



# Child Mortality in British Columbia

## 2014

Prepared by the Child Death Review Unit of the British Columbia Coroners Service

BC Coroners Service  
Ministry of Public Safety and Solicitor General

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# TABLE OF CONTENTS

## Introduction:

|   |   |
|---|---|
| About the Child Death Review Unit ..... | 1 |
| About This Report .....                 | 1 |

## Section One: Overview of Child Mortality in British Columbia

|   |   |
|---|---|
| Overview of Child Mortality in British Columbia ..... | 3 |
|---|---|

## Section Two: Characteristics of Child Deaths in 2014

### Child Deaths By Age Group ..... 8

|                                     |   |
|-------------------------------------|---|
| Deaths Under 12 Months of Age ..... | 8 |
|-------------------------------------|---|

|   |    |
|---|----|
| Deaths Between 1 and 4 Years of Age ..... | 10 |
|---|----|

|   |    |
|---|----|
| Deaths Between 5 and 9 Years of Age ..... | 11 |
|---|----|

|   |    |
|---|----|
| Deaths Between 10 and 14 Years of Age ..... | 12 |
|---|----|

|   |    |
|---|----|
| Deaths Between 15 and 18 Years of Age ..... | 13 |
|---|----|

### Child Deaths By Cause ..... 14

|                      |    |
|----------------------|----|
| Natural Causes ..... | 14 |
|----------------------|----|

|                     |    |
|---------------------|----|
| Injury Deaths ..... | 15 |
|---------------------|----|

|                           |    |
|---------------------------|----|
| Undetermined Deaths ..... | 17 |
|---------------------------|----|

### Children Receiving Services from the Ministry of Children and Family Development ..... 18

## Section Three: Child Death Review Panels & Recommendations Made by Local Coroners

|                       |    |
|-----------------------|----|
| Recommendations ..... | 19 |
|-----------------------|----|

## Appendix

|                            |    |
|----------------------------|----|
| BCCS Coroner Regions ..... | 23 |
|----------------------------|----|

# INTRODUCTION

## ABOUT THE CHILD DEATH REVIEW UNIT

By law, every child's death in British Columbia is reported to the Coroners Service, an agency within the Ministry of Public Safety and Solicitor General. Once the coroner's investigation is concluded, all deaths are additionally reviewed by the Coroners Service Child Death Review Unit (CDRU). Under the *Coroners Act (2007)*, the CDRU has a legislated mandate to review, on an individual or aggregate basis, the facts and circumstances of child deaths in British Columbia for the purposes of discovering and monitoring trends in child deaths, and determining whether further evaluation of the deaths of children is necessary or desirable in the public interest. In fulfilling its mandate the CDRU reviews child deaths considering the impact of public health and safety and how to prevent similar child deaths in the future.

## ABOUT THIS REPORT

### *Purpose*

This report presents findings of the 312 deaths of children occurring in British Columbia during 2014. This report consists primarily of descriptive data intended to characterize child mortality in British Columbia through demographics, causes and circumstances surrounding the death of these children.

This report summarizes recommendations distributed by the BCCS in 2014, but does not formulate new recommendations pertaining to policy, practices and services. Those will be included in future CDRU special reports, which will provide in depth discussion and analysis of specific causes of infant and child death.

### *Key terms*

The *Coroners Act* defines a **child** as a person under the age of 19 years. In some contexts, child mortality may be used to refer to deaths of infants and children under the age of five. For the purposes of this report, child mortality refers to the deaths of children under the age of 19, and children have been grouped by their age at the time of death as follows: neonate (0-28 days), infant (29 to 365 days), 1-4 years, 5-9 years, 10-14 years, and 15-18 years.

## ***Limitations and confidentiality***

Examining individual causes of child mortality in a given year in B.C. often involves analyzing and reporting on a relatively small number of events, which can present challenges both in protecting privacy and ensuring data accuracy. Under the *Coroners Act* and *Freedom of Information and Protection of Privacy Act*, provisions are made that allow the BC Coroners Service to disclose information to meet its legislative mandate and support the findings and recommendations generated by the review process. The BC Coroners Service is sensitive to the privacy of the children and families that we serve and proceeds with caution when reporting case review findings. Efforts have been made throughout the report to mitigate risks associated with analyzing and reporting on small case numbers, including collapsing data categories. In general, statistical results based on a small number of cases should be interpreted with caution given the potential for random variation.

Small discrepancies in mortality counts and rates may be evident between BCCS mortality data and that of BC Vital Statistics. This discrepancy is attributable to coding differences between the two agencies and the time delay involved in reconciling any changes between preliminary and final certifications of death. Small discrepancies could also arise with future reports as 26 cases were still under investigation at the time of writing.

Of note, there are slight variations between BC Coroners Service regions and the regional boundaries applied by other agencies in the province, including the Regional Health Authorities and the Ministry of Children and Family Development. A map and description of the BCCS regional boundaries is provided in Appendix A.

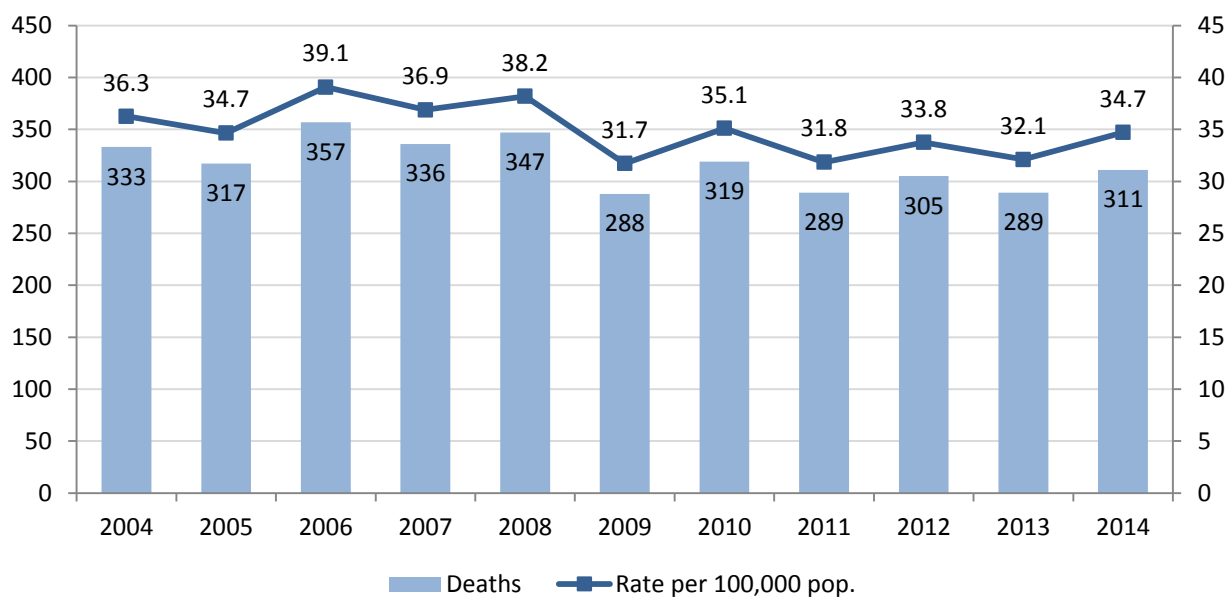
In this report mortality data is presented based on health authority boundaries. This is a change from previous BCCS reports and was done to improve use of BCCS findings for planning or delivering health services.

# OVERVIEW OF CHILD MORTALITY IN BRITISH COLUMBIA

Although tragic and devastating to the families, friends and communities, children’s deaths are a relatively rare event in British Columbia, especially beyond infancy. There were an estimated 896,483 children age 0-18 living in British Columbia in 2014, and 312 child deaths, a rate of death of 34.8 children per 100,000 population.

In September of 2007, a revision to the Coroners Act specified that all child deaths must be reported to the BCCS. As a result of this legislative change, a greater number of child deaths are investigated each year, beginning 2008, than in previous years. This increase is primarily in natural deaths. As the BCCS did not investigate all child deaths in BC until 2008, Figure 1 (below) uses British Columbia Vital Statistics Agency counts for child deaths by year for 2004 to 2014. However, BC Vital Statistics data and BCCS data are not directly comparable due to coding differences between the two agencies and the time delay involved in reconciling any changes between preliminary and final certifications of death.

**Figure 1. Child deaths, British Columbia, 2004-2014\***



\* This figure presents BC Vital Statistics Agency death data.

Identifying how children die each year in British Columbia provides valuable information on overall child mortality, and looking at child deaths in terms of specific causes and ages is particularly important when looking at any future preventative opportunities.

Patterns of mortality change from birth to adolescence. Children may experience changing risk exposure as they move through different ages and stages of development, resulting in a shift of leading causes of mortality from primarily biological conditions to predominantly injury causes. This is reflected

in Table 1 which lists the three most common causes of death within the different age groups identified in this report for 2014.

**TABLE 1**

| Leading causes of child death by age group, 0-18 years, BC, 2014 |   |   |   |                        |                        |
|--|---|---|---|------------------------|------------------------|
| Rank   | Under 1 year  | 1-4 years   | 5-9 years   | 10-14 years            | 15-18 years            |
| 1  | Perinatal causes  | Congenital and chromosomal anomalies, metabolic disorders | Cancers   | Unintentional injuries | Unintentional injuries |
| 2  | Congenital and chromosomal anomalies, metabolic disorders | Infections  | Injuries  | Cancers                | Suicide                |
| 3  | Sudden infant deaths of undetermined cause                | Injuries  | Congenital and chromosomal anomalies, metabolic disorders/Other | Suicide                | Homicide               |

*Notes:*

\* A forward slash ("/") indicates that there were the same number of deaths for each cause of death

\* "Other" has been used where there were multiple different means of death each accounting for two or less deaths.

In general, children are most vulnerable to illness or death during the neonatal period of infancy (Table 2). Following the neonatal period, mortality rates decline and remain lower throughout early childhood. Mortality rates increase once again as children approach adolescence, when injuries take over as the leading cause of child death.

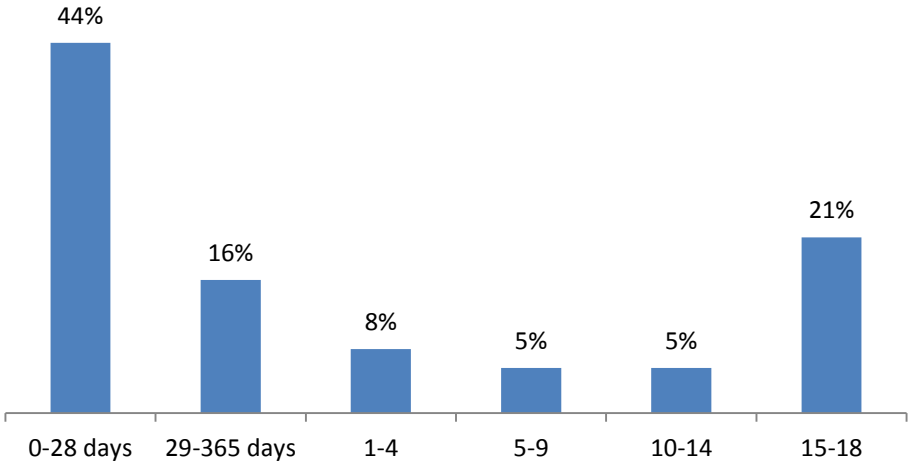
**TABLE 2**

| Child deaths by age group, 2014 |            |             |
|---------------------------------|------------|-------------|
| Age Group                       | Deaths     | Death Rate* |
| 0-28 days                       | 138        | 315.6       |
| 29-365 days                     | 50         | 114.4       |
| 1-4 years                       | 24         | 13.5        |
| 5-9 years                       | 17         | 7.5         |
| 10-14 years                     | 17         | 7.4         |
| 15-18 years                     | 66         | 30.4        |
| <b>Total</b>                    | <b>312</b> | <b>34.8</b> |

\* Death rate is per 100,000 live births for children less than 1 year, and per 100,000 population for children aged 1 to 18 years.

Overall, the greatest percentage of child deaths in 2014 were infants less than 29 days (44%), followed by children 15 to 18 years of age (21%) and infants 29 to 364 days (16%) (Figure 2).

**Figure 2.** Percentage of child deaths by age group, 2014



**Health Authority differences in child mortality in 2014**

In 2014, Fraser Health Authority had the highest percentage of child deaths (34%) in the province but the lowest child mortality rate (28.5 per 100,000 population). Northern Health Authority and Island

Health Authority had the highest child mortality rates (66.4 and 40.1 respectively per 100,000 population) (Table 3).

**TABLE 3**

| Child Deaths by Health Authority of Residence, 2014 |            |             |                       |
|---|------------|-------------|-----------------------|
| Region  | Deaths     | %           | Rate per 100,000 pop. |
| Fraser  | 105        | 34%         | 28.5                  |
| Vancouver Coastal                                   | 58         | 19%         | 29.7                  |
| Interior  | 44         | 14%         | 33.1                  |
| Island  | 53         | 17%         | 40.1                  |
| Northern  | 45         | 14%         | 66.4                  |
| Lived outside BC                                    | 7          | 2%          | n/a                   |
| <b>Total</b>  | <b>312</b> | <b>100%</b> | <b>34.8</b>           |

**BC Coroners Service Categorization of Deaths**

The BC Coroners Service categorizes child deaths into three main cause groups:

**Group One: Natural Causes**

Natural deaths refer to fatalities primarily caused by an internal disease process, such as an underlying medical condition or acquired illness, or from complications of the condition or treatment. In cases of natural death, the child is generally under the care of a physician and death is often expected. Occasionally, natural death is sudden and unexpected due to a previously undiagnosed medical condition or sudden unexpected deterioration.

**Group Two: Injury Causes**

Injury deaths include fatalities caused by damage to the body from external forces as well as when vital elements such as heat or oxygen are denied. Injury deaths are generally classified as **unintentional** (not purposely inflicted, such as death due to a motor vehicle crash), or as **intentional** (purposely inflicted by self or others, such as death due to suicide or homicide).

**Group Three: Undetermined Causes**

Undetermined causes include deaths that (because of insufficient evidence or inability to otherwise determine) cannot be reasonably categorized as natural or injury deaths. This includes some sudden infant deaths and fatalities due to other unknown or undetermined causes.

More natural deaths in childhood occur in hospital and health care facilities in larger, urban cities. In contrast, injury deaths occur throughout the province, on road systems, outdoors and in home settings,



with emergency medical transport to regional or urban centers for care. Undetermined deaths more commonly occur in the child’s home.

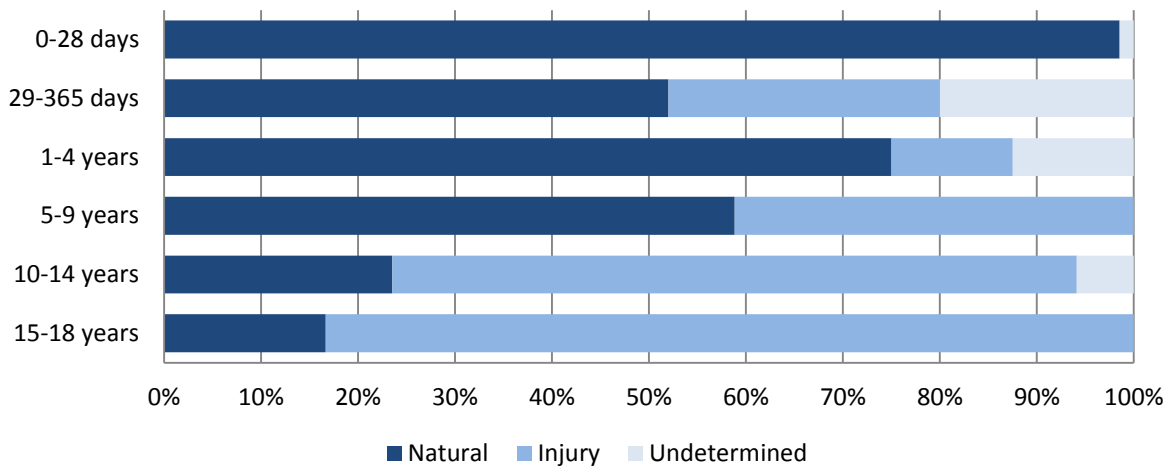
Table 4 shows that overall, natural causes of death comprise the greatest proportion of deaths involving children (66%) and that two thirds of all natural deaths occur in the first 28 days of life (66%). Injury deaths comprise the second greatest proportion of deaths involving children (29%) and more injury deaths occur in young people ages 15 to 18 (60%). Undetermined causes of death occur most often with infants (75%).

**TABLE 4**

| Child deaths by main cause and age group, 2014 |            |           |              |            |
|--|------------|-----------|--------------|------------|
| Age Group                                      | Natural    | Injury    | Undetermined | Total      |
| 0-28 days                                      | 136        | -         | 2            | 138        |
| 29-364 days                                    | 26         | 14        | 10           | 50         |
| 1-4 years                                      | 18         | 3         | 3            | 24         |
| 5-9 years                                      | 10         | 7         | -            | 17         |
| 10-14 years                                    | 4          | 12        | 1            | 17         |
| 15-18 years                                    | 11         | 55        | -            | 66         |
| <b>Total</b>                                   | <b>205</b> | <b>91</b> | <b>16</b>    | <b>312</b> |

Figure 3 shows that the cause of death varies considerably within different age groups.

Figure 3. Distribution of child deaths by main cause and age group, 2014



# SECTION TWO

## CHARACTERISTICS OF CHILD DEATHS

### DEATHS UNDER 12 MONTHS OF AGE

**Number of deaths:** 188 (77 Females, 111 Males)    **Mortality Rate:** 4.2/1,000 live births

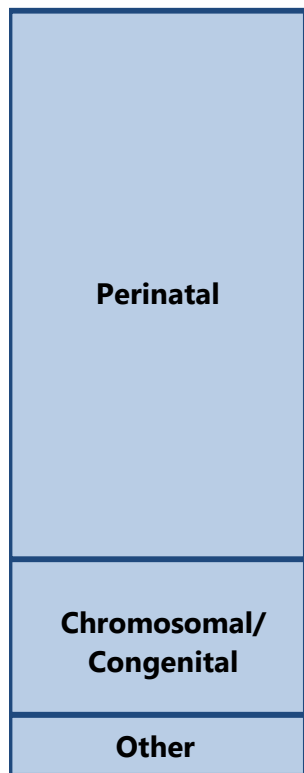
British Columbia had one of the lowest infant mortality rates in Canada (4.2 deaths vs. the Canadian average of 4.8 deaths per 1,000 live births for 2012).

In 2014, 73% of the infants that died before one year of age died in the first month of life (the neonatal period)(Figure 4). This group will be considered separately (below) from infants aged 29-364 days.

#### Neonates (0-28 days)

**Number of deaths:** 138 (62 Females, 76 Males)    **Mortality Rate:** 3.1/1,000 live births

#### Leading Causes of Death:



The majority (99%) of deaths of infants in their first month were caused by prematurity, perinatal complications or congenital, genetic, metabolic or chromosomal anomalies.

- 26% were born preterm (29-37 weeks) and
- 53% were born extremely preterm (28 weeks or less)

More male infants (n=76) died than females (n=62) (55% and 45% respectively).

Maternal or pregnancy-related factors influence infant mortality risk. Complications during pregnancy such as preterm labour, premature rupture of membranes, infection, or incompetent cervix, were present for 69% of the infants who died of natural causes.

Multiple pregnancies (either twin or triplet) were noted for 14% of infants who died.

Maternal age was greater than 34 years for fewer than one third of infants who died.

## Infants aged 29-364 days

**Number of deaths:** 50 (15 Females and 35 Males) **Mortality Rate:** 1.1/1,000 live births

### Leading Causes of Death:

|                          |
|--------------------------|
| Undetermined             |
| Chromosomal / Congenital |
| Injuries                 |
| Other                    |

In 2014, there were 50 infants who died between one month and one year of age. Almost equal numbers of infants died of undetermined causes, chromosomal and congenital disorders and injuries.

There were 16 infants (32%) who died during sleep where the cause of death could not be determined (undetermined deaths). There were 15 infants who died due to chromosomal/congenital anomalies or endocrine or metabolic disorders (30%). There were fourteen infants (28%) who died due to injuries. Of the injury related deaths, ten deaths were due to accidental asphyxia during sleep, two deaths were associated to falls or drowning, and two deaths were homicides.

The remaining infant deaths were due to infections/sepsis, respiratory conditions, or cancer.

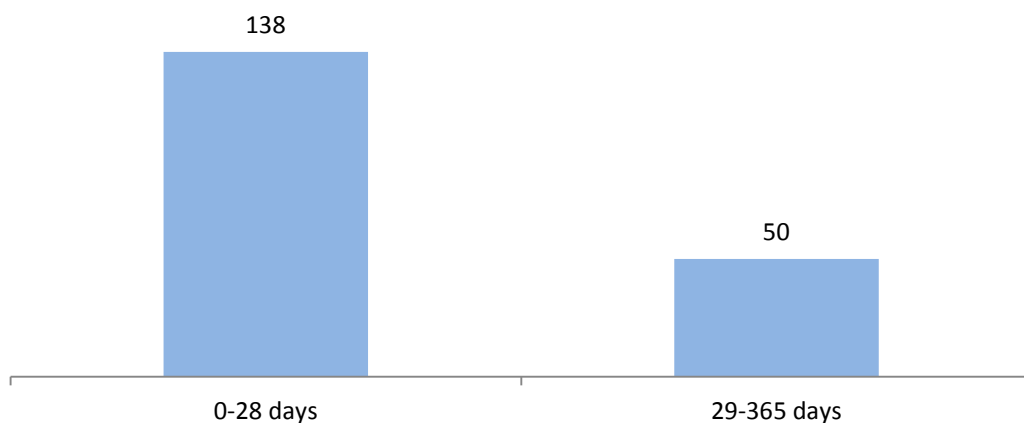
More male infants died than female infants (70% and 30% respectively).

In comparison with neonates:

- A smaller proportion were born prematurely (36% preterm; 6% extremely preterm)
- Maternal or pregnancy-related factors were noted less frequently (4% of cases)

### Age:

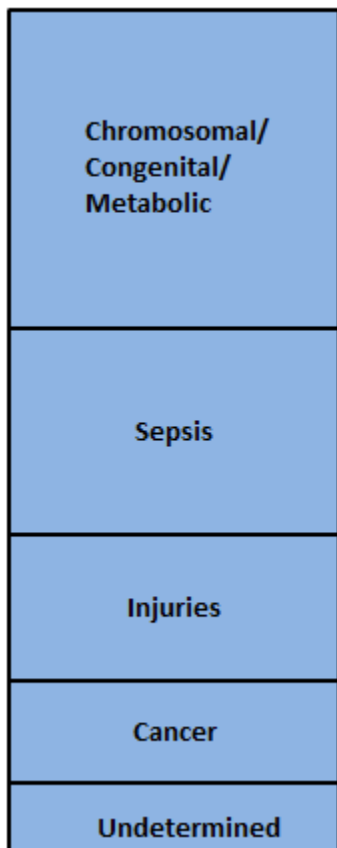
**Figure 4.** Child deaths, <1 year, 2014



# DEATHS BETWEEN 1 AND 4 YEARS OF AGE

**Number of deaths:** 24 (12 Females and 12 Males)    **Death Rate:** 13.5/100,000 population

## Leading Causes of Death:



Natural deaths accounted for 75% (n=18) of all deaths in this age group. Chromosomal/congenital anomalies and metabolic disorders accounted for 37%, infections 24%, and cancer 12% of all deaths.

In 2014, injuries accounted for 17% (n=4) of the deaths for children between the ages of 1 and 4 years old. Deaths were due to fire, motor vehicle crash, drowning and falls.

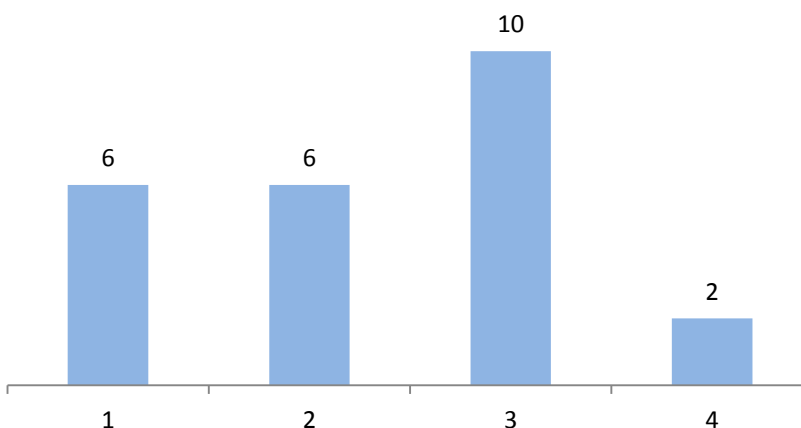
There were 2 children (8%) where the cause of death was undetermined.

An equal number of male and female children died.

Figure 5 shows that the number of deaths at each age within this age group.

## Age:

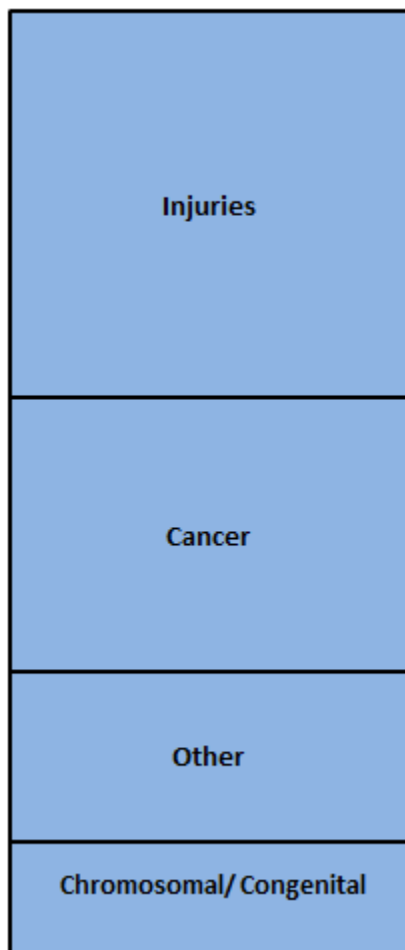
**Figure 5.** Child deaths, 1-4 years, 2014



# DEATHS BETWEEN 5 AND 9 YEARS OF AGE

**Number of deaths:** 17 (8 Females and 9 Males)    **Death Rate:** 7.5/100,000 population

## Leading Causes of Death:



In 2014, there were 17 children age 5 to 9 years who died. Most deaths (n=10) were due to natural causes.

Cancer was the leading cause of natural deaths for this age group, accounting for 29% of all deaths among 5 to 9 year old children. Chromosomal/congenital anomalies accounted for 12% of all deaths in this age group. Other conditions such as neurological disorders, respiratory conditions and infections were responsible for 18% of deaths.

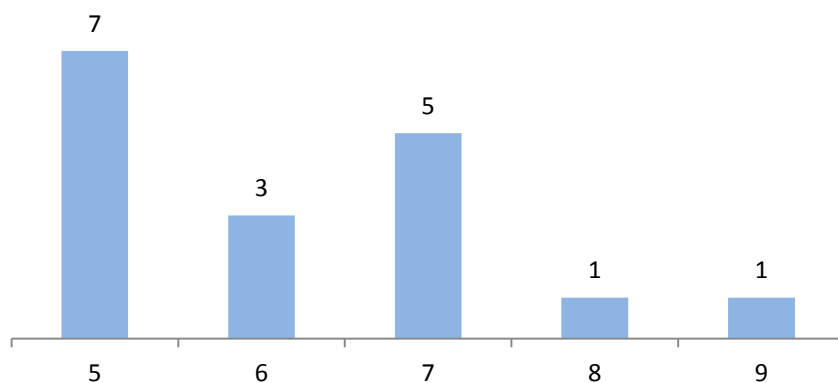
Injuries accounted for 41% of all deaths. These were primarily due to motor vehicle crashes and fire.

Slightly more male children died than female children (53% and 47% respectively).

Figure 6 shows that the number of deaths across the 5 to 9 year old age group.

## Age:

**Figure 6.** Child deaths, 5-9 years, 2014



# DEATHS BETWEEN 10 AND 14 YEARS OF AGE

**Number of deaths:** 17 (5 Females and 12 Males)    **Death Rate:** 7.4/100,000 population

## Leading Causes of Death:



In 2014, the leading cause of death in this age group were injuries (intentional and unintentional) which accounted for approximately 76% (n=13) of all the deaths. Motor vehicle incidents resulted in 42% of injury related deaths. Head injuries due to snow-boarding, and water sports accounted for one third of injury related deaths, while suicide accounted for 16% of the deaths among this age group.

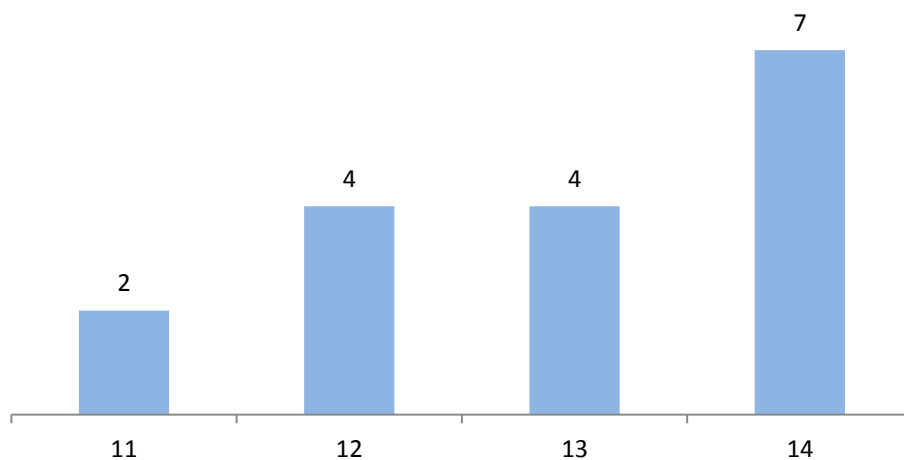
Natural deaths resulted in 23% (n=4) of deaths. Most natural deaths were due to cancer. One death was due to respiratory arrest associated to asthma.

In this age group, more males died than females (70% and 30% respectively).

Figure 7 shows that the number of deaths across the 10 to 14 year old age group. Although the number of deaths varies by age there is no discernible pattern.

## Age:

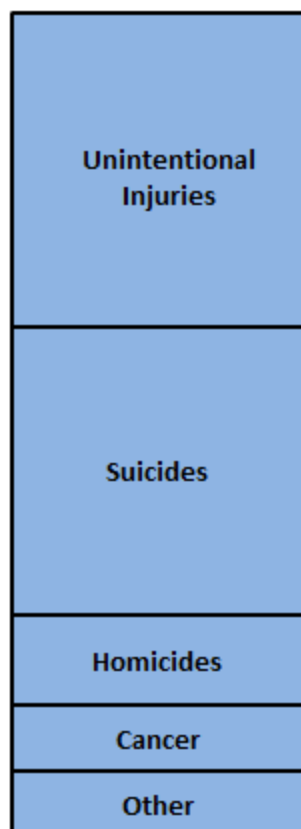
**Figure 7.** Child deaths, 10-14 years, 2014



# DEATHS BETWEEN 15 AND 18 YEARS OF AGE

**Number of deaths:** 66 (17 Females and 49 Males)    **Death Rate:** 30.4/100,000 population

## Leading Causes of Death:



Among children aged 15 to 18 years, the leading cause of death in 2014 were injuries. Collectively, injuries (intentional and unintentional) accounted for 83% of all child deaths involving 15 to 18 year olds.

Of deaths due to unintentional injuries (n=25), motorized vehicle crashes were responsible for the greatest number of deaths (68%, n=17). Drowning (n=3) and accidental alcohol or other drug overdoses (n=3) each accounted for 12% of deaths. An additional 8% (n=2) of deaths were due to head injuries associated to a fall.

35% of deaths in this age group were due to suicides. Of the 23 young people who died as a result of suicide in 2014, 87% were males and 13% were females.

Natural deaths due to cancers, neurological or congenital conditions resulted in 11 deaths.

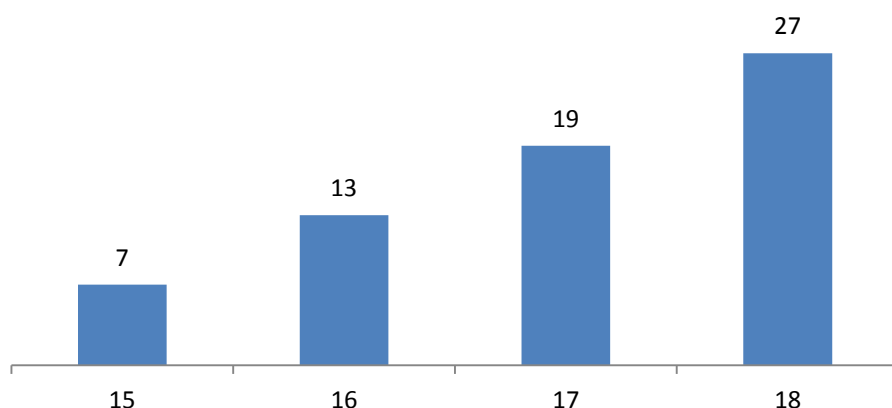
There were seven deaths due to homicide.

Among 15 to 18 year old youth, 74% of the deaths were males and 26% were females.

More deaths within this age group occurred at ages 17 and 18 in 2014 (Figure 8).

## Age:

**Figure 8.** Child deaths, 15-18 years, 2014

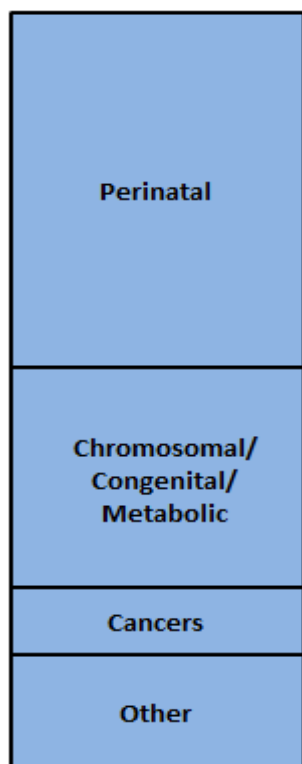


## CHILD DEATHS BY CAUSE:

### NATURAL DEATHS

**Number of deaths:** 205 (90 Females and 115 Males)

#### Leading Causes of Natural Death:



In 2014, 205 (66%) of the 312 child deaths that occurred in B.C. were due to natural causes. Two thirds of natural deaths in 2014 involved infants who died in the first month of life.

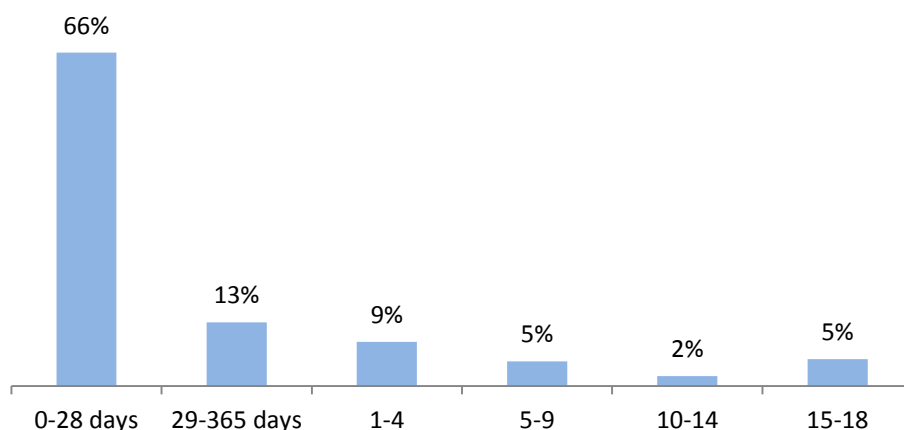
In 2014, leading causes of natural death include conditions originating in the perinatal period (n=97, 47%), followed by congenital, genetic, metabolic and chromosomal abnormalities (n=60, 29%), and cancers (n=19, 9%). Leading causes of natural child death in 2014 are consistent with longitudinal patterns observed in British Columbia since 2000.

In 2014, males accounted for 56% of natural deaths and females for 44%.

As figure 9 demonstrates, 80% of the children who died of natural causes in 2014 were under the age of one, with the majority of natural infant deaths occurring in the first month of life.

#### Age:

**Figure 9.** Percent of child deaths by age group, 2014





# INJURY RELATED DEATHS

**Number of deaths:** 91 (22 Females and 69 Males)

## Leading Causes of Injury Related Death:

|                                    |
|------------------------------------|
| <b>Motorized Vehicle Incidents</b> |
| <b>Suicide</b>                     |
| <b>Homicide</b>                    |
| <b>Airway Obstruction</b>          |
| <b>Other</b>                       |

In 2014, 91 (29%) of the 312 child deaths that occurred in B.C. were injury related. It is well established that older children experience higher injury mortality and hospitalization rates than younger age groups, attributable to increased exposure and experimentation as children progress through different stages of development.

Motorized vehicle crashes continue to be the leading cause of injury related death for children 0-18 years in B.C., followed by suicide, and homicide. Other causes of unintentional injury-related deaths in 2014 included airway obstruction, drowning, falls, unintentional poisoning, fire, and blunt force trauma.

Motorized vehicle incidents accounted for 29% (n=26) of all injury related child deaths in 2014. Of these deaths, 69% (n=18) involved youth aged 15 to 18.

The second leading cause of injury related death was suicide, with 23 of the 25 suicides occurring in youth age 15 to 18. Children under the age of 10 years old are not seen as being able to form the intent to commit suicide. The most common means of suicide in young people is through hanging. In 2014, more suicides were males, their rate being more than six times higher than females.

Homicide is defined as a death due to injury intentionally inflicted by action of another person. Homicide is a neutral term that does not imply fault or blame. In 2014 there were 11 deaths caused by homicide. 64% of homicides occurred in the 15 to 18 year old age group.

For all injury related deaths, more decedents were males (76%) than females (24%).

### ***Health Authority rates of fatal injuries***

The highest injury mortality rates among children in 2014 were observed in the Interior Health Authority and Northern Health Authority followed by the Island Health Authority. These were above the provincial rate of 10.0 deaths per 100,000 population (table 5).

**TABLE 5**

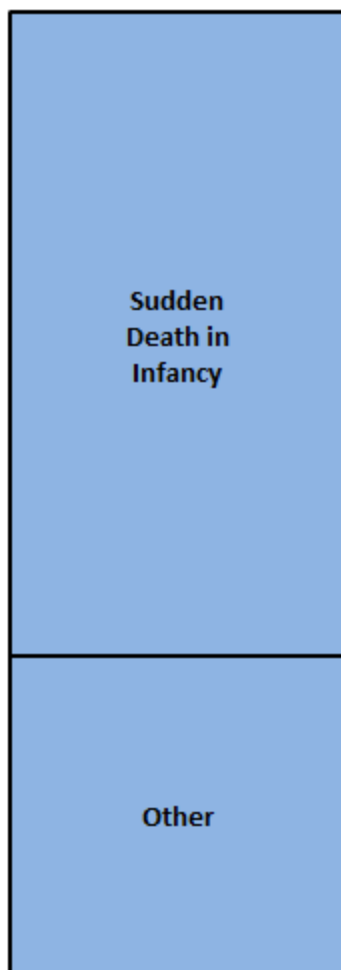
| <b>Injury deaths by Health Authority of residence, 2014</b> |               |             |                              |
|---|---------------|-------------|------------------------------|
| <b>Region</b>   | <b>Deaths</b> | <b>%</b>    | <b>Rate per 100,000 pop.</b> |
| Fraser  | 28            | 31%         | 7.6                          |
| Vancouver Coastal   | 9             | 10%         | 4.6                          |
| Interior  | 22            | 24%         | 16.6                         |
| Island  | 15            | 16%         | 11.3                         |
| Northern  | 11            | 12%         | 16.2                         |
| Lived outside BC  | 6             | 7%          | n/a                          |
| <b>Total</b>  | <b>91</b>     | <b>100%</b> | <b>10.1</b>                  |

# UNDETERMINED DEATHS

**Number of deaths:** 16 (7 Females and 9 Males)

## Leading Causes of Undetermined Death:

In 2014, 16 (5%) of the 312 child deaths occurring in British Columbia were due to undetermined causes.



Three quarters (n=12, 75%) of undetermined deaths were characterized as sudden death in infants. Primarily healthy infants under one year of age died suddenly and unexpectedly in circumstances related to sleep. These deaths are investigated by an examination of the scene of death, review of medical and social records, and a complete autopsy. There are typically no causal findings on autopsy in cases of sudden infant death, although scene and social investigation may identify factors that are known to increase an infant's risk of death. Sudden infant deaths typically peak at two to four months of age and begin to drop further after six months. British Columbia has established safe sleep guidelines for infants which can be accessed at

<http://www.perinataleservicesbc.ca/NR/rdonlyres/D799441C-3E00-49EE-BDF7-2A3196B971F0/0/HPGuidelinesSafeSleep1.pdf>

In 2014, almost two times as many male infants (n=8) died of sudden infant death as compared to female infants (n=4).

There were 4 other cases where classification of death remains as undetermined.

## CHILDREN RECEIVING SERVICES FROM THE MINISTRY OF CHILDREN AND FAMILY DEVELOPMENT

One quarter (25%) of children who died in 2014 were in receipt of services from the Ministry of Children and Family Development (Table 6). Many of these 79 children were medically fragile children supported through the province's child and youth special needs programs and services.

Of the 79 children receiving services from MCFD, 44 (56%) died of natural causes, 15 (19%) died of injury-related causes, 7 (9%) died by suicide, six (7%) died by homicide, and 7 (9%) children died of undetermined causes. Across all causes, 12 children were in care of MCFD at the time of their death.

**TABLE 6**

| Child deaths by type of MCFD service received at time of death, 2014 |                   |
|--|-------------------|
| Type of MCFD service   | Number of Deaths* |
| Child/Youth Special Needs  | 33                |
| Family Services  | 28                |
| Child Protection Services  | 21                |
| Child in Care  | 12                |
| Child/Youth Mental Health  | 6                 |
| Youth Justice/ Youth Services  | 3                 |

*\* A total of 79 children were in receipt of services from the Ministry of Children and Family Development (MCFD) at the time of their death. The total does not equate to 79 as some children were in receipt of more than one type of service.*

# SECTION THREE

## CHILD DEATH REVIEW PANEL

In 2014, the BC Coroners Service convened three death review panels to address child mortality topics with the goal of preventing future similar deaths.

A death review panel is mandated\* to review and analyze the facts and circumstances of deaths to provide the Chief Coroner with advice on medical, legal, social welfare and other matters concerning public health and safety, and the prevention of deaths.

The Chair of the CDRU leads the child death review panel, whose membership includes professionals with expertise relating to children including: injury prevention, public health, medicine, law enforcement, emergency response, Aboriginal health, education, advocacy, academics and child welfare.

In 2014, three topics selected for panel review were drowning, young driver fatalities, and youth overdose deaths. These three panels resulted in 9 key recommendations to agencies and ministry partners to improve awareness, services, and practice to address and prevent child and youth deaths (Table 7 - Table 9).

**Table 7**

| <b>A Review of Drowning (2007-2013)</b>                                   |   |   |
|---|---|---|
| <b>Recommendations</b>  |   | <b>Status</b>   |
| Recommendation 1: Messaging to male youth between ages 15 to 18 years old | The B.C./Yukon Branch of the Lifesaving Society bring together its community partners to develop water safety and drowning prevention messaging specifically targeting male youth. Male youth need to be consulted about the relevancy and effectiveness of this messaging. | The Lifesaving Society is leading a national coalition of organizations, governments and academics to develop a Canadian Drowning Prevention Plan. In addition, a youth forum was held to discuss drowning prevention focusing on male youth. <ul style="list-style-type: none"> <li>- Initiated an additional module of the Swim to Survive Plus</li> <li>- Installed Public Access Liferings at unsupervised waterfronts in BC</li> <li>- 2016 WaterWise Safety presentations increased focus on middle schools and young males.</li> </ul> |

\* Under the *Coroners Act*

|  |   |  |
|--|---|--|
| Recommendation 2: Messaging to parents   | The Canadian Red Cross and The Community Against Preventable Injuries bring together community partners to develop water safety and drowning prevention messaging specific to first time parents, supervising children when they are in, on or near water, and reinforcing water safety with youth. | The Red Cross in collaboration with Preventable and the Lifesaving Society met to address backyard pool and parental supervision utilizing a toolkit for backyard pool awareness.<br><br>Preventable continues to include water safety and drowning prevention messaging and scenarios in its social marketing campaign aired seasonally during summer months ( <a href="http://www.preventable.ca">www.preventable.ca</a> ) |
| Recommendation 3: Support for a bylaw establishing 4-sided fencing around backyard pools | That the Union of B.C. Municipalities (UBCM) reviews this report for information and education purposes in consideration of establishing a 4-sided pool fencing bylaw to prevent young children from gaining access.  | Report sent to UBCM for information.   |

**Table 8**

| <b>Review of Young Driver Deaths (2004-2013)</b>            |   |  |
|---|---|--|
| <b>Recommendations</b>                                      |   | <b>Status</b>  |
| Recommendation 1: Review of the Graduated Licencing Program | That the Insurance Corporation of B.C. (ICBC) conduct a review of B.C.'s Graduated Licencing Program to identify potential opportunities to improve its effectiveness. The review should include a consultation with young drivers and the parents and guardians that support young drivers.  | ICBC will look for opportunities to further improve the Graduated Licencing Program's effectiveness, including consulting with young drivers and their parents and guardians.  |
| Recommendation 2: Enhanced Data Collection                  | The BC Coroners Service contribute to the knowledge base of young driver fatalities by obtaining and utilizing driver abstracts in all fatal crashes of young drivers as part of the BCCS investigation process; and<br><br>ICBC and its partner agencies contribute to the knowledge base of distracted driving of young drivers by reviewing and clarifying the criteria used to identify distracted driving in police-attended crashes and publically reporting out on distracted driving. | BCCS policy amended to include obtaining and using driver abstracts in all fatal crashes.<br><br>ICBC will work with partners to improve the collection of distracted driving data, including the use of roadside observational studies, surveys and information gathered at non-fatal crashes. ICBC will continue to publicly report on distracted driving. |
| Recommendation 3: Reduce Speed                              | The Ministry of Transportation and Infrastructure ensure that road safety and   | Ministry engineers follow internationally accepted   |

|                                 |   |  |
|---------------------------------|---|--|
| <p>Related Injury and Death</p> | <p>injury prevention are the paramount criteria used in the course of monitoring and reviewing existing speed limits and setting new speed limits on BC’s provincial road system; and</p> <p>The Ministry of Justice conduct a pilot project of automated speed enforcement strategies such as “time and distance” and “speed on green” in areas identified as high risk for serious crashes.</p> | <p>standards when setting speed limits, which take into account a road’s safety history, as well as ambient speed, design and level of adjacent development. As part of the BC Road Safety Strategy Executive Steering Committee, the ministry will continue to work with its road safety partners to monitor the sections of highway where speed limits were changed following the ministry’s Rural Highway Safety and Speed Review to ensure they remain safe.</p> |
|---------------------------------|---|--|

**Table 9**

| <p><b>Preventing Death After Overdose: A review of Overdose Deaths in Youth and Young Adults (2009-2013)</b></p>  |  |  |
|---|--|--|
| <p><b>Recommendations</b></p>   | <p><b>Status</b></p>   |  |
| <p>Recommendation 1: To reduce barriers to seeking immediate medical assistance when an overdose has occurred</p> | <p>The BC Emergency Health Services (BCEHS) in collaboration with policing agencies and key stakeholders develop targeted strategies to promote calling 911, and to inform the public that safety, and the health and wellbeing of persons requiring medical attention is the paramount focus of police attendance at an overdose.</p> <p>The First Nation Health Authority investigate access to Take Home Naloxone as one of the tools for mitigating opiate overdoses in First Nations communities.</p> | <p>The Emergency Medical Dispatchers (EMDs) assessing calls will no longer call for police assistance in every drug overdose emergency. EMDs will only notify police to attend suspected overdose calls: where the situation is believed to be dangerous to responders or nearby members of the public or in the case of any attempted suicide.</p> <p>The FNHA has rolled out a “Take Home Naloxone” program in communities that incorporates a sustainable ‘train the trainer’ approach to Naloxone usage for opioid overdose.</p> |
| <p>Recommendation 2: To raise awareness of the importance of seeking immediate medical attention</p>              | <p>The Ministry of Children and Family Development engage with foster parents and youth networks such as the BC Federation of Youth in Care Networks, the Federation of Community Social Services, the Youth Advisory Council, and Gathering Our Voices for input on</p>   | <p>The Provincial Director of Child Welfare will engage with the BC Federation of Youth in Care Networks, the BC Federation of Foster Parent Association, the Federation of Community Social</p>   |

|   |   |   |
|---|---|---|
|   | <p>effective messaging to young people to raise awareness about the signs of an overdose and the importance of calling emergency 911 immediately.</p> <p>The Ministry of Education, in updating its physical education curriculum, specifically address the issue of calling 911 when people are in medical distress, and ensure that overdosing is identified as a form of medical distress that some young people may experience or witness.</p> <p>The Ministry of Health Provincial Emergency Services Advisory Committee review processes for discharge safety planning for patients who present with an overdose.</p> | <p>Services, the Association of Aboriginal Friendship Centres (Gathering Our Voices) and the Youth Advisory Council to obtain their input on effective messaging to young people and raise awareness about the signs of an overdose and the importance of calling emergency 911 immediately.</p> <p>The Ministry of Education is in the process of updating the physical education curriculum and will include learning about the impact of substance use and overdosing and how to respond to medical emergencies.</p> |
| <p>Recommendation 3: To support interagency learning around overdose deaths</p> | <p>The BCCS share Coroners Reports of overdose deaths of young people with BCEHS to inform their practice when responding to an emergency 911 call involving an overdose.</p> <p>The First Nations Health Authority examine sources of opioid overdose data for First Nations and Aboriginal people to understand opioid overdose trends.</p>   | <p>The FNHA and Ministry of Health have agreed to review the BCCS files and data from 2009 to 2013 with the goal to better understanding how First Nations people are dying from prescription opioid overdose. The data will assist with the preparation of a strategic guidance report and facilitate ongoing engagement with health system partners and stakeholders.</p>   |

## RECOMMENDATIONS MADE BY LOCAL CORONERS/INQUEST

A total of 16 recommendations were distributed in 2014 with respect to three children who died in 2013. Each recommendation may be distributed to more than one agency.

Recommendations were made to 13 agencies or Ministries.

The Coroner recommendations encouraged the sharing of the summary findings for information and educational purposes and to support policy development and practice.

In addition, there was one inquest which resulted in 8 recommendations. These recommendations focused on work safety practices, including worksite training for young or new workers, improving awareness of worker fatigue, and counselling support for first responders at critical incidents.



