

# Child Health Standards Committee

2017 Mortality Review

# 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

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 mortality reviews are typically published several years after the date of death. This report summarizes deaths which occurred in 2017.

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

- The Child Health Standards Committee (CHSC) reviewed 99 deaths which occurred in 2017. 62 were children 29 days to 14 years of age, 27 were teens 15 to 17 years of age, three were infants less than 29 days of age and seven were children whose place of residence was out of province.
- The mortality rate for Manitoba children aged 29 days to 14 years was 24.2 per 100,000 in 2017, compared to 26.6 per 100,000 in 2016 and 27.8 per 100,000 in 2015. The mortality rate for Manitoba teens 15 to 17 years of age was 53.8 per 100,000 in 2017 compared to 47.6 per 100,000 in 2016 and 33.7 per 100,000 in 2015.
- The infant mortality rate was 5.3 per 1,000 live births in 2017, slightly lower than the rate of 5.7 per 1,000 live births in 2016.
- The cause of death was classified as preventable for 22 of the 62 child deaths (35%) and 24 of the 27 teen deaths (89%). Injury (unintentional injury, suicide, homicide) accounted for all of the preventable deaths.
- Injury was the leading cause of death overall, accounting for 35% of deaths among children and 89% of deaths among teens. In children 29 days to 14 years of age, the most common causes of injury-related mortality were suicide, drowning, and motor vehicle collisions. The most common causes of injury-related mortality in teens were suicide, followed by homicide, drowning and hypothermia.
- There were 20 suicides in 2017, compared to 14 in 2016 and 2015. In 2017, 15 suicides were teens 15 to 17 years of age and five were 14 years of age or younger.
- The CHSC initiated educational action with seven physicians with respect to medical care provided. Six referrals were made to health administrators, professional bodies, other organizations or government departments. The committee reviewed additional actions taken by other standards committees.

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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 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.

**Sudden infant death syndrome (SIDS**): infant deaths that cannot be explained after a thorough case investigation, including a scene investigation, autopsy, and review of the clinical history.

**Sudden unexpected infant death (SUID):** a sudden and unexpected death, whether explained or unexplained (including SIDS), occurring during infancy.

**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 of Manitoba. 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 Mortality Reviews 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.

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 (RHAs). On June 1, 2012, the previous 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**

The following newsletter item was published by the committee in 2017:

• Recommendations from the Child Health Standards Committee related to child health

## **Other Committee Activities**

The CHSC conducted the following Morbidity/Mortality audit in 2017:

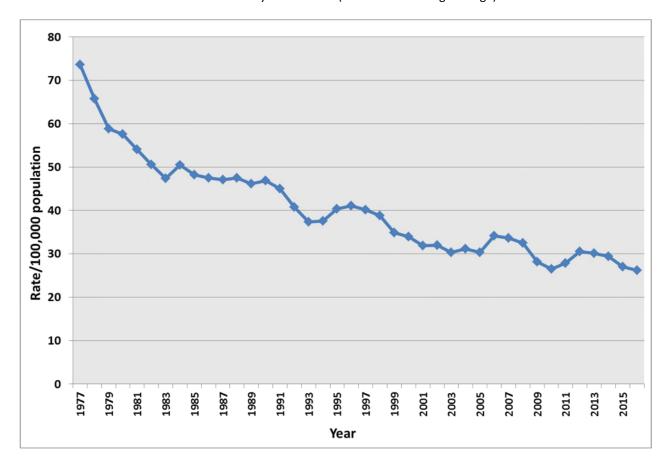
• Suicide: Children and Teens

The CHSC advocated for the following issues in 2017:

- Safe sleep guidelines, policies and public education
- Sepsis identification and management protocols
- Access to mental health care services for children and youth

#### **Mortality Rates**

**Figure 1** shows the three-year moving average trends in pediatric mortality from 1977 to 2017 for Manitoba residents. *The 2017 data are included in the three-year moving average reported as 2016.* 



**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 2017							
Age Group	Number of Deaths	Population	Rate/100,000	Three-Year Average (2015-2017)			
29 days to <1 year	21	16,838	124.7	133.1			
1 to 4 years	14	69,370	20.2	26.9			
5 to 9 years	11	87,390	12.6	10.5			
10 to 14 years	16	82,266	19.4	20.2			
Total 29 days to 14 years	62	255,864	24.2	26.2			
15 to 17 years	27	50,191	53.8	45.0			

Table 2 - MORTALITY RATES BY SEX 2017							
Sex (Age Group)	Number of Deaths	Population	Rate/100,000	Three-Year Average (2015-2017)			
Male (29d to 14y)	40	131,188	30.5	28.9			
Female (29d to 14y)	22	124,676	17.6	23.4			
<b>Male</b> (15y to 17y)	18	25,905	69.5	53.9			
Female (15y to 17y)	9	24,286	37.1	35.6			

# **Infant Mortality Rates**

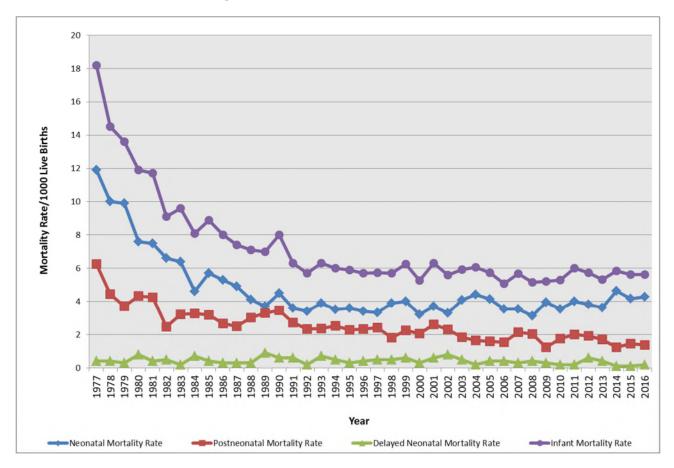
In 2017 there were 89 infant deaths according to Vital Statistics (0-1 yr). There were 21 deaths in the Manitoba population between 29 days and one year of age. The number of live births for Manitoba residents was 16,656. This gives a post-neonatal infant mortality rate of 1.3 per 1,000 live births. There were 68 neonatal deaths in the first 28 days of life, excluding non-residents. The neonatal mortality rate was 4.1 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 slightly lower than rates in recent years. These figures include neonates weighing <500 grams born alive.

Notes: (1) The above numbers include all live births and neonatal deaths (hospitals and other locations). (2) In previous years, live births and neonatal deaths were provided by Manitoba Health. These data are no longer available, so the Manitoba Vital Statistics Annual Report 2016/17 was used for live birth and neonatal death data. See <a href="https://vitalstats.gov.mb.ca/pdf/2017\_vs\_annual\_report\_en.pdf">https://vitalstats.gov.mb.ca/pdf/2017\_vs\_annual\_report\_en.pdf</a>.

#### CHILD HEALTH STANDARDS COMMITTEE MORTALITY REVIEW 2017

#### Infant Mortality Rates Continued

**Figure 2** shows Manitoba infant mortality rates over time. Also plotted are neonatal, postneonatal 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 2017, two 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.



#### **Figure 2 – INFANT MORTALITY RATES**

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# 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	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
New Brunswick	3.2	5.8	3.4	3.5	5.7	4.7	4.1	4.0	5.1	2.8
Prince Edward Island	2.0	3.4	3.6	4.2	3.5	2.3	1.4	2.1	7.1	3.0
British Columbia	3.7	3.6	3.8	3.9	3.8	3.7	4.3	3.3	3.4	3.1
Quebec	4.3	4.4	5.0	4.5	5.0	4.9	4.4	4.8	4.3	4.0
Nova Scotia	3.5	3.4	4.6	4.9	4.6	3.3	4.5	4.1	4.9	4.0
Newfoundland	5.1	6.3	5.3	6.3	5.5	6.6	6.2	4.7	4.3	4.4
Canada	5.1	4.9	5.0	4.9	4.8	4.9	4.7	4.5	4.5	4.5
Ontario	5.3	5.0	5.0	4.7	4.9	4.8	4.6	4.4	4.7	4.7
Alberta	6.2	5.5	5.9	5.2	4.3	5.3	5.1	4.7	4.4	4.9
Northwest Territories	9.7	15.5	1.4	7.2	4.4	7.5	6.2	6.1	6.2	4.9
Saskatchewan	6.2	6.7	5.9	6.8	5.5	7.4	5.9	5.3	5.8	6.6
Manitoba	6.5	6.3	6.7	7.7	5.9	5.7	6.2	6.4	5.5	7.2
Nunavut	16.1	14.8	14.5	28.7	21.4	18.2	16.8	12.2	17.7	11.1
Yukon	5.4	7.8	5.2	n/a	2.2	2.3	5.0	9.8	6.8	n/a

Source: Statistics Canada. Table 13-10-0713-01 Infant deaths and mortality rates, by age group. www150.statcan.gc.ca

# **Regional Mortality Rates**

**Table 4** shows mortality rates by Regional Health Authority (RHA). Note that updated RHA boundaries have been used in our reports since 2013.

Table 4 - REGIONAL MORTALITY RATES 2017In Children 29 Days to 14 Years							
RHA	Number of Deaths	Population	Rate per 100,000	Three-Year Average (2015-2017)			
Northern	19	22,776	83.4	77.8			
Interlake-Eastern	5	22,603	22.1	31.2			
Southern	11	46,650	23.6	27.0			
Prairie Mountain	8	32,583	24.6	20.7			
Winnipeg	19	131,252	14.5	17.3			
All Manitoba	62	255,864	24.2	26.2			

Note: Data are presented in <u>descending order</u> of three-year average rates.

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# **Causes of Childhood Death**

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

Sixty-two deaths of Manitoba children 29 days to 14 years of age were reviewed. Injury was the leading cause of death and accounted for 35% of all deaths in this age group. The CHSC also reviewed seven deaths of children whose place of residence was out of province.

Table 5 - CAUSES OF DEATH 2017In Children 29 Days to 14 Years					
Cause of Death	Deaths	Rate per 100,000			
Injury Total	22	8.6			
Unintentional Injury	16	6.3			
Intentional Injury*	6	2.3			
SUID	10	3.9			
Nervous System	7	2.7			
Sudden death cause unknown	5	2.0			
Respiratory System	4	1.6			
Infectious Disease	3	1.2			
Perinatal Conditions	3	1.2			
Neoplasm	2	0.8			
Congenital Anomaly	2	0.8			
Endocrine and Metabolic Diseases	2	0.8			
Diseases of the Circulatory System	1	0.4			
Diseases of the Digestive System	1	0.4			
Total	62	24.2			

\*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 Manitobaresidents 29 days to one year of age.

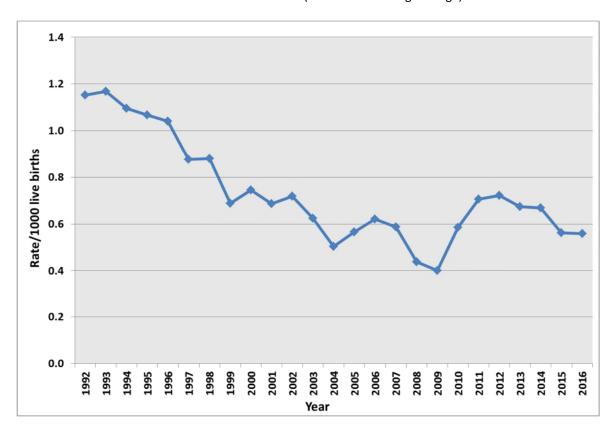
Table 6 – CAUSES OF POST-NEONATAL INFANT DEATH         In Children 29 Days to 1 Year					
Cause of Death	Deaths	Rate per 100,000			
SUID	10	59.4			
Perinatal Conditions	3	17.8			
Respiratory Diseases	2	11.9			
Diseases of the Nervous System	2	11.9			
Injury - Total	2	11.9			
Injury - unintentional	1	5.9			
Injury - intentional	1	5.9			
Congenital Anomaly	1	5.9			
Sudden death, cause unknown	1	5.9			
Total	21	124.7			

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 2017. There was a consistent decline in sudden infant death rates during this time period until 2010/2011 when the rates rose significantly, followed by a declining trend since 2012.

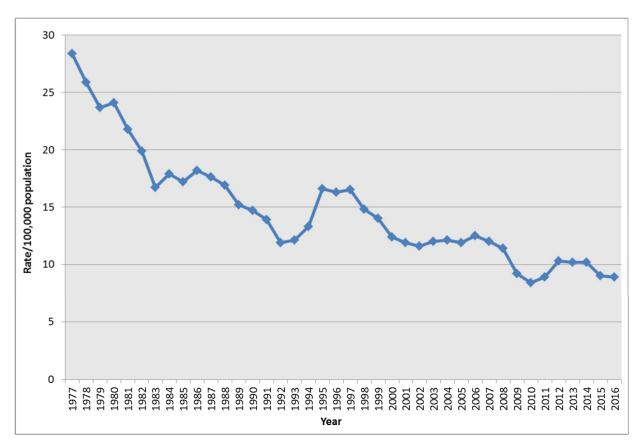
Among the 11 sudden infant death cases, 10 were classified as SUID and one was classified as suffocation/entrapment in the sleep environment. 7 were sleeping on beds or mattresses, 2 were sleeping in cribs, and two were sleeping in other devices/furniture. 6 infants were sharing a sleep surface. All had modifiable risk factors for SIDS, sudden unexpected infant death and/or suffocation and 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 2017 are included in the 2016 three-year average (2015-2017).



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

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## Deaths from Injury - Trends Continued

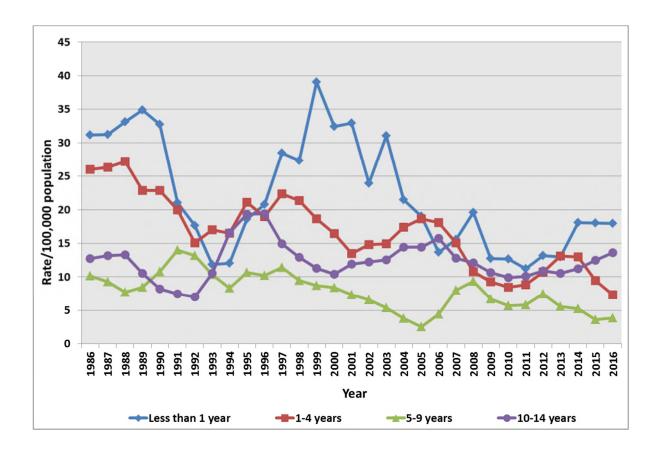
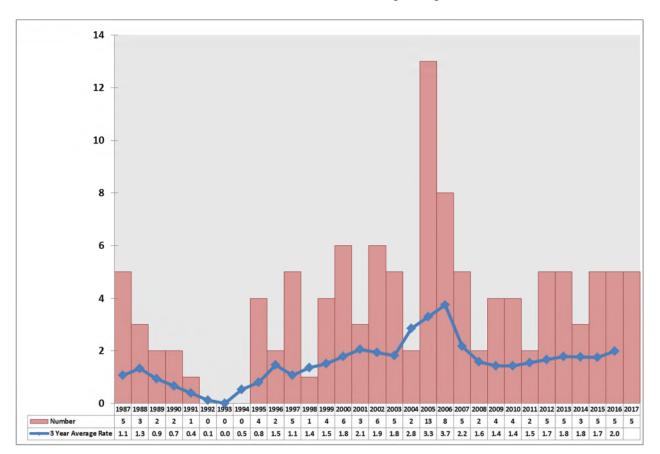


Figure 5 - MORTALITY RATES FROM INJURY BY AGE GROUP

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 2017 are included in the 2016 three-year average (2015 to 2017). The annual rates of suicide in this age group have been stable since 2008.





# Deaths from Injury - Trends Continued

In 2017, there were 22 deaths due to injury among Manitoba children 14 years of age and under. Injuries caused 35% of all deaths of children between 29 days and 14 years of age (22 of 62).

Table 7 – INJURY-RELATED MORTALITY RATES BY AGE GROUP 2017							
Age Group	Number of Deaths	Population	Rate/100,000	Three-Year Average 2015-2017			
29 days - 1 year	2	16,838	11.9	17.9			
1 - 4 years	6	69,370	8.6	7.3			
5 - 9 years	5	87,390	5.7	3.9			
10 - 14 years	9	82,266	10.9	13.6			
Total	22	255,864	8.6	8.9			

Table 8 – TYPES OF INJURY CAUSING DEATH 2017In Children 29 Days to 14 Years						
Unintentional/Undetermine	d		Intentional			
Cause	Number	Rate	Cause	Number	Rate	
Drowning	5	2.0	Suicide	5	2.0	
Motor Vehicle	4	1.6	Homicide	1	0.4	
Suffocation	3	1.2				
Off Road Vehicle	1	0.4				
Farm machinery	1	0.4				
Fall	1	0.4				
Firearm	1	0.4				
Total	16	6.3	Total	6	2.3	

#### **Deaths from Injuries**

There were 16 deaths related to unintentional injuries and 6 deaths related to intentional injuries (five suicides, one homicide).

Six children died related to transport injuries. Two were motor vehicle passengers, one was an ATV passenger and three young children were struck by vehicles. The two motor vehicle passengers were restrained and the ATV passenger was wearing a helmet.

Five children died due to drowning. Two were boating and one was swimming. Two children fell into water on or near their property.

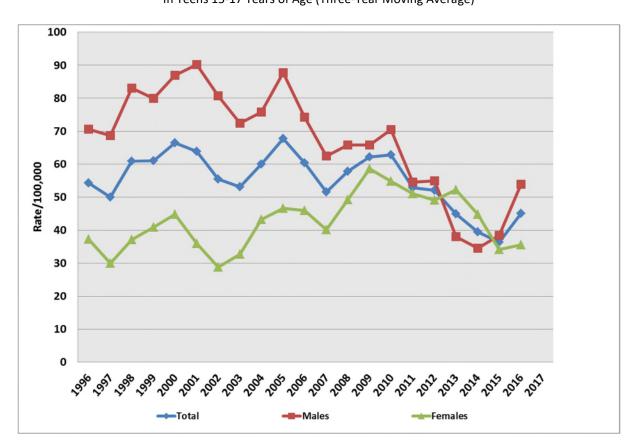
Three children died due to choking/suffocation/asphyxia, related to choking on food, entrapment by furniture and traumatic asphyxia related to building materials.

#### **Autopsies**

In 2017, 44 of the 62 Manitoba children who died between the ages of 29 days and 14 years had an autopsy (71%). Among teens 15 to 17 years of age, 26 of 27 had autopsies (96%).

Since 1994, the Child Health Standards Committee has reviewed deaths of Manitoba youth 15 to 17 years of age. The death rate in 2017 increased to 53.8 per 100,000, higher than the three-year average rate of 45.0 per 100,000. Male mortality rates were consistently higher than females until 2013, when for the first time since 1996, the three-year average mortality rates for females were higher than the rates for males (2012-2014 and 2013-2015). This trend reversed in 2015-2017, with males again having higher mortality rates than females.

**Figure 7** shows mortality rates by sex. **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

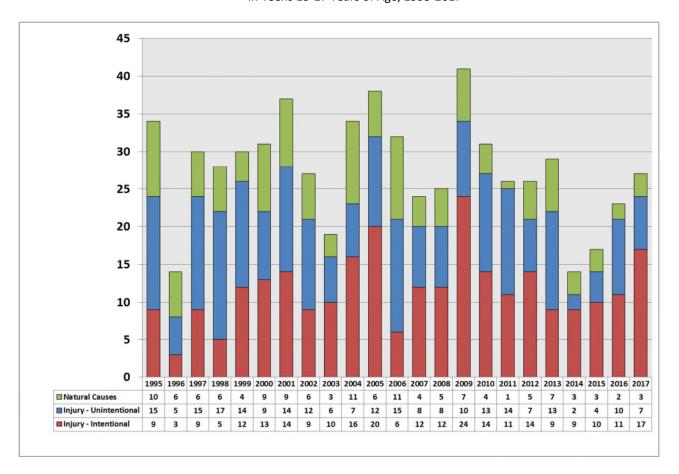


Figure 8 – NUMBER OF DEATHS BY CAUSE (INJURY VS. NATURAL CAUSES) In Teens 15-17 Years of Age, 1995-2017

# Teen Deaths Continued

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

Table 9 – CAUSES OF DEATH in Teens 15 to 17 years					
	Deaths	Rate per 100,000			
Injury	24	47.8			
Unintentional Injury	7	13.9			
Intentional Injury*	17	33.9			
Diseases of the Nervous System	1	2.0			
Diseases of the Cardiovascular System	1	2.0			
Sudden death, cause unknown	1	2.0			
Total	27	53.8			

\* Includes homicide and suicide

Table 10 – TYPES OF INJURY CAUSING DEATH in Teens 15 to 17 Years						
Unintentional			Intentional			
	Deaths	Rate/100,000		Deaths	Rate/100,000	
Drowning	2	4.0	Homicide	2	4.0	
Hypothermia	2	4.0	Suicide	15	29.9	
Motor Vehicle	1	2.0				
Poisoning	1	2.0				
Firearm	1	2.0				
Total	7	13.9	Total	17	33.9	

#### **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 the 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 2017, 22 of the 62 childhood deaths were deemed to have a preventable cause, all due to unintentional injuries, suicide, and homicide. Twelve cases were theoretically preventable, related to significant risk factors in the sleep environment (SUID), as well as two cases where earlier and more aggressive medical care could have modified the outcome. For four cases the preventability of the cause was unknown as the cause of death was unknown. Four cases were not classified at the time of writing this report.

#### (ii) Preventable Outcome

Eleven cases were classified as having a theoretically preventable outcome, including three cases where more aggressive care could have modified the outcome, and eight cases where the parent, guardian or bystander could have modified the outcome with better supervision, rescue or first aid. For four cases the preventability of the outcome was unknown. Four cases were not classified at the time of writing this report.

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 2017, 24 of the 27 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

Four cases were classified as having a theoretically preventable outcome, where closer adult supervision and/or the actions of peers could have altered the outcome in three cases, and in one case, management at a tertiary care facility may have impacted the outcome.

#### **Educational and Other Actions**

The Child Health Standards Committee took 13 educational or other actions for nine cases in 2017. Additional actions taken by other Standards Committees were also reviewed by the committee.

Table 11 - EDUCATIONAL AND OTHER ACTIONS				
Action Taken				
Physician Providers	7			
Health Administrators	2			
Referrals to other agencies/organizations	4			
Total number of actions	13			

# 5. Recommendations

The Child Health Standards Committee had the following recommendations related to child health in 2017:

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 any child who expresses suicidal ideation be referred for assessment, and mental health followup ensured, in particular when children are in the care of Child and Family Services.

# **CHILD HEALTH STANDARDS COMMITTEE**

#### **COMMITTEE MEMBERS (2017)**

- Dr. D. Beer, Paediatrician
- Dr. A. Goldberg, Paediatric Nephrologist
- Dr. K. Gripp, Paediatrician
- Dr. C. Littman, Pathologist
- Dr. S. Lum Min, Paediatric Surgeon
- Dr. S. Veroukis, Paediatrician
- Dr. T. Bodnarchuk, Paediatrician
- Dr. B. Magwood, Paediatrician

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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 (2020)**

Dr. L. Warda, Paediatrician, Medical Consultant

Dr. A. Mihalchuk, Family Physician, Assistant Registrar, CPSM

Mr. J. Martin, Administrative Assistant, Child and Maternal Standards, CPSM