

Alcohol's Role in the Deaths of BC Children and Youth

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ABSTRACT

Objective: To determine the prevalence and context of alcohol use in the deaths of children and youth reviewed by the BC Children's Commission.

Methods: In 489 case reviews of BC children and youth, we examined the role that alcohol may have had at the time of death or whether there was a history of alcohol use either by the deceased child or another person in the child's life.

Results: Alcohol is most prevalent in the lives of 15-18 year olds. It is present at the time of death in two fifths of Motor Vehicle Incidents (MVI) and one third of suicides and drownings.

Interpretation: Alcohol has a profound presence in the lives and deaths of children reviewed by the Children's Commission. Enhancing deterrence laws and alcohol control policies, and increasing public awareness are warranted.

Established in 1996, British Columbia's Children's Commission has a statutory mandate to collect information on all deaths of children and youth under the age of 19 years. The Commission undertakes comprehensive child fatality reviews to determine the adequacy of services to the child or youth, and to examine public health and policy matters. The review process is completed by trained investigators and involves interviews with key informants and a review of documents and records produced by agencies or organizations that were involved in service provision. Each review contains information on the context in which the death occurred, background information on the child or youth, results of police or coroner's findings and recommendations as it relates to legislation, education or services that were found to be lacking or inadequate.

Alcohol can lead to health and safety risks for children and youth both directly and indirectly.¹ For example, death or injury could result from accidental poisoning from excessive drinking; assaults by drunken peers or strangers; or unintentional actions such as caregivers too intoxicated to provide proper supervision, or an intoxicated parent rolling over and suffocating a baby in bed. Alcohol has been implicated in child deaths of all types, including motor vehicle fatalities, homicides, suicides and Sudden Infant Death Syndrome (SIDS). "The younger a child [is when he/she] initiates alcohol and other drug use, the higher the risk for serious health consequences and adult substance abuse."² The purpose of this study was to determine the prevalence and context of alcohol use in the deaths of children and youth reviewed by the Commission.

METHODS

Case selection

There are approximately one million children and youth in the province of BC.³ During the past 4 years, 1,700 child and youth deaths have been registered. Of these 1,700 deaths, the Children's Commission has opened 944 formal investigations. Children's deaths are investigated if they are unexpected, if the child had received services from the Ministry for Children and Families (MCF) within the past year or if the child was a "child in

La traduction du résumé se trouve à la fin de l'article.

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care" (CIC) at the time of death. From October 1996 to December 2000, 349 fatality reports were analyzed, completed and publicly released. The Commission has also completed 140 reviews on children who had died prior to October 1996. These were children in care or receiving services from the former Ministry for Social Services. As of December 31, 2000, a total of 489 reports were completed and publicly released.

Research questions

For each case we posed the question: was alcohol mentioned in any way in the fatality report? Alcohol use was recorded if any of the key words associated with alcohol were found, including "drinking", "drunk", "intoxicated", or "inebriated". We did not differentiate between the various amounts of alcohol being consumed. The investigators who conduct the fatality reviews stated that when a reference to alcohol appeared in a report, it always pertained to misuse or abuse of the product. If there was evidence of empty alcohol containers or if the youth had attended a substance abuse program, this was recorded as "likely" use of alcohol.

Classifications of death were based on the BC Coroner's Service categories.⁴ Sudden Infant Death Syndrome (SIDS) deaths were treated as a separate category.

FINDINGS

General demographics

A total of 309 male and 180 female deaths were reviewed. The highest percentage of fatalities appeared in the youngest age group (0 to 4 years (n = 180)), and the oldest (15 to 18 years (n = 179)). More males than females died in each age category. Approximately 20% (n = 99) of the cases were Aboriginal children and youth, and 56 children were CIC at the time of their death. Aboriginal children and youth make up approximately 8% of the overall child population in BC.⁵

Broad classifications of all deaths

For both genders, most fatalities occurred as a result of accidents (n = 211). Accidents included poisoning, drowning, cliff jumping, motor vehicle incidents, or any type of vehicle, such as trains, boats, or snowmobiles. The second most common reason

TABLE I
Presence of Alcohol by Age Category

| Age Category (years) | Cases with Any Alcohol Use (Yes/Likely) | | Personal Current Alcohol Use | | External Current Alcohol Use | |
|----------------------|---|-----|------------------------------|-----|------------------------------|-----|
| | n | % | n | % | n | % |
| 0-4 n = 180 | 55 | 31% | 0 | 0% | 8 | 4% |
| 5-9 n = 59 | 14 | 24% | 0 | 0% | 7 | 12% |
| 10-14 n = 71 | 18 | 25% | 3 | 4% | 4 | 6% |
| 15-18 n = 179 | 101 | 56% | 64 | 36% | 46 | 26% |
| Total N=489 | 188 | 38% | 67 | 14% | 65 | 13% |

TABLE II
Prevalence of Alcohol by Cause of Death

| Cause of Death | Total Number | Alcohol Mentioned in the Fatality Report (Yes/Likely) | | Alcohol Present at Time of Death (Yes/Likely) | |
|------------------------|--------------|---|-----|---|-----|
| | | n | % | n | % |
| Motor Vehicle Incident | 123 | 58 | 47% | 49 | 40% |
| Suicide | 34 | 24 | 71% | 11 | 32% |
| SIDS | 53 | 24 | 45% | 4 | 8% |
| Homicide | 34 | 17 | 50% | 3 | 9% |
| Drowning | 29 | 9 | 31% | 9 | 31% |
| Total | 273 | 132 | 48% | 76 | 28% |

for death was natural causes related to various diseases and illnesses (n = 141). SIDS was the third most common classification of death (n = 53) followed by suicide (n = 34) and homicide (n = 34). More males than females died in each category except for homicide, where the numbers were equally distributed between genders.

SIDS and natural causes were the leading cause of death in the 0-4 year age group. After age 4, accidents became the main cause of death. Two thirds of deaths in youth aged 15-18 occurred as a result of accidents, with motor vehicle incidents being the most common.

Alcohol use

The role of alcohol in the lives of children and youth was divided into three categories: "Any alcohol use" – defined as alcohol being mentioned anywhere in the report; "Personal current alcohol use" – the deceased child was under the influence of any amount of alcohol at the time of his/her death; "External current alcohol use" – defined as someone other than the deceased child present at the scene of the death and having consumed alcohol. Alcohol was most prevalent in the lives of the 15-18 year old age group in terms of any alcohol use, personal current alcohol use, and external current alcohol use (Table I).

Classifications of death

Alcohol was mentioned in the fatality reports of approximately half of the children and youth who died in motor vehicle incidents, SIDS, and homicides; and in almost three quarters of suicides and one third of drownings. At the time of death, alcohol was present in approximately two fifths of MVIs, and one third of suicides and drownings. Overall, alcohol was present at the time of death in 28% of the children who died from those causes that appear in Table II.

INTERPRETATION

Due to this study's design, causation cannot be implied. While alcohol use may have occurred at the time of death or in the histories of some children and youth, this study is limited in its ability to state that this use caused the child or youth's death. This study does indicate, however, that tragic outcomes are associated with both personal consumption of alcohol by children and youth, and drinking by other people in their lives.

Fatalities, unintentional and intentional, associated with alcohol use represent one of the leading preventable causes of death among children and youth.⁶ It is clear from the results of this study that multiple

approaches must be applied to prevent or ameliorate the consequences of inappropriate alcohol use in children's lives, and that these efforts must take higher priority. Following are strategies that exemplify the kinds of actions that could begin to address the magnitude of this problem:

Deterrence Laws – lowering the legal BAC limits from the current 0.08% for drivers transporting children;⁶

Alcohol Control Policies – increasing the price slightly can have profound impact on the prevalence of drinking among adolescents;^{7,8}

Increasing Public Awareness – public information on responsible use, such as posters in drinking establishments, server intervention initiatives and information labels on beverage containers.

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