Child Mortality in British Columbia

2013

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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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 289 deaths of children occurring in British Columbia during 2013. 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 2013, 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 11 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.

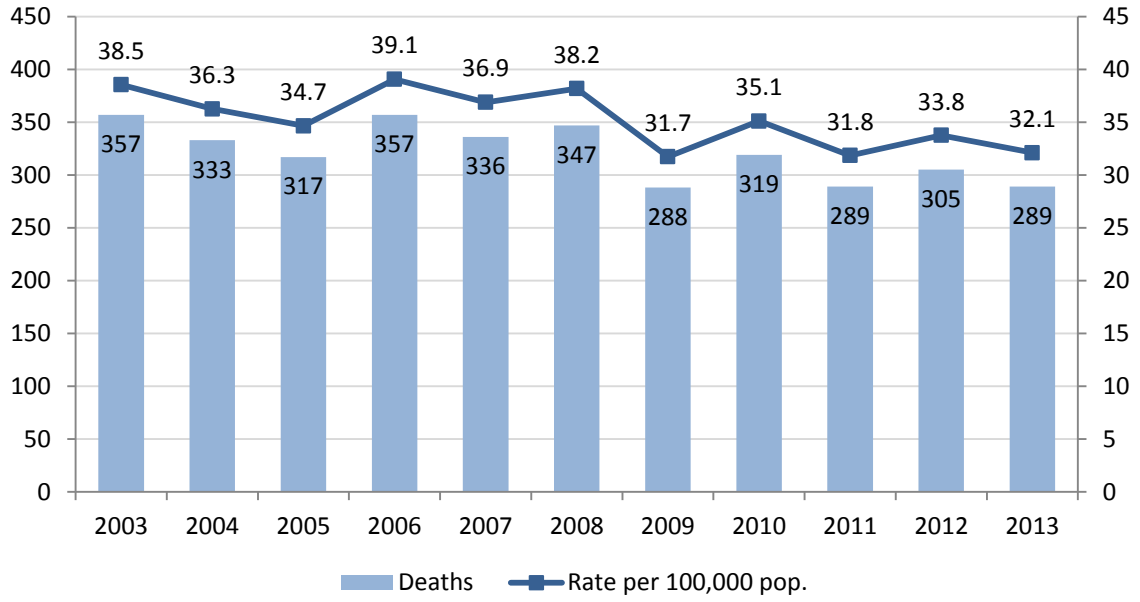
In this report mortality data is presented based on health authority boundaries. This is a change from previous BCCS reports and was done to improve use of BCCS findings for planning or delivering health services.

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 898,632 children age 0-18 living in British Columbia in 2013, and 289 child deaths, a rate of death of 32.1 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 2003 to 2013. 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, 2003-2013*



* *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 2013.

TABLE 1

Leading causes of child death by age group, 0-18 years, BC, 2013					
Rank	Under 1 year	1-4 years	5-9 years	10-14 years	15-18 years
1	Perinatal causes	Injuries	Cancers	Congenital and chromosomal anomalies/ Cancer	Injuries
2	Congenital and chromosomal anomalies	Congenital and chromosomal anomalies/ Cancer	Injuries	Neurologic and nervous system diseases	Suicide
3	Undetermined causes of sudden infant deaths	Neurologic and nervous system diseases	Congenital and chromosomal anomalies	Injuries	Cancers

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.

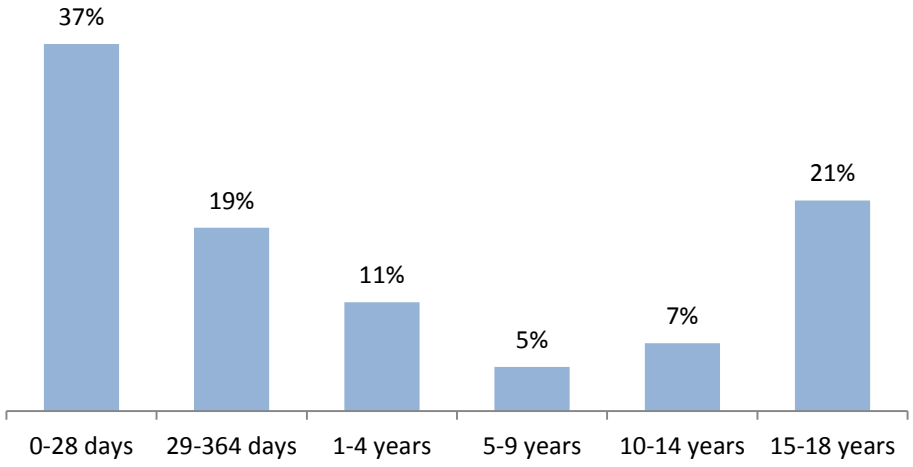
TABLE 2

Child deaths by age group, 2013		
Age Group	# Deaths	Death Rate*
0-28 days	108	245.5
29-365 days	54	122.7
1-4 years	32	17.9
5-9 years	13	5.8
10-14 years	20	8.6
15-18 years	62	28.1
Total	289	32.1

** 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 2013 were infants less than 29 days (37%), followed by children 15 to 18 years of age (21%) and infants 29 to 364 days (19%) (Figure 2).

Figure 2. Percentage of child deaths by age group, 2013



Health Authority differences in child mortality in 2013

In 2013, Fraser Health Authority had the highest percentage of child deaths (42%) in the province. However, Northern Health Authority and Island Health Authority had the highest child mortality rates (47.0 and 41.3 respectively per 100,000 population) (Table 3).

TABLE 3

Child Deaths by Health Authority of Residence, 2013			
Region	Deaths	%	Rate per 100,000 pop.
Fraser	120	42%	32.5
Vancouver Coastal	44	15%	22.5
Interior	35	12%	26.0
Island	55	19%	41.3
Northern	32	11%	47.0
Lived outside BC	3	1%	n/a
Total	289	100	32.1

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 cases of 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 (67%) and that most of the natural deaths occur in the first 28 days of life (53%). Injury deaths comprise the second greatest proportion of deaths involving children (23%) and most injury deaths occur in young people ages 15 to 18 (66%). Undetermined causes of death occur most often with infants (55%).

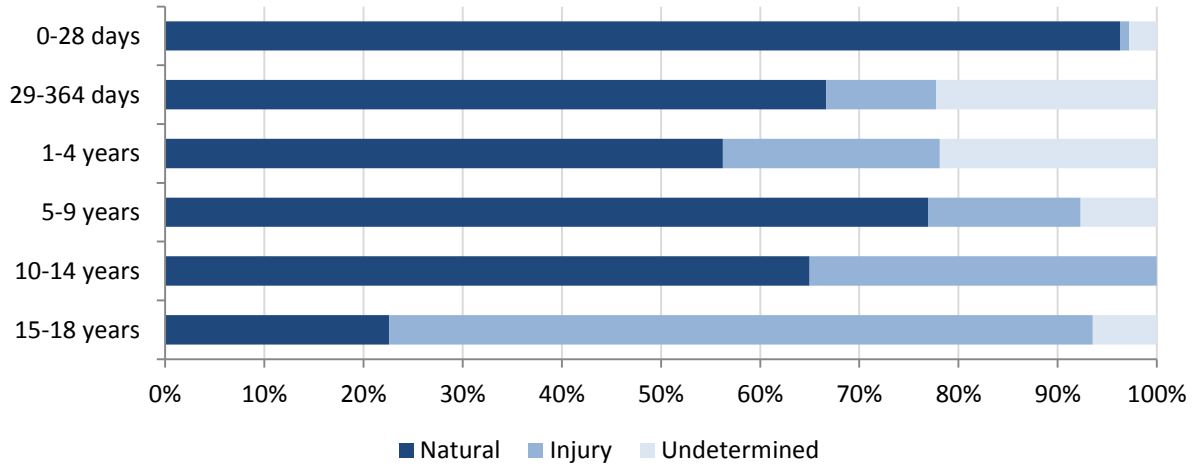
TABLE 4

Child deaths by main cause and age group, 2013

Age Group	Natural	Injury	Undetermined	Total
0-28 days	104	1	3	108
29-364 days	36	6	12	54
1-4 years	18	7	7	32
5-9 years	10	2	1	13
10-14 years	13	7	-	20
15-18 years	14	44	4	62
Total	195	67	27	289

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, 2013



SECTION TWO

CHARACTERISTICS OF CHILD DEATHS

DEATHS UNDER 12 MONTHS OF AGE

Number of deaths: 162 (82 Females, 80 Males) **Mortality Rate:** 3.7/1,000 live births

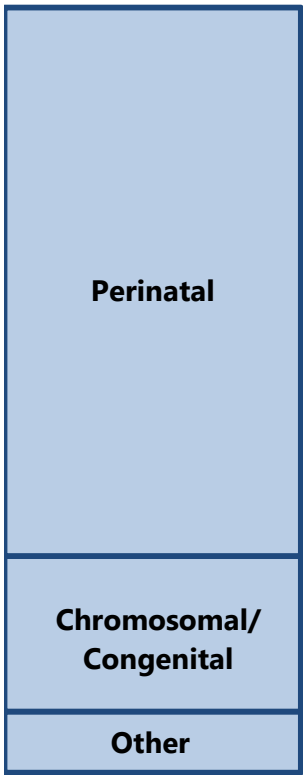
British Columbia had one of the lowest infant mortality rates in Canada (3.7 deaths vs. the Canadian average of 4.8 deaths per 1,000 live births for 2012).

In 2013, two thirds of the infants that died before one year of age died in the first month of life (the neonatal period) (Figure 5). This group will be considered separately (below) from infants aged 29-364 days.

Neonates (0-28 days)

Number of deaths: 108 (52 Females, 56 Males) **Mortality Rate:** 2.4/1,000 live births

Leading Causes of Death:



The majority (96%) of deaths of infants in their first month were caused by prematurity, perinatal complications or congenital, genetic, metabolic or chromosomal anomalies.

- 17% were born preterm (29-37 weeks) and
- 60% were born extremely preterm (28 weeks or less)

Slightly more female infants died than males (52% and 48% respectively).

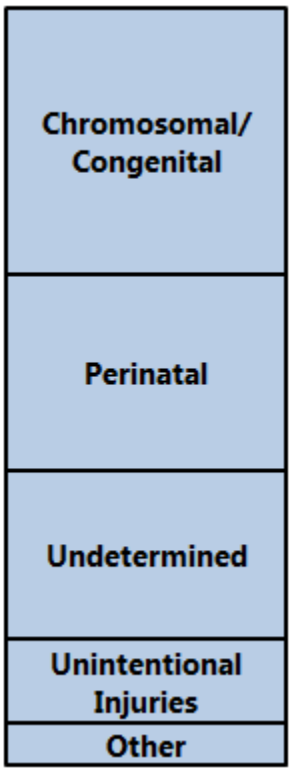
Maternal or pregnancy-related factors influence infant mortality risk. Complications during pregnancy such as preterm labour, premature rupture of membranes, infection, or incompetent cervix, were present for 70% of the infants who died of natural causes.

Multiple pregnancies (either twin or triplet) were noted for 16% of infants who died.

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

Infants aged 29-364 days

Number of deaths: 54 (30 Females and 24 Males) **Mortality Rate:** 1.2/1,000 live births



Leading Causes of Death:

In 2013, there were 54 infants who died between one month and one year of age. Almost two thirds of these deaths were due to chromosomal/congenital anomalies (n=19, 35%), and deaths due to perinatal complications (n=14, 26%).

There were 12 infants (22%) who died during sleep and where the cause of death could not be determined and 6 infants (11%) who died due to accidental asphyxia during sleep. The remaining infant deaths were due to infectious disease (whooping cough, meningitis or cancer).

More female infants died than male infants (56% and 44% respectively).

In comparison with neonates:

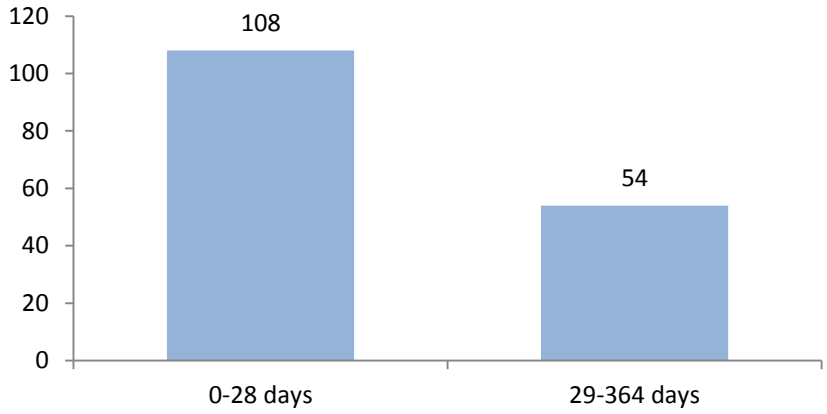
- -A smaller proportion were born prematurely (33% preterm; 16% extremely preterm)
- -Maternal or pregnancy-related factors were noted less frequently (48% of cases)

Multiple pregnancies (either twin or triplet) were noted for 22% of infants who died.

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

Age:

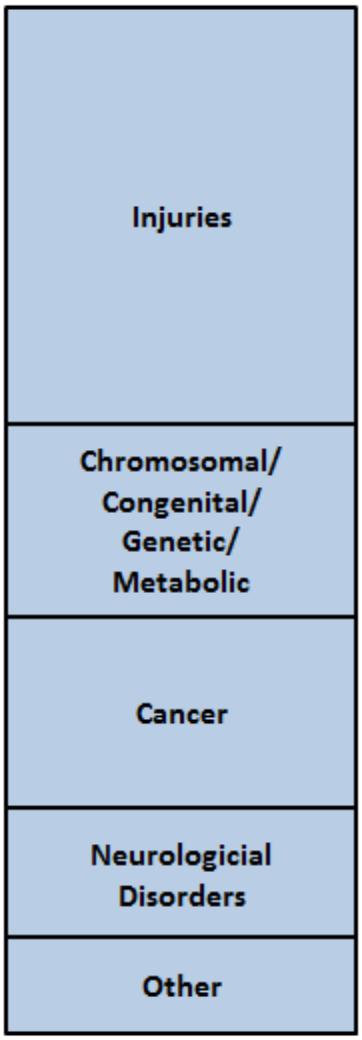
Figure 4. Child deaths, <1 year, 2013



DEATHS BETWEEN 1 AND 4 YEARS OF AGE

Number of deaths: 32 (12 Females and 20 Males) **Death Rate:** 18.0/100,000 population

Leading Causes of Death:



Injuries accounted for 40% (n=13) of the deaths for children between the ages of 1 and 4 years old in 2013. There were 7 children (54%) where the cause of death was undetermined, and six deaths (46%) due to injuries associated to falls, crushing or motor vehicle crashes.

Natural deaths accounted for 56% of all deaths in this age group. Chromosomal/congenital anomalies and cancers each accounted for 19% of deaths, while neurologic/nervous system diseases resulted in 12% of deaths in this age group.

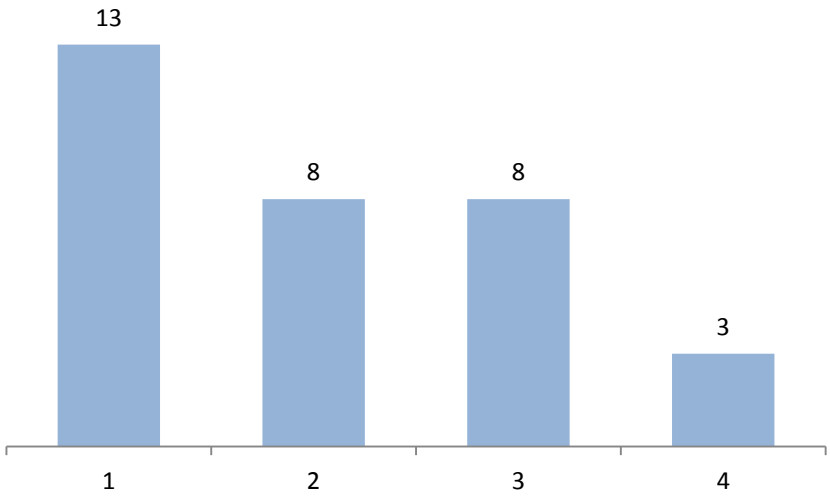
The other deaths were related to homicide and infection.

More male children died than female children (62.5% and 37.5% respectively). In this age group, more males died of injuries.

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

Age:

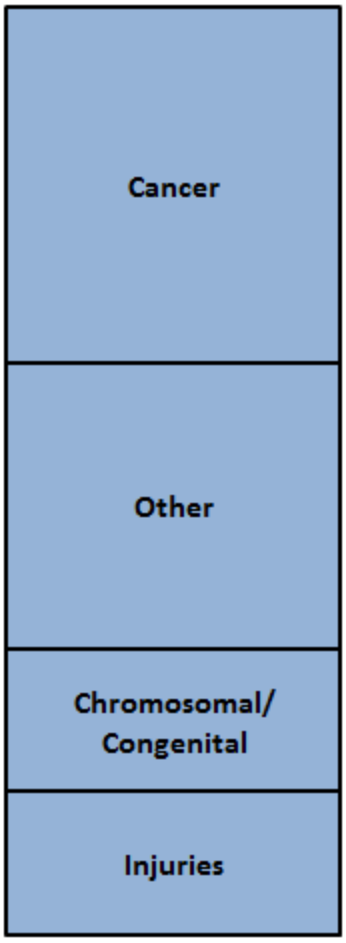
Figure 5. Child deaths, 1-4 years, 2013



DEATHS BETWEEN 5 AND 9 YEARS OF AGE

Number of deaths: 13 (7 Females and 6 Males) **Death Rate:** 5.8/100,000 population

Leading Causes of Death:



In 2013, there were 13 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 38% of all deaths among 5 to 9 year old children. Other conditions such as neurological disorders, respiratory conditions and infections were responsible for 31% of deaths.

Chromosomal/congenital anomalies and neurological disorders accounted for 23% of all deaths in this age group.

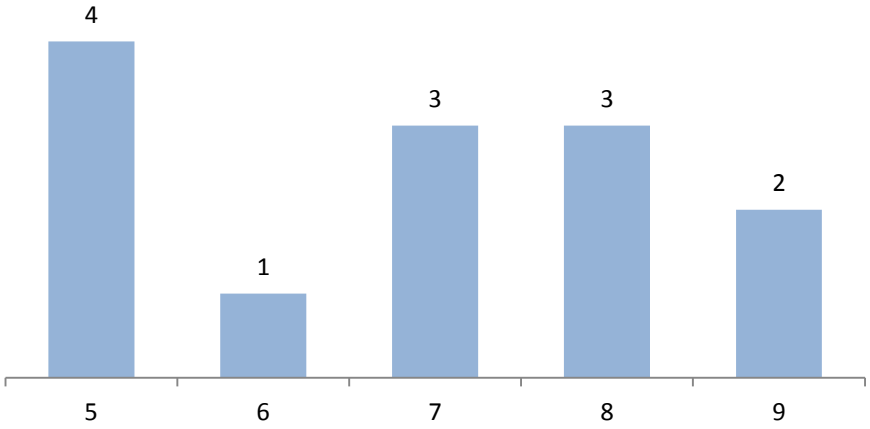
Injuries related to fire or motor vehicle crash resulted in the deaths of two children.

More male children died than females (54% and 46% respectively).

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

Age:

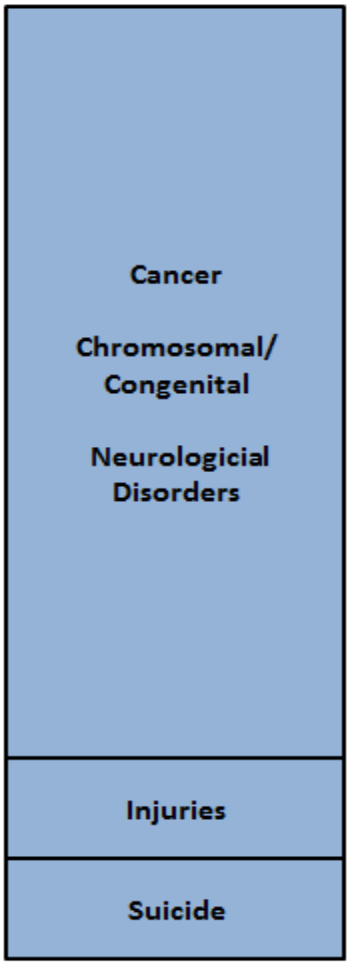
Figure 6. Child deaths, 5-9 years, 2013



DEATHS BETWEEN 10 AND 14 YEARS OF AGE

Number of deaths: 20 (10 Females and 10 Males) **Death Rate:** 8.6/100,000 population

Leading Causes of Death:



In 2013, the leading cause of death in this age group was natural deaths which accounted for approximately 75% of all the deaths. These deaths were equally the result of cancers, neurological conditions, and chromosomal or genetic conditions.

Motor vehicle incidents were the cause of 10% of deaths

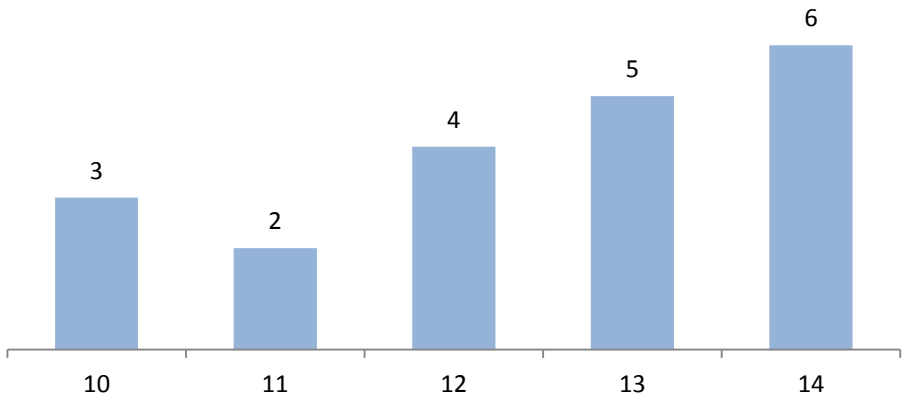
Suicide were reported for 2 children age 10 to 14 year old; accounting for 14% of the deaths among this age group.

In this age group, there were an equal number of male and female children who died.

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:

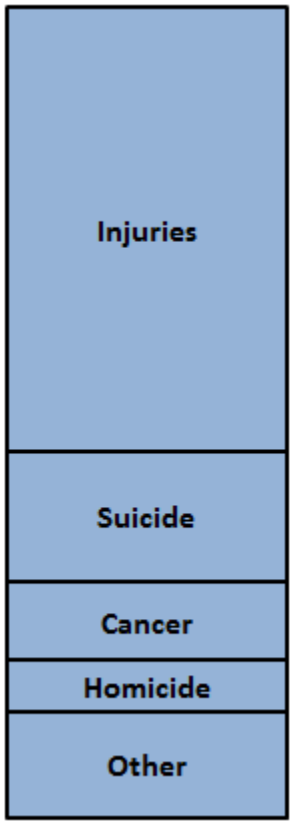
Figure 7. Child deaths, 10-14 years, 2013



DEATHS BETWEEN 15 AND 18 YEARS OF AGE

Number of deaths: 62 (24 Females and 38 Males) **Death Rate:** 28.1/100,000 population

Leading Causes of Death:



Among children aged 15 to 18 years, the leading cause of death in 2013 were injuries. Collectively, injuries (intentional and unintentional) accounted for 71% of all child deaths involving 15 to 18 year olds in 2013.

Of deaths due to unintentional injuries (n=30), motor vehicle crashes were responsible for the greatest number of deaths (33%, n=10). Drowning (n=6) and accidental alcohol or other drug overdoses (n=6) each accounted for accounted for 20% of deaths. An additional 6% (n=4) of deaths were due to head injuries associated to a fall.

16% of deaths in this age group were due to suicides. Of the 10 young people who died as a result of suicide in 2013, 50% were males and 50% were females.

Natural deaths due to cancers, neurological or congenital conditions resulted in 14 deaths.

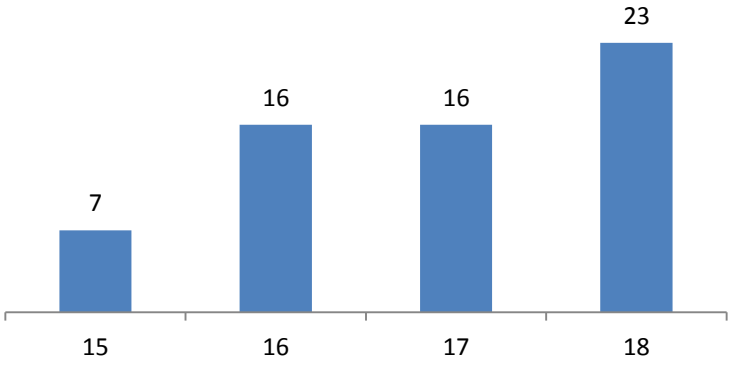
There were 4 deaths were the cause of death was undetermined and four deaths due to homicide.

Among 15 to 18 year old youth, 61% of the deaths were males and 39% were females.

The highest number of deaths within this age group occurred at ages 17 and 18 in 2013 (Figure 8).

Age:

Figure 8. Child deaths, 15-18 years, 2013

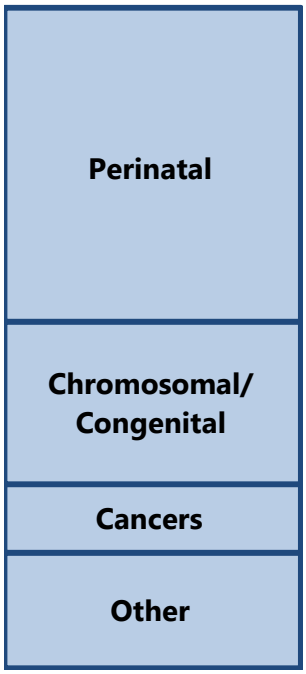


CHILD DEATHS BY CAUSE:

NATURAL DEATHS

Number of deaths: 195 (100 Females and 95 Males)

Leading Causes of Natural Death:



In 2013, 195 (67%) of the 289 child deaths that occurred in B.C. were due to natural causes. The majority of natural deaths in 2013 involved infants who died in the first month of life.

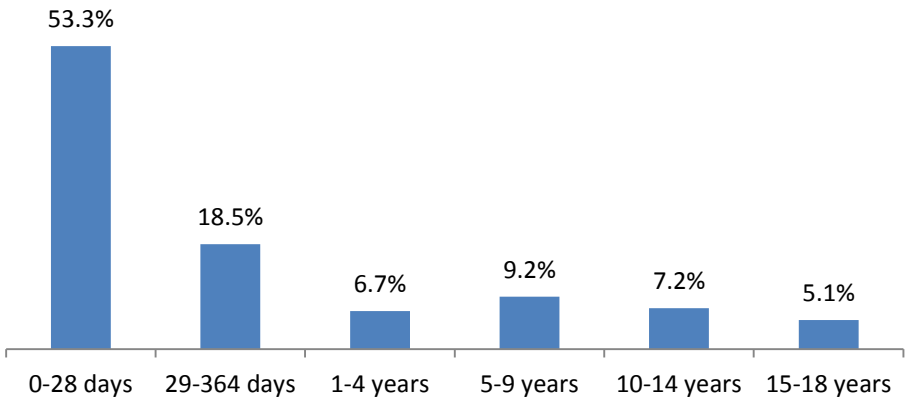
In 2013, leading causes of natural death include conditions originating in the perinatal period (n=101, 52%), followed by congenital, genetic, metabolic and chromosomal abnormalities (n=64, 33%), and cancers (n=24, 12%). Leading causes of natural child death in 2013 are consistent with longitudinal patterns observed in British Columbia since 2000.

In 2013, males accounted for 49% of natural deaths and females for 51%.

As figure 9 demonstrates, almost three quarters of the children who died of natural causes in 2013 were under the age of one, with the majority of natural infant deaths occurring in the first month of life.

Age:

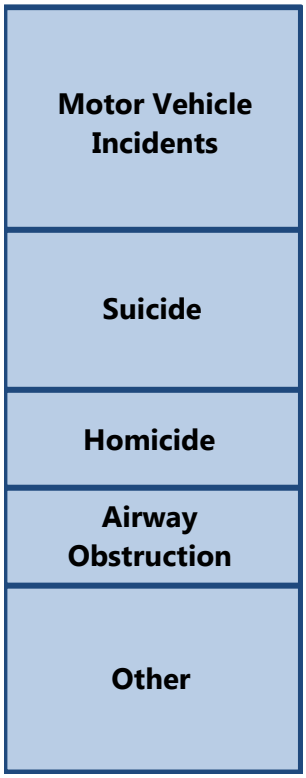
Figure 9. Distribution of child deaths by age group, 2013



INJURY RELATED DEATHS

Number of deaths: 67 (25 Females and 42 Males)

Leading Causes of Injury Related Death:



In 2013, 67 (23%) of the 289 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. Motor 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 2013 included airway obstructions, unintentional poisoning, drowning, fire, and falls.

Motor vehicle incidents accounted for 25% (n=17) of all injury related child deaths in 2013. Of these deaths, 59% (n=10) involved youth aged 15 to 18.

The second leading cause of injury related death was suicide, with 10 of the 12 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 2013, suicide occurred equally for males and 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 2013 there were 5 deaths caused by homicide. More homicides occurred in the 15 to 18 year old age group.

For all injury related deaths, more decedents were males (63%) than females (37%).

Health Authority rates of fatal injuries

The highest injury mortality rate among children in 2013 was observed in the Northern Health Authority followed by the Island and Interior Health Authorities. These were above the provincial rate of 7.4 deaths per 100,000 population (table 5).

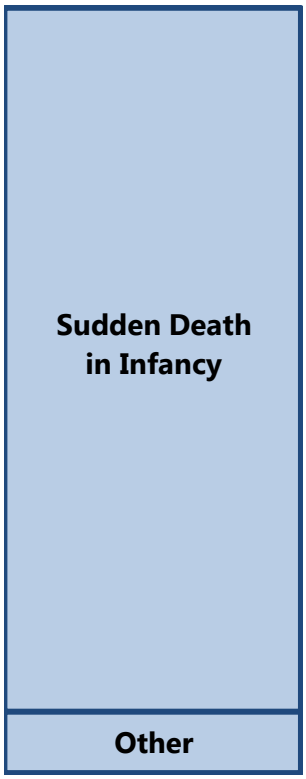
TABLE 5

Injury deaths by Health Authority of residence, 2013			
Region	Deaths	%	Rate per 100,000 pop.
Fraser	23	34%	6.2
Interior	11	16%	8.2
Island	14	21%	10.5
Northern	9	13%	13.2
Vancouver Coastal	9	13%	4.6
Lived outside BC	1	2%	n/a
Total	67	100%	7.4

UNDETERMINED DEATHS

Number of deaths: 27 (10 Females and 17 Males)

Leading Causes of Undetermined Death:



In 2013, 27 (9%) of the 289 child deaths occurring in British Columbia were due to undetermined causes.

Almost three quarters (n=20, 74%) 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 again after six months. British Columbia has established safe sleep guidelines for infants which can be accessed at http://www.perinatalservicesbc.ca/NR/rdonlyres/D799441C-3E00-49EE-BDF7-2A3196B971F0/0/HPGuidelinesSafeSleep1.pdf

In 2013, the number of sudden infant deaths was equal for males and females. Of the 20 infants who died suddenly, half were male and half were female.

There were 7 other cases where cause of death could not be determined. More were deaths of youth age 15-18 years.

CHILDREN RECEIVING SERVICES FROM THE MINISTRY OF CHILDERN AND FAMILY DEVELOPMENT

Almost one third (32%) of children who died in 2013 were in receipt of services from the Ministry of Children and Family Development (table 6) Many of these 93 children were medically fragile children supported through the province's child and youth special needs programs and services.

Of the 93 children receiving services from MCFD 57 (61%) died of natural causes, 26 (28%) children died of injury-related causes, and 10 (11%) children died of undetermined causes. Across all causes, seven 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, 2013

Type of MCFD service	Number of Deaths*
Child/Youth Special Needs	46
Family Services	34
Child Protection Services	37
Child in Care	7
Child/Youth Mental Health	8
Youth Justice/ Youth Services	3

** A total of 93 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 93 as some children were in receipt of more than one type of service.*

SECTION THREE

CHILD DEATH REVIEW PANEL

In 2013, the BC Coroner Service convened two death review panels to address child mortality topics with the goal to prevent 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 and 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 2013, two topics selected for panel review were sudden unexpected infant deaths and youth suicide. These 2 panels resulted in 6 key recommendations to agencies and ministry partners to improve awareness, services, and practice to address and prevent infant, child and youth deaths (Table 7 and Table 8).

Table 7

Review of Unexpected Infant Deaths (2008-2012)		
Recommendations		**Status**
Recommendation 1: Investigative practices	• That the Deputy Commissioner RCMP E Division and the Chief Constables of the independent municipal police departments develop a standardized investigative protocol to support law enforcement investigations into unexpected infant deaths. • That the BC Ambulance Service work with the BC Coroners Service to develop standardized questions with respect to the initial scene to support Emergency Medical Responders attending calls where infants die unexpectedly. • The BC Coroners Service revise its protocol for unexpected infant deaths to include obtaining 911 transcripts and ensure that scene recreations are conducted. • The BC Coroners Service adopts the Aboriginal Administrative Data Standard	Completed. Police follow national best practice Major Case Management Framework for investigations. Completed. BCCS protocol and policy amended. Completed. AADS implemented June 2016

* Under the *Coroners Act*

	(AADS) in order to collect more robust data about Aboriginal people.	
Recommendation 2: Genetic Testing	• Criteria be established by the BC Coroners Service, in consultation with pathologists and clinical geneticists, and the First Nations Health Authority, to identify when genetic testing would be beneficial in helping to establish a cause of death in infants. • The BC Coroners Service, pediatric pathologists, the Provincial Medical Genetics Program and the First Nations Health Authority review the utility of testing for the CPT1a variant in First Nations infants.	Completed. Medical guideline and parent brochure for CPT1a developed.
Recommendation 3: Safe sleep messaging	• The First Nations Health Authority, The Community Against Preventable Injuries, Ministry of Health (MOH), the Ministry of Children and Family Development and community stakeholders collaborate to identify the audience of parents/caregivers who are most likely to benefit from receiving messaging about infant safe sleep positioning and the risks of bed sharing and substance use and then implement a plan that reaches the target audience with that messaging.	Provincial safe sleep guidelines developed for health care providers. Safe sleep messaging developed and disseminated through MOH parent publications, HealthyFamiliesBC parenting website and through public health and acute care maternity settings. Honoring Our Babies: Safe Sleep Cards and Facilitators Guide developed by FNHA MCFD practice directive implemented addressing unsafe sleep practices with infants.

Table 8

Review of Child and Youth Suicides (2008-2012)		
Recommendations		**Status**
Recommendation 1: Service coordination	School districts continue to bring together key community partners involved in serving youth and families to develop community level risk assessment protocols in support of early intervention and prevention of harmful behaviours, including appropriate information sharing among agencies and proactive follow-up with young people and their families.	Completed. ERASE strategy implementation commenced in 2013 and Violence Threat Assessment community protocols developed ERASE training provided for educators, key youth service workers and community

	B.C. provincial government and school districts continue to ensure local front line staff are provided with education on supporting the mental health and well-being of children and youth.	partners
Recommendation 2: Access to child and youth mental health services	As part of its child and youth mental health services review and partnership with Ministry of Health (MOH) and Health Authorities, the Ministry of Children and Family Development (MCFD): • Map MCFD and contracted agency mental health services and service levels across the province and make the information easily accessible and publicly available; • Identify and address barriers to accessing mental health services, including the perspective of what young people identify as barriers to services; • Identify and address barriers to transitioning between community mental health and acute hospital services; and • Identify and address barriers to transitioning from child and youth to adult mental health services.	MCFD and MOH continue to work together and with Health Authorities to identify and address access barriers and streamline transitions. Includes the development of a provincial MCFD/ MOH/ HA protocol to support flexible, responsive transitions from Child and Youth Mental Health Services to Adult Mental Health Services. Online service inventory and Google style map format identifies key MCFD, HA and contracted agency mental health and substance use services.
Recommendation 3: BC Coroners service practice	The BCCS further contributes to the knowledge base of children and youth suicide by: • Proactively providing child death coroners reports, when deemed appropriate, to stakeholders for educational purposes; • On a trial basis, requesting toxicological analysis and Pharmanet records for all child and youth suicides; • Reviewing investigative questions with respect to a young person's sexual orientation to ensure the information is being gathered consistently; • Reviewing investigative questions with respect to bullying to see if additional light can be shed on this issue; • Ensuring a young person's use of social media is investigated as an information source for all child and youth suicides.	Completed. BCCS policy and protocol updated.

RECOMMENDATIONS MADE BY LOCAL CORONERS/INQUEST

A total of 48 recommendations were distributed in 2013 with respect to fourteen children who died between 2006 and 2013. Twenty three of the recommendations resulted from a single inquest. Each recommendation may be distributed to more than one agency. The agencies to which each recommendation was distributed are indicated below.

Recommendations were made to 13 agencies or Ministries.

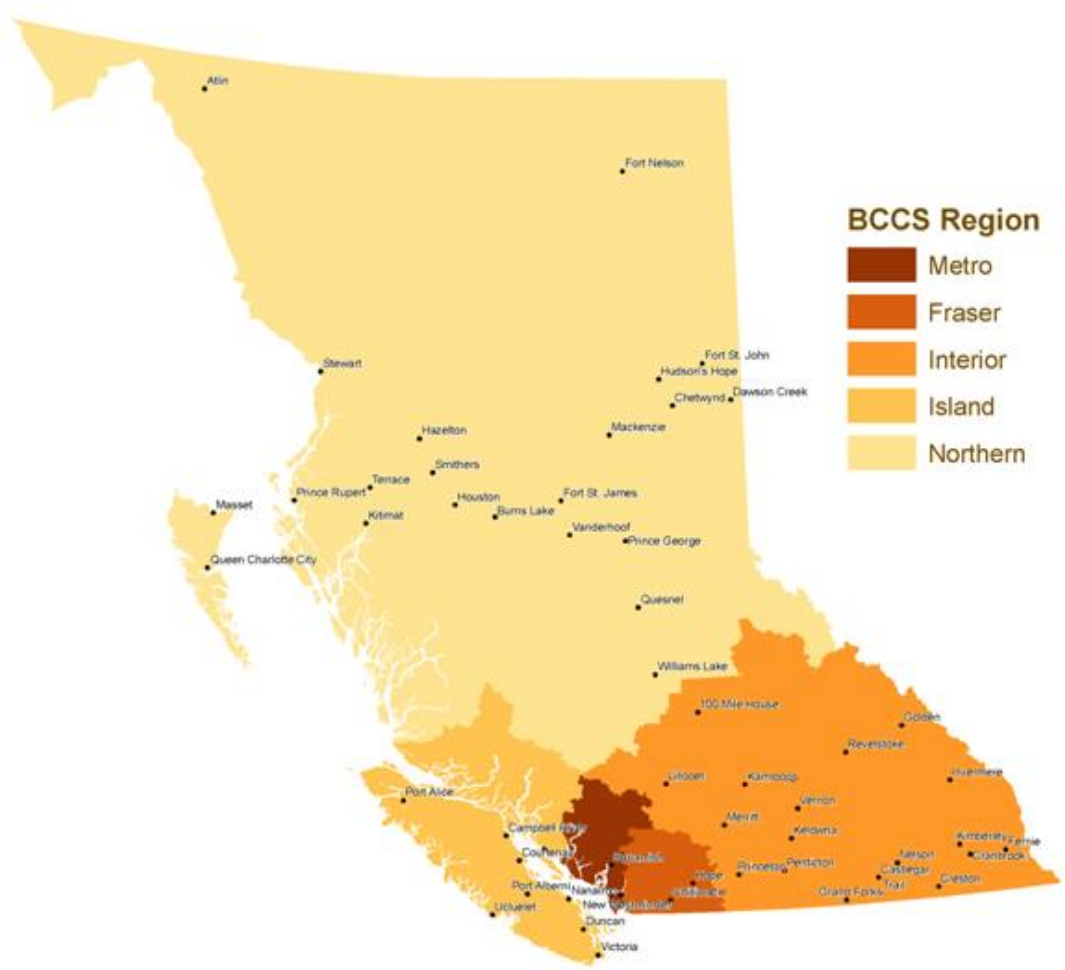
Of the 25 Local Coroner Recommendations:

- Four recommendations were to support sharing of the summary findings for information and educational purposes and to support policy development and practice.
- Seven recommendations were directed to the Ministry of Education, School Board and College to improve awareness and recognition of mental health issues and how to respond or seek support.
- Five recommendations were directed to the Representative for Children and Youth to consider reviewing the government services provided to the decedent with a view to improving services and outcomes for children in British Columbia.
- One recommendation was directed to Health Canada with notification of an adverse reaction to a prescribed medication
- Four recommendations to Ministry of Children and Family Development and the Ministry of Education related to information sharing and integrated case management to ensure best services and communication between service providers.
- Three recommendations were directed to the Ministry of Education regarding documentation of mental health concerns and that student expulsion decisions are discussed with parents.
- One recommendation was directed to health agency providing parenting programs encouraging the use of provincial guidelines for newborn assessment when providing services to families with newborns.

There was one inquest which resulted in 23 recommendations to improve mental health services, treatment, risk assessment, protocols, documentation and support to youth at risk of suicide and to support families navigating mental health services.

REFERENCES

BC CORONERS SERVICE REGIONS



Northern Region: Includes the region north, east and west from 100 Mile House to all Provincial borders, and Haida Gwaii.

Metro Region: Sunshine Coast, Sea to Sky Corridor, North Shore, Vancouver, UBC, Burnaby, Richmond, and Delta.

Fraser Region: Includes Coquitlam and Surrey to the Coquihalla Highway summit, east to Manning Park and north to Jackass Mountain bordering Merritt.

Interior Region: Includes the region north to 100 Mile House and Blue River, east to the Alberta border, south to the USA border and west to the Manning Park gate, including Ashcroft, Lytton and Lillooet.

Island Region: All of Vancouver Island, the Gulf Islands, and Powell River.