

Child Deaths in Idaho



2000

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A report on child
deaths based on the
findings of the
**Idaho Child
Mortality Review
Team**

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EXECUTIVE SUMMARY

The Idaho Child Mortality Review Team (CMRT) presents the fourth annual report on child deaths of Idaho residents occurring in Idaho in 2000. In our review process, the team relies on information already gathered by coroners, law enforcement, and medical personnel. The team does not contact the family or friends of children who have died.

In keeping with our objective to identify potential risk factors and preventable causes of death, we strive to provide evidence on which changes to reduce child deaths in Idaho can be based.

A positive change in our process occurred in 2002. The CMRT Chairperson began reporting the annual team findings to the Governor's Coordinating Council on Families and Children. This provides the opportunity to share information and recommendations with Council members. The goal of the Council to improve the well being of families and children by building partnerships, improving services and creating public awareness is directly related to the objectives and the work of the CMRT.

The work of the Team continues to be hampered by our ability to provide thorough case review and make informed recommendations. The challenges include:

- Inability to obtain medical records.
- Incomplete information on records, such as coroner reports on SIDS deaths, suicides, and other non-motor vehicle collisions.
- Lack of subpoena power to obtain medical records

SUMMARY OF FINDINGS AND RECOMMENDATIONS

There were 197 Idaho resident child deaths, occurring in Idaho in 2000. Of the 197 deaths, 81 were selected for review. After review 68 were considered to be preventable, 8 were considered not preventable. Five were classified as unable to determine preventability due to lack of sufficient information.

- **Thirty-four (34) Idaho children died in motor vehicle accidents in Idaho in 2000.**

The team recommends:

- A standard (primary) seat belt law that covers all ages and all seating positions.
- Child safety restraint education for parents based on National guidelines according to the child's age and size.
- Idaho's Office of Highway Safety *Ground Zero* project, which focuses on reducing the risk-taking behaviors of young drivers including impaired driving, speeding, and not wearing seatbelts.

- **Eleven (11) Idaho children died of Sudden Infant Death Syndrome (SIDS) in Idaho in 2000.**

The team is concerned about the SIDS deaths that have 1 or more risk factors present. We recommend that parents be educated at every opportunity by the health care community about protecting babies from the known risk factors associated with SIDS.

- **Eight (8) Idaho children died due to suicide in Idaho in 2000.**

The team supports the Department of Health and Welfare and their public and private partners in the development of a statewide suicide prevention plan.

- **Five (5) child death reviews were hampered by lack of access to complete records and were so incomplete that preventability could not be determined.**

The team is concerned about the inability to provide a meaningful review of child deaths due to the lack of information available. We recommend a mechanism to assist the review team in obtaining records surrounding the child deaths. There are multiple options used successfully by other states including:

- Granting the team statutory authority to access applicable records.
- Granting the team subpoena power to request applicable records.
- Laws protecting the team review documents from discoverability.



HISTORY

Concern for the welfare of children, particularly those who are abused or neglected, has been longstanding among public and private social service agencies, professionals, and the general public. In response to this concern, Los Angeles County, California started child mortality review in 1978. Their success in identifying preventable child deaths led to many states instituting statewide child mortality review teams. The overall goals of the teams include focusing on creating effective multi-agency case management and improving prevention and intervention programs to protect children from serious injury and death.

In response to this same concern, then-Governor Philip E. Batt, with Executive Order No. 98-10 (Appendix A), formed Idaho's Child Mortality Review Team on July 16, 1998. The team is appointed by the Director of the Department of Health and Welfare and consists of a multidisciplinary, multi-agency board. Bureaus within the Division of Health and the Idaho Transportation Department's Office of Highway Safety provide support to the team.

In 24 years, child mortality review teams have become a national standard in the effort to protect children. According to the National Center on Child Fatality Review, as of 2000, multi-agency child death review teams exist in all 50 states and the District of Columbia.

CHILD MORTALITY REVIEW TEAM

The Idaho Child Mortality Review Team represents a combination of public, criminal justice, health, and social service organizations. Team members participate in the review and make decisions by voting on the preventability of the death and identification of prevention activities and target audiences. The following members were appointed to the team by the Director of the Department of Health and Welfare and participated in the 2000 reviews:

Joyce Gilbert, MD, Pediatrician, Chair

Shirley Alexander, MSW, Child Protection Program Specialist, and Children at Risk Task Force Member

D. Lee Binnion, MD, Emergency Physician

Robert Cihak, MD, Pathologist

Glen Groben, MD, Forensic Pathologist

Vicki DeGeus-Morris, Coroner, Canyon County

Eve Dickinson, Keeping Children Safe Panel, Community Representative

Christine Hahn, MD, State Epidemiologist

Tony Wallace, Sgt., Boise Police Department

ASSISTANTS TO THE CHILD MORTALITY REVIEW TEAM

The Child Mortality Review Team has the support of many state agencies in their efforts to review child deaths. The assistants provide record review and clerical support. They do not have decision making or voting authority on the team. The Epidemiologist and Child Protection Program Specialist from the team meet with the screening group monthly. The following assistants provided support to the team during the 2000 reviews:

Dia Gainor, Chief, Emergency Medical Services Bureau

Boni Carrell, EMS for Children Planner, Emergency Medical Services Bureau

Susan Mulkey, IT Production Specialist, Office of Highway Safety

Ginger Floerchinger-Franks, Injury Prevention Program Manager, Bureau of Health Promotion

Kathy Simplot, Senior Research Analyst, Bureau of Health Policy and Vital Statistics

Teneale Chapton, Senior Research Analyst, Bureau of Health Policy & Vital Statistics

Carolyn Thrasher, Administrative Assistant, Emergency Medical Services Bureau

Members bring a wide variety of experience and perspectives on children's health, safety, and maltreatment issues. Because of the varied expertise the team possesses, the ability to identify prevention and intervention activities is greatly enhanced.

MISSION STATEMENT

To reduce preventable child fatalities through systemic, multidisciplinary, multi-agency review of child fatalities; resulting in data-driven recommendations for legislation, public policy, statewide and community-based prevention education and systems improvement.

OBJECTIVES

The team has developed the following objectives to direct its work:

- Identify potentially preventable causes of death.
- Identify the risk factors leading to the death.
- Collect and organize the information into meaningful summaries of causes of child death in Idaho.
- Make specific and feasible recommendations to the Governor and Chairs of the Senate and House Health and Welfare committees on ways in which child mortality can be reduced in Idaho.

METHODOLOGY

Deaths of Idaho residents, less than 18 years of age, occurring in Idaho during 2000 were reviewed. Deaths occurring out of state were not reviewed since records surrounding circumstances of their deaths are unavailable for the team's use.

The Bureau of Health Policy and Vital Statistics identified the child deaths. An abstract of each death certificate was supplied to the screening group, which met monthly to review the abstracts and identify potentially preventable deaths. The screening group selected a death for further review when it met one or more of the following criteria:

- Death was due to an external cause
- Death was unexplained
- Death was due to a cause with identified risk factors

The death was assessed to identify additional information necessary for a comprehensive review. Additional information was requested from the appropriate agency. The sources of information could include:

- Autopsy reports
- Coroner reports
- Law enforcement reports
- Medical records
- Emergency medical system records
- Child protection records

Recognizing that the records of child deaths and circumstances leading to the deaths are kept by multiple agencies, the team strives to examine the events leading to death across systems and over time. The team does not have subpoena power and cannot always obtain confidential records.

Of 197 resident child deaths occurring in Idaho in 2000, 81 met the criteria for review and additional information was requested. After available records were collected, the assistants reviewed the information, and the cases were prepared for presentation before the Child Mortality Review Team (CMRT).

The team, including the assistants, met quarterly. Available information from records on the child deaths were presented with additional input from the team members and assistants.

The 81 deaths selected for review included all accident, suicide, homicide, Sudden Infant Death Syndrome, and deaths of undetermined intent. Ten of the deaths due to natural causes were also reviewed. Deaths that were not sent for further review included most deaths due to extreme prematurity, cancer, and severe multiple congenital anomalies, unless preventive measures could clearly have reduced the risk of infant death (e.g., trauma leading to a premature birth).

Detailed technical notes can be found under Appendix B.

Deaths that were judged to be definitely or probably preventable were considered “preventable” for the purposes of this document. The team’s working definition for preventability was:

Preventability refers to the ability of an individual or community to reasonably have done something to alter the conditions that led to the child's death, thereby preventing the child's death, or reasonably do something now to reduce the likelihood of future deaths. Examples include, but are not limited to, implementing safety rules, laws, or policies; creating or improving barriers around dangerous areas; educating children or adults in the community; or improving access to health care.

The preventability of each death was stratified into categories as outlined by identifying documented risk factors which would have likely contributed to the death.

Preventable	Definition
Definitely	Definite actions could have been taken to prevent this death.
Probably	Certain actions may have decreased the likelihood of this death.
Probably not	This death was probably not preventable.
Not preventable	No preventive measures were found.
Unable to determine	

Risk factors, prevention opportunities, and intervention activities were identified. A data collection form was completed on each case reviewed. If additional records were needed, or specific questions were raised that required more information, a case review was continued at the next meeting. If additional information was unobtainable, the case was considered incomplete, and a determination of preventability was not made.

Of the 81 cases presented to the CMRT, 5 cases were considered incomplete and preventability could not be determined. The following table identifies the 5 deaths by manner.

Manner	Number
Natural	2
Sudden Infant Death Syndrome	1
Suicide	1
Unintentional Injury	1
Total	5

Information from the data collection form was entered into an Access 97 database, from which this report was produced.

POPULATION

The population of Idaho in 2000 was estimated at 1,294,953. Children under the age of 18 comprised 28.5 percent of the population. This is a .5 percent increase over 1999. The resident population under the age of 18 increased by about 10,000 in both gender groups from approximately 180,000 to 190,000 resident males under the age of 18, and approximately 170,000 to 180,000 resident females.

POPULATION	NUMBER	PERCENT
Idaho Total	1,293,953	100.0
Idaho residents 0-17	369,030	28.5
SEX, RESIDENTS 0-17		
Males	189,726	51.4
Females	179,304	48.6
RACE, RESIDENTS 0-17*		
White	323,376	87.6
Black	1,899	0.5
American Indian	6,034	1.6
Asian / Hawaiian / Pacific Islander	3,155	0.9
Other Race	22,421	6.1
Two or More Races	12,145	3.3
ETHNICITY, RESIDENTS 0-17		
Hispanic	42,902	11.6
Non-Hispanic	326,128	88.4

Population: U.S. Census Bureau, Internet release August 1, 2001.

Idaho resident child (less than 18) deaths occurring in Idaho during 2000 were reviewed.

MANNER OF DEATH	RESIDENCE/OCCURRENCE				
	(A) Idaho Resident Children, dying in Idaho*	(B) Idaho Resident Children, dying outside Idaho	(C) TOTAL: Idaho Resident Children Deaths (A + B)	(D) Non-Resident Children, dying in Idaho	(E) TOTAL: Child deaths occurring in Idaho (A + D)
Natural	137	38	175	5	142
Accidents	51	9	60	11	62
Suicide	8	1	9	1	9
Homicide	1	0	1	0	1
TOTAL	197	48	245	17	214

NOTE: Figures in this table for child deaths other than Idaho resident children dying in Idaho (column A) are for informational and comparison purposes only.

***All numbers presented in this report will be for Idaho resident child (less than 18) deaths, occurring in Idaho unless otherwise specifically stated. The reader should keep in mind while reviewing this report that findings are based on the population in column (A) only.**

The 48 deaths to Idaho resident children occurring out of state were not reviewed. The records surrounding circumstances of their deaths were unavailable for the team's use.

Non resident deaths occurring in Idaho were not reviewed. A break down of those deaths by state of residence is seen on the right.

RESIDENT STATE	NUMBER OF DEATHS
<i>Montana</i>	1
<i>Nevada</i>	1
<i>Oregon</i>	3
<i>Utah</i>	2
<i>Washington</i>	7
<i>Wyoming</i>	3



TRENDS IN CHILD MORTALITY

Mortality statistics are compiled in accordance with the World Health Organization (WHO) regulations, which specify that member nations, including the United States, classify and code causes of death in accordance with the International Statistical Classification of Diseases and Related Health Problems. The tenth revision of the International Classification of Diseases (ICD-10) was implemented in the United States beginning with deaths occurring in 1999 and replaces the ninth revision of the ICD (ICD-9), which was used from 1979 through 1998. Data presented for 1992-1998 have been adjusted for comparability to 1999 data and may differ from data previously published. Refer to Technical Notes for further explanation and methodology.

Idaho and U.S. Resident Deaths by Age Group

In 2000 the Idaho death rate for children aged 15-17 was 21 percent lower than the U.S. rate.

STATISTIC	AGE GROUP			
	<1*	1-4	5-14	15-17
Idaho Number	152	19	44	30
Idaho Rate	748.6	24.4	21.4	45.4
U.S. Rate	728.7	32.9	18.7	55.1

* Death rates to children <1 are per 100,000 live births occurring in 2000. Rates for other age groups are per 100,000 population in the age group.

Idaho's rate of accidental deaths is significantly higher than the U.S. rate.

Idaho and U.S. Resident Deaths by Manner

POPULATION	NATURAL	ACCIDENTAL	SUICIDE	HOMICIDE	UNDETERMINED INTENT
Idaho Total	175	60	9	1	0
Idaho Rate	47.4	16.3	2.4	0.3	0.0
U.S. Rate	50.1	12.7	1.6	2.6	0.3

Sudden Infant Death Syndrome (SIDS)

There has been a significant decline in SIDS rates in the U.S. and Idaho since 1992. The SIDS rate decreased 78.8 percent from 105.7 per 100,000 live births in 1999 to 59.1 in 2000, bringing Idaho's rate lower than the U.S. for the first time.

Idaho* and U.S. SIDS deaths and rates, 1992-2000

Residence	1992	1993	1994	1995	1996	1997	1998	1999	2000
Idaho Resident									
Occurring in Idaho	29	35	27	21	25	20	21	21	11
Occurring outside of Idaho	2	0	1	1	1	1	0	0	1
<i>Total Resident SIDS deaths</i>	<i>31</i>	<i>35</i>	<i>28</i>	<i>22</i>	<i>26</i>	<i>21</i>	<i>21</i>	<i>21</i>	<i>12</i>
Idaho Resident SIDS death rate	180.1	203.1	160.1	121.3	136.0	112.2	107.5	105.7	59.1
U.S. Resident SIDS death rate	125.1	121.4	107.1	90.6	81.5	80.2	74.5	66.9	62.2

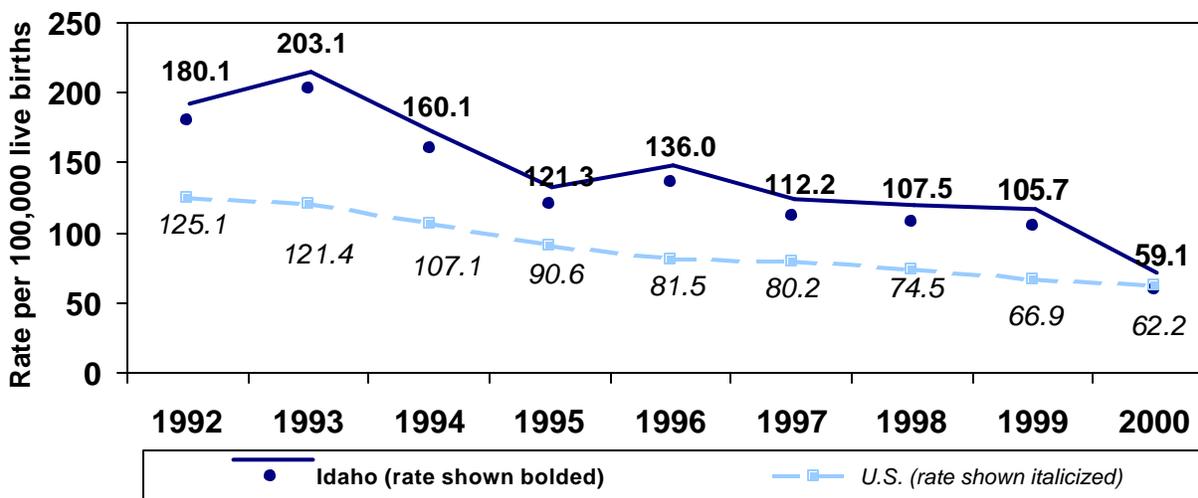
* Idaho rates are based on resident data and are comparable to U.S. data.

Rate: Number of deaths per 100,000 live births.

Note: Rates based on fewer than 20 deaths are subject to relatively large and random variation. Use with caution.

Death numbers and rates for deaths occurring from 1992-1998 have ICD-9/ICD-10 comparability ratios applied and may differ from data previously published. Comparability ratio for SIDS: 1.04. See Technical Notes.

Idaho* and United States SIDS death rates, 1992-2000



*This trend includes SIDS deaths to all Idaho resident infants (under the age of 1) for the years shown, occurring both in and outside of Idaho.

Due to revisions in the database, data may differ slightly from those previously published by the Bureau of Health Policy and Vital Statistics.

Unintentional Injury

Idaho's Unintentional injury death rate for children aged 0-17 dropped dramatically in 2000, but remains higher than the U.S. Motor Vehicle injury accounts for the majority of unintentional deaths in children.

Idaho* and United States Unintentional injury deaths and rates
Children under 18, 1992-2000

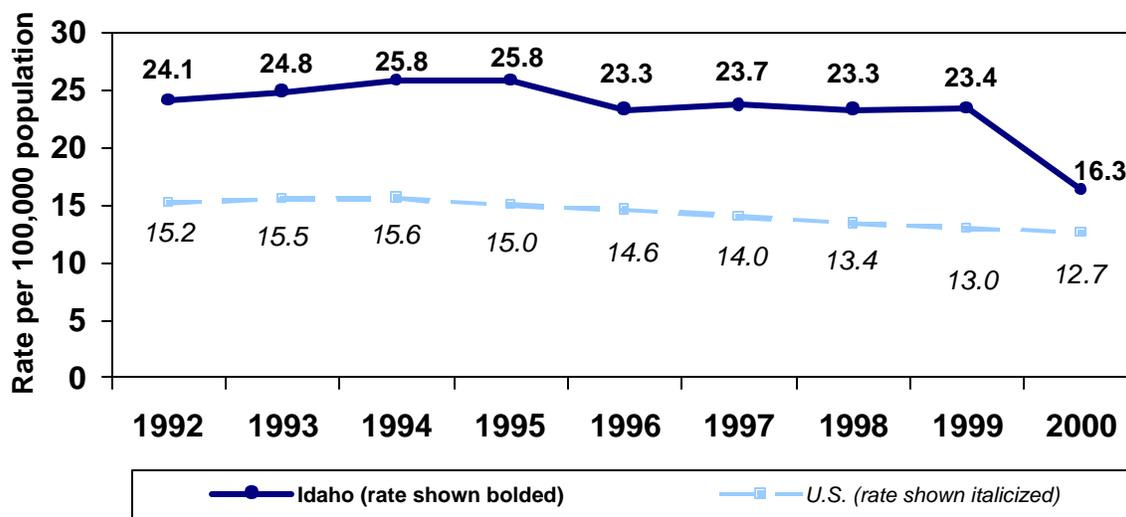
Residence	1992	1993	1994	1995	1996	1997	1998	1999	2000
Idaho Resident									
Occurring in Idaho	70	72	81	79	67	76	72	75	51
Occurring outside of Idaho	8	10	7	10	14	7	10	7	9
<i>Total Resident Unintentional injury deaths</i>	<i>78</i>	<i>82</i>	<i>88</i>	<i>89</i>	<i>81</i>	<i>83</i>	<i>82</i>	<i>82</i>	<i>60</i>
Idaho Resident Unintentional injury death rate	24.1	24.8	25.8	25.8	23.3	23.7	23.3	23.4	16.3
U.S. Resident Unintentional injury death rate	15.2	15.5	15.6	15.0	14.6	14.0	13.4	13.0	12.6

*Idaho resident rates are based on total Idaho resident deaths and are comparable to U.S. rates.

Rate: Number of deaths per 100,000 population aged less than 18 years of age.

Note: Death numbers and rates for deaths occurring from 1992-1998 have ICD-9/ICD-10 comparability ratios applied and may differ from data previously published. Comparability for Unintentional injury: 1.03. See Technical Notes.

Idaho* and United States Unintentional injury death rates, children under 18, 1992-2000



*This trend includes Unintentional Injury deaths to all Idaho resident children under the age of 18 for the years shown, occurring both in and outside of Idaho.

Due to revisions in the database, data may differ slightly from those previously published by the Bureau of Vital Records and Health Statistics.

Motor Vehicle Collisions

Motor vehicle accident (MVA) death rates in Idaho have been significantly higher than the U.S. rate for the last 9 years.

Idaho* and United States MVA deaths and rates, children under 18, 1992-2000

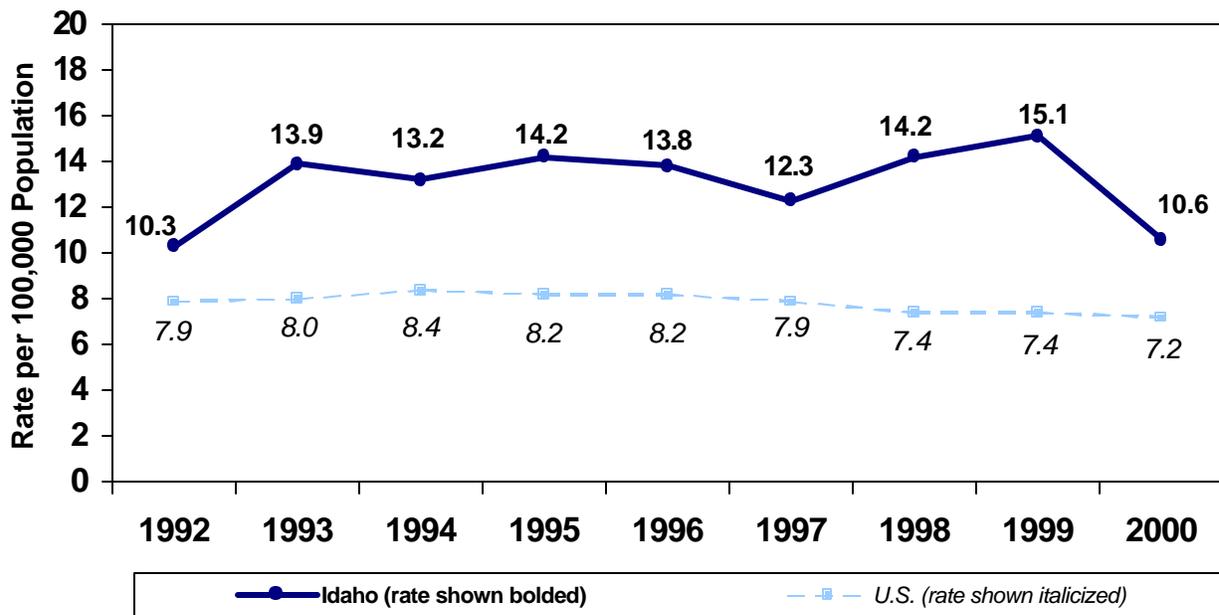
Residence	1992	1993	1994	1995	1996	1997	1998	1999	2000
Idaho Resident									
Occurring in Idaho	29	40	43	43	40	40	42	48	34
Occurring outside of Idaho	4	5	2	6	8	3	8	5	5
<i>Total Resident MVA deaths</i>	<i>33</i>	<i>45</i>	<i>45</i>	<i>49</i>	<i>48</i>	<i>43</i>	<i>50</i>	<i>53</i>	<i>39</i>
Idaho Resident MVA death rate	10.3	13.9	13.2	14.2	13.8	12.3	14.2	15.1	10.6
U.S. Resident MVA death rate	7.9	8.0	8.4	8.2	8.2	7.9	7.4	7.4	7.2

*Idaho resident rates are based on total Idaho resident deaths and are comparable to U.S. rates.

Rate: Number of deaths per 100,000 population aged less than 18 years of age.

Note: Death numbers and rates for deaths occurring from 1992-1998 have ICD-9/ICD-10 comparability ratios applied and may differ from data previously published. Comparability for Motor vehicle accidents: 0.98. See Technical Notes.

Idaho* and United States MVA death rates, children under 18, 1992-2000



*This trend includes MVA deaths to all Idaho resident children under the age of 18 for the years shown, occurring both in and outside of Idaho. Due to revisions in the database, data may differ slightly from those previously published by the Bureau of Health Policy and Vital Statistics.

Suicide

Idaho's suicide death rate among children fluctuates from year to year, but has been significantly higher than the U.S. rate for 6 of the last 9 years. It was not significantly higher in 1992, 1996, and 2000.

Idaho* and United States Suicide deaths and rates, children under 18, 1992-2000

Residence	1992	1993	1994	1995	1996	1997	1998	1999	2000
Idaho Resident									
Occurring in Idaho	10	18	17	10	9	16	14	12	8
Occurring outside of Idaho	0	0	0	2	0	3	3	0	1
<i>Total Resident suicide deaths</i>	<i>10</i>	<i>18</i>	<i>17</i>	<i>12</i>	<i>9</i>	<i>19</i>	<i>17</i>	<i>12</i>	<i>9</i>
Idaho Resident suicide death rate	3.1	5.4	5.0	3.5	2.6	5.4	4.8	3.4	2.4
U.S. Resident suicide death rate	1.9	1.9	1.9	1.9	1.8	1.7	1.7	1.4	1.6

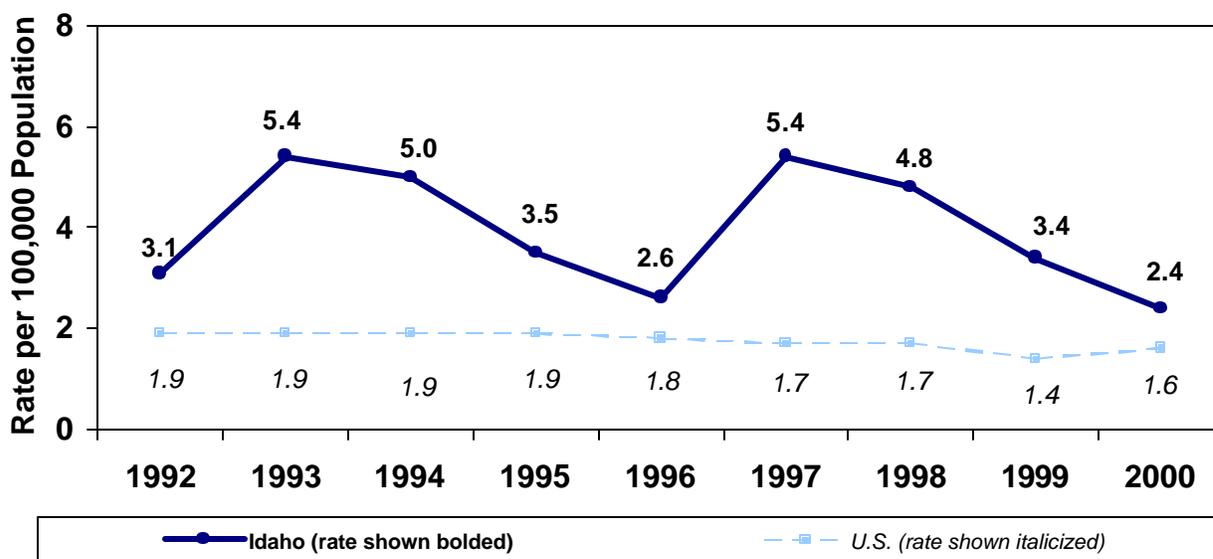
*Idaho resident rates are based on total Idaho resident deaths and are comparable to U.S. rates.

Rate: Number of deaths per 100,000 population aged less than 18 years of age.

Note: Rates based on fewer than 20 deaths are subject to relatively large and random variation. Use with caution.

Death numbers and rates for deaths occurring from 1992-1998 have ICD-9/ICD-10 comparability ratios applied and may differ from data previously published. Comparability ratio for Suicide: 1.00. See Technical Notes.

Idaho* and United States Suicide death rates, children under 18, years 1992-2000



*This trend includes suicide deaths to all Idaho resident children under the age of 18 for the years shown, occurring both in and outside of Idaho. Due to revisions in the database, data may differ slightly from those previously published by the *Bureau of Health Policy and Vital Statistics*.

Firearms

For the first time since 1992, Idaho's firearm death rate was not higher than the U.S.

Idaho* and U.S. Firearm deaths and rates, children under the age of 18, 1992-2000:

Residence	1992	1993	1994	1995	1996	1997	1998	1999	2000
Idaho Resident									
Occurring in Idaho	13	19	21	19	14	19	15	13	8
Occurring outside of Idaho	1	1	0	3	0	2	2	0	0
Total Resident firearm deaths	14	20	21	22	14	21	17	13	8
Idaho Resident firearm death rate	4.3	6.0	6.2	6.4	4.0	6.0	4.8	3.7	2.2
U.S. Resident firearm death rate	4.6	4.9	4.9	4.4	3.7	3.3	2.8	2.5	2.2

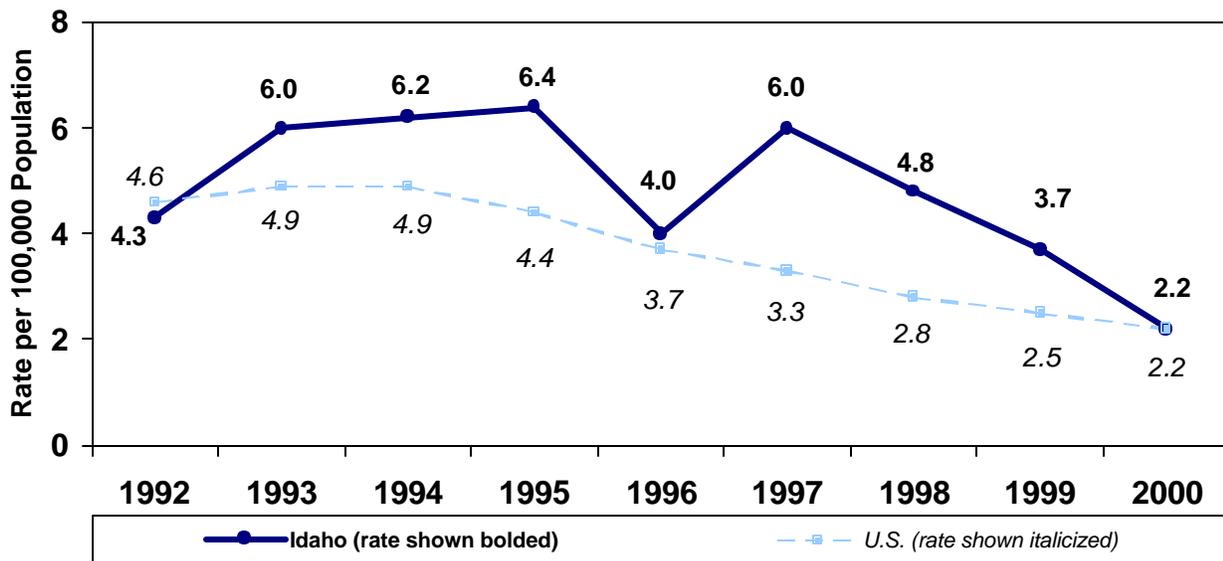
*Idaho resident rates are based on total Idaho resident deaths and are comparable to U.S. rates.

Rate: Number of deaths per 100,000 population aged less than 18 years of age.

Note: Rates based on fewer than 20 deaths are subject to relatively large and random variation. Use with caution.

Death numbers and rates for deaths occurring from 1992-1998 have ICD-9/ICD-10 comparability ratios applied and may differ from data previously published. Comparability ratio for Firearm deaths: 1.00. See Technical Notes.

Idaho* and U.S. Firearm deaths and rates, children under the age of 18, 1992-2000



*This trend includes firearm deaths to all Idaho resident children under the age of 18 for the years shown, occurring both in and outside of Idaho.

Due to revisions in the database, data may differ slightly from those previously published by the Bureau of Vital Records and Health Statistics.

AUTOPSIES

Autopsy and subsequent pathological examination offers conclusive information about clinical characteristics present at the time of death, as well as manifestations indicative of conditions surrounding the death. This evidence may illuminate, confirm, or in some cases, contradict the conclusion about cause based solely on external review.

Autopsies are an important aspect of many death investigations but are not mandated by Idaho State law. The table below shows the number and percent of autopsies performed on the 197 deaths occurring to resident children in Idaho in 2000.

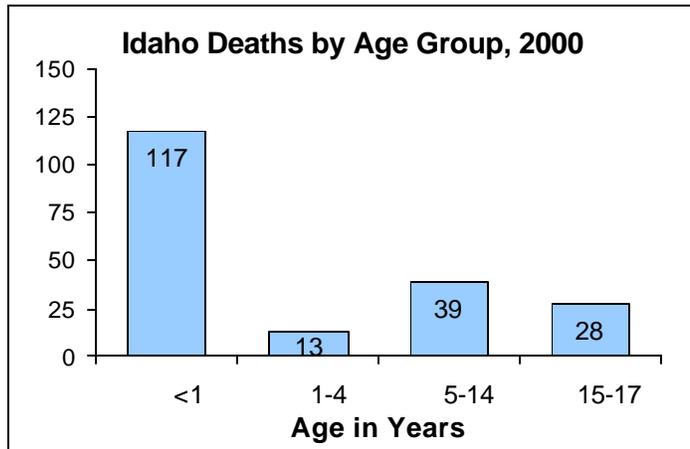
**Idaho Resident Deaths, Occurring in Idaho
Number and Percent Autopsied by Cause of Death**

Cause of Death	Percent autopsied	Number of deaths	Number of Autopsies
SIDS	100.0	11	11
Assault (Homicide)	100.0	1	1
Suffocation or strangulation	50.0	4	2
Natural—not SIDS	25.4	126	32
Trauma—other	18.2	11	2
Intentional self-harm (Suicide)	12.5	8	1
Motor vehicle accidents	14.7	34	5
Drowning or Submersion	0.0	2	0
ALL CAUSES	27.4	197	54

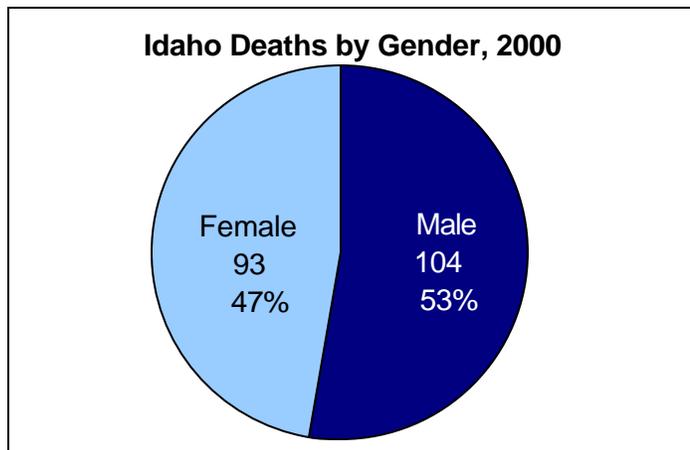
OVERVIEW

To reduce the number of child deaths in Idaho, it is important to understand how and why children die. In 2000 children under the age of 18 dying in Idaho had the following characteristics.

The majority of deaths occurred in children less than one year of age.



The percentage of males dying was higher than females.



The race and ethnicity of the children who died reflects the race and ethnicity of the Idaho population under the age of 18 years.

Race	
Asian / Pacific Islander	6
Black	1
American Indian	3
White	186
Not Stated	1
Total	197

Ethnicity	
Hispanic	33
Non-Hispanic	164
Total	197

The manner of death is documented on the death certificate by the coroner or a physician and provides a classification for each child death. The following table identifies the deaths by manner.

**Idaho Resident Child Deaths, Occurring in Idaho
Age, Sex, and Manner of Death**

AGE/SEX	MANNER OF DEATH			
	Natural	Accidental	Suicide	Homicide
<1	114	3	0	0
1-4	9	4	0	0
5-16	10	25	3	1
15-17	3	20	5	0
Male	70	28	6	0
Female	66	24	2	1
Total*	136	52	8	1

Of the 197 Idaho resident child deaths occurring in Idaho in 2000, 81 were selected for review by the screening committee. Of the 81 deaths reviewed by the CMRT, 68 were considered to be preventable after team review; 8 were considered not preventable. Five were classified as unable to determine preventability due to lack of sufficient information.

Preventable?	Definition	
Definitely	Definite actions could have been taken to prevent this death.	62
Probably	Certain actions may have decreased the likelihood of this death.	6
Probably not	This death was probably not preventable.	1
Not Preventable	No preventive measures were found.	7
Unable to Determine		5

NATURAL DEATHS

The rate of death from natural causes in children is highest in the first year of life and generally results from such causes as pregnancy complications, congenital anomalies, and SIDS. Natural causes of death quickly become less common as children grow older. Of the 81 deaths reviewed by the team, 10 were identified as natural. Of the 10 natural deaths, preventability could not be determined for 2 deaths due to lack of information. There were 3 natural deaths reviewed in which no preventable measures were found. Five (5) of the deaths were determined to be definitely or probably preventable. Two (2) of the 5 preventable deaths are summarized below.

8 year old child with a history of seizures and spina bifida was left alone in the bathtub for one minute and inhaled water while having a seizure in the tub. The cause of death was drowning asphyxiation.

2 year old child was not breathing on arrival at a physician's office. The ambulance was called to transport the patient to the hospital and to provide emergency equipment to care for the patient. The office did not have emergency equipment available. The child's cause of death was undetermined with a history of recent respiratory distress.

2000 Conclusions and recommendations

The team recommends parents be directly involved with their children while engaged in high risk activities and while bathing if the child's developmental level or disability prevents them from protecting themselves.

The burden of safety is on parents and caretakers. Parents are expected to supervise their children to prevent injuries. Many parents supervise their children by being close-by and on-hand as needed, rather than being directly involved in the child's activities.

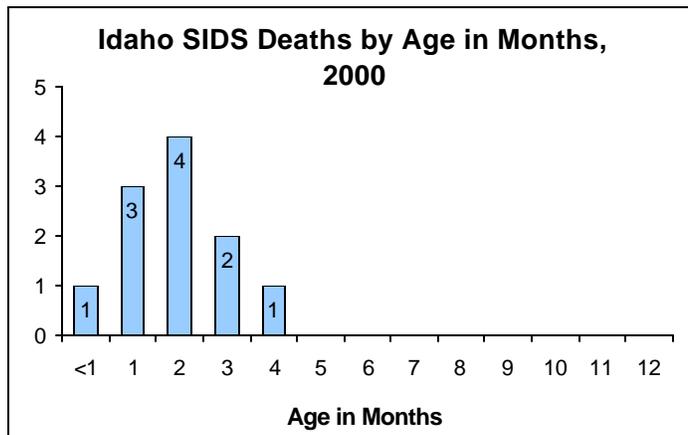
The team recommends that Pediatric resuscitation equipment should be in all medical clinics.

Training resources and guidelines for preparing physicians office's for emergencies involving children, including emergency protocols, recommended equipment and medications, can be downloaded at no cost from the Emergency Medical Services for Children web site at www.ems-c.org. The publications are entitled "Office PERC: Preparedness for Emergency Response to Children" and "Office Preparedness for Pediatric Emergencies".

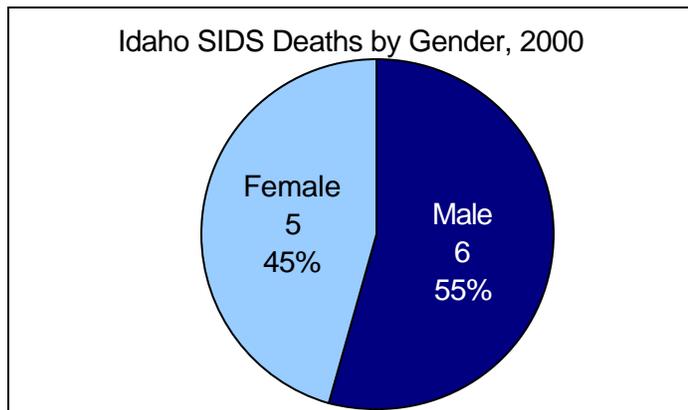
SUDDEN INFANT DEATH SYNDROME (SIDS)

SIDS is the leading cause of death in babies from 1 month to 1 year of age. SIDS is defined as the sudden death of an infant less than one year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and a review of the clinical history. There were 11 resident SIDS deaths occurring in Idaho in 2000.

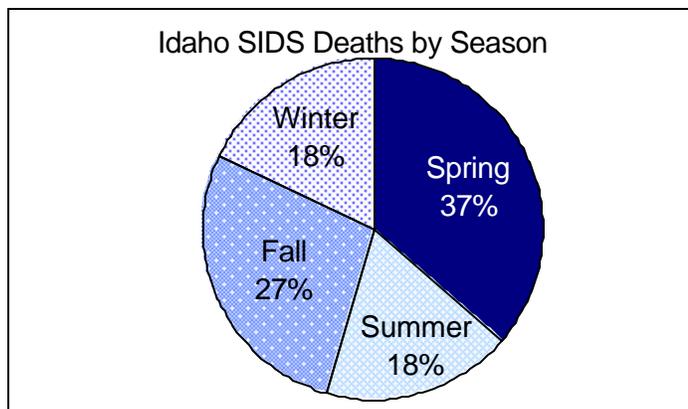
Nationally most SIDS deaths occur when a baby is between 1 and 4 months old. In Idaho in 2000, 10 of the 11 SIDS deaths occurred between 1 and 4 months of age. The SIDS death of the child less than 1 month of age is not consistent with the definition of SIDS.



More boys than girls are victims of SIDS nationally. In 2000 in Idaho, the SIDS deaths were almost equal for males (6) and females (5).



Nationally most SIDS deaths occur during the fall, winter, and early spring months. More SIDS deaths in Idaho in 2000 occurred in the spring and fall.



2000 Equinoxes : March 20, September 22; Solstices : June 21, December 21,

Idaho SIDS Deaths, 2000

The Centers for Disease Control and Prevention (CDC) reports that SIDS deaths occur among all socioeconomic and racial/ethnic groups, but nationally are higher among African Americans and some American Indian tribes. The table identifies the race and ethnicity of the Idaho resident SIDS deaths occurring in Idaho in 2000.

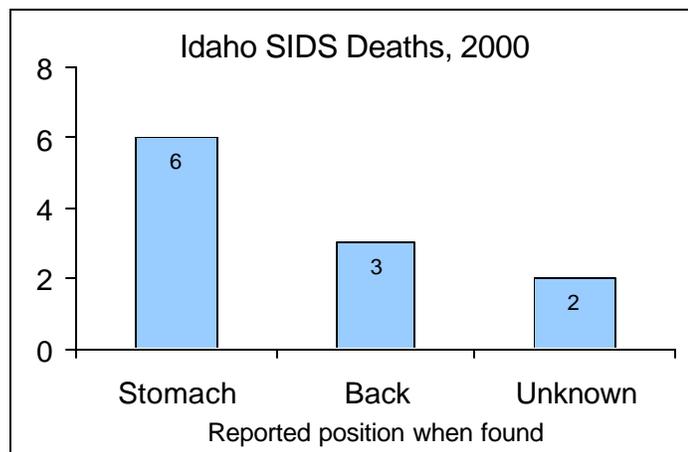
Race	
White	10
Native American	1
Total	11

Ethnicity	
Hispanic	1
Non-Hispanic	10
Total	11

According to the CDC, an infant who sleeps on its stomach is more at risk for SIDS. Babies who are not breastfed, who are exposed to tobacco smoke, and who get overheated because of too many clothes also seem to be at increased risk, as are infants whose sleeping surface is too soft and excessively padded. The risk increases when a baby shares a bed with an adult; the risk is greater still if more than one adult is in the bed or if the adult is under the influence of alcohol or drugs. SIDS is not caused by vomiting and choking, or minor illnesses such as colds or infections.

In Idaho and the rest of the northwest, SIDS rates have been historically higher than the national average. There has been a significant decline in SIDS rates in the U.S. since 1992 (see page 11). The decline is attributable in part to the CDC’s “Back to Sleep” campaign, which has helped to educate the public that the risk of SIDS is decreased when an infant is placed on their back to sleep. Research shows that having infants sleep on their backs reduces the risk of SIDS by 30-50 percent.

In Idaho in 2000, 67 percent of infants who died from SIDS were found on their stomach when the position was known.



In Idaho in 1999,

- Nearly two-thirds (62 percent) put their baby down to sleep on his/her back, most of the time.
- Over one-fourth (28.4 percent) put their baby on his/her side, most of the time.
- 8.4 percent reported that they placed their baby on his/her stomach to sleep most of the time.

Idaho Bureau of Vital Statistics and Health Policy, “PRATS: Pregnancy Risk Assessment Tracking System, 1999 Survey”

Eight (8) of the 11 SIDS deaths reviewed were thought to be definitely or probably preventable. Many of the 11 SIDS deaths reviewed had modifiable risk factors identified. The risk factors are not exclusive of one another. There can be more than one risk factor identified in each case.

RISK FACTOR	NUMBER
Soft sleep surface, loose bedding	3
Exposure to tobacco smoke	2
Co-sleeping with 2 people	1
Co-sleeping with 1 person	2

The ideal sleep surface for infants is firm with no soft items under or near the baby. The location where the infant was sleeping is known in 8 of the 11 SIDS deaths. In nearly two-thirds (63 percent) of the SIDS deaths (where the sleeping location was known) the infants were discovered in beds. The others were found in the following locations:

- 2 were in cribs
- 1 was in a car seat
- 3 of the records did not state the location of discovery

There are concerns about the disruption of the scene investigation when an infant is removed from the residence. Because parents and prehospital personnel cannot distinguish a child with SIDS from any other cause of cardiopulmonary arrest, it is recommended that standard principles of treatment and transport for children in cardiopulmonary arrest be used. Of the 11 SIDS deaths:

- 4 infants were pronounced dead at their residence
- 7 were taken to a hospital where they were pronounced dead.

While the cause of SIDS remains unknown, the risk can be reduced by understanding and being aware of risk factors, but no one behavior can eradicate the risk completely.

In 2 of the SIDS deaths reviewed there were no modifiable risk factors identified and the deaths were determined not preventable. One (1) of the SIDS deaths reviewed had insufficient evidence to determine preventability.

A 1 month old baby had been in good health with a slight runny nose. The infant was placed on its stomach for a nap and was found lifeless some time later

Data Gaps

For a SIDS diagnosis to be made there has to be a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history. Most SIDS deaths did not have a SIDS investigation form completed and information was missing. For example, reports did not include information on sleep position, maternal smoking, or sleeping surface. The SIDS investigation form is available at www.cdc.gov/mmwr/PDF/rr/rr4510.pdf

2000 Conclusions and recommendations

The team is concerned about the SIDS deaths that have 1 or more risk factors present. We recommend that parents be educated at every opportunity by the health care community about protecting babies from the known risk factors associated with SIDS.

The following are excerpts from "SIDS: Counseling Parents to Reduce the Risk" by the American Academy of Family Physicians. The full text can be found at <http://www.aafp.org/afp/980401ap/carroll>.

Risk-Reduction Measures: What Parents need to know

The major risk-reduction measures supported by available scientific research are (1) having healthy babies sleep in the supine position; (2) not exposing babies to cigarette smoke, either during pregnancy or after birth; (3) making the sleeping environment as safe as possible.

1. Sleeping Position

Available data indicate that the prone (on the stomach) sleeping position is associated with the highest risk of SIDS; the supine, or back, position, is associated with the lowest risk, and the side-lying position falls in between. Basically, "back is best" from a SIDS risk-reduction point of view.

2. Cigarette Smoke Exposure

Smoking during pregnancy exposes the developing fetus to toxins and other potentially harmful effects of cigarette smoke. Numerous research studies confirm that maternal smoking during pregnancy increases the risk of SIDS. In addition, increasing evidence suggests that exposing the baby after birth to cigarette smoke also increases the risk of SIDS. The increase in SIDS risk appears to be related to the "dose" of passive-smoke exposure--the greater the exposure to smoke both before and after birth, the higher the risk of SIDS.

3. Potentially Hazardous Sleeping Environments

The sleeping environment also appears to be linked to SIDS in some cases. A recent study from the U.S. Consumer Products Safety Commission (CPSC) indicated that as many as 30 percent of deaths diagnosed as SIDS-related in the past may have been related to unsafe sleeping environments or unsafe bedding material. Soft mattresses, pillows and other bedding material can be hazardous and may be associated with infant deaths diagnosed as SIDS.

It is currently recommended that infants not be placed for sleep on adult beds. This raises obvious questions about infant-parent co-sleeping. Research data on this topic, at the present time, do not provide a clear answer. Some studies have found infant/parent co-sleeping to be associated with a higher risk of SIDS, while others have not. Although studies of maternal-infant interactions during sleep indicate several potential benefits of co-sleeping, there is no question that adult bedding material can be dangerous for infants, and infant/parent co-sleeping may expose an infant to this risk of sleeping on adult bedding materials.

UNINTENTIONAL INJURY

Injuries play a greater role in mortality as children grow older. Injuries are the leading cause of death in children from 1-17 years of age. Of the 81 deaths reviewed by the team, injuries claimed the lives of 60 children; the majority (51) of the deaths were unintentional.

Unintentional injuries are those that appear to occur by chance. Intentional injuries are those that appear to have been planned or are inflicted by a person. Suicide and Homicide are intentional injuries. The classification of injuries into two categories, intentional and unintentional, allows emphasis to be placed on prevention activities. The phrase “unintentional injury” is used in this document interchangeably with accident.

Unintentional injuries are generally understandable, predictable, and most importantly, preventable. Understanding injury patterns is key to prevention. Each type of unintentional injury has a particular pattern, based on the following factors:

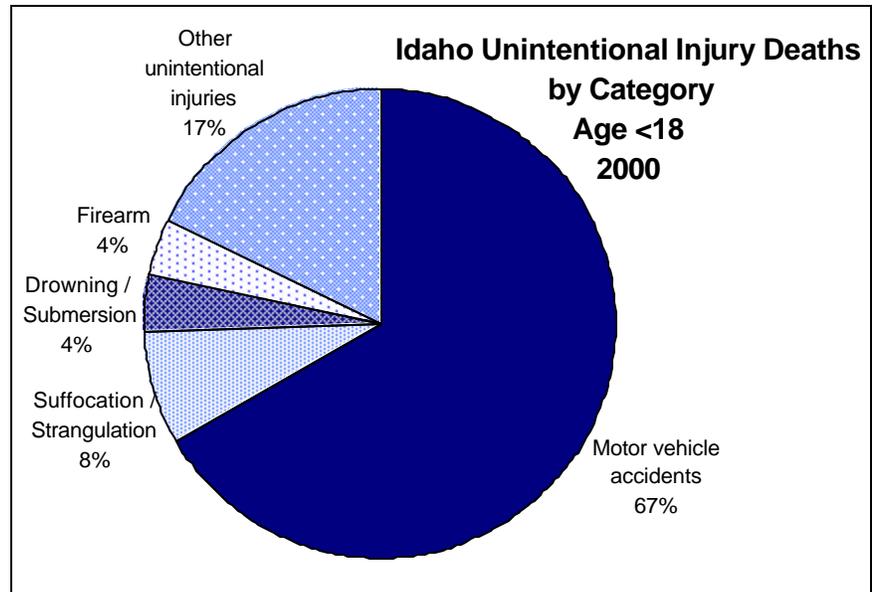
- Age
- Gender
- Developmental level: physical, mental, emotional
- Presence of injury opportunities such as all-terrain vehicles, backyard swimming pools, firearms, kerosene heaters, etc.
- Access to and use of bike helmets, motor vehicle safety restraints including car safety and booster seats, smoke detectors, etc.
- Lack of appropriate supervision

Several characteristics are common to most types of injuries. Nationally injury rates are greatest in:

- Low socioeconomic groups, especially urban African-American children and American Indians/Alaska Natives
- Males

Nationally the leading causes of fatal childhood unintentional injury are motor vehicle collisions, fires/burns, drowning, falls, and poisoning.

The leading cause of unintentional injury deaths to Idaho children in 2000 was motor vehicle collisions.

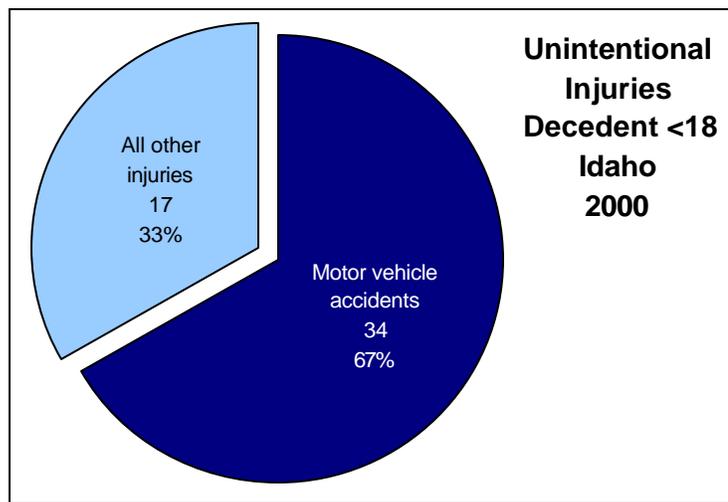


The next 6 sections of this report summarize each type of unintentional injury.

MOTOR VEHICLE FATALITIES

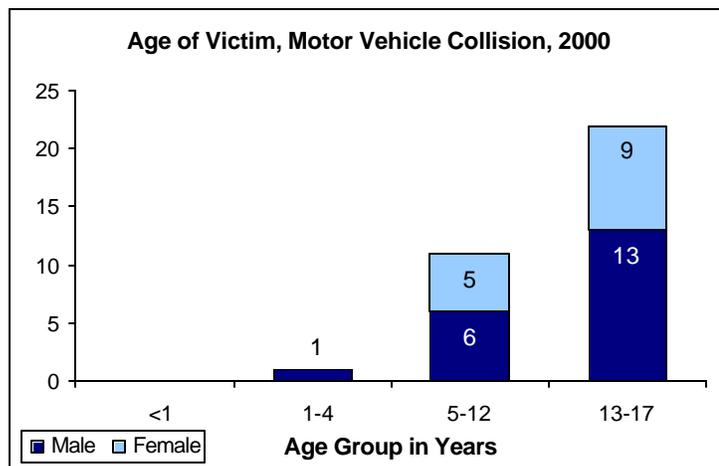
Motor vehicle *accident (MVA) deaths include deaths to persons in a motor vehicle at the time of injury and to persons struck or otherwise injured due to a motor vehicle. MVA's are classified into 2 categories, traffic and non-traffic. Traffic collisions are those occurring on a public roadway. Non-traffic collisions are those that occur on private property. In 2000 there were 34 MVA fatalities resulting from 33 separate collisions. Thirty-three of the fatalities and 32 collisions were classified as traffic. There was 1 non-traffic fatality in 2000. Statistics in this section use the number of fatalities (34) in the denominator unless otherwise noted.

In Idaho in 2000 twice as many children died in motor vehicle collisions as all other unintentional injuries combined.



The rate of motor vehicle fatalities among Idaho's children is higher than the U.S. rate (see page 14).

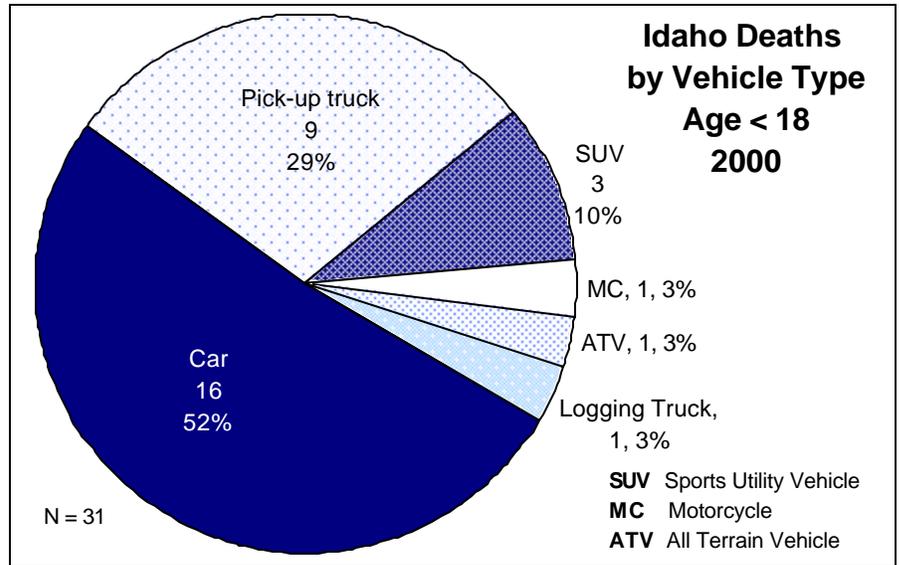
In Idaho in 2000 almost two thirds (65 percent) of the motor vehicle collision victims under the age of 18 were teenagers. Over half of the teenage victims were male.



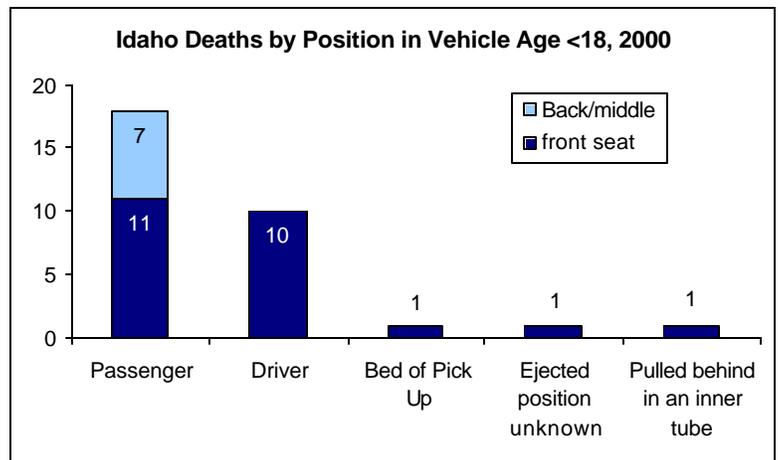
There were 3 fatalities in motor vehicle collisions where the decedent was not in/on vehicle. One (1) was a pedestrian, 2 were cyclists.

- The pedestrian involved in the traffic collision was waved across the cross walk by a driver stopped at the cross walk and was struck by a car that passed the vehicles stopped at the cross walk.
- Of the 2 cyclists that were involved in traffic collisions, 1 failed to stop at a stop sign, and 1 was riding down a hill and was struck by a car coming up the hill.

Of the 31 fatalities that involved occupants in/on vehicles, cars and pickups were the most common form of transport for the victim.



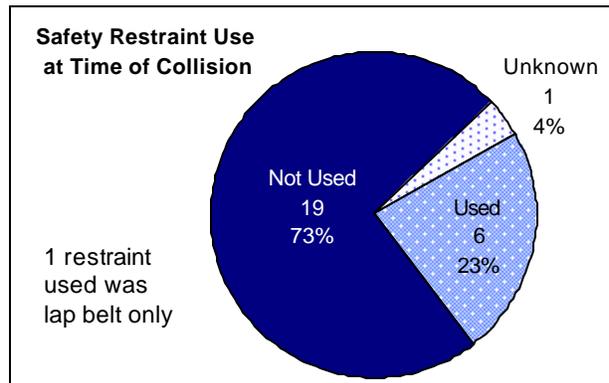
Of the 31 motor vehicle fatalities that occurred in/on a vehicle, 18 were passengers inside a vehicle, 10 were drivers, 1 was ejected with the position unknown, 1 was riding in the bed of a pick-up, and 1 was being pulled behind the vehicle on an inner tube.



Safety Devices in MVA deaths

Lack of correctly used safety restraints has been clearly linked to the risk of death while riding in a motor vehicle. Research shows children are more likely to be restrained in vehicles if adults use seat belts.

Nineteen of the 34 fatally injured children and teens age 4 or over in vehicles were not restrained. In over half (57 percent) of the fatalities in which the child/ teenager was also the driver, the child/ teenager was not using a restraint, as required by Idaho law. *NOTE: Idaho law (until 7/1/03) did not require anyone (over the age of 4 years and weighing more than 40 pounds) sitting in the back seat of a vehicle to be restrained.*



Note: Pedestrians and children riding in the bed of a pick-up are not applicable to Restraint analysis and were not included in the calculation of percentages

Idaho law requires children under the age of 4 years and 40 pounds to be properly restrained in a car safety seat unless:

- The car was manufactured before January 1, 1966,
- All seats are in use,
- The child is removed from the seat for nursing or to attend to immediate physiologic needs.

There was only 1 child under the age of 4 fatally injured in a MVA in 2000. The child was in a child safety seat.

- Nearly 9 out of 10 (89.5 percent) Idaho adult residents with children under the age of 5 in their household reported that the child always rides in a child safety seat in a vehicle.

“Idaho Behavioral Risk Factors Surveillance System Report, 2000” random phone survey conducted by the Bureau of Vital Records and Health Statistics

Helmets save lives, just like seat belts do. According to research done at Harborview Medical Center Injury Prevention and Research Center at the University of Washington in Seattle, overall, helmets decrease the risk of head and brain injury by 85 to 88 percent and facial injury to the upper and mid face by 65 percent.

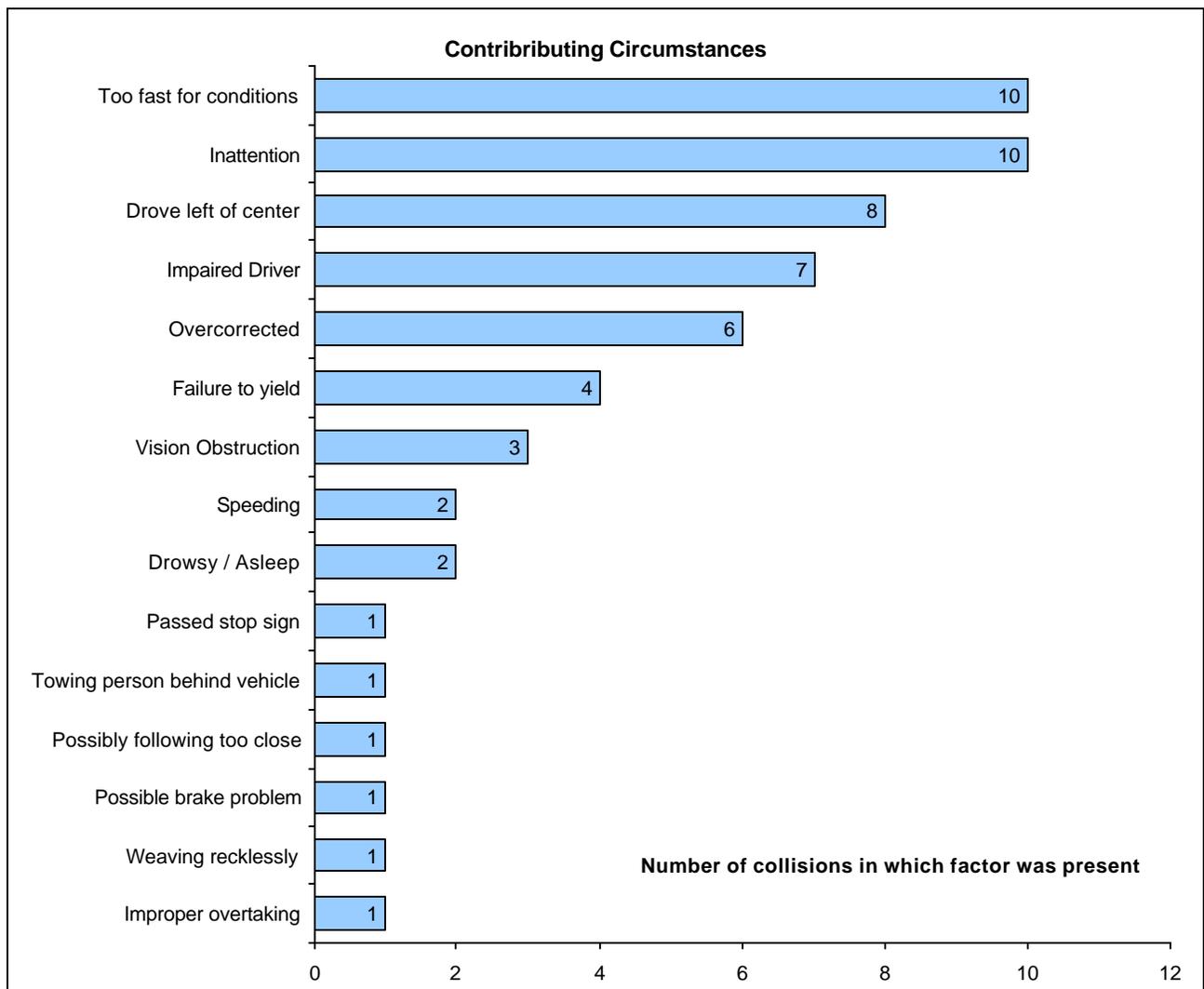
Half (2) of the children who died while on a bicycle, motorcycle, or ATV were wearing helmets at the time of their injury.

- Nearly one-fourth (24.1 percent) of Idaho adults with children in the household between the ages of 5 and 16 report their child has never worn a bicycle helmet when riding a bicycle in the last twelve months.
- One-third (33.2 percent) of Idaho adult residents with children aged 5 to 15 who have children that ride bicycles stated that the child always wears a helmet. An additional 15.9 percent stated that the child nearly always wears a helmet.

“Idaho Behavioral Risk Factors Surveillance System Report, 2000” random phone survey conducted by the Bureau of Vital Records and Health Statistics

Contributing Circumstances

For every vehicle involved in a traffic collision in Idaho, the investigating officer may indicate up to 3 circumstances per vehicle contributing to the cause of the collision on the collision report. Too fast for conditions and inattention were the most common circumstances identified on vehicle collision reports.



Inattention and Driving too fast for conditions have been in the top 3 for the past 4 years.

In Contributing Circumstance, driving under the influence of drugs and/or alcohol is documented as Impaired Driver, impaired driving is the 4th contributing circumstance in 2000 and was 6th in 1999, 7th in 1998, and 4th in 1997.

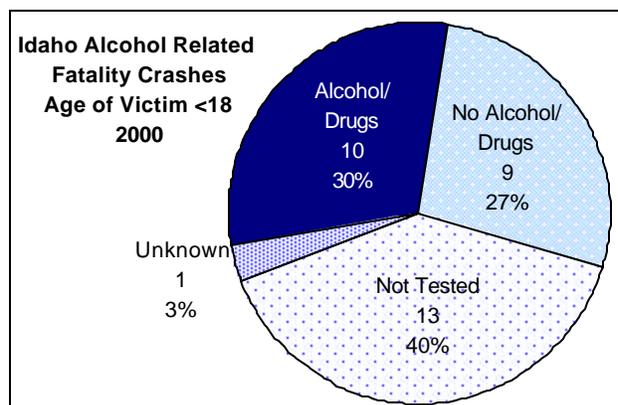
Drugs and Alcohol

There are 2 reasons making it difficult to link the impact of alcohol and drugs to fatal collisions involving children.

1. Idaho law requires only the blood of drivers and pedestrians dying in motor vehicle collisions to be tested for alcohol (Idaho Code 49-1314). At fault drivers who do not die will not necessarily be tested for alcohol/drugs.
2. Results from the tests that are performed are not always available. Of the 32 motor vehicle traffic collisions that resulted in 33 child fatalities, there were 48 drivers. Twenty three of the drivers were tested for drugs and/or alcohol. Of the 23 tested, 11 had positive results of substance(s) in the bloodstream and 12 had negative results. Twenty of the drivers were not tested and for 5 of the drivers it is unknown if they were tested.

In 2000 the review team was able to positively identify 11 collisions and 12 deaths in which alcohol was a contributing factor. Alcohol is known to have contributed to nearly 1/3 of the fatal crashes involving children and teenagers under the age of 18 in 2000.

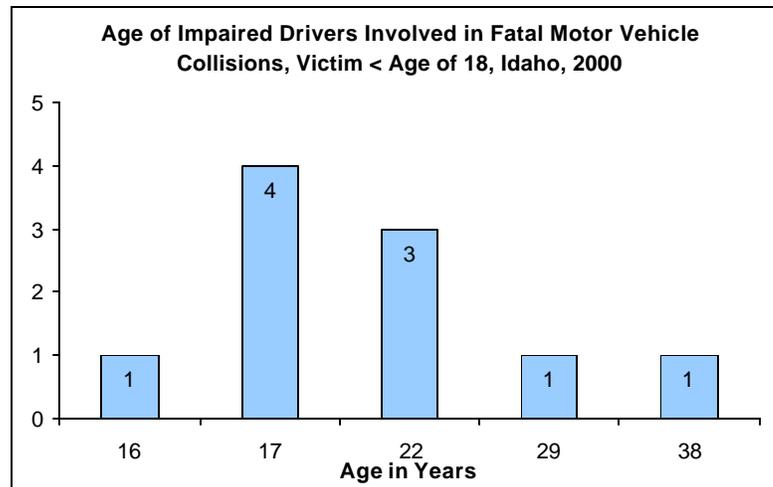
In 13 of the 33 collisions alcohol use is not known because all of the drivers involved were not tested.



Of the alcohol related collisions 3 of the victims were the driver and 7 were passengers inside the vehicle of the impaired driver, 1 was in a vehicle struck by an impaired driver and 1 was a pedestrian struck by an impaired driver.

According to the report Alcohol Involvement in Fatal Crashes 2000 published in March of 2002 by the United States Department of Transportation, drivers between 21 and 24 years old had the highest rates of intoxication (27 percent), followed by those between 25 and 29 years old (25 percent). Drivers 16 to 20 years old involved in fatal crashes were intoxicated 15 percent of the time. (In all the states, drivers 15 to 20 years old are legally prohibited from purchasing alcohol.)

In Idaho in 2000 the drivers involved in collisions in which a child under the age of 18 years was fatally injured and alcohol and drugs were a factor were all under the age of 40. Five of the drivers were under the legal age to buy or consume alcohol.



Young Drivers

According to the National Highway Traffic Safety Administration, on the basis of miles driven, teenagers are involved in three times as many fatal crashes as are all drivers. Why do young drivers have such poor driving performance? Three factors work together to make the teen years so deadly for young drivers:

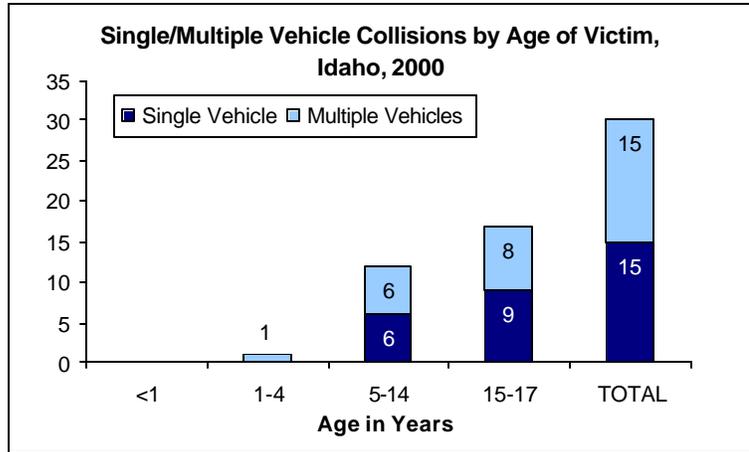
Inexperience: All young drivers start out with very little knowledge or understanding of the complexities of driving a motor vehicle. Like any other skill, learning to drive well takes a lot of time.

Risk-taking behavior and immaturity: Adolescent impulsiveness is a natural behavior, but it results in poor driving judgment and participation in high-risk behaviors such as speeding, inattention, drinking and driving, and not using a seat belt. Peer pressure also often encourages risk taking.

Greater risk exposure: Teen drivers are different from other drivers, and their crash experience is different. Compared to other drivers, a higher proportion of teenagers are responsible for their fatal crashes because of their own driving errors:

- A larger percentage of fatal crashes involving teenage drivers are single vehicle crashes. The vehicle usually leaves the road and overturns or hits a roadside object such as a tree or a pole.
- In general, a smaller percentage of teens wear their seat belts compared to other drivers.
- A larger proportion of teen fatal crashes involve speeding, or going too fast for road conditions, compared to other drivers.
- Two of three teens who die as passengers are in vehicles driven by other teenagers.

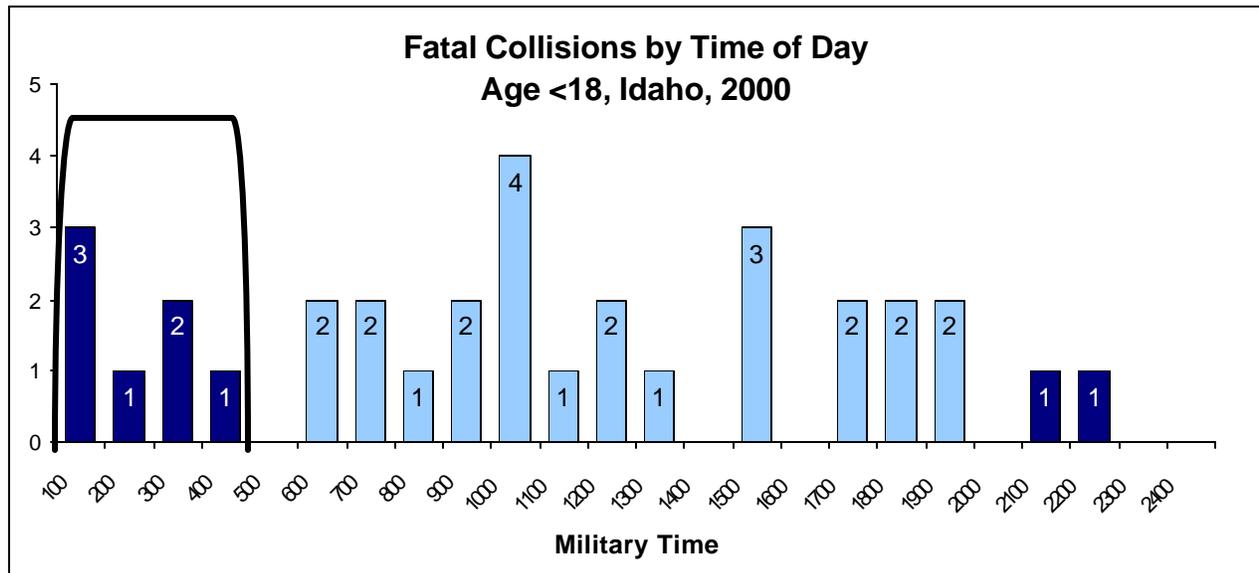
Older children were more likely to die in single vehicle collisions such as rollovers, although the number of multiple car collisions in this age group increased as well.



This chart excludes the 1 pedestrian, 2 bicyclists, and the non traffic collision involving an ATV

Research done by the Department of Health and Human Services shows night and weekend driving are disproportionately dangerous for teenagers. While they do only 20 percent of their driving at night, more than half of their crash fatalities occur during these hours. The nighttime fatality rate for teen males exceeds that for females by more than two to one. Weekend driving accounts for 54 percent of all teen driving fatalities.

The Insurance Institute for Highway Safety found that nationally in 2000, 41 percent of the teen motor vehicle deaths occurred between 9 p.m. and 6 a.m.



In Idaho in 2000 nine (27 percent) of the Motor Vehicle collisions occurred between 9:00 p.m. and 6 a.m. (shown as dark bars in the chart above). The review team is particularly concerned about the collisions occurring between 1:00 a.m. and 5:00 a.m. (shown bracketed in the chart above).

The following chart details the 7 collisions occurring between 1:00 a.m. and 5:00 a.m.

Age of Driver			Age of Victim		Alcohol Related	Not Tested	Week End	Single Vehicle	Multiple Vehicles
15-17	18-19	20+	<15	15-17					
X					X		X	X	
	X			X		X	X	X	
		X	X		X		X	X	
X				X	X			X	
X						X	X	X	
X					X				X
X			X		X			X	

The shaded boxes indicate that the victim was the driver
Weekend is defined as 12:01 a.m. Saturday and 11:59 p.m. Sunday.

The majority of fatalities that occurred during the hours of 1:00 a.m. and 5:00 a.m. were alcohol related with 57 percent of them occurring on a weekend. The Centers of Disease Control and Prevention report that of the motor-vehicle-associated deaths involving young drinking drivers, more fatalities occur during nighttime rather than daytime and on weekends rather than weekdays.

The following are examples of deaths that might have been prevented.

An unrestrained 15 year old died when he was ejected from the car he was riding in when the driver overcorrected causing the vehicle to roll. The 16 year old driver and 3 other passengers were restrained and remained in the vehicle. All were transported by ambulance for their injuries.

An unrestrained 14 year old died when he was partially ejected from the car he was riding in when the driver overcorrected causing the vehicle to roll. Another unrestrained passenger was partially ejected and died. The restrained driver and passenger remained in the vehicle and were transported by ambulance for their injuries

2000 Conclusions and recommendations

In 2000, Idaho's seat belt laws did not protect children over the age of four and over forty pounds riding in the back of a vehicle. Current law only requires seat belts in the front seats of vehicles.

The team recommends a standard (primary) seat belt law that covers all ages and all seating positions based on the following information from the National Highway Traffic Safety Administration.

Safety restraints work. They are the most effective means of reducing fatalities and serious injuries when traffic crashes occur and are estimated to save 9,500 lives in America each year. Research has found that lap/shoulder belts, when used properly, reduce the risk of fatal injury to front seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent.

http://www.nhtsa.dot.gov/people/injury/airbags/presbelt/america_seatbelt.html

The team recommends child safety restraint education for parents based on the following information from the National Highway Traffic Safety Administration.

Child safety seats work. Children, especially those under 4’9” tall (about 8 years and 80 pounds), are vulnerable in collisions because of the size and shape of their bodies. The child safety seat is designed to spread the forces of a crash over more of the body for front-facing toddlers, and cradle the fragile neck and back of the rear-facing infant. Booster seats raise children over the age of 4 years and weighing more than 40 pounds, so that seat belts fit properly across their shoulders and abdomens.

Child safety seats are the most effective occupant protection devices used in motor vehicles today. If used correctly, they are 71 % effective in reducing fatalities in children under the age of 5 and 69 % effective in reducing the need for hospitalization. About 50 % of children under age 5 who died in crashes were unrestrained. Of the remaining 50 %, 26 % were in an adult seat belt which does not provide effective protection for most children under 4’9” tall (about 8 years and 80 pounds). Others were in a child restraint system, but had not been restrained properly. In studies conducted by NHTSA to observe child safety seat misuse, nearly 80 % of the child seats observed were misused in one or more ways. In some cases, the seat was not properly attached to the vehicle; in others, the child was not appropriately buckled into the seat or was placed rear-facing in front of an airbag.

http://www.nhtsa.dot.gov/people/injury/airbags/presbelt/america_seatbelt.html

Proper Child Safety Seat Use Chart			
Buckle Everyone. Children Age 12 and Under in Back!			
	INFANTS	TODDLER	YOUNG CHILDREN
WEIGHT	Birth to 1 year at least 20-22 lbs.	Over 1 year and Over 20 lbs.-40 lbs.	Over 40 lbs. Ages 4-8, unless 4’9”.
TYPE of SEAT	Infant only or rear-facing convertible	Convertible / Forward-facing	Belt positioning booster seat
SEAT POSITION	Rear-facing only	Forward-facing	Forward-facing
ALWAYS MAKE SURE:	Children to one year and at least 20 lbs. in rear-facing seats Harness straps at or below shoulder level	Harness straps should be at or above shoulders Most seats require top slot for forward-facing	Belt positioning booster seats must be used with both lap and shoulder belt. Make sure the lap belt fits low and tight across the lap/upper thigh area and the shoulder belt fits snug crossing the chest and shoulder to avoid abdominal injuries
WARNING	All children age 12 and under should ride in the back seat	All children age 12 and under should ride in the back seat	All children age 12 and under should ride in the back seat

www.nhtsa.dot.gov/people/injury/childps/

The team is concerned about the motor vehicle collisions that occurred between 1:00 and 4:00 a.m. The team recommends that parents and the community take responsibility for teenagers being out late.

Proven methods in reducing motor vehicle fatalities and injuries associated with younger drivers include instituting a well-enforced curfew system to restrict night driving. <http://www.cdc.gov/mmwr/preview/mmwrhtml/00000454.htm>

The team is concerned about risk taking behavior by young drivers involved in fatal collisions. We are in support of the Idaho Office of Highway Safety *Ground Zero* project.

The project objectives are to:

- Emphasize the dangers of risk-taking behaviors such as impaired driving, speeding and not wearing seat belts
- Decrease the high rate of fatal and injury traffic crashes involving teenagers, especially those that are alcohol-involved
- Increase seat belt use among teenagers
- Educate youth about Idaho's new Graduated Drivers Licensing Law, which became effective in January 2001

The team recommends public education on the danger of riding unrestrained in pickup truck beds.

"Kids Aren't Cargo" a public safety campaign from the National Highway Traffic Safety Administration tells of the dangers of riding in the open bed of a pickup and how those dangers can be prevented. The dangers include:

- Nationally children and teenagers account for more than half of the deaths of passengers riding in the bed of a truck.
- Ejection is the most significant cause of injury and death for pickup truck cargo area passengers in collisions. Even if no collision occurs, cargo area passengers can fall out during swerving, braking or on rough roads.
- One third of non-collision deaths occurred when victims are standing up, sitting on the tailgate or "horsing around."

www.nhtsa.dot.gov/people/outreach/safesobr/18qp2/cpsw18.htm

The team makes the following recommendations for improving bicycle safety in Idaho:

- Provide motorist education on sharing roadways safely.
- Develop bike lanes and paths to accommodate bicyclists.

- Provide access and linkage between bike paths and lanes.
- Provide safe bicycling routes around schools.
- Provide bicycle safety education to children and their parents including the importance of helmet use.
- Provide low cost bicycle helmets.
- Enforce existing bicycle-related regulations.

DROWNING AND SUBMERSION

Drowning is the second leading cause of injury-related death for children aged 1 through 14 years. Knowledge is a powerful tool for combating these tragedies. Knowing how and where children drown provides a basis for prevention.

In Idaho in 2000, 2 deaths to children under the age of 18 were presented to the team. Both deaths were reviewed, and determined to be preventable.

In Idaho in 2000, both drowning deaths were in open water. Both children were playing at the time of the drowning and neither one was wearing a flotation device.

Age	Number
1-4	1
5-14	1
Sex	Number
Male	2
Female	0
Location	Number
River	1
Reservoir	1

A child was missing after last being seen by siblings near the river. The river was behind the child's house. The child's body was recovered 3 days later.

A teenager was swimming from one dock to another, tired and went under. The body was recovered within 10 minutes. Resuscitation was unsuccessful.

2000 Conclusions and recommendations

Taking simple prevention measures and closely supervising your children can help protect them from drowning. Lack of supervision was a contributing factor in at least one of the drowning deaths.

The team recommends that public education be provided on the following:

- Small children should NEVER be left unsupervised around any container of water large enough for the child to get their head in. This includes mop buckets, toilets, bathtubs, pools, spas and open bodies of water such as canals, rivers and reservoirs.
- Children should wear a U.S. Coast Guard-approved personal flotation device (PFD) when on boats, near open bodies of water, and when participating in water sports that do not require swimming. Water wings are not considered safety devices and are not substitutes for PFD.

FIREARMS [UNINTENTIONAL]

In Idaho in 2000, there were 2 unintentional firearm deaths. The children were 5 and 17 years old. Both were reviewed by the team and determined to be definitely preventable.

All children are potentially at risk for unintentional firearm injury regardless of whether there are guns in the home or children know the rules about handling guns. Knowing how and why the injuries occur can substantially reduce the risk.

According to the National SAFEKIDS Campaign nearly all childhood unintentional shooting deaths occur in or around the home. Half occur in the home of the victim and nearly 40 percent occur at a friend or relative's house. Most of these deaths involve guns that have been kept loaded and accessible to children and occur when children play with the guns. In Idaho in 2000, both deaths occurred at the home of the victim.

Rates of unintentional firearm-related injury are higher in rural areas, where people are more likely to own firearms. Shootings in rural areas are more likely to occur outdoors with a shotgun or rifle; in cities, most shootings occur indoors with a handgun. In Idaho in 2000 1 of the unintentional shootings was indoors with a rifle and 1 occurred on the porch of the home with a pistol.

A teenager was handling a gun in the bedroom. The gun was either dropped or set down hard butt end first and it discharged. The sheriff stated after investigation it was found that the rifle had a bad safety on it and when set down butt first the rifle would discharge.

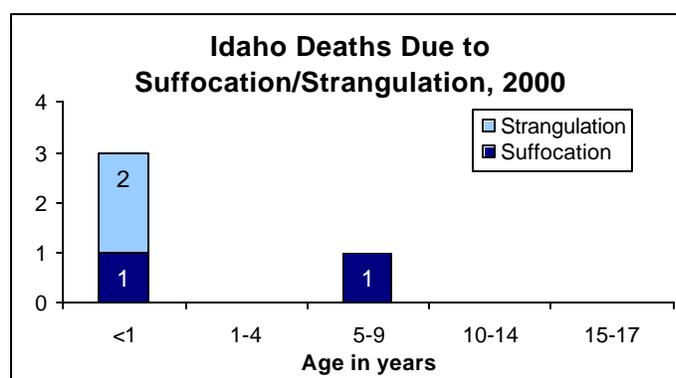
A young child got a gun from parents' room and threatened to kill the other children in the house. While the others were leaving the home the child pulled the trigger twice and said "see it's just a toy, it's not real" the gun fired on the second pull, fatally injuring the child handling the gun.

SUFFOCATION AND STRANGULATION

In 2000, 4 children died in Idaho from unintentional suffocation or strangulation. All of these deaths were reviewed. Three (3) of the 4 were determined to be definitely preventable and the preventability of 1 was unable to be determined.

The mechanism of injury in the 4 deaths was different in each case. The causes of the suffocation/strangulation were:

- Infant caught between crib rail and mattress, crib missing a screw
- Infant in hot trailer, aspirated vomitus
- Child choked on a pill
- Infant became entangled in a car seat strap while unattended in a vehicle



2000 Conclusions and recommendations

The team recommends that parents and caregivers be made aware of:

- **Importance of intact cribs**

According to the Consumer Product Safety Commission, Crib Safety Tips

There should be:

A firm, tight-fitting mattress so a baby cannot get trapped between the mattress and the crib.

No missing, loose, broken or improperly installed screws, brackets or other hardware on the crib or mattress support.

Use Your Crib Safely, Document# 5030,
<http://www.cpsc.gov/cpsc/pub/pubs/5030.pdf>

- **Correct use of Child Safety Seats**

See Motor Vehicle Fatalities, page 36

- **Parental supervision**

See Natural Deaths, page 20

OTHER UNINTENTIONAL INJURIES

There were 9 deaths that occurred from other unintentional injuries. Two (2) of the 9 children died in a plane crash. Five (5) of the 9 deaths were due to head injury, 1 death was due to Hyperthermia, and 1 death was due to Traumatic Asphyxia.

The 2 deaths in the plane crash were due to blunt trauma and severe burns.

The 5 head injury deaths were from blunt force trauma. The mechanism of injury in the head injuries were:

- A young child riding a large Jet Ski crashed into a rock on the riverbank. The child was thrown into a tree
- A child collapsed after helmet to helmet contact during football
- A child collapsed after being hit in the neck by a baseball
- A child became entangled in a chain on a spud trailer that was running and sustained fatal injuries
- A child was hit with fragments of countertops that fell and shattered on contact with the floor. The parents and child were standing in an aisle of a business outside of the taped off area.

The hyperthermia death was a very young child who was being tended by a teenage family member. The child went outside to play and was found 1 1/2 hours later in the family car. The incident happened in July and the outside temperature was estimated to be over 100 degrees. The child had been found playing in the car on a previous occasion.

2000 Conclusions and recommendations

The team recommends providing the following public education on the seriousness of leaving children unattended in vehicles:

- Heat build up in vehicles is more dangerous to children than to adults since a young child's core body temperature may increase three to five times faster than that of an adult.
- Never leave a child unattended in a motor vehicle even with a window slightly open.
- Always lock car doors and trunks, even at home, and keep keys out of children's reach.
- Watch children around cars, particularly when loading or unloading. Check to ensure all children leave the vehicle when reaching your destination.
- When restraining children in a car that has been parked in the heat, check to make sure seating surfaces and equipment (i.e., car seats and buckles) are not overly hot. (Source: National Safe Kids. www.safekids.org)

The team is concerned about children operating Jet Ski's. According to manufacturer's recommendations, no one under the age of 15 should operate a Jet Ski.

In Idaho there are no specific age restrictions for operating a vessel in Idaho, except that the operator must be physically and mentally capable of operating the vessel under the prevailing conditions.

INTENTIONAL SELF-HARM (SUICIDE)

According to the Centers for Disease Control and Prevention, in 2000 suicide was the second leading cause of death for young people 10-17 years in the United States and the second leading cause of death for the same age group in Idaho. Idaho was ranked 10th in the nation in 2000 for the rate of suicide injury deaths of children aged 10 to 17 years.

Eight suicides occurred in Idaho in 2000. All 8 cases were reviewed by the team and 7 were determined to be preventable. One case did not have enough information to determine preventability.

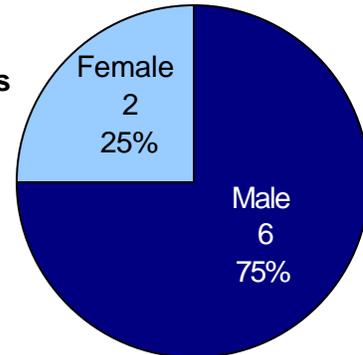
Five of those who died from suicide were ages 15-17. Three of the victims were under the age of 15. Although suicide among children ages 10-14 is considered a rare event, Idaho has had a total of 13 deaths in the last 4 years in the 10-14 age group.

Idaho Resident Child Suicides, Occurring in Idaho, by Age and Sex, 2000

AGE	MALE	FEMALE
13	1	0
14	1	1
15	1	1
16	3	0
TOTAL	6	2

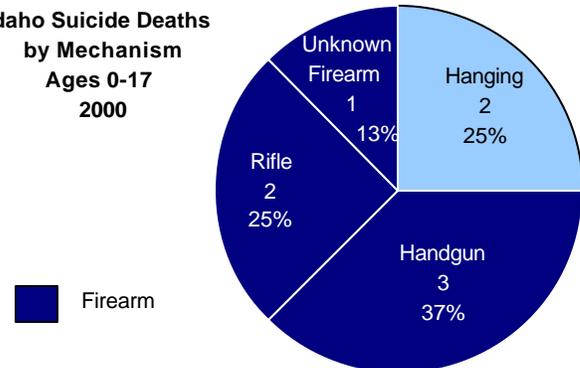
The risk for suicide among young people is greatest for males. In Idaho in 2000, 75 percent of the victims were males.

Idaho Suicide Deaths by Gender Ages 0-17 2000



Each year more suicides occur by firearms in the United States than all other methods combined. In Idaho in 2000, 75 percent of the suicides occurred by firearms.

Idaho Suicide Deaths by Mechanism Ages 0-17 2000



A 15 year old told a girl if she did not go out with him he would kill himself. He was found with a self inflicted gunshot wound when his father returned from working a night shift.

Data Gaps

The team was challenged by the lack of a consistent investigation of suicide deaths and the lack of information regarding the medical, social, and psychological history of the victim.

Information missing in the 2000 cases:

- Location of firearms and how they were accessed
- Contents of suicide notes
- School history
- Alcohol and Drug tests not done or results not available

2000 Conclusions and recommendations

The team supports the Department of Health and Welfare and their public and private partners in the development of a statewide suicide prevention plan. We would like to see the following issues addressed in the plan:

- Promote public awareness that adolescent suicide is a problem that can be prevented.
- Work with the media to ensure news coverage of suicides is not sensationalized.
- Work with school staff having had a student suicide to ensure that response to the suicide is not sensationalized and to support peers in an effort to prevent future suicides.
- Provide training to primary care providers and natural community helpers on recognizing and responding to adolescents showing signs of suicide risk. Include information on referral resources.
- Provide information to parents of children who are at risk for suicide on recognizing and responding to signs of potential attempts. Provide information on referral resources.
- Provide information to parents of adolescents at risk for suicide on the necessity of securing guns and ammunition.
- Provide professional education to improve suicide investigations by thorough collection of medical histories, improved scene investigations, enhanced systems for conducting psychological autopsies, and toxicological exams.

ASSUALT (HOMICIDE)

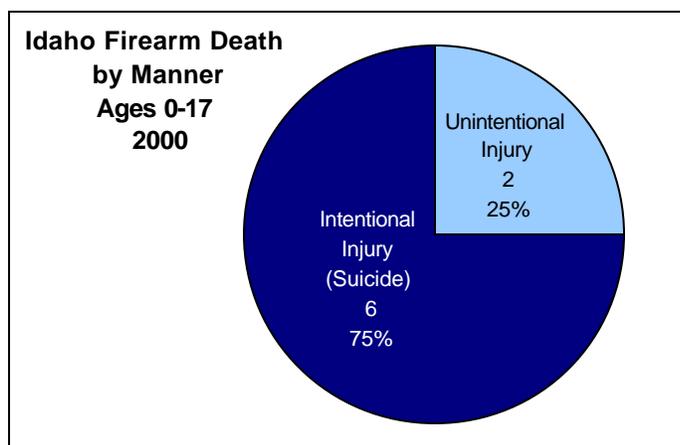
The rate of homicide in Idaho is lower than the United States. There was 1 death to a child under the age of 18 years due to homicide in Idaho in 2000. The death was determined to be definitely preventable

FIREARMS IN INJURY DEATHS

This section contains aggregate data and includes unintentional injury, intentional injury, and deaths with undetermined intent.

There were 8 firearm deaths of children in Idaho in 2000. Firearms have been the second leading cause of injury death to children in Idaho from 1997 through 2000. Only motor vehicle collisions claim more young lives.

The majority of firearm deaths were due to suicide.



Handguns were used in half of all firearm deaths.

Three fourths of all firearm deaths committed with a handgun were suicides.

Idaho Resident Child Firearm Deaths, Occurring in Idaho by Manner and Type of Gun

Manner	Handgun	Rifle	Unknown
Accident	1	1	0
Suicide	3	2	1
Total	4	3	1

- Almost 2 of 3 (63.3 percent) Idaho adults with children less than 18 years of age have a gun present in their home or vehicle.
- Almost 1 in 9 (11.6 percent) adults with children less than 18 years of age has a loaded gun in the home.
- Approximately 1 in 24 (4.2 percent) adults with children less than 18 years of age has a loaded gun in his/her vehicle.

Bureau of Vital Records and Health Statistics "Idaho Behavioral Risk Factors" Surveillance System Report, 1999.

Half of the firearms used in child deaths in Idaho in 2000 belonged to an adult member of the victim's family.

2000 Conclusions and recommendations

The team recommends public education on firearm storage information including the following messages:

- Firearms should be stored unloaded, locked up and out of children's reach.
- Ammunition should be stored in a separate, locked location from firearms.
- Gun storage keys and lock combinations should be hidden in separate locations.
- Low cost gun locks should be made available.
- Gun locks and load indicators could prevent more than 30 percent of all unintentional firearms deaths. (www.safekids.org)
- Children should be taught the following by their caregivers:
 - Guns are dangerous.
 - Never touch or play with guns.
 - To tell an adult if they find a gun, or to call 911 if they find a gun when an adult is not present.
 - Gun violence on TV and in the movies is not real.
- Caregivers should check with neighbors, friends, relatives, or other adults in any homes where children visit to ensure they are following safe storage practices if firearms are in the home.

APPENDIX A

THE OFFICE OF THE GOVERNOR
EXECUTIVE DEPARTMENT
STATE OF IDAHO
BOISE
EXECUTIVE ORDER NO. 98-10
CHILD MORTALITY REVIEW TEAM

WHEREAS, the health and safety of Idaho children are of primary importance; and

WHEREAS, the child death rate in Idaho exceeds that of the nation; and

WHEREAS, some child deaths are due to preventable causes; and

WHEREAS, records of children's deaths and circumstances leading to their death are kept by multiple agencies but not coordinated, on-going effort is being made to evaluate these records; and

WHEREAS, expertise exists within the state to evaluate these records and identify circumstances leading to or contributing to the deaths of children; and

WHEREAS, the identification of risk producing circumstances and recommendations to remediate them may reduce child death rates;

NOW THEREFORE, I, PHILIP E. BATT, Governor of the State of Idaho, by virtue of the authority vested in me under the Constitution and laws of this state, do hereby establish the Child Mortality Review Team.

The duties of the Team shall include reviewing data on selected cases of child death and developing recommendations for systems improvement which lead to reduced mortality.

The Director of the Department of Health and Welfare shall appoint the members of the Team. The Team shall establish the terms of appointment, chairmanship, and other operating guidelines in bylaws. Membership shall include:

- a pediatrician,
- an emergency medicine physician,
- a pathologist,
- a coroner,
- a prosecutor,
- a law enforcement representative,

- a Children at Risk Task Force member,
- the state epidemiologist, and
- a representative of the public.

An annual report with the Team's findings and recommendations shall be presented to the Governor and to the Chairs of the Senate and House Health and Welfare Teams.

This Executive Order shall cease to be effective four years after its entry into force.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Idaho at Boise the Capitol, the 16th day of July, in the year of our Lord nineteen hundred ninety-eight, and of the Independence of the United States of America the two hundred twenty-third and of the Statehood of Idaho the one hundred ninth.

PHILIP E. BATT

GOVERNOR

PETE T. CENARRUSA

SECRETARY OF STATE

APPENDIX B

TECHNICAL NOTES REGARDING SIGNIFICANCE TESTING

For significant testing of all rates contained in this report: $p=.05$. Three statistical tests were performed for each cause, area, or year. If the test outcomes did not match, the more frequent outcome was reported.

For causes, areas, or years in which the rate is based on 100 or more events, the following tests were performed:

- 1) Evaluate overlapping confidence intervals at $p=.05$. If the confidence intervals of the rates do not overlap, the rates are significantly different.
- 2) Evaluate the test statistic. If the z statistic is greater than or equal to the test statistic (1.96), the rates are significantly different.
- 3) If the confidence interval for the ratio of rates does not contain the value of 1, the rates are significantly different.

For causes, areas, or years in which the rate is based on less than 100 events, the following tests were performed:

- 1) Evaluate overlapping confidence intervals at $p=.05$. If the confidence intervals of the rates do not overlap, the rates are significantly different.
- 2) Evaluate the test statistic. If the Difference of Rates is greater than or equal to the z statistic, the rates are significantly different.
- 3) If the confidence interval of the Difference in Rates does not contain the value of 0, the rates are significantly different.

TECHNICAL NOTES REGARDING THE ICD-9 / ICD-10 CONVERSION

Cause-of-Death Classification

Mortality statistics are compiled in accordance with the World Health Organization (WHO) regulations, which specify that member nations, including the United States, classify and code causes of death in accordance with the International Statistical Classification of Diseases and Related Health Problems. The tenth revision of the International Classification of Diseases (ICD-10) was implemented in the United States beginning with deaths occurring in 1999 and replaces the ninth revision of the ICD (ICD-9), which was used from 1979 through 1998. Some changes from ICD-9 to ICD-10 include:

1. ICD-10 is far more detailed than ICD-9, with about 8,000 categories compared to 4,000 categories.
2. ICD-10 uses 4-digit alphanumeric codes, compared to 4-digit numeric codes in ICD-9.
3. Some cause-of-death titles have been changed, and conditions have been regrouped.
4. Some cause-of-death coding rules have been changed.

Comparability Ratio

The change from ICD-9 to ICD-10 may result in discontinuities in cause-of-death trends. These discontinuities are measured using comparability ratios. The National Center for Health Statistics (NCHS) developed comparability ratios to measure the level of agreement between classification systems for causes of death.

The comparability ratio is the result of a study completed by the NCHS in which a sample of the U.S. mortality data file was coded by both the new (ICD-10) and the old revision (ICD-9) codes.

Comparability ratio:

$$\frac{\text{Number of deaths for a cause of death based on ICD-10 code(s)}}{\text{Number of deaths for a cause based on the most comparable ICD-9 code(s)}}$$

A comparability ratio of 1.00 indicates that the same number of deaths was assigned to a particular cause whether ICD-9 or ICD-10 was used. A comparability ratio of less than 1.00 indicates fewer deaths occurred in 1999 compared with 1976-1998, solely because of the revision of the ICD. For example, a ratio of 0.98 (MVA deaths) indicates there were 2 percent fewer deaths (1.00-0.98) for this cause because of the code revision. A comparability ratio of more than 1.00 indicates more deaths occurred from this cause in 1999 compared with 1976-1998, only because of the implementation of ICD-10. A ratio of 1.04 (SIDS deaths) indicates 4 percent more deaths (absolute difference of 1.04-1.00) were attributed to the cause using ICD-10 than would have been using ICD-9.

Comparability ratios for select causes of death have been revised since preliminary comparability ratios were released. NCHS revised ratios for motor vehicle collisions. The comparability ratio for motor vehicle collisions was updated after a change in the classification of motor vehicle collisions. Originally, for a death to be classified as a motor vehicle accident in ICD-10, it must be explicit that the injury involved a "motor" vehicle, even if the injury occurred on a highway or road. In ICD-9, the absence of the term "motor" or when a vehicle accident was reported as occurring on a highway or road, the assumption was to classify the accident as involving a motor vehicle. ICD-10 did not allow for this assumption and such accidents are categorized as "Other" land transport accidents. *Since the implementation of ICD-10, however, for U.S. data, it has been decided that, if an accident occurred on a highway or road, classification to motor vehicle accident is appropriate. Idaho data published prior to this report may not reflect this change. Since this update was implemented, Idaho deaths due to motor vehicle accidents have been revised and are comparable to U.S. data.* Revised data are available upon request.

To show trends in data, NCHS has instructed states to treat ICD-10 as the standard and adjust statistics prior to 1999 using comparability ratios. Therefore, mortality statistics provided in this report are NOT comparable to previously published mortality statistics based on ICD-9 codes.

For example, in 1999 there were 21 Idaho resident deaths from SIDS based on ICD-10 codes. In 1998, there were 20 deaths from SIDS, based on the ICD-9 codes. At first glance, one would conclude the number of SIDS deaths increased by 5 percent from 1998 to 1999. However, because of changes in coding rules for ICD, these two counts

are not comparable. Beginning in 1999 a change in Rule A affects the coding of SIDS deaths. In ICD-9 SIDS was treated as an ill-defined condition and ignored in the presence of other better-defined conditions listed on the death certificate. In ICD-10, SIDS is not considered to be ill-defined. Thus, in ICD-10, SIDS may be selected as the underlying cause of death even when other conditions are listed on the death certificate. Thus, deaths classified as SIDS in ICD-10 may have been classified to other causes using ICD-9.

The ICD-10 to ICD-9 comparability ratio for SIDS is 1.04. In other words, the counts and rates for SIDS were expected to increase 4 percent beginning in 1999 only because of the introduction of ICD-10. To compare the number of SIDS deaths in 1998 with the number of deaths in 1999 multiply 1998 data by the comparability ratio.

Number of deaths in 1998 (not comparable with 1999 data)	X	Comparability Ratio	=	Number of deaths in 1998, comparable with number of deaths in 1999 (rounded)	Number of deaths in 1999
20		1.04		21	21

In this report, trend data are presented for SIDS, Motor Vehicle Accidents, Suicide, and Firearm deaths. The following table shows the ICD-9 and ICD-10 codes and the comparability ratio for each of these causes of death.

CAUSE	ICD-9 CODES	ICD-10 CODES	COMPARABILITY RATIO
SIDS	798.0	R95	1.04
Motor Vehicle Accidents	810-825	V02-04,V09.0,V09.2,V12-V14,V19.0-V19.2,V19.4-V19.6,V20-V79,V80.3-V80.5,V81.0,V81.1,V82.0-V82.1,V83-V86,V87.0-V87.8,V88.0V88.8,V89.0,V89.2	0.98
Suicide	950-959	X60-X84,Y87.0	1.00
Firearms	922,955.0955.4,965.0-965.4,970,985.0-985.4	W32-W34,X72-X74,X93-X95,Y22-Y24,Y35.0	