

THE
CHILD
HEALTH
STANDARDS
COMMITTEE
2010 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 2010.

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

Executive Summary 2010

- The Child Health Standards Committee (CHSC) reviewed 99 deaths which occurred in 2010. 59 were children 29 days to 14 years of age, 31 were teens 15 to 17 years of age and 9 were children whose place of residence was out of province.
- The mortality rate for Manitoba children aged 29 days to 14 years was 25.2 per 100,000 in 2010 compared to 26.2 per 100,000 in 2009 and 32.8 per 100,000 in 2008. The mortality rate for Manitoba teens 15 to 17 years of age was 59.1 per 100,000 in 2010 compared to 79.9 per 100,000 in 2009 and 47.7 per 100,000 in 2008.
- The infant mortality rate was 5.2 per 1,000 live births, which is similar to rates in recent years.
- The cause of death was classified as preventable for 17 of the 59 child deaths (29%) and 27 of the 31 teen deaths (87%). Injury (unintentional injury, suicide, homicide) accounted for all of the preventable deaths.
- Injury was the leading cause of death overall, accounting for 49% 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 (vehicle, bicycle, off road vehicle), suicide and house fires. The most common cause of injury-related mortality in teens was suicide.
- There were 15 suicides in 2010, compared to 20 in 2009 and 12 in 2008. In 2010, 11 suicides were teens 15 to 17 years of age and 4 were 14 years of age or younger; this compares to 16 teens and 4 children 14 years of age and younger in 2009.
- There were 21 First Nations children 29 days to 14 years of age who died in 2010. First Nations children in this age group were 4.1 times more likely to die than other Manitoba children. First Nations children accounted for 36% of childhood deaths in Manitoba. There were 16 First Nations teens who died in 2010. First Nations teens were 8.4 times more likely to die than other Manitoba teens and accounted for 52% of teen deaths in Manitoba. Mortality rates off-reserve were 1.3 times higher than on-reserve for both age groups.
- In 2010, the CHSC initiated educational action with two physicians with respect to medical care provided. Three referrals were made to health administrators, professional bodies, other organizations or government departments. In nine cases, educational action was taken by another standards committee. An inquest was called for two cases.

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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 7th full day of life (<168 hours), or
- **Late:** between the 8th and 28th 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.

First Nations: An individual who is registered under *The Indian Act of Canada*.

Non-First Nations or Other: All non-First Nations people, and those Métis and people of aboriginal descent who are not registered under *The Indian Act of Canada*.

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 and 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 18th 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. In addition, the Committee has divided Manitoba into three broad geographic regions: Urban (Winnipeg and Brandon); South (Assiniboine, Central and South Eastman); and North (Churchill, Burntwood, NorMan, North Eastman, Parkland and Interlake).

(Please refer to Definitions in Appendices.)

Newsletter Items

There was one newsletter item prepared by the committee in 2010: Cough and Cold Preparations for Young Children.

Other Committee Activities

The CHSC conducted two Morbidity/Mortality audits in 2010:

- Suicide: Children and Teens
- Sudden infant deaths

The CHSC advocated for the following issues in 2010:

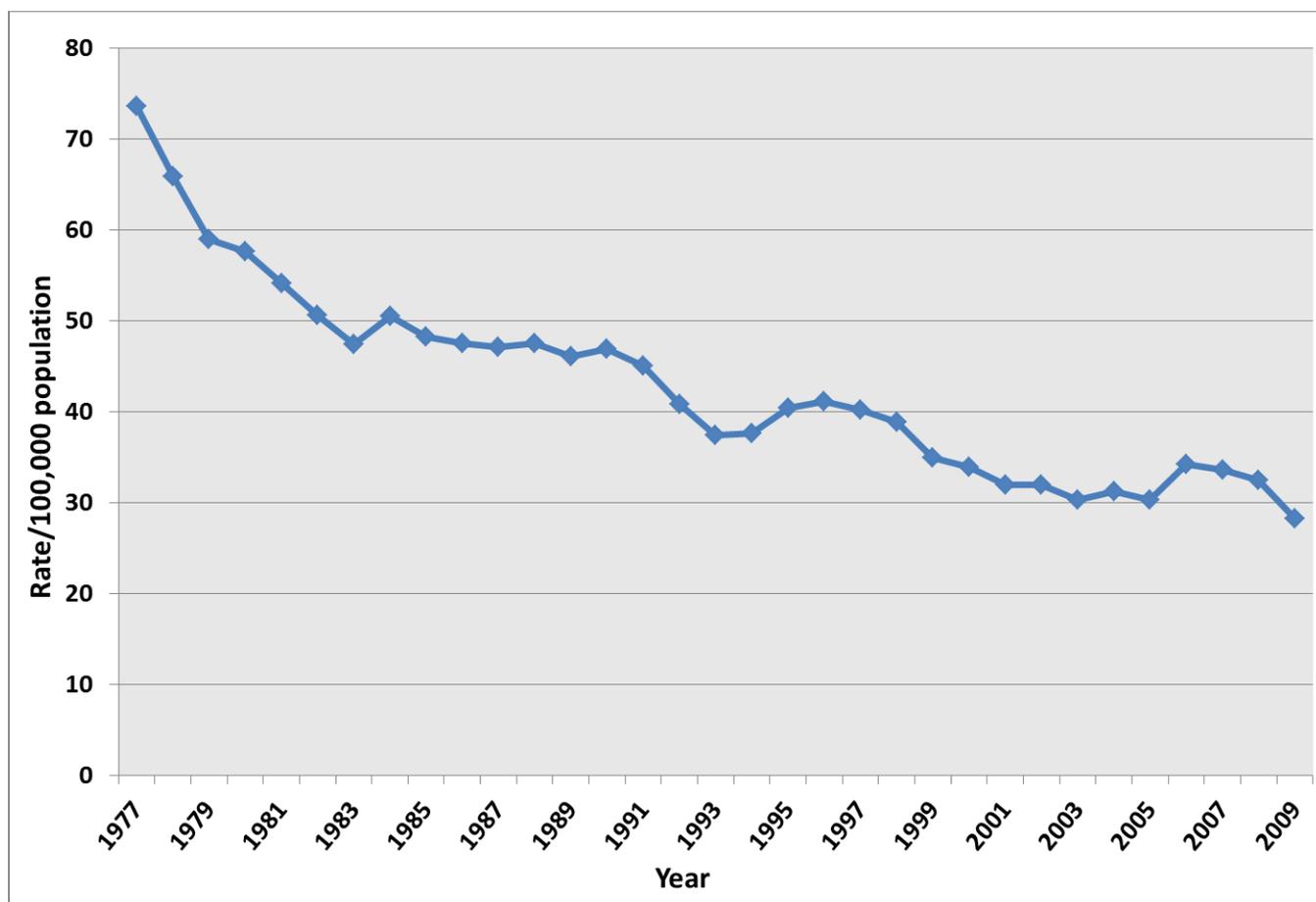
- Safe sleep guidelines, policies and public education
- Suicide awareness
- Specialized care for children with immune deficiencies
- Improved access to emergency care

3. Statistical Summary

Mortality Rates

Figure 1 shows the three-year moving average trends in paediatric mortality from 1977 to 2010 for Manitoba residents. *The 2010 data are included in the three-year moving average reported as 2009.*

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 2010

Age Group	Number of Deaths	Population	Rate/100,000	Three-Year Average (2008-2010)
29 days to <1 year	27	15,924	169.6	167.5
1 to 4 years	16	62,878	25.4	24.1
5 to 9 years	3	75,138	4.0	13.3
10 to 14 years	13	80,542	16.1	17.6
Total 29 days to 14 years	59	234,482	25.2	28.1
15 to 17 years	31	52,456	59.1	62.2

Table 2 - MORTALITY RATES BY GENDER 2010

Gender/Age Group	Number of Deaths	Population	Rate/100,000	Three-Year Average (2008-2010)
Male (29d to 14y)	32	120,135	26.6	30.1
Female (29d to 14y)	27	114,347	23.6	25.8
Male (15y to 17y)	13	26,929	48.3	65.8
Female (15y to 17y)	18	25,527	70.5	58.6

Infant Mortality Rates

In 2010 there were 27 deaths in the Manitoba population between 29 days and one year of age. The number of live births based on Manitoba Health registrations was 16,068. This gives a post-neonatal infant mortality rate of 1.7 per 1,000 live births. There were also 57 neonatal deaths in the first 28 days of life. The neonatal mortality rate was 3.5 per 1,000 live births.

Combining the neonatal mortality rate with the post-neonatal mortality rate gives an overall infant mortality rate of 5.2 per 1,000 live births. This is similar to rates in recent years. These figures do not include neonates born weighing <500 grams.

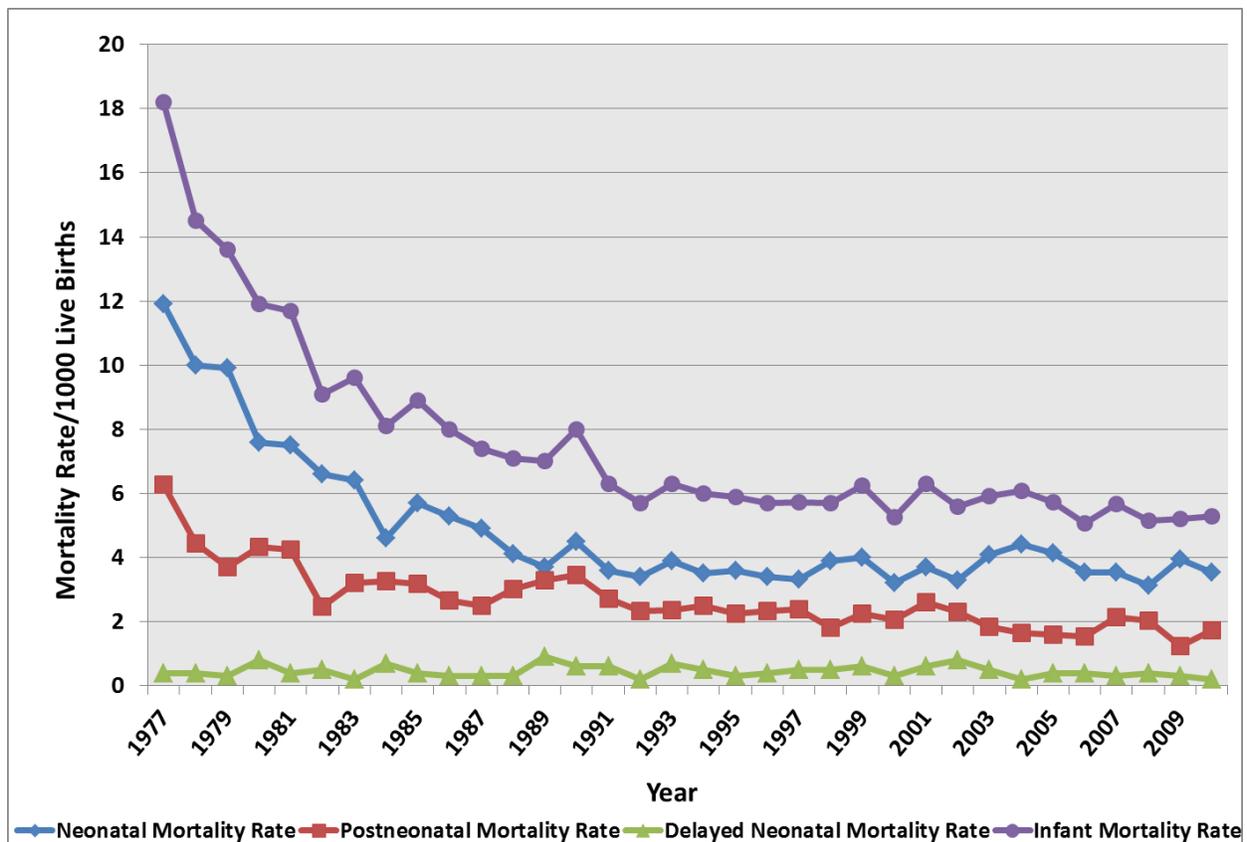
Infant Mortality Rates Continued

For First Nations infants, there were 17 neonatal deaths and 10 post-neonatal deaths among 2601 live deliveries for an infant mortality rate of 10.4 per 1,000 live births. For non-First Nations infants, there were 40 neonatal and 17 post-neonatal deaths among 13,467 live deliveries for a rate of 4.2 per 1,000 live births. The First Nations infant mortality rate was 2.5 times that for non-First Nations infants.

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

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 2010, three infants less than one year of age were classified as dying from delayed neonatal causes. Infant mortality rates have remained stable for the past decade.

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 significantly higher rates than the Canadian average since 2001 and in 2010 had the 2nd highest infant mortality rate in Canada.

Province	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northwest Territories	4.9	11.0	5.7	0.0	4.2	10.2	4.1	9.7	15.5	1.4
New Brunswick	4.3	3.8	4.1	4.3	4.1	4.0	4.3	3.2	5.8	3.4
Prince Edward Island	7.2	1.5	4.9	4.3	2.2	2.1	5.0	2.0	3.4	3.6
British Columbia	4.1	4.6	4.2	4.3	4.5	4.1	4.0	3.7	3.6	3.8
Nova Scotia	5.6	4.2	5.7	4.6	4.0	4.0	3.3	3.5	3.4	4.6
Quebec	4.7	4.8	4.4	4.6	4.6	5.1	4.5	4.3	4.4	5.0
Canada	5.2	5.4	5.3	5.3	5.4	5.0	5.1	5.1	4.9	5.0
Ontario	5.4	5.3	5.3	5.5	5.6	5.0	5.2	5.3	5.0	5.0
Yukon	8.7	8.8	6.0	11.0	0.0	8.2	8.5	5.4	7.8	5.2
Newfoundland	4.9	4.5	5.0	5.1	6.2	5.3	7.5	5.1	6.3	5.3
Alberta	5.6	7.3	6.6	5.8	6.8	5.3	6.0	6.2	5.5	5.9
Saskatchewan	5.5	5.7	6.3	6.2	8.3	6.1	5.8	6.2	6.7	5.9
Manitoba	7.0	7.1	8.0	7.0	6.6	6.0	7.3	6.5	6.3	6.7
Nunavut	16.9	11.0	19.8	16.1	10.0	13.4	15.1	16.1	14.8	14.5

Rates shown per 1000 live births.

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

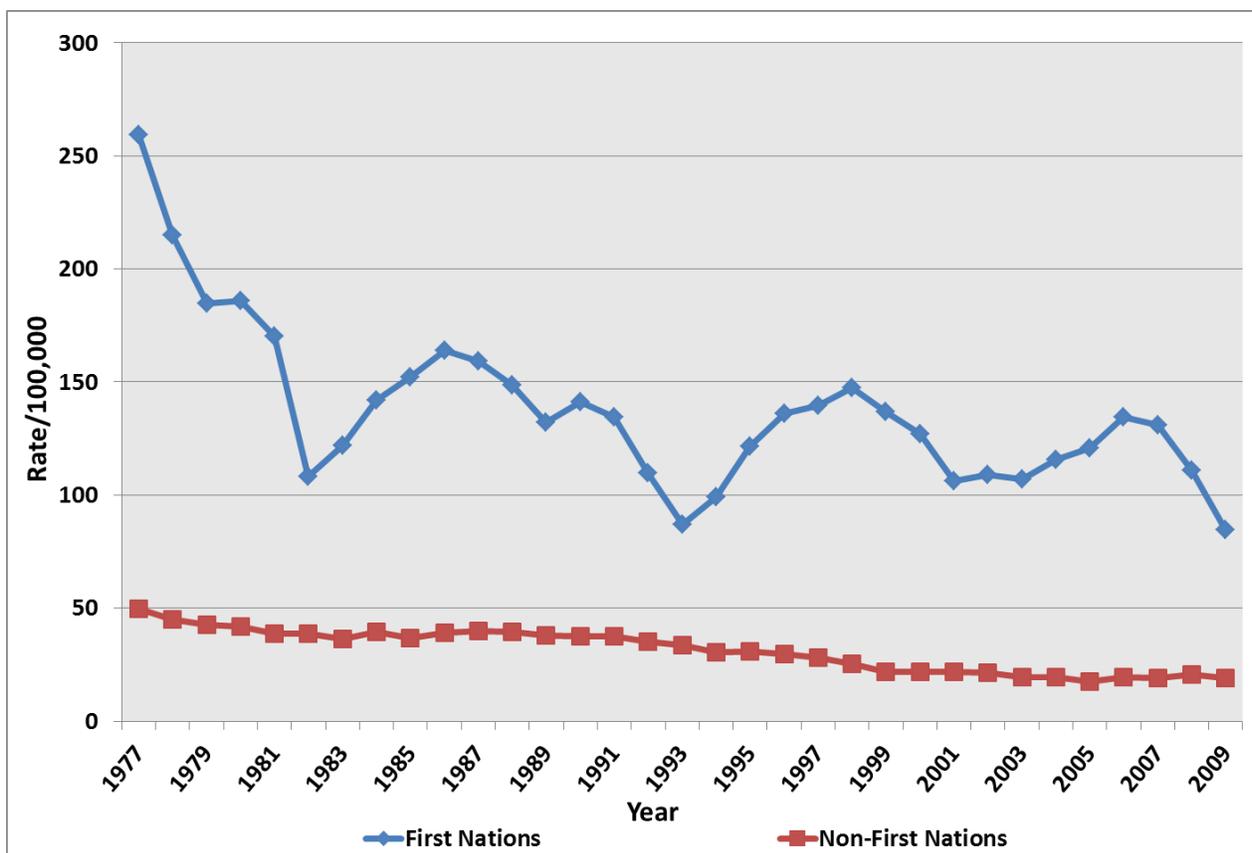
First Nations Mortality Rates

In 2010 First Nations children accounted for 14% of the population aged 29 days to 14 years in Manitoba and 36% of childhood deaths. There were 21 deaths among registered First Nations children and 38 among all others. The mortality rate for First Nations children was 64.9 per 100,000 and for all others 18.8 per 100,000. Therefore, First Nations children were 3.5 times more likely to die than other Manitoba children. This is slightly lower than 2009, which showed a 4-fold increased risk of death.

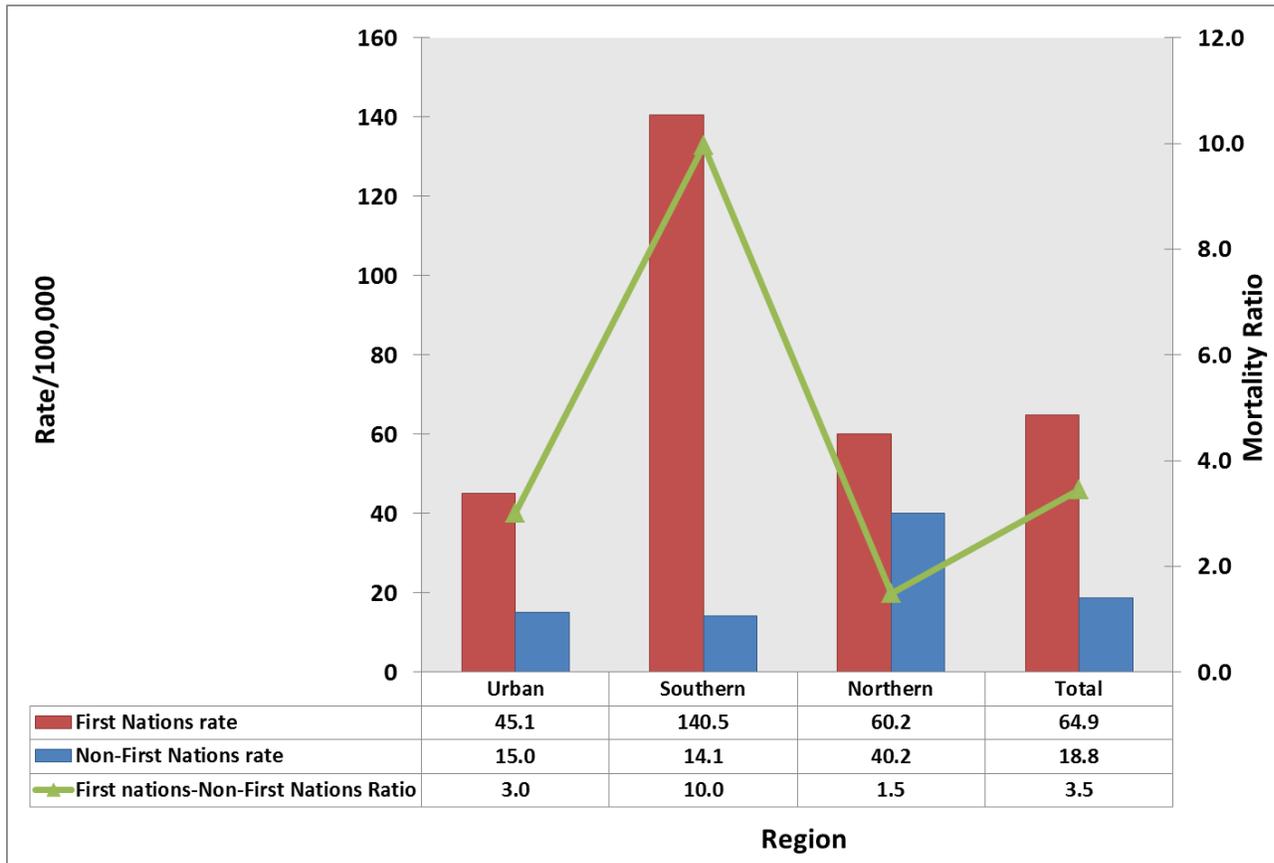
In Manitoba in 2010, 54% of First Nations children resided in First Nations communities. Of the 21 First Nations children who died, 10 died in First Nations communities and 11 died in other communities. Mortality rates off-reserve were 1.3 times higher than on-reserve for this age group.

(The Manitoba Health Client Registry is used for these calculations for both deaths and population figures. This data is felt to represent approximately two-thirds of First Nations individuals in Manitoba.)

Figure 3 – MORTALITY RATES: FIRST NATIONS vs. NON-FIRST NATIONS CHILDREN
In Children 29 Days to 14 Years (Three-Year Moving Average)



**Figure 4 – MORTALITY RATES BY GEOGRAPHIC REGION
FIRST NATIONS vs. NON-FIRST NATIONS**
In Children 29 days to 14 years



Definition of geographic regions for the purpose of this report:

- North Rural – Churchill, Burntwood, NorMan, North Eastman, Parkland and Interlake RHAs
- South Rural – Assiniboine, Central and South Eastman RHAs
- Urban – Winnipeg and Brandon RHAs

Regional Mortality Rates

Table 4 – REGIONAL MORTALITY RATES 2010				
In Children 29 Days to 14 Years				
RHA	Number of Deaths	Population	Rate per 100,000	Three-Year Average Rates (2008 – 2010)
Burntwood	11	15,587	70.6	75.2
NorMan	2	6,271	31.9	58.9
North Eastman	2	8,116	24.6	48.9
Central	6	24,814	24.2	33.8
Assiniboine	4	12,070	33.1	33.2
Interlake	7	14,072	49.7	32.9
Parkland	3	8,057	37.2	29.0
All Manitoba	59	234,482	25.2	27.9
Winnipeg	20	119,165	16.8	19.2
South Eastman	2	16,315	12.3	16.6
Brandon	2	9,824	20.4	14.0
Churchill	0	191	0.0	0.0

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 2010, 59 deaths of Manitoba children were reviewed. Injury was the leading cause of death and accounted for 29% of all deaths in this age group. The CHSC reviewed nine deaths of children from out of province.

Table 5 – CAUSES OF DEATH In Children 29 Days to 14 Years		
Cause of Death	Deaths	Rate per 100,000
<i>Unintentional Injury</i>	11	4.7
<i>Intentional Injury*</i>	5	2.1
<i>Intent Undetermined</i>	1	0.4
Injury Total	17	7.3
SIDS/SUID	10	4.3
Congenital Anomaly	4	1.7
Neoplasm	4	1.7
Respiratory System	4	1.7
Circulatory System	4	1.7
Endocrine, Nutritional, Metabolic	4	1.7
Sudden death cause unknown	4	1.7
Nervous System	3	1.3
Conditions Originating in Perinatal Period	3	1.3
Infectious Disease	1	0.4
Diseases of the Digestive System	1	0.4
Total	59	25.2

*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.

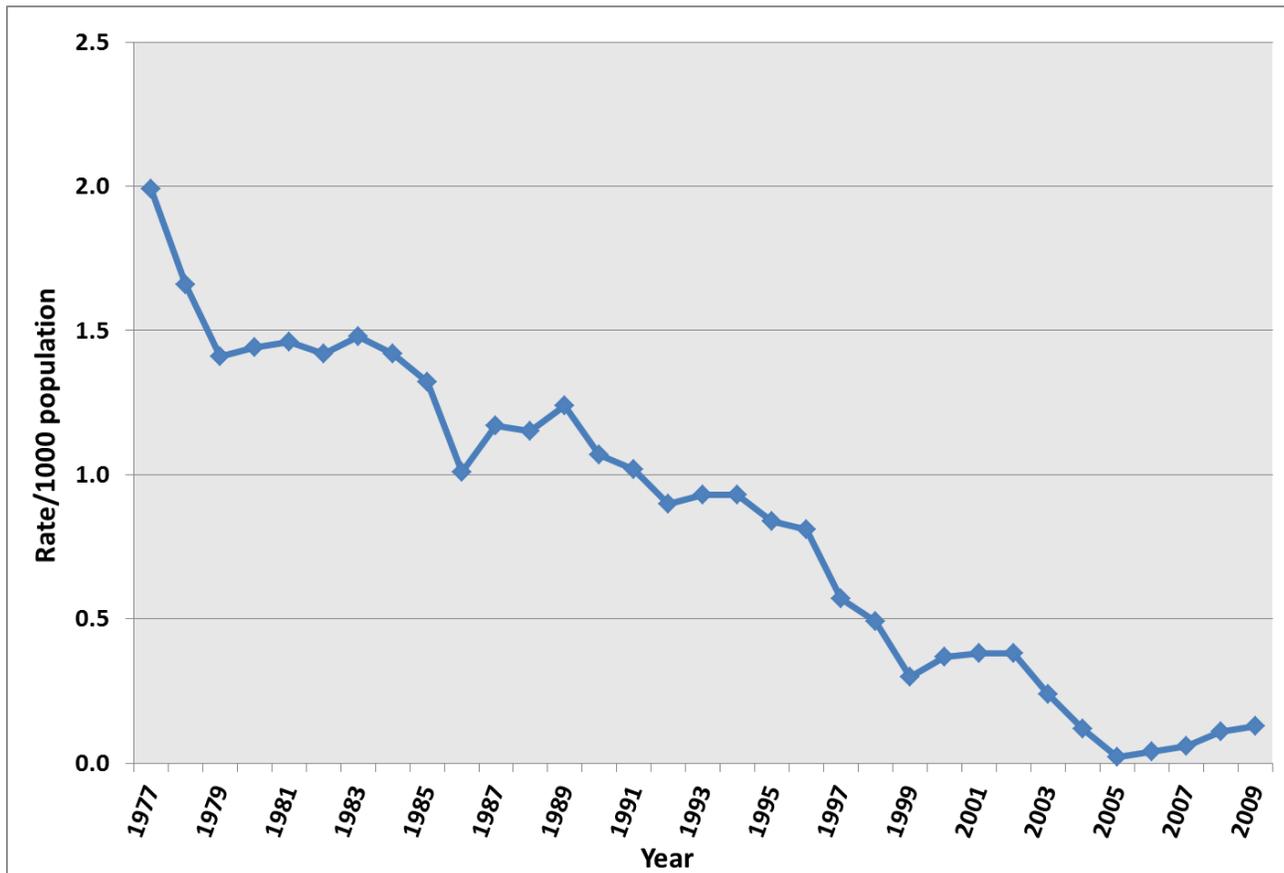
Table 6 – CAUSES OF POST-NEONATAL INFANT DEATH In Children 29 Days to 1 Year		
Cause of Death	Deaths	Rate per 100,000
SUID/SIDS	10	62.8
Diseases of the Circulatory System	4	25.1
Congenital Anomaly	3	18.8
Sudden death cause unknown	2	12.6
Endocrine, Nutritional, Metabolic	2	12.6
Conditions Originating in Perinatal Period	2	12.6
Diseases of the Respiratory System	1	6.3
Injury - intent undetermined	1	6.3
Infectious Diseases	1	6.3
Diseases of the Nervous System	1	6.3
Total	27	169.6

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 Syndrome (SIDS)

Figure 5A shows the three-year moving average rates for Sudden Infant Death Syndrome (SIDS) from 1977 to 2010. There was a consistent decline in SIDS rates until 1999. In 2004, there was one case of SIDS in the 29 days to one-year age group. There were no cases of SIDS in 2005 or 2006; all cases were classified as Sudden Unexplained Infant Death (SUID). There was one case classified as SIDS in 2008, two in 2009 and three in 2010.

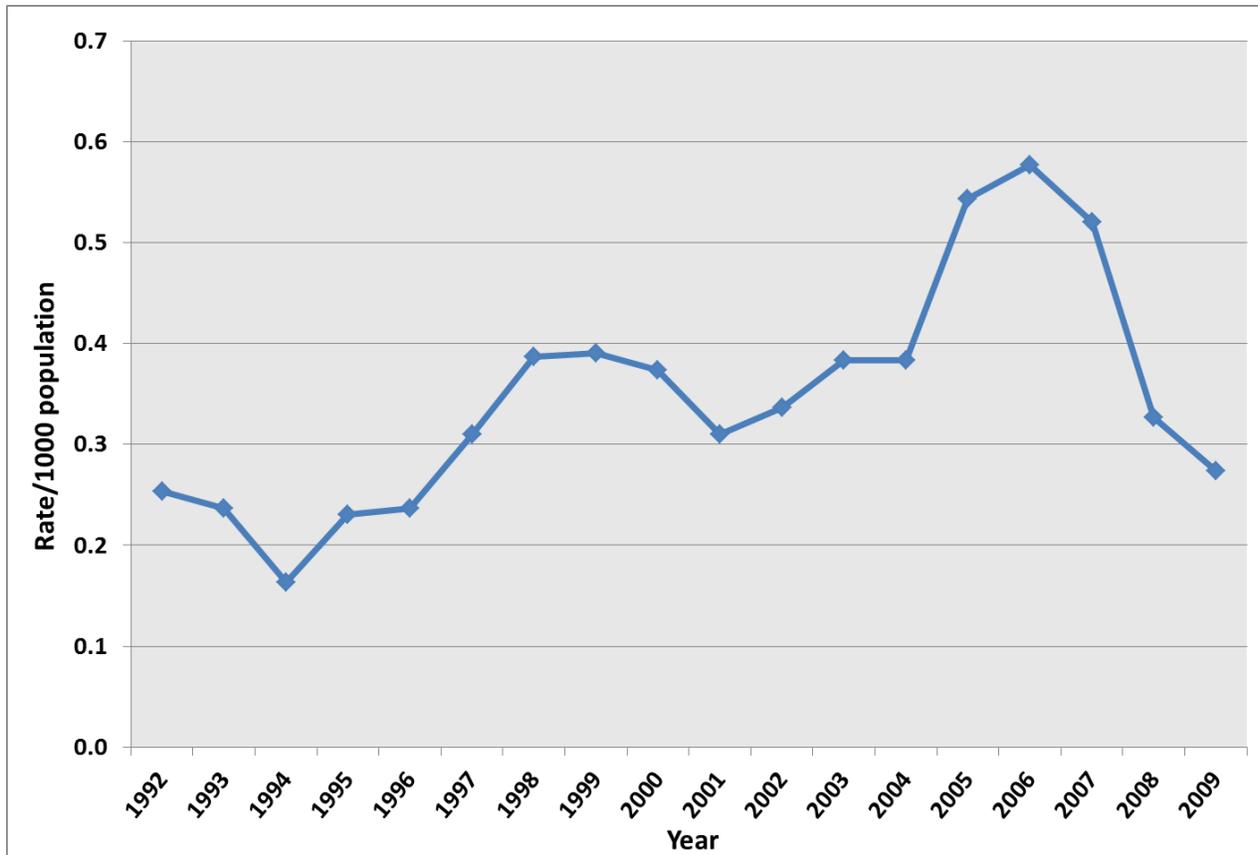
Figure 5A – SUDDEN INFANT DEATH SYNDROME (SIDS)
In Children 29 Days to 1 Year (Three-Year Moving Average)



Sudden Infant Death Syndrome (SIDS) Continued

Figure 5B shows the three-year moving average rates for Sudden Unexpected Infant Death (SUID) from 1992 to 2010. Data for 2010 are included in the 2009 three-year average (2008-2010). In 2010, there were seven cases of SUID in the 29 days to one-year age group.

Figure 5B – SUDDEN UNEXPECTED INFANT DEATH (SUID)
In Children 29 Days to 1 Year (Three-Year Moving Average)

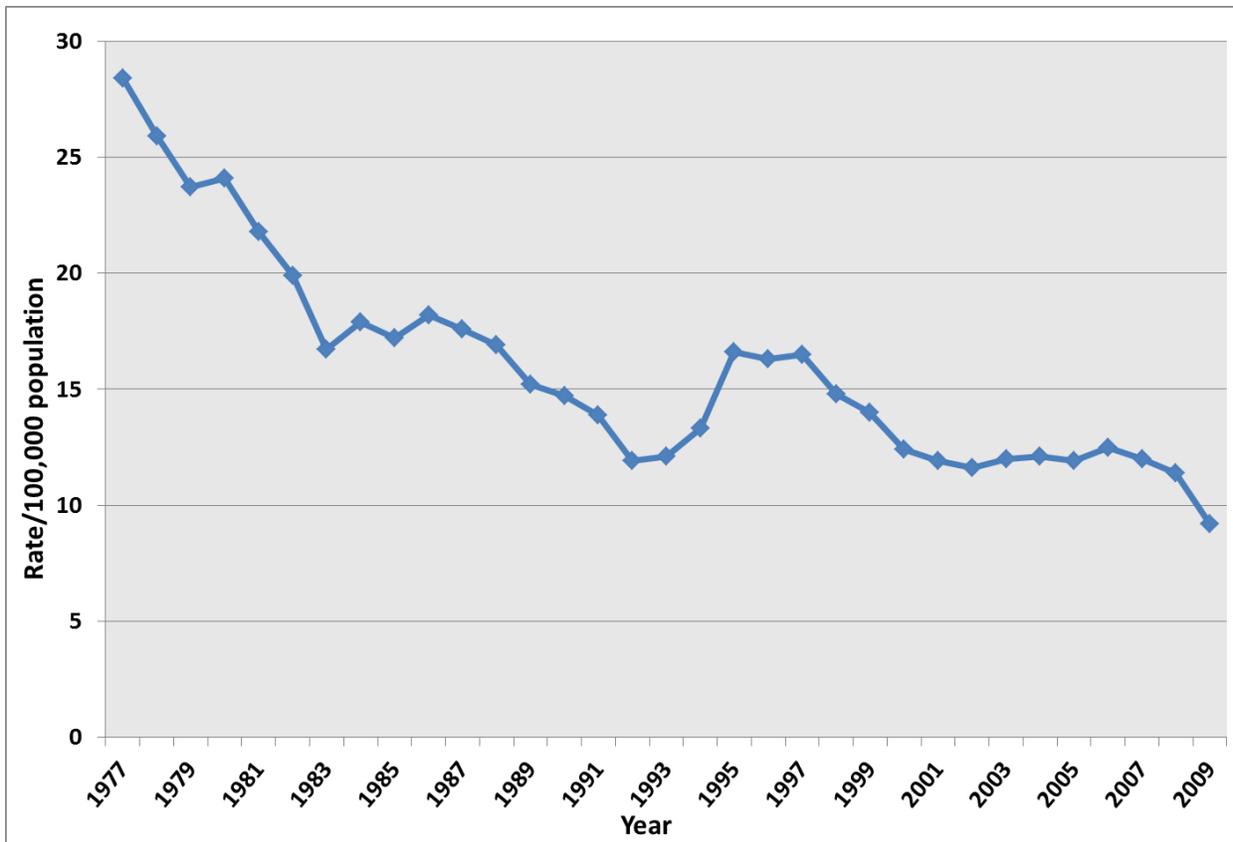


Among the ten SIDS and SUID cases, five were in adult beds, two were on sofas, one was placed in a playpen and two were in cribs. Four infants were sharing a sleep surface (bed or sofa). Three infants were documented as having been put to sleep on their back and two were placed prone, with the remainder unknown. All but one of these infants had modifiable risk factors for SIDS, SUID or suffocation/entrapment.

Deaths from Injury - Trends

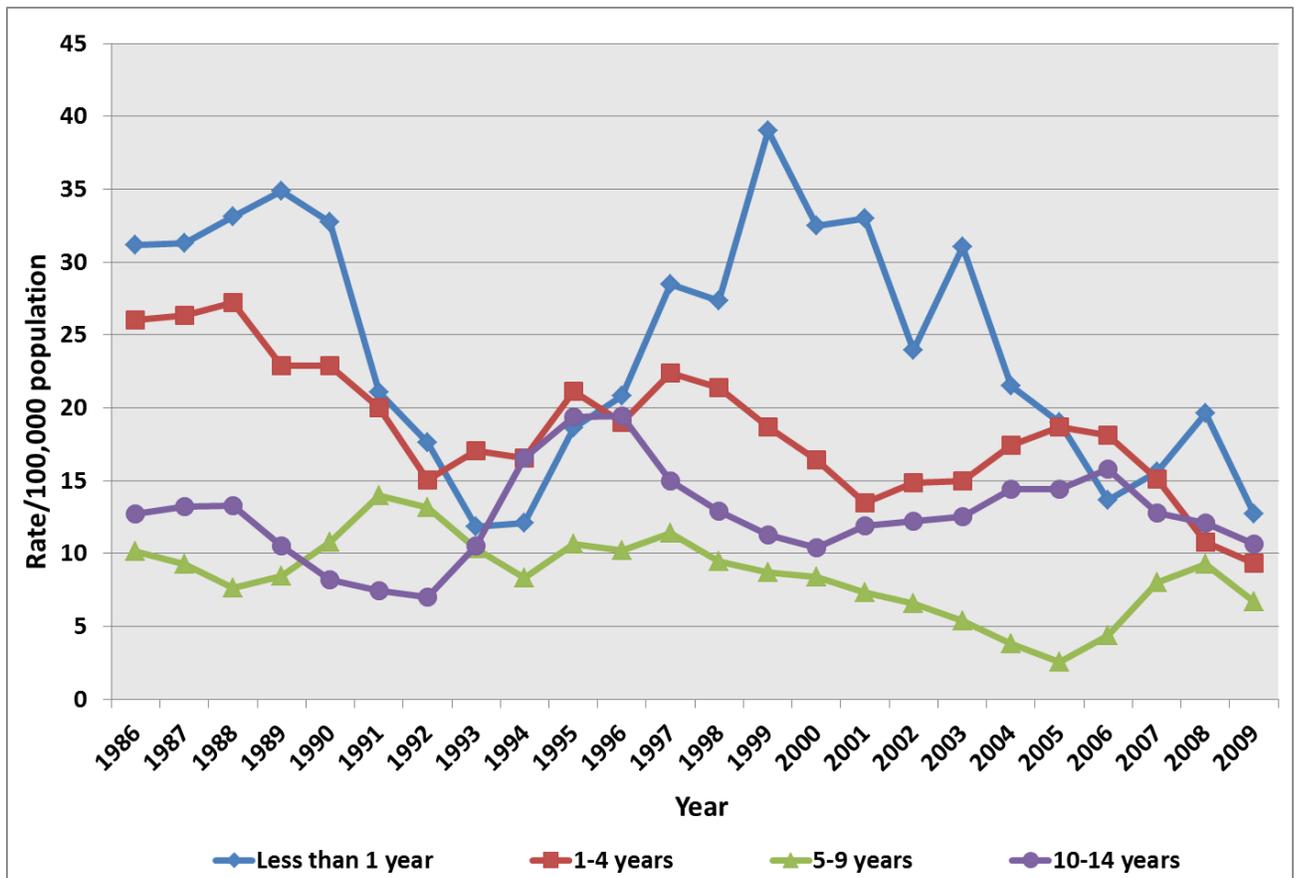
Figures 6A and 6B show the three-year moving average rates for injury deaths (unintentional and intentional combined) for children 29 days to 14 years of age. Data for 2010 are included in the 2009 three-year average (2008-2010).

Figure 6A - MORTALITY RATES FROM INJURY
In Children 29 Days to 14 Years (Three-Year Moving Average)



Deaths from Injury - Trends Continued

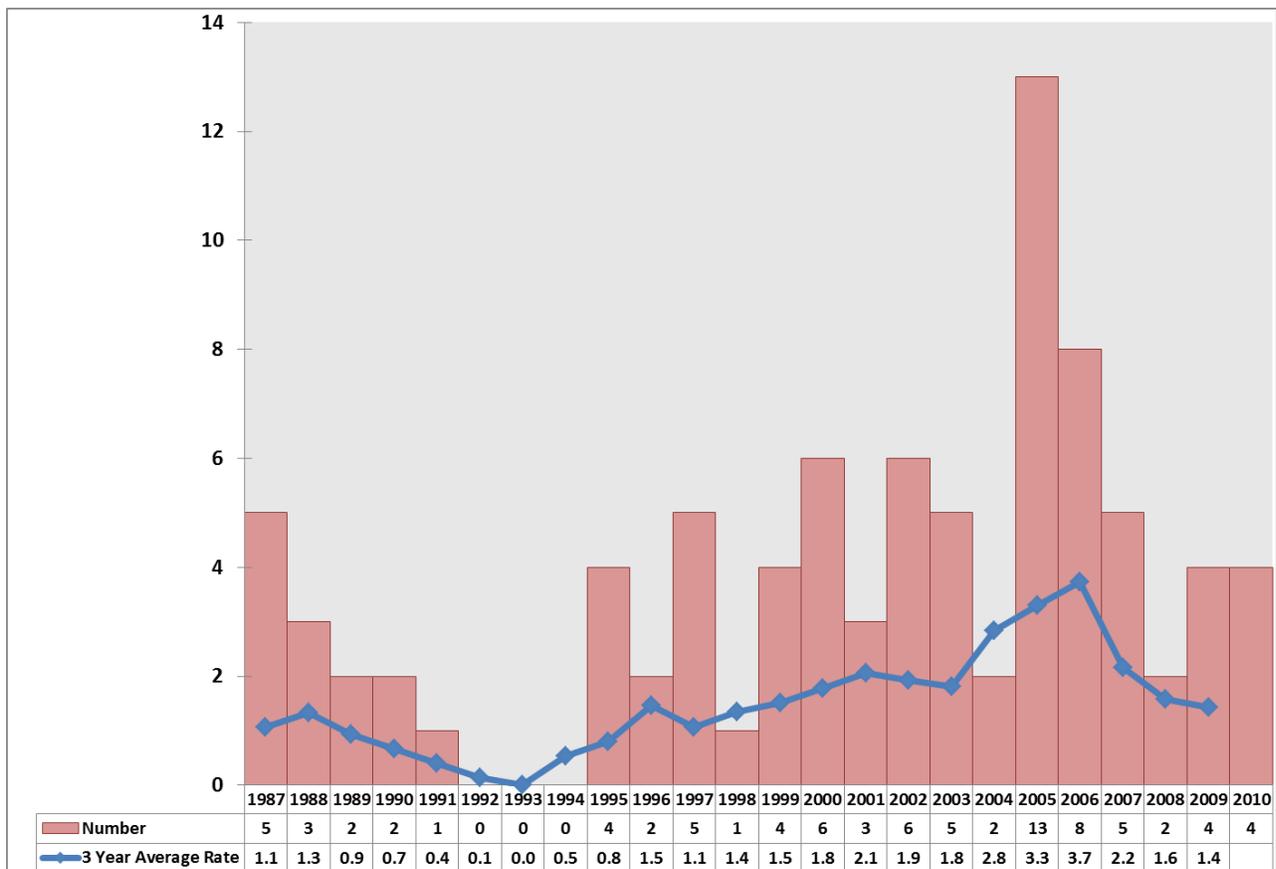
Figure 6B - MORTALITY RATES FROM INJURY BY AGE GROUP
 In Children 29 Days to 14 Years (Three-Year Moving Average)



Deaths from Injury – Trends Continued

Figure 6C 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 2010 are included in the 2009 three-year average (2008 to 2010). 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 2010 as compared to the peak in 2005.

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



Deaths from Injury – Trends Continued

In 2010, there were 17 deaths due to injury among Manitoba children 14 years of age and under. Injuries caused 28% of all deaths of children between 29 days and 14 years of age (17 of 59).

Age Group	Number of Deaths	Population	Rate/100,000	Three-Year Average 2008-2010
29 days - <1 year	1	15,924	6.3	12.7
1 - 4 years	6	62,878	9.5	9.3
5 - 9 years	1	75,138	1.3	6.7
10 - 14 years	9	80,542	11.2	10.6
Total	17	234,482	7.3	9.2

Unintentional			Intentional		
Cause	Number	Rate/100,000	Cause	Number	Rate/100,000
House Fire	3	1.3	Suicide	4	1.7
Motor Vehicle passenger	2	0.9	Homicide	1	0.4
Drowning	1	0.4	Total	5	2.1
Cyclist	1	0.4	Undetermined		
Off road vehicle driver	1	0.4	Cause	Number	Rate/100,000
Motor Vehicle driver	1	0.4	Fall	1	0.4
Poisoning	1	0.4			
Hypothermia	1	0.4			
Total	11	4.7			

There were 11 deaths related to unintentional injuries and 5 deaths related to intentional injuries (four suicides and one homicide). For one injury death the intent was undetermined.

The most common cause of unintentional injury death was house fires. Three children died as a result of house fires. In two incidents children were playing with a candle or lighter. In the third incident, arson was suspected.

Five children died as a result of transport injuries. One child passenger restrained in a car seat died in a high speed vehicle motor collision. One unrestrained youth was ejected in a single vehicle collision. An unlicensed and unrestrained driver lost control of a vehicle and was ejected. An un-helmeted cyclist was struck by a truck. A child operating an ATV lost control and rolled the vehicle. No helmet was in use.

Deaths from Injury – Trends Continued

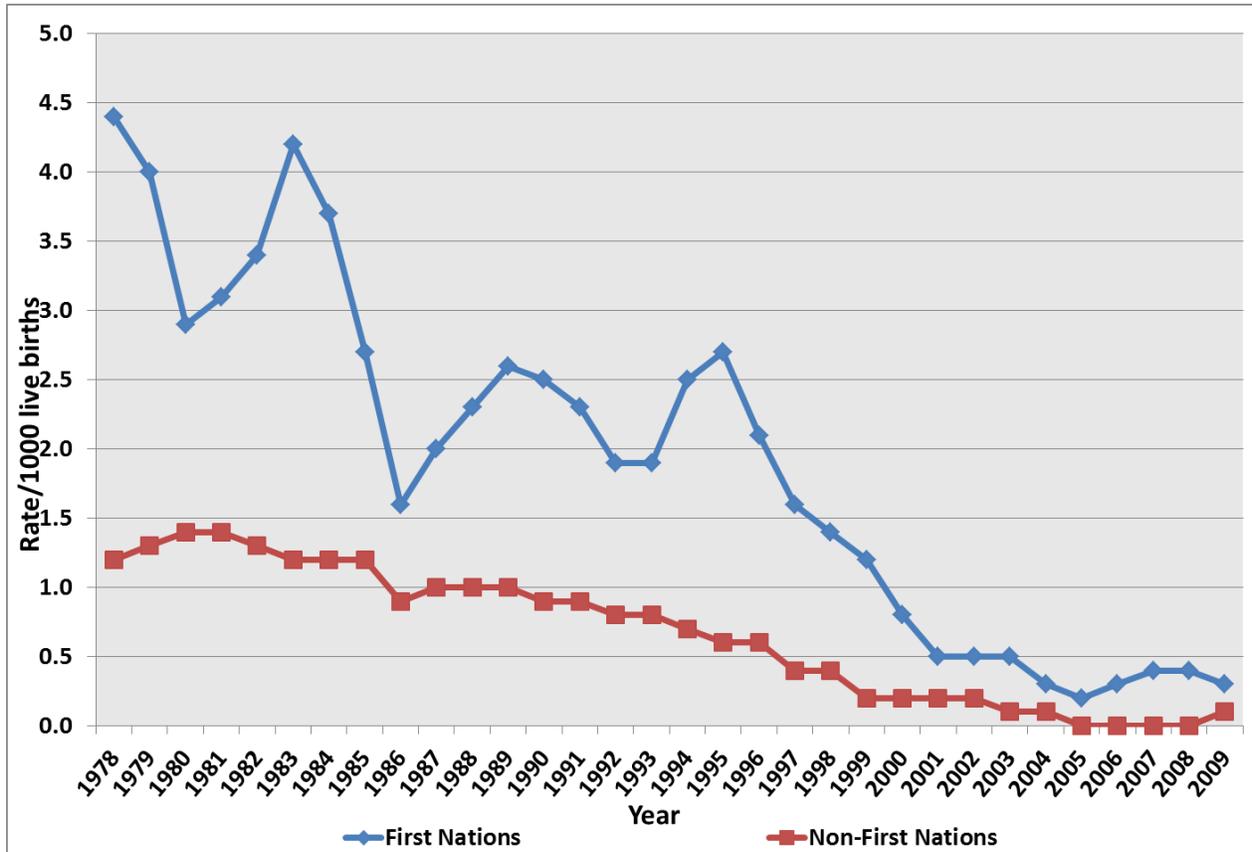
One young child drowned in a residential pool. There was no fence and no Personal Flotation Device in use.

Four children less than 15 years of age committed suicide in 2010. Two were First Nations children and both were living on reserve.

One child died related to inflicted injuries.

Selected Cause-Specific Mortality – First Nations Children

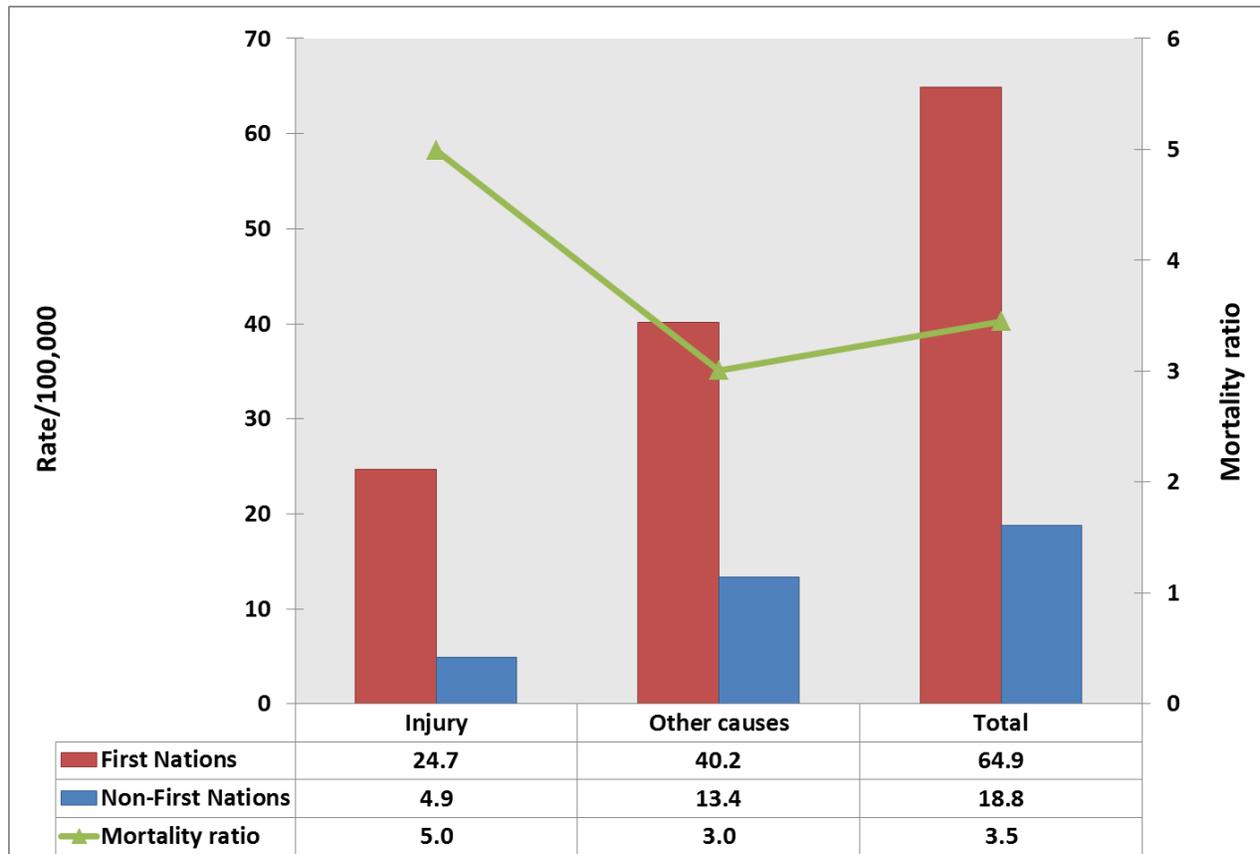
Figure 7 – SUDDEN INFANT DEATH SYNDROME
FIRST NATIONS vs. NON-FIRST NATIONS (Three-Year Moving Average)



SIDS rates have been declining for all Manitoba children since the late 1970s. The gap between First Nations and non-First Nations rates has been steadily declining over this time period. In 2003 First Nations children had a 2.5-fold increased risk of SIDS when compared to non-First Nations children. In 2004 the only SIDS death was a First Nations child. In 2005 and 2006 there were no cases of SIDS. In 2007 there were two cases of SIDS, both First Nations. In 2008 there was one case of SIDS in a First Nations child. In 2009 there were two SIDS cases, neither in First Nations children. In 2010 there were three SIDS cases, one in a First Nations child. **Figure 7** illustrates the three-year average rates; however the very small number of cases in recent years should be noted.

Selected Cause-Specific Mortality – First Nations Children Continued

Figure 8 – MORTALITY RATES FROM INJURY
FIRST NATIONS vs. NON-FIRST NATIONS In Children 29 Days to 14 Years



First Nations children had an elevated risk of death for all causes combined, with 3.5 times the rates experienced by non-First Nations children. For injury, there was a 5-fold increased risk of death. These differences in mortality are slightly less compared to 2009.

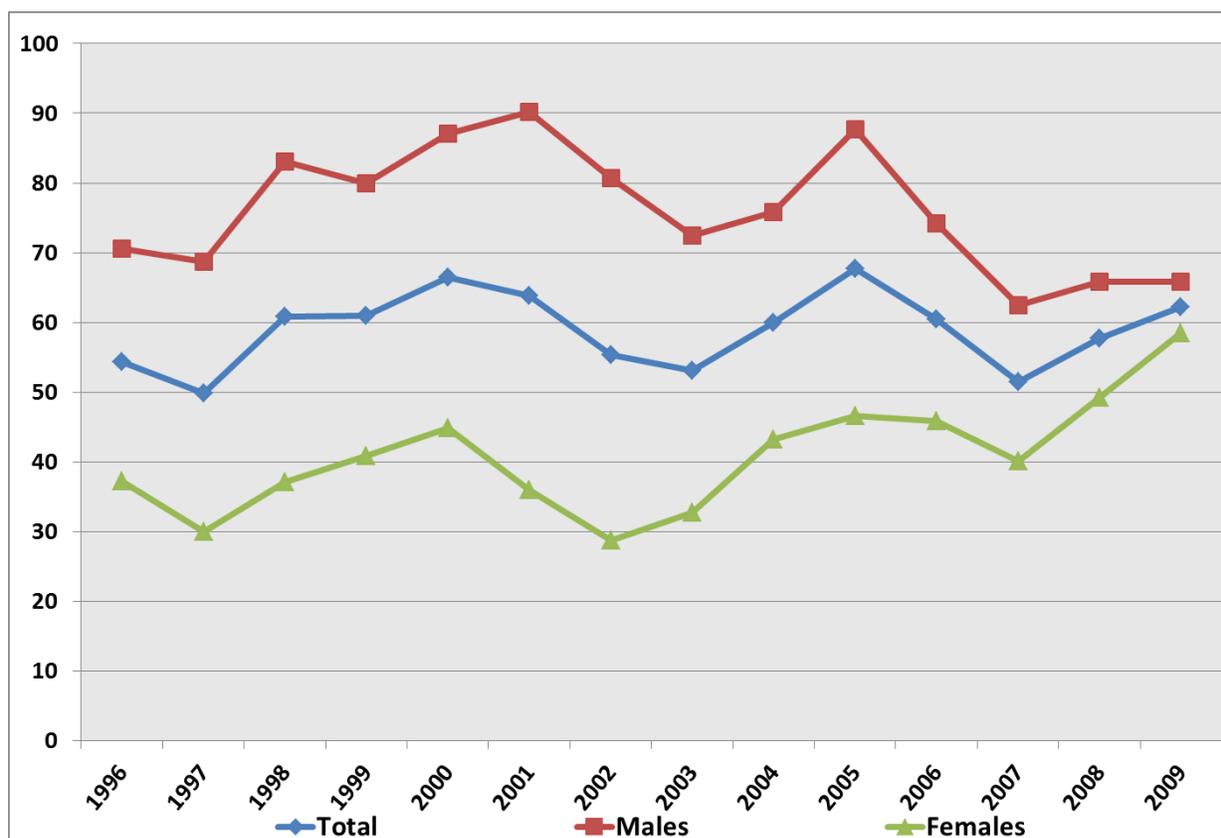
Autopsies

In 2010, 43 of the 59 Manitoba children who died between the ages of 29 days and 14 years had an autopsy (73%). Among teens 15 to 17 years of age, 27 of 31 had autopsies (87%).

4. Teen Deaths, 15 to 17 Years

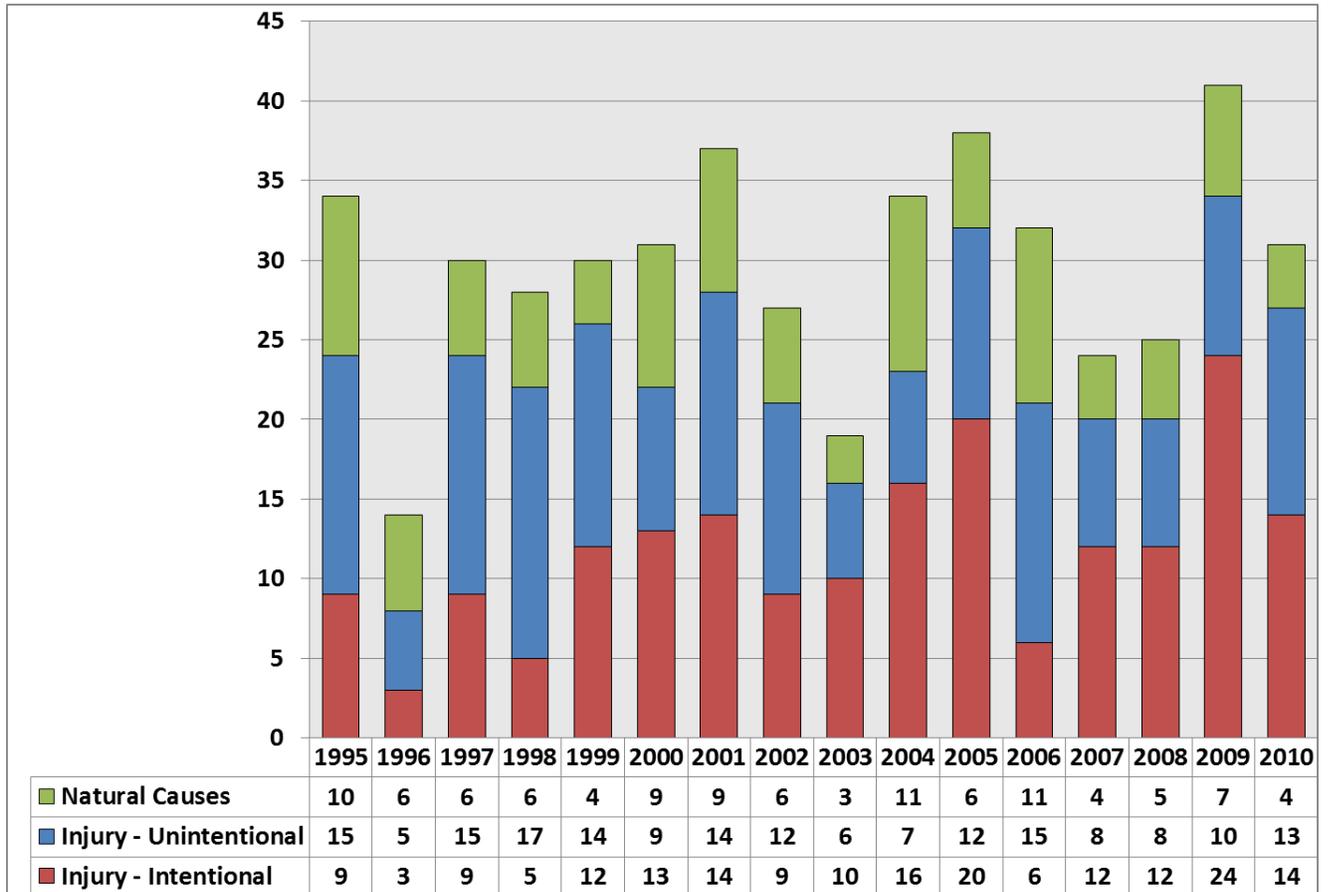
Since 1994, the Child Health Standards Committee has reviewed deaths of Manitoba youth 15 to 17 years of age. The death rate in 2010 was 59.1 per 100,000, slightly lower than the three-year average rate of 62.2 per 100,000. Male mortality rates are consistently higher than females, though the gap has narrowed significantly over the past several years. **Figure 9** shows mortality rates by gender. **Figure 10** shows the proportion of deaths due to injury and other causes.

Figure 9 - MORTALITY RATES
In Teens 15-17 Years of Age (Three-Year Moving Average)



Teen Deaths Continued

Figure 10 – NUMBER OF DEATHS BY CAUSE (INJURY VS. NATURAL CAUSES)
In Teens 15-17 Years of Age, 1995-2010



There were 16 First Nations teens who died in 2010. First Nations teens were 8.4 times more likely to die than other Manitoba teens and accounted for 52% of teen deaths in Manitoba. Mortality rates off-reserve were 1.3 times higher than on-reserve for this age group.

Teen Deaths Continued

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

Table 9 – CAUSES OF DEATH in Teens 15 to 17 years		
	Deaths	Rate per 100,000
Injury	27	51.5
<i>Unintentional Injury</i>	13	24.8
<i>Intentional Injury*</i>	14	26.7
Neoplasms	2	3.8
Nervous System Diseases	1	1.9
Diseases of the musculoskeletal system	1	1.9
Total	31	59.1

Table 10 – TYPES OF INJURY CAUSING DEATH in Teens 15 to 17 Years					
Unintentional			Intentional		
	Cases	Rate/100,000		Cases	Rate/100,000
Motor Vehicle	8	15.3	Homicide	3	5.7
Hypothermia	1	1.9	Suicide	11	21.0
Poisoning	1	1.9			
House Fire	1	1.9			
Choking/Suffocation	1	1.9			
Other	1	1.9			
Total	13	24.8	Total	14	26.7

Teen Deaths Continued

In 2010, 27 of the 31 teen deaths were due to injuries. Alcohol was a factor in 8 of the 13 unintentional deaths. Motor vehicle collisions were the leading cause of unintentional injury death; alcohol, speeding, and dangerous driving were implicated in these crashes. One teen was the driver in a fatal motor vehicle collision; the remaining deaths were passengers. A lap-shoulder belt or lap belt was used in two of the eight cases. Alcohol was implicated as a factor in four crashes. One teen died in a bicycle-motor vehicle collision. No helmet was in use. Three additional alcohol-related deaths included one death due to hypothermia, one due to poisoning and one due to a house fire.

There were 14 intentional injury deaths, including 11 suicides and 3 homicides. Ten of the suicides were by hanging. Ten of the suicides and one of the homicides were First Nations teens.

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 2010, 17 of the 59 childhood deaths were deemed to have a preventable cause. All were injuries (including unintentional injuries, suicide, and homicide). Ten cases were theoretically preventable and included nine cases of SIDS/SUID and one case of late effects related to a perinatal infection.

(ii) Preventable Outcome

Ten cases had a theoretically preventable outcome, including five cases where there was a delay in seeking care, three cases where children died in house fires while other occupants were able to escape and survive, one case where a condition diagnosed earlier in life could have altered the outcome, and one case where the parent or guardian could have modified the outcome with better supervision.

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 2010, 27 of the 31 teen deaths were judged to have a preventable cause. All of the preventable deaths were due to trauma (injury), homicide or suicide.

(ii) Preventable Outcome

Six deaths were classified as having a theoretically preventable outcome, including two cases of suicide that were the subject of an inquest, and four cases where action by the parent or guardian could have prevented the outcome. In three of the latter cases alcohol was a significant factor.

Educational and Other Actions

The Child Health Standards Committee took educational action for 5 cases in 2010. An additional 9 actions taken by other Standards Committees were reviewed by the committee. An inquest was called for two cases of suicide.

Table 11 - EDUCATIONAL ACTIONS	
Action Taken	
Physician Providers	2
Health Administrators	0
Referrals to other agencies/organizations	3
Total number of actions	5

6. *Recommendations*

The Child Health Standards Committee had the following recommendations related to child health in 2010:

1. Facilities providing paediatric emergency care comply with current paediatric triage guidelines and ensure that staff members are aware of paediatric equipment and procedures.
2. Healthcare providers should be familiar with current guidelines for paediatric resuscitation.
3. The committee supports the work of regional and provincial partners who are developing safe sleep guidelines, policies, and public education.
4. Parents should not use cough and cold products, including drugs and natural health products, in children less than 6 years of age.
5. A Pediatric Immunology specialist should be recruited to facilitate coordinated care for children with suspected or confirmed immune system disorders.

CHILD HEALTH STANDARDS COMMITTEE

COMMITTEE MEMBERS (2010)

Dr. J. Embree, Paediatric Infectious Disease
Dr. C. Littman, Pathologist
Dr. R. Smith, Paediatrician
Dr. G. Lemoine, General Practice
Dr. M. Feierstein, Paediatrician
Dr. T. Drews, Paediatrician
Dr. J. Strong, Paediatrician
Dr. I. Bratu, Paediatric Surgeon

ADMINISTRATIVE STAFF (2010)

Dr. L. Warda, Paediatrician, Medical Consultant
Dr. T. Babick, Family Physician, Deputy Registrar, CPSM
Ms M. Myers, Administrative Assistant, Child Program, CPSM

CURRENT ADMINISTRATIVE STAFF (2013)

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