

### Definition/Description:

#### Injury Deaths

Defined as deaths that resulted from an injury as indicated by the presence of one of the ICD-9 E-codes (E800-E999) in records in the Vital Statistics Death Database occurring to children and youth, 19 years of age and younger (i.e. 0-19 years). "All Injury" (ICD-9 codes: E800-869.9, E880-929.9, and E950-E999.9) is used in this report as the summary measure of injury in the Winnipeg Health Region (WHR). Health Canada, the United States Centers for Disease Control and the International Collaborative Effort on Injury (ICE on Injury) have recommended the use of All Injury instead of all external causes of injury (i.e. ICD-9 E800-E999.9) when examining injury data for injury prevention and control. It should be noted that injuries due to Adverse Events are excluded from the All Injury definition. Counts, crude rates and PYLL are reported for *All Injury* death for the WHR.

All Injury can be divided into five intent-manner categories: *Unintentional, Self-inflicted, Assault, Undetermined, and Other Violence*, based upon the "injury matrix". Counts and crude rates are reported for all five intent-manner categories for the WHR. Note that the total of these five intent-manner categories results in *All Injury*.

The following data is presented in this indicator:

1. Table of Injury Deaths by Manner-Intent in the WHR for Children and Youth, 1990-1999.
2. Table of Age-specific Rates and Counts of Injury Deaths by Manner- Intent for Children and Youth in the WHR, 1990-1999.
3. Chart of Per cent Distribution of Injury Deaths by Manner/ Intent for Children and Youth Age Groups in the WHR, 1990-1999.

Note that all rates provided in this indicator are *per 100 000 population*.

#### Method

Ten calendar years of death data from the Vital Statistics Death Database were used, from January 1, 1990 to December 31, 1999. Residents of the WHR who died as a result of an injury (as indicated by an ICD-9 E-code) were included in this analysis. Further detail can be found in indicator for Injury Death (indicator #17).

#### Source:

The death data used in this report was obtained from Vital Statistics Agency, Consumer and Corporate Affairs, Manitoba Finance and Manitoba Bureau of Statistics, Government of Manitoba. All numerical values, tables, and figures (including spatial analyses) were generated by the Population Health and Health System Analysis Unit, Winnipeg Regional Health Authority.

For further information, a comprehensive Mortality Report, Winnipeg Regional Health Authority, 2004, can be found at

<http://www.wrha.mb.ca/howcare/decsup/files/population/WRHAMortalityReport2004.pdf>

**Findings:**

**Injury Deaths for Children and Youth in the Winnipeg Health Region, 1990-1999**

Counts and crude rates of injury death for those 19 years of age and younger

Unintentional		Self-inflicted		Assault		Undetermined		All Injury	
Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000
109	6.5	38	2.3	30	1.8	9	0.5	183	10.8

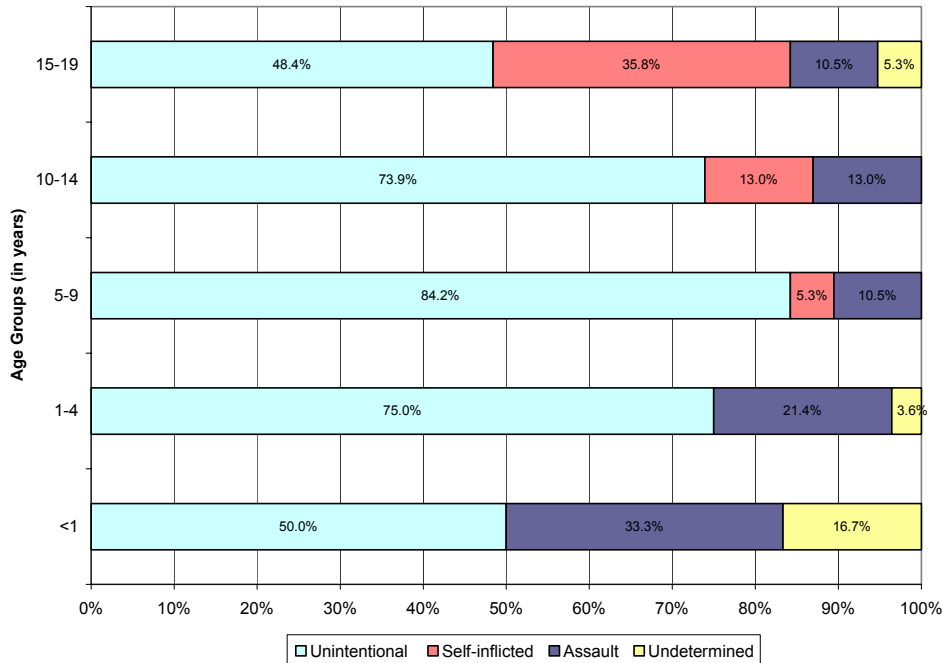
**Age-specific Rates and Counts of Injury Deaths for Children and Youth in the Winnipeg Health Region, 1990-1999**

Age Group	Unintentional		Self-inflicted		Assault		Undetermined		All Injury	
	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000
<1	9	10.4	0	0.0	6	6.9	*	*	18	20.8
1-4	21	6.0	0	0.0	6	1.7	*	*	28	7.9
5-9	16	3.7	*	*	*	*	0	0.0	19	4.4
10-14	17	4.2	*	*	*	*	0	0.0	23	5.7
15-19	46	11.1	34	8.2	10	2.4	5	1.2	95	23.0

Notes:

- The intent/manner category of 'Other violence' is not shown due to small counts, but these counts were included in the 'All Injury' totals.
- All Injury excludes Adverse Events.
- \* Indicates that the value is suppressed due to a cell count of less than five.
- All rates are per 100 000 population.

**Injury Deaths in the Winnipeg Health Region: Per cent Distribution of Intent-Manner Categories Among Children and Youth Age Groups , 1990-1999**



## Injury Deaths for Children and Youth in the Winnipeg Health Region, 1990-1994 and 1995-1999

Counts and crude rates of injury death for those 19 years of age and younger

	Unintentional		Self-inflicted		Assault		Undetermined		All Injury	
	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000	Count	Rate per 100,000
1990-1994	52	6.1	24	2.8	13	1.5	4	0.5	93	10.9
1995-1999	57	6.9	14	1.7	14	1.7	5	0.6	90	10.8

### Highlights:

**Note:** Only the crude rates are referred to in this narrative.

The *All Injury* mortality rate for Children and Youth (19 years of age and younger) in the Winnipeg Health Region is 10.8 per 100 000 population, for 1990-1999.

#### Children (under 1, 1-4, 5-9, and 10-14 year-olds)

- 88 children died as a result of injuries in the period of 1990-1999.
- The *All Injury* rate ranges from 4.4 per 100 000 population in 5-9 year-olds to 20.8 per 100 000 population in the under one year-old group.
- *Unintentional Injury* makes up the greatest percentage of injuries experienced by Children.

#### Youth

##### 15-19 year-olds

- 95 youth died as a result of injuries in the period of 1990-1999.
- The *All Injury* rate for Youth 15-19 years of age is 23.0 per 100 000 population.
- *Unintentional Injury* makes-up almost half of all injury deaths in 15-19 year-olds (48.4%).
- *Self-inflicted Injury* makes-up 35.8% of all injury in 15-19 year-olds; the *Self-inflicted Injury* (suicide) death rate is 8.2 per 100 000 population for this age group.

#### Changes Over Time

- The *All Injury* mortality rate for children and youth (19 years of age and younger) has remained stable between 1990-1994 and 1995-1999 (see Table Injury Deaths for Children and Youth in the Winnipeg Health Region, 1990-1994 and 1995-1999).
- There was an increase of 12.7% in the *Unintentional Injury* mortality rate for children and youth between the two time periods.
- A 40% decrease was observed for Self-Inflicted (suicide) mortality rate for children and youth between the two time periods.
- The Assault and Undetermined mortality rates have low numbers of events which increased by one event (per category), therefore any calculation of a per cent change should be interpreted with caution.