interpersonal violence deaths occurred among residents of the smaller communities if the mine explosion was excluded from the analysis.

				Excluding Mine Explosion			
	Number	(%)	Crude Rate per 100,000	Number	(%)	Crude Rate per 100,000	
Total	24	100%	5.9	18	100%	4.5	
Female <sup>†</sup>	2	8%	#	2	11%	#	
Male *	22	92%	10.4	16	89%	1.0	
0 - 14 Years	1	4%	#	1	6%	#	
15 - 24 Years	5	21%	7.7	5	28%	7.7	
25 - 34 Years	9	38%	10.8	6	33%	7.2	
35 - 64 Years	9	38%	7.0	6	33%	4.7	
65 & Older	-	-	-	-	-	-	
Dene *	12	50%	10.6	12	67%	10.6	
Inuit	4	17%	#	4	22%	#	
Other Ethnicity $^{\dagger}$	8	33%	3.2	2	11%	#	
Yellowknife <sup>†</sup>	7	29%	4.0	1	6%	#	
Regional	1	4%	#	1	6%	#	
Other Communities *	16	67%	12.0	16	89%	12.0	

# Table 16Deaths due to Interpersonal Violence by Various Characteristics,NWT 1990 - 1999

Source: NWT Vital Statistics

† Reference category

\* Rate significantly higher than reference category.

# Less than five cases, rate not calculated

# Hospitalizations due to Interpersonal Violence

Over half (58%) of hospitalizations due to interpersonal violence resulted from unarmed fights or brawls. Battering and other maltreatment accounted for another 11% of hospitalizations due to interpersonal violence. Assaults using a cutting or piercing object made up 10% of hospitalizations in this category, and in 7% of the cases the injury was sustained from the use of a blunt object.

The male rate of hospitalizations due to injuries sustained from interpersonal violence was nearly two times that of females (237.5 vs. 120.5 per 100,000 person-years). Males accounted for 68% of all hospitalizations in this category and 73% of hospitalizations resulting from an unarmed fight or brawl. Males also accounted for 90% of injuries by a cutting/piercing object and 77% of injuries from a blunt object. Meanwhile, females accounted for 78% of interpersonal violence hospitalizations due to battering or maltreatment. Almost all of the cases among males for this category occurred among children less than 15 years of age.

#### Figure 51

# Interpersonal Violence Hospitalizations by Method Used, NWT 1995/96 - 1999/2000 (n=377)



Source: CIHI Discharge Abstract Database

Young adults in the 15 to 34 years of age groups had the highest numbers of hospitalizations due to interpersonal violence, 58% of the total. These age groups also had significantly higher rates; 269.6 and 323.2 per 100,000 person-years. Meanwhile, children less than 15 years of age had the lowest hospitalization rates due to injuries in this category.

Adults between 25 and 34 years of age accounted for 37% of hospitalizations resulting from a unarmed fights or brawls, 39% of those occurring from a cut or stab wound and 35% of those occurring due to a blunt object. Meanwhile, nearly one quarter of the hospitalizations due to battering or maltreatment occurred among children less than 15 years of age.

Over half (55%) of all injury related hospitalizations due to interpersonal violence occurred among Dene residents. This ethnic group along with Inuit had significantly higher risk of hospitalization due to this injury mechanism. Unarmed fights or brawls were the most common mechanisms for interpersonal violence injuries for all three ethnic groups.

Forty-two percent of all injury-related hospitalizations due to interpersonal violence occurred among residents of smaller communities, another 29% occurred among residents of the three regional centers and 29% among residents of Yellowknife. Hospitalizations due to unarmed fights or brawls generally followed this overall distribution. Individuals who lived in the smaller communities or the regional centers had significantly higher rates of hospitalization due to interpersonal violence than residents of Yellowknife (229.5 and 227.5 respectively vs. 121.0 per 100,000 person years). However, when hospitalizations where the length of stay was at least two days were examined, the rate for residents of regional centers was not significantly different from the rate for Yellowknife residents.

NWT 1995/96 - 1999/2000					
	Number	(%)	Crude Rate per 100,000		
Total	377	100%	181.4		
Female <sup>†</sup>	120	32%	120.5		
Male *	257	68%	237.5		
0 - 14 Years	20	5%	34.6		
15 - 24 Years **	86	23%	269.6		
25 - 34 Years **	131	35%	323.2		
35 - 44 Years	76	20%	206.0		
45 & Older	64	17%	157.4		
Dene *	207	55%	339.3		
Inuit *	78	21%	354.6		
Other Ethnicity $^{\dagger}$	92	24%	73.7		
Yellowknife <sup>†</sup>	109	29%	121.0		
Regional *	110	29%	227.5		
Other Communities *	158	42%	229.5		

# Table 17Hospitalizations due to Interpersonal Violence by Various CharacteristicsNWT 1995/96 - 1999/2000

#### Hospital Stay Two Days or More

Yellowknife <sup>†</sup>	59	31%	65.5
Regional	35	26%	72.4
Other Communities *	94	43%	136.5

Source: CIHIC Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# **Historical Trends**

# Mortality

The deliberately set mine explosion that made up 25% of all homicides studied in this report occurred in 1992. If these cases are excluded from the trend analysis, the results show a fairly constant annual number of homicides during the ten-year period under investigation. The annual number of deaths fluctuated from a low of one to a high of three during the entire period. The crude rate for the five-year period 1990 to 1994 was 5.6 per 100,000 person-years, and the rate for the period 1995 to 1999 was 3.4 per 100,000 person-years. This was not a significant difference.

## **Hospitalizations**

Due to the fluctuations in the annual number of assault related hospitalizations no significant trend was observed between fiscal years 1995 and 1999. However, there was a significant increase between fiscal years 1997 and 1999. The hospitalization rate for the former year was 148.3 per 100,000 compared to a rate of 235.2 per 100,000 in the latter year.

#### Figure 52





Source: CIHI Discharge Abstract Database

## **Risk Factors**

There are many types of interpersonal violence, and for each type the causes are complex and diverse. However, a number of risk factors have been identified, including alcohol and drug use, witnessing family violence, victim of child abuse, exposure to high levels of peer and community violence, exposure to media violence, and the presence of poverty and the lack of opportunity. It is important to point out that these factors are not independent of each other, but rather are interactive.<sup>28</sup>

Heavy alcohol consumption can severely impair a person's judgment. When that happens disputes are more likely to occur and escalate into violence. According to a health survey conducted in 2000 and 2001, NWT residents are more likely to drink heavily more often than Canadians as a whole.<sup> $\Delta$ </sup> An estimated 35% of NWT residents between 20 and 64 years of age drank heavily 12 or more times in the previous year, compared to 18% of Canadians in the same age group (p< 0.05).<sup>29</sup>

# **Implications for Prevention**

Interpersonal violence is not amenable to easy and quick solutions. Behavioural, biological, social, and environmental factors all are associated strongly with the development of violent behaviour. These factors need to be addressed using various primary, secondary and tertiary prevention approaches by the fields of criminal justice, social services, mental health, education, and public health. No single discipline alone can prevent violence. A complex problem such as interpersonal violence must be prevented through a combination of approaches.

Having said this, a number of general interventions in health and social services can be considered, including strategies to decrease the cultural acceptance of violence particularly among and against certain groups, family counseling, the provision of shelters for victims of spousal assault, and strategies to reduce heavy drinking and the use of other drugs.<sup>30</sup>

<sup>&</sup>lt;sup>A</sup> Heavy drinking was defined as consuming five or more drinks per occasion.

### CONCLUSION

This report intended to create one of the fundamental building blocks in a coordinated injury control strategy, namely data. Data are critical in order to identify populations at risk, establish priorities, and inform public policy. The patterns of injury described in this report along with the preliminary analysis of risk factors point to some potential priorities toward which injury prevention efforts might be targeted. In this section of the report an overview of the main results of the descriptive profile is presented followed by a discussion of the principles of injury prevention.

## **Overview of Results**

#### Overall Burden of Injury

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 33 individuals per year), about the same number as deaths due to cardiovascular diseases such as heart failure and stroke (23%), and cancer (24%). Between 1995 and 1999, there was an annual average of 530 hospitalizations due to injury. When hospitalizations due to pregnancy and childbirth are excluded, injury was the third leading reason for hospitalization during this period. Injury has a serious impact on the younger members of the population. It was the leading cause of death and the second leading reason for hospitalizations among residents one to forty-four years of age. In fact, if hospitalizations due to dental caries were also excluded from the total, injury was the leading cause of hospitalizations for NWT residents between one and forty-four years of age.

The magnitude of the injury problem in the NWT is also evident when injury rates in the NWT are compared to the overall Canadian rates. After differences in the age distribution of the two populations were taken into account, 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.

#### At Risk Groups – All Injuries

Injuries in the NWT tend to cluster among different groups of people determined by age, sex, ethnicity and their community of residence. As pointed out above, injuries are a particular public health problem among youth and young adults. Individuals between 15 and 34 years of age accounted for 43% of all injury deaths between 1990 and 1999. However, injuries remain an important cause of death throughout life. Seniors 65 years of age and older had the greatest risk of dying due to an injury. The injury mortality rate in this age group was over four times higher than the overall NWT rate. Seniors also had the highest hospitalization rate due to injuries. Youth between 15 and 24 had the second highest mortality rate and third highest hospitalization rate, due in large part to the large number of self-inflicted injuries in this group.

The involvement of males and females also differed for both deaths and hospitalizations due to injury. In general, males were more at risk of injury death and hospitalization than were females. Males accounted for 78% of all injury deaths and 60% of all injury related hospitalizations. The injury mortality rate for males was over three times the rate for females, and the male hospitalization rate was 1.4 times higher than the female rate. The male unintentional injury rate

was 2.4 times higher than the female rate, and the risk of dying from an intentional injury was 7.5 times higher among males. While males were 1.6 times more likely than females to be hospitalized due to unintentional injury, the sexes did not differ for intentional injury. However, males were more likely than females to be admitted due to injuries sustained from an assault while females were more likely to be hospitalized due to self-inflicted injuries.

Gender differences were also observed across age groups. Between the ages 15 and 64, mortality rates were significantly higher among males than females. Differences in mortality rates were not significant for children and seniors. Injury hospitalization was significantly higher among males than females less than 35 years of age. For the other age groups there were no significant differences between genders.

The Dene population accounted for 42% of all injury deaths and 43% of all injury hospitalizations. Meanwhile, 20% of injury deaths and 17% of injury hospitalizations occurred among Inuit residents. The Metis and Non-Aboriginal population accounted for 38% of injury deaths and 40% of injury hospitalizations. However, Inuit had the highest average annual injury-related mortality and hospitalization rates, followed by Dene. Both of these ethnic groups were over two times more likely to die to be hospitalized because of an injury than were other NWT residents. This pattern was observed for all age groups. Both ethnic groups had similar death and hospitalization rates due to unintentional injuries, but Inuit had higher rates due to intentional injuries.

Residents of the three regional centers of Hay River, Fort Smith and Inuvik accounted for 25% of all injury deaths and 33% of all injury-related hospitalizations. Meanwhile, 28% of injury deaths and 31% of hospital separations occurred among residents of Yellowknife. Nearly half (47%) of all injury deaths and 36% of all injury-related hospitalizations occurred among residents of the smaller NWT communities. However, the injury-related mortality and hospitalization rates were significantly higher for residents of the smaller communities and the three regional centers than for residents of Yellowknife.

## Leading Causes of Injury

The term 'injury' encompasses many different types of injuries (e.g. head injuries, fractures, burns), all of which have an external cause referred to in this report as the injury mechanism. Suicide was the leading cause of injury deaths followed by motor vehicle traffic crashes and drowning. Unintentional poisoning, excessive exposure to cold weather conditions, and fires and burns were also important causes of injury deaths. The leading causes of death were different across age groups. Fires and burns, motor vehicle traffic crashes and drowning were the leading cause among children less than 15 years of age. Suicide was the leading cause for residents between 15 and 64 years of age. Motor vehicle traffic crashes and drowning were also important causes for these age groups. A large number of causes among seniors were unspecified. Falls and excessive exposure to cold weather were among the leading causes of injury deaths for this age group.

Focusing on injuries requiring hospitalization, falls was the most important injury-related cause. Self-inflicted injury along with injuries sustained from interpersonal violence and injuries due to motor vehicle traffic crashes were also among the leading causes of injury-related hospitalizations. Again, the leading causes of hospitalization were different across age groups. Falls and unintentional poisoning were among the leading causes of injury-related hospitalization for children less than 15 years of age. Self-harm and assaults were the two leading causes of injury hospitalization among persons between 15 and 34 years of age. Falls and motor vehicle traffic crashes were also important for these age groups. Falls, assault, and self-harm were also important causes for persons between 35 and 64 years of age. Most injury-related hospitalizations among seniors were due to falls, and the mechanism was unspecified in a large number of cases for this age group.

#### **Risk Factors**

The descriptive data in this report has shown that injuries are not random events; rather there are patterns as to who is being injured. Some groups in the NWT are more at risk of injury than others. Knowing where, and to whom injuries occur is not enough. To plan effective injury prevention measures it is necessary to have an adequate understanding of why some people are more at risk than others. In other words we need to look at the risk factors for injury. A risk factor is an aspect of personal behaviour or lifestyle, environmental exposure, or other characteristic that is associated 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 boat or snowmobile. Their greater exposure explains in part their higher rates of injury from boat and snowmobile-related activities. 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.<sup>31</sup> In the above example, the likelihood of sustaining an injury is also influenced by behavioural factors such as drinking alcohol, wearing a personal flotation device and wearing a helmet.

The analysis in this report is reliant on existing administrative data compiled for purposes other than injury prevention. Using this data, it is often impossible to determine what the person was doing at the time of the injury, exactly where the injury occurred, and if there were any contributing risk factors. For example, it is not possible to determine if a large number of motor vehicle traffic crashes occurred on a particular section of the highway, if a large number of drivers were intoxicated, and if occupants were wearing seatbelts. Moreover, the categories sometimes lack the detail needed to provide important information for the development of targeted prevention programs. For example, "fall from stairs or steps" is one of the categories of falls presented in the report. However, no information is provided on whether the fall was indoors or outdoors, what kind of stairs they were, or if handrails were present. More research on specific risk factors associated with various types of injuries is needed. On the other hand, findings from various other sources do point to some general risk factors were present in the injury incidents presented in this report, some general inference can be made that point to a number of issues for consideration.

The people of the Northwest Territories live in communities scattered over a huge land mass. People rely on a variety of transportation methods including snowmobiles, all-terrain vehicles, boats and small planes. At the same time cold, darkness, ice, and vast distances between communities contribute to travel risk. Subsistence and recreational hunting means that firearms are readily available, increasing the risk of unintentional injuries and suicide deaths. Moreover, fishing and hunting in freezing temperatures and stormy weather can be fraught with danger from drowning, hypothermia and exposure. A large proportion of the population also works in primary and construction industries where the risk of injury tends to be higher. Quick access to trauma treatment services may be limited, resulting in poorer outcomes. The remoteness typical of many NWT communities contributes to the increased response time for medical treatment following an injury. Social and cultural attitudes about risk-taking may also play a part in contributing to the high rate of injury-related deaths and hospitalizations.

The higher rates for males may be partly attributable to the predominance of males in higher injury risk occupations, hunting and fishing activities and higher risk recreational activities such as boating and snowmobiling. In addition, differences in behaviour between the sexes likely expose males to greater injury risks. For example, men are more likely to drive or operate a boat after drinking and to drive faster than are women. Males attempting suicide are also more likely to use more lethal means, such as guns, which increases their likelihood of competing the act. Moreover, males are more likely to engage in violent acts such as brawls and fights. Women on the other hand are at greater risk than men for certain types of injury. Older women are at a higher risk of falling and fracturing a hip or other bone. Bone loss is a contributing factor for this increased risk. Women are also more likely than men to be victims of physical or sexual assault from someone they are dating or their partner.

Teens and young adults are at a greater risk for many types of injuries. Inexperience as drivers makes them more prone to motor vehicle crashes. At the same time, they are more likely to act impulsively, make poor decisions about the dangers in a hazardous driving situation and engage in high-risk behaviours such as driving fast, overtaking other vehicles in a risky manner, riding with someone who is drinking or drink and drive. Driving inexperience coupled with drinking and driving makes this group particularly at risk of fatal motor vehicle crashes. The same impulsiveness along with depression, underdeveloped coping skills, possible substance abuse, perceptions of limited opportunities, and poverty may also put this group at a higher risk of self-inflicted injury and interpersonal violence.<sup>32</sup>

Although some exposures may be lower for seniors (e.g., kilometers driven in a motor vehicle or snowmobile and amount of time spent in a boat), decreases in hearing, vision and mental alertness probably increases the risk of some injuries. Certain exposures such as use of stairs or walking on slippery surfaces, that are conducive to falls, do not change as people get older. Seniors are at the greatest risk of serious injury due to a fall. Complication due to a fracture is a large risk factor for mortality among this group. Moreover, the severity of injuries and the potential for serious complications is higher for seniors. As a result the elderly person injured with the same degree of severity as a younger person is more likely to die or require hospitalization than the younger person.

Aboriginal persons are more at risk of injury than are non-Aboriginal NWT residents. There may be several reasons for this. They are more likely to live in rural areas and engage in activities that increase their potential exposure to harsh climatic conditions in the north. Aboriginal peoples are more likely to use snowmobiles, ATVs or boats for transportation or substance activities. They are also more likely to travel greater distances over rural roads. A larger percentage of Aboriginal peoples have lower education levels and higher rates of poverty. Such characteristics have been shown to increase the risk of injury.<sup>33</sup>

Intoxication is perhaps one of the most important risk factors for injury in the NWT. A review of Northwest Territories Corner's Service Reports for the years 1999 to 2001 found that alcohol was a contributing factor in 44% of all unintentional injury deaths and 39% of all suicides.<sup>34</sup> A 2001 report on motor vehicle traffic crashes indicted that between 1991 and 2001, alcohol was a

contributing factor in 23% of all traffic crash-related injuries.<sup>35</sup> When NWT residents were asked in the 1999 Safety and Injury Survey what was the main reason for injuries in their communities, 58% cited alcohol use. Residents of smaller communities were more likely to view alcohol use as the main reason for injuries in their communities (70% compared to 59% for the regional centers, and 49% for Yellowknife).<sup>36</sup>

In another study, 153 key informants in 14 southern NWT communities were interviewed in early 2000 to obtain information about their perceptions of causes of injury in their community and their attitudes toward injury prevention. Several common themes emerged from these interviews; one was the perception that alcohol abuse was an important risk factor for injury. Another was a perceived increase in the number of motor vehicles including snowmobiles and ATVs while control mechanisms (e.g. speed limit enforcement) had not always kept pace.<sup>37</sup>

# **Injury Control**

After the burden of injury, at risk groups and risk factors have been identified, the development of injury prevention or control initiatives can be considered. It is not the intent of this report to suggest the adoption of, or describe the evidence supporting, specific injury prevention strategies. Rather, the following discussion is presented in order to help identify some possible opportunities for action in order to illustrate the field of injury prevention.

In practical terms, *injury prevention* means making positive choices about minimizing risk at all levels of society while maintaining healthy, active and safe communities and lifestyles. These choices are strongly influenced by the social, economic and physical environments where one lives, works, learns and plays.<sup>38</sup>

It is important to recognize that injuries include a large number of injury types that take place in a wide variety of settings. Causes vary a great deal. For different injury settings, types and causes there may be a number of potential prevention measures that may achieve reductions in the frequency of events or in the severity of injuries that occur. Reviews of injury prevention and control measures since the 1960s have led to the conclusion that no single intervention strategy is likely to be sufficient to address the problem. Successful programs have been based on complementary interventions including health education, environmental modifications and engineering, and legislative regulations and enforcement. This conceptual framework is often termed the 3 Es of injury prevention.<sup>39,40</sup>

Education refers to efforts to use public education messages to reduce risk taking among the target audience. This is the most challenging approach in injury prevention because changes in people's beliefs and behaviours must occur for the intervention to work. However, effective education programs can work if the messages are clear, appropriate for the audience and periodically repeated. In some cases, education programs are coupled with legislative regulations and enforcement to increase compliance. For example, education coupled with enforcement of legislation has been shown to be effective in increasing the use of seatbelts and child restraint in vehicles, while decreasing the incidence of drinking and driving. Sometimes new legislation will lead to a reduction in the incidence and severity of injuries.

Environmental modifications have been effective in preventing injuries from many different types of mechanisms. For example, the installation of appropriate handrails on stairs, smoke alarms in homes, guardrails on sections of highways, safe storage of firearms are all examples of successful

interventions using this approach. The advantage of environmental modifications is that individuals need not take actions to change their behaviour. However, the most effective injury prevention programs will use a combination of all three approaches. The important thing to keep in mind is that any injury event can be seen as the culmination of a chain of causation. Interventions that break any of the links in this chain will be effective. For example, if intoxication is a major injury risk factor, any initiatives that reduce heavy alcohol use in the population will likely have a positive effect on injury reduction in the territory.

In general, injury prevention embodies the goal of decreasing injuries through better understanding of risk factors and actively addressing these factors. These risk factors not only include the more immediate causes such as heavy alcohol consumption, failure to wear a seatbelt or personal flotation device, but also more proximal determinants of health such as socioeconomic status, quality of the physical environment, education levels, social support networks and personal health practices and coping skills that impact on a person's overall health status. Examining these determinants of health as factors for injury prevention ensures that their influence on injury occurrence and severity is considered. This expands possible points of intervention to include actions that address these more general patterns of contributing factors. In effect, injury prevention can be conceptualized within a population health approach where prevention strategies are composed of a wide variety of interventions involving many sectors of society.

A health promotion framework based on a population health model takes into account the fact that injuries have multiple causes, involve multiple risk factors and occur in multiple sites. Injuries prevention interventions need to take into account the full interrelationships of determinants of health and associated risk factors. The *Federal/Provincial/Territorial (F/P/T) Sub-Committee on Injury prevention and Control* recently developed an injury prevention model based on this approach. The draft *Report on Proposed National Priorities for Injury Prevention and Control* identified three key elements:

- Injury causes describing how injury occurred.
- Priority populations describing any groups of people that experience a disproportionately high burden of injury.
- Points of intervention describing a continuum of possible points where injuries could be prevented or their impact modified.

Any number of injury causes, at risk populations or points of intervention (or various combinations of the three) may be the focus of injury prevention and control activities. By providing a conceptual framework that helps identify the scope of an injury problem, the authors of the report maintain the population health promotion model compliments the well-established injury control tool known as the Haddon Matrix that injury control practitioners have used to identify possible strategies for specific injury problems.<sup>41</sup> A description of the Haddon Matrix is presented in Appendix C.

The Canadian Collaborating Centres for Injury Prevention and Control proposes four strategic pillars as part of an injury prevention strategy:

1. Leadership and Public Policy Development

The development of healthy public policy to create supportive environments that enable people to lead healthy and safe lives through the cooperation of all sectors and level of government is needed.

2. Knowledge Development and Translation

Knowledge and translation refers to a range of activities from gathering knowledge about injury issues and intervention that work to making the knowledge available to the people who can use it in a form that is most useful to them.

3. Community Development and Infrastructure

For initiatives to have the best chance of succeeding over the long-term they should be locally owned and managed, makes effective use of local resources, and address issues that are relevant to the local population. However, resources and policies from all levels of government must support these initiatives. Interventions are more effective when they actively involve community stakeholders in the program development process. In this way the programs are integrated into the community and reflect unique community characteristics.

4. Public Information

Changing public perceptions about the preventability of injury is important. A communication strategy is needed to inform people that injuries are predictable and preventable and not accidents over which they have no control.<sup>42</sup>

For the most part, this report focused on the first step in the process to understanding and preventing injuries, namely assessing the burden of various types of injury among different groups in the territory. However, it is important to point out that mortality and hospitalizations represents the tip of the injury iceberg. For every NWT resident who dies or is hospitalized due to injury, many more are seen at a community health center, hospital emergency room or physician's office. Some initial work on the second step, identifying risk factors for injuries, was also carried out in the report. Utilizing information from coroner's annual reports along with a report on motor vehicle traffic crashes and one cross-sectional survey of NWT residents, a preliminary discussion of several possible injury risk factors was carried out. However, more research and analysis in this area is needed in order to further our knowledge of the many underlying causes of injuries in the NWT.

The first step in reducing injuries in the Northwest Territories is to improve awareness and understanding of injury as a major public health and safety issue that is both predictable and preventable rather than unfortunate accidents that occur by chance. However, to say that injury is a major public health problem does not imply that the social response should be mounted primarily or exclusively by public health agencies. The activities involved in injury prevention are complex, and no one group can address the issue alone. Local governments, public health officials, health care providers, law enforcement officials, fire services, transportation, community groups, schools, all have a part to play in reducing the high levels of injury mortality and morbidity in the Northwest Territories. Coalitions and partnerships need to be encouraged and supported. The more widespread and coordinated the efforts, the more likely we will see a reduction in injury. Leadership and coordination is required to bring together diverse groups to focus on integrated community-level interventions that consider multiple risk factors within the context of people's lives and use multiple strategies in comprehensive approaches to injury prevention and control.

# **APPENDIX A**

#### Methodology

#### Data sources

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 1990 to 1999. Hospital separation data is based on the Discharge Abstract Database provided by the Canadian Institute for Health Information. Data was obtained for all Northwest Territories residents hospitalized both inside and outside of the territory at any time during fiscal years 1995/96 to 1999/2000. Population estimates used to calculate the rate of injury, death and hospitalization were obtained from the NWT Bureau of Statistics.

Canadian injury mortality data were based on detailed cause of death tables by age and sex obtained from Statistics Canada publication *Health Statistics at a Glance*, catalogue number 82F0075XCB. Canadian age and sex specific injury hospitalization data was obtained from the following report produced by Health Canada: *Canadian Injury Data: Mortality – 1997 and Hospitalizations – 1996-97*. The report can be found at Health Canada's website http://www.hc-sc.gc/hpb/lcdc/brch/injury/cid98/index.html.

#### Counting cases

Throughout the report the International Classification of Diseases – ninth revision (ICD-9) was used to classify deaths and hospitalizations. Events associated with injuries are classified using the codes for external cause of injury and poisoning (E-codes). The underlying cause of death was coded in ICD-9 by Statistics Canada. In a number of cases, unspecified cause of death were recoded at the Department of Health and Social Services after review of more complete records obtained from the Northwest Territories vital statistics registry. All mortality analyses presented in this report are the responsibility of the Department of Health and Social Services, and may not agree completely with vital statistics mortality data presented by other agencies.

A case was counted if a valid E-code was the defined underlying cause of death, the event that initiated the chain of events leading to the death. A hospitalization was counted if a valid E-code appeared anywhere in the discharge abstract. If a hospital separation had more than one E-code recorded, the cause of injury was reported by the first valid E-code on the record. Normally, the first recorded E-code is related to the most serious injury diagnosis. It should be pointed out that the different methods used in the mortality and morbidity databases to select the one E-code that describes the cause of injury could arrive at different conclusions for the same type of injury event. For example, if a person fell down a flight of stairs and received a fatal arterial laceration from broken glass, the underlying cause of death would be a fall. If the person survived and was later discharged from a hospital, the first listed or principal diagnosis would be arterial laceration and the associated external cause would be cut/pierce.<sup>43</sup>

In order to describe the full population-based incidence of injury deaths all NWT residents who died from injury in the NWT along with NWT residents who died from injury in other jurisdictions were included in the analysis. Deaths and hospitalizations of residents from other jurisdictions who were injured in the NWT were excluded. The most accurate estimate of the incidence and risk of injury death in the NWT would include only residents who were injured in the NWT. However, given the nature of medical service provision in the territory, injured NWT residents suffering major trauma are sometimes transferred to a hospital in Alberta for treatment. Moreover, residents of one community in the southwest corner of the territory receive hospital services in northern British Columbia. If the injured person dies after being transferred to an out of territory hospital, the jurisdiction where the death occurred is listed in the mortality file, yet this event should be captured in the numerator count. As a result, all injury deaths of NWT residents occurring in Alberta, British Columbia and the Yukon – the only highway link between northern NWT and the rest of Canada passes through the Yukon – are included in the count of injury related deaths. While including residents who died 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.<sup> $\Delta$ </sup>

The count of injury-related hospitalizations includes all NWT residents hospitalized in NWT acute care hospitals along with NWT residents hospitalized in acute care hospitals in Edmonton, Alberta and Fort Neilson, British Columbia. Population-based injury morbidity analysis becomes much more complex where the population is served by several acute care hospitals and patients are sometimes transferred between hospitals, depending on the level of acute care required. This problem is evident in the NWT where injured patients hospitalized in one of the smaller local hospitals are sometimes transferred to the larger regional facility in Yellowknife and/or to an acute care hospital in Edmonton for treatment of the same injury.

A unique patient identifier would help reduce this "double counting," but in a large number of cases, a unique identifier was not provided. The following method was used to reduce double counting due to transfers between hospitals for the same injury. Because of the small population of the territory, where a unique patient identifier was not present, cases with the same birth-date, gender and community of residence were assumed to be unique patients. Where the date of discharge from one acute care hospital equaled the date of admission to another hospital for an identified unique patient, the case was removed from the count of injury hospitalizations. One hundred and thirty-three cases were removed from the injury hospitalization file in this way.

There are other difficulties in using hospitalization data to count injured people. Sometimes the same person can be admitted and discharged several times for more than one injury in a single year. Therefore, the number of injury hospitalizations represents each injury incident that resulted in a hospitalization and not the number of individuals hospitalized. Moreover, incidents are counted at the time of discharge not admission. If a person was admitted in March 2000 and discharged in April 2001, the case would not be counted in the data. Finally, in order to ensure the confidentiality of NWT residents, aggregated hospitalization data with less than five cases were suppressed.

 $<sup>^{\</sup>Delta}$  Between 1990 and 1999, 40 of the 331 injury related deaths among NWT residents took place outside of the territory, 70% of these occurred in Edmonton Alberta. This is an indication that in the vast majority of cases, the event likely occurred inside the NWT and the individual was transferred to a hospital in that city for care.

# **Defining Injury Categories**

There are many specific ICD-9 external cause of injury codes. In order to make the analysis more interpretable, codes were rolled up into broader, more encompassing categories. The grouping of E-codes into various injury categories is based on the framework for presenting injury data developed by the United States Centers for Disease Prevention and Control in collaboration with the American Public Health Association (MMWR 1997 (No. RR –14):1-30.). The framework was modified to present additional categories to better describe the nature of injuries in the Northwest Territories. A complete list of E-codes used to define each injury category is provided at the end of Appendix A. The matrix table shows E-codes grouped according to the two E-code classification axes: **mechanism** of injury or cause of death (e.g., falls, fires/burns, firearms, poisoning, and suffocation) by **intent** of injury or manner of death (i.e., unintentional, intentionally self-inflicted, intentionally inflicted by another, intent undetermined, and legal intervention).

Three groups of events assigned injury codes in the ICD-9 classification are excluded from the data presented in this report. They are very different from most injuries, both in their nature and in the types of preventive measures that might be considered appropriate.

ICD-9 codes	Description
E870 – E876	Misadventure to patients during medical and surgical care.
E878 – E879	Surgical and medical procedures as the cause of abnormal reaction of
	patient or later complication, without mention of misadventure at the
	time of the procedure.
E930 – E949	Drugs, medicinal and biological substances causing adverse effects in
	therapeutic use.

## Ethnicity

The vital data from Statistics Canada does not include ethnicity. This information was obtained by performing a record linkage between the vital statistics files obtained from Statistics Canada and the NWT vital statistics registry. Ethnicity is recorded for all hospitalizations that occur within the NWT. For cases where the hospitalization occurred outside of the territory a stratified random hot-deck imputation method was used to impute ethnicity. Stratification was based on community of residence, age group and sex. The distribution of out of territory hospitalizations did not differ from in-territory hospitalization on these variables. Ethnicity was imputed for 283 of the 3,220 injury related hospitalizations analyzed.

## Calculating Rates

A key aspect of injury surveillance is the calculation of injury rates. Rates permit comparisons between groups and the analysis of factors such as demographic characteristics of the groups. Differences in injury rates between populations or within the same population at different points in time occur as a result of a combination of differences or changes in the underlying factors that influence the occurrence of injury and by random variation in the number of injury rates presented in this report are based on the injury experiences of the entire population. In effect, sampling and sampling errors is not an issue. However, population parameters such as the injury mortality rate due to fires may vary from time to time due to random variation. Moreover, the effect of such

variation on population parameters can be quite large when the population size and the actual number of observed events are both small. Therefore, efforts need to be made to minimize the effects of random variation. Moreover, a means of measuring the chance component is important so that its effect on rates can be taken into account.

As the number of observed events increase, less chance is involved and the observed rate is a better estimate of the "true" rate. Increasing the number of events can be accomplished by expanding the time period under study. In this report, the analysis of injury mortality is based on ten years of data 1990 to 1999 and the hospitalization analysis is based on five years of data 1995 to 1999. 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." That is the annual population estimates must be summed for each year under study. In effect, the more stable rate represents an average of the years under study. On the other hand, combining multiple years of data will conceal any changes that may have occurred in the more recent past.

## Age-Adjusted Rates

While population-based rates ensure that differences in population size have been taken into consideration, overall crude rates may still be misleading if there are substantial differences between populations being compared or if there are differences within a population at different points in time. For example, the age structure of two populations may be very different or the age structure of a single population may be different at various points in time. Since age influences the risk of most diseases and death, any differences in the overall crude rates between populations, or within a population over time, may be due to differences in age structure rather than differences in the risk of disease or death.

To remove this effect and still provide one summary measure for the total population, it is necessary to adjust for differences in age structure through a process of age standardization or adjustment. In this study, the Canadian crude rates were adjusted using the direct method of standardization. In this method, the age-specific rates of the Canadian population were applied to the NWT 1990-1999 age structure to yield an "expected" rate that would have occurred if the Canadian age-specific rates were present in a population with the same age distribution as the NWT during 1990 to 1999. It is important to point out that standardized rates are not "real" rates but are fictional rates based on an arbitrarily chosen standard population. However, the adjusted rate can be trusted in a head-to-head comparison with other age-adjusted rates.

# Confidence Intervals

The confidence interval is the most common method used to assess the adequacy of an observed rate as an estimate of the "true' rate unaffected by random fluctuations. Confidence intervals are calculated with a stated probability (normally 95%), and we say that there is a 95% chance that the confidence interval covers the "true" value. If an area has a small number of events, the observed rate in any period of time may be different from the "true" rate and the 95% confidence interval will be wide. As the number of observed events increase, less chance is involved and the observed rate is a better estimate of the "true" rate and the confidence interval will be narrower. Rates with wide confidence intervals are subject to large random variation and should be interpreted with caution. In this report, rates are not calculated for fewer than five cases since these small numbers produce rates that are inherently unreliable.

For injury deaths, which tend to be rare events, 95% confidence intervals based the Poisson probability distribution were calculated using the exact method.<sup> $\Delta$ </sup> Due to the possibility of multiple admissions, the calculation of confidence intervals for injury hospitalizations is more complex. Where multiple admissions do occur an adjustment must be made in the way confidence intervals are calculated in order to avoid underestimating their width. A Multiple Admission Factor (MAF) was calculated for each major injury category and demographic group using the method outlined by Cain and Diehr (1992).<sup>44</sup> A distribution of multiple admissions was approximated by assuming that cases with the same date of birth, community of residence and sex were unique patients. This distribution was compared with the Poisson distribution to calculate a ratio (the MAF) used to adjust the confidence intervals. The confidence intervals themselves were calculated assuming normal approximation of the Poisson distribution.<sup>45</sup>

## Testing Statistical Significance

Confidence intervals can also be used to determine statistical significance. A statistical significant difference between two rates is noted when the confidence intervals of the two rates do not overlap. However, it is important to point out that the use of confidence intervals in this way is not equivalent to a statistical test. Rather it is a good approximation that produces a conservative result. That is, in some cases an appropriate statistical test would indicate a statistically significant difference even though the confidence intervals do slightly overlap. As a result, chi-square tests of independence were used to test statistically significant differences between sexes, age groups, ethnicity and community types when mortality and hospitalizations were examined for each type of injury.

# Potential Years of Life Lost (PYLL)

PYLL is a measure of premature mortality that gives greater weight to deaths occurring at a younger age than to those at later ages. In this report, deaths prior to 75 – the approximate life expectancy in the NWT - are considered premature and the number of years of life that would have remained are considered years of life lost prematurely. PYLL is calculated by subtracting that actual age at death from 75. For example, a person dying at age 25 has lost 50 years of life (75-25=50 PYLL). By emphasizing the loss of life at an early age, PYLL focuses attention on the need to deal with the major causes of early deaths.

# Historical Trends

Due to the small number of annual injury related deaths, central moving averages were calculated for three-year periods and these estimates were used to calculate the mortality rates. Averaging estimates from longer time periods is useful as an intuitive method or reducing variability when there are a small number of observations for any particular time period.

 $<sup>^{\</sup>Delta}$  While the assumption of a Poisson process may not hold for some categories of injury deaths (for example, those that tend to occur in clusters such as deaths in aircraft crashes) it is widely used when analyzing injury deaths.

The chi-square test for trend in binomial proportions was used to test the statistical significance in historical trends. Since the test is based on the overall trend in the proportions, this test can be used even if some of the groups have a small number of cases.<sup>46</sup> As a result, the trend analysis is based on the annual number of deaths for the period 1990 to 1999.

# Limitations

The quality of the data is dependent on the coding performed and this in turn is dependent on documentation provided on the health record in the case of hospitalizations and on the registration of death form in the case of the mortality data. It should be acknowledged that there may be errors or inconsistencies in the coding that cannot be identified in this analysis. Moreover, errors may also occur when recording community of residence and/or ethnicity. Hence, apparent differences between community type and ethnicity should be interpreted with caution.

This report is based on the most current data available when it was undertaken. However, this data is still four years old and changes in risk factors and the nature of injury may have occurred during that time. Moreover, combining ten years of mortality data may result in misleading rates if conditions changed during the time period covered by the rate.

When injury rates for each mechanism were calculated for this report, 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 owns and operates a snowmobile. Moreover, the number of kilometers driven each year varies among those who do operate these machines. The number of injuries per kilometer driven would be a more appropriate measure of the actual risk of snowmobile rated injuries. This is also true for all other types of motor vehicle and other transportation related injuries. However, estimates of kilometers driven for different sub-populations in the territory are not available. Similarly, the opportunity for drowning-related injury occurs when the person has some access to a medium in which drowning could occur. For many people, this may be an infrequent occurrence. As a result, the rates for some injury mechanisms presented in this report may underestimate the real risk of injury.

External cause of injury codes (E-codes) captures the circumstances of an injury along two dimensions: intent (unintentional, self-inflicted, assault, undetermined, legal intervention), and mechanism (e.g., fall, drowning, fire, motor vehicle traffic crash). In the structure of the ICD, the intent of the injury death takes precedence over the mechanism. That is, a coder must first determine intent and then assign the proper mechanism. Sometimes it is difficult for physicians, medical examiners or coroners to determine intent. It is likely the number of suicides and self-inflicted injuries is somewhat underestimated for certain mechanisms of injury. For example, without evidence of intent, motor vehicle traffic crashes and drownings are most likely considered unintentional.

The ICD-9 coding scheme was not designed for injury prevention purposes. Along with the uncertainty with defining intent, it is often difficult to determine what the person was doing at the time of the injury, exactly where the injury occurred, and if there were any contributing factors. For example, relying on ICD-9 coding alone means it is not possible to determine if a large number of motor vehicle traffic crashes are occurring on a particular section of highway, if a large number of drivers were intoxicated, and if the occupants were wearing seatbelts. Similarly it is difficult to determine if an intimate partner or another acquaintance perpetrated an assault. Moreover some of the E-codes are broad and lack the level of detail needed to provide important

information for the development of targeted prevention programs. For example, "fall from stairs or steps" is one of the categories of falls presented in the report. However no information is provided on whether the fall was indoors or outdoors, what kind of stairs they were, or if handrails were present.

The analysis in this report is reliant on existing administrative data compiled for other purposes. The reliance does not permit analysis of populations defined by socio-economic status an important influence on the risk of injury. In this situation, ethnicity not only presents injury data for unique cultural groups but also presents a crude ecological control for socioeconomic status. In effect it is assumed ethnicity can be viewed as a surrogate measure of socio-economic status. Classification by ethnicity may obscure an underlying relationship between injury and poverty, a relationship that suggests that improving the socio-economic conditions of poor people might improve their health. However, more research is needed to confirm that assumption.

Comparisons of injury rates between community types and ethnicity 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 behavioural risk factors. However, observed variations may be a result of differences in injury treatment and registration practices, in addition to lifestyle or environmental factors. 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. For example, the same person may be admitted several times for follow-up treatment of the same injury and would be counted in each case. Individuals living in communities where a hospital is located may be more likely to be hospitalized for follow-up treatment of the same injury and/or observation/treatment of more minor injuries than residents who live in the smaller communities where follow-up and/or treatment of more minor injuries can be done at the community health centre.<sup> $\Delta$ </sup>

On the other hand, limited evidence suggests that for some types of injuries – for example, fracture of a limb without complications – hospitalization may be more likely for residents of smaller communities than residents of towns where a hospital is located who receive treatment on an outpatient basis. Moreover, persons severely injured in more remote areas of the territory may be more likely to die before they receive treatment, and thereby show up in the mortality data, than someone injured near a intensive trauma treatment centre.

It is difficult to determine what impacts these factors have on differences in injury hospitalization and mortality rates for residents of the three types of communities examined. However, the system for transferring seriously injured patients from smaller communities to hospitals is well established in the NWT. Therefore, hospitalization data should provide a good record of the overall patterns of nonfatal injuries that are more severe in nature. 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.

Finally, comparisons between the NWT and Canadian hospitalization rates should be treated with caution. Without access to national data it was not possible to ensure that the methodology used to select injury cases was the same for both the NWT and Canada. The Canadian hospitalization data was obtained from the report "Canadian Injury Data: Mortality - 1997 and Hospitalizations – 1996-97. The report was produced by Health Canada and can be obtained at <u>www.hc-sc.gc.ca/hpb/lcdc/brch/injury/cid98/index.html</u>.

 $<sup>^{\</sup>Delta}$  There are four hospitals in the NWT, one in Yellowknife and one in each of the three regional centres. Community health centre are located in most of the smaller communities.

Mechanism/cause	Unintentional	Suicide / Self-inflicted	Homicide / Assault	Undetermined	Other <sup>1</sup>
Cut/pierce	Е920.09	E956	E966	E986	E974
Drowning/submersion	E830.09; E832.09; E910.09	E954	E964	E984	
Fall	E880.0-E886.9; E888	E957.09	E968.1	E987.09	
Fire/burn	E890.0 - E899; E924.09	E958.1,.2,.7	E961; E968.0,.3	E988.1,.2,.7	
Firearm	Е922.09	E955.04	E965.04	E985.04	E970
Machinery	E919 .09				
MV traffic	E810 - E819 (.09) <sup>2</sup>	E958.5		E988.5	
Pedal cyclist, other	E800-E807 (.3); E820-E825 (.6); E826.1,.9; E827-E829 (.1)				
Pedestrian,other	E800-E807 (.2); E820-E825 (.7); E826-E829 (.0)				
Transport,other	E800-E807 (.0,.1,.8,.9); E820- E825 (.05,.8,.9); E826.28; E827-E829 (.29); E831.09; E833.0-E845.9	E958.6		E988.6	
Natural / environmental	Е900.0-Е909; Е928.02	E958.3		E988.3	
Overexertion	E927				
Poisoning	E850.0-E869.9	Е950.0-Е952.9	E962.09	Е980.0-Е982.9	E972
Struck by, against	Е916-Е917.9		E960.0; E968.2		E973; E975
Suffocation	Е911-Е913.9	E953.09	E963	E983.09	
Other specified, classifiable	E846-E848; E914-E915; E918; E921.09; E923.09; E925.0- E926.9; E929.05	E955.5,.9; E958.0,.4	E960.1; E965.5- .9; E967.09; E968.4	E985.5; E988.0,.4	E971; E978; E990-E994; E996; E997.02
Other specified, not elsewhere classifiable	E928.8; E929.8	E958.8; E959	E968.8; E969	E988.8; E989	E977; E995; E997.8; E998; E999
Unspecified	E887; E928.; E929.9	E958.9	E968.9	E988.9	E976; E997.9
All injury <sup>3</sup>	E800-E869; E880-E929	E950-E959	E960-E969	E980-E989	E970-E978; E990-E999
Adverse effects <sup>4</sup>					E870-E879; E930.0-E949.9
All external causes					Е800-Е999

# Matrix Table with Assignment of E-codes for Injury Mortality & Morbidity Data

<sup>1</sup> Includes legal intervention (E970- E978) and operations of war (E990-E999).

 $^2$  The decimal should be applied to each individual three- digit E code in the grouping.

<sup>3</sup> Adverse effects have been excluded from the "all injury" category but are included in the "all external causes" category.

<sup>4</sup> Includes (1) adverse effects to patients during surgical and medical care, (2) surgical and medical procedures as the cause of abnormal reactions or later complications without mention of negative events at the time of procedure, (3) drugs, medicinal and biological substances causing adverse effects when used therapeutically.

# **ICD-9** E-codes for cells not included in the U.S. Framework

# used in tables of injury mortality by mechanism and intent

Mechanism	Unintentional	Suicide	Homicide	Undetermined
Motor Vehicle Traffic				
MVTC - occupant	E810 - E819 (.0 & .1)			
MVTC - motorcyclist	E810 - E819 (.2 &.3)			
MVTC - pedal cyclist	E810 - E819 (.6)			
MVTC - pedestrian	E810 - E819 (.7)			
MVTC - unspecified	E810 - E819 (.9)			
Transport, Other				
snowmobile, drowning	<i>E820 &amp; N code = 994.1</i>			
snowmobile (except drowning)	E820			
aircraft	E840 - E845			
Drowning				
boating incident	E830 & E832			
recreational swimming	E910.2			
bathtub	E910.4			
non-aquatic activities	E910.8			
unspecified	E910.9			
Fire/burn				
conflagration in private dwelling	E890			
other specified fire	E891 - E898	E958.1	E968.0	E988.1
unspecified fire	E899			
Poisoning				
medication	<i>E850 - E858</i>	E950 (.05)	E962.0	E980 (.05)
alcohol	E860			
carbon monoxide	E868	E952 (.0, .1)		E982 (.0, .1)
Suffocation				
hanging ex. bed or cradle	E913.8	E953.0		E983.0
Natural/environmental				
excessive cold	E901	E958.3		E988.3
exposure to weather nos	E904.3			
animal bite	E906 (.05, .9)			
Unspecified				
fracture, cause unspecified	E887			

# **ICD-9** E-codes for cells not included in the U.S. Framework

# used in tables of injury hospitalization by mechanism and intent

Mechanism	Unintentional	Self-inflicted	Assault	Undetermined
Motor Vehicle Traffic				
MVTC - occupant	E810 - E819 ( .0 & .1)			
MVTC - motorcyclist	E810 - E819 ( .2 & .3)			
MVTC - pedal cyclist	E810 - E819 (.6)			
MVTC - pedestrian	E810 - E819 (.7)			
MVTC - unspecified	E810 - E819 ( .9)			
Transport, Other				
snowmobile	E820			
other off-road motor vehicle	E821			
Fall				
same level - tripping	E885 & E886			
one level to another	E883 & E884		E968.1	E987
stairs / steps	E880			
ladder / scaffold / building	E881 & E882			
Fire/burn				
conflagration in private building	E890			
Hot substance/ object	E924	E958 (.2, .7)	E961 & E968.3	E988 ( .2, .7)
Poisoning				
medication	<i>E850 - E858</i>	E950 (.05)	E962.0	E980 (.05)
Natural/environmental				
excessive cold	E901	E958.3		E988.3
animal bite	E906 (.05, .9)			
Struck by, against				
unarmed fight / brawl			E960.0	
struck by blunt object			E968.2	
Other, classifiable				
maltreatment			E967	
foreign object in eye / orifice	E914, E915			
Unspecified				
fracture, cause unspecified	E887			
### **APPENDIX B**

Tables

#### Table A-1 Injury Mortality Rates by Age Group & Intent NWT, 1990 - 1999 & Canada 1996 Rate per 100,000 person-years

	•••••	. NWT	C	anada
	Crude	95% Confidence	Crude	Age-adjusted
	Rate	Intervals	Rate	Rate <sup>1</sup>
All Injuries <sup>2</sup>	81.9	(73.4, 91.4)	44.6	35.3
0 - 14	26.3	(17.7, 37.5)	8.3	
15 - 24	104.5	(81.2, 132.5)	43.8	
25 - 34	87.7	(68.7, 110.2)	41.2	
35 - 44	80.7	(60.9, 104.8)	44.3	
45 - 64	99.2	(75.4, 128.3)	41.3	
65 +	335.1	(245.3, 447.0)	116.9	
Unintentional	55.7	(48.7, 63.6)	28.4	20.3
0 - 14	23.6	(15.6, 34.4)	6.6	
15 - 24	53.8	(37.5, 74.8)	26.4	
25 - 34	52.8	(38.4, 70.9)	21.3	
35 - 44	51.9	(36.1, 72.1)	20.2	
45 - 64	68.4	(48.9, 93.2)	21.1	
65 +	313.3	(226.7, 421.9)	101.2	
Intentional	25.2	(20.7, 30.7)	15.0	14.0
0 - 14	#		1.6	
15 - 24	49.2	(33.6, 69.4)	16.7	
25 - 34	32.4	(21.4, 47.2)	18.6	
35 - 44	28.8	(17.6, 44.5)	22.2	
45 - 64	29.1	(16.9, 46.6)	18.5	
65 +	#		14.6	

NWT source: NWT Vital Statistics; provided by Statistics Canada

Canadian source: Statistics Canada, Canadian Mortality Data

<sup>1</sup> Adjusted using direct method with the 1990 - 1999 NWT age distribution the standard populaiton.

<sup>2</sup> Injuries of undetermined intent included in the total.

# Rates suppressed, number of cases less than five.

- /	- •			
	•••••	. NWT	C	anada
	Crude	95% confidence	Crude	Age-adjusted
	Rate	intervals	Rate	Rate <sup>1</sup>
All Injuries <sup>2</sup>	1,549.8	(1,482, 1,617)	870.9	717.6
0 - 14	950.7	(850, 1,051)	508.8	
15 - 24	1,717.9	(1,536, 1,899)	824.4	
25 - 34	1,645.6	(1,488, 1,803)	704.2	
35 - 44	1,450.1	(1,295, 1,605)	678.3	
45 - 64	1,746.4	(1,566, 1,926)	702.1	
65 +	4,495.1	(3,905, 5,085)	2,317.0	
Unintentional	1,131.2	(1,075, 1,187)	740.4	579.5
0 - 14	834.9	(743, 927)	474.6	
15 - 24	971.8	(839, 1,105)	577.1	
25 - 34	1,004.1	(884, 1,124)	493.7	
35 - 44	967.6	(844, 1,091)	495.9	
45 - 64	1,425.0	(1,267, 1,583)	609.0	
65 +	4,221.5	(3,665, 4,778)	2,269.0	
Intentional	382.5	(351, 414)	117.5	125.3
0 - 14	107.2	(75, 139)	29.6	
15 - 24	708.5	(598, 818)	228.2	
25 - 34	584.7	(496, 673)	193.6	
35 - 44	431.0	(351, 511)	164.5	
45 - 64	285.0	(216, 354)	82.2	
65 +	221.5	(96, 347)	36.1	

#### Table A-2 Injury Hospitalization Rates by Age Group & Intent NWT, 1995/96 - 1999/2000 & Canada 1996/97 Rate per 100,000 person-years

NWT source: CIHI Discharge Abstract Database

Canadian source: Health Canada, Canadian Injury Data

<sup>1</sup> Adjusted using direct method with the 1990 - 1999 NWT age distribution the standard population.

<sup>2</sup> Injuries of undetermined intent included in the total.

#### Table A-3 Injury Mortality by Year & Intent NWT, 1990 - 1999

All Injuries <sup>1</sup>			•••	Unintentional			Intentional		
# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	
331	81.9	(73.4, 91.4)	225	55.7	(48.7, 63.6)	102	25.2	(20.7, 30.7)	
35	93.3	(65.0, 129.8)	20	53.3	(32.6, 82.3)	14	37.3	(20.4, 62.6)	
31	80.1	(54.4, 113.7)	20	51.7	(31.63, 79.8)	11	28.4	(14.2, 50.9)	
36	91.4	(64.0, 126.5)	23	58.4	(37.0, 87.6)	11	27.9	(13.9, 49.9)	
41	102.7	(73.7, 139.3)	27	67.6	(44.6, 98.4)	14	35.1	(19.2, 58.8)	
36	88.4	(61.9, 122.4)	29	71.2	(47.7, 102.2)	5	12.3	(4.0, 28.6)	
30	72.4	(48.9, 103.4)	23	55.5	(35.2, 83.3)	7	16.9	(6.8, 34.8)	
34	81.3	(56.3, 113.6)	28	66.9	(44.5, 96.7)	6	14.3	(5.3, 31.2)	
26	62.2	(40.6, 91.1)	16	38.3	(21.9, 62.2)	10	23.9	(11.5, 44.0)	
28	68.1	(45.3, 98.4)	20	48.6	(29.7, 75.1)	8	19.5	(8.4, 38.3)	
35	84.0	(58.5, 116.8)	19	45.6	(27.5, 71.2)	16	38.4	(21.9, 62.4)	
	# of deaths 331 35 31 36 41 36 30 34 26 28 35	# of deaths         Rate per 100,000           331         81.9           35         93.3           31         80.1           36         91.4           41         102.7           36         88.4           30         72.4           34         81.3           26         62.2           28         68.1           35         84.0	All Injuries <sup>1</sup> # of deaths       Rate per loo,000       95% CI - rate         331       81.9       (73.4, 91.4)         35       93.3       (65.0, 129.8)         31       80.1       (54.4, 113.7)         36       91.4       (64.0, 126.5)         41       102.7       (73.7, 139.3)         36       88.4       (61.9, 122.4)         30       72.4       (48.9, 103.4)         34       81.3       (56.3, 113.6)         26       62.2       (40.6, 91.1)         28       68.1       (45.3, 98.4)         35       84.0       (58.5, 116.8)	All Injuries1 $\#$ of Rate per deaths $\#$ of 100,000 $95\%$ CI - rate $\#$ of deaths331 $81.9$ $(73.4, 91.4)$ $225$ 35 $93.3$ $(65.0, 129.8)$ $20$ 31 $80.1$ $(54.4, 113.7)$ $20$ 36 $91.4$ $(64.0, 126.5)$ $23$ 41 $102.7$ $(73.7, 139.3)$ $27$ 36 $88.4$ $(61.9, 122.4)$ $29$ 30 $72.4$ $(48.9, 103.4)$ $23$ 34 $81.3$ $(56.3, 113.6)$ $28$ 26 $62.2$ $(40.6, 91.1)$ $16$ 28 $68.1$ $(45.3, 98.4)$ $20$ 35 $84.0$ $(58.5, 116.8)$ $19$	4II Injuries <sup>1</sup> $$ Uninter# of deathsRate per 100,00095% CI - rate# of deathsRate per 100,00033181.9(73.4, 91.4)22555.73593.3(65.0, 129.8)2053.33180.1(54.4, 113.7)2051.73691.4(64.0, 126.5)2358.441102.7(73.7, 139.3)2767.63688.4(61.9, 122.4)2971.23072.4(48.9, 103.4)2355.53481.3(56.3, 113.6)2866.92662.2(40.6, 91.1)1638.32868.1(45.3, 98.4)2048.63584.0(58.5, 116.8)1945.6	4ll Injuries <sup>1</sup> $$ Uninteritonal# of Rate per deaths 100,000 $95%$ CI - rate# of Rate per deaths 100,000 $95%$ CI - rate331 $81.9$ $(73.4, 91.4)$ $225$ $55.7$ $(48.7, 63.6)$ 35 $93.3$ $(65.0, 129.8)$ $20$ $53.3$ $(32.6, 82.3)$ 31 $80.1$ $(54.4, 113.7)$ $20$ $51.7$ $(31.63, 79.8)$ 36 $91.4$ $(64.0, 126.5)$ $23$ $58.4$ $(37.0, 87.6)$ 41 $102.7$ $(73.7, 139.3)$ $27$ $67.6$ $(44.6, 98.4)$ 36 $88.4$ $(61.9, 122.4)$ $29$ $71.2$ $(47.7, 102.2)$ 30 $72.4$ $(48.9, 103.4)$ $23$ $55.5$ $(35.2, 83.3)$ 34 $81.3$ $(56.3, 113.6)$ $28$ $66.9$ $(44.5, 96.7)$ 26 $62.2$ $(40.6, 91.1)$ $16$ $38.3$ $(21.9, 62.2)$ 28 $68.1$ $(45.3, 98.4)$ $20$ $48.6$ $(29.7, 75.1)$ 35 $84.0$ $(58.5, 116.8)$ $19$ $45.6$ $(27.5, 71.2)$	4ll Injuries <sup>1</sup> $$ Unintentional $$ # of Rate per deaths $95%$ CI - rate# of deathsRate per deaths $95%$ CI - rate# of deaths33181.9 $(73.4, 91.4)$ 225 $55.7$ $(48.7, 63.6)$ $102$ 35 $93.3$ $(65.0, 129.8)$ 20 $53.3$ $(32.6, 82.3)$ $14$ 3180.1 $(54.4, 113.7)$ 20 $51.7$ $(31.63, 79.8)$ $11$ 36 $91.4$ $(64.0, 126.5)$ 23 $58.4$ $(37.0, 87.6)$ $11$ 41 $102.7$ $(73.7, 139.3)$ 27 $67.6$ $(44.6, 98.4)$ $14$ 3688.4 $(61.9, 122.4)$ 29 $71.2$ $(47.7, 102.2)$ $5$ 30 $72.4$ $(48.9, 103.4)$ 23 $55.5$ $(35.2, 83.3)$ $7$ 3481.3 $(56.3, 113.6)$ 28 $66.9$ $(44.5, 96.7)$ $6$ 26 $62.2$ $(40.6, 91.1)$ $16$ $38.3$ $(21.9, 62.2)$ $10$ 28 $68.1$ $(45.3, 98.4)$ 20 $48.6$ $(29.7, 75.1)$ $8$ 3584.0 $(58.5, 116.8)$ $19$ $45.6$ $(27.5, 71.2)$ $16$	4II Injuries1 $III$ Uninterional $IIII$ Thentional# of cathsRate per deaths $00,000$ $95%$ CI - rate# of caths $I00,000$ $95%$ CI - rate# of caths $IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII$	

Source: NWT Vital Statistics; provided by Statistics Canada

<sup>1</sup> Injuries of undetermined intent included in the total.

#### Table A-4 Age Standardized Injury Mortality Rates by Year & Intent<sup>1</sup> (Three-year rolling average) NWT, 1990 - 1999

	All	Injuries <sup>2</sup>	Unin	tentional	Intentional		
	Rate per 100,000	95% CI - rate	Rate per 100,000	95% CI - rate	Rate per 100,000	95% CI - rate	
1990 - 99	81.9	(73.4, 91.4)	55.7	(48.7, 63.6)	25.2	(20.7, 30.7)	
1990 - 92	88.1	(70.9, 105.2)	55.0	(41.3, 68.6)	30.5	(20.5, 40.4)	
1991 - 93	92.4	(74.9, 109.8)	60.0	(45.9, 74.1)	30.5	(20.5, 40.4)	
1992 - 94	95.2	(77.6, 112.9)	67.3	(52.5, 82.2)	25.2	(16.2, 34.2)	
1993 - 95	87.8	(71.1, 104.5)	65.5	(51.1, 80.0)	21.4	(13.2, 29.6)	
1994 - 96	80.0	(64.2, 95.7)	64.6	(50.4, 78.7)	14.6	(7.9, 21.4)	
1995 - 97	71.7	(56.9, 86.5)	53.1	(40.4, 65.8)	18.6	(11.0, 26.2)	
1996 - 98	69.4	(54.9, 84.0)	50.0	(37.8, 62.3)	19.4	(11.6, 27.2)	
1997 - 99	69.1	(54.7, 83.5)	41.8	(30.7, 52.9)	27.4	(18.2, 36.7)	

Source: NWT Vital Statistics; provided by Statistics Canada

<sup>1</sup> The 1990 to 1999 NWT age distribution was the standard population.

<sup>2</sup> Injuries of undetermined intent included in the total.

#### Table A-5 Injury Hospitalizations by Fiscal Year & Intent NWT, 1995/96 - 1999/2000

	All Injuries <sup>1</sup>			Unintentional			Intentional		
	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate
1995 - 99	3,220	1,549.3	(1,482, 1,617)	2,351	1131.2	(1,075, 1,187)	795	382.5	(351, 414)
1995/96	683	1,648.8	(1,493, 1,805)	511	1,233.6	(1,102, 1,365)	153	369.3	(304, 435)
1996/97	616	1,472.7	(1,326, 1,620)	442	1,056.7	(935, 1,178)	162	387.3	(320, 454)
1997/98	605	1,447.4	(1,302, 1,593)	434	1,038.3	(918, 1,158)	149	356.5	(292, 421)
1998/99	607	1,476.3	(1,328, 1,625)	468	1,138.3	(1,011, 1,265)	129	313.8	(253, 375)
1999/00	709	1,701.5	(1,544, 1,860)	496	1,190.4	(1,062, 1,319)	202	484.8	(410, 560)
Age-Stan	dardiz	ed Rates	2						
1995/96		1,663.5	(1,506, 1,821)		1,251.6	(1,118, 1,385)		366.0	(301, 431)
1996/97		1,480.4	(1,333, 1,628)		1,065.9	(944, 1,188)		385.5	(319, 452)
1997/98		1,448.4	(1,303, 1,594)		1,039.2	(919, 1,159)		356.6	(292, 421)
1998/99		1,468.5	(1,321, 1,616)		1,128.3	(1,003, 1,254)		316.0	(255, 377)
1999/00		1,692.6	(1,535, 1,850)		1,178.0	(1,051, 1,305)		487.7	(412, 563)

Source: CIHI Discharge Abstract Database

<sup>1</sup> Injuries of undetermined intent included in the total.

<sup>2</sup> The 1995 to 1999 NWT age distribution was the standard population.

Table A-6	
Injury Mortality by Age Group & In	ntent
NWT, 1990 - 1999	

	Number of deaths	Rate per 100,000	95% confidence intervals - rate
All Injuries <sup>1</sup>	331	81.9	(73.4, 91.4)
0 - 14	30	26.3	(17.7, 37.5)
15 - 24	68	104.5	(81.2, 132.5)
25 - 34	73	87.7	(68.7, 110.2)
35 - 44	56	80.7	(60.9, 104.8)
45 - 64	58	99.2	(75.4, 128.3)
65 +	46	335.1	(245.3, 447.0)
Unintentiona	l 225	55.7	(48.7, 63.6)
0 - 14	27	23.6	(15.6, 34.4)
15 - 24	35	53.8	(37.5, 74.8)
25 - 34	44	52.8	(38.4, 70.9)
35 - 44	36	51.9	(36.1, 72.1)
45 - 64	40	68.4	(48.9, 93.2)
65 +	43	313.3	(226.7, 421.9)
Intentional	102	25.2	(20.7, 30.7)
0 - 14	3	#	
15 - 24	32	49.2	(33.6, 69.4)
25 - 34	27	32.4	(21.4, 47.2)
35 - 44	20	28.8	(17.6, 44.5)
45 - 64	17	29.1	(16.9, 46.6)
65 +	3	#	

Source: NWT Vital Statistics; provided by Statistics Canada

<sup>1</sup> Injuries of undetermined intent included in the total.

# Rates suppressed, number of cases less than five

	Number of Hosp.	Rate per 100,000	95% confidence intervals - rate
All Injuries <sup>1</sup>	3,220	1,549.3	(1,482, 1,617)
0 - 14	550	950.7	(850, 1,051)
15 - 24	548	1,717.9	(1,536, 1,899)
25 - 34	667	1,645.6	(1,488, 1,803)
35 - 44	534	1,447.4	(1,292, 1,602)
45 - 64	576	1,746.4	(1,566, 1,926)
65 +	345	4,495.1	(3,905, 5,085)
Unintentional	2,351	1,131.2	(1,075, 1,187)
0 - 14	483	834.9	(743, 927)
15 - 24	310	971.8	(839, 1,105)
25 - 34	407	1,004.1	(884, 1,124)
35 - 44	357	967.6	(844, 1,091)
45 - 64	470	1,425.0	(1,267, 1,583)
65 +	324	4,221.5	(3,665, 4,778)
Intentional	795	382.5	(351, 414)
0 - 14	62	107.2	(75, 139)
15 - 24	226	708.5	(598, 818)
25 - 34	237	584.7	(496, 673)
35 - 44	159	431.0	(351, 511)
45 - 64	94	285.0	(216, 354)
65 +	17	221.5	(96, 347)

Table A-7 Injury Hospitalizations by Age Group & Intent NWT, 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

<sup>1</sup> Injuries of undetermined intent included in the total.

	•••••	Male	28	•••••	Females			
	Number of deaths	Rate per 100,000	95% confidence intervals - rate	Number of deaths	Rate per 100,000	95% confidence intervals - rate		
All Injuries <sup>1</sup>	258	122.0	(107.8, 138.1)	73	37.9	(29.7, 7.7)		
0 - 14	16	27.4	(15.3, 45.2)	14	25.1	(13.7, 42.1)		
15 - 24	57	169.7	(128.6, 219.9)	11	34.9	(17.4, 62.5)		
25 - 34	67	155.6	(120.6, 197.6)	6	14.9	(5.5, 32.5)		
35 - 44	46	124.8	(91.4, 166.5)	10	30.7	(14.7, 56.5)		
45 - 64	44	135.7	(98.6, 182.1)	14	53.8	(29.4, 90.3)		
65 +	28	393.2	(261.3, 568.3)	18	272.8	(161.7, 431.1)		
Unintentiona	<b>I</b> 163	77.1	(65.9, 90.1)	62	32.2	(24.7, 41.3)		
0 - 14	14	24.0	(13.1, 40.2)	13	23.3	(12.4, 39.9)		
15 - 24	27	80.4	(53.0, 117.0)	8	25.4	(11.0, 50.1)		
25 - 34	40	92.9	(66.4, 126.5)	4	#			
35 - 44	29	78.7	(52.7, 113.0)	7	21.5	(8.6, 44.3)		
45 - 64	28	86.3	(57.4, 124.8)	12	46.1	(23.8, 80.6)		
65 +	25	351.1	(227.2, 518.3)	18	272.8	(161.7, 431.1)		
Intentional	91	43.0	(34.6, 52.8)	11	5.7	(2.9, 10.2)		
0 - 14	2	#		1	#			
15 - 24	29	86.4	(57.8, 124.0)	3	#			
25 - 34	25	58.1	(37.6, 85.7)	2	#			
35 - 44	17	46.1	(26.9, 73.8)	3	#			
45 - 64	15	46.2	(25.9, 76.3)	2	#			
65 +	3	#		-	-	-		

#### Table A-8 Injury Mortality by Age Group, Sex & Intent NWT, 1990 - 1999

Source: NWT Vital Statistics; provided by Statistics Canada

<sup>1</sup> Injuries of undetermined intent included in the total.

# Rates suppressed, number of cases less than five.

	•••••	Male	28	••••••	Females				
	Number of Hosp.	Rate per 100,000	95% confidence intervals - rate	Number of Hosp.	Rate per 100,000	95% confidence intervals - rate			
All Injuries <sup>1</sup>	1,924	1,778.0	(1,678, 1,878)	1,296	1,300.9	(1,211, 1,391)			
0 - 14	324	1,095.7	(946, 1,246)	226	799.1	(666, 932)			
15 - 24	327	1,969.6	(1,702, 2,237)	221	1,444.8	(1,202, 1,687)			
25 - 34	460	2,226.1	(1,972, 2,481)	207	1,041.9	(861, 1,223)			
35 - 44	308	1,587.9	(1,365, 1,810)	226	1,291.7	(1,082, 1,513)			
45 - 64	349	1,932.9	(1,679, 2,187)	227	1,520.4	(1,269, 1,772)			
65 +	156	3,974.5	(3,201, 4,748)	189	5,044.0	(4,145, 5,943)			
Unintentional	1,483	1,370.4	(1,286, 1,455)	868	871.3	(799, 944)			
0 - 14	303	1,024.7	(885, 1,165)	180	636.4	(520, 753)			
15 - 24	224	1,349.2	(1,135, 1,563)	86	562.2	(413, 711)			
25 - 34	296	1,432.4	(1,235, 1,630)	111	558.7	(428, 689)			
35 - 44	226	1,165.1	(981, 1,349)	131	748.7	(588, 909)			
45 - 64	290	1,606.1	(1,383, 1,830)	180	1,205.6	(985, 1,426)			
65 +	144	3,668.8	(2,952, 4,386)	180	4,803.8	(3,942, 5,665)			
Intentional	400	369.6	(326, 413)	395	396.5	(350, 443)			
0 - 14	18	60.9	(27, 95)	44	155.6	(101, 210)			
15 - 24	99	596.3	(455, 737)	127	830.3	(659, 1,001)			
25 - 34	148	716.2	(578, 854)	89	448.0	(338, 558)			
35 - 44	73	376.3	(273, 480)	86	491.5	(368, 615)			
45 - 64	54	299.1	(203, 395)	40	267.9	(169, 366)			
65 +	8	203.8	(75, 444)	9	240.2	(88, 523)			

#### Table A-9 Injury Hospitalizations by Age Group, Sex & Intent NWT, 199596 - 1999/2000

Source: CIHI Discharge Abstract Database

<sup>1</sup> Injuries of undetermined intent included in the total.

#### Table A-10 Injury Mortality by Age Group, Ethnicity & Intent NWT, 1990 - 1999

	•••	Dene			Inuit			Other		
	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	
All Injuries <sup>1</sup>	138	121.4	(102.3, 143.9)	67	162.2	(125.7, 206.0)	126	50.6	(42.3, 60.5)	
0 - 14	20	50.5	(30.9, 78.1)	5	33.2	(10.8, 77.4)	5	8.4	(2.7, 19.7)	
15 - 24	25	121.0	(78.3, 178.6)	19	261.9	(157.7, 409.0)	24	64.4	(41.3, 95.8)	
25 - 34	30	156.2	(105.4, 223.0)	14	192.5	(105.2, 323.0)	29	51.4	(34.4, 73.8)	
35 - 44	13	93.5	(49.8, 159.9)	12	224.1	(115.8, 391.5)	31	61.7	(42.0, 87.6)	
45 - 64	18	128.5	(76.2, 203.2)	13	258.5	(137.7, 442.0)	27	68.2	(44.9, 99.2)	
65 +	32	501.4	(343.0, 707.8)	4	#		10	161.1	(77.2, 296.2)	
Unintentional	109	95.9	(79.1, 116.1)	41	99.2	(71.2, 134.6)	75	30.1	(23.7, 37.8)	
0 - 14	19	48.0	(28.9, 75.0)	4	#		4	#		
15 - 24	16	77.4	(44.3, 125.7)	7	96.5	(38.8, 198.8)	12	32.2	(16.6, 56.2)	
25 - 34	19	98.9	(59.6, 154.5)	8	110.0	(47.5, 216.7)	17	30.1	(17.5, 48.2)	
35 - 44	10	72.0	(34.5, 132.3)	7	130.7	(52.6, 269.4)	19	37.8	(22.8, 59.1)	
45 - 64	15	107.1	(60.0, 176.7)	11	218.7	(109.2, 391.4)	14	35.4	(19.3, 59.3)	
65 +	30	470.1	(317.2, 671.1)	4	#		9	145.0	(66.3, 275.2)	
Intentional	28	24.6	(16.4, 35.6)	26	62.9	(41.1, 92.2)	48	19.3	(14.2, 25.6)	
0 - 14	1	#		1	#		1	#		
15 - 24	9	43.5	(19.9, 82.7)	12	165.4	(85.5, 289.0)	11	29.5	(14.7, 52.8)	
25 - 34	10	52.1	(25.0, 95.8)	6	82.5	(30.3, 179.6)	11	19.5	(9.7, 34.9)	
35 - 44	3	21.6	(4.5, 63.1)	5	93.4	(30.3, 217.9)	12	23.9	(12.3, 41.7)	
45 - 64	3	#		2	#		12	30.3	(15.7, 52.9)	
65 +	2	#		-	-	-	1	#		

Source: NWT Vital Statistics; provided by Statistics Canada

<sup>1</sup> Injuries of undetermined intent included in the total.

# Rates suppressed, number of cases less than five.

#### Table A-11 Injury Hospitalizations by Age Group, Ethnicity & Intent NWT, 1995/96 - 1999/2000

	Dene			••••	Inu	it	Other		
	# of Hosp.	Rate per 100,000	95% CI - rate	# of Hosp.	Rate per 100,000	95% CI - rate	# of Hosp.	Rate per 100,000	95% CI - rate
All Injuries <sup>1</sup>	1,393	2,283.0	(2,127, 2,439)	540	2,455.2	(2,194, 2,717)	1,287	1,031.2	(966, 1,096)
0 - 14	227	1,083.6	(899, 1,268)	98	1,243.2	(930, 1,556)	225	775.5	(658, 893)
15 - 24	214	2,013.3	(1,662, 2,364)	121	3,115.2	(2,417, 3,814)	213	1,220.5	(1,032, 1,409)
25 - 34	306	2,902.8	(2,482, 3,324)	108	2,869.5	(2,188, 3,552)	253	970.7	(833, 1,109)
35 - 44	182	2,371.9	(1,924, 2,819)	112	3,779.6	(2,902, 4,658)	240	915.0	(781, 1,049)
45 - 64	261	3,394.0	(2,862, 3,926)	75	2,712.2	(1,938, 3,486)	240	1,062.3	(907, 1,217)
65 +	203	5,746.1	(4,738, 6,755)	26	3,539.7	(1,831, 5,248)	116	3,359.8	(2,663, 4,057)
Unintentional	977	1,601.2	(1,473, 1,729)	335	1,523.2	(1,326, 1,720)	1,039	832.5	(775, 890)
0 - 14	191	911.7	(746, 1,077)	86	1,091.0	(811, 1,371)	206	710.0	(600, 820)
15 - 24	110	1,034.9	(787, 1,283)	62	1,596.2	(1,116, 2,077)	138	790.8	(641, 941)
25 - 34	165	1,565.2	(1,260, 1,870)	53	1,408.2	(949, 1,867)	189	725.1	(607, 843)
35 - 44	119	1,550.9	(1,195, 1,907)	52	1,754.8	(1,178, 2,331)	186	709.1	(593, 825)
45 - 64	203	2,639.7	(2,178, 3,101)	56	2,025.1	(1,385, 2,665)	211	933.9	(791, 1,077)
65 +	189	5,349.8	(4,394, 6,305)	26	3,539.7	(1,911, 5,169)	109	3,157.0	(2,491, 3823)
Intentional	373	611.3	(539, 683)	193	877.5	(729, 1,026)	229	183.5	(157, 210)
0 - 14	33	157.5	(95, 220)	12	152.2	(49, 256)	17	58.6	(27, 90)
15 - 24	101	950.2	(736, 1,165)	56	1,441.7	(991, 1,893)	69	395.4	(291, 500)
25 - 34	126	1,195.3	(954, 1,437)	52	1,381.6	(933, 1,830)	59	226.4	(161, 291)
35 - 44	53	690.7	(475, 906)	56	1,889.8	(1,300, 2,480)	50	190.6	(131, 250)
45 - 64	49	637.2	(430, 844)	17	614.8	(264, 965)	28	123.9	(72, 176)
65 +	11	311.4	(98, 525)	-	-	-	6	173.8	(56, 406)

Source: CIHI Discharge Abstract Database

<sup>1</sup> Injuries of undetermined intent included in the total.

#### Table A-12 Injury Mortality by Age Group, Community Type & Intent NWT, 1990 - 1999

	••••	. Yellow	knife	F	Regional	Centers	Other Communities			
	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	# of deaths	Rate per 100,000	95% CI - rate	
All Injuries <sup>1</sup>	92	53.2	(42.8, 65.2)	83	86.5	(68.9, 107.2)	156	117.5	(100.1, 137.9)	
0 - 14	3	#		5	18.8	(6.1, 44.0)	22	51.3	(32.2, 77.7)	
15 - 24	28	102.0	(67.8, 147.4)	15	99.0	(55.4, 163.3)	25	113.5	(73.4, 167.5)	
25 - 34	17	43.5	(25.3, 69.7)	19	100.6	(60.6, 157.1)	37	149.1	(105.0, 205.5)	
35 - 44	22	62.7	(39.3, 94.9)	14	87.1	(47.6, 146.1)	20	111.4	(68.0, 172.0)	
45 - 64	16	64.9	(37.1, 105.3)	17	108.9	(63.4, 174.4)	25	137.9	(89.3, 203.6)	
65 +	6	213.2	(78.2, 464.1)	13	348.6	(185.6, 596.1)	27	386.0	(254.4, 561.5)	
Unintentional	58	33.5	(25.4, 43.3)	58	60.4	(45.9, 78.1)	109	82.1	(67.7, 99.4)	
0 - 14	2	#		5	18.8	(6.1, 44.0)	20	46.7	(28.5, 72.1)	
15 - 24	18	65.5	(38.8, 103.6)	7	46.2	(18.6, 95.2)	10	45.4	(21.8, 83.5)	
25 - 34	8	20.5	(8.8, 40.4)	14	74.1	(40.5, 124.4)	22	88.7	(55.6, 134.2)	
35 - 44	15	42.7	(23.9, 70.5)	9	56.0	(25.6, 106.3)	12	66.8	(34.5, 116.8)	
45 - 64	9	36.5	(16.7, 69.3)	10	64.1	(30.7, 117.8)	21	115.9	(71.7, 177.1)	
65 +	6	213.2	(78.2, 464.1)	13	348.6	(185.6, 596.1)	24	343.1	(219.8, 510.5)	
Intentional	32	18.5	(12.6, 26.1)	23	24.0	(15.2, 36.0)	47	35.4	(26.0, 47.1)	
0 - 14	1	#		-	-	-	2	#		
15 - 24	9	32.8	(15.0, 62.2)	8	52.8	(22.8, 104.1)	15	68.1	(38.1, 112.3)	
25 - 34	8	20.5	(8.8, 40.4)	4	#		15	60.4	(33.8, 99.7)	
35 - 44	7	19.9	(8.0, 41.1)	5	31.1	(10.1, 72.6)	8	44.6	(19.2, 87.8)	
45 - 64	7	28.4	(11.4, 58.5)	6	38.4	(14.1, 83.7)	4	#		
65 +	-	-	-	-	-	-	3	#		

Source: NWT Vital Statistics; provided by Statistics Canada

<sup>1</sup> Injuries of undetermined intent included in the total.

# Rates suppressed, number of cases less than five.

# Table A-13Injury Hospitalizations by Age Group, Community Type & IntentNWT, 1995/96 - 1999/2000

	••••	. Yellow	knife	F	Regional	Centers	Other Communities			
	# of Hosp.	Rate per 100,000	95% CI - rate	# of Hosp.	Rate per 100,000	95% CI - rate	# of Hosp.	Rate per 100,000	95% CI - rate	
All Injuries <sup>1</sup>	1,014	1,126.0	(1,038, 1,214)	1,063	2,198.2	(2,023, 2,373)	1,143	1,660.1	(1,545, 1,775)	
0 - 14	168	745.1	(602, 888)	183	1,378.1	(1,113, 1,644)	199	899.6	(750, 1,049)	
15 - 24	163	1,192.4	(961, 1,424)	184	2,543.4	(2,058, 3,029)	201	1,840.8	(1,537, 2,144)	
25 - 34	233	1,247.1	(1,045, 1,450)	193	2,152.1	(1,750, 2,554)	241	1,919.4	(1,630, 2,208)	
35 - 44	207	1,101.8	(912, 1,292)	173	2,101.2	(1,686, 2,516)	154	1,595.1	(1,294 1,896)	
45 - 64	186	1,256.4	(1,028, 1,485)	206	2,449.6	(2,007, 2,892)	184	1,888.1	(1,563, 2,214)	
65 +	57	3,643.8	(2,462, 4,826)	124	5,553.0	(4,281, 6,825)	164	4,253.5	(3,486, 5,021)	
Unintentional	766	850.6	(777, 924)	783	1,619.2	(1,474, 1,764)	802	1,164.8	(1,070, 1,260)	
0 - 14	159	705.1	(571, 839)	154	1,159.7	(925, 1,394)	170	768.5	(632, 905)	
15 - 24	108	790.0	(608, 972)	99	1,368.5	(1,023, 1,713)	103	943.3	(728, 1,158)	
25 - 34	151	808.2	(651, 966)	119	1,326.9	(1,022, 1,632)	137	1,091.1	(876, 1,306)	
35 - 44	142	755.8	(604, 908)	112	1,360.3	(1,038, 1,632)	103	1,066.8	(824, 1,310)	
45 - 64	153	1,033.5	(834, 1,233)	179	2,128.6	(1,731, 2,526)	138	1,416.1	(1,138, 1,694)	
65 +	53	3,388.1	(2,290, 4,486)	120	5,373.9	(4,169, 6,579)	151	3,916.3	(3,191, 4,642)	
Intentional	245	272.0	(231, 313)	245	506.6	(427, 586)	305	443.0	(387, 499)	
0 - 14	9	39.9	(8, 71)	27	203.3	(107, 300)	26	117.5	(67, 168)	
15 - 24	54	395.0	(268, 522)	79	1,092.0	(790, 1,394)	93	851.7	(657, 1,046)	
25 - 34	82	438.9	(324, 554)	64	713.6	(494, 933)	91	724.8	(557, 892)	
35 - 44	63	335.3	(235, 435)	53	643.7	(426, 862)	43	445.4	(296, 595)	
45 - 64	33	222.9	(131, 315)	21	249.7	(115, 384)	40	410.5	(267, 554)	
65 +	#	#		#	#		12	311.2	(113, 509)	

Source: CIHI Discharge Abstract Database

<sup>1</sup> Injuries of undetermined intent included in the total.

# Suppressed, number of cases less than five

### Table A-14 Injury Hospitalizations by Age Group, Community Type & Intent Total Hospital Stay Two Days or More NWT, 1995/96 - 1999/2000

	••••	. Yellow	knife	F	Regional	Centers	Other Communities			
	# of Hosp.	Rate per 100,000	95% CI - rate	# of Hosp.	Rate per 100,000	95% CI - rate	# of Hosp.	Rate per 100,000	95% CI - rate	
All Injuries <sup>1</sup>	544	604.1	(542, 666)	494	1,021.6	(908, 1,135)	727	1,055.9	(967, 1,145)	
0 - 14	58	257.2	(177, 338)	43	323.8	(202, 446)	99	447.6	(345, 550)	
15 - 24	85	621.8	(461, 782)	84	1,161.1	(850, 1,473)	123	1,126.5	(896, 1,357)	
25 - 34	123	658.4	(517, 800)	86 959.0 (704, 1,214)		(704, 1,214)	153	1,218.5	(995, 1,442)	
35 - 44	125	665.4	(524, 807)	83	83 1,008.1 (736, 1,280)		100	1,035.8	(801, 1,271)	
45 - 64	109	736.3	36.3 (568, 904)		1,331.8	(1,023, 1,641)	127	1,303.2	(1,041, 1,565)	
65 +	44	2,812.8	(1,814, 3,812)	86	3,851.3	(2,844, 4,859)	125	3,242.0	(2,592, 3,892)	
Unintentional	416	461.9	(409, 515)	378	781.7	(685, 878)	520	755.3	(681, 830)	
0 - 14	54	239.5	(163, 316)	29	218.4	(121, 316)	82	370.7	(278, 463)	
15 - 24	58	424.3	(294, 554)	44	608.2	(388, 828)	63	577.0	(413, 741)	
25 - 34	83	444.3	(330, 558)	63	702.5	(490, 915)	93	740.7	(567, 914)	
35 - 44	85	452.4	(338, 567)	56	680.1	(462, 898)	69	714.7	(521, 909)	
45 - 64	95	641.7	(488, 795)	102	1,212.9	(925, 1,500)	96	985.1	(759, 1,212)	
65 +	41	2,621.0	(1,675, 3,567)	84	3,761.7	(2,792, 4,732)	117	3,034.5	(2,409, 3,660)	
Intentional	126	139.9	(111, 169)	93	192.3	(144, 241)	188	273.1	(231, 315)	
0 - 14	#	#		13	97.9	(32, 164)	15	67.8	(31, 105)	
15 - 24	26	190.2	(104, 276)	35	483.8	(284, 683)	58	531.2	(383, 679)	
25 - 34	40	214.1	(136, 292)	18	200.7	(85, 316)	53	422.1	(299, 545)	
35 - 44	39	207.6	(131, 284)	22	267.2	(128, 406)	27	279.7	(165, 394)	
45 - 64	14	94.6	(36, 153)	5	59.5	(16, 152)	27	277.1	(164, 390)	
65 +	#	#		#	#		8	207.5	(83, 428)	

Source: CIHI Discharge Abstract Database

<sup>1</sup> Injuries of undetermined intent included in the total.

# Suppressed, number of cases less than five

	Uninten	itional	Suid	cide	Homi	icide	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	225	100.0	78	100.0	24	100.0	4	100.0	331	100.0
Motor vehicle traffic crash	55	24.4	-	-	-	-	-	-	55	16.6
MVTC - occupant	13	5.8	-	-	-	-	-	-	13	3.9
MVTC - motorcyclist	1	0.4	-	-	-	-	-	-	1	0.3
MVTC - pedal cyclist	1	0.4	-	-	-	-	-	-	1	0.3
MVTC - pedestrian	8	3.6	-	-	-	-	-	-	8	2.4
MVTC - unspecified	32	14.2	-	-	-	-	-	-	32	9.7
Pedestrian, other	1	0.4	-	-	-	-	-	-	1	0.3
Transport, other	19	8.4	-	-	-	-	-	-	19	5.7
snowmobile, drowning	4	1.8	-	-	-	-	-	-	4	1.2
snowmobile (except drowning)	2	0.9	-	-	-	-	-	-	2	0.6
aircraft	12	5.3	-	-	-	-	-	-	12	3.6
other	1	0.4	-	-	-	-	-	-	1	0.3
Drowning	37	16.4	-	-	-	-	1	25.0	38	11.5
boating incident	16	7.1	-	-	-	-	-	-	16	4.8
recreational swimming	5	2.2	-	-	-	-	-	-	5	1.5
bathtub	1	0.4	-	-	-	-	-	-	1	0.3
non-aquatic activities	8	3.6	-	-	-	-	-	-	8	2.4
other	-	-	-	-	-	-	1	25.0	1	0.3
unspecified	7	3.1	-	-	-	-	-	-	7	2.1
Fire, burn	22	9.8	-	-	-	-	-	-	22	6.6
conflagration in private dwelling	15	6.7	-	-	-	-	-	-	15	4.5
other specified fire	2	0.9	-	-	-	-	-	-	2	0.6
unspecified fire	5	2.2	-	-	-	-	-	-	5	1.5
Fall	7	3.1	2	2.6	-	-	-	-	9	2.7
Poisoning	28	12.4	11	14.1	1	4.2	2	50.0	42	12.7
medication	9	4.0	8	10.3	-	-	1	25.0	18	5.4
alcohol	17	7.6	-	-	-	-	-	-	17	5.1
carbon monoxide	2	0.9	2	2.6	-	-	1	25.0	5	1.5
other	-	-	1	1.3	1	4.2	-	-	2	0.6
Suffocation	3	1.3	14	17.9	1	4.2	-	-	18	5.4
hanging ex. bed or cradle	-	-	14	17.9	-	-	-	-	14	4.2
other	3	1.3	-	-	1	4.2	-	-	4	1.2
Firearms	2	0.9	51	65.4	1	4.2	-	-	54	16.3
Cut, pierce	-	-	-	-	8	33.3	-	-	8	2.4
Environmental	24	10.7	-	-	-	-	-	-	24	7.3
excessive cold	19	8.4	-	-	-	-	-	-	19	5.7
exposure to weather nos.	4	1.8	-	-	-	-	-	-	4	1.2
animal bite	1	0.4	-	-	-	-	-	-	1	0.3
Machinery	1	0.4	-	-	-	-	-	-	1	0.3
Struck by, against	1	0.4	-	-	3	12.5	-	-	4	1.2
Other, classifiable	4	1.8	_	-	6	25.0	-	-	10	3.0
Other, not classifiable	1	0.4	-	-	-	_	1	25.0	2	0.6
Unspecified	20	8.9	-	-	4	16.7	-	-	24	7.3
fracture, cause unspecified	11	4.9	-	-	-	-	-	-	11	3.3
other unspecified	9	4.0	-	-	4	16.7	-	-	13	3.9

## Table A-15Injury Mortality, NWT, 1990 - 1999, Both Sexes, All Ages

#### Unintentional Suicide Homicide Undetermined Total **Mechanism of Cause** Number (%) Number (%) Number (%) Number (%) Number (%) Total 100.0 27 100.0 2 1 100.0 30 100.0 --Motor vehicle traffic crash 7 25.9 23.3 7 \_ \_ \_ \_ \_ -MVTC - occupant 2 7.4 --2 6.7 ---\_ MVTC - motorcyclist \_ \_ \_ \_ \_ \_ \_ ----MVTC - pedal cyclist 1 3.7 ---1 3.3 -MVTC - pedestrian 2 2 7.4 6.7 \_ \_ \_ ---MVTC - unspecified 2 2 7.4 6.7 ------Pedestrian, other --\_ ----\_ --2 7.4 2 6.7 Transport, other \_ \_ \_ \_ \_ \_ snowmobile, drowning 3.7 1 ---1 3.3 --snowmobile (except drowning) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ 1 1 3.3 aircraft 3.7 -----other -\_ -\_ -\_ --18.5 5 Drowning 5 \_ \_ 16.7 \_ boating incident 2 7.4 -2 6.7 -\_ -\_ recreational swimming \_ \_ \_ -\_ -\_ -\_ \_ ---\_ bathtub -\_ --10.0 non-aquatic activities 3 11.1 3 \_ -\_ --other \_ \_ -\_ -\_ -\_ -unspecified ----------9 33.3 \_ \_ 9 30.0 Fire, burn \_ -\_ \_ -26.7 conflagration in private dwelling 8 29.6 \_ -\_ -\_ 8 other specified fire 1 3.7 1 3.3 \_ \_ \_ \_ \_ \_ unspecified fire ----------Fall \_ \_ \_ \_ \_ \_ ----Poisoning \_ \_ \_ \_ -\_ \_ \_ medication -----\_ -\_ -alcohol \_ \_ \_ \_ -\_ \_ \_ -carbon monoxide -------\_ -other \_ \_ \_ --\_ --Suffocation 3 11.1 100.0 4 -1 \_ -13.3 \_ hanging ex. bed or cradle \_ \_ -\_ --4 13.3 other 3 11.1 1 100.0 -\_ \_ -2 100.0 2 Firearms \_ 6.7 -\_ \_ . Cut, pierce --\_ \_ -\_ --\_ -Environmental 1 3.7 --\_ \_ -1 3.3 excessive cold ---------exposure to weather nos. \_ \_ \_ -\_ \_ -\_ -animal bite 3.7 3.3 1 \_ \_ \_ -\_ -1 Machinery \_ \_ \_ \_ \_ \_ -\_ \_ \_ -Struck by, against -\_ \_ -\_ -\_ -Other, classifiable -\_ \_ -------Other, not classifiable --\_ -\_ -\_ ---Unspecified \_ \_ -\_ \_ \_ \_ \_ -fracture, cause unspecified ---------other unspecified ----------

### Table A-16Injury Mortality, NWT, 1990-1999, Both Sexes, 0 - 14 Years of Age

	Uninten	itional	Suid	ide	Homi	icide	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	35	100.0	27	100.0	5	100.0	1	100.0	68	100.0
Motor vehicle traffic crash	18	51.4	-	-		-		-	18	26.5
MVTC - occupant	5	14.3	-	-	-	-	-	-	5	7.4
MVTC - motorcyclist	1	2.9	-	_		-	-	-	1	1.5
MVTC - pedal cyclist										
MVTC - pedestrian	2	5.7	-	_		-	-	-	2	2.9
MVTC - unspecified	10	28.6	-	-	-	-	-	-	10	14.7
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	4	11.4	-					-	4	5.9
snowmobile, drowning	1	2.9	-	-	-	-	-	-	1	1.5
snowmobile (except drowning)	1	2.9	-	_	-	-	-	-	1	1.5
aircraft	2	5.7	-	-	-	-	-	-	2	2.9
other	-	-	-	_	-	-	-	-	-	-
Drowning	5	14.3	-	_	-	-	-	-	5	7.4
boating incident	1	2.9	-		-	-	-	-	1	1.5
recreational swimming	3	8.6	-	-	-	-	-	-	3	4.4
bathtub										
non-aquatic activitives	1	2.9	-	_	-	-	-	-	1	1.5
other	-		-		-	-	-		-	
unspecified	-	-	-	_	-	-	-	-	-	-
Fire, burn	1	2.9	-	_	_	-	-	_	1	1.5
conflagration in private dwelling	-	-	-		-	-	-		-	-
other specified fire	-	-	-	_	-	-	-	-	_	-
unspecified fire	1	2.9	-		-	-	-		1	1.5
Fall			2	7.4	-	-	-	-	2	2.9
Poisoning	2	5.7	-	_	-	-	1	100.0	3	4.4
medication	-	-	-	-	-	-	-	-	-	
alcohol	1	2.9	-	_	-	-	-	-	1	1.5
carbon monoxide	1	2.9	-		-	-	1	100.0	2	2.9
other	-	-	1	3.7	1	20.0	-	-	2	2.9
Suffocation	-	-	7	25.9	-	-	-	-	7	10.3
hanging ex. bed or cradle	-	-	7	25.9	-		-		7	10.3
other	-	-	-	_	-	-	-	-	-	-
Firearms	-	-	18	66.7	-	-	-	_	18	26.5
Cut, pierce	-		-		1	20.0	-	-	1	1.5
Environmental	5	14.3	-	_	_	-	-	_	5	7.4
excessive cold	4	11.4	-		-	-	-	-	4	5.9
exposure to weather nos.	1	2.9	-	_	-	-	-	-	1	1.5
animal bite	-	-	-		-	-	-	-	-	-
Machinery	-	-	-	_	-	-	-	-	-	-
Struck by, against	-	-	-		2	40.0	-		2	2.9
Other, classifiable	-	-	-	_	-	-	-	-	-	-
Other, not classifiable	-	-	-		_	-	-	-	-	
Unspecified	-	-	-	_	2	40.0	-	_	2	2.9
fracture, cause unspecified	-	-	-		_	-	-	-	-	
					2	10.0	_	-	2	29

### Table A-17Injury Mortality, NWT, 1990-1999, Both Sexes, 15 - 24 Years of Age

## Table A-18Injury Mortality, NWT, 1990-1999, Both Sexes, 25 - 34 Years of Age

	Uninten	tional	Suic	cide	Homi	icide	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	44	100.0	18	100.0	9	100.0	2	100.0	73	100.0
Motor vehicle traffic crash	9	20.5	-	-	-	-	-	-	9	12.3
MVTC - occupant	1	2.3	-	-	-	-	-	-	1	1.4
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	1	2.3	-	-	-	-	-	-	1	1.4
MVTC - unspecified	5	11.4	-	-	-	-	-	-	5	6.8
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	9	20.5	-	-	-	-	-	-	9	12.3
snowmobile, drowning	2	4.5	-	-	-	-	-	-	2	2.7
snowmobile (except drowning)	1	2.3	-	-	-	-	-	-	1	1.4
aircraft	6	13.6	-	-	-	-	-	-	6	8.2
other	-	-	-	-	-	-	-	-	-	-
Drowning	13	29.5	-	-	-	-	-	-	13	17.8
boating incident	9	20.5	-	-	-	-	-	-	9	12.3
recreational swimming	-	-	-	-	-	-	-	-	-	-
bathtub	1	2.3	-	-	-	-	-	-	1	1.4
non-aquatic activitives	1	2.3	-	-	-	-	-	-	1	1.4
other	-	-	-	-	-	-	-	-	-	-
unspecified	2	4.5	-	-	-	-	-	-	2	2.7
Fire, burn	4	9.1	-	-	-	-	-	-	4	5.5
conflagration in private dwelling	4	9.1	-	-	-	-	-	-	4	5.5
other specified fire	-	-	-	-	-	-	-	-	-	-
unspecified fire	-	-	-	-	-	-	-	-	-	-
Fall	-	-	-	-	-	-	-	-	-	-
Poisoning	4	9.1	3	16.7	1	11.1	1	50.0	9	12.3
medication	-	-	2	11.1	-	-	1	50.0	3	4.1
alcohol	3	6.8	-	-	-	-	-	-	3	4.1
carbon monoxide	1	2.3	1	5.6	-	-	-	-	2	2.7
other	-	-	-	-	1	11.1	-	-	1	1.4
Suffocation	-	-	2	11.1	-	-	-	-	2	2.7
hanging ex. bed or cradle	-	-	2	11.1	-	-	-	-	2	2.7
other	-	-	-	-	-	-	-	-	-	-
Firearms	-	-	13	72.2	-	-	-	-	13	17.8
Cut, pierce	-	-	-	-	5	55.6	-	-	5	6.8
Environmental	3	6.8	-	-	-	-	-	-	3	4.1
excessive cold	3	6.8	-	-	-	-	-	-	3	4.1
exposure to weather nos.	-	-	-	-	-	-	-	-	-	-
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	-	-	-	-	-		-	-	-	
Other, classifiable	1	2.3	-	-	3	55.5	-	-	4	5.5
Other, not classifiable	-	-	-	-	-	-	1	50.0	1	1.4
Unspecified	1	2.3	-	-	-	-	-	-	1	1.4
Jracture, cause unspecified	-	-	-	-	-	-	-	-	-	
other unspecified	1	2.3	-	-	-	-	-	-	1	1.4

	Uninten	tional	Suic	ide	Homi	icide	Undeter	nined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	36	100.0	17	100.0	3	100.0	-	-	56	100.0
Motor vehicle traffic crash	12	33.3		-	-	-		-	12	21.4
MVTC - occupant	3	8.3	-	-	-	-	-	-	3	5.4
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	1	2.8	-	-	-	-	-	-	1	1.8
MVTC - unspecified	8	22.2	-	-	-	-	-	-	8	14.3
Pedestrian, other	1	2.8	-	-	-	-	-	-	1	1.8
Transport, other	1	2.8	-	-	-	-	-	-	1	1.8
snowmobile, drowning	-	-	-	-	-	-	-	-	-	-
snowmobile (except drowning)	-	-	-	-	-	-	-	-	-	-
aircraft	-	-	-	-	-	-	-	-	-	-
other	1	2.8	-	-	-	-	-	-	1	1.8
Drowning	4	11.1	-	-	-	-	-	-	4	7.1
boating incident	2	5.6	-		-	-	-	-	2	3.6
recreational swimming	1	2.8	-	-	-	-	-	-	1	1.8
bathtub		-	-		-	-	-	-	-	
non-aquatic activities	1	2.8	-	-	-	-	-	-	1	1.8
other	-	-	-		-	-	1	-	-	
unspecified	-	-	-	-	-	-	-	-	-	-
Fire, burn	1	2.8	- 1	_	-	-	-	-	1	1.8
conflagration in private dwelling	1	2.8	-		-	-	-	-	1	1.8
other specified fire	-	-	-	-	-	-	-	-	_	-
unspecified fire	-	-	-		-	-	-	-	-	-
Fall	1	2.8	-	-	-	-	-	-	1	1.8
Poisoning	10	27.8	4	23.5	-	-	-	-	14	25.0
medication	4	11.1	3	17.6	-	-	-	-	7	12.5
alcohol	6	16.7	-	-	-	-	-	-	6	10.7
carbon monoxide	-	-	1	5.9	-	-	-	-	1	1.8
other	-	-	-	-	-	-	-	-	-	-
Suffocation	-	-	2	11.8	-	-	-	-	2	3.6
hanging ex. bed or cradle		-	2	11.8	-	-	-	-	2	3.6
other	-	-	-	-	-	-	-	-	-	-
Firearms	1	2.8	11	64.7	-	-	-	-	12	21.4
Cut, pierce	-	-	-	-	-	-	-	-	-	-
Environmental	2	5.6	-	-	-	-	-	-	2	3.6
excessive cold	2	5.6	-	-	-	-	-	-	2	3.6
exposure to weather nos.	-	-	-	-	-	-	-	-	-	-
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	1	2.8	-	-	-	-	-	-	1	1.8
Struck by, against	-	-	-	-	-	-	-	-	-	-
Other, classifiable	-	-	-	-	1	33.3	-	-	1	1.8
Other, not classifiable			-		-	-		-	-	
Unspecified	2	5.6	-	-	2	66.7	-	-	4	7.1
fracture, cause unspecified			-		-	-	-	-	-	
other unspecified	2	5.6	-	-	2	66.7	-	-	4	7.1

#### Table A-19 Injury Mortality, NWT, 1990-1999, Both Sexes, 35 - 44 Years of Age

#### Table A-20 Injury Mortality, NWT, 1990-1999, Both Sexes, 45 - 64 Years of Age

	Uninten	tional	Suic	ide	Homi	cide	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	40	100.0	11	100.0	6	100.0	1	100.0	58	100.0
Motor vehicle traffic crash	7	17.5	-	-	-	-	-	-	7	12.1
MVTC - occupant	-	-	-	-	-	-	-	-	-	-
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	1	2.5	-	-	-	-	-	-	1	1.7
MVTC - unspecified	6	15.0	-	-	-	-	-	-	6	10.3
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	3	7.5	-	-	-	-	-	-	3	5.2
snowmobile, drowning	-	-	-	-	-	-	-	-	-	-
snowmobile (except drowning)	-	-	-	-	-	-	-	-	-	-
aircraft	3	7.5	-	-	-	-	-	-	3	5.2
other	-	-	-	-	-	-	-	-	-	-
Drowning	6	15.0	-	-	-	-	1	100.0	7	12.1
boating incident	2	5.0	-	-	-	-	-	-	2	3.4
recreational swimming	1	2.5	-	-	-	-	-	-	1	1.7
bathtub	-	-	-	-	-	-	-	-	-	-
non-aquatic activities	-	-	-	-	-	-	-	-	-	-
other	-	-	-	-	-	-	1	100.0	1	1.7
unspecified	3	7.5	-	-	-	-	-	-	3	5.2
Fire, burn	6	15.0	-	-	-	-	-	-	6	10.3
conflagration in private dwelling	1	2.5	-	-	-	-	-	-	1	1.7
other specified fire	1	2.5	-	-	-	-	-	-	1	1.7
unspecified fire	4	10.0	-	-	-	-	-	-	4	6.9
Fall	-	-	-	-	-	-	-	-	-	-
Poisoning	8	20.0	3	27.3	-	-	-	-	11	19.0
medication	3	7.5	2	18.2	-	-	-	-	5	8.6
alcohol	5	12.5	-	-	-	-	-	-	5	8.6
carbon monoxide	-	-	-	-	-	-	-	-	-	-
other	-	-	1	9.1	-	-	-	-	1	1.7
Suffocation	-	-	2	18.2	-	-	-	-	2	3.4
hanging ex. bed or cradle	-	-	2	18.2	-	-	-	-	2	3.4
other	-	-	-	-	-	-	-	-	-	-
Firearms	1	2.5	6	54.5	1	16.7	-	-	8	13.8
Cut, pierce	-	-	-	-	2	33.3	-	-	2	3.4
Environmental	5	12.5	-	-	-	-	-	-	5	8.6
excessive cold	5	12.5	-	-	-	-	-	-	5	8.6
exposure to weather nos.	-	-	-	-	-	-	-	-	-	-
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	1	2.5	-	-	1	16.7	-	-	2	3.4
Other, classifiable	2	5.0	-	-	2	33.3	-	-	4	6.9
Other, not classifiable	-	-	-	-	-	-	-	-	-	-
Unspecified	1	2.5	-	-	-	-	-	-	1	1.7
fracture, cause unspecified	-	-	-	-	-	-	-	-	-	-
other unspecified	1	2.5	-	-	-	-	-	-	1	1.7

#### Table A-21 Injury Mortality, NWT, 1990-1999, Both Sexes, 65 Years of Age & Older

	Uninten	tional	Suic	cide	Homic	cide	Undetern	nined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	43	100.0	3	100.0	-	-	-	-	46	100.0
Motor vehicle traffic crash	2	4.7	-	-	-	-	-	-	2	4.3
MVTC - occupant	-	-	-	-	-	-	-	-	-	-
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	1	2.3	-	-	-	-	-	-	1	2.2
MVTC - unspecified	1	2.3	-	-	-	-	-	-	1	2.2
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	-	-	-	-	-	-	-	-	-	-
snowmobile, drowning	-	-	-	-	-	-	-	-	-	-
snowmobile (except drowning)	-	-	-	-	-	-	-	-	-	-
aircraft	-	-	-	-	-	-	-	-	-	-
other	-	-	-	-	-	-	-	-	-	-
Drowning	4	9.3	-	-	-	-	-	-	4	8.7
boating incident	-	-	-	-	-	-	-	-	-	-
recreational swimming	-	-	-	-	-	-	-	-	-	-
bathtub	-	-	-	-	-	-	-	-	-	-
non-aquatic activities	2	4.7	-	-	-	-	-	-	2	4.3
other	-	-	-	-	-	-	-	-	-	-
unspecified	2	4.7	-	-	-	-	-	-	2	4.3
Fire, burn	1	2.3	-	-	-	-	-	-	1	2.2
conflagration in private dwelling	1	2.3	-	-	-	-	-	-	1	2.2
other specified fire	-	-	-	-	-	-	-	-	-	-
unspecified fire	-	-	-	-	-	-	-	-	-	-
Fall	6	14.0	-	-	-	-	-	-	6	13.0
Poisoning	4	9.3	1	33.3	-	-	-	-	5	10.9
medication	2	4.7	1	33.3	-	-	-	-	3	6.5
alcohol	2	4.7	-	-	-	-	-	-	2	4.3
carbon monoxide	-	-	-	-	-	-	-	-	-	-
other	-	-	-	-	-	-	-	-	-	-
Suffocation	-	-	1	33.3	-	-	-	-	1	2.2
hanging ex. bed or cradle	-	-	1	33.3	-	-	-	-	1	2.2
other	-	-	-	-	-	-	-	-	-	-
Firearms	-	-	1	33.3	-	-	-	-	1	2.2
Cut, pierce	-	-	-	-	-	-	-	-	-	-
Environmental	8	18.6	_	-	-	-	-	-	8	17.4
excessive cold	5	11.6	-	-	-	-	-	-	5	10.9
exposure to weather nos.	3	7.0	-	-	-	-	-	-	3	6.5
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	-	-	-	-	-	-	-	-	-	-
Other, classifiable	1	2.3	-	-	-	-	-	-	1	2.2
Other, not classifiable	1	2.3	-	-	-	-	-	-	1	2.2
Unspecified	16	37.2	-	-	-	-	-	-	16	34.8
fracture, cause unspecified	11	25.6	-	-	-	-	-	-	11	23.9
other unspecified	5	11.6	-	-	-	-	-	-	5	10.9

#### Table A-22 Injury Mortality, NWT, 1990-1999, Males, All Ages Unintentional Suicide Homicide L

	Uninten	tional	Suic	ide	Homi	cide	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	163	100.0	69	100.0	22	100.0	4	100.0	258	100.0
Motor vehicle traffic crash	36	22.1	-	-	-	-	-	-	36	14.0
MVTC - occupant	10	6.1	-	-	-	-	-	-	10	3.9
MVTC - motorcyclist	1	0.6	-	-	-	-	-	-	1	0.4
MVTC - pedal cyclist	1	0.6	-	-	-	-	-	-	1	0.4
MVTC - pedestrian	5	3.1	-	-	-	-	-	-	5	1.9
MVTC - unspecified	19	11.7	-	-	-	-	-	-	19	7.4
Pedestrian, other	1	0.6	-	-	-	-	-	-	1	0.4
Transport, other	16	9.8	-	-	-	-	-	-	16	6.2
snowmobile, drowning	4	2.5	-	-	-	-	-	-	4	1.6
snowmobile (except drowning)	2	1.2	-	-	-	-	-	-	2	0.8
aircraft	9	5.5	-	-	-	-	-	-	9	3.5
other	1	0.6	-	-	-	-	-	-	1	0.4
Drowning	34	20.9	-	-	-	-	1	25.0	35	13.6
boating incident	15	9.2	-	-	-	-	-	-	15	5.8
recreational swimming	5	3.1	-	-	-	-	-	-	5	1.9
bathtub	1	0.6	-	-	-	-	-	-	1	0.4
non-aquatic activities	6	3.7	-	-	-	-	-	-	6	2.3
other	-	-	-	-	-	-	1	25.0	1	0.4
unspecified	7	4.3	-	-	-	-	-	-	7	2.7
Fire, burn	15	9.2	-	-	-	-	-	-	15	5.8
conflagration in private dwelling	10	6.1	-	-	-	-	-	-	10	3.9
other specified fire	2	1.2	-	-	-	-	-	-	2	0.8
unspecified fire	3	1.8	-	-	-	-	-	-	3	1.2
Fall	3	1.8	2	2.9	-	-	-	-	5	1.9
Poisoning	22	13.5	7	10.1	1	4.5	2	50.0	32	12.4
medication	6	3.7	5	7.2	-	-	1	25.0	12	4.7
alcohol	14	8.6	-	-	-	-	-	-	14	5.4
carbon monoxide	2	1.2	1	1.4	-	-	1	25.0	4	1.6
other	-	-	1	1.4	1	4.5	-	-	2	0.8
Suffocation	-	-	12	17.4	-	-	-	-	12	4.7
hanging ex. bed or cradle	-	-	12	17.4	-	-	-	-	12	4.7
other	-	-	-	-	-	-	-	-	-	-
Firearms	1	0.6	48	69.6	1	4.5	-	-	50	19.4
Cut, pierce	-	-	-	-	7	31.8	-	-	7	2.7
Environmental	18	11.0	-	-	-	-	-	-	18	7.0
excessive cold	14	8.6	-	-	-	-	-	-	14	5.4
exposure to weather nos.	3	1.8	-	-	-	-	-	-	3	1.2
animal bite	1	0.6	-	-	-	-	-	-	1	0.4
Machinery	1	0.6	-	-	-	-	-	-	1	0.4
Struck by, against	1	0.6	-	-	3	13.6	-	-	4	1.6
Other, classifiable	4	2.5	-	-	6	27.3	-	-	10	3.9
Other, not classifiable	1	0.6	-	-	-	-	1	25.0	2	0.8
Unspecified	10	6.1	-	-	4	18.2	-	-	14	5.4
fracture, cause unspecified	4	2.5	-	-	-	-	-	-	4	1.6
other unspecified	6	3.7	-	-	4	18.2	-	-	10	3.9

#### Unintentional Suicide Homicide Undetermined Total Mechanism of Cause Number (%) Number (%) Number (%) Number (%) Number (%) Total 100.0 9 100.0 62 2 100.0 \_ 73 100.0 -Motor vehicle traffic crash 19 30.6 19 26.0 \_ \_ \_ \_ \_ -MVTC - occupant 4.8 3 ---3 4.1 --\_ MVTC - motorcyclist \_ \_ \_ \_ \_ \_ -\_ \_ MVTC - pedal cyclist --------\_ -MVTC - pedestrian 3 3 4.8 4.1 \_ \_ \_ \_ --MVTC - unspecified 13 17.8 13 21.0 ------Pedestrian, other ----\_ \_ -\_ --3 4.8 3 Transport, other \_ \_ \_ 4.1 \_ \_ \_ snowmobile, drowning \_ ---\_ -\_ --snowmobile (except drowning) \_ \_ \_ \_ \_ \_ \_ \_ \_ \_ 3 4.8 3 4.1 aircraft ----\_ other -\_ -\_ -\_ -\_ 4.8 Drowning 3 \_ \_ \_ 3 4.1 \_ \_ \_ boating incident 1.6 -1 1.4 1 --\_ \_ recreational swimming -\_ \_ \_ -\_ --\_ -\_ ---\_ \_ bathtub -\_ -3.2 2 non-aquatic activities 2 -2.7 \_ \_ --other -\_ -\_ -\_ -\_ -unspecified ----\_ -----7 11.3 \_ \_ \_ 7 Fire, burn \_ \_ \_ 9.6 conflagration in private dwelling -5 8.1 \_ -\_ -\_ 5 6.8 other specified fire \_ \_ \_ \_ --\_ \_ \_ unspecified fire 2 3.2 2 2.7 ------Fall 4 6.5 \_ ---\_ -4 5.5 Poisoning 6 9.7 4 44.4 10 13.7 \_ \_ \_ \_ 3 medication 3 4.8 33.3 ---6 8.2 alcohol 3 4.8 \_ -3 4.1 \_ -\_ carbon monoxide --1 11.1 ---1 1.4 other --\_ ----Suffocation 3 4.8 2 22.2 50.0 6 1 \_ -8.2 hanging ex. bed or cradle 2 22.2 2 2.7 \_ \_ \_ -other 3 4.8 1 50.0-4 5.5 --33.3 5.5 3 Firearms 1 1.6 \_ 4 \_ \_ 50.0 Cut, pierce 1 \_ -1 1.4 \_ \_ \_ \_ Environmental 6 9.7 ---\_ \_ -6 8.2 excessive cold 5 8.1 ----5 6.8 -exposure to weather nos. 1 1.6 1 1.4 \_ -\_ \_ -\_ animal bite \_ -\_ \_ \_ ---\_ -Machinery \_ \_ \_ \_ \_ \_ \_ -\_ \_ --\_ Struck by, against -\_ -\_ \_ \_ \_ Other, classifiable \_ -\_ \_ -\_ \_ \_ --Other, not classifiable -\_ -\_ -\_ -\_ \_ -13.7 Unspecified 10 16.1 10 \_ \_ \_ \_ -fracture, cause unspecified 7 11.3 ---7 9.6 -\_ other unspecified 3 4.8 ------3 4.1

#### Table A-23 Injury Mortality, NWT, 1990-1999, Females, All Ages

#### Table A-24 Injury Mortality, NWT, 1990-1999, Dene, All Ages

	Uninten	tional	Suic	cide	Hom	icide	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	109	100.0	16	100.0	12	100.0	1	100.0	138	100.0
Motor vehicle traffic crash	26	23.9	-	-	-	-	-	-	26	18.8
MVTC - occupant	4	3.7	-	-	-	-	-	-	4	2.9
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	1	0.9	-	-	-	-	-	-	1	0.7
MVTC - pedestrian	6	5.5	-	-	-	-	-	-	6	4.3
MVTC - unspecified	15	13.8	-	-	-	-	-	-	15	10.9
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	6	5.5	-	-	-	-	-	-	6	4.3
snowmobile, drowning	3	2.8	-	-	-	-	-	-	3	2.2
snowmobile (except drowning)	-	-	-	-	-	-	-	-	-	-
aircraft	2	1.8	-	-	-	-	-	-	2	1.4
other	1	0.9	-	-	-	-	-	-	1	0.7
Drowning	22	20.2	-	-	-	-	-	-	22	15.9
boating incident	8	7.3	-	-	-	-	-	-	8	5.8
recreational swimming	3	2.8	-	-	-	-	-	-	3	2.2
bathtub	1	0.9	-	-	-	-	-	-	1	0.7
non-aquatic activities	3	2.8	-	-	-	-	-	-	3	2.2
other	-	-	-	-	-	-	-	-	-	-
unspecified	7	6.4	-	-	-	-	-	-	7	5.1
Fire, burn	10	9.2	-	-	-	-	-	-	10	7.2
conflagration in private dwelling	8	7.3	-	-	-	-	-	-	8	5.8
other specified fire	2	1.8	-	-	-	-	-	-	2	1.4
unspecified fire	-	-	-	-	-	-	-	-	-	-
Fall	4	3.7	-	-	-	-	-	-	4	2.9
Poisoning	10	9.2	2	12.5	-	-	1	100.0	13	9.4
medication	2	1.8	1	6.3	-	-	1	100.0	4	2.9
alcohol	8	7.3	-	-	-	-	-	-	8	5.8
carbon monoxide	-	-	1	6.3	-	-	-	-	1	0.7
other	-	-	-	-	-	-	-	-	-	-
Suffocation	1	0.9	4	25.0	1	8.3	-	-	6	4.3
hanging ex. bed or cradle	-	-	4	25.0	-	-	-	-	4	2.9
other	1	0.9	-	-	1	8.3	-	-	2	1.4
Firearms	-	-	10	62.5	1	8.3	-	-	11	8.0
Cut, pierce	-	-	-	-	5	41.7	-	-	5	3.6
Environmental	18	16.5	-	-	-	-	-	-	18	13.0
excessive cold	15	13.8	-	-	-	-	-	-	15	10.9
exposure to weather nos.	2	1.8	-	-	-	-	-	-	2	1.4
animal bite	1	0.9	-	-	-	-	-	-	1	0.7
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	-	-	-	-	2	16.7	-	-	2	1.4
Other, classifiable	1	0.9	-	-	-	-	-	-	1	0.7
Other, not classifiable	-	-	-	-	-	-	-	-	-	-
Unspecified	11	10.1	-	-	3	25.0	-	-	14	10.1
fracture, cause unspecified	8	7.3	-	-	-	-	-	-	8	5.8
other unspecified	3	2.8	-	-	3	25.0	-	-	6	4.3

#### Table A-25 Injury Mortality, NWT, 1990-1999, Inuit, All Ages

	Uninten	tional	Suic	ide	Homi	icide	Undetern	nined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	41	100.0	22	100.0	4	100.0	-	-	67	100.0
Motor vehicle traffic crash	8	19.5	-	-	-	-	-	-	8	11.9
MVTC - occupant	2	4.9	-	-	-	-	-	-	2	3.0
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	1	2.4	-	-	-	-	-	-	1	1.5
MVTC - unspecified	5	12.2	-	-	-	-	-	-	5	7.5
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	6	14.6	-	-	-	-	-	-	6	9.0
snowmobile, drowning	1	2.4	-	-	-	-	-	-	1	1.5
snowmobile (except drowning)	1	2.4	-	-	-	-	-	-	1	1.5
aircraft	4	9.8	-	-	-	-	-	-	4	6.0
other	-	-	-	-	-	-	-	-	-	-
Drowning	7	17.1	-	-	-	-	-	-	7	10.4
boating incident	3	7.3	-	-	-	-	-	-	3	4.5
recreational swimming	-	-	-	-	-	-	-	-	-	-
bathtub	-	-	-	-	-	-	-	-	-	-
non-aquatic activities	4	9.8	-	-	-	-	-	-	4	6.0
other	-	-	-	-	-	-	-	-	-	-
unspecified	-	-	-	-	-	-	-	-	-	-
Fire, burn	6	14.6	-	-	-	-	-	-	6	9.0
conflagration in private dwelling	1	2.4	-	-	-	-	-	-	1	1.5
other specified fire	-	-	-	-	-	-	-	-	-	-
unspecified fire	5	12.2	-	-	-	-	-	-	5	7.5
Fall	1	2.4	1	4.5	-	-	-	-	2	3.0
Poisoning	7	17.1	-	-	1	25.0	-	-	8	11.9
medication	3	7.3	-	-	-	-	-	-	3	4.5
alcohol	4	9.8	-	-	-	-	-	-	4	6.0
carbon monoxide	-	-	-	-	-	-	-	-	-	-
other	-	-	-	-	1	25.0	-	-	1	1.5
Suffocation	-	-	5	22.7	-	-	-	-	5	7.5
hanging ex. bed or cradle	-	-	5	22.7	-	-	-	-	5	7.5
other	-	-	-	-	-	-	-	-	-	-
Firearms	-	-	16	72.7	-	-	-	-	16	23.9
Cut, pierce	-	-	-	-	2	50.0	-	-	2	3.0
Environmental	5	12.2	-	-	-	-	-	-	5	7.5
excessive cold	3	7.3	-	-	-	-	-	-	3	4.5
exposure to weather nos.	2	4.9	-	-	-	-	-	-	2	3.0
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	-	-	-	-	-	-	-	-	-	-
Other, classifiable	-	-	-	-	-	-	-	-	-	-
Other, not classifiable	-	-	-	-	-	-	-	-	-	-
Unspecified	1	2.4	-	-	1	25.0	-	-	2	3.0
fracture, cause unspecified	-	-	-	-	-	-	-	-	-	-
other unspecified	1	2.4	-	-	1	25.0	-	-	2	3.0

#### Table A-26 Injury Mortality, NWT, 1990-1999, Metis & Non-Aboriginal, All Ages

	Unintentional Suicide		Homi	cide	Undeter	mined	Tot	Total         Number       (%)         126       100.0         21       16.7         7       5.6         1       0.8         -       -         1       0.8         12       9.5         1       0.8         7       5.6         1       0.8         7       5.6         -       -         1       0.8         7       5.6         -       -         1       0.8         6       4.8         -       -         9       7.1         5       4.0         2       1.6         -       -         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8         1       0.8 <tr td=""></tr>		
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	75	100.0	40	100.0	8	100.0	3	100.0	126	100.0
Motor vehicle traffic crash	21	28.0	-	-	-	-	-	-	21	16.7
MVTC - occupant	7	9.3	-	-	-	-	-	-	7	5.6
MVTC - motorcyclist	1	1.3	-	-	-	-	-	-	1	0.8
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	1	1.3	-	-	-	-	-	-	1	0.8
MVTC - unspecified	12	16.0	-	-	-	-	-	-	12	9.5
Pedestrian, other	1	1.3	-	-	-	-	-	-	1	0.8
Transport, other	7	9.3	-	-	-	-	-	-	7	5.6
snowmobile, drowning	-	-	-	-	-	-	-	-	-	-
snowmobile (except drowning)	1	1.3	-	-	-	-	-	-	1	0.8
aircraft	6	8.0	-	-	-	-	-	-	6	4.8
other	-	-	-	-	-	-	-	-	-	-
Drowning	8	10.7	-	-	-	-	1	33.3	9	7.1
boating incident	5	6.7	-	-	-	-	-	-	5	4.0
recreational swimming	2	2.7	-	-	-	-	-	-	2	1.6
bathtub	-	-	-	-	-	-	-	-	-	-
non-aquatic activities	1	1.3	-	-	-	-	-	-	1	0.8
other	-	-	-	-	-	-	1	33.3	1	0.8
unspecified	-	-	-	-	-	-	-	-	-	-
Fire, burn	6	8.0	-	-	-	-	-	-	6	4.8
conflagration in private dwelling	6	8.0	-	-	-	-	-	-	6	4.8
other specified fire	-	-	-	-	-	-	-	-	-	-
unspecified fire	-	-	-	-	-	-	-	-	-	-
Fall	2	2.7	1	2.5	-	-	-	-	3	2.4
Poisoning	11	14.7	9	22.5	-	-	1	33.3	21	16.7
medication	4	5.3	7	17.5	-	-	-	-	11	8.7
alcohol	5	6.7	-	-	-	-	-	-	5	4.0
carbon monoxide	2	2.7	1	2.5	-	-	1	33.3	4	3.2
other	-	-	1	2.5	-	-	-	-	1	0.8
Suffocation	2	2.7	5	12.5	-	-	-	-	7	5.6
hanging ex. bed or cradle	-	-	5	12.5	-	-	-	-	5	4.0
other	2	2.7	-	-	-	-	-	-	2	1.6
Firearms	2	2.7	25	62.5	-	-	-	-	27	21.4
Cut, pierce	-	-	-	-	1	12.5	-	-	1	0.8
Environmental	1	1.3	-	-	-	-	-	-	1	0.8
excessive cold	1	1.3	-	-	-	-	-	-	1	0.8
exposure to weather nos.	-	-	-	-	-	-	-	-	-	-
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	1	1.3	-	-	-	-	-	-	1	0.8
Struck by, against	1	1.3	-	-	1	12.5	-	-	2	1.6
Other, classifiable	3	4.0	-	-	6	75.0	-	-	9	7.1
Other, not classifiable	1	1.3	-	-	-	-	1	33.3	2	1.6
Unspecified	8	10.7	-	-	-	-	-	-	8	6.3
fracture, cause unspecified	3	4.0	-	-	-	-	-	-	3	2.4
other unspecified	5	6.7	-	-	-	-	-	-	5	4.0

	Unintentional Suicide		cide	Homi	icide	Undetermined		Tot	al	
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	58	100.0	25	100.0	7	100.0	2	100.0	92	100.0
Motor vehicle traffic crash	17	29.3	-	-	-	-	-	-	17	18.5
MVTC - occupant	7	12.1	-	-	-	-	-	-	7	7.6
MVTC - motorcyclist	1	1.7	-	-	-	-	-	-	1	1.1
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	9	15.5	-	-	-	-	-	-	9	9.8
Pedestrian, other	1	1.7	-	-	-	-	-	-	1	1.1
Transport, other	4	6.9	-	-	-	-	-	-	4	4.3
snowmobile, drowning	1	1.7	-	-	-	-	-	-	1	1.1
snowmobile (except drowning)	-	-	-	-	-	-	-	-	-	-
aircraft	3	5.2	-	-	-	-	-	-	3	3.3
other	-	-	-	-	-	-	-	-	-	-
Drowning	7	12.1	-	-	-	-	-	-	7	7.6
boating incident	2	3.4	-	-	-	-	-	-	2	2.2
recreational swimming	3	5.2	-	-	-	-	-	-	3	3.3
bathtub	1	1.7	-	-	-	-	-	-	1	1.1
non-aquatic activities	1	1.7	-	-	-	-	-	-	1	1.1
other	-	-	-	-	-	-	-	-	-	-
unspecified	-	-	-	-	-	-	-	-	-	-
Fire, burn	2	3.4	-	-	-	-	-	-	2	2.2
conflagration in private dwelling	2	3.4	-	-	-	-	-	-	2	2.2
other specified fire	-	-	-	-	-	-	-	-	-	-
unspecified fire	-	-	-	-	-	-	-	-	-	-
Fall	1	1.7	1	4.0	-	-	-	-	2	2.2
Poisoning	13	22.4	5	20.0	-	-	1	50.0	19	20.7
medication	5	8.6	4	16.0	-	-	-	-	9	9.8
alcohol	7	12.1	-	-	-	-	-	-	7	7.6
carbon monoxide	1	1.7	-	-	-	-	1	50.0	2	2.2
other	-	-	1	4.0	-	-	-	-	1	1.1
Suffocation	2	3.4	5	20.0	-	-	-	-	7	7.6
hanging ex. bed or cradle	-	-	5	20.0	-	-	-	-	5	5.4
other	2	3.4	-	-	-	-	-	-	2	2.2
Firearms	1	1.7	14	56.0	-	-	-	-	15	16.3
Cut, pierce	-	-	-	-	1	14.3	-	-	1	1.1
Environmental	3	5.2	-	-	-	-	-	-	3	3.3
excessive cold	2	3.4	-	-	-	-	-	-	2	2.2
exposure to weather nos.	1	1.7	-	-	-	-	-	-	1	1.1
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	1	1.7	-	-	-	-	-	-	1	1.1
Struck by, against	-	-	-	-	-	-	-	-	-	-
Other, classifiable	1	1.7	-	-	6	85.7	-	-	7	7.6
Other, not classifiable	-	-	-	-	-	-	1	50.0	1	1.1
Unspecified	5	8.6	-	-	-	-	-	-	5	5.4
fracture, cause unspecified	3	5.2	-	-	-	-	-	-	3	3.3
other unspecified	2	3.4	-	-	-	-	-	-	2	2.2

## Table A-27Injury Mortality, NWT, 1990-1999, Yellowknife, All Ages

## Table A-28Injury Mortality, NWT, 1990-1999, Regional Centers, All Ages

	Uninten	Unintentional Suicide Homicide Undetermine		mined	Total					
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	58	100.0	22	100.0	1	100.0	2	100.0	83	100.0
Motor vehicle traffic crash	15	25.9	-	-	-	-	-	-	15	18.1
MVTC - occupant	4	6.9	-	-	-	-	-	-	4	4.8
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	3	5.2	-	-	-	-	-	-	3	3.6
MVTC - unspecified	8	13.8	-	-	-	-	-	-	8	9.6
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	4	6.9	-	-	-	-	-	-	4	4.8
snowmobile, drowning	-	-	-	-	-	-	-	-	-	-
snowmobile (except drowning)	2	3.4	-	-	-	-	-	-	2	2.4
aircraft	2	3.4	-	-	-	-	-	-	2	2.4
other	-	-	-	-	-	-	-	-	-	-
Drowning	5	8.6	-	-	-	-	1	50.0	6	7.2
boating incident	3	5.2	-	-	-	-	-	-	3	3.6
recreational swimming	1	1.7	-	-	-	-	-	-	1	1.2
bathtub	-	-	-	-	-	-	-	-	-	-
non-aquatic activities	1	1.7	-	-	-	-	-	-	1	1.2
other	-	-	-	-	-	-	1	50.0	1	1.2
unspecified	-	-	-	-	-	-	-	-	-	-
Fire, burn	6	10.3	-	-	-	-	-	-	6	7.2
conflagration in private dwelling	5	8.6	-	-	-	-	-	-	5	6.0
other specified fire	-	-	-	-	-	-	-	-	-	-
unspecified fire	1	1.7	-	-	-	-	-	-	1	1.2
Fall	1	1.7	1	4.5	-	-	-	-	2	2.4
Poisoning	4	6.9	4	18.2	-	-	1	50.0	9	10.8
medication	1	1.7	2	9.1	-	-	1	50.0	4	4.8
alcohol	2	3.4	-	-	-	-	-	-	2	2.4
carbon monoxide	1	1.7	2	9.1	-	-	-	-	3	3.6
other	-	-	-	-	-	-	-	-	-	-
Suffocation	1	1.7	3	13.6	-	-	-	-	4	4.8
hanging ex. bed or cradle	-	-	3	13.6	-	-	-	-	3	3.6
other	1	1.7	-	-	-	-	-	-	1	1.2
Firearms	1	1.7	14	63.6	-	-	-	-	15	18.1
Cut, pierce	-	-	-	-	1	100.0	-	-	1	1.2
Environmental	10	17.2	-	-	-	-	-	-	10	12.0
excessive cold	7	12.1	-	-	-	-	-	-	7	8.4
exposure to weather nos.	3	5.2	-	-	-	-	-	-	3	3.6
animal bite	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	1	1.7	-	-	-	-	-	-	1	1.2
Other, classifiable	2	3.4	_	_		-	_	-	2	2.4
Other, not classifiable	1	1.7	-	-	-	-	-	-	1	1.2
Unspecified	7	12.1		-	-	-	_	-	7	8.4
fracture, cause unspecified	2	3.4	-	-	-	-	-	-	2	2.4
other unspecified	5	8.6	-	-	_	-	-	-	5	6.0

## Table A-29 Injury Mortality, NWT, 1990-1999, Other Smaller Comunities, All Ages

	Unintentional Suicide		ide	Homi	cide	Undeterr	nined	Tot	al	
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Total	109	100.0	31	100.0	16	100.0	-	-	156	100.0
Motor vehicle traffic crash	23	21.1	-	-	-	-	-	-	23	14.7
MVTC - occupant	2	1.8	-	-	-	-	-	-	2	1.3
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	1	0.9	-	-	-	-	-	-	1	0.6
MVTC - pedestrian	5	4.6	-	-	-	-	-	-	5	3.2
MVTC - unspecified	15	13.8	-	-	-	-	-	-	15	9.6
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	11	10.1	-	-	-	-	-	-	11	7.1
snowmobile, drowning	3	2.8	-	-	-	-	-	-	3	1.9
snowmobile (except drowning)	-	-	-	-	-	-	-	-	-	-
aircraft	7	6.4	-	-	-	-	-	-	7	4.5
other	1	0.9	-	-	-	-	-	-	1	0.6
Drowning	25	22.9	-	-	-	-	-	-	25	16.0
boating incident	11	10.1	-	-	-	-	-	-	11	7.1
recreational swimming	1	0.9	-	-	-	-	-	-	1	0.6
bathtub	-	-	-	-	-	-	-	-	-	-
non-aquatic activities	6	5.5	-	-	-	-	-	-	6	3.8
other	-	-	-	-	-	-	-	-	-	-
unspecified	7	6.4	-	-	-	-	-	-	7	4.5
Fire, burn	14	12.8	-	-	-	-	-	-	14	9.0
conflagration in private dwelling	8	7.3	-	-	-	-	-	-	8	5.1
other specified fire	2	1.8	-	-	-	-	-	-	2	1.3
unspecified fire	4	3.7	-	-	-	-	-	-	4	2.6
Fall	5	4.6	-	-	-	-	-	-	5	3.2
Poisoning	11	10.1	2	6.5	1	6.3	-	-	14	9.0
medication	3	2.8	2	6.5	-	-	-	-	5	3.2
alcohol	8	7.3	-	-	-	-	-	-	8	5.1
carbon monoxide	-	-	-	-	-	-	-	-	-	-
other	-	-	-	-	1	6.3	-	-	1	0.6
Suffocation	-	-	6	19.4	1	6.3	-	-	7	4.5
hanging ex. bed or cradle	-	-	6	19.4	-	-	-	-	6	3.8
other	-	-	-	-	1	6.3	-	-	1	0.6
Firearms	-	-	23	74.2	1	6.3	-	-	24	15.4
Cut, pierce	-	-	-	-	6	37.5	-	-	6	3.8
Environmental	11	10.1	-	-	-	-	-	-	11	7.1
excessive cold	10	9.2	-	-	-	-	-	-	10	6.4
exposure to weather nos.	-	-	-	-	-	-	-	-	-	-
animal bite	1	0.9	-	-	-	-	-	-	1	0.6
Machinery	-	-	-	-	-	-	-	-	-	-
Struck by, against	-	-	-	-	3	18.8	-	-	3	1.9
Other, classifiable	1	0.9	-	-	-	-	-	-	1	0.6
Other, not classifiable	-	-	-	-	-	-	-	-	-	-
Unspecified	8	7.3	-	-	4	25.0	-	-	12	7.7
fracture, cause unspecified	6	5.5	-	-	-	-	-	-	6	3.8
other unspecified	2	1.8	-	-	4	25.0	-	-	6	3.8

	Uninter	ntional	Self-in	flicted	Assa	nult	Undeter	rmined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	2,351	100.0	418	100.0	377	100.0	70	100.0	3,220	100.0
Motor vehicle traffic crash	246	10.5	-	-	-	-	-	-	246	7.6
MVTC - occupant	155	6.6	-	-	-	-	-	-	155	4.8
MVTC - motorcyclist	11	0.5	-	-	-	-	-	-	11	0.3
MVTC - pedal cyclist	5	0.2	-	-	-	-	-	-	5	0.2
MVTC - pedestrian	33	1.4	-	-	-	-	-	-	33	1.0
MVTC - other	7	0.3	-	-	-	-	-	-	7	0.2
MVTC - unspecified	35	1.5	-	-	-	-	-	-	35	1.1
Pedal cyclist, other	43	1.8	-	-	-	-	-	-	43	1.3
Pedestrian, other	12	0.5	-	-	-	-	-	-	12	0.4
Transport, other	158	6.7	-	-	-	-	-	-	159	4.9
snowmobile	104	4.4	-	-	-	-	-	-	104	3.2
other off-road motor vehicle	27	1.1	-	-	-	-	-	-	27	0.8
other transport	27	1.1	-	-	-	-	-	-	28	0.9
Near drowning	7	0.3	-	-	-	-	-	-	7	0.2
Fire, burn	54	2.3	-	-	-	-	-	-	63	2.0
conflagration in private building	12	0.5	-	-	-	-	-	-	12	0.4
other / unspecified fire	20	0.9	-	-	-	-	-	-	29	0.9
Hot substance/ object	22	0.9	-	-	-	-	-	-	22	0.7
Fall	920	39.1	-	-	-	-	-	-	926	28.8
same level - tripping	311	13.2	-	-	-	-	-	-	311	9.7
one level to another	181	7.7	-	-	-	-	-	-	187	5.8
stairs / steps	116	4.9	-	-	-	-	-	-	116	3.6
ladder / scaffold / building	50	2.1	-	-	-	-	-	-	50	1.6
unspecified fall	262	11.1	-	-	-	-	-	-	262	8.1
Poisoning	96	4.1	350	83.7	5	1.3	37	52.9	488	15.2
medication	59	2.5	311	74.4	-	-	27	38.6	401	12.5
other poisoning	37	1.6	39	9.3	-	-	10	14.3	87	2.7
Suffocation	11	0.5	13	3.1	-	-	-	-	24	0.7
Firearms	12	0.5	-	-	-	-	-	-	22	0.7
Cut, pierce	95	4.0	42	10.0	39	10.3	-	-	180	5.6
Environmental	82	3.5	-	-	-	-	-	-	85	2.6
excessive cold	34	1.4	-	-	-	-	-	-	37	1.1
animal bite	27	1.1	-	-	-	-	-	-	27	0.8
other environment	21	0.9	-	-	-	-	-	-	21	0.7
Machinery	15	0.6	-	-	-	-	-	-	15	0.5
Overexertion	88	3.7	-	-	-	-	-	-	88	2.7
Struck by, against	114	4.8	-	-	244	64.7	-	-	362	11.2
unarmed fight / brawl	-	-	-	-	218	57.8	-	-	218	6.8
struck by blunt object	-	-	-	-	26	6.9	-	-	26	0.8
other struck by	114	4.8	-	-	-	-	-	-	118	3.7
Other, classifiable	139	5.9	-	-	44	11.7	-	-	183	5.7
maltreatment	-	-	-	-	41	10.9	-	-	41	1.3
foreign object in eye / orifice	45	1.9	-	-	-	-	-	-	45	1.4
other classifiable	94	4.0	-	-	-	0.8	-	-	97	3.0
Other, not classifiable	34	1.4	-	-	20	5.3	5	7.1	61	1.9
Unspecified	225	9.6	-	-	19	5.0	11	15.7	256	8.0
fracture, cause unspecified	59	2.5	-	-	-	-	-	-	59	1.8
other unspecified	166	7.1	-	-	19	5.0	11	15.7	197	6.1

### Table A-30Injury Hospitalizations, NWT, 1995/96-1999/2000, Both Sexes, All Ages

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Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

### Table A-31Injury Hospitalizations, NWT, 1995/96-1999/2000, Both Sexes, 0 - 14 Years of Age

	Uninten	tional	Self-inflicted		Assa	ult	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	483	100.0	42	100.0	20	100.0	5	100.0	550	100.0
Motor vehicle traffic crash	27	5.6	-	-	-	-	-	-	27	4.9
MVTC - occupant	12	2.5	-	-	-	-	-	-	12	2.2
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	10	2.1	-	-	-	-	-	-	10	1.8
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	-	0.2	-	-	-	-	-	-	-	-
Pedal cyclist, other	22	4.6	-	-	-	-	-	-	22	4.0
Pedestrian, other	7	1.4	-	-	-	-	-	-	7	1.3
Transport, other	30	6.2	-	-	-	-	-	-	30	5.5
snowmobile	23	4.8	-	-	-	-	-	-	23	4.2
other off-road motor vehicle	-	-	-	-	-	-	-	-	-	-
other transport	-	-	-	-	-	-	-	-	-	-
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	11	2.3	-	-	-	-	-	-	13	2.4
conflagration in private building	-	-	-	-	-	-	-	-	-	-
other / unspecified fire	5	1.0	-	-	-	-	-	-	7	1.3
Hot substance/ object	5	1.0	-	-	-	-	-	-	5	0.9
Fall	198	41.0	-	-	-	-	-	-	199	36.2
same level - tripping	45	9.3	-	-	-	-	-	-	45	8.2
one level to another	94	19.5	-	-	-	-	-	-	95	17.3
stairs / steps	18	3.7	-	-	-	-	-	-	18	3.3
ladder / scaffold / building	5	1.0	-	-	-	-	-	-	5	0.9
unspecified fall	36	7.5	-	-	-	-	-	-	36	6.5
Poisoning	46	9.5	36	85.7	-	-	-	-	86	15.6
medication	28	5.8	33	78.6	-	-	-	-	64	11.6
other poisoning	18	3.7	-	-	-	-	-	-	22	4.0
Suffocation	6	1.2	-	-	-	-	-	-	9	1.6
Firearms	-	-	-	-	-	-	-	-	-	-
Cut, pierce	15	3.1	-	-	-	-	-	-	17	3.1
Environmental	29	6.0	-	-	-	-	-	-	30	5.5
excessive cold	7	1.4	-	-	-	-	-	-	8	1.5
animal bite	16	3.3	-	-	-	-	-	-	16	2.9
other environment	6	1.2	-	-	-	-	-	-	6	1.1
Machinery	-	-	-	-	-	-	-	-	-	-
Overexertion	-	-	-	-	-	-	-	-	-	-
Struck by, against	29	6.0	-	-	-	-	-	-	32	5.8
unarmed fight / brawl	-	-	-	-	-	-	-	-	-	-
struck by blunt object	-	-	-	-	-	-	-	-	-	-
other struck by	29	6.0	-	-	-	-	-	-	29	5.3
Other, classifiable	28	5.8	-	-	10	50.0	-	-	38	6.9
maltreatment	-	-	-	-	10	50.0	-	-	10	1.8
foreign object in eye / orifice	17	3.5	-	-	-	-	-	-	17	3.1
other classifiable	11	2.3	-	-	-	-	-	-	11	2.0
Other, not classifiable	-	-	-	-	-	-	-	-	7	1.3
Unspecified	23	4.8	-	-	19	95.0	-	-	23	4.2
fracture, cause unspecified	6	1.2	-	-	-	-	-	-	6	1.1
other unspecified	17	3.5	-	-	19	95.0	-	-	17	3.1

Source: CIHI Discharge Abstract Database

Note: Cell sizes less than 5 have been suppressed.

	Uninter	Unintentional Self-inflicted Assault		Undeter	rmined	Tot	tal			
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	310	100.0	140	100.0	86	100.0	11	100.0	548	100.0
Motor vehicle traffic crash	64	20.6	-	-	-	-	-	-	64	11.7
MVTC - occupant	49	15.8	-	-	-	-	-	-	49	8.9
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	-	-	-	-	-	-	-	-	-	-
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	8	2.6	-	-	-	-	-	-	8	1.5
Pedal cyclist, other	13	4.2	-	-	-	-	-	-	43	7.8
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	36	11.6	-	-	-	-	-	-	37	6.8
snowmobile	27	8.7	-	-	-	-	-	-	27	4.9
other off-road motor vehicle	-	-	-	-	-	-	-	-	-	-
other transport	5	1.6	-	-	-	-	-	-	6	1.1
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	8	2.6	- 1	-	-	-	-	-	8	1.5
conflagration in private building	-	-	-	-	-	-	-	-	-	-
other / unspecified fire	-	-	-	-	-	-	-	-	-	-
Hot substance/ object	_	-	-	-	-	-	-	-	-	_
Fall	64	20.6	-	-	-	-	-	-	64	11.7
same level - tripping	22	7.1	-	-	-	-	-	-	22	4.0
one level to another	12	3.9	-	-	-	-	-	-	12	2.2
stairs / steps	10	3.2	-	-	-	-	-	-	10	1.8
ladder / scaffold / building	7	2.3	-	-	-	-	-	-	7	1.3
unspecified fall	13	4.2	_	-	_	-	-	-	13	2.4
Poisoning	5	1.6	119	85.0	-	-	7	63.6	133	24.3
medication	_	_	115	82.1	-	_	5	45.5	126	23.0
other poisoning	-	_	-	-	-	-	-	-	7	13
Suffocation	_	-	6	4.3	_	-	_	-	6	1.1
Firearms		-	-	-	-	-	-	-	-	-
Cut. nierce	2.7	87	12	8.6	10	11.6	_	_	49	89
Environmental	10	3.2	-	-	-	-	-	-	12	2.2
excessive cold	6	19	_	_	-	-	_	_	8	1.5
animal hite	-	-			-	-	-		-	-
other environment	-	-	-	-	-	-	-	-	-	_
Machinery	-	-	-	-	-	-	-	-	_	-
Overexertion	11	3.5	-	-	-	-	-	-	11	2.0
Struck by, against	19	6.1	-	-	59	68.6	-	-	79	14.4
unarmed fight / brawl	-	-	_	-	50	58.1	_	-	50	91
struck by blunt object	-	-	-	-	9	10.5	-	-	9	1.6
other struck by	19	6.1	_	-	_	-	-	-	20	3.6
Other, classifiable	21	6.8	-	-	8	93	_	-	2.9	5.3
maltreatment	-	-	_	_	7	81	_	_	7	13
foreign object in me / owifice	5	1.6			,	0.1			5	0.0
other classifiable	16	5.2	-	-	-	-	-	-	17	0.9
Other not classificable	10	5.2	-	-	-	-	-	-	7	J.1 1 2
Unspecified		-	-	-	-	-	-	-	1	1.3
	24	1.1	-	-	-	-	-	-	28	5.1
jraciure, cause unspecified	0	1.9	-	-	-	-	-	-	0	1.1
other unspecified	18	3.8	-	-	-	-		-	22	4.0

#### Table A-32 Injury Hospitalizations, NWT, 1995/96-1999/2000, Both Sexes, 15 - 24 Years of Age

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

	Uninter	Unintentional Self-inflicted Assault Undetermined		mined	Total					
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	407	100.0	106	100.0	131	100.0	22	100.0	667	100.0
Motor vehicle traffic crash	64	15.7	-	-	-	-	-	-	64	9.6
MVTC - occupant	43	10.6	-	-	-	-	-	-	43	6.4
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	7	1.7	-	-	-	-	-	-	7	1.0
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	9	2.2	-	-	-	-	-	-	9	1.3
Pedal cyclist, other	-	-	-	-	-	-	-	-	-	-
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	39	9.6	-	-	-	-	-	-	39	5.8
snowmobile	21	5.2	-	-	-	-	-	-	21	3.1
other off-road motor vehicle	11	2.7	-	-	-	-	-	-	11	1.6
other transport	7	1.7	-	-	-	-	-	-	7	1.0
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	11	2.7	-	-	-	-	-	-	15	2.2
conflagration in private building	-	-	-	-	-	-	-	-	-	-
other / unspecified fire	-	-	-	-	-	-	-	-	7	1.0
Hot substance/ object	7	1.7	-	-	-	-	-	-	7	1.0
Fall	103	25.3	-	-	-	-	-	-	105	15.7
same level - tripping	40	9.8	-	-	-	-	-	-	40	6.0
one level to another	9	2.2	-	-	-	-	-	-	11	1.6
stairs / steps	13	3.2	-	-	-	-	-	-	13	1.9
ladder / scaffold / building	19	4.7	-	-	-	-	-	-	24	3.6
unspecified fall	22	5.4	-	-	-	-	-	-	22	3.3
Poisoning	13	3.2	77	72.6	-	-	13	59.1	103	15.4
medication	8	2.0	67	63.2	-	-	11	50.0	86	12.9
other poisoning	5	1.2	10	9.4	-	-	-	-	17	2.5
Suffocation	-	-	-	-	-	-	-	-	-	-
Firearms	-	1.0	-	-	-	-	-	-	10	1.5
Cut, pierce	23	5.7	22	20.8	15	11.5	-	-	61	9.1
Environmental	11	2.7	-	-	-	-	-	-	11	1.6
excessive cold	10	2.5	-	-	-	-	-	-	10	1.5
animal bite	-	-	-	-	-	-	-	-	-	-
other environment	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	0.4
Overexertion	24	5.9	-	-	-	-	-	-	24	3.6
Struck by, against	30	7.4	-	-	90	68.7	-	-	121	18.1
unarmed fight / brawl	-	-	-	-	81	61.8	-	-	81	12.1
struck by blunt object	-	-	-	-	9	6.9	-	-	9	1.3
other struck by	30	7.4	-	-	-	-	-	-	31	4.6
Other, classifiable	22	5.4	-	-	8	6.1	-	-	30	4.5
maltreatment	-	-	-	-	8	6.1	-	-	8	1.2
foreign object in eye / orifice	5	1.2	-	-	-	-	-	-	5	0.7
other classifiable	17	4.2	-	-	-	-	-	-	17	2.5
Other, not classifiable	6	1.5	-	-	5	3.8	-	-	14	2.1
Unspecified	48	11.8	-	-	9	6.9	-	-	60	9.0
fracture, cause unspecified	-	1.0	-	-	-	-	-	-	-	-
other unspecified	44	10.8	-	-	9	6.9	-	-	56	8.4

#### Table A-33 Injury Hospitalizations, NWT, 1995/96-1999/2000, Both Sexes, 25 - 34 Years of Age

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

	Uninter	tional	Self-in	flicted	Assa	ault	Undeter	rmined	Tot	Total	
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)	
All Injuries	357	100.0	83	100.0	76	100.0	16	100.0	534	100.0	
Motor vehicle traffic crash	32	9.0	-	-	-	-	-	-	32	6.0	
MVTC - occupant	22	6.2	-	-	-	-	-	-	22	4.1	
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-	
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-	
MVTC - pedestrian	-	-	-	-	-	-	-	-	-	-	
MVTC - other	-	-	-	-	-	-	-	-	-	-	
MVTC - unspecified	-	-	-	-	-	-	-	-	-	-	
Pedal cyclist, other	-	-	-	-	-	-	-	-	-	-	
Pedestrian, other	-	-	-	-	-	-	-	-	-	-	
Transport, other	24	6.7	-	-	-	-	-	-	24	4.5	
snowmobile	15	4.2	-	-	-	-	-	-	15	2.8	
other off-road motor vehicle	-	-	-	-	-	-	-	-	-	-	
other transport	6	1.7	-	-	-	-	-	-	6	1.1	
Near drowning	-	-	-	-	-	-	-	-	-	-	
Fire, burn	11	3.1	-	-	-	-	-	-	11	2.1	
conflagration in private building	-	-	-	-	-	-	-	-	-	-	
other / unspecified fire	-	-	-	-	-	-	-	-	-	-	
Hot substance/ object	-	-	-	-	-	-	-	-	-	-	
Fall	129	36.1	-	-	-	-	-	-	129	24.2	
same level - tripping	47	13.2	-	-	-	-	-	-	47	8.8	
one level to another	12	3.4	-	-	-	-	-	-	12	2.2	
stairs / steps	26	7.3	-	-	-	-	-	-	26	4.9	
ladder / scaffold / building	6	1.7	-	-	-	-	-	-	6	1.1	
unspecified fall	38	10.6	-	-	-	-	-	-	38	7.1	
Poisoning	16	4.5	75	90.4	-	-	10	62.5	102	19.1	
medication	11	3.1	69	83.1	-	-	6	37.5	87	16.3	
other poisoning	5	1.4	6	7.2	-	-	-	-	15	2.8	
Suffocation	-	-	-	-	-	-	-	-	-	-	
Firearms	-	-	-	-	-	-	-	-	5	0.9	
Cut, pierce	16	4.5	-	-	10	13.2	-	-	31	5.8	
Environmental	6	1.7	-	-	-	-	-	-	6	1.1	
excessive cold	-	-	-	-	-	-	-	-	-	-	
animal bite	-	-	-	-	-	-	-	-	-	-	
other environment	-	-	-	-	-	-	-	-	-	-	
Machinery	-	-	-	-	-	-	-	-	-	-	
Overexertion	18	5.0	-	-	-	-	-	-	18	3.4	
Struck by, against	19	5.3	-	-	47	61.8	-	-	68	12.7	
unarmed fight / brawl	-	-	-	-	44	57.9	-	-	44	8.2	
struck by blunt object	-	-	-	-	-	-	-	-	-	-	
other struck by	19	5.3	-	-	-	-	-	-	21	3.9	
Other, classifiable	24	6.7	-	-	12	15.8	-	-	36	6.7	
maltreatment	-	-	-	-	10	13.2	-	-	10	1.9	
foreign object in eve / orifice	-	-	-	-	-	-	-	-	-	-	
other classifiable	20	5.6	-	-	-	-	-	-	22	4.1	
Other, not classifiable	11	3.1	-	-	-	-	-	-	14	2.6	
Unspecified	38	10.6	-	-	-	-	-	-	45	8.4	
fracture, cause unspecified	12	3.4	-	_	-	-	-	_	12	2.2	
other unspecified	26	7.3	-	-	-	-	-	-	33	6.2	
enter unspectfied	20	1.5	1						55	0.2	

### Table A-34Injury Hospitalizations, NWT, 1995/96-1999/2000, Both Sexes, 35 - 44 Years of Age

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

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	Uninter	ntional	Self-in	flicted	Assa	ult	Undeter	mined	Tot	Total	
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)	
All Injuries	470	100.0	43	100.0	51	100.0	12	100.0	576	100.0	
Motor vehicle traffic crash	44	9.4	-	-	-	-	-	-	44	7.6	
MVTC - occupant	21	4.5	-	-	-	-	-	-	21	3.6	
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-	
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-	
MVTC - pedestrian	7	1.5	-	-	-	-	-	-	7	1.2	
MVTC - other	-	-	-	-	-	-	-	-	-	-	
MVTC - unspecified	11	2.3	-	-	-	-	-	-	11	1.9	
Pedal cyclist, other	-	-	-	-	-	-	-	-	-	-	
Pedestrian, other	-	-	-	-	-	-	-	-	-	-	
Transport, other	23	4.9	-	-	-	-	-	-	23	4.0	
snowmobile	13	2.8	-	-	-	-	-	-	13	2.3	
other off-road motor vehicle	5	1.1	-	-	-	-	-	-	5	0.9	
other transport	5	1.1	-	-	-	-	-	-	5	0.9	
Near drowning	-	-	-	-	-	-	-	-	-	-	
Fire, burn	8	1.7	-	-	-	-	-	-	9	1.6	
conflagration in private building	_	_	-	-	-	-	-	-	-	_	
other / unspecified fire	-	-	-	-	-	-	-	-	-	-	
Hot substance/ object	-	-	-	-	-	-	-	-	-	_	
Fall	191	40.6	-	-	-	-	-	-	193	33.5	
same level - trinning	72	15.3	_	_	_	_	_	_	72	12.5	
one level to another	10	4.0	_	-	_	_	_	_	21	3.6	
stairs / stars	26	5.5							21	1.5	
laddar / scaffold / building	20	2.3		_	_	_	_	-	20	1.0	
unspecified fall	63	13 1	_	-	-		_	-	63	10.0	
Poisoning	14	3.0	40	93.0	_	_		_	57	9.9	
madiaation	7	1.5	25	58.1	-	-	-	-	25	6.1	
ather personing	7	1.5	15	24.0	-	-	-	-	22	2.0	
Suff agation	/	1.5	15	54.9	-	-	-	-	22	3.8	
Sunocation	-	-	-	-	-	-	-	-	-	-	
Firearms Cost minute	- 12	-	-	-	-	-	-	-	-	-	
Cut, pierce	10	2.0	-	-	-	-	-	-	10	3.0	
Environmental	19	4.0	-	-	-	-	-	-	19	3.3	
excessive cold	0	1.3	-	-	-	-	-	-	0	1.0	
animal bite	0	1.3	-	-	-	-	-	-	0	1.0	
other environment	7	1.5	-	-	-	-	-	-	7	1.2	
Machinery	-	-	-	-	-	-	-	-	-	-	
Overexertion	24	5.1	-	-	-	-	-	-	24	4.2	
Struck by, against	15	3.2	-	-	35	68.6	-	-	50	8.7	
unarmed fight / brawl	-	-	-	-	32	62.7	-	-	32	5.6	
struck by blunt object	-	-	-	-	-	-	-	-	-	-	
other struck by	15	3.2	-	-	-	-	-	-	15	2.6	
Other, classifiable	31	6.6	-	-	6	11.8	-	-	37	6.4	
maltreatment	-	-	-	-	6	11.8	-	-	6	1.0	
foreign object in eye / orifice	9	1.9	-	-	-	-	-	-	9	1.6	
other classifiable	22	4.7	-	-	-	-	-	-	22	3.8	
Other, not classifiable	11	2.3	-	-	-	-	-	-	14	2.4	
Unspecified	66	14.0	-		-		-		74	12.8	
fracture, cause unspecified	20	4.3	-	-	-	-	-	-	20	3.5	
other unspecified	46	9.8	-	-	-	-	-	-	54	9.4	

#### Table A-35 Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Both Sexes, 45 - 64 Years of Age

Source: CIHI Discharge Abstract Database

Note: Cell sizes less than 5 have been suppressed.
### Table A-36Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Both Sexes, 65 Years of Age & Older

	Uninter	itional	Self-inf	licted	Assa	ault	Undetern	nined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	324	100.0	-	-	13	100.0	-	-	345	100.0
Motor vehicle traffic crash	15	4.6	-	-	-	-	-	-	15	4.3
MVTC - occupant	8	2.5	-	-	-	-	-	-	8	2.3
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	-	-	-	-	-	-	-	-	-	-
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	-	-	-	-	-	-	-	-	-	-
Pedal cyclist, other	-	-	-	-	-	-	-	-	-	-
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	6	1.9	-	-	-	-	-	-	6	1.7
snowmobile	5	1.5	-	-	-	-	-	-	5	1.4
other off-road motor vehicle	-	-	-	-	-	-	-	-	-	-
other transport	-	-	-	-	-	-	-	-	-	-
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	5	1.5	-	-	-	-	-	-	7	2.0
conflagration in private building	-	-	-	-	-	-	-	-	-	-
other / unspecified fire	-	-	-	-	-	-	-	-	5	1.4
Hot substance/ object	-	-	-	-	-	-	-	-	-	-
Fall	235	72.5	-	-	-	-	-	-	236	68.4
same level - tripping	85	26.2	-	-	-	-	-	-	85	24.6
one level to another	35	10.8	-	-	-	-	-	-	36	10.4
stairs / steps	23	7.1	-	-	-	-	-	-	23	6.7
ladder / scaffold / building	-	-	-	-	-	-	-	-	-	-
unspecified fall	90	27.8	-	-	-	-	-	-	90	26.1
Poisoning	-	-	-	-	-	-	-	-	7	2.0
medication	-	-	-	-	-	-	-	-	-	-
other poisoning	-	-	-	-	-	-	-	-	-	-
Suffocation	-	-	-	-	-	-	-	-	-	-
Firearms	-	-	-	-	-	-	-	-	-	-
Cut, pierce	-	-	-	-	-	-	-	-	-	-
Environmental	7	2.2	-	-	-	-	-	-	7	2.0
excessive cold	-	-	-	-	-	-	-	-	-	-
animal bite	-	-	-	-	-	-	-	-	-	-
other environment	-	-	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-	-	-
Overexertion	7	2.2	-	-	-	-	-	-	7	2.0
Struck by, against	-	-	-	-	10	76.9	-	-	12	3.5
unarmed fight / brawl	-	-	-	-	9	69.2	-	-	9	2.6
struck by blunt object	-	-	-	-	-	-	-	-	-	-
other struck by	-	-	-	-	-	-	-	-	-	-
Other, classifiable	13	4.0	-	-	-	-	-	-	13	3.8
maltreatment	-	-	-	-	-	-	-	-	-	-
foreign object in eye / orifice	5	1.5	-	-	-	-	-	-	5	1.4
other classifiable	8	2.5	-	-	-	-	-	-	8	2.3
Other, not classifiable	-	-	-	-	-	-	-	-	5	1.4
Unspecified	26	8.0	-	-	-	-	-	-	26	7.5
fracture, cause unspecified	11	3.4	-	-	-	-	-	-	11	3.2
other unspecified	15	4.6	-	-	-	-	-	-	15	4.3

Source: CIHI Discharge Abstract Database

Mechanism of CauseNumber(%)Number		Uninter	itional	Self-in	flicted	Assault		Undetermined		Total	
All lapiries       1,483       100.0       143       100.0       257       100.0       38       100.0       1,924       100.0         Motor vchicle traffic crash       159       10.7       -       -       -       -       1.0       5.3         MTC - concuput       109       6.9       -       -       -       -       1.0       5.4         MTC - concuput       7       0.5       -       -       -       -       1.0       7.0         MTC - specid cyclist       -       -       -       -       -       -       6.0       0.0         MTC - specid cyclist, other       32       2.2       -       -       -       -       1.0       0.0       0.1         Pelal cyclist, other       32       2.2       -       -       -       -       0.0       0.1       0.0       0.0       0.1       0.0       0.0       0.1       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0	Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Mor vehicle traffic crafti       159       10.7       -       -       -       -       -       103       8.3         MTC - oncognat       103       6.9       -       -       -       -       1.03       5.7       0.4         MTC - speed cyclat       -       -       -       -       -       -       1.0	All Injuries	1,483	100.0	143	100.0	257	100.0	38	100.0	1,924	100.0
MTC - encognal   103   6.9   -   -   -   -   1.03   5.4     MTC - moderychst   -   -   -   -   -   -   -   -   7   0.4     MTC - opdalogitst   -   -   -   -   -   -   -   1.8   0.9     MTC - opdalogitst   18   1.2   -   -   -   -   -   1.8   0.9     MTC - opdalogitst   2   1.5   -   -   -   -   1.8   0.9     MTC - opdalogitst   22   1.5   -   -   -   -   2.2   1.1     Polat - opdalogitst   22   1.5   -   -   -   -   2.2   1.1     Polat - opdalogitst   120   8.1   -   -   -   -   -   1.2   1.6     Samowabit   19   1.3   -   -   -   -   -   1.0   1.0     oher transport, oher   17   1.1   -   -   -   -   1.0   1.0     oher transport, oher   17   0.5   -   -   -   -   1.0   1.0     oher transport, oher   16	Motor vehicle traffic crash	159	10.7	-	-	-	-	-	-	159	8.3
MTC - polaryclist   I </td <td>MVTC - occupant</td> <td>103</td> <td>6.9</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>103</td> <td>5.4</td>	MVTC - occupant	103	6.9	-	-	-	-	-	-	103	5.4
MTC - polarying     I     I     I     I     I     I     I     I       MTC - oplestrian     18     12     I	MVTC - motorcyclist	7	0.5	-	-	-	-	-	-	7	0.4
MTC experiment   18   1.2   -   -   -   1.5   -   1.6   1.6   0.4     MTC expecified   22   1.5   -   -   -   1.5   -   1.7     Pedelstrin, other   32   2.2   1.5   -   -   -   -   -   3.2   3.2     Pedelstrin, other   32   2.2   1.5   -   -   -   -   -   3.2   3.2     Pedelstrin, other   32   2.2   -   -   -   -   -   -   3.2   3.2     Pedelstrin, other   32   0.5   -   -   -   -   -   4.4     other of transport   17   1.1   -   -   -   -   -   4.7     Near draming   7   0.5   -   -   -   -   -   4.7     Near draming   7   0.5   -   -   -   -   -   4.7     Near draming   7   0.5   -   -   -   -   1.6   1.6     Near draming   7   0.5   -   -   -   -   1.6   1.6     Sameland frame   161 <td>MVTC - pedal cyclist</td> <td>-</td>	MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MTC - unspecified       2       1       -       -       -       -       -       2       1         Pedial cylist, other       32       22       1       -       -       -       -       32       1.7         Pedial cylist, other       32       22       -       -       -       -       32       1.7         Pedial cylist, other       120       84       5.7       -       -       -       -       120       6.2         snownobile       84       5.7       -       -       -       -       10       6.2       10       1.7       10.5       -       -       -       -       17       0.4       44       other rownowning       7       0.5       -       -       -       -       17       0.4       17       0.4       -       -       -       17       0.4       16       0.4       1.7       0.4       1.6       0.8       0.6       -       -       -       16       0.8       0.6       0.6       0.6       0.6       0.6       0.6       0.6       0.6 <td>MVTC - pedestrian</td> <td>18</td> <td>1.2</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>18</td> <td>0.9</td>	MVTC - pedestrian	18	1.2	-	-	-	-	-	-	18	0.9
MTC- unspecified   22   1.5   -   -   -   -   -   -   22   1.1     Pedistria, other   32   2.22   -   -   -   -   -   -   32   1.1     Pedistria, other   120   8.1   -   -   -   -   -   -   120   6.2     strownolde   84   5.7   -   -   -   -   -   -   120   6.2     other of insort out on vehice   19   1.1   -   -   -   -   -   19   1.0     other out on on vehice   9   0.5   -   -   -   -   -   17   17   0.4     Near drowning   7   0.5   -   -   -   -   -   17   0.4     Stard traving   7   0.5   -   -   -   -   -   24   1.2     Other inspectived bight   16   1.1   -   -   -   -   -   16   1.2     Other inspectived bight   16   1.1   -   -   -   -   -   16   3.2     Fall   51   35.1   31   31<	MVTC - other	6	0.4	-	-	-	-	-	-	6	0.3
Pedacyria, other       93       2.2       -       -       -       -       -       -       -       -       -       -       -       -       9       0.5         Transport, other       120       8.1       -       -       -       -       -       -       120       6.2       state       3       -       -       -       -       120       6.2       3       -       -       -       -       -       120       6.2       -       10       -       10       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       -       10       10       10       10       10       10       10       10       10       10       10       10       10       10       10	MVTC - unspecified	22	1.5	-	-	-	-	-	-	22	1.1
Pedestrian, other   120   0.6   -   -   -   -   -   -   10   0.6.2     ransport, other   120   8.1   -   -   -   -   -   8.4   4.4     other off-road motor vehicle   147   1.1   -   -   -   -   8.4   4.4     other off-road motor vehicle   147   1.1   -   -   -   -   1.7   1.9   1.0     other transport   137   0.5   -   -   -   -   -   4.7   2.4     off-argation in private building   7   0.5   -   -   -   -   -   1.7   0.4     other / unspecified fire   16   1.1   -   -   -   -   -   512   2.66     same level- tripping   116   1.1   -   -   -   -   61   3.2   2.66     same level- tripping   116   1.1   -   -   -   -   61   3.2   2.66     same level to another   101   6.3   -   -   1.5   1.02   3.1   3.2     loader / socified / building   142   2.8   -   - </td <td>Pedal cyclist, other</td> <td>32</td> <td>2.2</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>32</td> <td>1.7</td>	Pedal cyclist, other	32	2.2	-	-	-	-	-	-	32	1.7
Transport, other       120       8.1       -       -       I       -       I <thi< th="">       I       I       I</thi<>	Pedestrian, other	9	0.6	-	-	-	-	-	-	9	0.5
summobile       84       5.7       -       -       -       -       -       -       8.4       4.4         other off-road more vehicle       19       1.3       -       -       -       -       17       0.1         other transport       17       1.1       -       -       -       -       7       0.4         Fire, burn       39       2.6       -       -       -       -       -       7       0.4         other vinspecified fire       16       1.1       -       -       -       -       2.4       1.2         that ubstance object       16       1.1       -       -       -       -       2.4       1.2         same level another       101       6.8       -       -       -       -       106       8.8         stats/ steps       61       4.1       -       -       -       -       101       3.2         tadder/scaffold building       42       2.8       -       -       15       39.5       178       9.3         maleetel another       131	Transport, other	120	8.1	-	-	-	-	-	-	120	6.2
other approad motor vehicle       19       1.0            19       1.0         other transport       17       1.1             17       0.90         Near drowning       7       0.5	snowmobile	84	5.7	-	-	-	-	-	-	84	4.4
other transport       17       1.1       -       -       -       -       -       17       0.9         Near drowning       7       0.5       -       -       -       -       -       7       0.4         confingration in prvate building       7       0.5       -       -       -       -       2.4       1.2         other / unspecified for       1/6       1.1       -       -       -       -       2.4       1.2         that substance/ object       1/6       1.1       -       -       -       -       -       1.6       0.8         same level or inping       160       1/1.2       -       -       -       -       1.6       0.8       3.2         ladder/ scaffold building       42       2.8       -       -       -       -       -       42       2.2         unspecified fail       1/1       9.5       3.5       -       -       1.6       7.8       3.2         Bioloning       19       1.3       2.7       1.89       -       -       10       2.3 <t< td=""><td>other off-road motor vehicle</td><td>19</td><td>1.3</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>19</td><td>1.0</td></t<>	other off-road motor vehicle	19	1.3	-	-	-	-	-	-	19	1.0
Near drowning       7       0.5       -       -       -       -       -       7       0.4         Fire, burn       39       2.6       -       -       -       -       -       47       2.4         conflagration in private building       7       0.4       -       -       -       -       47       2.4         conflagration in private building       7       0.4       -       -       -       -       2.4       1.2         dote // uspecified fire       1.6       1.1       -       -       -       -       -       1.6       0.8       -       -       -       -       1.6       0.8       -       -       -       1.0       0.8       -       -       -       0.7       0.16       0.8       -       -       -       1.0       0.8       3.3       3.2       3.3       3.3       -       -       -       -       1.0       0.8       3.3       3.5       1.0       -       -       1.1       1.0       -       -       1.1       1.0       -       - <td< td=""><td>other transport</td><td>17</td><td>1.1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>17</td><td>0.9</td></td<>	other transport	17	1.1	-	-	-	-	-	-	17	0.9
Fire, burn   39   2.6   -   -   -   -   -   -   -   -   -   7   0.4     conflagration in private huiding   7   0.5   -   -   -   -   -   7   0.4     oher / mysecifed fre   16   1.1   -   -   -   -   -   7   0.4     Fall   511   34.5   -   -   -   -   -   512   26.6     same level in another   101   6.8   -   -   -   -   -   512   26.6     same level in another   101   6.8   -   -   -   -   -   102   5.3     statis/ steps   61   4.1   -   -   -   -   -   1.6   1.1   1.02   5.3     ladder / scaffold/buildig   141   9.5   -   -   1.6   -   1.1   7.3     Poisoning   19   1.3   2.7   1.89   -   10   2.63   1.72   6.6     other private datation   33   2.2   3.5   3.5   1.5   1.32   1.72   6.6     Statis/ steps   11   0.7	Near drowning	7	0.5	-	-	-	-	-	-	7	0.4
conflagration in private building       7       0.5       -       -       -       -       -       7       0.4         other / unspecified fire       16       1.1       -       -       -       -       24       1.2         bas substance/ object       16       1.1       -       -       -       -       16       0.8         Fall       511       34.5       -       -       -       -       16       0.8         stairs / steps       101       6.8       -       -       -       -       102       5.3         ladder / scaffold / building       42       2.8       -       -       -       -       14       7.3         medication       33       2.2       8.3       5.8.0       -       -       110       7.6.9       -       110       7.6.3       17.2       17.8       9.3         medication       33       2.2       8.3       5.8.0       -       -       10       2.6.3       17.2       1.6.6         other poisoning       19       1.3       2.7       18.9	Fire, burn	39	2.6	-	-	-	-	-	-	47	2.4
other / unspecified fire       16       1.1       -       -       -       -       -       24       1.2         Hot substance/ object       16       1.1       -       -       -       -       -       512       26.6         same level tripping       166       11.2       -       -       -       -       512       26.6         same level to another       101       6.8       -       -       -       -       -       512       26.6         same level to another       101       6.8       -       -       -       -       -       102       5.3         stairs / steps       61       4.1       -       -       -       -       -       42       2.2         unspecified fall       1/1       9.5       -       -       -       15       39.5       178       9.3         medication       33       2.2       83       58.0       -       10       2.3       172       6.6         other poisoning       19       1.3       2.7       18.9       3.3       35       1	conflagration in private building	7	0.5	-	-	-	-	-	-	7	0.4
Hot substance/ object       16       1.1       -       -       -       -       -       -       16       0.8         Fall       511       34.5       -       -       -       -       -       -       -       512       26.6         same level to another       101       6.8       -       -       -       -       -       -       102       5.3         statix steps       61       4.1       -       -       -       -       -       -       -       -       10       5.3         ladder / scafiold / building       42       2.8       -       -       -       -       -       -       -       -       -       413       7.3         Poisoning       52       3.5       110       76.9       -       -       10       26.3       112       6.6         other poisoning       19       1.3       27       18.9       -       -       10       26.3       117       6.6         Suffocation       7       0.5       5       35       -       -	other / unspecified fire	16	1.1	-	-	-	-	-	-	24	1.2
Fall       511       34.5       -       -       -       -       -       -       -       512       26.6         same level tripping       166       11.2       -       -       -       -       -       100       8.6         one level to another       101       6.8       -       -       -       -       102       5.3         statir Steps       61       4.1       -       -       -       -       -       102       5.3         unspecified fall       141       9.5       -       -       -       -       15       39.5       178       9.3         medication       33       2.2       8.8       58.0       -       -       10       26.3       127       6.6         other poisoning       19       1.3       2.7       18.9       -       -       -       12       0.6         Suffocation       7       0.5       3.5       1.5       -       -       -       12       0.6         Erearms       11       0.7       -       -       12	Hot substance/ object	16	1.1	-	-	-	-	-	-	16	0.8
same level - tripping       166       1.2       -       -       -       -       -       -       -       -       102       5.3         stairs / steps       61       4.1       -       -       -       -       -       61       3.2         ladder / saffold / building       42       2.8       -       -       -       -       -       42       2.2         unspecified fall       141       9.5       -       -       -       15       39.5       178       9.3         medication       33       2.2       83       88.0       -       -       10       2.6       127       6.6         other poisoning       19       1.3       2.7       18.9       -       -       10       2.3       127       6.6         Firearms       11       0.7       -       -       -       -       132       35       7.0         Environmental       52       3.5       -       -       -       133       35       136       -       133       0.7         excessive cold	Fall	511	34.5	-	-	-	-	-	-	512	26.6
one level to another       101       6.8       -       -       -       -       -       102       5.3         statary steps       61       4.1       -       -       -       -       -       61       3.2         ladder / scaffold / building       42       2.8       -       -       -       -       61       3.2         unspecified fall       141       9.5       -       -       -       15       39.5       178       9.3         medication       33       2.2       83       58.0       -       -       100       26.3       1/27       6.6         other poisoning       19       1.3       2.7       18.9       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5       3.5       -       -       -       -       102       0.6         Firearms       11       0.7       -       -       -       130       0.7         catter poisoning       11       0.7       -       -       -       130       0.70 <td>same level - tripping</td> <td>166</td> <td>11.2</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>166</td> <td>8.6</td>	same level - tripping	166	11.2	-	-	-	-	-	-	166	8.6
statics / steps       61       4.1       -       -       -       -       -       -       -       61       3.2         ladder / scaffold / building       42       2.8       -       -       -       -       -       42       2.2         unspecified fall       141       9.5       -       -       -       15       39.5       178       9.3         medication       33       2.2       83       58.0       -       -       10       26.3       127       6.6         other poisoning       19       1.3       27       18.9       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5       3.5       -       -       -       10       26.3       10       1.0         Cut, pierce       78       5.3       19       13.3       35       13.6       -       -       13       0.7         ather environmental       52       3.5       -       -       -       -       13       0.7         ather environmental	one level to another	101	6.8	-	-	-	-	-	-	102	5.3
ladder / scaffold / building       42       2.8       -       -       -       -       -       -       -       -       -       -       -       110       7.3         Poisoning       52       3.5       110       76.9       -       -       15       39.5       1178       9.3         medication       33       2.2       83       58.0       -       -       10       26.3       127       6.6         other poisoning       19       1.3       2.7       18.9       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5       3.5       -       -       -       12       0.6         Firearms       11       0.7       -       -       -       -       13       0.9       1.0         Environmental       52       3.5       -       -       -       -       13       0.7         other environment       12       0.8       -       -       -       -       13       0.7         other environment	stairs / steps	61	4.1	-	-	-	-	-	-	61	3.2
unspecified fall       141       9.5       -       -       -       1       -       141       7.3         Poisoning       52       3.5       110       76.9       -       -       15       39.5       178       9.3         medication       33       2.2       83       58.0       -       -       10       26.3       127       6.6         other poisoning       19       1.3       27       18.9       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5.3       5       -       -       -       12       0.6         Firearms       11       0.7       -       -       -       -       135       7.0         Environmental       52       3.5       -       -       -       -       135       7.0         excessive cold       27       1.8       -       -       -       -       13       0.7         other environment       12       0.8       -       -       -       -       13       0.7	ladder / scaffold / building	42	2.8	-	-	-	-	-	-	42	2.2
Poisoning       52       3.5       110       76.9       -       -       15       39.5       178       9.3         medication       33       2.2       83       58.0       -       -       10       26.3       127       6.6         other poisoning       19       1.3       27       18.9       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5       3.5       -       -       -       5       12       0.6         Firearms       11       0.7       -       -       -       -       15       10       10       70         Cut, pierce       78       5.3       19       13.3       35       13.6       -       13       0.7         Environmental       52       3.5       -       -       -       -       13       0.7         other environment       12       0.8       -       -       -       -       13       0.7         Other environment       12       0.8       -       -       -	unspecified fall	141	9.5	-	-	-	-	-	-	141	7.3
medication       33       2.2       83       58.0       -       -       10       26.3       127       6.6         other poisoning       19       1.3       27       18.9       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5       3.5       -       -       -       5       13.2       51       2.7         Suffocation       7       0.5       5       3.5       -       -       -       -       12       0.6         Firearms       11       0.7       -       -       -       -       -       135       7.0         Environmental       52       3.5       -       -       -       -       -       54       2.8         excessive cold       27       1.8       -       -       -       -       13       0.7         other environment       12       0.8       -       -       -       -       13       0.7         other environment       12       0.8       -       -       -	Poisoning	52	3.5	110	76.9	-	-	15	39.5	178	9.3
other poisoning     19     1.3     27     18.9     -     -     5     13.2     51     2.7       Suffocation     7     0.5     5     3.5     -     -     -     112     0.6       Firearms     11     0.7     -     -     -     -     -     12     0.6       Cut, pierce     78     5.3     19     13.3     355     13.6     -     -     135     7.0       Environmental     52     3.5     -     -     -     -     -     54     2.8       excessive cold     27     1.8     -     -     -     -     -     53     1.0     1.0     -     -     -     -     1.3     0.7       other environment     12     0.8     -     -     -     -     -     1.3     0.7       other environment     12     0.8     -     -     -     -     -     1.5     0.8       Other environment     12     0.8     3.0     -     -     1.80     70.0     -     <	medication	33	2.2	83	58.0	-	-	10	26.3	127	6.6
Suffocation     7     0.5     5     3.5     -     -     -     -     12     0.6       Firearms     11     0.7     -     -     -     -     -     -     19     1.0       Cut, pierce     78     5.3     19     13.3     35     13.6     -     -     135     7.0       Environmental     52     3.5     -     -     -     -     -     54     2.8       excessive cold     27     1.8     -     -     -     -     -     53     0.7       other environment     12     0.8     -     -     -     -     13     0.7       other environment     12     0.8     -     -     -     -     15     0.8       Overexertion     45     3.0     -     -     180     70.0     -     272     14.1       unarmed fight / brawl     -     -     160     62.3     -     20     1.0     3.3       struck by blunt object     -     -     20     7.8     - <t< td=""><td>other poisoning</td><td>19</td><td>1.3</td><td>27</td><td>18.9</td><td>-</td><td>-</td><td>5</td><td>13.2</td><td>51</td><td>2.7</td></t<>	other poisoning	19	1.3	27	18.9	-	-	5	13.2	51	2.7
Firearms     11     0.7     -     -     -     -     -     19     1.0       Cut, pierce     78     5.3     19     13.3     35     13.6     -     -     135     7.0       Environmental     52     3.5     -     -     -     -     -     54     2.8       excessive cold     27     1.8     -     -     -     -     -     53     30     1.6       animal bite     13     0.9     -     -     -     -     -     13     0.7       other environment     12     0.8     -     -     -     -     -     12     0.6       Machinery     15     1.0     -     -     1-     -     15     0.8       Overexertion     45     3.0     -     -     180     70.0     -     272     145       unarmed fight / brawl     -     -     -     160     62.3     -     20     1.0       other, classifiable     94     6.3     -     -     9     3.5	Suffocation	7	0.5	5	3.5	-	-	-	-	12	0.6
Cut, pierce       78       5.3       19       13.3       35       13.6       -       -       135       7,0         Environmental       52       3.5       -       -       -       -       -       54       2.8         excessive cold       27       1.8       -       -       -       -       -       30       1.6         animal bite       13       0.9       -       -       -       -       -       13       0.7         other environment       12       0.8       -       -       -       -       12       0.6         Machinery       15       1.0       -       -       -       -       15       0.8         Overexertion       45       3.0       -       -       180       70.0       -       20       7.8       -       20       1.0         struck by, against       89       6.0       -       -       160       6.3       -       20       1.0         other struck by       89       6.0       -       -       -       -       <	Firearms	11	0.7	-	-	-	-	-	-	19	1.0
Environmental     52     3.5     -     -     -     -     54     2.8       excessive cold     27     1.8     -     -     -     -     30     1.6       animal bite     13     0.9     -     -     -     -     -     13     0.7       other environment     12     0.8     -     -     -     -     12     0.6       Machinery     15     1.0     -     -     -     -     -     15     0.8       Overesertion     45     3.0     -     -     -     -     -     45     2.3       Struck by, against     89     6.0     -     -     180     70.0     -     20     1.6     8.3       struck by blunt object     -     -     160     62.3     -     20     1.0     8.3       other struck by     89     6.0     -     -     160     62.3     -     9     3.5     -     90     3.6       Other, classifiable     94     6.3     -     -     9     <	Cut, pierce	78	5.3	19	13.3	35	13.6	-	-	135	7.0
excessive cold     27     1.8     -     -     -     -     30     1.6       animal bite     13     0.9     -     -     -     -     13     0.7       other environment     12     0.8     -     -     -     -     12     0.6       Machinery     15     1.0     -     -     -     -     15     0.8       Overexertion     45     3.0     -     -     -     -     -     45     2.3       Struck by, against     89     6.0     -     -     180     70.0     -     272     14.1       unarmed fight / brawl     -     -     160     62.3     -     20     1.6     8.3       struck by blunt object     -     -     160     62.3     -     20     1.0       other struck by     89     6.0     -     -     20     7.8     -     20     1.0       other classifiable     94     6.3     -     -     9     3.5     -     -     9     0.5       for	Environmental	52	3.5	-	-	-	-	-	-	54	2.8
animal bite     13     0.9     -     -     -     -     -     13     0.7       other environment     12     0.8     -     -     -     -     12     0.6       Machinery     15     1.0     -     -     -     -     -     15     0.8       Overexertion     45     3.0     -     -     -     -     45     2.3       Struck by, against     89     6.0     -     -     180     70.0     -     272     14.1       unarmed fight / brawl     -     -     160     62.3     -     -     160     8.3       struck by blunt object     -     -     -     20     7.8     -     20     1.0       other struck by     89     6.0     -     -     9     3.5     -     9     2.4     1.6       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     24     1.2       other classifiable     70     4.7     -     -     -     70     3.6	excessive cold	27	1.8	-	-	-	-	-	-	30	1.6
other environment       12       0.8       -       -       -       -       -       12       0.6         Machinery       15       1.0       -       -       -       -       -       15       0.8         Overexertion       45       3.0       -       -       -       -       45       2.3         Struck by, against       89       6.0       -       -       180       70.0       -       -       272       14.1         unarmed fight / brawl       -       -       160       62.3       -       -       160       8.3         struck by blunt object       -       -       160       62.3       -       -       20       1.0         other struck by       89       6.0       -       -       20       7.8       -       20       1.0         other struck by       89       6.0       -       -       9       3.5       -       -       103       5.4         maltreatment       -       -       -       9       3.5       -       -       20 <t< td=""><td>animal bite</td><td>13</td><td>0.9</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>13</td><td>0.7</td></t<>	animal bite	13	0.9	-	-	-	-	-	-	13	0.7
Machinery     15     1.0     -     -     -     -     -     15     0.8       Overexertion     45     3.0     -     -     -     -     45     2.3       Struck by, against     89     6.0     -     -     180     70.0     -     272     14.1       unarmed fight / brawl     -     -     160     62.3     -     -     160     8.3       struck by blunt object     -     -     -     160     62.3     -     -     160     8.3       other struck by     89     6.0     -     -     20     7.8     -     -     20     1.0       other struck by     89     6.0     -     -     9     3.5     -     -     92     4.8       Other, classifiable     94     6.3     -     -     9     3.5     -     -     92     4.8       Other, classifiable     24     1.6     -     -     9     3.5     -     -     24     1.2       other classifiable     25     1.7	other environment	12	0.8	-	-	-	-	-	-	12	0.6
Overexertion     45     3.0     -     -     -     -     -     45     2.3       Struck by, against     89     6.0     -     -     180     70.0     -     -     272     14.1       unarmed fight / brawl     -     -     160     62.3     -     -     272     14.1       unarmed fight / brawl     -     -     -     160     62.3     -     -     160     8.3       struck by blunt object     -     -     -     20     7.8     -     -     20     1.0       other struck by     89     6.0     -     -     9     3.5     -     -     92     4.8       Other, classifiable     94     6.3     -     -     9     3.5     -     -     92     4.8       Other, classifiable     94     6.3     -     -     9     3.5     -     -     90     0.5       foreign object in eye / orifice     24     1.6     -     -     -     -     70     3.6       Other, not classifiable <t< td=""><td>Machinery</td><td>15</td><td>1.0</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>15</td><td>0.8</td></t<>	Machinery	15	1.0	-	-	-	-	-	-	15	0.8
Struck by, against     89     6.0     -     -     180     70.0     -     -     272     14.1       unarmed fight / brawl     -     -     160     62.3     -     -     160     8.3       struck by blunt object     -     -     -     20     7.8     -     -     20     1.0       other struck by     89     6.0     -     -     20     7.8     -     -     92     4.8       Other, classifiable     94     6.3     -     -     9     3.5     -     -     92     4.8       Maltreatment     -     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     -     -     20     7.8     1.2     1.2       other classifiable     70     4.7     -     -     -     -     70     3.6       Other, not classifiable     25     1.7     -     -     116     6.2     7     18.4     162     8.4       fracture, caus	Overexertion	45	3.0	-	-	-	-	-	-	45	2.3
unarmed fight / brawl     -     -     160     62.3     -     -     160     8.3       struck by blunt object     -     -     -     20     7.8     -     -     20     1.0       other struck by     89     6.0     -     -     20     7.8     -     -     20     1.0       other, classifiable     94     6.3     -     -     9     3.5     -     -     90     3.5       maltreatment     -     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     -     -     70     3.6       Other, not classifiable     25     1.7     -     -     112     4.7     5     13.2     42     2.2 <t< td=""><td>Struck by, against</td><td>89</td><td>6.0</td><td>-</td><td>-</td><td>180</td><td>70.0</td><td>-</td><td>-</td><td>272</td><td>14.1</td></t<>	Struck by, against	89	6.0	-	-	180	70.0	-	-	272	14.1
struck by blunt object     -     -     -     20     7.8     -     -     20     1.0       other struck by     89     6.0     -     -     -     -     92     4.8       Other, classifiable     94     6.3     -     -     9     3.5     -     -     103     5.4       maltreatment     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     -     9     0.5       other classifiable     70     4.7     -     -     -     -     70     3.6       Other, not classifiable     25     1.7     -     -     12     4.7     5     13.2     42     2.2       Unspecified     138     9.3     -     -     16     6.2     7     18.4     162     8.4       fracture, cause unspecified     30     2.0     -     -     -     -     30     1.6       other unspecified     108     7.3     - <td>unarmed fight / brawl</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>160</td> <td>62.3</td> <td>-</td> <td>-</td> <td>160</td> <td>8.3</td>	unarmed fight / brawl	-	-	-	-	160	62.3	-	-	160	8.3
other struck by     89     6.0     -     -     -     -     92     4.8       Other, classifiable     94     6.3     -     -     9     3.5     -     -     103     5.4       maltreatment     -     -     9     3.5     -     -     103     5.4       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     -     9     0.5       other classifiable     70     4.7     -     -     -     -     24     1.2       Other, not classifiable     25     1.7     -     -     112     4.7     5     13.2     42     2.2       Unspecified     138     9.3     -     -     116     6.2     7     18.4     162     8.4       fracture, cause unspecified     30     2.0     -     -     16     6.2     7     18.4     132     6.9	struck by blunt object	-	-	-	-	20	7.8	-	-	20	1.0
Other, classifiable     94     6.3     -     9     3.5     -     -     103     5.4       maltreatment     -     -     -     9     3.5     -     -     103     5.4       maltreatment     -     -     9     3.5     -     -     103     5.4       foreign object in eye / orifice     24     1.6     -     -     9     3.5     -     -     9     0.5       other classifiable     70     4.7     -     -     -     -     24     1.2       Other, not classifiable     25     1.7     -     -     12     4.7     5     13.2     42     2.2       Unspecified     138     9.3     -     -     16     6.2     7     18.4     162     8.4       fracture, cause unspecified     30     2.0     -     -     -     -     30     1.6       other unspecified     108     7.3     -     -     16     6.2     7     18.4     132     6.9	other struck by	89	6.0	-	-	-	-	-	-	92	4.8
maltreatment     -     -     9     3.5     -     -     9     0.5       foreign object in eye / orifice     24     1.6     -     -     -     -     24     1.2       other classifiable     70     4.7     -     -     -     -     24     1.2       Other, not classifiable     25     1.7     -     -     12     4.7     5     13.2     42     2.2       Unspecified     138     9.3     -     -     16     6.2     7     18.4     162     8.4       fracture, cause unspecified     30     2.0     -     -     -     -     30     1.6       other unspecified     108     7.3     -     -     16     6.2     7     18.4     132     6.9	Other, classifiable	94	6.3	-	-	9	3.5	-	-	103	5.4
foreign object in eye / orifice     24     1.6     -     -     -     -     24     1.2       other classifiable     70     4.7     -     -     -     -     70     3.6       Other, not classifiable     25     1.7     -     12     4.7     5     13.2     42     2.2       Unspecified     138     9.3     -     -     16     6.2     7     18.4     162     8.4       fracture, cause unspecified     30     2.0     -     -     -     -     30     1.6       other unspecified     108     7.3     -     -     16     6.2     7     18.4     132     6.9	maltreatment	-	-	-	-	9	3.5	-	-	9	0.5
other classifiable       70       4.7       -       -       -       -       70       3.6         Other, not classifiable       25       1.7       -       12       4.7       5       13.2       42       2.2         Unspecified       138       9.3       -       -       16       6.2       7       18.4       162       8.4         fracture, cause unspecified       30       2.0       -       -       16       6.2       7       18.4       162       8.4         other unspecified       108       7.3       -       -       16       6.2       7       18.4       132       6.9	foreign object in eye / orifice	24	1.6	-	-	-	-	-	-	24	1.2
Other, not classifiable       25       1.7       -       12       4.7       5       13.2       42       2.2         Unspecified       138       9.3       -       -       16       6.2       7       18.4       162       8.4         fracture, cause unspecified       30       2.0       -       -       16       6.2       7       18.4       162       8.4         other unspecified       108       7.3       -       -       16       6.2       7       18.4       132       6.9	other classifiable	70	4.7	-	-	-	-	-	-	70	3.6
Unspecified       138       9.3       -       -       16       6.2       7       18.4       162       8.4         fracture, cause unspecified       30       2.0       -       -       -       -       30       1.6         other unspecified       108       7.3       -       -       16       6.2       7       18.4       132       6.9	Other, not classifiable	25	1.7	-	-	12	4.7	5	13.2	42	2.2
fracture, cause unspecified       30       2.0       -       -       -       -       30       1.6         other unspecified       108       7.3       -       -       16       6.2       7       18.4       132       6.9	Unspecified	138	9.3	-	-	16	6.2	7	18.4	162	8.4
other unspecified 108 7.3 16 6.2 7 18.4 132 6.9	fracture, cause unspecified	30	2.0	-	-	-	-	-	-	30	1.6
	other unspecified	108	7.3	-	-	16	6.2	7	18.4	132	6.9

## Table A-37Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Males, All Ages

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

	Uninter	tional	Self-in	flicted	Assa	ault	Undeter	rmined	Tot	tal
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	868	100.0	275	100.0	120	100.0	32	100.0	1,296	100.0
Motor vehicle traffic crash	87	10.0	-	-	-	-	-	-	87	6.7
MVTC - occupant	52	6.0	-	-	-	-	-	-	52	4.0
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	15	1.7	-	-	-	-	-	-	15	1.2
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	13	1.5	-	-	-	-	-	-	13	1.0
Pedal cyclist, other	11	1.3	-	-	-	-	-	-	11	0.8
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	38	4.4	-	-	-	-	-	-	39	3.0
snowmobile	20	2.3	-	-	-	-	-	-	20	1.5
other off-road motor vehicle	8	0.9	-	-	-	-	-	-	8	0.6
other transport	10	1.2	-	-	-	-	-	-	11	0.8
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	15	1.7	-	-	-	-	-	-	16	1.2
conflagration in private building	5	0.6	-	-	-	-	-	-	5	0.4
other / unspecified fire	-	-	-	-	-	-	-	-	5	0.4
Hot substance/ object	6	0.7	-	-	-	-	-	-	6	0.5
Fall	409	47.1	-	-	-	-	-	-	414	31.9
same level - tripping	145	16.7	-	-	-	-	-	-	145	11.2
one level to another	80	9.2	-	-	-	-	-	-	85	6.6
stairs / steps	55	6.3	-	-	-	-	-	-	55	4.2
ladder / scaffold / building	8	0.9	-	-	-	-	-	-	8	0.6
unspecified fall	121	13.9	-	-	-	-	-	-	121	9.3
Poisoning	44	5.1	240	87.3	-	-	22	68.8	310	23.9
medication	26	3.0	228	82.9	-	-	17	53.1	274	21.1
other poisoning	18	2.1	12	4.4	-	-	5	15.6	36	2.8
Suffocation	-	-	8	2.9	-	-	-	-	12	0.9
Firearms	-	-	-	-	-	-	-	-	-	-
Cut, pierce	17	2.0	23	8.4	-	-	-	-	45	3.5
Environmental	30	3.5	-	-	-	-	-	-	30	2.3
excessive cold	7	0.8	-	-	-	-	-	-	7	0.5
animal bite	14	1.6	-	-	-	-	-	-	14	1.1
other environment	9	1.0	-	-	-	-	-	-	9	0.7
Machinery	-	-	-	-	-	-	-	-	-	-
Overexertion	43	5.0	-	-	-	-	-	-	43	3.3
Struck by, against	25	2.9	-	-	64	53.3	-	-	90	6.9
unarmed fight / brawl	-	-	-	-	58	48.3	-	-	58	4.5
struck by blunt object	-	-	-	-	6	5.0	-	-	6	0.5
other struck by	25	2.9	-	-	-	-	-	-	26	2.0
Other, classifiable	45	5.2	-	-	35	29.2	-	-	80	6.2
maltreatment	-	-	-	-	32	26.7	-	-	32	2.5
foreign object in eye / orifice	21	2.4	-	-	-	-	-	-	21	1.6
other classifiable	24	2.8	-	-	-	-	-	-	27	2.1
Other, not classifiable	9	1.0	-	-	8	6.7	-	-	19	1.5
Unspecified	87	10.0	-	-	-	-	-	-	94	7.3
fracture, cause unspecified	29	3.3	-	-	-	-	-	-	29	2.2
other unspecified	58	6.7	-	-	-	-	-	-	65	5.0

## Table A-38Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Females, All Ages

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

Mechanism of CauseNumber(%)NumberMNumberMNumberMM<		Uninter	itional	Self-in	flicted	Ass	ault	Undeter	rmined	Tot	al
All liprics       97       100.0       166       100.0       207       100.0       1.393       100.0         Moter vehicle traffic crash       96       9.8       -       -       -       -       96       6.9         MTC - necorgant       60       6.1       -       -       -       -       0.0       4.9         MTC - peckel cyclist       -       -       -       -       -       -       0.0       4.9         MTC - speck cyclist       -	Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Mater vehicle traffic crash       96       9.8       -       -       -       -       -       -       00       4.3         MTC - secupant       60       6.1       -       -       -       -       60       4.0         MTC - secupant       6       6.6       -       -       -       -       60       4.0         MTC - secupant       14       1.4       -       -       -       -       1.4       1.4       1.4       -       -       -       -       1.4       1.4       1.4       -       -       -       -       1.4       1.4       1.4       -       -       -       1.4       1.4       1.0       -       -       -       1.6       1.1         Procestrian       16       1.6       -       -       -       -       1.6       0.0       -       -       -       -       1.6       0.0       0.0       -       -       -       1.0       0.0       -       -       -       1.0       0.0       -       -       -       1.0       0.0	All Injuries	977	100.0	166	100.0	207	100.0	39	100.0	1,393	100.0
MTC - accapant     60     6.1     -     -     -     -     60     4.3       MTC - noncordit     6     0.6     -     -     -     -     6     0.4       MTC - spectrum     14     1.4     -     -     -     -     -     14     1.0       MTC - onspectivel     12     1.2     -     -     -     -     -     12     0.9       Pedda yelis, other     16     1.6     -     -     -     -     10	Motor vehicle traffic crash	96	9.8	-	-	-	-	-	-	96	6.9
MTC - notarcyclist     6     0.6     -	MVTC - occupant	60	6.1	-	-	-	-	-	-	60	4.3
MTC - pedatyshin     I <thi< th="">     I     <thi< th=""></thi<></thi<>	MVTC - motorcyclist	6	0.6	-	-	-	-	-	-	6	0.4
MTC - spectrum   14   1.4   -   -   -   -   1.4   1.0     MTC - superfield   12   1.2   -   -   -   -   -   12   0.9     Pedat region processor   16   1.6   -   -   -   -   -   16   1.1     Pedatstria, robust   58   5.9   -   -   -   -   -   58   42     smomobile   39   4.0   -   -   -   -   -   58   42     smomobile   39   4.0   -   -   -   -   -   39   2.8     oder off-road maar velucle   10   1.0   -   -   -   -   -   39   2.8     oder off-road maar velucle   10   1.0   -	MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MTC - sumperfied       12       12       -       -       -       -       -       12       0.9         MTC - sumperfied       16       1.6       -       -       -       -       16       1.1         Pedel cyclist, other       16       0.6       -       -       -       -       16       1.1         Pedel cyclist, other       39       4.0       -       -       -       -       58       4.2         snownable       39       4.0       -       -       -       -       39       2.8         other remayort, other       10       1.0       -       -       -       -       9       0.6         Near drowning       -	MVTC - pedestrian	14	1.4	-	-	-	-	-	-	14	1.0
MTC <t< td=""><td>MVTC - other</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	MVTC - other	-	-	-	-	-	-	-	-	-	-
Pedateryian, other       16       1.6       -       -       -       -       -       -       -       -       -       -       -       6       0.4         Transport, other       58       0.5       -       -       -       -       -       58       4.2         snormobile       10       1.0       -       -       -       -       -       58       4.2         other off-rond morvehice       10       0.0       -       -       -       -       -       10       0.7         other dironsport       9       0.9       -       -       -       -       -       10       0.7         Sinder dironsport       9       0.9       -       -       -       -       -       224       1.7         configuration in privace building       -       -       -       -       11       0.8       -       -       -       11       0.8         for dirons undice       64       1.6       -       -       -       -       14       1.0         for dirons undice	MVTC - unspecified	12	1.2	-	-	-	-	-	-	12	0.9
Pedestrian, other     6     0.6     -     -     -     -     -     -     6     0.43       Transport, other     39     4.0     -     -     -     -     39     2.8       other off-road motor vehicle     10     1.0     -     -     -     -     -     10     0.7       other transport     9     0.9     -     43     43     43     -     -     -     -     -     43     43     43     -     -     -     -     -     43     14     -     -     -     -     -     43 <td>Pedal cyclist, other</td> <td>16</td> <td>1.6</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>16</td> <td>1.1</td>	Pedal cyclist, other	16	1.6	-	-	-	-	-	-	16	1.1
Transport, other     58     5.9     -     -     -     -     58     4.0       anonumbile     39     4.0     -     -     -     -     39     2.8       other off-road motor vehicle     10     1.0     -     -     -     -     -     10     0.7       other off-road motor vehicle     10     0.9     0.6     -     -     -     -     -     10     0.7       other off-road motor vehicle     18     1.8     -     -     -     -     2.4     1.7       configgration in private building     -     -     -     -     -     12     0.9     0.6       file / submeter     11     1.1     -     -     -     -     112     0.1       folder / subpetified filte     13     14.6     -     -     -     -     143     10.3       one level to anoher     75     7.7     -     -     -     -     147     16.0       usspecified filt     147     15.0     -     -     -     147     16.0	Pedestrian, other	6	0.6	-	-	-	-	-	-	6	0.4
snownoble       39       4.0       -       -       -       -       -       39       2.8         other forsontor vehicle       10       1.0       -       -       -       -       -       10       0.7         other transport       9       0.9       -       -       -       -       -       9       0.6         Near drowning       -       10       0.5       7       -       -       -       -       -       7       7       -       -       -       -       7       7       7       -       -       -       10       0.7       3.4 <td>Transport, other</td> <td>58</td> <td>5.9</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>58</td> <td>4.2</td>	Transport, other	58	5.9	-	-	-	-	-	-	58	4.2
other ansport       10       10       -       -       -       -       10       0.7         Near drowning       -       -       -       -       -       -       -       9       0.60         Near drowning       - </td <td>snowmobile</td> <td>39</td> <td>4.0</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>39</td> <td>2.8</td>	snowmobile	39	4.0	-	-	-	-	-	-	39	2.8
oher transport       9       0.9       -       -       -       -       -       -       0       0.6         Near drowning       - <td< td=""><td>other off-road motor vehicle</td><td>10</td><td>1.0</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>10</td><td>0.7</td></td<>	other off-road motor vehicle	10	1.0	-	-	-	-	-	-	10	0.7
Near drowningFire, burn1818111conflagration in private building1120.9Ito substance/ object111.11100.8Fall43344.34373.1.4same level tripping1/31/4.61733.1.4same level to another757.74773.1.4same level to another757.71793.4ladder / scaffold / building212.11713.4ladder / scaffold / building212.11711.6	other transport	9	0.9	-	-	-	-	-	-	9	0.6
Fire, burn   18   1.8   -   -   -   -   -   -   1   -   1   -   1   -   1   -   1   1     conflagration in private building   -   -   -   -   -   -   -   -   12   0.9     Hot substance/ object   11   1.1   -   -   -   -   -   437   31.4     Same level to another   75   7.7   -   -   -   -   -   437   3.4     ladder / scaffold/building   21   2.1   -   -   -   -   -   47   3.4     ladder / scaffold/building   21   2.1   -   -   -   -   1.4   1.4   1.4     medication   20   2.0   112   67.5   -   -   1.8   61.5   201   1.4.4     medication   20   2.0   112   67.5   -   -   1.8   61.5   201   1.4.4     medication   5   0.5   9   5.4   -   -   1.8   61.5   2.1   1.4     Intername   5   0.5   0.5   -   -   -<	Near drowning	-	-	-	-	-	-	-	-	-	-
conflagration in private building       -       -       -       -       -       -       -       1       0         ather /unspecified fire       6       6       -       -       -       -       11       0.8         Hot substance' object       11       1.1       -       -       -       -       11       0.8         Fall       433       44.3       -       -       -       -       437       3.14         same level to another       75       7.7       -       -       -       -       143       16.3         stairs / steps       47       4.8       -       -       -       -       47       3.4         ladder / scaffold / building       21       2.1       -       -       -       -       47       3.4         medication       20       2.1       12       67.5       -       -       18       46.2       154       11.1         other poisoning       17       1.7       24       14.5       -       -       18       402       154       11.1    o	Fire, burn	18	1.8	-	-	-	-	-	-	24	1.7
other / unspecified fire       6       0.6       -       -       -       -       -       12       0.9         Hot substance' object       11       1.1       -       -       -       -       -       437       31.4         same level - tripping       143       14.6       -       -       -       437       31.4         same level to another       75       7.7       -       -       -       -       437       3.4         ladder / stagfold / building       21       2.1       -       -       -       -       47       3.4         ladder / stagfold / building       21       2.1       -       -       -       -       47       1.6         Poisoning       37       3.8       136       81.9       -       -       24       61.5       201       1.44         other poisoning       17       1.7       24       14.5       -       -       6       15.4       47       3.4         Suffocation       5       0.5       -       -       -       -       13       0.9	conflagration in private building	-	-	-	-	-	-	-	-	-	-
Hot substance/ object       11       1.1       -       -       -       -       -       -       11       0.8         Fall       433       44.3       -       -       -       -       -       437       31.4         same level to another       7.5       7.7       -       -       -       -       -       143       10.3         one level to another       7.5       7.7       -       -       -       -       -       -       143       10.3         one level to another       7.5       7.7       -       -       -       -       -       -       17       1.7       2.1       -       -       -       147       10.6         prisoning       21       1.7       2.1       6.5       2.0       11.2       6.7       -       -       143       10.4         other poisoning       17       1.7       2.4       14.5       -       -       18       46.2       15.4       17.1         Suffocation       5       0.5       -       -       -       - <th< td=""><td>other / unspecified fire</td><td>6</td><td>0.6</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>12</td><td>0.9</td></th<>	other / unspecified fire	6	0.6	-	-	-	-	-	-	12	0.9
Fall     433     44.3     -     -     -     -     -     -     -     -     -     -     1/3     10.3       same level to another     75     7.7     -     -     -     -     -     79     5.7       state' steps     47     4.8     -     -     -     -     -     79     5.7       unspecified fall     147     15.0     -     -     -     -     -     147     15.0       poisoning     37     3.8     136     81.9     -     -     124     61.5     201     14.4       medication     20     2.0     11/2     67.5     -     -     18     46.2     15.4     11.1       other poisoning     17     1.7     2.4     14.5     -     -     -     14     10.0       Firearms     5     0.5     -     -     -     -     13     0.9       Cut, pierce     40     4.1     14     8.4     20     9.7     -     77     5.5       Environmental <td>Hot substance/ object</td> <td>11</td> <td>1.1</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>11</td> <td>0.8</td>	Hot substance/ object	11	1.1	-	-	-	-	-	-	11	0.8
same level - tripping       143       14.6       -       -       -       -       -       -       -       -       -       -       -       -       -       -       7.7       -       -       -       -       -       -       7.7       5.7         stairs / steps       47       4.8       -       -       -       -       -       -       47       3.4         ladder / sadfold / building       21       2.1       -       -       -       -       -       47       1.5         unspecified fall       147       15.0       -       -       6       1.5       1.1       1.6         Poisoning       37       3.8       136       81.9       -       -       1.8       46.2       15.4       1.1.4         other poisoning       17       1.7       2.4       14.5       -       -       1.8       40       1.4       1.0         Firearms       5       0.5       -       -       -       -       1.14       1.0         aninal bite       0.0       0.5	Fall	433	44.3	-	-	-	-	-	-	437	31.4
one level to another       75       7.7       -       -       -       -       -       -       7.9       5.7         statis' steps       47       4.8       -       -       -       -       -       47       3.4         ladder/ scaffold / building       21       2.1       -       -       -       -       -       1.7       1.6         Poisoning       37       3.8       136       81.9       -       -       24       61.5       201       14.4         medication       20       2.0       11/2       67.5       -       -       18       46.2       15.4       11.1         other poisoning       17       1.7       2.4       14.5       -       -       18       46.2       15.4       11.1         other poisoning       17       1.7       2.4       14.5       -       -       -       18       46.2       15.4       11.1         other poisoning       17       1.7       2.5       5.5       5.5       5.5       5.5       5.5       5.5       5.5       5.5	same level - tripping	143	14.6	-	-	-	-	-	-	143	10.3
stairs / steps       47       4.8       -       -       -       -       -       -       -       1       -       1	one level to another	75	7.7	-	-	-	-	-	-	79	5.7
ladder / scaffold / building       21       2.1       -       -       -       -       -       -       -       1       -       -       1.1       1.5         unspecified fall       147       15.0       -       -       -       -       -       -       24       61.5       201       14.4         medication       20       2.0       112       67.5       -       -       18       46.5       201       14.4         other poisoning       1.7       1.7       24       14.5       -       -       6       15.4       47       3.4         Suffocation       5       0.5       9       5.4       -       -       -       14       1.00         Firearms       5       0.5       -       -       -       -       -       13       0.9         Cut, pierce       40       4.1       4       8.4       20       9.7       -       -       14       1.0         animal bite       10       1.0       -       -       -       -       -       10 <t< td=""><td>stairs / steps</td><td>47</td><td>4.8</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>47</td><td>3.4</td></t<>	stairs / steps	47	4.8	-	-	-	-	-	-	47	3.4
unspecified fall       147       15.0       -       -       -       -       -       147       10.6         Poisoning       37       3.8       136       81.9       -       -       24       61.5       201       14.4         medication       20       2.0       112       67.5       -       -       18       46.2       154       11.1         other poisoning       17       1.7       24       14.5       -       -       6       15.4       47       3.4         Suffocation       5       0.5       9       5.4       -       -       -       113       0.9         Cut, pierce       40       4.1       14       8.4       20       9.7       -       -       133       0.9         Cut, pierce       40       4.1       14       8.4       20       9.7       -       -       14       1.0         animal bite       10       1.0       -       -       -       -       10       0.7         other environment       9       0.9       - <td< td=""><td>ladder / scaffold / building</td><td>21</td><td>2.1</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>21</td><td>1.5</td></td<>	ladder / scaffold / building	21	2.1	-	-	-	-	-	-	21	1.5
Poisoning     37     3.8     136     81.9     -     -     24     61.5     201     14.4       medication     20     2.0     1/2     67.5     -     -     18     46.2     154     11.1       other poisoning     17     1.7     24     14.5     -     -     6     15.4     47     3.4       Suffocation     5     0.5     9     5.4     -     -     6     15.4     4.7     3.4       Suffocation     5     0.5     9     5.4     -     -     -     14     1.0       Firearms     5     0.5     -     -     -     -     -     13     0.9       Cut, pierce     40     4.1     14     8.4     20     9.7     -     -     17     7.5     5.5       Environmental     33     3.4     -     -     -     -     7.7     5.5       Machinery     6     0.6     -     -     -     -     -     10     0.7       other environment     9	unspecified fall	147	15.0	-	-	-	-	-	-	147	10.6
medication       20       2.0       112       67.5       -       -       18       46.2       154       11.1         other poisoning       17       1.7       24       14.5       -       -       6       15.4       47       3.4         Suffocation       5       0.5       9       5.4       -       -       -       14       1.0         Firearms       5       0.5       -       -       -       -       13       0.9         Cut, pierce       40       4.1       14       8.4       20       9.7       -       77       5.5         Environmental       33       3.4       -       -       -       -       14       1.0         animal bite       10       1.0       -       -       -       -       10       0.7         other environment       9       0.9       -       -       -       -       10       0.7         other environment       9       0.9       -       -       -       -       10       0.7         other environment </td <td>Poisoning</td> <td>37</td> <td>3.8</td> <td>136</td> <td>81.9</td> <td>-</td> <td>-</td> <td>24</td> <td>61.5</td> <td>201</td> <td>14.4</td>	Poisoning	37	3.8	136	81.9	-	-	24	61.5	201	14.4
other poisoning       17       1.7       24       14.5       -       -       6       15.4       47       3.4         Suffocation       5       0.5       9       5.4       -       -       -       14       1.0         Firearms       5       0.5       -       -       -       -       13       0.9         Cut, pierce       40       4.1       14       8.4       20       9.7       -       -       13       0.9         Cut, pierce       40       4.1       14       8.4       20       9.7       -       -       13       0.9         Environmental       33       3.4       -       -       -       -       14       1.0         animal bite       10       1.0       -       -       -       -       10       0.7         other environment       9       0.9       -       -       -       -       10       0.7         Other environment       9       0.9       -       -       -       -       -       16       0.4 <t< td=""><td>medication</td><td>20</td><td>2.0</td><td>112</td><td>67.5</td><td>-</td><td>-</td><td>18</td><td>46.2</td><td>154</td><td>11.1</td></t<>	medication	20	2.0	112	67.5	-	-	18	46.2	154	11.1
Suffocation     5     0.5     9     5.4     -     -     -     14     1.0       Firearms     5     0.5     -     -     -     -     -     13     0.9       Cut, pierce     40     4.1     14     8.4     20     9.7     -     -     77     5.5       Environmental     33     3.4     -     -     -     -     -     33     2.4       excessive cold     1/4     1.4     -     -     -     -     14     1.0       animal bite     10     1.0     -     -     -     -     14     1.0       other environment     9     0.9     -     -     -     -     10     0.7       Machinery     6     0.6     -     -     -     -     -     31     2.2       Struck by, against     29     3.0     -     -     1128     61.8     -     -     161     11.6       unarmed fight/brawl     -     -     -     13     6.3     -     -     13 </td <td>other poisoning</td> <td>17</td> <td>1.7</td> <td>24</td> <td>14.5</td> <td>-</td> <td>-</td> <td>6</td> <td>15.4</td> <td>47</td> <td>3.4</td>	other poisoning	17	1.7	24	14.5	-	-	6	15.4	47	3.4
Firearms     5     0.5     -     -     -     -     -     13     0.9       Cut, pierce     40     4.1     14     8.4     20     9.7     -     -     77     5.5       Environmental     33     3.4     -     -     -     -     -     77     5.5       Environmental     33     3.4     -     -     -     -     -     33     2.4       excessive cold     14     1.4     -     -     -     -     -     33     2.4       animal bite     10     1.0     -     -     -     -     -     10     0.7       other environment     9     0.9     -     -     1     -     -     10     0.7       Machinery     6     0.6     -     -     128     61.8     -     -     31     2.2     2       Struck by, against     2.9     3.0     -     -     1128     61.8     -     -     161     11.6       unarmed fight / brawl     -     - <th< td=""><td>Suffocation</td><td>5</td><td>0.5</td><td>9</td><td>5.4</td><td>-</td><td>-</td><td>-</td><td>-</td><td>14</td><td>1.0</td></th<>	Suffocation	5	0.5	9	5.4	-	-	-	-	14	1.0
Cut, pierce     40     4.1     14     8.4     20     9.7     -     -     77     5.5       Environmental     33     3.4     -     -     -     -     -     33     2.4       excessive cold     14     1.4     -     -     -     -     -     33     2.4       animal bite     10     1.0     -     -     -     -     -     -     14     1.0       animal bite     10     1.0     -     -     -     -     -     14     1.0       animal bite     10     1.0     -     -     -     -     -     14     1.0       other environment     9     0.9     -     -     -     -     -     10     0.7       Other environment     9     0.9     -     -     -     -     -     -     -     10     0.7     -     6     0.4       Other environment     31     3.2     -     -     128     61.8     -     -     115     8.3 <th< td=""><td>Firearms</td><td>5</td><td>0.5</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>13</td><td>0.9</td></th<>	Firearms	5	0.5	-	-	-	-	-	-	13	0.9
Environmental     33     3.4     -     -     -     -     -     33     2.4       excessive cold     14     1.4     -     -     -     -     14     1.0       animal bite     10     1.0     -     -     -     -     10     0.7       other environment     9     0.9     -     -     -     -     9     0.6       Machinery     6     0.6     -     -     -     -     -     6     0.4       Overesertion     31     3.2     -     -     -     -     -     6     0.4       Overesertion     31     3.2     -     -     128     61.8     -     -     61     11.6       unarmed fight / brawl     -     -     17.5     55.6     -     113     6.3     -     133     2.4       Other, classifiable     29     3.0     -     -     115     55.6     -     133     2.4       Other, classifiable     55     5.6     -     20     9.7     -	Cut, pierce	40	4.1	14	8.4	20	9.7	-	-	77	5.5
excessive cold     14     1.4     -     -     -     -     14     1.0       animal bite     10     1.0     -     -     -     -     10     0.7       other environment     9     0.9     -     -     -     -     9     0.6       Machinery     6     0.6     -     -     -     -     9     0.6       Overexertion     31     3.2     -     -     -     -     6     0.4       Overexertion     31     3.2     -     -     -     -     31     2.2       Struck by, against     29     3.0     -     -     128     61.8     -     -     161     11.6       unarmed fight / brawl     -     -     -     1/5     55.6     -     1/3     0.3     0.9       other struck by     29     3.0     -     -     1/3     6.3     -     1/3     0.9       other, classifiable     55     5.6     -     -     1/3     0.1     -     -     7/6     5.5 <td>Environmental</td> <td>33</td> <td>3.4</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>33</td> <td>2.4</td>	Environmental	33	3.4	-	-	-	-	-	-	33	2.4
animal bite     10     1.0     -     -     -     -     -     10     0.7       other environment     9     0.9     -     -     -     -     9     0.6       Machinery     6     0.6     -     -     -     -     -     9     0.6       Machinery     6     0.6     -     -     -     -     6     0.4       Overexertion     31     3.2     -     -     -     -     -     66     0.4       Overexertion     31     3.2     -     -     -     -     31     2.2       Struck by, against     29     3.0     -     -     128     61.8     -     -     161     11.6       unarmed fight / brawl     -     -     13     6.3     -     -     113     0.9       other struck by     29     3.0     -     -     13     6.3     -     -     13     0.9       other struck by     29     3.0     -     -     20     1.4     16     16 <td< td=""><td>excessive cold</td><td>14</td><td>1.4</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>14</td><td>1.0</td></td<>	excessive cold	14	1.4	-	-	-	-	-	-	14	1.0
other environment       9       0.9       -       -       -       -       -       9       0.6         Machinery       6       0.6       -       -       -       -       -       -       6       0.4         Overexertion       31       3.2       -       -       -       -       -       6       0.4         Overexertion       31       3.2       -       -       -       -       -       31       2.2         Struck by, against       29       3.0       -       -       128       61.8       -       -       161       11.6         unarmed fight / brawl       -       -       115       55.6       -       113       6.3       -       133       0.9         other struck by       29       3.0       -       -       113       6.3       -       133       0.9         other struck by       29       3.0       -       -       21       10.1       -       -       76       5.5         mattreatment       -       -       20       9.7	animal bite	10	1.0	-	-	-	-	-	-	10	0.7
Machinery     6     0.6     -     -     -     -     -     -     6     0.4       Overexertion     31     3.2     -     -     -     -     -     31     2.2       Struck by, against     29     3.0     -     -     128     61.8     -     -     161     11.6       unarmed fight / brawl     -     -     -     115     55.6     -     -     115     8.3       struck by blunt object     -     -     -     113     6.3     -     -     13     0.9       other struck by     29     3.0     -     -     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     33     2.4       Other, classifiable     19     1.9     -     -     20     9.7     -     20     1.4       foreign object in eye / orifice     19     1.9     -     -     -     -     19     1.4       other classifiable     7     0.7	other environment	9	0.9	-	-	-	-	-	-	9	0.6
Overexertion     31     3.2     -     -     -     -     -     31     2.2       Struck by, against     29     3.0     -     -     128     61.8     -     -     161     11.6       unarmed fight / brawl     -     -     -     115     55.6     -     -     161     11.6       unarmed fight / brawl     -     -     -     115     55.6     -     -     115     8.3       struck by blunt object     -     -     -     13     6.3     -     -     13     0.9       other struck by     29     3.0     -     -     21     10.1     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     76     5.5       maltreatment     -     -     20     9.7     -     -     19     1.4       other classifiable <th< td=""><td>Machinery</td><td>6</td><td>0.6</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>6</td><td>0.4</td></th<>	Machinery	6	0.6	-	-	-	-	-	-	6	0.4
Struck by, against     29     3.0     -     -     128     61.8     -     -     161     11.6       unarmed fight / brawl     -     -     -     115     55.6     -     -     115     8.3       struck by blunt object     -     -     -     13     6.3     -     -     13     0.9       other struck by     29     3.0     -     -     -     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     76     5.5       maltreatment     -     -     -     20     9.7     -     -     19     1.4       foreign object in eye / orifice     19     1.9     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     -     26     1.9       Unspecified     32     3.3	Overexertion	31	3.2	-	-	-	-	-	-	31	2.2
unarmed fight / brawl     -     -     -     115     55.6     -     -     115     8.3       struck by blunt object     -     -     -     13     6.3     -     -     13     0.9       other struck by     29     3.0     -     -     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     76     5.5       maltreatment     -     -     -     20     9.7     -     -     20     1.4       foreign object in eye / orifice     19     1.9     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     -     26     1.9       Unspecified     99     10.1     -     -     13     6.3     -     -     32     2.3       other unspecified     67     6.9     -     <	Struck by, against	29	3.0	-	-	128	61.8	-	-	161	11.6
struck by blunt object     -     -     -     13     6.3     -     -     13     0.9       other struck by     29     3.0     -     -     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     76     5.5       maltreatment     -     -     -     20     9.7     -     -     20     1.4       foreign object in eye / orifice     19     1.9     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     -     26     1.9       Unspecified     99     10.1     -     -     13     6.3     -     -     32     2.3       other unspecified     32     3.3     -     -     -     -     32     2.3       other unspecified     67     6.9     -     -     13 </td <td>unarmed fight / brawl</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>115</td> <td>55.6</td> <td>-</td> <td>-</td> <td>115</td> <td>8.3</td>	unarmed fight / brawl	-	-	-	-	115	55.6	-	-	115	8.3
other struck by     29     3.0     -     -     -     -     33     2.4       Other, classifiable     55     5.6     -     -     21     10.1     -     -     76     5.5       maltreatment     -     -     20     9.7     -     -     20     1.4       foreign object in eye / orifice     19     1.9     -     -     20     9.7     -     -     20     1.4       other classifiable     36     3.7     -     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     -     26     1.9       Unspecified     99     10.1     -     -     113     6.3     -     -     32     2.3       other unspecified     32     3.3     -     -     13     6.3     -     -     83     6.0	struck by blunt object	-	-	-	-	13	6.3	-	-	13	0.9
Other, classifiable     55     5.6     -     -     21     10.1     -     -     76     5.5       maltreatment     -     -     -     20     9.7     -     -     20     1.4       foreign object in eye / orifice     19     1.9     -     -     20     9.7     -     -     20     1.4       other classifiable     36     3.7     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     26     1.9       Unspecified     99     10.1     -     -     113     6.3     -     -     32     2.3       other unspecified     32     3.3     -     -     13     6.3     -     -     83     6.0	other struck by	29	3.0	-	-	-	-	-	-	33	2.4
maltreatment     -     -     20     9.7     -     -     20     1.4       foreign object in eye / orifice     19     1.9     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     19     1.4       Other, not classifiable     7     0.7     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     -     26     1.9       Unspecified     99     10.1     -     -     113     6.3     -     -     115     8.3       fracture, cause unspecified     32     3.3     -     -     -     -     32     2.3       other unspecified     67     6.9     -     -     13     6.3     -     -     83     6.0	Other, classifiable	55	5.6	-	-	21	10.1	-	-	76	5.5
foreign object in eye / orifice     19     1.9     -     -     -     -     -     19     1.4       other classifiable     36     3.7     -     -     -     -     37     2.7       Other, not classifiable     7     0.7     -     -     16     7.7     -     -     26     1.9       Unspecified     99     10.1     -     -     113     6.3     -     -     115     8.3       fracture, cause unspecified     32     3.3     -     -     -     -     32     2.3       other unspecified     67     6.9     -     -     13     6.3     -     -     83     6.0	maltreatment	-	-	-	-	20	9.7	-	-	20	1.4
other classifiable       36       3.7       -       -       -       -       37       2.7         Other, not classifiable       7       0.7       -       16       7.7       -       -       26       1.9         Unspecified       99       10.1       -       -       13       6.3       -       -       115       8.3         fracture, cause unspecified       32       3.3       -       -       -       -       37       2.7         other unspecified       67       0.7       -       -       16       7.7       -       -       26       1.9         0.1       -       -       113       6.3       -       -       115       8.3         other unspecified       67       6.9       -       -       13       6.3       -       -       83       6.0	foreign object in eye / orifice	19	1.9	-	-	-	-	-	-	19	1.4
Other, not classifiable       7       0.7       -       -       16       7.7       -       -       26       1.9         Unspecified       99       10.1       -       -       13       6.3       -       -       115       8.3         fracture, cause unspecified       32       3.3       -       -       -       -       32       2.3         other unspecified       67       6.9       -       -       13       6.3       -       -       83       6.0	other classifiable	36	3.7	-	-	-	-	-	-	37	2.7
Unspecified       99       10.1       -       -       13       6.3       -       -       115       8.3         fracture, cause unspecified       32       3.3       -       -       -       -       32       2.3         other unspecified       67       6.9       -       -       13       6.3       -       -       83       6.0	Other, not classifiable	7	0.7	-	-	16	7.7	-	-	26	1.9
fracture, cause unspecified       32       3.3       -       -       -       -       32       2.3         other unspecified       67       6.9       -       -       13       6.3       -       -       83       6.0	Unspecified	99	10.1	-	-	13	6.3	-	-	115	8.3
other unspecified 67 6.9 13 6.3 83 6.0	fracture, cause unspecified	32	3.3	-	-	-	-	-	-	32	2.3
	other unspecified	67	6.9	-	-	13	6.3	-	-	83	6.0

#### Table A-39 Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Dene, All Ages

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

	Uninter	itional	Self-in	flicted	Assa	ault	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	335	100.0	115	100.0	78	100.0	12	100.0	540	100.0
Motor vehicle traffic crash	30	9.0	-	-	-	-	-	-	30	5.6
MVTC - occupant	19	5.7	-	-	-	-	-	-	19	3.5
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	7	2.1	-	-	-	-	-	-	7	1.3
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	-	-	-	-	-	-	-	-	-	-
Pedal cyclist, other	6	1.8	-	-	-	-	-	-	6	1.1
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	30	9.0	-	-	-	-	-	-	30	5.6
snowmobile	24	7.2	-	-	-	-	_	-	24	4.4
other off-road motor vehicle	5	1.5	-	-	-	-	-	-	5	0.9
other transport	_	-	-	-	-	-	-	-	_	_
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	13	3.9	_	-	-	-	_	-	14	2.6
conflagration in private building		-	_	-	_	-	_	-	_	0.7
other / unspecified fire	-	-	-	-	-	-	-		5	0.9
Hot substance/object	5	15		_		_		_	5	0.9
Fall	115	34.3	-		_		_		116	21.5
same lovel - tripping	23	6.0	_	-	_	-	_	_	23	1 3
one level to another	23	7.2	-	-	-	-	_	-	25	7.5
stains ( stans	24	6.0	-	-	-	-	-	-	23	4.0
statts / steps	12	2.6	-	-	-	-	-	-	12	4.5
	12	5.0	-	-	-	-	-	-	12	2.2
unspecified jail	20 20	9.9	- 101	-	-	-	-	-	124	0.1
r oisoning	20	0.0	101	07.0	-	-	-	-	124	23.0
metacation	14	4.2	95	02.0 5.2	-	-	-	-	112	20.7
Star for a strang	0	1.8	0	3.2	-	-	-	-	12	2.2
Sunocation	-	-	-	-	-	-	-	-	-	-
Firearms	-	-		-	-	10.2	-	-	-	-
Cut, pierce	10	3.0	11	9.0	ð	10.3	-	-	29	5.4
Environmental	18	5.4	-	-	-	-	-	-	18	3.3
excessive cold	7	2.1	-	-	-	-	-	-	7	1.3
animal bite	-	-	-	-	-	-	-	-	-	-
other environment	7	2.1	-	-	-	-	-	-	7	1.3
Machinery	-	-	-	-	-	-	-	-	-	-
Overexertion	11	3.3	-	-	-	-	-	-	11	2.0
Struck by, against	10	3.0	-	-	51	65.4	-	-	61	11.3
unarmed fight / brawl	-	-	-	-	44	56.4	-	-	44	8.1
struck by blunt object	-	-	-	-	7	9.0	-	-	7	1.3
other struck by	10	3.0	-	-	-	-	-	-	10	1.9
Other, classifiable	24	7.2	-	-	15	19.2	-	-	39	7.2
maltreatment	-	-	-	-	13	16.7	-	-	13	2.4
foreign object in eye / orifice	10	3.0	-	-	-	-	-	-	10	1.9
other classifiable	14	4.2	-	-	-	-	-	-	16	3.0
Other, not classifiable	9	2.7	-	-	-	-	-	-	15	2.8
Unspecified	32	9.6	-	-	-	-	5	41.7	38	7.0
fracture, cause unspecified	7	2.1	-	-	-	-	-	-	7	1.3
other unspecified	25	7.5	-	-	-	-	5	41.7	31	5.7

#### Table A-40 Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Inuit, All Ages

Source: CIHI Discharge Abstract Database

	Uninter	ntional	Self-in	flicted	Assa	ult	Undeter	rmined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	1,039	100.0	137	100.0	92	100.0	19	100.0	1,287	100.0
Motor vehicle traffic crash	120	11.5	-	-	-	-	-	-	120	9.3
MVTC - occupant	76	7.3	-	-	-	-	-	-	76	5.9
MVTC - motorcyclist	5	0.5	-	-	-	-	-	-	5	0.4
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	12	1.2	-	-	-	-	-	-	12	0.9
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	22	2.1	-	-	-	-	-	-	22	1.7
Pedal cyclist, other	21	2.0	-	-	-	-	-	-	21	1.6
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	70	6.7	-	-	-	-	-	-	71	5.5
snowmobile	41	3.9	-	-	-	-	-	-	41	3.2
other off-road motor vehicle	12	1.2	-	-	-	-	-	-	12	0.9
other transport	17	1.6	-	-	-	-	-	-	18	1.4
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	23	2.2	-	-	-	-	-	-	25	1.9
conflagration in private building	7	0.7	-	-	-	-	-	-	7	0.5
other / unspecified fire	10	1.0	-	-	-	-	-	-	12	0.9
Hot substance/ object	6	0.6	-	-	-	-	-	-	6	0.5
Fall	372	35.8	-	-	_	-	-	-	373	29.0
same level - trinning	145	14.0	_	_	_	_	_	_	145	113
one level to another	82	7.9			-		-	-	83	6.4
stairs / stars	16	1.1		-					16	3.6
laddar / scaffold / huilding	17	1.4		-	_	_		-	17	1.3
unspecified fall	82	7.0	-	-	-	-	-	-	82	6.4
Poisoning	30	3.8	113	82.5	_	_	10	52.6	163	12.7
madication	25	2.4	104	75.0	_	-	6	31.6	135	10.5
other poisoning	14	1.7	0	6.6	_	-	0	51.0	28	2.2
Suffocation	14	1.5	<i>y</i>	0.0	-	-	-	-	7	0.5
Fincerms		-	-	-	-	-	-	-	6	0.5
Cut pierce	45	0.3	17	-	- 11	12.0	-	-	74	0.3 5 7
Cut, pierce	4.3	3.0	17	12.4	11	12.0	-	-	24	2.6
	12	1.2	-	-	-	-	-	-	16	2.0
excessive cola	13	1.5	-	-	-	-	-	-	10	1.2
athan aminannant	5	1.5	-	-	-	-	-	-	15	1.0
Machinery		0.5	-	-	-	-	-	-	, o	0.4
Our chinery	8	0.8	-	-	-	-	-	-	8	0.0
Struck by against	40	4.4	-	-	-	-	-	-	40	3.0 10.0
Struck by, against	/5	1.2	-	-	50	/0./	-	-	140	10.9
unarmea Jigni / brawi	-	-	-	-	59	04.1	-	-	59	4.0
struck by blunt object	75	- 7 2	-	-	0	0.5	-	-	75	0.5
other struck by	/5	7.2	-	-	-	-	-	-	/5	5.8
Otner, classifiable	60	5.8	-	-	8	8.7	-	-	68	5.3
maltreatment	-	-	-	-	8	8.7	-	-	8	0.6
foreign object in eye / orifice	16	1.5	-	-	-	-	-	-	16	1.2
other classifiable	44	4.2	-	-	-	-	-	-	44	3.4
Other, not classifiable	18	1.7	-	-	-	-	-	-	20	1.6
Unspecified	94	9.0	-	-	5	5.4	-	-	103	8.0
fracture, cause unspecified	20	1.9	-	-	-	-	-	-	20	1.6
other unspecified	74	7.1	-	-	5	5.4	-	-	83	6.4

#### Table A-41 Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Metis & Non-Aboriginal, All Ages

Source: CIHI Discharge Abstract Database

	Uninten	tional	Self-in	flicted	Assault		Undetermined		Total	
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	766	100.0	136	100.0	109	100.0			1,014	100.0
Motor vehicle traffic crash	69	9.0	-	-	-	-	-	-	69	6.8
MVTC - occupant	49	6.4	-	-	-	-	-	-	49	4.8
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	10	1.3	-	-	-	-	-	-	10	1.0
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	5	0.7	-	-	-	-	-	-	5	0.5
Pedal cyclist, other	17	2.2	-	-	-	-	-	-	17	1.7
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	37	4.8	-	-	-	-	-	-	38	3.7
snowmobile	20	2.6	-	-	-	-	-	-	20	2.0
other off-road motor vehicle	7	0.9	-	-	-	-	-	-	7	0.7
other transport	10	1.3	-	-	-	-	-	-	11	1.1
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	13	1.7	-	-	-	-	-	-	17	1.7
conflagration in private building	5	0.7	-	-	-	-	-	-	5	0.5
other / unspecified fire	5	0.7	-	-	-	-	-	-	9	0.9
Hot substance/ object	-	-	-	-	-	-	-	-	-	-
Fall	287	37.5	-	-	-	-	-	-	287	28.3
same level - tripping	126	16.4	-	-	-	-	-	-	126	12.4
one level to another	64	8.4	-	-	-	-	-	-	64	6.3
stairs / steps	24	3.1	-	-	-	-	-	-	24	2.4
ladder / scaffold / building	19	2.5	-	-	-	-	-	-	19	1.9
unspecified fall	54	7.0	-	-	-	-	-	-	54	5.3
Poisoning	31	4.0	115	84.6	-	-	-	-	149	14.7
medication	19	2.5	99	72.8	-	-	-	-	120	11.8
other poisoning	12	1.6	6	4.4	-	-	-	-	29	2.9
Suffocation	-	-	-	-	-	-	-	-	6	0.6
Firearms	-	-	-	-	-	-	-	-	-	-
Cut, pierce	42	5.5	12	8.8	14	12.8	-	-	69	6.8
Environmental	26	3.4	-	-	-	-	-	-	27	2.7
excessive cold	10	1.3	-	-	-	-	-	-	11	1.1
animal bite	13	1.7	-	-	-	-	-	-	13	1.3
other environment	-	-	-	-	-	-	-	-	-	-
Machinery	6	0.8	-	-	-	-	-	-	6	0.6
Overexertion	32	4.2	-	-	-	-	-	-	32	3.2
Struck by, against	53	6.9	-	-	65	59.6	-	-	118	11.6
unarmed fight / brawl	-	-	-	-	57	52.3	-	-	57	5.6
struck by blunt object	-	-	-	-	8	7.3	-	-	8	0.8
other struck by	53	6.9	-	-	-	-	-	-	53	5.2
Other, classifiable	50	6.5	-	-	16	14.7	-	-	66	6.5
maltreatment	-	-	-	-	16	14.7	-	-	16	1.6
foreign object in eve / orifice	15	2.0	-	-	-	-	-	-	15	1.5
other classifiable	35	4.6	-	-	-	-	-	-	35	3.5
Other, not classifiable	13	1.7	-	-	5	4.6	-	-	19	1.9
Unspecified	79	10.3	-	-	6	5.5	-	-	86	8.5
fracture, cause unspecified	20	2.6	-	-	-		-	-	20	2.0
other unspecified	59	7.7	-	-	6	5.5	-	-	66	6.5

## Table A-42Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Yellowknife, All Ages

Source: CIHI Discharge Abstract Database

## Table A-43Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Regional Centers, All Ages

	Uninten	tional	Self-in	flicted	Assa	ult	Undeter	mined	Tot	al
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	783	100.0	135	100.0	110	100.0	35	100.0	1,063	100.0
Motor vehicle traffic crash	93	11.9	-	-	-	-	-	-	93	8.7
MVTC - occupant	55	7.0	-	-	-	-	-	-	55	5.2
MVTC - motorcyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	12	1.5	-	-	-	-	-	-	12	1.1
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	18	2.3	-	-	-	-	-	-	18	1.7
Pedal cyclist, other	15	1.9	-	-	-	-	-	-	15	1.4
Pedestrian, other	-	-	-	-	-	-	-	-	-	-
Transport, other	47	6.0	-	-	-	-	-	-	47	4.4
snowmobile	28	3.6	-	-	-	-	-	-	28	2.6
other off-road motor vehicle	8	1.0	-	-	-	-	-	-	8	0.8
other transport	11	1.4	-	-	-	-	-	-	11	1.0
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	23	2.9	-	-	-	-	-	-	24	2.3
conflagration in private building	5	0.6	-	-	-	-	-	-	5	0.5
other / unspecified fire	9	1.1	-	-	-	-	-	-	10	0.9
Hot substance/ object	9	1.1	-	-	-	-	-	-	9	0.8
Fall	302	38.6	-	-	-	-	-	-	304	28.6
same level - tripping	68	8.7	-	-	-	-	-	-	68	6.4
one level to another	56	7.2	-	-	-	-	-	-	58	5.5
stairs / steps	41	5.2	-	-	-	-	-	-	41	3.9
ladder / scaffold / building	14	1.8	-	-	-	-	-	-	14	1.3
unspecified fall	123	15.7	-	-	-	-	-	-	123	11.6
Poisoning	40	5.1	114	84.4	-	-	18	51.4	173	16.3
medication	27	3.4	99	73.3	-	-	15	42.9	141	13.3
other poisoning	13	1.7	15	11.1	-	-	-	-	32	3.0
Suffocation	-	-	5	3.7	-	-	-	-	7	0.7
Firearms	-	-	-	-	-	-	-	-	-	-
Cut, pierce	29	3.7	13	9.6	11	10.0	-	2.9	54	5.1
Environmental	25	3.2	-	-	-	-	-	-	27	2.5
excessive cold	10	1.3	-	-	-	-	-	-	12	1.1
animal bite	6	0.8	-	-	-	-	-	-	6	0.6
other environment	9	1.1	-	-	-	-	-	-	9	0.8
Machinery	5	0.6	-	-	-	-	-	-	5	0.5
Overexertion	35	4.5	-	-	-	-	-	-	35	3.3
Struck by, against	36	4.6	-	-	75	68.2	-	-	111	10.4
unarmed fight / brawl	-	-	-	-	69	62.7	-	-	69	6.5
struck by blunt object	-	-	-	-	6	5.5	-	-	6	0.6
other struck by	36	4.6	-	-	-	-	-	-	36	3.4
Other, classifiable	34	4.3	-	-	15	13.6	-	-	49	4.6
maltreatment	-	-	-	-	13	11.8	-	-	13	1.2
foreign object in eye / orifice	6	0.8	-	-	-	-	-	-	6	0.6
other classifiable	28	3.6	-	-	-	-	-	-	30	2.8
Other, not classifiable	12	1.5	-	-	5	4.5	-	11.4	23	2.2
Unspecified	79	10.1	-	-	-	-	7	20.0	89	8.4
fracture, cause unspecified	20	2.6	-	-	-	-	-	-	20	1.9
other unspecified	59	7.5	-	-	-	-	7	20.0	69	6.5

Source: CIHI Discharge Abstract Database

	Unintentional Self-inflicted Assault		nult	lt Undetermined			Total			
Mechanism of Cause	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
All Injuries	802	100.0	147	100.0	158	100.0	32	100.0	1,143	100.0
Motor vehicle traffic crash	84	10.5	-	-	-	-	-	-	84	7.3
MVTC - occupant	51	6.4	-	-	-	-	-	-	51	4.5
MVTC - motorcyclist	5	0.6	-	-	-	-	-	-	5	0.4
MVTC - pedal cyclist	-	-	-	-	-	-	-	-	-	-
MVTC - pedestrian	11	1.4	-	-	-	-	-	-	11	1.0
MVTC - other	-	-	-	-	-	-	-	-	-	-
MVTC - unspecified	12	1.5	-	-	-	-	-	-	12	1.0
Pedal cyclist, other	11	1.4	-	-	-	-	-	-	11	1.0
Pedestrian, other	8	1.0	-	-	-	-	-	-	8	0.7
Transport, other	74	9.2	-	-	-	-	-	-	74	6.5
snowmobile	56	7.0	-	-	-	-	-	-	56	4.9
other off-road motor vehicle	12	1.5	-	-	-	-	-	-	12	1.0
other transport	6	0.7	-	-	-	-	-	-	6	0.5
Near drowning	-	-	-	-	-	-	-	-	-	-
Fire, burn	18	2.2	-	-	-	-	-	-	22	1.9
conflagration in private building	-	-	-	-	-	-	-	-	-	-
other / unspecified fire	6	0.7	-	-	-	-	-	-	10	0.9
Hot substance/ object	10	1.2	-	-	-	-	-	-	10	0.9
Fall	331	41.3	-	-	-	-	-	-	335	29.3
same level - tripping	117	14.6	-	-	-	-	-	-	117	10.2
one level to another	61	7.6	-	-	-	-	-	-	65	5.7
stairs / steps	51	6.4	-	-	-	-	-	-	51	4.5
ladder / scaffold / building	17	2.1	-	-	-	-	-	-	17	1.5
unspecified fall	85	10.6	-	-	-	-	-	-	85	7.4
Poisoning	25	3.1	121	82.3	-	-	18	56.3	166	14.5
medication	13	1.6	113	76.9	-	-	12	37.5	140	12.2
other poisoning	12	1.5	8	5.4	-	-	6	18.8	26	2.3
Suffocation	5	0.6	6	4.1	-	-	-	-	11	1.0
Firearms	8	1.0	-	-	-	-	-	-	16	1.4
Cut, pierce	24	3.0	17	11.6	14	8.9	-	-	57	5.0
Environmental	31	3.9	-	-	-	-	-	-	31	2.7
excessive cold	14	1.7	-	-	-	-	-	-	14	1.2
animal bite	8	1.0	-	-	-	-	-	-	8	0.7
other environment	9	1.1	-	-	-	-	-	-	9	0.8
Machinery	-	-	-	-	-	-	-	-	-	-
Overexertion	21	2.6	-	-	-	-	-	-	21	1.8
Struck by, against	25	3.1	-	-	104	65.8	-	-	133	11.6
unarmed fight / brawl	-	-	-	-	92	58.2	-	-	92	8.0
struck by blunt object	-	-	-	-	12	7.6	-	-	12	1.0
other struck by	25	3.1	-	-	-	-	-	-	29	2.5
Other, classifiable	55	6.9	-	-	13	8.2	-	-	68	5.9
maltreatment	-	-	-	-	12	7.6	-	-	12	1.0
foreign object in eye / orifice	24	3.0	-	-	-	-	-	-	24	2.1
other classifiable	31	3.9	-	-	-	0.6	-	-	32	2.8
Other, not classifiable	9	1.1	-	-	10	6.3	-	-	19	1.7
Unspecified	67	8.4	-	-	10	6.3	-	-	81	7.1
fracture, cause unspecified	19	2.4	-	-	-	-	-	-	19	1.7
other unspecified	48	6.0	-	-	10	6.3	-	-	62	5.4

## Table A-44Injury Hospitalizations, NWT, 1995/96 - 1999/2000, Smaller Communities, All Ages

Source: CIHI Discharge Abstract Database

Notes: All injuries by intent do not add to total because cases listed as "Other" intent are not shown. Cell sizes less than 5 have been suppressed.

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#### Table A-45 Suicide Rates: NWT (1990 - 1999) & Canada (1996) Hospitalization Rates due to Self-inflicted Injury: NWT (1995/96 - 1999/2000) & Canada (1996/97) Rate per 100,000 person-years

	N	WT	Ca	anada
	Crude Rate	(95% C.I.)	Crude Rate	Age-adjusted Rate <sup>1</sup>
Deaths	19.3	(15.3, 24.1)	13.3	12.2
Male	32.6	(25.4, 41.4)	21.1	19.5
Female	4.7	(2.1, 8.9)	5.7	5.1
0 - 14 Years	#	#	0.7	
15 - 24 Years	41.5	(27.4, 60.4)	14.4	
25 - 34 Years	21.6	(12.8, 34.2)	16.2	
35 - 44 Years	24.5	(14.3, 39.2)	20.1	
45 & Older	19.4	(10.6, 32.5)	15.6	16.5
Hospitalizations	201.1	(178.3, 224.0)	85.6	90.4
Male	132.1	(106.5, 157.8)	68.2	69.9
Female	276.0	(237.4, 314.7)	102.6	111.6
0 - 14 Years	72.6	(46.6, 98.6)	18.8	
15 - 24 Years	438.9	(352.9, 524.9)	158.6	
25 - 34 Years	261.5	(202.6, 320.4)	134.5	
35 - 44 Years	225.0	(167.7, 282.3)	127.8	
45 & Older	115.6	(76.4, 154.7)	51.6	61.4

Mortality Sources: Statistics Canada, NWT Vital Statistics & Canadian Mortality Data

Hospitalization Sources: NWT - CIHI Discharge Abstract Database; Canada - Health Canada: *Canadian Injury Data* 

<sup>1</sup> Adjusted using direct method, the 1990 - 1999 NWT age distribution was the standard population for mortality rates; the 1995 - 1999 NWT age distribution was the standard for hospitalization rates.

# Rates suppressed number of cases less than five.

#### Table A-46 Suicides by Various Characteristics NWT 1990 - 1999

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	78	100%	19.3	(15.3, 24.1)
Female <sup>†</sup>	9	12%	4.7	(2.1, 8.9)
Male *	69	88%	32.6	(25.4, 41.3)
0 - 14 Years	2	3%	#	
15 - 24 Years **	27	35%	41.5	(27.4, 60.4)
25 - 34 Years	18	23%	21.6	(12.8, 34.2)
35 - 44 Years	17	22%	24.5	(14.3, 39.2)
45 & Older	14	18%	19.4	(10.6, 32.5)
Dene <sup>†</sup>	16	21%	14.1	(8.0, 22.8)
Inuit *	22	28%	53.3	(33.4, 80.6)
Other Ethnicity	40	51%	16.1	(11.5, 21.9)
Yellowknife <sup>†</sup>	25	32%	14.4	(9.3, 21.3)
Regional	22	28%	22.9	(14.4, 34.7)
Other Communities	31	40%	23.3	(15.9, 33.1)

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Source: NWT Vital Statistics; provided by Statistics Canada

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

# Less than five cases, rate not calculated.

#### Table A-47 Hospitalizations due to Self-inflicted Injury by Various Characteristics NWT 1995/96 - 1999/2000

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	418	100%	201.1	(178.3, 224.0)
Male <sup>†</sup>	143	34%	132.1	(106.5, 157.8)
Female *	275	66%	276.0	(237.4, 314.7)
0 - 14 Years	42	10%	72.6	(46.6, 98.6)
15 - 24 Years **	140	33%	438.9	(352.9, 524.9)
25 - 34 Years **	106	25%	261.5	(202.6, 320.4)
35 - 44 Years	83	20%	225.0	(167.7, 282.3)
45 & Older	47	11%	115.6	(76.4, 154.7)
Dene *	169	40%	272.1	(223.1, 321.0)
Inuit *	118	28%	522.9	(409.9, 635.9)
Other Ethnicity $^{\dagger}$	131	33%	109.8	(88.0, 131.5)
Yellowknife <sup>†</sup>	136	33%	151.0	(121.0, 181.1)
Regional *	135	32%	279.2	(223.4, 334.9)
Other Communities *	147	35%	213.5	(172.6, 254.4)
Hospital Stay Two Days	or More			
Yellowknife <sup>†</sup>	67	31%	74.4	(53.3, 95.5)
Regional *	58	26%	119.9	(83.4, 156.5)
Other Communities *	94	43%	136.5	(103.8, 169.2)

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

Table A-48 Suicide Rates by Year NWT, 1990 - 1999 (Three year-rolling average)

	Rate per 100,000	95% CI - rate
1990 - 99	19.3	(15.3, 24.1)
1990 - 92	19.9	(12.6, 29.9)
1991 - 93	19.5	(12.4, 29.2)
1992 - 94	15.8	(9.5, 24.7)
1993 - 95	16.4	(10.0, 25.3)
1994 - 96	11.3	(6.2, 18.9)
1995 - 97	14.4	(8.5, 22.7)
1996 - 98	16.0	(9.8, 24.8)
1997 - 99	24.1	(16.2, 34.4)

NWT Vital Statistics, provided by Statistics Canada

#### Table A-49 Self-inflicted Injury Hospitalization Rates by Year NWT, 1995/96 - 1999/2000

	Rate per 100,000	95% CI - rate
1995 - 99	201.1	(178.3, 224.0)
1995	210.0	(157.8, 262.3)
1996	184.1	(135.4, 232.8)
1997	208.1	(156.3, 259.9)
1998	153.2	(108.4, 198.0)
1999	249.6	(192.8, 306.4)

Source: CIHI Discharge Abstract Database

#### Table A-50 Mortality Rates due to Motor Vehicle Traffic Crashes NWT (1990 - 1999) & Canada (1996) Hospitalization Rates due to Motor Vehicle Traffic Crashes NWT (1995/96 - 1999/2000) & Canada (1996/97) Rate per 100,000 person-years

	NWT		C	anada
	Crude Rate	(95% C.I.)	Crude Rate	Age-adjusted Rate <sup>1</sup>
Deaths	13.6	(10.3, 17.7)	9.8	9.0
Male	17.0	(11.9, 23.6)	13.6	12.7
Female	9.9	(5.9, 15.4)	6.1	5.4
0 - 14 Years	6.1	(2.5, 12.6)	3.0	
15 - 24 Years	27.7	(16.4, 43.7)	18.2	
25 - 34 Years	10.8	(4.9, 20.5)	10.5	
35 - 44 Years	17.3	(8.9, 30.2)	7.9	
45 & Older	12.5	(5.7, 23.7)	11.1	9.9
Hospitalizations	118.4	(102.6, 134.1)	94.0	90.2
Male	146.9	(122.6, 171.3)	115.1	112.4
Female	87.3	(67.8, 106.9)	73.4	67.7
0 - 14 Years	46.7	(27.9, 65.4)	41.3	
15 - 24 Years	200.6	(148.3, 253.0)	172.9	
25 - 34 Years	157.9	(116.7, 199.1)	107.8	
35 - 44 Years	86.7	(54.7, 118.8)	80.4	
45 - 64 Years	133.4	(91.4, 175.4)	80.4	
65 & Older	195.4	(90.1, 300.8)	118.3	

Mortality Sources: Statistics Canada, NWT Vital Statistics & Canadian Mortality Data

Hospitalization Sources: NWT - CIHI Discharge Abstract Database;

Canada - Health Canada: Canadian Injury Data

<sup>1</sup> Adjusted using direct method, the 1990 - 1999 NWT age distribution was the standard populaiton for mortality rates; the 1995 - 1999 NWT age distribution was the standard for hospitalization rates.

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	55	100%	13.6	(10.3, 17.7)
Female <sup>†</sup>	19	35%	9.9	(5.9, 15.4)
Male	36	65%	17.0	(11.9, 23.6)
0 - 14 Years	7	13%	6.1	(2.5, 12.6)
15 - 24 Years **	18	33%	27.7	(16.4, 43.7)
25 - 34 Years	9	16%	10.8	(4.9, 20.5)
35 - 44 Years	12	22%	17.3	(8.9, 30.2)
45 & Older	9	16%	12.5	(5.7, 23.7)
Dene *	26	47%	22.9	(14.9, 33.5)
Inuit	8	15%	19.4	(8.4, 38.2)
Other Ethnicity $^{\dagger}$	21	38%	8.4	(5.2, 12.9)
Yellowknife <sup>†</sup>	17	31%	9.8	(5.7, 15.7)
Regional	15	27%	15.6	(8.7, 25.8)
Other Communities	23	42%	17.3	(11.0, 26.0)

#### Table A-51 Motor Vehicle Traffic Deaths by Various Characteristics NWT 1990 - 1999

Source: NWT Vital Statistics; provided by Statistics Canada

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

#### Table A-52 Hospitalizations due to Motor Vehicle Traffic Crashes by Various Characteristics NWT 1995/96 - 1999/2000

	Number	(%)	Crude Rate	(95% C I )
	Number	(70)	per 100,000	(9576 C.I.)
Total	246	100%	118.4	(102.6, 134.1)
Male *	159	65%	146.9	(122.6, 171.3)
Female <sup>†</sup>	87	35%	87.3	(67.8, 106.9)
0 - 14 Years	27	11%	46.7	(27.9, 65.4)
15 - 24 Years **	64	26%	200.6	(148.3, 253.0)
25 - 34 Years **	64	26%	157.9	(116.7, 199.1)
35 - 44 Years	32	13%	86.7	(54.7, 118.8)
45 - 64 Years	44	18%	133.4	(91.4, 175.4)
65 & Older	15	6%	195.4	(90.1, 300.8)
Dene *	96	39%	157.3	(123.8, 190.9)
Inuit	30	12%	138.1	(85.8, 190.5)
Other Ethnicity <sup>†</sup>	120	49%	96.2	(77.8, 114.5)
Yellowknife <sup>†</sup>	69	28%	76.6	(57.3, 95.9)
Regional *	93	38%	192.3	(150.7, 234.0)
Other Communities *	84	34%	122.0	(94.2, 149.8)
Hospital Stay Two Days	or More			
Yellowknife <sup>†</sup>	39	28%	43.3	(28.8, 57.8)
Regional *	45	33%	93.1	(64.1, 122.0)
Other Communities *	54	39%	78.4	(56.1, 100.7)

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

#### Table A-53 Motor Vehicle Traffic Crash Death Rates by Year NWT, 1990 - 1999 (Three-year rolling average)

Rate per 100,000 95% CI - rate 1990 - 99 13.6 (10.3, 17.7) 1990 - 92 16.4 (9.9, 25.7) 1991 - 93 13.6 (7.7, 22.0) 1992 - 94 10.8 (5.8, 18.5) 1993 - 95 9.8 (5.1, 17.2) (8.6, 22.9) 1994 - 96 14.5 1995 - 97 14.4 (8.5, 22.7) 1996 - 98 (7.9, 21.8) 13.6 1997 - 99 11.2 (6.1, 18.9)

Source: NWT Vital Statistics, provided by Statistics Canada

#### Table A-54 Motor Vehicle Traffic Crash Hospitalization Rates by Year NWT, 1995/96 - 1999/2000

	Rate per 100,000	95% CI - rate
1995 - 99	118.4	(102.6, 134.1)
1995	140.0	(101.6, 178.4)
1996	93.2	(62.0, 124.4)
1997	100.5	(68.1, 132.9)
1998	126.5	(89.8, 163.1)
1999	132.0	(94.8, 169.2)

Source: CIHI Discharge Abstract Database

	Pop. 15 + Who Ride in Car or Truck (#)	Always (%)	Most of the time (%)	Some of the time (%)	Rarely or Never (%)
	()			()	
Northwest Territories	28,963	62	18	12	9
Males	15,581	59	17	14	10
Females	13,381	64	19	10	7
15 - 24 Yrs.	6,301	61	15	15	9
25 - 39 Yrs.	11,185	62	18	10	10
40 - 54 Yrs.	7,968	61	21	11	8
55 Yrs. & Over	3,509	61	12	17	9
Dene	8,745	58	13	21	8
Inuit	1,811	26	21	24	29
Other Ethnicity	18,407	67	19	7	7
Yellowknife	13,026	66	19	7	9
Regional Centers	6,884	67	18	8	8
Other Communities	9,053	51	16	23	10

#### Table A-55 Use Seatbelts When Riding in a Car or Truck, by Selected Characteristics NWT, 1999

Source: NWT Bureau of Statistics: Injury Module; NWT 1999 Labour Force Survey

#### Table A-56 Drowning Rates NWT (1990 - 1999) & Canada (1996) Rate per 100,000 person-years

	NWT		Ca	anada
	Crude Rate	(95% C.I.)	Crude Rate	Age-adjusted Rate <sup>1</sup>
Deaths	9.2	(6.4, 12.6)	1.5	1.5
Male	16.1	(11.1, 22.5)	2.5	2.5
Female	#	#	0.5	0.5
0 - 14 Years	4.4	(1.4, 10.2)	1.0	
15 - 24 Years	7.7	(2.5, 17.9)	2.0	
25 - 34 Years	15.6	(8.3, 26.7)	1.7	
35 - 64 Years	7.8	(3.8, 14.4)	1.4	
65 & Older	#	#	1.7	

Sources: Statistics Canada, NWT Vital Statistics & Canadian Mortality Data

1 Adjusted using direct method with the 1990 - 1999 NWT age distribution the standard population.

# Number of cases less than five, rate not calculated.

#### Table A-57 Drowning Deaths by Various Characteristics NWT 1990 - 1999

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	37	100%	9.2	(6.4, 12.6)
Female	3	8%	#	#
Male	34	92%	16.1	(11.1, 22.5)
0 - 14 Years	5	14%	4.4	(1.4, 10.2)
15 - 24 Years	5	14%	7.7	(2.5, 17.9)
25 - 34 Years **	13	35%	15.6	(8.3, 26.7)
35 - 64 Years	10	27%	7.8	(3.8, 14.4)
65 & Older	4	11%	#	#
Dene *	22	59%	19.3	(12.1, 29.3)
Inuit *	7	19%	16.9	(6.8, 34.9)
Other Ethnicity <sup>†</sup>	8	22%	3.2	(1.4, 6.3)
Yellowknife <sup>†</sup>	7	19%	4.0	(1.6, 8.3)
Regional Centers	5	14%	5.2	(1.7, 12.2)
Other Communities *	25	68%	18.8	(12.2, 27.8)

Source: NWT Vital Statistics; provided by Statistics Canada

† Reference category

\* Rate significantly higher than reference category

\*\* Rate significantly higher than other age groups

# Number of cases less than five, rate not calculated.

Table A-58 Drowning Rates by Year NWT, 1990 - 1999 (Three-year rolling average)

	Rate per 100,000	95% CI - rate
1990 - 99	9.2	(6.4, 12.6)
1990 - 92	12.1	(7.3, 18.9)
1991 - 93	14.4	(8.2, 23.4)
1992 - 94	12.5	(6.7, 21.4)
1993 - 95	8.2	(4.2, 14.3)
1994 - 96	9.7	(5.7, 15.3)
1995 - 97	8.8	(5.2, 13.9)
1996 - 98	8.8	(5.1, 14.1)
1997 - 99	4.8	(2.6, 8.1)

Source: NWT Vital Statistics; provided by Statistics Canada

	Pop. 15 + who ride in boat (#)	Always (%)	Most of the time (%)	Some of the time (%)	Rarely or Never (%)	Not Provided (%)
Northwest Territories	24,985	65	14	10	11	0.2
Males	13,559	59	17	11	13	0.3
Females	11,426	72	10	9	9	0.2
15 - 24 Yrs.	5,247	66	5	15	13	0.0
25 - 39 Yrs.	9,881	63	17	9	10	0.6
40 - 54 Yrs.	6,742	64	17	10	10	0.0
55 Yrs. & Over	3,115	71	10	5	14	0.0
Dene	7,331	55	16	14	15	0.4
Inuit	1,772	41	16	9	33	0.0
Other Ethnicity	15,882	72	12	9	7	0.2
Yellowknife	11,591	70	13	8	8	0.0
Regional Centers	5,389	71	12	8	9	0.7
Other Communities	8,005	53	16	14	17	0.3

#### Table A-59 Use of Lifejacket When in a Boat, by Selected Characteristics NWT, 1999

Source: NWT Bureau of Statistics: Injury Module; NWT 1999 Labour Force Survey

#### Table A-60 Mortality Rates due to Falls: NWT (1990-1999) & Canada (1996) Hospitalization Rates due to Falls: NWT (1995/96 - 1999/2000) & Canada (1996) Rate per 100,000 person-years

	NWT		C	anada
	Crude Rate	(95% C.I.)	Crude Rate	Age-adjusted Rate <sup>1</sup>
Deaths	1.7	(0.7, 3.6)	4.7	1.8
65 & Older	43.7	(16.0, 95.1)	31.1	
Hospitalizations	442.7	(408.7, 476.6)	398.9	243.4
Male	472.2	(423.6, 520.8)	333.9	258.6
Female	410.6	(363.3, 457.8)	462.7	222.0
0 - 14 Years	342.3	(285.6, 398.9)	203.9	
15 - 24 Years	200.6	(142.2, 259.0)	130.9	
25 - 34 Years	254.1	(195.8, 312.4)	129.1	
35 - 44 Years	349.7	(278.0, 421.3)	171.9	
45 - 64 Years	579.1	(481.7, 676.5)	300.3	
65 & Older	3,061.9	(2,603.4, 3520.4)	1,875.1	

Mortality Sources: Statistics Canada, NWT Vital Statistics & Canadian Mortality Data

Hospitalization Sources: NWT - CIHI Discharge Abstract Database;

Canada - Health Canada: Canadian Injury Data

<sup>1</sup> Adjusted using direct method, the 1990 - 1999 NWT age distribution was the standard population for mortality rates; the 1995 - 1999 NWT age distribution was the standard for hospitalization rates.

Table A-61
Deaths due to Falls by Various Characteristics
NWT 1990 - 1999

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	7	100%	1.7	(0.7, 3.6)
Female	4	57%	#	
Male	3	43%	#	
0 - 14 Years	-	_	-	
15 - 24 Years	-	-	-	
25 - 34 Years	-	-	-	
35 - 44 Years	1	14%	#	
45 - 64 Years	-	-	-	
65 & Older	6	86%	43.7	(16.0, 95.1)
Dene	4	57%	#	
Inuit	1	14%	#	
Other Ethnicity	2	29%	#	
Yellowknife	1	14%	#	
Regional	1	14%	#	
Other Communities	5	71%	7.3	(2.4, 16.9)

Source: NWT Vital Statistics; provided by Statistics Canada

# Number of cases less than five, rate not calculated

	Number	(%)	Crude Rate per 100,000	(95% C.I.)				
Total	920	100%	442.7	(408.7, 476.6)				
Female <sup>†</sup>	409	44%	410.6	(363.3, 457.8)				
Male *	511	56%	472.2	(423.6, 520.8)				
0 - 14 Years	198	22%	342.3	(285.6, 398.9)				
15 - 24 Years	64	7%	200.6	(142.2, 259.0)				
25 - 34 Years	103	11%	254.1	(195.8, 312.4)				
35 - 44 Years	129	14%	349.7	(278.0, 421.3)				
45 - 64 Years **	191	21%	579.1	(481.7, 676.5)				
65 & Older **	235	26%	3,061.9	(2,603.4, 3,520.4)				
Dene *	433	47%	709.6	(630.4, 788.9)				
Inuit *	115	13%	522.9	(409.5, 636.3)				
Other Ethnicity $^{\dagger}$	372	40%	298.1	(262.1, 334.0)				
Yellowknife <sup>†</sup>	287	31%	318.7	(274.9, 362.5)				
Regional *	302	33%	624.5	(541.0, 708.0)				
Other Communities *	331	36%	480.8	(419.3, 542.2)				
Total Stay Two or Mor	Total Stay Two or More Days							
Yellowknife <sup>†</sup>	162	32%	179.9	(147.0, 212.8)				
Regional *	144	28%	297.8	(240.0, 355.6)				
Other Communities *	206	40%	299.2	(250.7, 347.7)				

## Table A-62Hospitalizations due to Falls by Various CharacteristicsNWT 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

	Rate per 100,000	95% CI - rate
1995 - 99	442.7	(408.7, 476.6)
1995	424.9	(350.4, 499.4)
1996	425.5	(351.3, 499.8)
1997	471.3	(393.2, 549.4)
1998	423.2	(348.6, 497.8)
1999	468.0	(390.0, 545.9)

Table A-63 Rate of Hospitalizations due to Falls by Year NWT, 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

#### Table A-64 Mortality Rates due Other Transportation NWT (1990 - 1999) & Canada (1996) Hospitalization Rates due to Other Transportation NWT (1995/96 - 1999/2000) & Canada (1997/98) Rate per 100,000 person-years

	NV	WT	C	anada
	Crude Rate	(95% C.I.)	Crude Rate	Age-adjusted Rate <sup>1</sup>
Deaths	4.7	(2.8, 7.3)	0.7	0.7
Male	7.6	(4.3, 12.3)	1.2	1.2
Female	#	#	0.7	0.5
25 - 34 Years	10.8	(4.9, 20.5)	0.8	
Hospitalizations	76.0	(63.3, 88.7)	20.6	21.6
Male	110.9	(89.6, 132.2)	N.A.	N.A.
Female	38.1	(25.1, 51.2)	N.A.	N.A.
0 - 14 Years	51.9	(32.0, 71.8)	15.3	
15 - 24 Years	112.9	(73.3, 152.4)	34.6	
25 - 34 Years	96.2	(63.8, 128.6)	27.0	
35 - 44 Years	65.1	(37.1, 93.0)	20.9	
45 & Older	71.3	(43.5, 99.2)	15.0	15.8

Mortality Sources: Statistics Canada, NWT Vital Statistics & Canadian Mortality Data

Hospitalization Sources: NWT - CIHI Discharge Abstract Database;

Canada - CIHI National Trauma Registry Hospital Injury Admissions Report 1997/98

<sup>1</sup> Adjusted using direct method, the 1990 - 1999 NWT age distribution was the standard population for mortality rates; the 1995 - 1999 NWT age distribution was the standard for hospitalization rates.

# Rates suppressed number of cases less than five.

N.A. Not Available - The National Trauma Registry Hospital Injury Admissions Report 1997/98 did not provide detailed admissions data by sex.

## Table A-65Other Transport Deaths by Various CharacteristicsNWT 1990 - 1999

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	19	100%	4.7	(2.8, 7.3)
Female	3	16%	#	#
Male	16	84%	7.6	(4.3, 12.3)
0 - 14 Years	2	11%	#	#
15 - 24 Years	4	21%	#	#
25 - 34 Years	9	47%	10.8	(4.9, 20.5)
35 - 64 Years	1	5%	#	#
46 - 64 Years	3	16%	#	#
65 Years 7 Older	-	-	-	
Dene	6	32%	5.3	(1.9, 11.5)
Inuit *	6	32%	14.5	(5.3, 31.6)
Other Ethnicity <sup>†</sup>	7	37%	2.8	(1.1, 5.8)
Yellowknife	4	21%	#	#
Regional Centers	4	21%	#	#
Other Communities	11	58%	8.3	(4.1, 14.8)

Source: NWT Vital Statistics; provided by Statistics Canada

† Reference category

\* Rate significantly higher than reference category

# Number of cases less than five, rate not calculated.

	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	158	100%	76.0	(63.3, 88.7)
Female <sup>†</sup>	38	24%	38.1	(25.1, 51.2)
Male *	120	76%	110.9	(89.6, 132.2)
0 - 14 Years	30	19%	51.9	(32.0, 71.8)
15 - 24 Years **	36	23%	112.9	(73.3, 152.4)
25 - 34 Years	39	25%	96.2	(63.8, 128.6)
35 - 44 Years	24	15%	65.1	(37.1, 93.0)
45 & Older	29	18%	71.3	(43.5, 99.2)
Dene *	58	37%	94.6	(68.4, 120.8)
Inuit *	30	19%	136.4	(84.1, 188.7)
Other Ethnicity <sup>†</sup>	70	44%	56.1	(42.0, 70.2)
Yellowknife <sup>†</sup>	37	23%	41.1	(26.9, 55.3)
Regional Centers *	47	30%	97.2	(67.4, 127.0)
Other Communities *	74	47%	107.5	(81.2, 133.7)
Total Stay Two or More	e Days			
Yellowknife <sup>†</sup>	20	24%	22.2	(11.8, 32.6)
Regional Centers	17	20%	35.2	(17.2, 53.1)
Other Communities *	48	56%	69.7	(48.6, 90.9)

#### Table A-66 Other Transport Hospitalizations by Various Characteristics NWT, 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category

\*\* Rate significantly higher than other age groups

	Rate per 100,000	95% CI - rate
1995 - 99	76.0	(63.3, 88.7)
1995	60.4	(35.0, 85.7)
1996	64.5	(38.4, 90.7)
1997	88.5	(57.9, 119.1)
1998	85.1	(54.9, 115.4)
1999	81.6	(52.2, 111.0)

Table A-67Other Transportation Injury Hospitalization Rates by YearNWT, 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

	Pop. 15 + Who Ride a Snowmobile	Always	Most of the time	Some of the time	Rarely or Never	Not Provided
	(#)	(%)	(%)	(%)	(%)	(%)
Northwest Territories	18,879	61	7	9	21	2
Males	10,768	61	10	9	19	1
Females	8,110	61	4	9	24	2
15 - 24 Yrs.	4,701	66	6	9	16	2
25 - 39 Yrs.	8,235	61	8	11	19	2
40 - 54 Yrs.	4,562	63	7	5	23	2
55 Yrs. & Over	1,380	37	6	9	47	0
Dene	6,336	42	7	16	34	1
Inuit	1,625	15	11	13	61	0
Other Ethnicity	10,918	79	7	4	8	2
Yellowknife	7,342	85	5	5	3	2
Regional Centers	4,020	70	7	8	14	2
Other Communities	7,517	33	9	14	43	1

#### Table A-68 Use Helmet When Riding a Snowmobile, by Selected Characteristics NWT, 1999

Source: NWT Bureau of Statistics: Injury Module; NWT 1999 Labour Force Survey

	Pop. 15 + Who Ride an ATV (#)	Always (%)	Most of the time (%)	Some of the time (%)	Rarely or Never (%)	Not Provided (%)
Northwest Territories	13,052	57	6	8	26	3
Males	8,163	56	6	10	26	2
Females	4,889	59	7	4	27	3
15 - 24 Yrs.	3,554	55	3	7	33	2
25 - 39 Yrs.	5,905	54	9	12	22	3
40 - 54 Yrs.	2,713	67	7	3	21	2
55 Yrs. & Over	880	54	-	-	46	-
Dene	4,470	22	5	15	55	3
Inuit	870	42	18	2	38	-
Other Ethnicity	7,711	79	6	4	9	3
Yellowknife	4,925	83	5	5	3	3
Regional Centers	2,611	65	7	5	22	2
Other Communities	5,516	30	7	12	49	2

#### Table A-69 Use Helmet When Riding a ATV, by Selected Characteristics NWT, 1999

Source: NWT Bureau of Statistics: Injury Module; NWT 1999 Labour Force Survey

#### Table A-70

#### Mortality Rates due to Interpersonal Violence: NWT (1990-1999) & Canada (1996) Hospitalization Rates due to Interpersonal Violence: (NWT 1995/96 - 1999/2000) & Canada (1996/97)

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Rate per 100,000 person-years

	NWT		Excluding	Mine Explosion	C	Canada		
	Crude Rate	(95% C.I.)	Crude Rate	(95% C.I.)	Crude Rate	Age-adjusted Rate <sup>1</sup>		
Deaths	5.9	(3.8, 8.8)	4.5	(2.6, 7.0)	1.7	1.8		
Male	10.4	(6.5, 15.7)	7.6	(4.3, 12.3)	2.3	2.4		
Female	#	#	#	#	1.1	1.2		
0 - 14 Years	#	#	#	#	0.9			
15 - 24 Years	7.7	(2.5, 17.9)	7.7	(2.5, 17.9)	2.2			
25 - 34 Years	10.8	(4.9, 20.5)	7.2	(2.6, 15.7)	2.4			
35 - 64 Years	7.0	(3.2, 13.4)	4.7	(1.7, 10.2)	1.9			
65 & Older	-	-	-	-	0.9			
Hospitalizations	181.4	(160.3, 202.5)	N.A.	N.A.	31.9	34.9		
Male	237.5	(204.0, 271.0)	N.A.	N.A.	50.5	54.2		
Female	120.5	(95.6, 145.3)	N.A.	N.A.	13.7	15.0		
0 - 14 Years	34.6	(17.1, 52.1)	N.A.	N.A.	10.8			
15 - 24 Years	269.6	(203.9, 335.3)	N.A.	N.A.	69.6			
25 - 34 Years	323.2	(259.4, 387.0)	N.A.	N.A.	59.1			
35 - 44 Years	206.0	(152.6, 259.4)	N.A.	N.A.	36.7			
45 & Older	157.4	(112.9, 201.9)	N.A.	N.A.	13.9	15.9		

Mortality Sources: Statistics Canada, NWT Vital Statistics & Canadian Mortality Data

Hospitalization Sources: NWT - CIHI Discharge Abstract Database;

Canada - Health Canada: Canadian Injury Data

<sup>1</sup> Adjusted using direct method, the 1990 - 1999 NWT age distribution was the standard population for mortality rates; the 1995 - 1999 NWT age distribution was the standard for hospitalization rates.

# Rates suppressed number of cases less than five.

N.A. Not Applicable

## Table A-71Mortality Rates due to Interpersonal Violence by Various CharacteristicsNWT 1990 - 1999

					l	. Excluding Mine Explosion		
	Number	(%)	Crude Rate per 100,000	(95% C.I.)	Number	(%)	Crude Rate per 100,000	(95% C.I.)
Total	24	100%	5.9	(3.8, 8.8)	18	100%	4.5	(2.6, 7.0)
Female <sup>†</sup>	2	8%	#	#	2	11%	#	#
Male *	22	92%	10.4	(6.5, 15.7)	16	89%	7.6	(4.3, 12.3)
0 - 14 Years	1	4%	#	#	1	6%	#	#
15 - 24 Years	5	21%	7.7	(2.5, 17.9)	5	28%	7.7	(2.5, 17.9)
25 - 34 Years	9	38%	10.8	(4.9, 20.5)	6	33%	7.2	(2.6, 15.7)
35 - 64 Years	9	38%	7.0	(3.2, 13.4)	6	33%	4.7	(1.7, 10.2)
65 & Older	-	-	-		-	-	-	
Dene *	12	50%	10.6	(5.5, 18.4)	12	67%	10.6	(5.5, 18.4)
Inuit	4	17%	#	#	4	22%	#	#
Other Ethnicity $^{\dagger}$	8	33%	3.2	(1.4, 6.3)	2	11%	#	#
Yellowknife <sup>†</sup>	7	29%	4.0	(1.6, 8.3)	1	6%	#	#
Regional	1	4%	#	#	1	6%	#	#
Other Communities *	16	67%	12.0	(6.9, 19.6)	16	89%	12.0	(6.9, 19.6)

Source: NWT Vital Statistics; provided by Statistics Canada

† Reference category

\* Rate significantly higher than reference category.

# Less than five cases, rate not calculated

	Number	(%)	Crude Rate per 100,000	(95% C.I.)	
Total	377	100%	181.4	(160.3, 202.5)	
Female <sup>†</sup>	120	32%	120.5	(95.6, 145.3)	
Male *	257	68%	237.5	(204.0, 271.0)	
0 - 14 Years	20	5%	34.6	(17.1, 52.1)	
15 - 24 Years **	86	23%	269.6	(203.9, 335.3)	
25 - 34 Years **	131	35%	323.2	(259.4, 387.0)	
35 - 44 Years	76	20%	206.0	(152.6, 259.4)	
45 & Older	64	17%	157.4	(112.9, 201.9)	
Dene *	207	55%	339.3	(286.0, 392.5)	
Inuit *	78	21%	354.6	(264.0, 445.3)	
Other Ethnicity <sup>†</sup>	92	24%	73.7	(56.3, 91.1)	
Yellowknife <sup>†</sup>	109	29%	121.0	(94.8, 147.2)	
Regional *	110	29%	227.5	(178.5, 276.5)	
Other Communities *	158	42%	229.5	(188.2, 270.7)	
Hospital Stay Two Days or More					
Yellowknife <sup>†</sup>	59	31%	65.5	(46.2, 84.8)	
Regional	35	26%	72.4	(44.7, 100.0)	
Other Communities *	94	43%	136.5	(104.7, 168.4)	

## Table A-72Hospitalizations due to Interpersonal Violence by Various CharacteristicsNWT, 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database

† Reference category

\* Rate significantly higher than reference category.

\*\* Rate significantly higher than other age groups.

	Rate per 100,000	95% CI - rate
1995 - 99	181.4	(160.3, 202.5)
1995	159.3	(115.0, 203.7)
1996	203.2	(153.4, 253.0)
1997	148.3	(105.7, 190.9)
1998	160.5	(115.9, 205.2)
1999	235.2	(181.5, 288.9)

# Table A-73Hospitalization Rates due to Interpersonal Violence by YearNWT, 1995/96 - 1999/2000

Source: CIHI Discharge Abstract Database
## **APPENDIX C**

## The Haddon Matrix and 10 Countermeasures

For most of the past century non-intentional injuries were attributed to accidents, attributed to acts of God or nature, or defined as a chance occurrence and often blamed on individual shortcomings or personal attributes of the accident victim. Recognizing that injuries are not random events but characterized by seasonal variations, long-term trends, geographic and socioeconomic distributions, in the same manner as infectious disease, Dr. William Haddon in the early 1960s analyzed the factors underlying non-intentional injuries using the traditional epidemiology model of agent, host and environment. He concluded that the exchange of energy – mechanical, thermal, radiant, chemical or electrical – with human tissue outside of human tolerance is the necessary and specific cause of injury. Later this energy transfer analysis was extended to "negative agents" produced by the absence of necessary elements such as oxygen or heat.<sup>47</sup> Drowning results from a lack of oxygen and frostbite from the lack of heat. The agent of injury – energy – is transmitted to the host through a vehicle (inanimate object) or a vector (animate objects). The environment can be divided into two components. The physical environment includes the characteristics of the setting in which the injury event takes place (for example a road or building). The social environment includes the social norms and practices in the culture.

From an epidemiological point of view, the systematic application of how the agent interacts with the host and environment provides knowledge that can be used to control energy exchanges with human tissue, thus reducing injuries or their severity. Interventions that alter any of these three factors can reduce the onset or extent of injury. To aid in the identification of common risk factors, Haddon developed a two dimensional matrix where host, agent and environment make up one dimension.<sup> $\Delta$ </sup> Three phases in the timing of the injury incident – pre-event, event and postevent, make up the second dimension of the matrix. These phases correspond to the three levels of prevention in public health - primary, secondary and tertiary. In this way, the matrix can be used has an aid in the development of prevention strategies that aim to eliminate or lessen the transfer of energy to the host, thereby preventing or decreasing the severity of the injury.

The pre-event phase refers to the period before the event occurs and includes all factors that influence potential exposure to the event. This is the phase where primary prevention measures can be introduced to prevent the event by eliminating the mechanism of energy transfer or exposure. Types of measures during this phase include campaigns against drinking and driving, teaching children not to play with matches, and fences around swimming pools. The event phase refers to the moment of energy transfer and includes factors that affect energy transfer. Here, prevention measures focus not so much on preventing an event but on ways to avoid injury or reduce the severity of injury by reducing energy transfer once a potential injury producing exposure has occurred.

Secondary prevention measures such as education and legislation concerning the proper use of bicycle helmets, wearing seat belts or wearing personal flotation devices are examples of interventions at this stage. Secondary prevention strategies may not eliminate all injures, but they do reduce the severity of injuries. For example, seat belts do not prevent all injuries in vehicle

 $<sup>^{\</sup>Delta}$  To avoid confusing the actual agent of injury – energy – and the mechanism by which the energy is transferred, the matrix normally specifies the vehicle or vector.

crashes: cuts and fractures of legs and arms are common among belted vehicle occupants. However, seat belts do reduce severe injuries to critical anatomic regions such as the head or chest. The post-event refers to the period after the injury has occurred. At this stage tertiary prevention measures are used to reduce the consequences of injury. These strategies could include fast access to emergency services and effective rehabilitation services.<sup>48</sup>

After the injury problem to be addressed is clearly identified using appropriate data and each row and column in the matrix is defined, the Haddon matrix provides a powerful tool for examining the risk factors associated with the injury problem. This analysis can then be used to formulate multiple strategies for preventing or limiting the severity of injuries. The following are two basic Haddon matrices where the injury problem was identified as motor vehicle crashes in a rural area. Table C1 illustrates the interaction of factors associated with an event. The pre-event phase illustrates possible causes for the crash; the event phase illustrates factors that determine whether injury results from the crash; and the post-event phase illustrates factors that determine whether the severity of the injury can be reduced.

	Host (driver, occupants)	Agent/vehicle (motor vehicle)	Physical environment (highways)	Socioeconomic environment (community norms and legislation)
Pre-event	Alcohol intoxication, tendency to drive too fast	Old vehicle with faulty brakes	Roads with dangerous curves and surfacing	Community attitudes towards drinking and driving, enforcement of speed limits
Event	Use of seat belt	Hardness and sharpness of contact surfaces in vehicle	Guardrail placement	Enforcement of laws related to seat belt use
Post-event	Age and physical condition of victim	Fuel system integrity of vehicle	Distance to and quality of emergency medical services	Government support for trauma care systems

Table C1: Haddon matrix; factors associated with motor vehicle accidents in rural areas<sup>49</sup>

After both dimensions of the matrix have been defined and factors that cause the injury problem have been detailed, it is possible to use the Haddon matrix to generate ideas about countermeasure options to address the problem. At this point there may be a tendency to identify the phase of the strategy in terms of when the strategy was put into place. This is incorrect. For example, while a seat belt is secured before the crash occurs, this intervention should not be classified as a pre-event since the benefits of the seat belt takes effect at the time of the crash. Similarly, bicycle helmets and smoke detectors should be classified as event phase strategies.

Table C2 provides a number of examples of strategies that can be used for injury control in the case outlined in Table C1. Within each cell a large number of specific issues can be organized each providing opportunities for influencing the end result. There is no essential priority determining which element must be modified. For example, one potentially effective measure against drunk driving is an ignition interlock device that prevents the car from starting if the

driver is drunk.<sup>50</sup> This is a modification of the vector rather than the host. Moreover, for injuries involving repeat occurrences, strategies identified in the post-event phase may be effective preevent strategies for subsequent events. For example, policies and programs aimed at a drunk driver who had a crash (a post-event strategy) serve as a pre-event strategy for future potential incidents. The use of the matrix suggests that a mix of interventions should be employed, incorporating strategies in the pre-event, event, and post-event strages aimed at the host, agent, and environment.<sup>51</sup>

	Host (motor vehicle occupants)	Agent/vehicle (motor vehicle)	Physical environment (highways)	Socioeconomic environment (community norms and legislation)
Pre-event	Educate people about the dangers of drinking and driving	Remove unsafe vehicles from the road	Improve conditions of highways	Enforce laws related to impaired driving, reduce alcohol consumption in the community
Event	Educate people about the need to wear a seat belt	Ensure air bags operate properly	Install guardrails were appropriate	Enforce seat belt and child safety seat laws
Post-event	Provide first aid instruction to public	Incorporate lessons learned to design car with more safety features	Ensure there are emergency communication and ambulance systems	Ensure government support for effective trauma care systems

Table C2: Haddon matrix applied to the problem of motor vehicle accidents in rural areas

Soon after Dr. Haddon introduced the phase-factor matrix, he developed another analysis of injury prevention strategy options - a list of 10 general logically distinct countermeasures that encompass all injury reduction countermeasures. The 10 strategies are not always mutually exclusive and in some cases several of the strategies may point to the same intervention. The following lists the 10 general strategies and briefly illustrates each using the above example of motor vehicle injuries:

- 1. **Prevent the creation of the agent** for motor vehicles this may be difficult. However, it may be possible to prevent the manufacture of all terrain vehicles that are prone to roll over or reach excessive speeds.
- 2. **Reduce the amount of agent brought into being** introduce and enforce laws against drunk driving.
- 3. Prevent the release of the agent that already exists reduce speed limits.
- 4. **Modify the rate or spatial distribution of release of the agent from its source** introduce and enforce laws requiring the use of seat belts and child restraints.
- 5. Separate, in time or space, the agent and a susceptible host remove bicyclists from vehicle traffic by introducing bike trails.

- 6. Separate the agent from a susceptible host by imposition of a material barrier design improved vehicle safety mechanisms such as air bags, encourage the use of helmets among snowmobile and ATV drivers.
- 7. **Modify relevant basic qualities of the agent** design vehicles to reduce injuries, e.g. shatterproof windows, better fire retardant materials.
- 8. Strengthen the susceptible host increase public awareness of the hazards of drinking and driving.
- 9. Begin to counter the damage already done by the agent train emergency medical services to respond speedily and appropriately. Encourage and provide first aid training to the general public.
- 10. Stabilize, repair, and rehabilitate the injured host improve rehabilitation services.<sup>52</sup>

The list of 10 general countermeasures and the Haddon matrix together provide a framework that can be used to understand the origins of any injury problem and serve as an aid in identifying a variety of possible interventions. However, the analysis does **not** provide a formula or guide for action in specific cases. Some interventions will be more practical and hold more promise of success than others. The question becomes how to decide which interventions have the best chance of success in any given situation. Runyan proposed the addition of a third dimension to the Haddon matrix to facilitate decisions regarding which identified alternative intervention strategies to apply.<sup>53</sup> Using principles of policy analysis the third dimensions consists of a list of value criteria that guide the selection process. Decision-makers can choose which criteria to use and apply relative weights to each selection to reflect its importance. This can be done according to the injury problem and setting in each case. Some examples of decision criteria include: (1) effectiveness determined by evaluations of similar interventions in similar settings; (2) cost; (3) preferences of the affected community – if a population is opposed to an intervention compliance is likely to be limited; (4) the feasibility of the intervention.

The introduction and widespread use of the Haddon matrix along with the 10-countermeasure framework shifted injury prevention away from an earlier focus on changing individual behaviour through health education that in effect blamed the victim. Today injury prevention programs include more public based interventions that modify the agent or environment in which injury occure. In general, injury prevention strategies can be divided into two very broad groups based on the required level of individual actions. Passive interventions need no input or action by the individual and are usually accomplished by modifying the vehicle, vector or environment. The introduction of anti-lock brakes and air bags in cars are examples. Active intervention requires individuals to take action for the intervention to work, for example seat belts and bicycle helmets. Passive measures are often considered more effective, particularly when compared to active interventions that require frequent or time-consuming action. However, the most effective prevention strategies combine both approaches. Human actions and personal responsibility still remain important in injury causation and modifying behaviour is an important component in many injury prevention strategies. The circumstance of specific types of injury must be considered.<sup>54</sup>

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