

SPECIAL TOPICS

1. Unexplained Infant Deaths

45 in 1997

44 in 1998

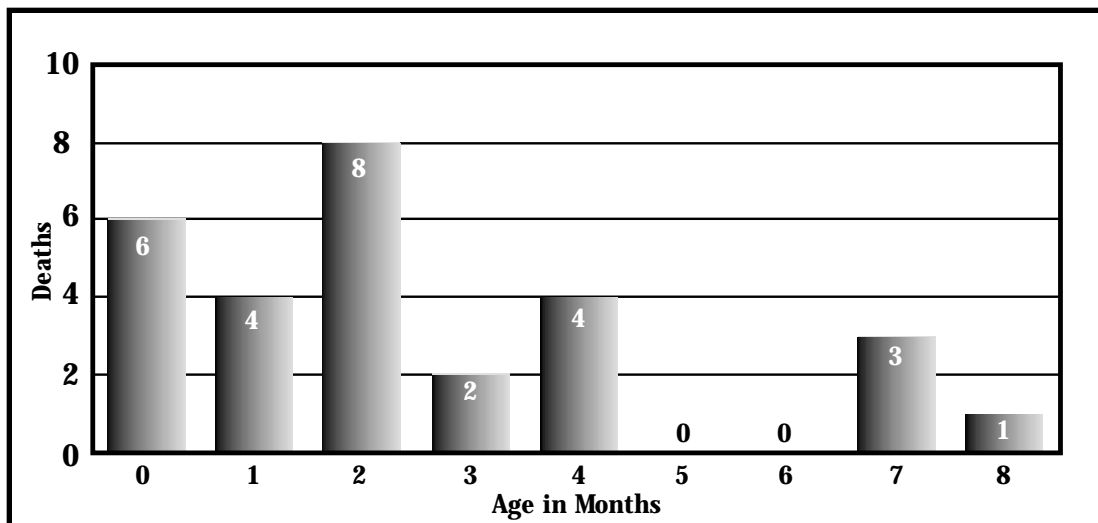
28 in 1999

This section describes infant deaths that are unexplained and unexpected. This type of death is the third leading cause of death for children under one year, behind perinatal conditions and congenital anomalies. This category includes deaths due to Sudden Infant Death Syndrome (SIDS). SIDS is defined as the unexplained and unexpected death of a previously healthy infant before age 1. The diagnosis of SIDS is an exclusionary diagnosis that is made after an autopsy, a death scene investigation, and a complete medical history to exclude any known cause of death.

Deaths can come to be classified as due to SIDS in a variety of ways. The most straightforward way is when the person filling out the death certificate (usually a Medical Examiner) assigns SIDS as a cause of death. Often, however, because of the desire to be as accurate as possible, the cause of death is listed on the death certificate as “unexpected” and/or “unexplained,” with various descriptions of environmental conditions that may have contributed in an unknown way to the death. For example, a death may be listed as due to an unexplained cause, in the presence of smoking in the household or sleeping in bed with a parent. Because of the difficulties inherent in assigning a cause of death when a likely explanation has not been found, deaths coded as SIDS are grouped together with other unexplained deaths in this section of the report.

In 1999, 28 children under one year of age died due to sudden unexplained causes. Deaths to infants due to unexpected and unexplained causes numbered 45 in 1997 and 44 in 1998. In 1999, this included 21 SIDS cases and seven “other” unexplained deaths. The classification of these cases is preliminary; some of the “other” unexplained deaths may be reclassified as SIDS before the data are finalized. More males (19) are represented than females (9). Age at death in Oregon’s cases ranged from 3 days to 8 months (see Figure 10). The peak incidence occurred at 2 months.

FIGURE 10: UNEXPECTED AND UNEXPLAINED INFANT DEATH BY AGE, OREGON, 1999, N=28



Source: Oregon Child Fatality Review Data

All 28 of these cases were reviewed by local Child Fatality Review teams. Eleven (39%) of the case families had previously been referred to SCF. In seven cases an SCF assessment/referral was made at the time of the fatality. No child homicides were discovered in the review of these cases. However, several cases were missing death scene investigations that are essential for making a determination of SIDS. A death scene investigation was conducted in 25 (89%) cases; no investigation was conducted in three cases (11%). In all cases an autopsy was performed.

Infants who died of unexpected causes were 3.9 times more likely to have a mother who smoked.

The cause of SIDS is unknown. Known risk factors for SIDS include maternal smoking during pregnancy and infant sleep position on the stomach. Although there is a strong association between these risk factors and the occurrence of SIDS, it is unclear how these risk factors cause SIDS.

Information on maternal smoking was obtained from birth certificates. Among the unexplained infant deaths, these babies were 3.9 times more likely to have a mother who smoked than the general Oregon population (50% versus 13%)⁴.

Pregnant women and family members who smoke should quit smoking.

The infant's usual sleep position was known to the Child Fatality Review team in 36% (10) cases. Sleep position is known to be a risk factor for SIDS. The American Academy of Pediatrics (AAP) recommends placing infants on their back to sleep to prevent SIDS. Of those whose usual sleep position was known, 60% (6) were reported to usually sleep on their stomach or side. In Oregon, 9% of mothers surveyed by the Pregnancy Risk Assessment Monitoring System (PRAMS) report that they put their baby down to sleep on their stomach.⁵

For the 23 cases whose position at discovery was known, 61% were on their stomach.

Because some infants die unexpectedly while sleeping with their parents or siblings, CFR teams also report data on the child's sleeping arrangement at the time of death. Among the 28 infants who died from unexplained causes, 46% (13) were sleeping alone and 43% (12) were reported to be co-sleeping with another person. While co-sleeping is not a risk factor for SIDS, some medical examiners consider co-sleeping as a potential factor in cases of unintentional suffocation.

Recommendations Related to Unexplained Infant Death

- Promote putting infants to sleep on their backs.
- Encourage pregnant parents and family members who smoke to quit smoking.
- Complete death scene investigations and autopsies on all deaths from unexplained causes.
- Encourage sharing of information about families among different investigative agencies (i.e., law enforcement, SCF, medical examiner), as occurs during Child Fatality Review, to promote thorough investigations of these deaths.

The Marion County team hosted a workshop to train team members in the valley on the diagnosis of SIDS and response to infant deaths.

Examples of current safety initiatives

- The American Academy of Pediatrics' "Back to Sleep" campaign.
- Smoking cessation programs for pregnant women and their families.

2. Suicide/Intentional Self Harm Deaths

24 in 1997

16 in 1998

18 in 1999

In 1999 there were 18 incidents in which a youth under age 18 engaged in intentional self harm⁶ which led to their death. Deaths due to intentional self harm or suicide among children numbered 20 in 1997 and 16 in 1998. Included among the 18 deaths in 1999 were 16 suicides and 2 cases of Russian Roulette.⁷ The rate of intentional self-harming behavior among youth aged 15-17 was almost six times that among those aged 10-14 (4 incidents among those aged 10-14, for a rate of 1.7 compared to 14 among those aged 15-17, for a rate of 9.5). Males were five times more likely to die from self harm than females (15 incidents among males compared to three incidents among females). Six incidents occurred while the victim was under the influence of alcohol or other drugs. All of the victims were white.

In this group of deaths, 56% (10) were firearm incidents. Six of the guns used were handguns and four were long guns. Seventy percent (7/10) of firearms were stored unlocked with ammunition. The storage location for one gun was unknown. The firearms belonged either to the victims' parents (5), the victim (2) or an adult acquaintance (1). All 10 firearm incidents involved a male victim. According to the 1999 Oregon Behavioral Risk Factor Survey, 44% of Oregon homes contain firearms.⁸ Youth access to firearms increases the risk of suicide.

The remaining incidents of self harming behavior include suicide due to hanging (4), jumping from a bridge and drowning (1), insulin poisoning (1), intentionally lighting oneself on fire (1), and a motor vehicle crash. Of the four suicides by hanging, three (75%) were male.

There was a group of three suicides in Eastern Oregon within a short period of time. The temporal and geographic clustering of these three deaths suggests that they were related to each other. In two firearm incidents the children knew each other and were friends.

Sixty-one percent (11) of the youth who died by intentional self harm had a family history of receiving services from SCF, six of the youth had child abuse and neglect referrals.

94% of youth who died by suicide had at least one risk factor. **67%** had two or more.

Data were available on whether or not the following risk factors for suicide were present in each case: prior arrests or convictions for crime, a history of a prior suicide attempt, history of mental health problems, current mental health treatment, gender or sexual orientation issues, alcohol or substance abuse history, and problems with school attendance and/or grades. Ninety-four percent (17) of these children had at least one of these recognized risk factors, and 67% (12) had two or more of these risk factors. Table 4 shows the number of youth with a history of risk factors. The presence of these risk factors may help identify high risk youth who should be the focus of prevention efforts.

TABLE 4. REPORTED RISK FACTORS ASSOCIATED WITH DEATH BY SELF-HARM AMONG OREGON YOUTH, AGED 10-17, 1999 N=18

Risk Factor	# Victims with Risk
Prior Arrests/Convictions	11
Family Discord	8
History of Depression	7
School Problems	7
Prior Suicide Attempt	6
Received Mental Health Treatment	6
Abuse/Neglect Referrals to SCF	6
History of Alcohol Abuse	5
Social/Emotional Disability	4
Family History of Suicide	3

Source: Child Fatality Review Data

Prevention efforts should focus on youth with identified risk factors.

In all cases a death scene investigation occurred; however, some investigative reports on suicides were as brief as two or three sentences. The state CFR team members determined that a more thorough investigation of suicide deaths is warranted. Often investigations included only family members as sources of information. Additional important information could be gathered from sources such as school and the youth's peers.

The Oregon Plan for Suicide Prevention and additional information on youth suicide are available at the Health Division website under the Center for Disease Prevention and Epidemiology, and then the Injury Prevention and Epidemiology section at: www.ohd.hr.state.or.us

Recommendations to Prevent Suicide/Intentional Self Harm Deaths

- Implement Oregon's Youth Suicide Prevention Plan.
- Focus suicide prevention efforts on youth with known risk factors.
- Identify youth at risk for suicide by screening for risk factors such as depression.
- Screen all youth entering juvenile justice custody for depression and suicide risk and screen at regular intervals during long-term custody.
- Encourage health care providers to assess firearm access in the homes of suicidal youth.
- Remove or lock up guns in homes where youth at risk for suicide live.
- Conduct more thorough investigations of suicides by including information from sources beyond immediate family members at the death scene.
- Educate authorities that suicide affects more than just the youth who dies. A potential for suicide clusters exists. In response to a suicide in a school or other institution, implement a crisis response plan that includes debriefing, screening, referral, counseling, and support for other youth and parents.

Examples of current safety initiatives

- Oregon Youth Suicide Prevention Plan
- "Gatekeeper" training
- Depression screening and treatment
- Comprehensive health care at School Based Health Centers
- American Foundation for Suicide Prevention (AFSP) annual survivor conference
- AFSP youth suicide prevention public education campaign
- Suicide Awareness Voices of Education depression awareness campaign

The Harney County team met to develop a response after youth suicide and attempts.

A 13 year old boy shot himself on a Monday afternoon with a 22 caliber rifle that belonged to his father. The youth was a student at a local high school. Several friends of the boy came forward to report that the boy was talking about killing himself but no one reported the suicide threats to adults. The teen was reportedly despondent about problems he was having with school, family and peers. The blood alcohol content just after the death of this teen was 0.07. He also tested positive for marijuana.

3. Child Abuse and Neglect Deaths

There were 20 abuse and neglect related deaths in 1999. Abuse and neglect deaths among children numbered 34 in 1997 and 24 in 1998. Of the 20 deaths in 1999, nine were due to abuse and in 11 cases neglect was determined to be a contributing factor to the death. Abuse and neglect were defined according to standards developed by the State Child Fatality Review Team. The rate of death due to child abuse and neglect is 2.3 per 100,000.⁹

Year	Abuse Deaths	Neglect Deaths
1999	9	11
1998	9	15
1997	11	23

Intensive family services, long term cooperation and monitoring should be implemented with families with drug and alcohol problems in the protective services system.

Abuse deaths were inflicted by shaken baby (5), strangulation (2), suffocation (1), and water intoxication (1).

Neglect contributed to deaths classified as due to the following causes: motor vehicle crash (2), suffocation (2), fire (2), drowning (1), unexpected infant death (1), gunshot wound (1), natural causes (1), strangulation suicide (1).

Methamphetamine use has been identified as a risk factor in child maltreatment deaths.

Sixty percent (12) abuse and neglect cases had a some history of family contact with SCF prior to death. Seven were open cases at the time of the child's death. Sixty percent (12) had a previous history of contact with AFS.

Major risk factors in the families of children who died by abuse and neglect include: prior arrest or conviction for crimes (55%), family history of abuse and neglect referrals (55%), alcohol abuse (50%), drug abuse (40%), domestic violence (37%), and victim history of abuse and neglect referrals (32%). Methamphetamine was the drug indicated in half of the families with history of drug abuse.

SCF Histories Among Children Who Die Unexpectedly in Oregon

According to SCF, there were 11,241 victims of child abuse/neglect among Oregon's children aged 0-18 in 1999. The rate of child abuse and neglect among Oregon children in 1999 is 1,355 per 100,000 population.⁹

It is estimated that 4% of Oregon children were the subject of an SCF referral in 1999. Among children who died of unexpected causes, 24% had a family history of a referral to SCF for child abuse or neglect.

Recommendations to Prevent Child Abuse and Neglect Deaths

- Increase supervision of children to prevent deaths due to neglect.
- Increase monitoring of protective services cases where drug and alcohol abuse is suspected, where domestic violence is suspected and where there is a history of involvement with law enforcement.
- Improve case coordination across county and state jurisdictions.

The Clackamas County team sponsored a state wide child abuse summit.

4. Lack of Adequate Supervision

16 in 1997 12 in 1998 10 in 1999

Lack of adequate supervision plays a role in unintentional injuries that lead to some child deaths. For example, leaving a child unattended by a river or road, or leaving a child in the custody of another young child may contribute to death. While defining "adequate" supervision is difficult, Oregon law (ORS 163.545) defines as a misdemeanor, "leaving a child under age 10 unattended in a place and for any period of time that would likely endanger the health or welfare of a child." Child Fatality Review teams use this definition to determine the extent that lack of supervision played in the deaths of children under age 10.

During 1999, 100 child deaths in children under 10 years of age were reviewed by local Child Fatality Review teams. In 10% (10) of these cases, the teams determined that the children were not adequately supervised at the time of death.

5. Deaths Among Disabled Children

20 in 1997 **34 in 1998** **25 in 1999**

Child Fatality Review teams classified children who died as to whether or not that child was disabled.¹⁰ This classification was based on review of records from schools, early intervention programs, Healthy Start, SCF, law enforcement agencies, medical records, and family reports. Disability was defined as any physical, social, emotional, or learning disability. Fourteen percent (25) of the deaths reviewed occurred among children who were identified by local teams to be disabled in some way.

The Mental Health and Developmental Disability Services Division has estimated that 2.8% of Oregon children are disabled. The Oregon Department of Education Early Intervention/Early childhood Education and School-Age Special Education estimated that 11% of Oregon children have a disability. These numbers suggest that disabled children in Oregon were between 1.2-4.2 times more likely than non-disabled children in Oregon to die from unexpected causes in 1999.

Recommendations to Prevent Deaths Among Disabled Children

- Providers should screen for disability in children to ensure appropriate services are provided.
- Share expertise between child protection and disability professionals.
- Train professionals in law enforcement, judicial system, human services, education and health care to recognize children with disabilities and to address care issues through prevention, intervention, and treatment.

6. Family History of Alcohol and Drug Abuse

20 in 1997 **28 in 1998** **42 in 1999**

Alcohol and drug abuse are widespread problems that may put a child at risk for abuse or injury. Child Fatality Review teams classified cases as to whether or not the victims or their families had a history of alcohol or drug abuse.¹⁰ A family history of alcohol abuse among family members was found in 16% (29/185) cases, and a history of drug abuse was found among family members in 17% (31/185) of cases. In (7%) 13/185 of cases the victim had a history of alcohol abuse, in 4% (7/185) of victims had a history of substance abuse. Interventions to reduce substance abuse in these families may help protect children from untimely death.

Recommendations to Prevent Deaths Among Families with Drug and Alcohol Abuse

Identification and intervention of domestic violence can prevent child abuse and deaths.

- Share expertise and case coordination among child protection and drug and alcohol professionals.
- Providers should increase screening for drug and alcohol problems among family and extended family members.
- Educate SCF, AFS, law enforcement, mental health and other workers about the pharmacology of alcohol, tobacco and other drugs.

7. Family History of Domestic Violence

22 in 1997 **23 in 1998** **27 in 1999**

The 1998 Oregon Domestic Violence Needs Assessment documented that 15% of children live in a home in which physical abuse by an intimate partner occurred in the last year. Domestic violence in a child's home may put that child at risk for child abuse and other physical injuries.

The prevalence of domestic violence is underestimated.

CFR teams classified children who died as to whether or not their families were known to have any history of domestic violence.¹¹ This information might be obtained from law enforcement, SCF, mental health, the district attorney, or the child's medical records. A history of being a victim of domestic violence was reported in 11% (20/185) of cases reviewed. A history of a family member perpetrating domestic violence was reported in 23/185 (12%) of the cases. In 34% (10/29) of cases with a family history of alcohol abuse, there was a family member perpetrating domestic violence. In the 35% (11/31) of families with identified substance abuse problems, there was a family member perpetrating domestic violence. In four cases, the child had a prior history of being a victim of domestic violence and in five cases the child had been a perpetrator in a past domestic violence incident.

Domestic violence often is not reported to official sources. This strongly suggests that the prevalence of domestic violence reported by the CFR teams is an underestimate of the true prevalence in the homes of children who have died. Better ascertainment of domestic violence may help identify children at higher risk for untimely death who might be saved by an aggressive intervention.

Members of Western Douglas, Multnomah and Deschutes County teams are participating in a pilot domestic violence fatality review project.

Recommendations to Prevent Deaths Among Families with a History of Domestic Violence

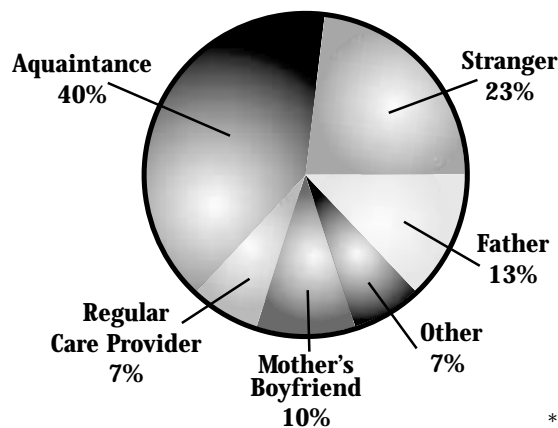
- Community providers should work to identify and intervene in domestic violence.
- Improve information sharing to assist community providers in prevention of domestic violence.
- Increase community resources to prevent and intervene in domestic violence.

B. Investigations and Judicial Outcomes in Crimes Against Children

Cases with Death Scene Investigations	92% in 1997	92% in 1998	91% in 1999
Perpetrators of Crime Identified	29 in 1997	34 in 1998	29 in 1999
Arrest for Crimes Against Children	25 in 1997	31 in 1998	24 in 1999

Death scene investigations were conducted in 91% (169/185) of the child death cases reviewed by the teams. A perpetrator was identified in 17% (29/169) of the investigated cases. Seventy-three percent (21) of the victims knew the perpetrators of the crimes against them. Figure 11 illustrates the relationship between the perpetrator and victim. Eighty-three percent of the perpetrators were male. One case with an identified perpetrator was a murder/suicide case; arrests were made in 24 cases. Grand juries returned indictments on 68 separate counts of crimes in 20 of 24 cases in which an arrest was made.

FIGURE 11: PERPETRATOR RELATIONSHIP TO CRIME VICTIM IN CRIMINAL CASES REVIEWED BY CHILD FATALITY REVIEW TEAMS, OREGON, 1999*, N=29



Source: Child Fatality Review Data

*Can be more than one perpetrator per crime

Convictions were found by juries on 42 counts in 85% (17/20) of the cases where grand juries had indicted perpetrators for crimes. Trial outcomes are pending in the remaining cases. The criminal cases fell into three categories: motor vehicular crimes (14 cases); child homicide (11 cases); and firearm homicide (2 cases). Eight of these cases were alcohol or drug related. Nine of these cases were determined to be caused by abuse and four were determined to be related to neglect. Table 5 contains information on the indictment, conviction and sentence for each case against a perpetrator or an alleged perpetrator in which crimes against children caused or contributed to one or more fatalities.

TABLE 5. INDICTMENTS, CONVICTIONS AND SENTENCES FOR PERPETRATORS OF CRIMES AGAINST CHILDREN WHO DIED IN OREGON, 1999

Indictment	Conviction	Sentence
Motor Vehicle Crash Fatality		
Manslaughter I x 2 Assault III DUII	Manslaughter II Assault III DUII	163 Months Prison
Manslaughter I x 3 Assault III Unauthorized use of a Motor Vehicle	Manslaughter II x 3 Assault III	150 Months Prison Concurrent 30 Months
Manslaughter II Assault II Assault III x 2 Reckless Driving	Negligent homicide Assault III Assault IV	28 Months + \$5,000 Fine 14 Months 6 Months
Manslaughter II Reckless Driving DUII	Pending	Pending
Manslaughter I DUII	Criminally Negligent Homicide Assault III	36 Months Suspended, 60 days jail 36 Months Sus., \$4,844 Fines + Fees
Manslaughter I Manslaughter II Assault II	Pending	Pending
Manslaughter I x 2 Criminally Negligent Homicide x 2	Criminally Negligent Homicide x 2	360 Days in Jail; 6 Years Probation License Suspended for 5 Years
Manslaughter I Assault III Reckless Driving Reckless Endangerment x 2	Criminally Negligent Homicide	10 Years (Bootcamp After 4 Yrs) 8 Years license Suspended \$753 Fines and Fees
Manslaughter II Reckless Endangerment DUII	Manslaughter II Reckless Endangerment II Reckless Endangerment III x 2 DUII	75 months, \$500 Fine, License Suspended 10 Years 10 Days Concurrent 10 Days Concurrent
Manslaughter Assault III Reckless Driving	Criminally Negligent Homicide	90 Days House Arrest 36 Months Probation Drivers License Suspended 10 Years
Manslaughter II Criminally Negligent Homicide DUII	Criminally Negligent Homicide DUII	36 Months Probation 60 Days Jail; \$1,279 Fines

Indictment	Conviction	Sentence
Motor Vehicle Crash Fatality		
Charge: Furnishing Alcohol to a Minor	Furnishing Alcohol to Minor	30 Days Suspended Sentence, 12 Months Probation, \$555 Fines +Fees
Manslaughter II DUII Reckless Driving Hit and Run	Manslaughter II DUII	75 Months 36 Months Post Prison Probation
Child Homicide		
Aggravated Murder x 3	Pending	Pending
Aggravated Murder x7	Pending	Pending
Felony Murder Manslaughter I	Pending	Pending
Murder by Abuse x 2 Manslaughter I x 3 Criminal Mistreatment	Manslaughter II	6 Years
Homicide by Abuse Murder I	Homicide by Abuse	26 Years, 8 Months
Manslaughter I	Criminally Negligent Homicide	Pending
Aggravated Murder x 2 Murder x 1 Manslaughter I Manslaughter II	Murder I	Pending
Murder by Abuse	Manslaughter I	120 Months; 36 Months Post Prison Supervision
Aggravated murder Sex Abuse	Murder	25 Years Prison
Assault I x 2 Assault II x 3 Assault III x 4 Criminal Mistreatment I x 1	Assault I x2 Assault II x 3 Assault III x 1 Criminal Mistreatment	260 Months 240 Months 2 x 70Months Concurrent 40 Months Consecutive
Unintentional Firearm Fatality		
GSW Pending Juvenile Court Action	Pending	Pending
Criminally Negligent Homicide	Pending	Pending

9. Comparison of Data Between Oregon and the United States

Manner of Death in Oregon and United States

Table 6 illustrates 1998 Oregon and United States child deaths and death rates in children aged 0- 19 by intent category. Deaths are classified as “Unintentional” (e.g., “accidents”), Suicide, Homicide, or “Natural and all other” (e.g., death due to congenital anomalies or to an undetermined cause). Compared to the United States as a whole, Oregon’s death rates from homicide are lower than the national figures. There were no significant differences between Oregon and the United States for any other manner of death.

TABLE 6. DEATH RATES OF CHILDREN AGED 0-19 BY MANNER OF DEATH, OREGON & UNITED STATES, 1998

Manner of Death	OREGON		UNITED STATES	
	Frequency (%)	Rate/100,000	Frequency (%)	Rate/100,000
Natural/Other	333 (61.4)	36.2	37,263 (67.5)	48.0
Unintentional	166 (30.6)	18.0	12,416 (22.5)	16.0
Homicide	20 (3.6)	2.2	3,461 (6.3)	4.5
Suicide	23 (4.2)	2.5	2,061 (3.7)	2.6
Total	542	58.9	55,201	71.1

Source: National Center for Health Statistics, CDC Wonder

Cause of Death in Oregon and the United States

Table 7 describes the cause of death for injury deaths in Oregon and the United States. Compared to the United States as a whole, Oregon's death rates from firearm and fire events are lower than the national rates and deaths from suffocation and drowning are higher than the national figures. There were no significant differences between Oregon and the United States for any other cause of death.

TABLE 7. DEATH RATES OF CHILDREN AGED 0-19 BY CAUSE OF DEATH, OREGON & UNITED STATES, 1998

Cause Category	OREGON		UNITED STATES	
	Frequency (%)	Rate/100,000	Frequency (%)	Rate/100,000
Motor Vehicle	103 (19.0)	11.2	7,965 (14.4)	48.0
Firearm	30 (5.5)	3.3	3,761 (6.8)	16.0
Drowning	24 (4.4)	2.6	1,442 (2.6)	4.5
Suffocation	19 (3.6)	2.1	1,262 (2.3)	2.6
Fire	7 (1.3)	0.8	765 (1.4)	71.1
Poisoning	5 (1.0)	0.5	532 (1.0)	0.7
Cutting/Piercing	3	*	252 (0.5)	0.3
Fall	1	*	199 (0.5)	0.3
All Other	350 (64.6)	38.0	39,023 (70.6)	50.2
Total	542	58.9	55,201	71.1

Source: National Center for Health Statistics, CDC Wonder

*Rates for frequencies less than 5 are suppressed