

THE  
CHILD  
HEALTH  
STANDARDS  
COMMITTEE  
**2013 ANNUAL REPORT**



# Acknowledgements

---

The Child Health Standards Committee (CHSC) wishes to acknowledge the continuing support of the following organizations. The information they provide has assisted the CHSC in its deliberations.

- Office of The Chief Medical Examiner
- Health Information Services, Manitoba Hospitals
- Manitoba Vital Statistics
- First Nations and Inuit Health Branch, Health Canada
- Insurance Division, Manitoba Health
- IMPACT/WRHA injury prevention program

The CHSC acknowledges the interest and cooperation of physicians and health care facilities across the province in providing information for the review process.

Due to the extensive and complex nature of these reviews, which rely on completed reviews from other standards committees, and the need to obtain documentation from numerous points of contact in the healthcare system, the CHSC annual reports are typically published several years after the date of death. This report summarizes deaths which occurred in 2013.

The committee is grateful to Manitoba Health for providing financial support.

## *Executive Summary 2013*

---

- The Child Health Standards Committee (CHSC) reviewed 116 deaths which occurred in 2013. 82 were children 29 days to 14 years of age, 29 were teens 15 to 17 years of age and 5 were children whose place of residence was out of province.
- The mortality rate for Manitoba children aged 29 days to 14 years was 33.8 per 100,000 in 2013 compared to 30.0 per 100,000 in 2012 and 27.8 per 100,000 in 2011. The mortality rate for Manitoba teens 15 to 17 years of age was 56.9 per 100,000 in 2013 compared to 50.0 per 100,000 in 2012 and 49.3 per 100,000 in 2011.
- The infant mortality rate was 5.3 per 1,000 live births, which is slightly lower than 2012, when it was 5.7 per 1,000 live births.
- The cause of death was classified as preventable for 30 of the 82 child deaths (37%) and 23 of the 29 teen deaths (79%). Injury (unintentional injury, suicide, homicide) accounted for all of the preventable deaths apart from one vaccine preventable death and one case of severe dehydration.
- Injury was the leading cause of death overall, accounting for 46% of deaths among children and teens. In children 29 days to 14 years of age, the most common causes of injury-related mortality were transportation-related (motor vehicle occupant, pedestrian, aircraft, bicycle) and drowning. The most common causes of injury-related mortality in teens was transportation-related (motor vehicle occupant, pedestrian) and suicide.
- There were 12 suicides in 2013, compared to 17 in 2012, and 10 in 2011. In 2013, 7 suicides were teens 15 to 17 years of age and 5 were 14 years of age or younger; this compares to 12 teens and 5 children 14 years of age and younger in 2012.
- In 2013, the CHSC initiated educational action with eight physicians with respect to medical care provided. Ten referrals were made to health administrators, professional bodies, other organizations or government departments. The committee reviewed additional actions taken by other standards committees. An inquest was called for one death.

# Table of Contents

---

	INDEX OF FIGURES AND TABLES .....	5
	DEFINITIONS .....	6
➤ PART 1:	INTRODUCTION .....	7
	• Background	
	• Goals and Objectives	
➤ PART 2:	COMMITTEE ACTIVITIES .....	8
	• Child Health Issues	
	• Clinical Guidelines and Newsletter Items	
➤ PART 3:	STATISTICAL SUMMARY .....	9
	• Mortality Rates .....	9
	▪ Deaths Grouped by Age for Manitoba Residents	
	▪ Deaths Grouped by Gender for Manitoba Residents	
	▪ Infant Mortality Rates	
	▪ Regional Mortality Rates	
	• Causes of Childhood Death .....	14
	▪ Sudden Infant Death	
	▪ Deaths from Injury	
	▪ Congenital Disorders	
	▪ Autopsies	
➤ PART 4:	TEEN DEATHS, 15 TO 17 YEARS .....	22
➤ PART 5:	PREVENTABILITY OF DEATH .....	26
	• Childhood Deaths	
	• Teenage Deaths	
	• Educational and Other Actions	
➤ PART 6:	RECOMMENDATIONS .....	28
	CHILD HEALTH STANDARDS COMMITTEE MEMBERSHIP .....	29

---

## Index of Figures and Tables

---

### FIGURES

Figure 1:	Mortality Rates (Children 29 days to 14 years) .....	9
Figure 2:	Infant Mortality Rates .....	11
Figure 3:	Sudden Infant Death (Children < 1 year) .....	16
Figure 4:	Mortality Rates from Injury (Children 29 days to 14 years) .....	17
Figure 5:	Mortality Rates from Injury By Age Group (Children 29 days to 14 years) .....	18
Figure 6:	Suicide among Children 14 Years of Age and Younger .....	19
Figure 7:	Mortality Rates in Teens (Teens 15 to 17 years).....	22
Figure 8:	Deaths by Cause in Teens (Injury vs. Natural Causes) .....	23

### TABLES

Table 1:	Mortality Rates by Age Group .....	10
Table 2:	Mortality Rates by Gender .....	10
Table 3:	Infant Mortality Rates by Province and Territory .....	12
Table 4:	Regional Mortality Rates (Children 29 days to 14 years) .....	13
Table 5:	Causes of Death (Children 29 days to 14 years) .....	14
Table 6:	Causes of Post-Neonatal Infant Death (Children 29 days to 14 years) .....	15
Table 7:	Injury-Related Mortality Rates by Age Group .....	20
Table 8:	Types of Injury Causing Death (Children 29 days to 14 Years) .....	20
Table 9:	Causes of Death (Teens 15 to 17 years) .....	24
Table 10:	Types of Injury Causing Death (Teens 15 to 17 years) .....	24
Table 11:	Educational Actions.....	27

# Definitions

---

**Age-Standardized Rates:** Death rates are adjusted to account for the differing proportions of children by age group in different regions. Because infants are more likely to die than older children, a region with a higher proportion of infants would have an inflated death rate unless adjustments are made.

**Delayed Neonatal Death:** The death of an infant occurring after 28 days of age, who under natural selection circumstances, without the benefit of neonatal intensive care, would have died before 28 days of age.

**Mortality Rate:** The number of deaths occurring in a specified population per 100,000 population per year. Mortality rates for children under five years of age are usually reported as deaths per 1,000 population or 1,000 live births.

**Infant Mortality Rate:** The number of deaths occurring prior to one year of age per 1,000 live births.

**Neonatal Mortality Rate:** The number of neonatal deaths per 1,000 live births.

- **Early:** before the 7<sup>th</sup> full day of life (<168 hours), or
- **Late:** between the 8<sup>th</sup> and 28<sup>th</sup> full day of life (≥168 hours to <672 hours)

**Post-Neonatal Mortality Rate:** The number of deaths from 29 days to one year of age per 1,000 live births.

**Under Five Mortality Rate:** The number of deaths occurring prior to five years of age per 1,000 population.

**Three-Year Moving Average:** Three-year moving averages are used in some of the calculations because large fluctuations in rates may occur from year to year in small populations such as Manitoba. This rate is calculated by averaging the rate for 3 one-year periods and presenting that rate using the median year. For example, data for 1999, 2000, and 2001 rates are averaged and presented as a “2000” rate.

# 1. Introduction

---

## Background

---

In 1976, The College of Physicians and Surgeons of Manitoba established the Paediatric Death Review Committee. In 2001, this committee was renamed the Child Health Standards Committee. This committee reports to the Central Standards Committee of the College of Physicians & Surgeons. The major function of all Standards Committees is to maintain and improve quality of care through education. ***These educational functions of the College are separate and distinct from its disciplinary functions.***

Educational strategies used by the Child Health Standards Committee include:

- Sending letters to physicians, hospitals, Area Standards Committees and regulatory agencies for other health professionals.
- Publishing articles in the College Newsletters and Annual Reports to draw members' attention to important aspects of medical care involving children.
- Developing and disseminating recommendations to improve paediatric care.
- Advocating for the health of Manitoba children by informing government and other public agencies of recommendations to improve legislation or public policy.

---

## Goals and Objectives

---

To monitor and improve the quality of medical care provided to Manitoba children by:

- Reviewing all deaths in the province of children between the ages of 29 days and the day before their 18<sup>th</sup> birthday.
- Determining whether or not each death was preventable at the family, community or medical care level.
- Communicating with involved practitioners or agencies where medical care or other actions could have affected the outcome.
- Making recommendations to government, medical organizations and the community at large regarding preventable mortality and morbidity.

## 2. *Committee Activities*

---

In addition to reviewing deaths, the Child Health Standards Committee functions as a sounding board for child health issues for the College of Physicians & Surgeons of Manitoba.

The Medical Consultant conducts the initial case reviews and, with the administrative assistant, sends out and receives correspondence, maintains the database, contributes to the development of draft Newsletter items, attends relevant meetings and collaborates with other interested parties.

Regional mortality rates are reported using the boundaries of the Manitoba Regional Health Authorities. On June 1, 2012, the existing 11 RHAs were amalgamated into five larger regions. The new RHAs are listed below, with the old RHAs listed in brackets:

- Winnipeg (Winnipeg, Churchill)
- Interlake-Eastern (Interlake, North Eastman)
- Prairie Mountain (Assiniboine, Brandon, Parkland)
- Southern (Central, South Eastman)
- Northern (Burntwood, NOR-MAN)

---

### **Newsletter Items**

---

There were two newsletter items published by the committee in 2013:

- “Severe Combined ImmunoDeficiency (SCID) in Manitoba Infants”
- “Child Abuse, Neglect, and Medical Neglect of Children: When to Report?”
- “Could It Be Kawasaki Disease?”

---

### **Other Committee Activities**

---

The CHSC conducted two Morbidity/Mortality audits in 2013:

- Suicide: Children and Teens
- Sudden infant deaths

The CHSC advocated for the following issues in 2013:

- Safe sleep guidelines, policies and public education
- Improvements in pediatric transport care
- Accessible information for families regarding warning signs and when to seek medical care
- Sepsis identification and management protocols



### 3. Statistical Summary

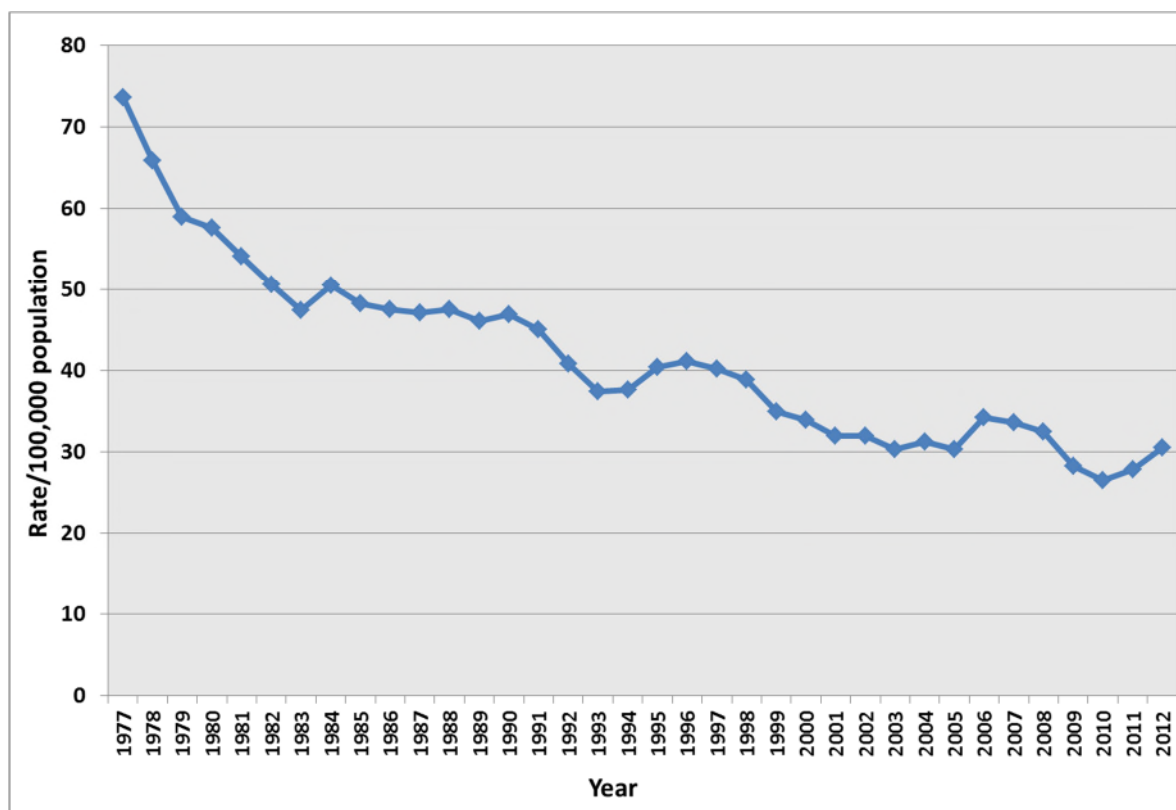
---

#### Mortality Rates

---

**Figure 1** shows the three-year moving average trends in pediatric mortality from 1977 to 2013 for Manitoba residents. *The 2013 data are included in the three-year moving average reported as 2012.*

**Figure 1 - MORTALITY RATES**  
In Children 29 Days to 14 Years (Three-Year Moving Average)



---

## Deaths Grouped by Age and Sex for Manitoba Residents

---

**Table 1 - MORTALITY RATES BY AGE GROUP 2013**

Age Group	Number of Deaths	Population	Rate/100,000	Three-Year Average (2011-2013)
29 days to <1 year	28	16,461	170.1	189.1
1 to 4 years	20	66,088	30.3	23.4
5 to 9 years	8	80,327	10.0	13.6
10 to 14 years	26	80,068	32.5	21.2
Total 29 days to 14 years	82	242,944	33.8	30.5
15 to 17 years	29	50,956	56.9	52.1

**Table 2 - MORTALITY RATES BY GENDER 2013**

Gender (Age Group)	Number of Deaths	Population	Rate/100,000	Three-Year Average (2011-2013)
Male (29d to 14y)	42	124,583	33.7	31.1
Female (29d to 14y)	40	118,361	33.8	29.9
Male (15y to 17y)	13	26,204	49.6	54.9
Female (15y to 17y)	16	24,752	64.6	49.0

---

## Infant Mortality Rates

---

In 2013 there were 28 deaths in the Manitoba population between 29 days and one year of age. The number of live births based on Manitoba Health registrations was 16,359. This gives a post-neonatal infant mortality rate of 1.7 per 1,000 live births. There were also 59 neonatal deaths in the first 28 days of life. The neonatal mortality rate was 3.6 per 1,000 live births.

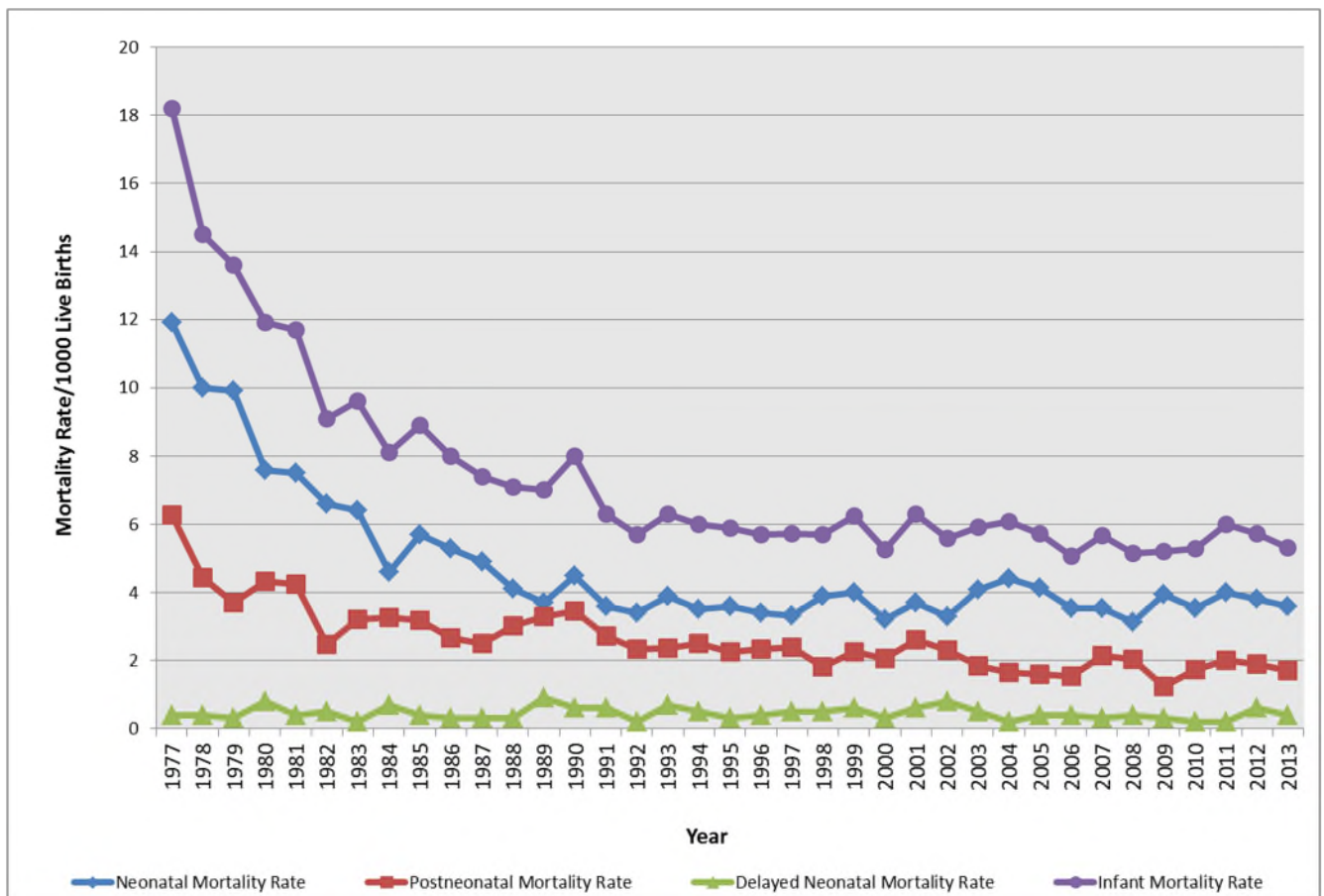
Combining the neonatal mortality rate with the post-neonatal mortality rate gives an overall infant mortality rate of 5.3 per 1,000 live births. This is somewhat lower than rates in recent years. These figures do not include neonates born weighing <500 grams.

Note: the above numbers include only "in hospital" live births and neonatal deaths.

## Infant Mortality Rates Continued

**Figure 2** shows Manitoba infant mortality rates over time. Also plotted are neonatal, post-neonatal and delayed neonatal infant mortality rates. When children’s lives are prolonged by technology and they die from neonatal illnesses after 28 days, they are classified as delayed neonatal deaths and become part of the post-neonatal infant mortality statistic. In 2013, seven infants less than one year of age were classified as dying from delayed neonatal causes. Infant mortality rates have remained relatively stable for the past decade with a slight decline over time.

**Figure 2 - INFANT MORTALITY RATES**



## Infant Mortality Rates Continued

**Table 3** shows Statistics Canada infant mortality rates for Canada as a whole, and by province. The Statistics Canada figures for Manitoba are slightly different than those presented in this report. Statistics Canada counts infants born in Manitoba to mothers from out of province as being the responsibility of Manitoba. They also count registered births and neonatal deaths weighing less than 500 grams, which are not included in our statistics. Manitoba has had one of the highest infant mortality rates in Canada each year for the last decade.

Province	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Prince Edward Island	4.9	4.3	2.2	2.1	5.0	2.0	3.4	3.6	4.2	3.5	2.3
Yukon	6.0	11.0	0	8.2	8.5	5.4	7.8	5.2	0	2.2	2.3
Nova Scotia	5.7	4.6	4.0	4.0	3.3	3.5	3.4	4.6	4.9	4.6	3.3
British Columbia	4.2	4.3	4.5	4.1	4.0	3.7	3.6	3.8	3.9	3.8	3.7
New Brunswick	4.1	4.3	4.1	4.0	4.3	3.2	5.8	3.4	3.5	5.7	4.7
Ontario	5.3	5.5	5.6	5.0	5.2	5.3	5.0	5.0	4.7	4.9	4.8
<b>Canada</b>	<b>5.3</b>	<b>5.3</b>	<b>5.4</b>	<b>5.0</b>	<b>5.1</b>	<b>5.1</b>	<b>4.9</b>	<b>5.0</b>	<b>4.9</b>	<b>4.8</b>	<b>4.9</b>
Quebec	4.4	4.6	4.6	5.1	4.5	4.3	4.4	5.0	4.5	5.0	4.9
Alberta	6.6	5.8	6.8	5.3	6.0	6.2	5.5	5.9	5.2	4.3	5.3
<b>Manitoba</b>	<b>8.0</b>	<b>7.0</b>	<b>6.6</b>	<b>6.0</b>	<b>7.3</b>	<b>6.5</b>	<b>6.3</b>	<b>6.7</b>	<b>7.7</b>	<b>5.9</b>	<b>5.7</b>
Newfoundland	5.0	5.1	6.2	5.3	7.5	5.1	6.3	5.3	6.3	5.5	6.6
Saskatchewan	6.3	6.2	8.3	6.1	5.8	6.2	6.7	5.9	6.8	5.5	7.4
Northwest Territories	5.7	0	4.2	10.2	4.1	9.7	15.5	1.4	7.2	4.4	7.5
Nunavut	19.8	16.1	10.0	13.4	15.1	16.1	14.8	14.5	28.7	21.4	18.2

Source: Statistics Canada, CANSIM, table 102-0504. Last modified: 2013-09-25.

---

## Regional Mortality Rates

---

**Table 4** shows mortality rates by Regional Health Authority (RHA). Note that the updated RHA boundaries are used here, so direct comparisons cannot be made with previous reports and three-year average rates are not shown.

<b>Table 4 - REGIONAL MORTALITY RATES 2013</b> In Children 29 Days to 14 Years			
<b>RHA</b>	<b>Number of Deaths</b>	<b>Population</b>	<b>Rate per 100,000</b>
Northern	15	22,324	67.2
Prairie Mountain	12	31,163	38.5
Winnipeg	41	123,580	33.2
Southern	11	43,509	25.3
Interlake-Eastern	3	22,368	13.4
<b>All Manitoba</b>	<b>82</b>	<b>242,944</b>	<b>33.8</b>

Note: Data are presented in descending order of three-year average rates.

## Causes of Childhood Death

**Table 5** shows the causes of death in children 29 days to 14 years of age.

For 2013, 82 deaths of Manitoba children were reviewed. Injury was the leading cause of death and accounted for 35% of all deaths in this age group. The CHSC reviewed five deaths of children from out of province.

<b>Table 5 – CAUSES OF DEATH</b> In Children 29 Days to 14 Years		
<b>Cause of Death</b>	<b>Deaths</b>	<b>Rate per 100,000</b>
<i>Unintentional Injury</i>	20	8.2
<i>Intentional Injury*</i>	7	2.9
<i>Injury, intent undetermined</i>	1	0.4
<i>Injury, other external causes</i>	1	
Injury Total	29	11.9
SUID	10	4.1
Neoplasm	8	3.3
Respiratory System	7	2.9
Sudden death cause unknown	6	2.5
Congenital Anomaly	5	2.1
Nervous System	4	1.6
Infectious Disease	4	1.6
Disease of the Blood	2	
Diseases of the Digestive System	2	0.8
Endocrine, Nutritional, Metabolic	2	0.8
Perinatal conditions	2	0.8
Circulatory System	1	0.4
<b>Total</b>	<b>82</b>	<b>33.8</b>

\*Intentional Injury includes homicide and suicide.

---

## Causes of Childhood Death Continued

---

**Table 6** lists the frequency of various causes of post-neonatal infant mortality among Manitoba residents 29 days to one year of age.

<b>Table 6 – CAUSES OF POST-NEONATAL INFANT DEATH</b> In Children 29 Days to 1 Year		
<b>Cause of Death</b>	<b>Deaths</b>	<b>Rate per 100,000</b>
SUID	10	60.7
Sudden death, cause unknown	3	18.2
Congenital Anomaly	3	18.2
Diseases of the Respiratory System	3	18.2
Perinatal conditions	2	12.1
Infectious Diseases	2	12.1
Injury - unintentional	1	6.1
Diseases of the Digestive System	1	6.1
Diseases of the Blood	1	6.1
Injury - intentional	1	6.1
Diseases of the Nervous System	1	6.1
<b>Total</b>	<b>28</b>	<b>170.1</b>

Infant deaths are classified as Sudden Infant Death Syndrome (SIDS) if they remain unexplained by clinical history, death scene investigation (by police) and detailed post mortem examination including skeletal x-rays and toxicology. Sudden Unexpected Infant Deaths (SUID) are those with historical, investigative or post mortem findings which suggest, but do not confirm a cause of death.

---

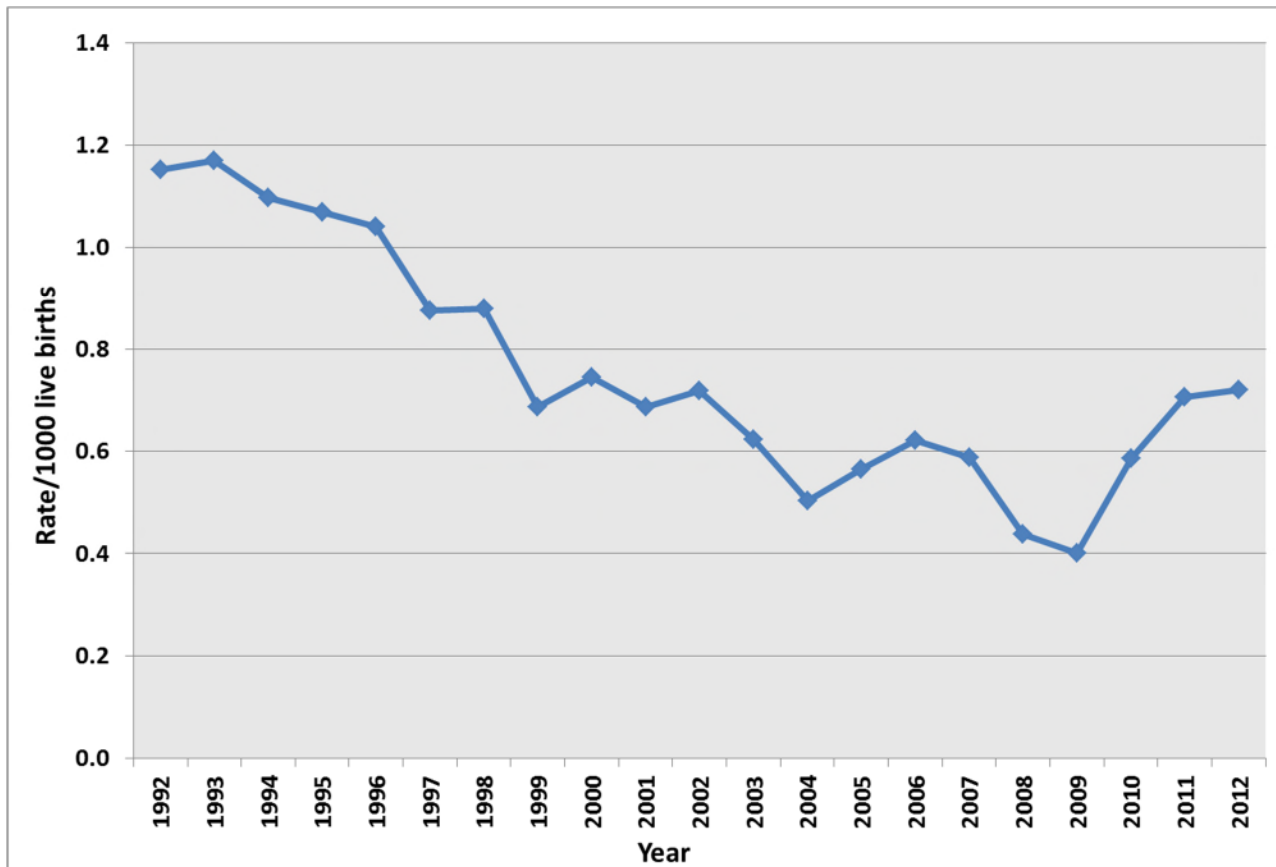
## Sudden Infant Death

---

**Figure 3** shows the three-year moving average rates for Sudden Infant Death (including SIDS, SUID- sudden unexpected infant death, and suffocation/entrapment in the sleep environment) from 1993 to 2013. There was a consistent decline in sudden infant death rates during this time period until 2010 followed by a gradual increase since 2011.

Among the 11 sudden infant death cases, 10 were classified as SUID and one as suffocation. Four were sleeping on adult beds or mattresses, two were on child fold-out couch/mattresses, with the remaining being on various surfaces (sofa, bassinet, playpen, mat, blankets on the floor). Four infants were sharing a sleep surface (bed or mattress or sofa). All had modifiable risk factors for SIDS, sudden unexpected infant death or suffocation/entrapment.

**Figure 3 – SUDDEN INFANT DEATH**  
In Children < 1 Year (Three-Year Moving Average)





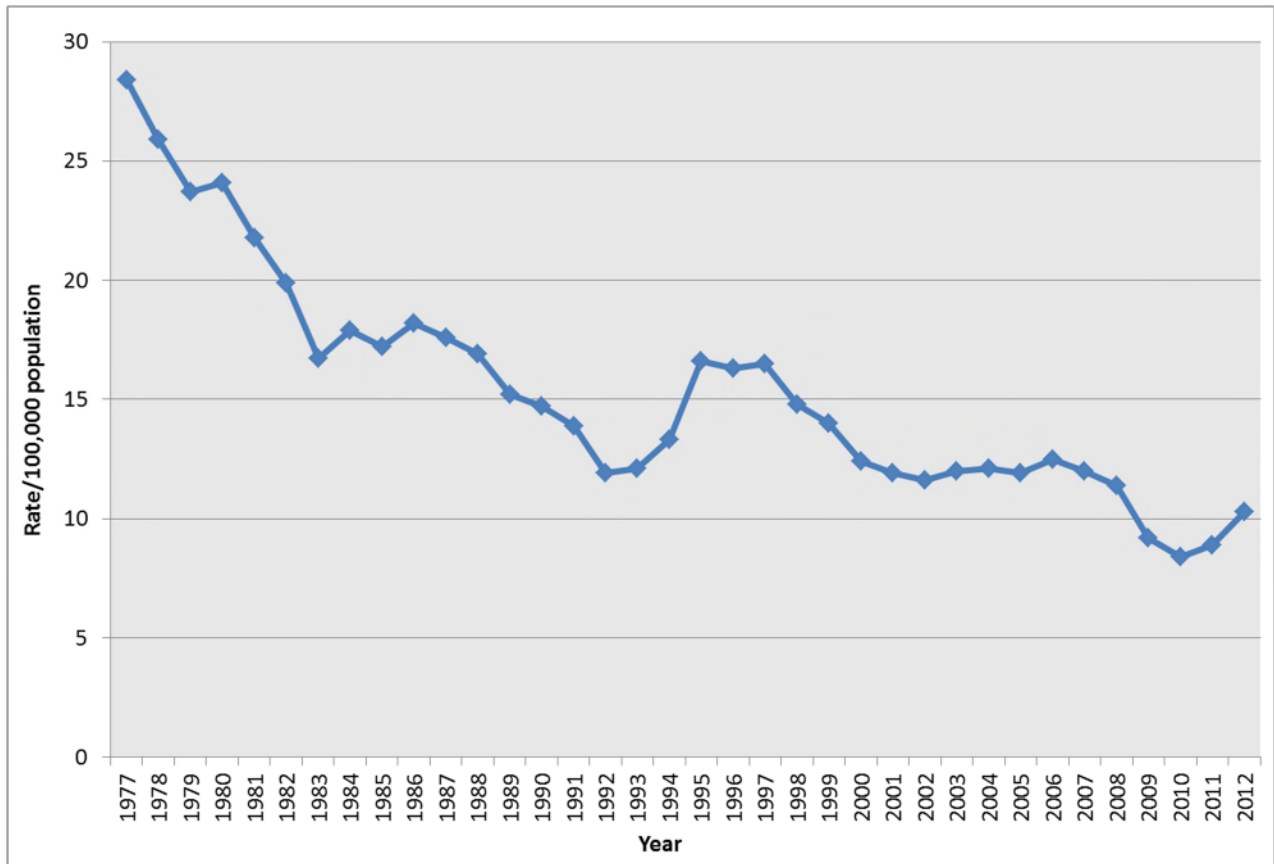
---

## Deaths from Injury - Trends

---

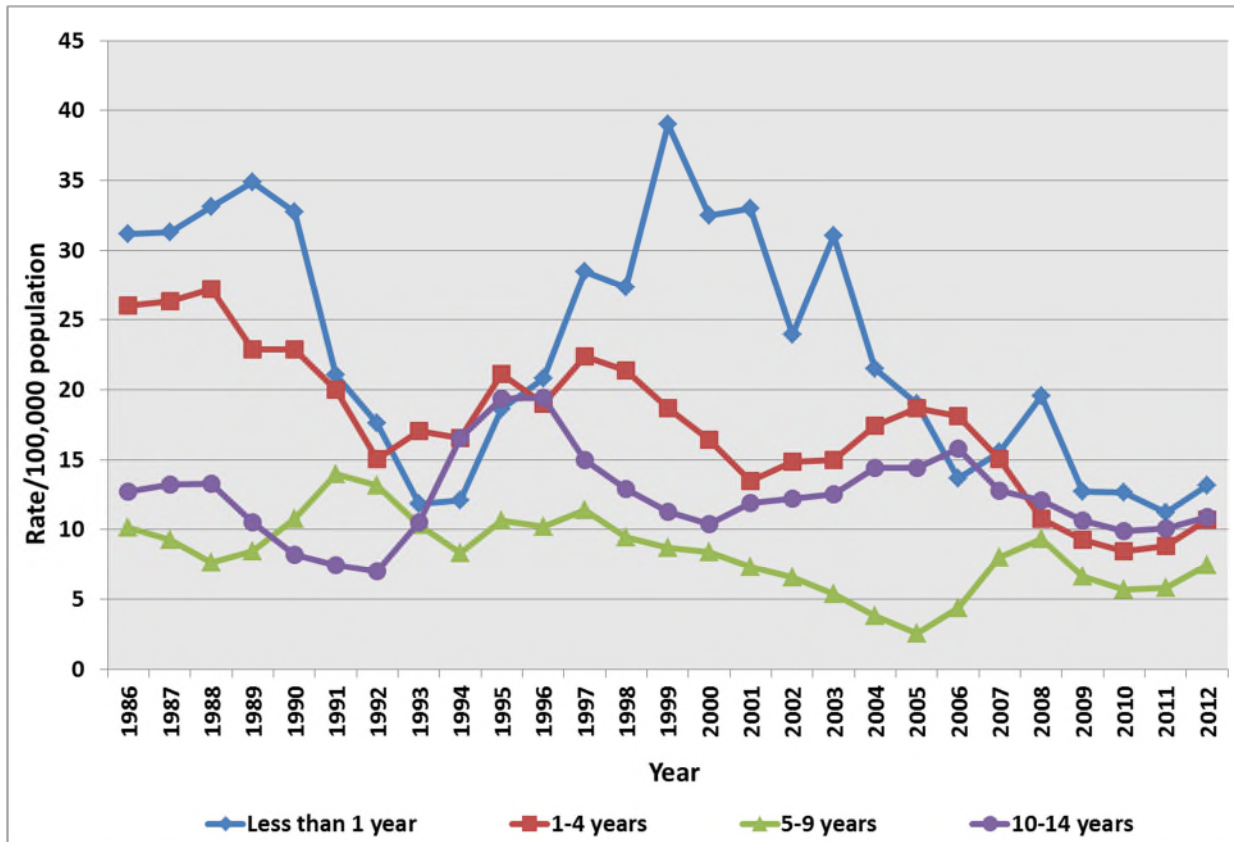
Figures 4 and 5 show the three-year moving average rates for injury deaths (unintentional and intentional combined) for children 29 days to 14 years of age. Data for 2013 are included in the 2012 three-year average (2011-2013).

**Figure 4 - MORTALITY RATES FROM INJURY**  
In Children 29 Days to 14 Years (Three-Year Moving Average)



## Deaths from Injury – Trends Continued

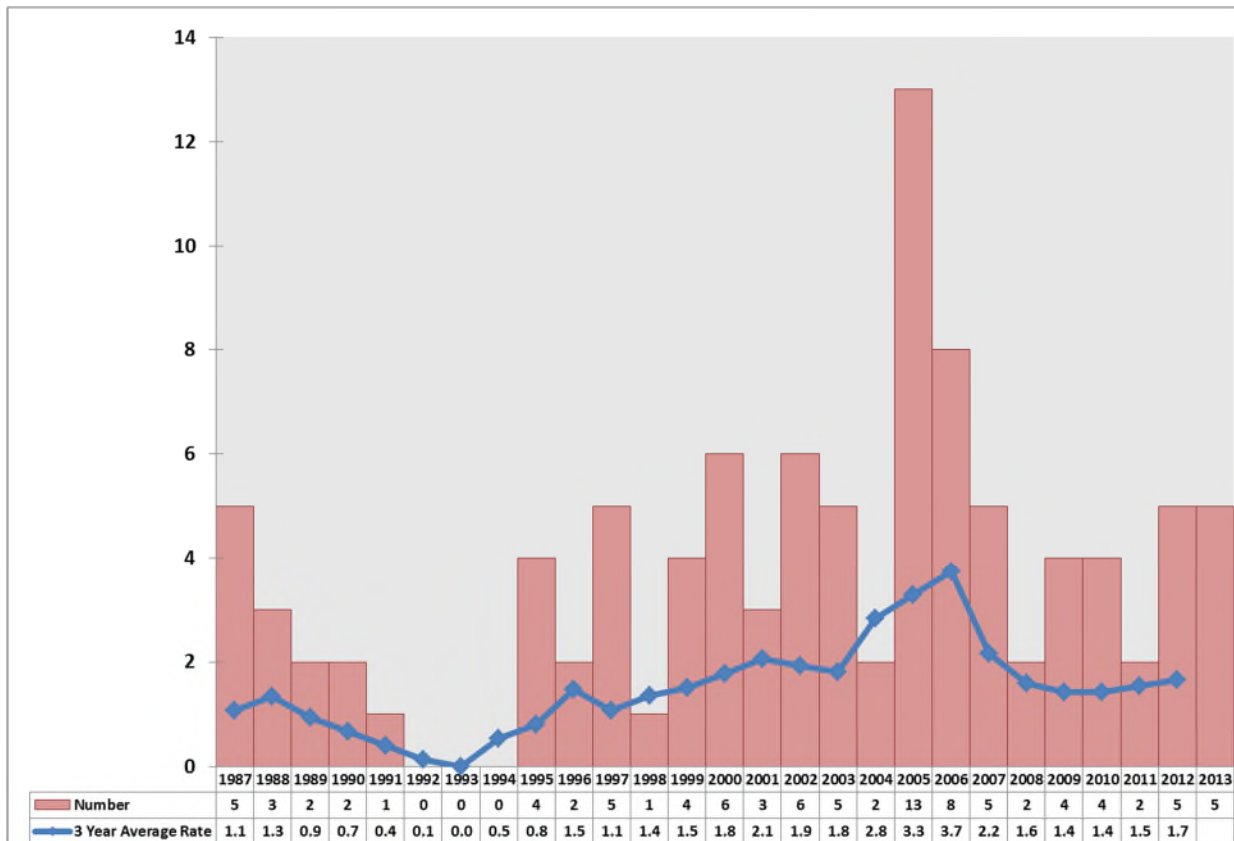
**Figure 5 – MORTALITY RATES FROM INJURY BY AGE GROUP**  
 In Children 29 Days to 14 Years (Three-Year Moving Average)



## Deaths from Injury – Trends Continued

**Figure 6** shows the annual number of suicides and the three-year moving average rates for suicide for children 14 years of age and younger. Data for 2013 are included in the 2012 three-year average (2011 to 2013). The annual number and rates of suicide had been increasing steadily in this age group in recent years, with a reduction in numbers in 2006 to 2013 as compared to the peak in 2005.

**Figure 6 – SUICIDES AMONG CHILDREN 14 YEARS OF AGE AND YOUNGER**  
Number Per Year and Three-Year Moving Averages



## Deaths from Injury – Trends Continued

In 2013, there were 28 deaths due to injury among Manitoba children 14 years of age and under. Injuries caused 34% of all deaths of children between 29 days and 14 years of age (28 of 82).

<b>Table 7 – INJURY-RELATED MORTALITY RATES BY AGE GROUP 2013</b>				
<b>Age Group</b>	<b>Number of Deaths</b>	<b>Population</b>	<b>Rate/100,000</b>	<b>Three-Year Average 2011-2013</b>
29 days - <1 year	2	16,461	12.1	16.6
1 - 4 years	10	66088	15.1	11.1
5 - 9 years	5	80327	6.2	7.3
10 - 14 years	11	80068	13.7	11.2
<b>Total</b>	<b>28</b>	<b>242,944</b>	<b>11.5</b>	<b>7.2</b>

<b>Table 8 – TYPES OF INJURY CAUSING DEATH 2013</b>					
<b>In Children 29 Days to 14 Years</b>					
<b>Unintentional</b>			<b>Intentional and Undetermined</b>		
<b>Cause</b>	<b>Number</b>	<b>Rate</b>	<b>Cause</b>	<b>Number</b>	<b>Rate</b>
Drowning	6	2.5	Suicide	4	1.6
Motor vehicle occupant	4	1.6	Homicide	3	1.2
Pedestrian	3	1.2	Undetermined	1	0.4
Aircraft	3	1.2			
Fall	2	0.8			
Suffocation	1	0.4			
Cyclist	1	0.4			
<b>Total</b>	<b>20</b>	<b>8.2</b>	<b>Total</b>	<b>8</b>	<b>3.3</b>

---

## **Deaths from Unintentional Injuries**

---

There were 20 deaths related to unintentional injuries and 7 deaths related to intentional injuries (four suicides and three homicides). For one death the intent was undetermined.

The most common cause of unintentional injury death was drowning. Six children died due to drowning. Three young children drowned when they fell into natural bodies of water while playing with no adult supervision. Another child playing outside with no adult supervision fell into open water on the property. Two children died while swimming in a residential pool or spa.

Eleven children died as a result of transport injuries. Four child passengers died, including two with sub-optimal restraint (incorrect type or not installed properly). Substance use and distracted driving were implicated in three of these deaths. Three children died in a single plane crash. Three children died due to pedestrian injuries: one young child was run over by a vehicle while playing at home; one child was struck by a truck while crossing the street; and one was struck by a train. An un-helmeted cyclist was struck by a vehicle.

Two children died related to falls, one while playing sports and one in an unwitnessed fall from a height.

One infant died as a result of suffocation related to soft bedding and unsafe sleep conditions.

---

## **Autopsies**

---

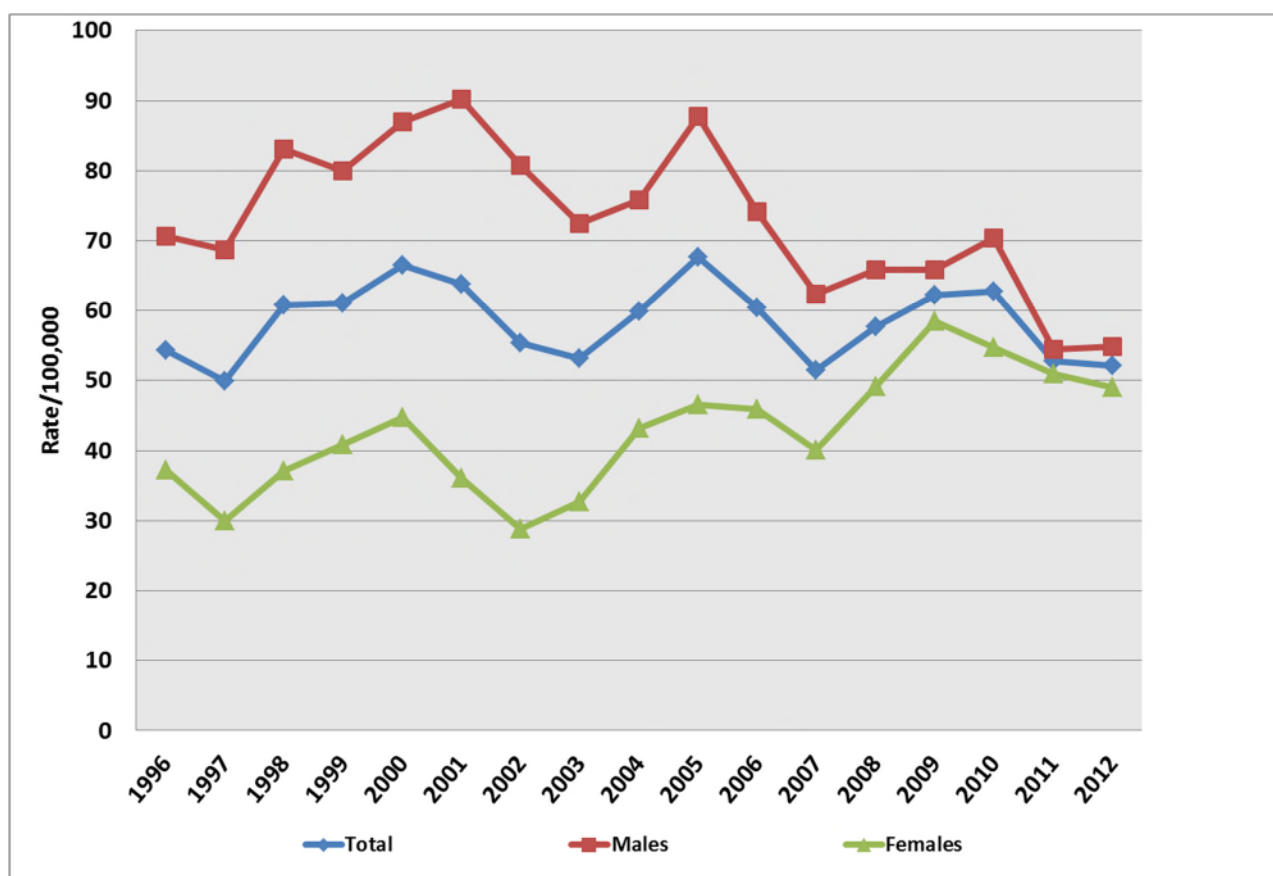
In 2013, 54 of the 82 Manitoba children who died between the ages of 29 days and 14 years had an autopsy (66%). Among teens 15 to 17 years of age, 25 of 29 had autopsies (86%).

## 4. Teen Deaths, 15 to 17 Years

Since 1994, the Child Health Standards Committee has reviewed deaths of Manitoba youth 15 to 17 years of age. The death rate in 2013 was 56.9 per 100,000, higher than the three-year average rate of 52.1 per 100,000. Male mortality rates are consistently higher than females, though the gap has narrowed significantly over the past several years.

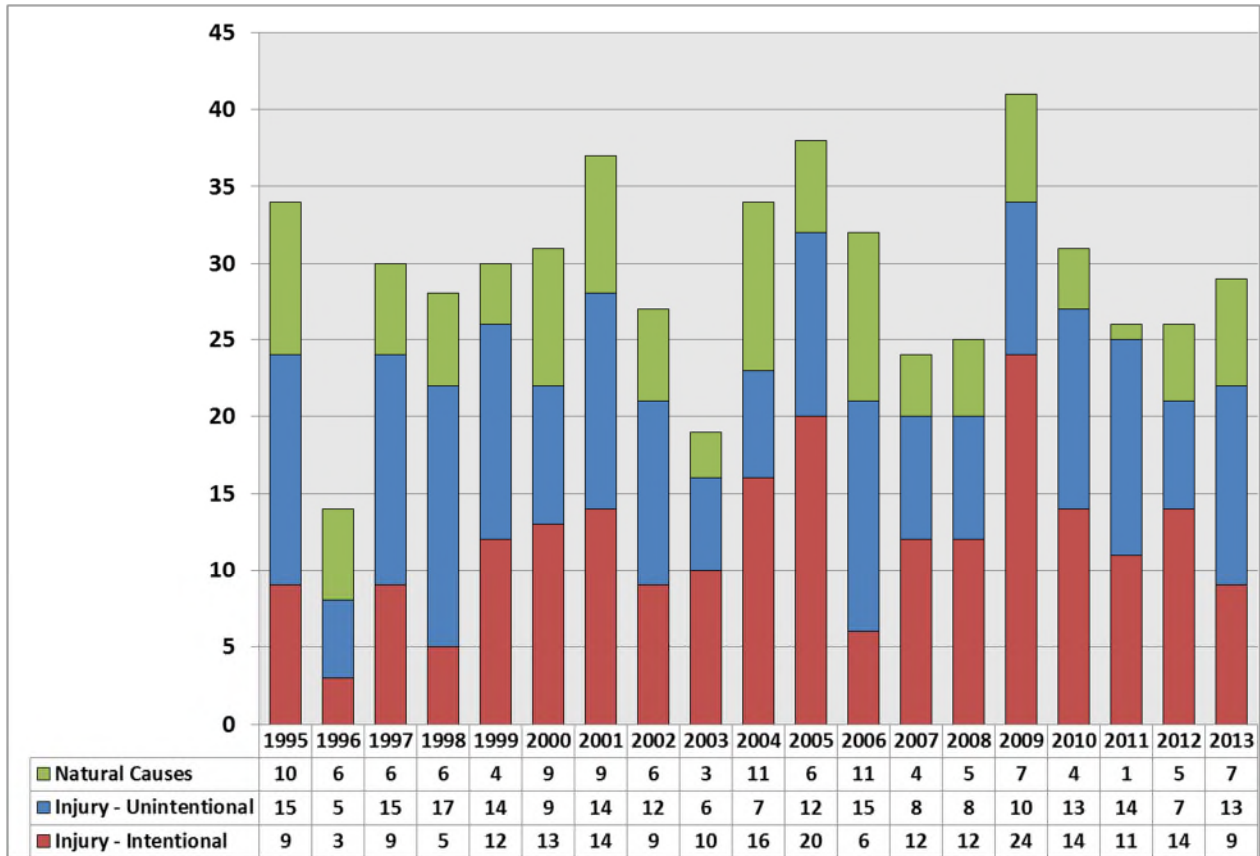
**Figure 7** shows mortality rates by gender. **Figure 8** shows the proportion of deaths due to injury and other causes.

**Figure 7 - MORTALITY RATES**  
In Teens 15-17 Years of Age (Three-Year Moving Average)



## Teen Deaths Continued

**Figure 8 – NUMBER OF DEATHS BY CAUSE (INJURY VS. NATURAL CAUSES)**  
In Teens 15-17 Years of Age, 1995-2013



## Teen Deaths Continued

**Table 9** shows the causes of death for this age group and **Table 10** shows the types of injuries causing death.

<b>Table 9 – CAUSES OF DEATH in Teens 15 to 17 years</b>		
	<b>Deaths</b>	<b>Rate per 100,000</b>
Injury	22	43.2
<i>Unintentional Injury</i>	13	25.5
<i>Intentional Injury*</i>	9	17.7
Endocrine/Metabolic	4	7.8
Diseases of the Respiratory System	2	3.9
Diseases of the Gastrointestinal System	1	2.0
<b>Total</b>	<b>29</b>	<b>56.9</b>

\* Includes homicide and suicide

<b>Table 10 – TYPES OF INJURY CAUSING DEATH in Teens 15 to 17 Years</b>					
<b>Unintentional</b>			<b>Intentional</b>		
	<b>Cases</b>	<b>Rate / 100,000</b>		<b>Cases</b>	<b>Rate / 100,000</b>
Motor Vehicle	6	11.8	Homicide	2	3.9
Poisoning	3	5.9	Suicide	7	13.7
Pedestrian	2	3.9			
Off-road Vehicle	1	2.0			
Hypothermia	1	2.0			
<b>Total</b>	<b>13</b>	<b>25.5</b>	<b>Total</b>	<b>9</b>	<b>17.7</b>



---

## **Teen Deaths** Continued

---

In 2013, 22 of the 29 teen deaths were due to injuries. Alcohol and/or other substance use were noted to be a factor in at least 10 of these deaths. Motor vehicle collisions were the leading cause of unintentional injury death; alcohol, speeding, distracted and dangerous driving were implicated in these crashes. Three teens were the driver; the remaining deaths were passengers. A seat belt was not in use in 3 cases and unknown in 3 cases. There were also two pedestrian deaths, one possibly intentional. One teen died in a snowmobile collision. Helmet use unknown. Three youth died related to overdose and one to hypothermia.

There were 9 intentional injury deaths, including 7 suicides and 2 homicides. All of the suicides were by hanging. Alcohol was noted at autopsy in three cases.

## 5. *Preventability of Death*

---

The CHSC divides preventability into two categories: (i) preventability of the disease or the injury that caused the death, and (ii) preventability of the outcome once the disease or injury has occurred. Medical care is sometimes involved in the preventability of outcome, and rarely is implicated in the cause of death. Educational action was taken by the committee or another standards committee for cases where medical care could have been improved.

---

### **Childhood Deaths**

---

#### ***(i) Preventable Cause***

In 2013, 30 of the 82 childhood deaths were deemed to have a preventable cause. 29 were injuries (including unintentional injuries, suicide, and homicide) and one was a vaccine preventable death. Seven cases were theoretically preventable, including five sudden infant deaths with significant risk factors in the sleep environment (SUID) and two homicides.

#### ***(ii) Preventable Outcome***

There were no cases classified as having a preventable outcome. Twenty-two cases were classified as having a theoretically preventable outcome, including two cases where there was a delay in seeking care, four cases where more aggressive care could have modified the outcome, one case where proper use of a car seat could have modified the outcome, and fourteen cases where the parent or guardian could have modified the outcome with better supervision and attention.

There were additional cases where the care provided did not alter the outcome but could have been improved:

- Failure to document a core (rectal) temperature at the time of death.\*
- Medication errors during resuscitation that did not affect the outcome; these may reflect or include documentation errors.\*
- Lack of documentation of significant physical findings relevant to diagnosis, clinical management, and/or discharge counseling/instructions.\*
- There were several cases of missing documentation in the medical records reviewed.\*

\* indicates observations also made in previous years

---

## Teen Deaths

---

**(i) Preventable Cause**

In 2013, 23 of the 29 teen deaths were judged to have a preventable cause. All of the preventable deaths were due to trauma (injury), homicide or suicide except one case of severe dehydration.

**(ii) Preventable Outcome**

Twelve deaths were classified as having a theoretically preventable outcome, including seven cases where seeking medical care could have modified the outcome and three unrestrained passengers where use of a seatbelt could have modified the outcome. In two cases, closer adult supervision could have altered the outcome.

---

## Educational and Other Actions

---

The Child Health Standards Committee took educational or other actions for 14 cases in 2013. Additional actions taken by other Standards Committees were also reviewed by the committee. An inquest was called for one death.

<b>Table 11 - EDUCATIONAL AND OTHER ACTIONS</b>	
<b>Action Taken</b>	
Physician Providers	8
Health Administrators	7
Referrals to other agencies/organizations	3
<b>Total number of actions</b>	<b>18</b>

## 6. *Recommendations*

---

The Child Health Standards Committee had the following recommendations related to child health in 2013:

1. That physicians be alert for early signs of immunodeficiency in infants and refer patients to the Pediatric Hematology/ Oncology/Blood & Marrow Transplant Section as soon as concerns are identified.
2. That physicians be aware of the requirements to report suspected child abuse and neglect to provincial authorities.
3. That physicians consider Kawasaki Disease in the differential diagnosis of infants and children with prolonged and unexplained fever in order to initiate prompt treatment to prevent coronary artery aneurysms and associated complications.
4. That the committee support the work of regional and provincial partners who are developing safe sleep guidelines, policies, and public education.
5. That the committee work with regional and provincial partners to update and disseminate sepsis management guidelines including assessment and management of fever in young infants.
6. That the committee work with regional and provincial partners to consider the communication needs of families who speak languages other than English/French, in particular to communicate postoperative warning signs and discharge instructions.

# CHILD HEALTH STANDARDS COMMITTEE

---

## **COMMITTEE MEMBERS (2013)**

Dr. D. Beer, Paediatrician  
Dr. N. Cisneros, Paediatric Immunologist  
Dr. M. Feierstein, Paediatrician  
Dr. A. Goldberg, Paediatric Nephrologist  
Dr. K. Gripp, Paediatrician  
Dr. G. Lemoine, General Practice  
Dr. C. Littman, Pathologist  
Dr. S. Lum Min, Paediatric Surgeon  
Dr. J. Strong, Paediatrician  
Dr. S. Veroukis, Paediatrician

## **ADMINISTRATIVE STAFF (2013)**

Dr. L. Warda, Paediatrician, Medical Consultant  
Dr. T. Babick, Family Physician, Deputy Registrar, CPSM  
Mr. J. Martin, Administrative Assistant, Child and Maternal Standards, CPSM

## **CURRENT ADMINISTRATIVE STAFF (2017)**

Dr. L. Warda, Paediatrician, Medical Consultant  
Dr. T. Babick, Family Physician, Deputy Registrar, CPSM  
Mr. J. Martin, Administrative Assistant, Child and Maternal Standards, CPSM