Child Deaths in Idaho

2016

A Report of Findings by the
Idaho Child Fatality Review Team
www.idcartf.org

Prepared June 2019

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IDAHO CHILD FATALITY REVIEW
2016

This report is a review of child deaths occurring in Idaho, summarizing the state's Child Fatality Review (CFR) process and findings. The Idaho Child Fatality Review Team was established in 2013 following an executive order from Gov. C.L. "Butch" Otter (No. 2012-03). The CFR Team is tasked with performing comprehensive and multidisciplinary reviews of deaths to Idaho children under age 18 in order to identify what information and education may improve the health and safety of Idaho's children.

Idaho's CFR process is in response to the longstanding public concern for the welfare of children, particularly those who are abused or neglected. Efforts to understand the factors that lead to a death may help prevent other injuries or deaths to children in the future. Following national guidelines and best practices, this is accomplished by a collaborative process that incorporates expertise and perspectives of multiple disciplines.

CHILD FATALITY REVIEW TEAM

The statewide CFR Team is established and supported by the Governor's Task Force for Children at Risk (CARTF). The following members were appointed and participated in 2016 reviews:

Tahna Barton, Court Appointed Special Advocates (CASA), CFR Team Chair
Susan Bradford, MD, Pediatrician, Family Medicine Residency of Idaho
Josie Bryan, Program Coordinator, St. Luke's Children's Injury Prevention
Jerrilea Archer, Ada County Sheriff's Office (retired),
Matthew Cox, MD, St. Luke's Medical Center, CARES
Candace Falsetti, Idaho Department of Health and Welfare, Behavioral Health
Alana Minton, JD, Deputy Attorney General, Idaho Department of Health and Welfare,
Charles Garrison, MD, Ada County Coroner, Forensic Pathologist
Dotti Owens, Ada County Coroner
Penny Shaul, JD, Prosecutor Bonneville County
Kris Spain MS, RD, LD, Central District Health Department, Preventive Health Services Division Administrator
Kara Stevens, Idaho Department of Health and Welfare, Clinical and Preventive Services
Garth Warren, MD, Ada County Coroner, Forensic Pathologist
Michelle Weir, Idaho Department of Health and Welfare, Child and Family Services

Teresa Abbott, MBA*, Principal Research Analyst, Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare *(analytical and reporting support)*

Christine Hahn, MD*, Idaho State Epidemiologist, Medical Director, Idaho Department of Health and Welfare *(subcommittee member)*

**Non-voting members*

ACKNOWLEDGEMENTS

Idaho Department of Health and Welfare (IDHW) serves as the fiscal agent, and provides staff support to the CFR Team utilizing federal Children's Justice Act funding. The CFR Team relies on the support of many state agencies in their efforts to obtain records and review information.

These reviews are made possible because of the cooperation of numerous law enforcement agencies, coroner offices, and medical facilities throughout the state. In particular, the CFR Team would like to express its appreciation to following individuals for providing data support to the team:

Pam Harder, Research Analyst Supervisor, Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare

Steve Rich, Principal Research Analyst, Idaho Transportation Department

THE OBJECTIVES OF CHILD FATALITY REVIEW

The National Center for Child Death Review provides resources and guidance to the Idaho CFR process. While multi-agency death review teams now exist in all 50 states and the District of Columbia, there are variations on how the process is implemented. However, all U.S. Child Death Review processes share the following key objectives *(National Center for Child Death Review, Program Manual for Child Death Review, 2005):*

1. Ensure the accurate identification and uniform, consistent reporting of the cause and manner of every child death.
2. Improve communication and linkages among local and state agencies and enhance coordination of efforts.
3. Improve agency responses in the investigation of child deaths.
4. Improve agency responses to protect siblings and other children in the homes of deceased children.
5. Improve delivery of services to children, families, providers and community members.
6. Identify specific barrier and system issues involved in the deaths of children.
7. Identify significant risk factors and trends in child deaths.

8. Identify and advocate for needed changes for policy and practices and expanded efforts in child health and safety to prevent child deaths.
9. Increase public awareness and advocacy for the issues that affect the health and safety of children.

The team's focus is to seek out common links or circumstances that may be addressed to avert future tragedies.

METHODOLOGY

Deaths of children under the age of 18 years which occurred in Idaho during calendar year 2016 were reviewed. Deaths occurring out of state were not reviewed since pertinent records are not available for the team's use.

The designated CFR research analyst within Idaho Department of Health and Welfare's Bureau of Vital Records and Health Statistics identified the deaths using the Vital Records system and retrieved death certificates. A subcommittee met prior to each full review team meeting to screen the list of deaths by cause and identify possibly preventable deaths for further review. The subcommittee 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 subcommittee next identified what additional information was necessary for a comprehensive review. The CFR research analyst then requested information from the appropriate agency. The information may include:

- Death certificates
- Birth certificates (full form)
- Autopsy reports
- Coroner reports
- Law enforcement reports
- Transportation Department crash and injury reports
- National Transportation Safety Board reports
- Medical records

- Emergency medical systems records
- Child protection records

Although the team attempted to obtain all relevant records from the various agencies, the team does not have subpoena power and could not always obtain confidential records. Agencies are cooperative and responsive to information requests, overall. Agreements are now in place with some Idaho hospitals to provide medical records to the team, while adhering to specific practices to safeguard patient privacy in compliance with Health Insurance Portability and Accountability Act (HIPAA). However, in the absence of subpoena power or statutory authority, the team continued to face barriers due to the inability to obtain certain records.

The challenges include:

- Incomplete or missing records such as coroner reports or law enforcement incident reports (not available, redacted, or refused on the basis of privacy concerns)
- Missing academic and behavioral records from schools, due to cited restrictions under the Family Educational Rights and Privacy Act (FERPA)

Of 222 child deaths occurring in Idaho in 2016, 106 were selected for detailed review by the CFR Team. To better identify preventable factors during the perinatal period, the CFR subcommittee expanded its scope this year to include more a thorough screening of perinatal condition and congenital malformation deaths (based on information found on the full form birth certificate, death certificates, and medical history). Deaths that were *not* selected for full CFR Team review included most deaths due to extreme prematurity, malignancies, and severe and/or multiple congenital anomalies.

2016 Deaths to Children (Birth to Age 18) Occurring in Idaho

	Total	Screened by CFR Subcommittee	Reviewed by CFR Team
Perinatal Conditions/Congenital Malformations	85	85	5
Unintentional Injuries (Accidents)	51	51	51
Suicide	15	15	15
Unexplained Infant Death*	19	19	19
Assault (Homicide)	6	6	5
Malignancies	8	8	0
Flu/Pneumonia	0	0	0
Non-ranking/All Other Causes	38	38	11
	222	**222**	**106**

**Includes Sudden Unexplained Infant Death (SUID) as well as "ill-defined" undetermined causes of infant death*

The CFR Team met five times between April 2018 and January 2019 to conduct case reviews. Risk factors, systems issues, and recommended actions were identified for each case and were summarized by cause of death. If the team determined that additional records were needed to complete a thorough review for a specific case, that review was revisited at the next meeting using newly obtained information.

Information gathered from various sources and team conclusions were entered into the National Child Death Review Case Reporting System by the CFR analyst. A data use agreement between the Michigan Public Health Institute and the Idaho Department of Health and Welfare establishes the terms and conditions for the collection, storage and use of data entered into the case reporting system. Summary statistics from the case reporting system are used throughout this report.

LIMITATIONS

Records relevant to the circumstances leading to deaths are retained by multiple agencies and are often carefully guarded as sensitive and confidential information. Idaho's CFR Team does not have subpoena power and consequently, some information required for a thorough review was not released.

The CFR Team is aware that for the purposes of seeking medical treatment, some deaths to Idaho residents occur out-of-state following an illness or injury that initiated within the state of Idaho. While the team makes every effort to consult with CFR coordinators and agencies in neighboring states to obtain complete information, it acknowledges the limitation of that approach in identifying all relevant cases and supporting information.

Calculation of rates is not appropriate with Idaho's CFR data because not all child deaths are reviewed. Instead of rates, CFR statistics have been reported as a proportion of the total reviews. Sample sizes are often small which result in unstable results. Please use caution in interpreting changes over time or comparing demographic subgroups.

DATA NOTES

In addition to data based on the child deaths reviewed by the CFR Team, this report includes Idaho and U.S. mortality data from the Vital Statistics System. Mortality data is presented as a way of understanding all child deaths to Idaho residents and their relationship to the subset of deaths selected for CFR Team review. Mortality data is based to all Idaho residents (regardless of where the incident occurred or where the child actually died) and CFR data is based to deaths occurring in Idaho. Mortality data may be based on aggregated years to provide larger population sizes, allowing for more stable analysis. Therefore, these data sources are not comparable.

Idaho Vital Statistics mortality trend data are from the Idaho death certificates and out-of-state death records for Idaho residents. Numbers of deaths by cause and rates are from the Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare. National rates are from the National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC).

EXECUTIVE SUMMARY

The Idaho Child Fatality Review (CFR) Team presents its annual report on child deaths occurring in Idaho in 2016. The team was formed by the Governor's Children at Risk Task Force (CARTF), under Executive Order 2012-03 to review deaths to children under the age of 18, using a comprehensive and multidisciplinary process. The team is tasked with identifying information and education that is needed to improve the health and safety of Idaho's children. Their goal is to identify common links or circumstances in these deaths that may be addressed to prevent similar tragedies in the future.

The team reviewed deaths to children under the age of 18 which occurred in Idaho during calendar year 2016. Deaths were identified, and manner and cause of death were categorized using the Vital Records system. The team utilized information already gathered by coroners, law enforcement, medical providers, and state government agencies in their reviews.

Although the team attempted to obtain all relevant records from the various agencies, it does not have subpoena power and could not always obtain confidential records. Challenges include incomplete, redacted or missing records, with some agencies citing privacy concerns. Schools cited Family Education Rights and Privacy Act (FERPA) restrictions in denying record requests.

SUMMARY OF FINDINGS

There were 222 child deaths occurring in Idaho in 2016. The CFR Team screened these deaths by cause to determine whether the case met the criteria for full review (was due to an external cause *OR* was unexplained *OR* was due to a cause with identified risk factors). The team conducted full reviews for 106 of these child deaths.

Sudden Unexplained Infant Death

Sudden Unexpected Infant Death (SUID) is the sudden death of an infant under one year of age, which remains unexplained after a comprehensive investigation. In 2016, there were 12 SUID cases occurring in Idaho. The team also reviewed 7 infant deaths of "undetermined" cause plus another 3 deaths to infants or toddlers determined to be accidents in the sleeping environment.

Commonalities frequently observed in these infant deaths included improper sleeping position or sleep environment (notably, co-sleeping with adults and on unsafe sleep surfaces when traveling), tobacco smoke exposure, hazardous living conditions, missing scheduled immunizations, and not breastfeeding. The team supports messaging that promotes American Academy of Pediatrics (AAP) safe sleep guidelines and the protective factors for infants of routine immunizations and breastfeeding. Families in need of support may benefit from home visiting programs offered through agencies like Head Start and Idaho Department of Health and Welfare (IDHW).

Motor Vehicle Accidents

In 2016, 31 children died from motor vehicle accidents. About half of the victims were in their mid to late teen years. Failure to maintain lane and inattentive or distracted driving were leading contributing causes. There were 4 fatal accidents resulting from children operating off-road recreational vehicles like ATVs. Two victims were non-helmeted cyclists who were struck by motor vehicles.

Improper safety restraint usage continues to be a common factor in motor vehicle fatalities (14 of the 24 traffic fatality victims were not using an age-appropriate seat belt restraint or safety seat). An interaction of risk factors was often involved in a single accident. Teen drivers having multiple passengers, with alcohol or drug impairment was commonly seen in a single event. Parents should model good driving behavior by wearing a seat belt, maintaining a safe speed, and not driving while distracted or under the influence of alcohol or drugs. Teen-

parent contracts which place restrictions of the teen driver are a useful way to communicate expectations and remind drivers to avoid risky behaviors.

Operators of off-road vehicles like ATVs, UTVs and motorcycles are urged to follow safety guidelines, and make sure they are using the vehicle in accordance with manufacturer recommendations related to terrain, speed, and operator age. Helmets are proven to prevent fatal head injuries for riders of bicycles, skateboards, motorcycles and ATVs.

Drowning

The team reviewed 7 drowning deaths occurring in 2016. Four (4) of these deaths were to school aged children in a swimming pool or lake. There were 2 cases in which an infant drowned in a bathtub. Inadequate supervision was the most common risk factor in drowning deaths.

Children of all ages should be closely supervised when playing in or around pools or open water. Parents should be mindful of the possibility of young children accessing or slipping into bodies of water. Fencing or other borders around canals, ponds, streams and pools should be installed and carefully maintained. Infants and toddlers should not be left unattended, even for a moment, in a bathtub.

Crush or Fall Injuries

There were 4 child deaths resulting from a fall or crush injury.

Parents are reminded to closely supervise young children in unfamiliar environments and to secure heavy objects in home and play areas. Young children and those who have not had safety training should not be allowed to operate, ride or climb on farming equipment or motor vehicles.

Accidental Shootings/Firearms

Two Idaho children died of accidentally inflicted gunshots in 2016. Both cases occurred in a home where the guns and ammunition were unsecured, allowing the child easy access.

The shooter playing with a gun was the most common circumstance surrounding unintentional firearm deaths of children. Public health messaging should include reminders of responsible gun ownership and safe handling practices (keeping guns out of reach of children, using gun locks and storing guns and ammunition in separate, secure locations).

Suicides

The CFR Team reviewed 15 suicides occurring in Idaho. Nearly two-thirds of the victims in 2016 were male and all were teenagers. The most common injury mechanism was firearms, followed distantly by hangings.

Limiting access to highly lethal means, such as firearms and prescription medications, reduces the risk of suicide. Suicide awareness should be included as a basic tenant of firearm safety and responsible gun ownership. According to IDHW's Office of Suicide Prevention, those who die by suicide typically had a treatable mental health and/or substance abuse disorder. The warning signs for suicide are almost always present, and therefore preventable.

Homicides

The team reviewed a total of 5 fatal assaults to children, along with 2 deaths of undetermined manner which were also investigated as possible homicides. Causes included drowning, blunt force head trauma and dehydration. Two (2) of the homicide victims were infants or toddlers and 3 were school aged children.

There were 3 separate tragedies which were investigated as suspected murder-suicides in 2016. All were inflicted by a parent and resulted in multiple child deaths. Substance abuse, mental health issues, and criminal history of the parent or caregiver are commonly observed risk factors in child homicides due to abuse and neglect. Professionals who work with children should seek training to identify signs of abusive behavior and injuries. They should be familiar with Idaho's mandatory reporting laws and readily report concerns to local law enforcement or to the Idaho Department of Health and Welfare.

Preventable Natural Deaths

Perinatal Conditions

The CFR Team reviewed 5 perinatal condition deaths to identify preventable risk factors that may be addressed through public education or system improvements.

While the great majority of perinatal condition deaths involved low birth weight and/or extreme prematurity, the team did find factors such as inadequate (or non-existent) prenatal care, maternal smoking, birth injuries, drug abuse or a medical condition during pregnancy. The subcommittee found that detailed information about birth attendants and home or birth center transfers was not always included on birth certificates. The CFR Team requests assistance from certifiers to consistently provide these details. Additional research leading to

recommendations for improved prenatal care, mid-wife education, and/or additional birth center licensing standards may help reduce the number of infant deaths in this category.

Refusal of Medical Treatment Due to Religious or Personal Beliefs

As part of their reviews of all 2016 deaths, the team noted a total of 5 cases where parents delayed/refused routine medical care or opted out of recommended vaccinations due to personal or religious beliefs.

The CFR Team determined that these deaths might have been prevented with timely medical treatment, compliance with scheduled vaccinations, and/or proper prenatal care.

Other natural manner deaths

Following the subcommittee recommendation, the team reviewed 11 other natural manner deaths of varied causes including respiratory infections, meningitis, sepsis, and gastroenteritis.

Most of these deaths were to infants in their first 6 months of life and many had underlying medical conditions and/or developmental delays. Proper hygiene and scheduled vaccinations (including an annual flu shot) can prevent the spread of viral infections which lead to severe illness.

RECENT ACTIONS AND COLLABORATIVE EFFORTS

Advancing Child Health and Safety in Idaho

- **Child Death Investigation Training.** In early 2019, CARTF funded Child Death Investigation training for all county coroners in Idaho, citing findings and recommendations from the CFR Team. Investigation tools including SUID dolls for re-enactments were provided to all participants.

- **Safe Sleep Kit Distribution.** St. Luke's Children's Pediatric Education and Prevention Program provided free Pack N' Plays and safe sleep packs to families in need at medical facilities in urban and rural locations throughout the state.

- **Safe Sleep Initiative.** In an effort to address sudden unexplained infant deaths (SUIDs) and sleep-related deaths to infants, the Maternal and Child Health (MCH) Program has focused on supporting safe sleep practices and tobacco cessation for pregnant women. The Program is a Cribs for Kids Partner allowing the purchase of safe sleep materials and survival kits (playpen, sleep sack, etc. for families in need. The MCH Program has partnered with Ada County Paramedics to support their community safe sleep education efforts and the Maternal, Infant, and Early Childhood Home Visiting Program to provide cribs and sleep sacks to families without a safe sleep surface. The MCH Program also partnered with Project Filter (Idaho Tobacco Prevention and Control Program) to implement a statewide incentive-driven smoking cessation program for pregnant women and families with young children. The IDHW Pregnancy Risk Assessment Survey (PRATS) supported "Back to Sleep" messaging by providing survey participants with a copy of a board book that incorporated safe sleep practices.

- **Adverse Childhood Experience's (ACEs) Screening.** Adverse Childhood Experiences, also known as ACEs, are stressful or traumatic events that occur during childhood and have been linked with negative, long-term effects on health and well-being. These experiences can include living in a home with abuse and neglect, domestic violence, substance use, parental mental illness, incarceration of a family member, or divorce. The MCH Program partnered with St. Luke's Children's to offer a quality improvement project to providers across the state to teach and support primary care providers to screen parents of infants and young children for their ACEs score and offer resources as a prevention effort to break the cycle of intergenerational toxic stress and trauma and build resiliency. The ACEs and Resiliency Learning Collaborative began in April 2018 and has approximately 40 providers participating from across Idaho.

- **Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program.** The MIECHV Program is housed in the MCH Section in the Division of Public Health and has home visiting programs at each health district across the state. "Home Visiting" is an evidence-based approach to supporting pregnant women and families of young children by providing resources, education, and skills-building to raise physically, socially, and emotionally healthy children. Research demonstrates that evidence-based home visiting programs prevent child abuse and neglect, encourage positive parenting practices, promote child development and school readiness, improve the health of families and their children, and improve families' economic self-sufficiency. Home visiting is also a proven strategy for addressing ACEs and building resiliency within a family.

- **Poison Control and Prevention**. IDHW's MCH Program and Emergency Medical Services co-fund Idaho's poison control center which enables any person within the geographical boundaries of Idaho to call a toll-free number and receive personalized, expert advice on any possible poisonings. For Idaho, about half of the calls made to the poison center were for children under five years of age.

- **Dissemination of "The Crying Plan."** Women Infants and Children (WIC) and home visiting programs collaborated with the Idaho Children's Trust Fund to disseminate the "Crying Plan" tool to parents and caregivers of infants and various community programs throughout Idaho. The goal of "The Crying Plan" is to help parents and caregivers identify strategies for coping with inconsolable, crying babies which some research has found to be a trigger of abusive head trauma. Find this tool at: www.cryingbabyplan.org

- **Child Care Safe Sleep Policies.** During the 2018 legislative session, the Idaho Child Care Program (ICCP) presented rules to update safe sleep practices as a condition of annual health and safety inspections for all ICCP providers. The new rules went into effect beginning July 1, 2018. The Rule states that as a condition of their inspections, all providers serving infants must have incorporated safe sleep practices into their policies and operations. Safe Sleep is defined as ALONE, On their BACK, and in a Certified Product Safety Commission CRIB.

- **Idaho Suicide Prevention Program**. In 2018, the Program, in collaboration with the Idaho Suicide Prevention Action Collective (ISPAC), engaged in a statewide suicide prevention strategic planning process which resulted in a new state suicide prevention plan and a 20 percent increase in state funding for suicide prevention. The new plan and associated funding priorities provide for continued support of youth and schools training programs through a subgrant with the Idaho State Department of Education. These programs resulted in an estimated 550 interventions with suicidal students in Idaho middle and high schools during the fall 2018 semester.

- **Adolescent Depression Screening Learning Collaborative.** The Idaho Health and Wellness Collaborative (IHAWCC) along with the Children's Healthcare Improvement Collaboration launched this project to increase early detection and initiation of treatment for depression in patients aged 12 to 17**.** Health care providers throughout Idaho participated. Results revealed a significant increase in depression and substance abuse screening and confirmed documented follow-up plans for 88 percent of patients who were found to have evidence of depression risk.

- **Critical Congenital Heart Disease Screening**. During the 2018 legislative session, the Idaho Newborn Screening (NBS) Program successfully added rules to require that all babies born in Idaho be screened for Critical Congenital Heart Disease (CCHD) beginning on July 1, 2018. CCHD refers to a group of serious heart defects occurring in infants that can be life threatening without early detection and intervention. Research shows that states with mandatory CCHD screening policies had significantly fewer infant cardiac deaths. State adoption of mandatory CCHD screening was linked with a 33% decline in infant deaths due to CCHD compared with states without mandatory screening.

POPULATION

The total population of Idaho in 2016 was estimated at 1,683,140. Of that number, 437,173 were children under the age of 18 (26% of total). Hispanics represented just over 18% of the state's child population, up from 14% since 2006.

Population	Number	Percent
Idaho total	1,683,140	100%
Age 0-17	**437,173**	**26.0%**
Residents, age 0-17 by sex		
Males	223,599	51.1%
Females	213,574	48.9%
Residents age 0-17 by race		
White	408,753	93.5%
Black	8,336	1.9%
American Indian or Alaska Native	11,392	2.6%
Asian/Hawaiian/Pacific Islander	8,692	2.0%
*Residents age 0-17 by ethnicity**		
Hispanic	79,627	18.2%
Non-Hispanic	357,546	81.8%

* Race and Hispanic origin are reported separately. Persons of Hispanic origin are included in approximate race totals.

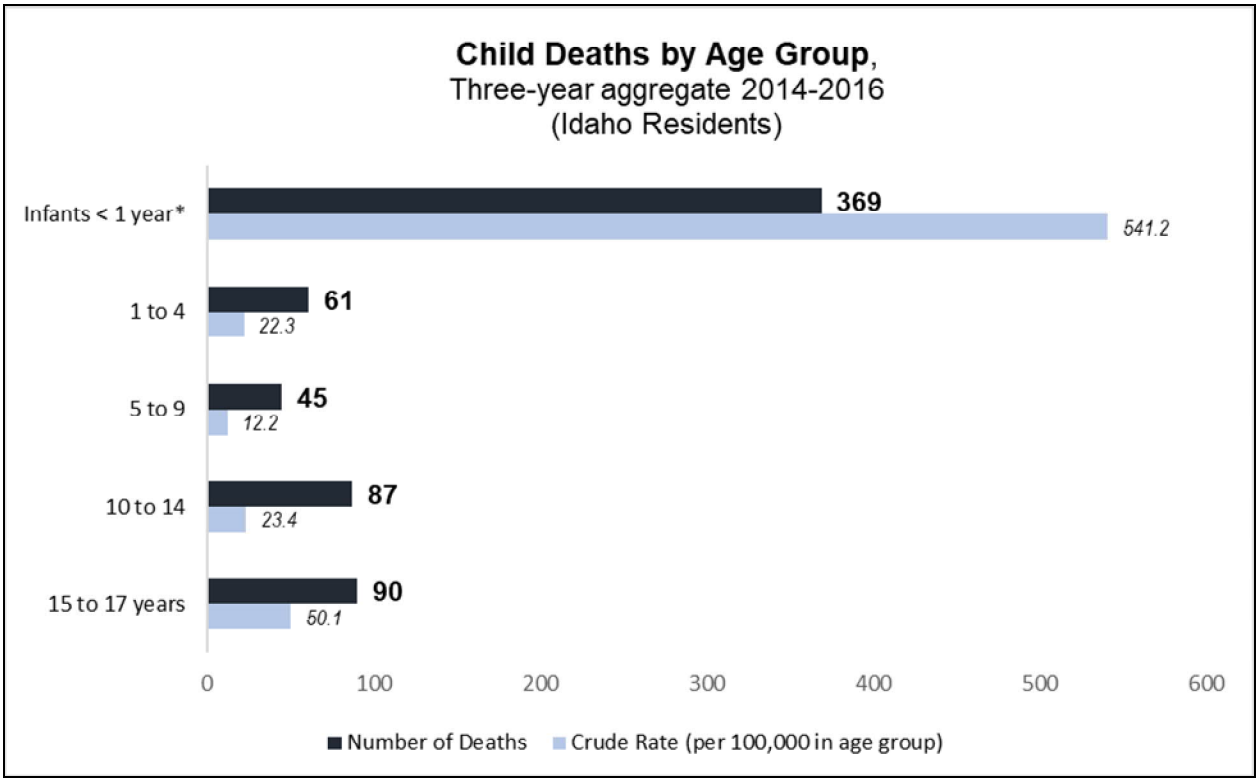
Source: Census Bureau in collaboration with the National Center for Health Statistics.
Internet release date: June 26, 2017

OVERVIEW

Idaho Mortality Data, Three-Year Aggregate (2014-2016)

As a framework for single year death reviews, Idaho mortality data analyzed over longer periods provide insight to the major causes of child death and may highlight vulnerable demographic groups.

The number and cause of death to Idaho children varied dramatically by age group. There was a total of 652 deaths to infants and children (under age 18) between 2014 and 2016. Infants (under 1 year of age) have a higher death rate than older children and comprise most of these deaths (369). Common causes of infant deaths were birth defects and conditions originating in the perinatal period such as birth trauma, short gestation/low birth weight, maternal conditions, and complications during birth.

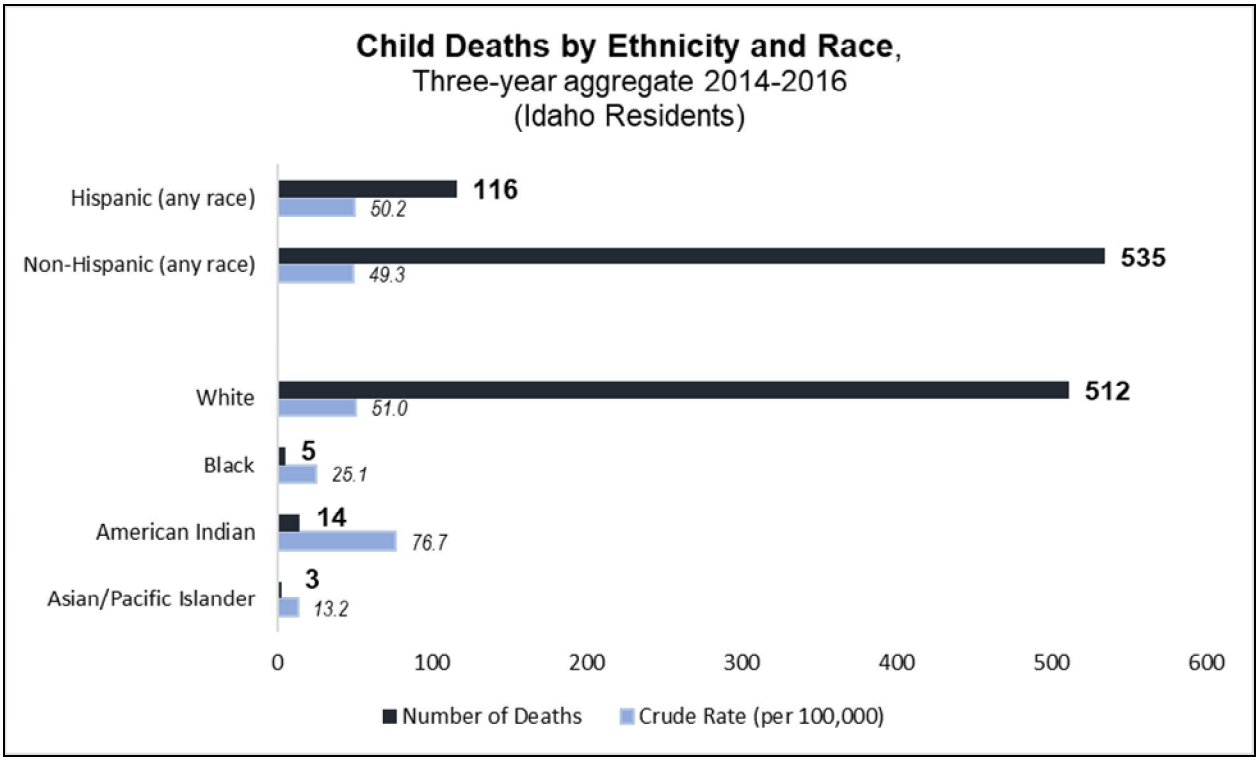


* Rate for infants under the age of 1 year is based on 100,000 live births

Leading Causes of Death to Idaho Child Residents, Three-year aggregate, 2014-2016

Rank	Infants (< 1-year-old)	Rank	Age 1-17
1	Congenital malformations/chromosomal abnormalities (100)	**1**	Accidents (123)
2	Short gestation/low birth weight (43)	**2**	Intentional Self-Harm (Suicide) (52)
3	Sudden/unexplained infant death (36)	**3**	Malignant Neoplasms (23)
4	Maternal complications of pregnancy (35)	**4**	Congenital Malformations (18)
5	Accidents (15)	**5**	Assault (Homicide) (12)
6	Complications of placenta, cord, membranes (11)	**6**	Diseases of Heart (8)
7	Hydrops fetalis not due to hemolytic disease (7)	**7**	Influenza and Pneumonia (3)
8	***Tie:*** Necrotizing enterocolitis of newborn (6) *and*		
	Neonatal hemorrhage (6)		

Children of Hispanic origin had a death rate comparable to that of non-Hispanics. While the rate for American Indians (76.7 deaths per 100.000) appears to be higher than for other races, the small number of observations (14 deaths over three years) makes it difficult to draw conclusions. Although rate differences between race categories groups are not statistically significant, they suggest a topic for further study over a longer period.



Rates based on 20 or fewer deaths may be unstable. Use with caution.

Race and Hispanic origin are separate questions on death certificates. Hispanics are also included in race figures.

SUDDEN UNEXPLAINED INFANT DEATH

Sudden Unexpected Infant Death (SUID) is the sudden death of an infant under one year of age, which remains unexplained after a comprehensive investigation. Though the exact cause is not known, most of these deaths occur while the infant is sleeping in an unsafe sleeping environment (www.cdc.gov/sids/AboutSUIDandSIDS.htm).

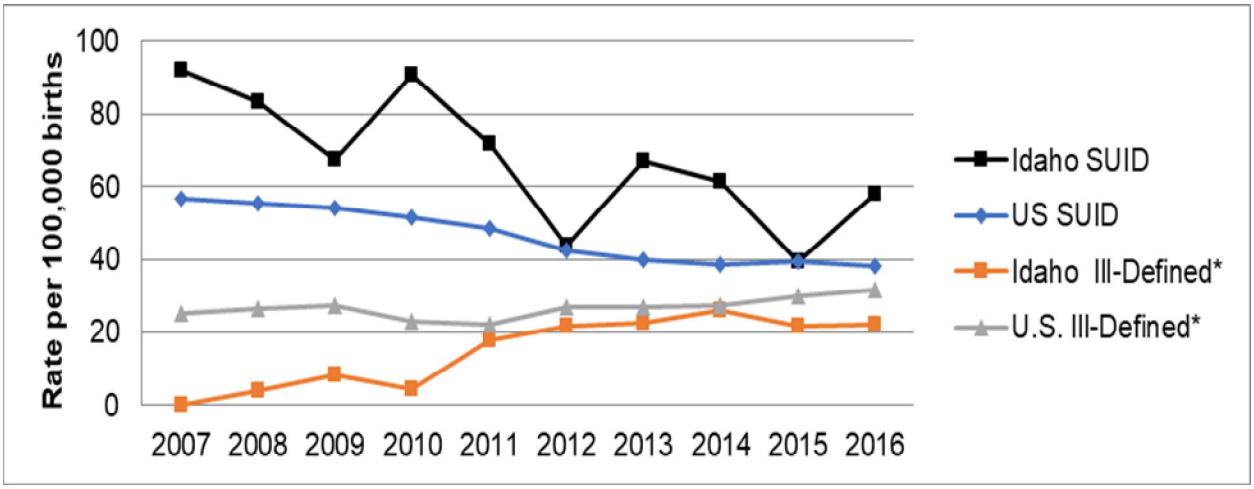
Infant deaths not meeting the CDC's definition of "SUID" (see above) may be reported as "other ill-defined and unknown causes of mortality." Historically, the SUID death rate has been higher for Idaho than for the U.S. overall while the rate of ill-defined infant deaths has been lower. With recent coroner training focused on thorough investigations and standardized coding, the CFR team expects improved practices throughout the state.

Idaho and U.S. Resident SUID Deaths (< age 1 year) and Rates per 100,000 Births, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Number Idaho Resident SUID deaths	**23**	**21**	**16**	**21**	**16**	**10**	**15**	**14**	**9**	**13**
Idaho Resident SUID death rate	91.9	83.5	67.4	90.5	71.7	43.6	67.1	61.2	39.4	57.9
U.S. Resident SUID death rate	56.8	55.4	53.9	51.6	48.3	42.5	39.7	38.7	39.4	38.0

Idaho and U.S. Resident Ill-Defined Infant Deaths (< age 1 year)
and Rates per 100,000 Births, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Number Idaho Resident Ill-defined infant deaths	**0**	**1**	**2**	**1**	**4**	**5**	**5**	**6**	**5**	**5**
Idaho Resident Ill-defined death rate	0	4.0	8.4	4.3	17.9	21.8	22.4	26.2	21.9	22.3
U.S. Resident Ill-defined* death rate	25.3	26.3	27.2	23.0	22.1	26.9	26.8	27.4	30.1	31.7



*All other ill-defined and unknown causes of mortality: ICD-10 codes: R96-R99.
SUID deaths are shown mutually exclusive in the tables and graph: ICD-10 code R95.

Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*

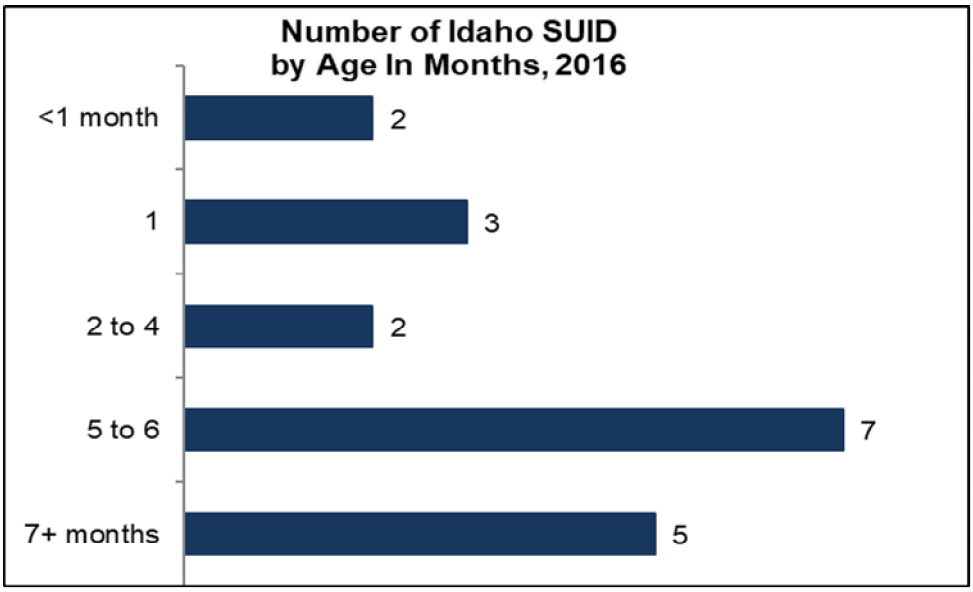
Rates based on 20 or fewer deaths may be unstable. Use with caution.

Idaho CFR Team Findings: Unexplained Infant Death

In 2016, there were 13 Idaho resident deaths with an immediate cause of "Sudden Unexplained Infant Death (SUID)," "Sudden Unexplained Death in Infancy," *or* "Sudden Infant Death Syndrome (SIDS)." Deaths listed with any of these immediate causes are collectively referred to throughout this report as "SUID". Of these, 12 of the SUID cases occurred in Idaho and were reviewed by the CFR Team. Because of their common circumstances, the CFR reviewed the

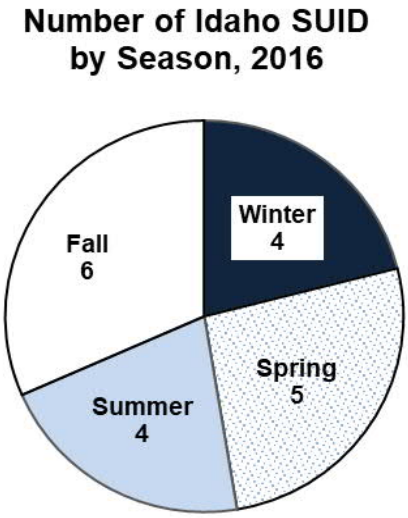
SUID cases along with 7 infant additional deaths classified as “undetermined” cause (for a total of 19 SUID/undetermined infant deaths).

According to the American Academy of Pediatrics (AAP), most SUID events in the U.S. occur when a baby is between two and four months old, and during the winter months.
This differed for Idaho in 2016, with unexplained infant deaths most often occurring to infants over the age of 5 months.



[Based on 19 SUID/Undetermined cause cases]

As in past years, no relationship was observed between the rate of SUID and seasonality in Idaho.



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[Based on 19 SUID/Undetermined cause cases]

The team considered the race and ethnic backgrounds of the infants who died and did not observe any notable disparities.

Systems Issues

As SUID is a diagnosis of exclusion to be made only if there is no other possible cause of death, a comprehensive investigation is essential. This includes an autopsy, scene investigation and health history. The CFR Team noted marked improvement in following CDC and state guidelines related to investigating and coding unexplained infant deaths. However, there were still areas needing improvement which could be addressed through continued child death investigation trainings for coroners and law enforcement agencies. Improved agency cooperation may also help identify at-risk families to prevent additional infant deaths.

Scene Investigation and SUIDI Reporting Form

The Centers for Disease Control and Prevention (CDC) designed the Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) as a tool for investigative agencies to better understand the circumstances and factors contributing to unexplained infant deaths. The team was able to confirm that the SUIDIRF (or local equivalent) was used by law enforcement

or coroner investigations for 9 of the 19 reviewed SUID cases. While still not utilized consistently in every jurisdiction and is more commonly used by agencies serving the urban centers of Idaho, use of this tool has increased over past years and may be attributed to consistent coroner training throughout the state.

Death Certificate Completion

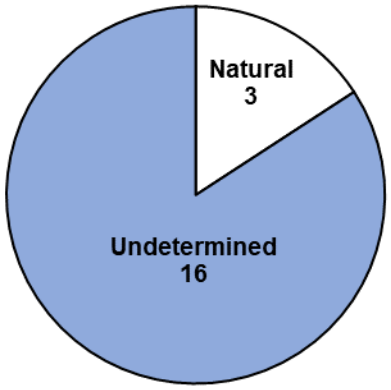
The IDHW Bureau of Vital Records and Health Statistics provides guidelines for completing and certifying death certificates. Both *cause* and *manner* of death are documented on the death certificate by a coroner or physician following established guidelines. According to the Idaho guidelines, cause of death is "a simple description of the sequence or process leading to death." Manner of death (natural, accident, suicide, homicide, or could not be determined) provides a broader classification for each death and should agree with the cause noted on the death certificate. In 3 of the 19 SUID cases, the manner of death was certified as "natural" which does not agree with the definition of "Sudden Unexplained Infant Death" as a cause.

There are also fields on the death certificate which allow for additional information such as "contributing circumstances" and "injury description." Including *all* potentially relevant information on these fields such as existing medical conditions, toxicology results, and sleep environment may lead to a better understanding and prevention of additional infant deaths.

Resource Constraints

The CFR Team recognizes the challenges of a growing state population and a higher number of incidents on the ability of coroner and law enforcement agencies to thoroughly investigate cases and issues of concern within families. Additional resource allocation may be needed in order to accomplish all of the recommendations.

Number of Idaho SUID
by Certified Manner of Death, 2016



[Based on 19 SUID/Undetermined cause cases]

Autopsies

Complete autopsies are an essential step in ruling out other causes of infant death. Autopsies were performed in all 19 of the unexplained infant deaths in 2016.

Inadequate or inconsistent agency cooperation

The team found multiple instances in which improved agency communication and information sharing might have prompted legal or child protective service (CPS) intervention for family support and/or child protection measures. There were cases where police and IDHW case workers separately investigated issues of concern which may have been substantiated or more thoroughly addressed had these agencies found a cooperative approach in sharing information on referred families.

The team also noted opportunities for coroner and law enforcement agencies to combine investigative efforts to better understand the circumstances contributing to infant deaths. This extra step may be especially valuable in cases where the infant's medical and social history is limited or when the family resists the interference of outside agencies or medical care due to personal or religious beliefs.

Common Factors and Associations

The CFR Team observed the following factors among the 2016 Idaho SUID and infant deaths of undetermined cause (ranked by frequency with number of instances in parenthesis):

1. Unsafe sleep environment/sleep surface (16)
2. Co-sleeping-general (12)
    - Co-sleeping w/ obese adult (5)
3. Recent illness of infant (10)
4. CPS history/alleged domestic abuse (10)
5. Parent history of substance abuse (9)
6. Prenatal or second-hand smoke/vape exposure (8)
7. Failed to immunize and/or seek medical treatment (5)
   Unstable home environment (5)
8. Hazardous or unhygienic home environment (4)
   Improper feeding (4)
   History of infant's feeding problems/intolerance (4)
   Infant or toddler developmental delay (4)
   No 911 call/self-transport to ER (4)
   Premature birth (4)

[Based on 19 SUID/undetermined infant deaths]

Unsafe sleep environment was noted in the great majority of these unexplained infant deaths (16 of 19 cases). Examples included adult sized beds, couches, air mattresses, and placing the infant on the ground or floor. Unsafe surfaces for infants include those with soft mattresses, thick bedding and pillows, or cluttered with toys and other objects. Co-sleeping with an adult was separately observed in more than half of these incidents. In national studies, parent obesity has been identified as a risk factor in infant deaths in the sleep environment. Over 1-in-4 of the 2016 SUID deaths involved co-sleeping with an obese adult.

As in past years, the team found that unstable, hazardous or unsanitary home environments were commonalties in many of the unexplained infant deaths. "Unstable" home environments include those without a consistent adult caretaker or with a parent with a history of criminal behavior, incarceration, mental health issues, or substance abuse. Many had a history of CPS referrals. Examples of "hazardous/unsanitary homes" included the presence of animal feces, uncontained soiled diapers, food waste, or illicit drugs/paraphernalia in the home. While it is not

the goal of the CFR Team to identify conditions that meet the legal standard of child neglect, documenting commonly seen safety hazards may help case workers or law enforcement officers to support families with a need for additional services.

Prenatal smoking (as reported on birth certificates) and reports of smoking or vaping in or around the home were frequently noted in these SUID cases (8 of 19 deaths).
In more than half of the SUID cases, parents reported that the infants suffered a recent illness or had an existing medical condition. These were commonly described as mild respiratory illness, low grade fever, or food intolerance. However, more significant conditions such as neonatal abstinence syndrome and developmental delays were also reported. Notably, the autopsy results for these unexplained cause deaths *did not* directly attribute the causes of death to illness or impairment. Nearly every case of SUID in 2016 involved a combination of risk factors such as unsafe sleep environment, improper feeding (such as propping a bottle or breast feeding in bed) or hazardous home environment.

The team also found a considerable number of parents who did not vaccinate or who did not seek medical treatment for their infants (5 of 19 deaths), most often due to personal or religious beliefs.

Accidents in the Sleeping Environment
The CFR Team also reviewed 3 infant deaths with a manner of "accident." In these cases, coroner and law enforcement investigations determined that the deaths were linked to hazards in the sleep environment. Similar factors to those seen in SUID were observed in these cases--most notably, co-sleeping or other unsafe sleep environments, prenatal smoking, drug exposure, and unstable home environment.

Recommended Actions for Understanding and Preventing SUID
American Academy of Pediatrics (AAP) safe sleep guidelines for infants up to 1 year of age emphasize the importance of placing infants to sleep on their backs, in their own uncluttered crib or bassinet, routine immunization, and avoidance of tobacco smoke exposure (www.aappublications.org/news/2016/10/24/SIDS102416).

Infants should be immunized in accordance with AAP and Centers for Disease Control and Prevention recommendations. Recent evidence suggests that vaccination may have a protective effect against SUID (http://pediatrics.aappublications.org/content/138/5/e20162938).

AAP research found that just two months of breastfeeding, even when combined with formula, provides the same benefit as exclusive breastfeeding. Babies receive immune benefits from breastfeeding which can reduce their risk of a viral infection. Other properties of breastmilk may also reduce risk of sudden infant death through their influence on brain development (www.aappublications.org/news/2017/10/30/BreastfeedingSIDS103017).

To better understand the role of alcohol or drug impairment, the CFR Team recommends consistent blood alcohol or drug testing of parents or caretakers as a routine part of infant death investigations.

Improved communication between agencies (CPS, law enforcement, healthcare providers and/or child care providers) and understanding of mandatory reporting requirements could prevent additional tragedies. Idaho Statute 16-1605 states:

> *"Any physician, resident on a hospital staff, intern, nurse, coroner, school teacher, day care personnel, social worker, or other person having reason to believe that a child under the age of eighteen (18) years has been abused, abandoned or neglected or who observes the child being subjected to conditions or circumstances which would reasonably result in abuse, abandonment or neglect shall report or cause to be reported within twenty-four (24) hours such conditions or circumstances to the proper law enforcement agency or the department."*

Health or safety concerns can be reported to law enforcement or to the Idaho Department of Health and Welfare by calling **2-1-1** so that issues can be properly investigated and potentially addressed.

Home visiting programs have proven successful at helping families build their capacity for creating and maintaining nurturing, healthy households. These programs strive to prevent child abuse and neglect, improve maternal and child health and promote school readiness. The Idaho Division of Public Health and Head Start both provide home visiting services to eligible families. Home visitors provide information on prenatal health, newborn care and child development. They offer referrals for needed resources including nutritional support, housing and utility assistance, substance and mental health referrals, and home safety plans.

CFR Team continues to recommend more consistent utilization of a SUID Investigation Reporting Form (SUIDIRF) by coroners and law enforcement as a way of better understanding

the preventive factors and ruling out other potential causes of infant death. After 5 review years, the team saw significant improvements in SUIDIRF utilization and increasingly thorough infant death investigations in Idaho. The CDC makes a standard form available and some local agencies have developed a simplified, version of this tool.

For Coroners

As a way of better understanding the circumstances involved in unexplained infant deaths, the CFR Team identified coroner training opportunities on the following topics:

- Guidelines for coding and detailing findings on death certificates
- SUID Investigation (use of SUIDIRF, autopsies, doll re-enactments, toxicology, etc.)
- Inter-agency collaboration
-

The great majority of unexplained infant deaths in Idaho appeared to be thoroughly investigated and reported in a consistent manner. Many coroners routinely utilize tools like CDC's SUIDIRF, full autopsies and scene re-enactments. Coding was generally in compliance with state and CDC guidelines. However, the team again found a few cases in which "cause" and "manner" were coded inconsistently on death certificates. Coroners should certify the cause of death as SUID only when all external causes have been ruled out. Therefore, *all* unexplained infant deaths should be coded with a manner of "Could not be determined." Additionally, entering detailed information in all relevant fields on the death certificate (such as other significant conditions or injury descriptions) may help to identify SUID risk factors like co-sleeping, unsafe sleep surfaces, or specific medical conditions. The CFR team recommends that these guidelines are continually reinforced in coroner training sessions.

Coroners are also encouraged to obtain medical and family history as part of a thorough investigation of unexplained infant deaths. Consistent usage of the CDC's SUIDIRF (www.cdc.gov/sids/SUIDRF.htm), or local equivalent, is recommended.

Coroners often play an important role in protecting surviving children in a home where a prior death occurred. They should be familiar with Idaho's mandatory reporting laws (*Idaho Statute 16-1605*, *see page 27*) and are encouraged to work cooperatively with their partners in law enforcement and Idaho Department of Health and Welfare to improve investigations and identify at-risk families.

Idaho's growing population will require additional resources so that county coroners may adequately manage larger caseloads. Resources should be allocated with consideration to regional population trends.

For Public Health Agencies

Public health agencies in Idaho currently include safe sleep messaging as part of public education campaigns. IDHW Maternal and Child Health programs can continue to support CFR Team recommendations through coordination with outside agencies and by educating parents and providers on known SUID risks.

Case workers should familiarize themselves with Idaho's mandatory reporting laws (*Idaho Statute 16-1605*, s*ee page 27)* and readily communicate with partner agencies when investigating health and safety concerns. Cooperative approaches with law enforcement and coroners may lead to improvements in supporting families and investigating concerns for child safety. Case workers should be cognizant of the association of certain factors in infant deaths (i.e. improper infant sleep environment, lack of timely immunizations, tobacco exposure, drug and alcohol impairment, mental health concerns, unsanitary/hazardous living spaces) as identified by the Idaho CFR team and national research findings.

The CFR Team recognizes the effectiveness of home visiting programs in helping families build and maintain nurturing, healthy households. Expanded access and greater awareness of such programs in public health and non-profit agencies is recommended to prevent or correct unsafe situations for infants and young children.

Because of the risk of parents falling asleep during late night feedings, health educators and case workers should help parents understand that the protective factors of breastfeeding do not negate the high risk of co-sleeping. Case workers are often in a unique position to identify problematic sleep environments and other hazards during home visits and can play a key role in educating parents and child care providers.

For Law Enforcement

Law enforcement agencies are encouraged to work cooperatively and share information with partner agencies (i.e. coroners, CPS, etc.) to investigate health and safety concerns within families. Unsafe situations may be better substantiated and addressed through complete information and family history obtained from multiple sources. Officers should be familiar with the factors that are commonly associated with infant deaths (*see page 25)* so that they can be addressed in advance to prevent injuries or deaths.

Officers should familiarize themselves with Idaho's mandatory reporting laws (*Idaho Statute 16-1605*, see *page 27*) and readily communicate with partner agencies to investigate health and safety concerns involving children.

Consistent usage of the CDC's SUID Investigation Reporting Form (www.cdc.gov/sids/SUIDRF.htm), or local equivalent, is recommended to properly guide infant death investigations. Thorough investigations (including home environment, incident re-enactments, family medical history, etc.) and consistent documentation helps to identify commonalities and risk factors which can prevent future deaths. When resources are limited, smaller agencies are encouraged to seek support from other law enforcement agencies or coroner's offices which may provide additional expertise and resources to assist with these investigations.

For Health Care Providers

Health care professionals play an important role in educating parents on the protective factors of prenatal care, breastfeeding, timely immunizations and safe sleep environment.

The CDC stresses that timely vaccinations are essential in providing immunity to life-threatening diseases. A 2018 study found evidence of a social movement of public health vaccine opposition based on a growing trend of parents opting out of school immunization requirements. Idaho reportedly has eight of the top 10 counties in the U.S. with the highest exemption rates: (https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002578).
Parents may need to be reassured of vaccine safety and informed of the benefits of complying with the CDC's immunization schedule (www.cdc.gov/vaccines/schedules/parents-adults/resources-parents.html).

Providers, including staff in newborn nurseries and NICU should endorse and model AAP risk-reduction recommendations, particularly related to safe sleep. Programs like *"Cribs 4 Kids"* and *"Sleep in Heavenly Peace"* donate safe cribs and beds to families in need. Potential topics for new parent education in hospitals may include proper swaddling techniques, infant CPR and breastfeeding support. The team also recommends training programs for high-risk families such as those with an incarcerated parent, a history of mental illness or substance abuse.

Families needing assistance with providing a safe home environment may benefit from referrals for additional support. Home visiting programs are offered by Idaho Division of Public Health, Head Start and other non-profit agencies. In addition to providing information on prenatal health and newborn care, home visitors offer referrals for resources like nutritional support, housing and utility assistance, substance and mental health referrals, and home safety plans.

Health providers should stay up-to-date on the latest findings of SUID risk factors encountered during the prenatal through neonatal period (e.g. prematurity, tobacco/alcohol/drug exposure, family history of apnea, seizure disorders and other medical conditions) and incorporate routine testing to identify high-risk infants.

Providers should be familiar with Idaho's mandatory reporting laws (*Idaho Statute 16-1605*, *see page 27*). Health or safety concerns can be reported to law enforcement or to the Idaho Department of Health and Welfare by calling **2-1-1** so that they can be properly investigated and potentially addressed.

<u>For Parents and Child Care Providers</u>

Parents and caretakers should comply with current AAP safe sleep recommendations (www.healthychildren.org/English/ages-stages/baby/sleep/Pages/A-Parents-Guide-to-Safe-Sleep.aspx). Infants should be placed on their back to sleep until they are 1 year old. The safest place to sleep is in their own crib or bassinet, on a firm sleeping surface, free of toys, pillows, small objects and loose bedding. AAP recommends that the infant's sleep area be in the same room (but *not* the same bed) as the parents for at least 6 months (ideally for the first year) to make it easier to feed and comfort the baby. Parents should avoid alcohol and drug

use while caring for an infant, as impairment can make it difficult to wake up and respond to an infant.

Because of the reduced risk of SUID to breastfed infants, mothers are strongly encouraged to breastfeed newborn infants. Even those who choose to combine breastfeeding with formula for just the first few months of life are providing significant protective benefits (www.forbes.com/sites/tarahaelle/2017/10/31/any-breastfeeding-even-partial-cuts-sids-risk-in-half/#9d609df25191). When breastfeeding in bed, mothers should be sure to return the infant to his/her own crib or bassinet once feeding is complete, to avoid the suffocation risk of co-sleeping.

Parents and caretakers should be especially mindful of sleep environment when the infant is away from home as when camping, staying in hotels, at daycare, or visiting relatives. Air mattresses, adult beds, and sleeping bags are soft sleep surfaces which are not intended for infant sleep. Couches, recliners, car seats, and infant swings are not safe for long periods of sleep. Infants who are younger than 4 months are particularly at risk, because they may assume positions that can create a risk of suffocation or airway obstruction. A safer alternative when away from home is a portable crib such as a play-yard (e.g. “Pack ‘n Play”). Consumers are warned not to rely on marketer’s claims of safe sleep products for infants. Wedges, positioners, special mattresses and heart/breathing monitors have not been shown to reduce the risk of SUID.

Recent AAP research confirms that staying current with immunizations significantly reduces the risk of infant death. Vaccines are routinely and thoroughly tested to ensure that they are safe and effective for infants and children. Parents are urged to consult with their pediatrician and follow the recommended immunization schedule for their children. Those with a financial barrier can receive routine childhood vaccines at no cost or at a significantly reduced cost through their health provider, local pharmacy, or their public health district. For information on where to obtain vaccinations in Idaho see: https://healthandwelfare.idaho.gov/Health/IdahoImmunizationProgram/ChildandAdolescentImmunization/tabid/3768/Default.aspx).

The CFR Team urges parents to maintain a safe and hygienic home environment that is uncluttered and free of hazardous objects. Recent public health research indicates that infants

may be more susceptible to infections when repeatedly exposed to bacteria from unwashed clothing, bedding, dishes, spoiled food and animal waste. Care should be taken to see that medications/drugs, tobacco products, cleaning supplies and sharp objects are kept out of the reach of children.

Because of the known risk to infants from tobacco smoke exposure, it must be stressed that there is no safe level of smoking or vaping during pregnancy. In addition, infants should never be exposed to second hand smoke or e-cigarette vapor. Idaho's Project Filter offers the "Quit Now" program to support smoking cessation efforts: http://projectfilter.org

As in any emergency, parents are reminded to **call 9-1-1** immediately when an infant or child may be in distress. Parents and child care providers should consider taking an infant CPR training course. In these situations, every second is critical, and prompt medical assistance can save a life.

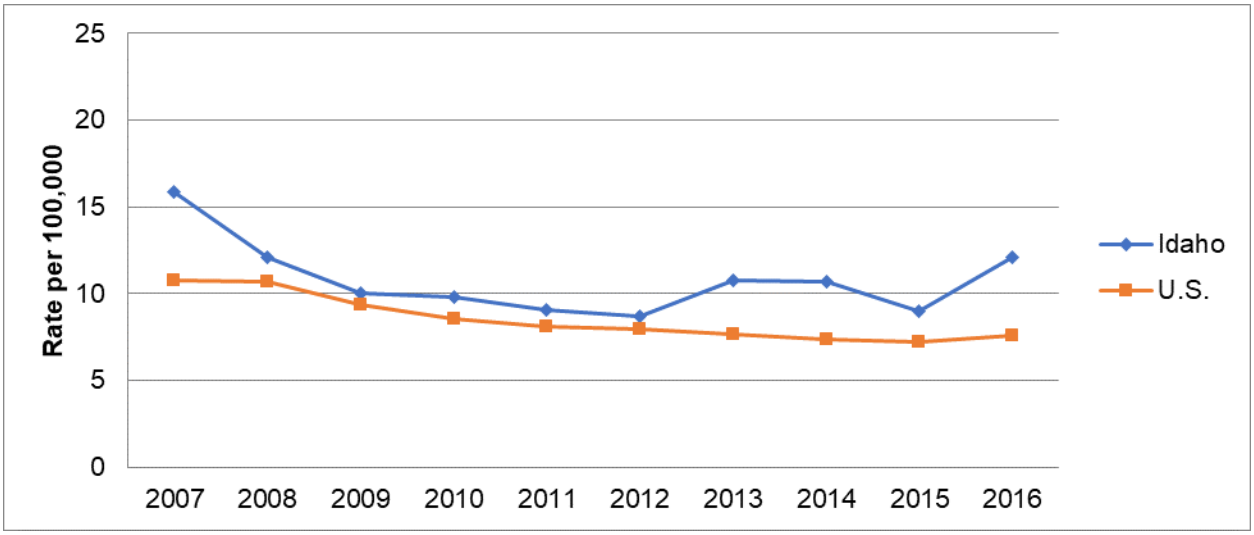
Home visiting programs provide information on prenatal health, newborn care and child development. They offer referrals for needed resources including nutritional support, housing and utility assistance, substance and mental health referrals, early education and home safety plans. For information on eligibility, to seek family support, or report a safety concern, call the Idaho Department of Health and Welfare's Care Line: **2-1-1** or Idaho Head Start at: http://www.idahohsa.org

UNINTENTIONAL INJURIES

Unintentional injuries (accidents) are those that were not planned or were accidentally inflicted by another person. Nationally, the leading causes of fatal accidents are motor vehicle collisions, drowning, fires, and poisoning. In 2016, the rate of accident deaths in Idaho was the highest since 2007 and was significantly higher than the overall U.S. rate.

Idaho and U.S. Resident Accident Deaths (Age <18)
and Rates Per 100,000, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total number Idaho Resident accident deaths	**65**	**50**	**42**	**42**	**39**	**37**	**46**	**46**	**39**	**53**
Idaho Resident accident death rate	15.9	12.1	10.0	9.8	9.1	8.7	10.8	10.7	9.0	12.1
U.S. Resident accident death rate	10.7	9.4	8.6	8.1	8.0	7.7	7.4	7.2	7.6	7.8

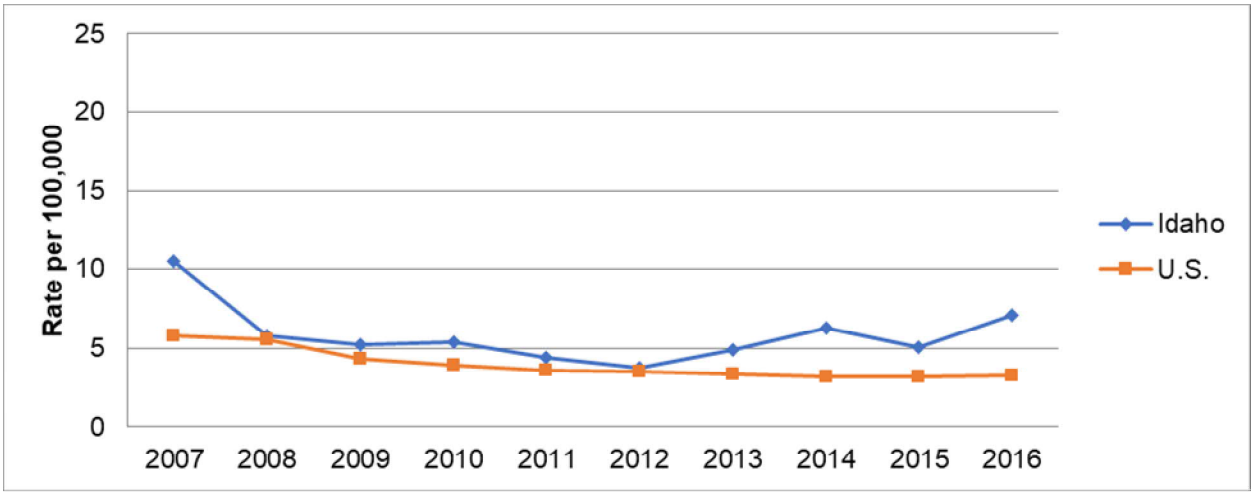


Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*

Idaho's rate of child motor vehicle fatalities increased sharply in 2016, to the highest rate since 2007. The state's motor vehicle death rate for the year was significantly higher than the overall U.S. rate.

Idaho and U.S. Motor Vehicle Accident Resident Deaths (Age <18) and Rates per 100,0000, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total number Idaho Resident accident deaths	**43**	**24**	**22**	**23**	**19**	**16**	**21**	**27**	**22**	**31**
Idaho Resident accident death rate	10.5	5.8	5.2	5.4	4.4	3.8	4.9	6.3	5.1	7.1
U.S. Resident accident death rate	5.5	4.4	4.0	3.6	3.5	3.4	3.2	3.2	3.3	3.5



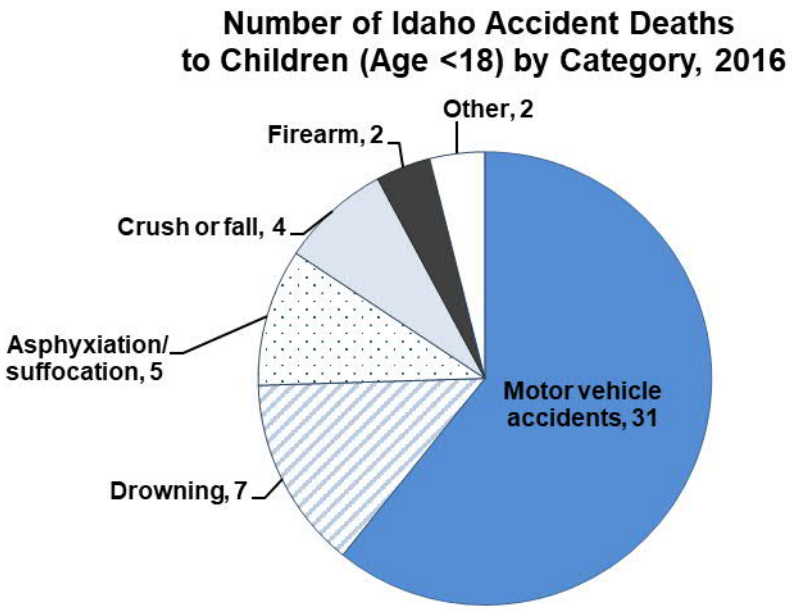
Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*

Rates based on 20 or fewer deaths may be unstable. Use with caution.

Idaho CFR Team Findings: Accidents

In 2016, there were 51 accident deaths to children occurring in Idaho. These accident deaths did not occur disproportionately to racial or ethnic minorities.

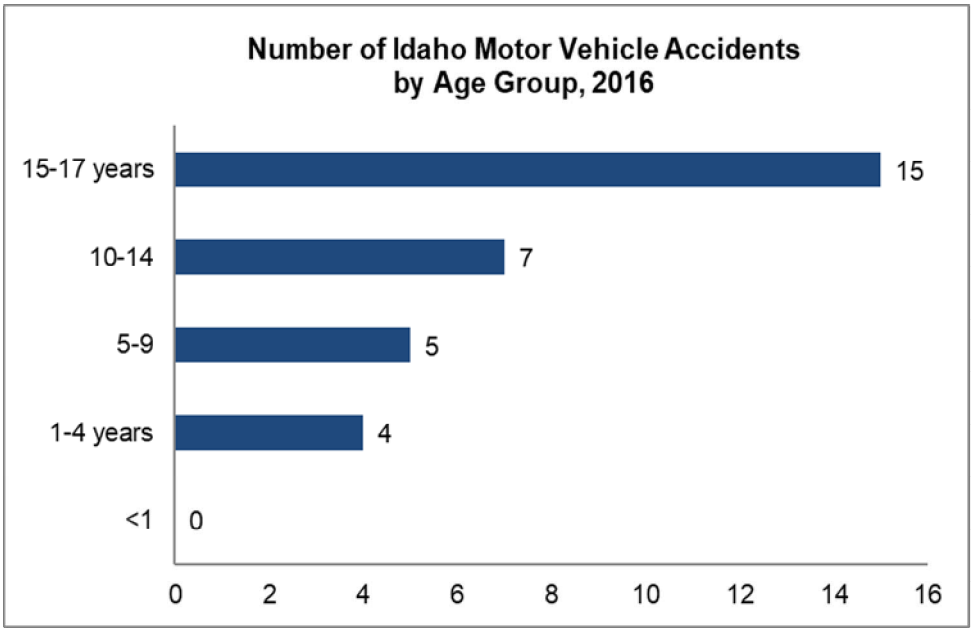
The majority (31 of 51) of these deaths were due to motor vehicle accidents. Drowning deaths accounted for another 7 of these cases. Of the 5 asphyxiation deaths, 3 were to infants or toddlers in the sleeping environment and are discussed in this report's section on sudden infant death. Less commonly occurring types of accidents for the year were firearm discharge (2) and crush or fall injuries (4). The 2 "other" accidents were the result of a fire and an accidental prescription medication overdose.

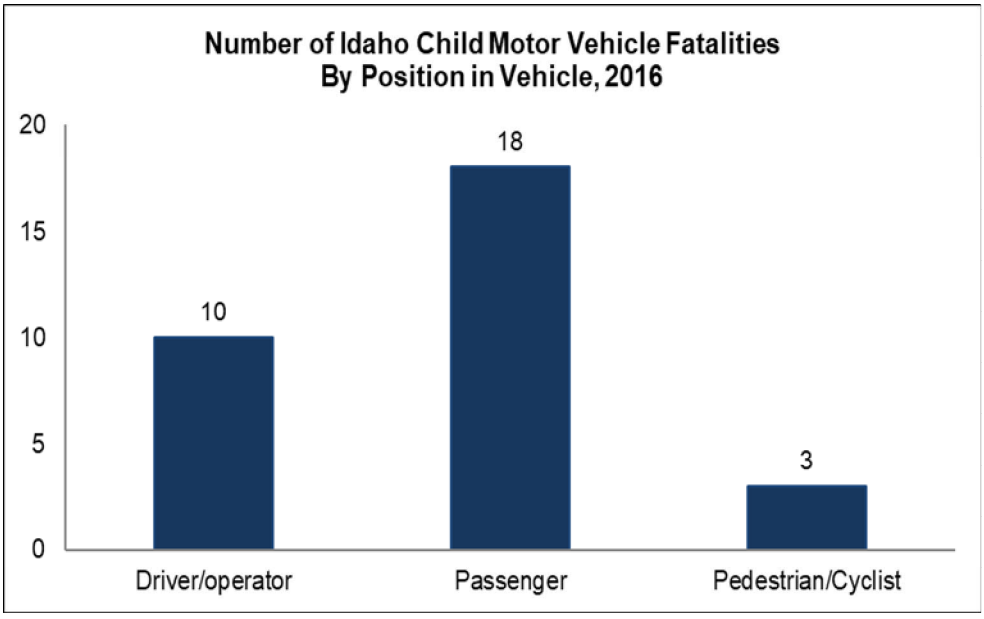


[Based on 51 accident deaths]

MOTOR VEHICLE ACCIDENTS

The CFR Team reviewed the 31 motor vehicle deaths that occurred in Idaho. About one-half of the victims were in their mid to late teen years. The victims were almost equally split by gender (16 males, 15 females). The majority (18) were passengers while 10 were drivers (or operators of an off-road vehicle) and 3 were pedestrians or cyclists.





[Based on 31 motor vehicle or other transportation fatalities]

Because 3 of these accidents resulted in more than one fatality, there were a total of 28 separate motor vehicle accidents accounting for the 2016 child deaths. Additionally, 5 of the accidents occurred off-road (ATV, snowmobile, or pedestrian on private land or driveway). One (1) death was the result of a water craft and 1 of a plane crash. The following findings are based on the remaining 21 *traffic* accidents.

Vehicle Type

In 2016, cars were the most common type of vehicle involved in traffic fatalities followed closely by pick-ups and SUVs or vans. Two (2) of the traffic accidents involved motor vehicles striking cyclists.

Vehicle type of 2016 Idaho Accidents (child as occupant)

Car	Pick-up or truck	SUV or Van	Motorcycle	Bicycle
8	5	5	1	2

*[Based on 21 motor vehicle traffic **accidents**]*

Teen drivers

Almost one-third of the traffic accidents involved a teen driver (6 of 21). In most cases, multiple risk factors were observed in the same accident. Distracted driving, alcohol or drug impairment, no seatbelt use, speeding, and unlicensed drivers were top risk factors in accidents involving a teen driver.

Seat Belt and Safety Restraint Usage

When used properly, National Highway Traffic Safety Administration (NHTSA) estimates that seat belts (lap/shoulder belts) reduce the risk of fatal injury to front seat passenger car occupants by 45 percent. Further, NHTSA estimates that the combination of an airbag plus a lap/shoulder belt reduces the risk of serious head injury among drivers by 85 percent. Idaho Statute 49-673 mandates that seat belts are worn by all occupants whenever a vehicle is in motion, except under certain specific conditions.

While Idaho law does not explicitly dictate children's position in a vehicle, the NHTSA states that the rear seat is the safest place for children of any age to ride. Idaho's Child Passenger Safety Law requires that all children six years of age or younger be properly restrained in an appropriate child safety restraint. An appropriate child safety restraint is a safety seat for

children up to 40 pounds and a belt-positioning booster seat for children aged six years or younger.

Improper safety restraint was found to be a key preventable risk factor in these motor vehicle fatalities. Most fatal traffic accident victims (14 of 24) were *not* using an age appropriate safety restraint (seat belt or child safety seat).

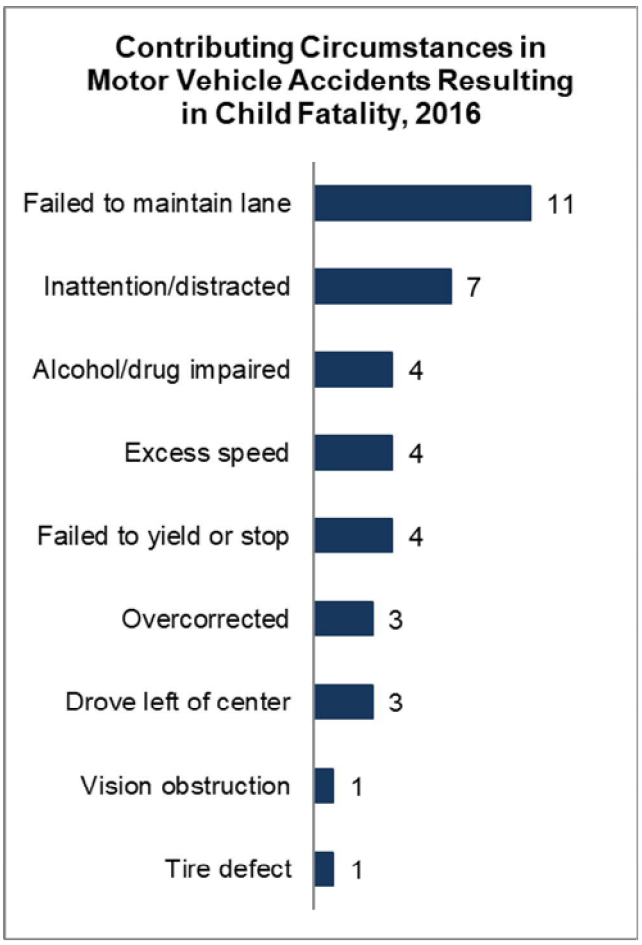
Safety Restraint Not Used

Seat belts not used	Child safety seats/booster seats not used
13	1

*[Based on 24 motor vehicle traffic **fatalities**]*

Contributing circumstances

For each vehicle involved in a traffic collision, the investigating officer may indicate up to three circumstances that contributed to the resulting accident. These are summarized in Idaho Transportation Department (ITD) crash reports. The most commonly cited circumstances in the 2016 motor vehicle traffic accidents were failure to maintain lane (11) and inattention/distraction (7). Impaired driving, speeding, and failure to stop or yield were also frequently noted.



Excess speed includes "too fast for conditions" and "exceeded posted speed"

*[Based on 21 motor vehicle traffic **accidents**]*

Systems Issues

The CFR Team observed that many of the contributing circumstances noted on ITD crash reports (e.g. failure to maintain lane, driving left of center, failure to stop/yield) could also be related to distracted driving. While "Inattention" was commonly cited on the ITD reports, "Distracted in or on vehicle" (along with detailed narrative information on the source of the driver's distraction) was less commonly selected. The team questioned whether the current approach to classifying contributing circumstances on ITD reports might underestimate the magnitude of distracted driving as a cause of accidents.

There were a few instances where the ITD report sections on alcohol and drug testing were not completed or were marked "Neither Alcohol nor Drugs Detected" without supporting detail as to how that determination was made.

More thorough investigations into the sequence of events and the driver's activities and state-of-mind prior to these accidents will lead to better understanding of the causes and may ultimately prevent additional accidents. Additional information pertaining to the role of electronic devices and other common types of distractions while driving would improve utility of the ITD reports. As noted in past years, the team felt that detailing the specific source of distraction on the crash report form (e.g. handheld phone, radio, pet, passengers, etc.) would improve the analysis of preventable factors, thus improving driver education and public messaging.

Common Factors and Associations

Along with the contributing circumstances obtained from ITD crash reports, the CFR Team separately captured common factors which may have played a role in these accidents. This additional step provides information that may improve public education and safety messaging as opposed to strictly identifying direct causes of accidents.

The team identified the following common factors in the fatal motor vehicle accidents (ranked by frequency with number of instances in parenthesis):

1. Seat belts not used (13)
2. Distracted or inattentive driving (8)
3. Multiple teen passengers (5)
4. Alcohol impaired (5)
5. Illicit drug or prescription drug impaired (4)
6. Speed too fast for conditions (4)
7. Failure to yield (4)
8. Driving without privileges/suspended license (2)
9. No helmet: motorcyclists and cyclists (2)
10. Improper infant restraint/safety seat for age (1)
11. Hazardous/winter road conditions (1)
12. Inadequate supervision of child (1)

[Based on 21 ***motor vehicle traffic*** *accidents]*

The team noted distracted or inattentive driving when narrative accounts of the incident mentioned a sudden driver error like failure to stop or maintain lane which could not be otherwise explained (by weather conditions, road hazard, excess speed, equipment failure,

etc.). Although a specific source or reason for the distraction was typically not documented, examples of potentially distracting elements observed in these cases included pets, electronic devices, and multiple passengers.

As in past years, it was common to see multiple risk factors present in the same accident. The combination of a teen driver, multiple teen passengers, speeding, and alcohol or drug impairment were often observed in the same accident.

Off-road vehicles

In 2016, there were 4 *non-traffic* accidents to children riding or operating vehicles off-road for recreational or work purposes. Vehicle types included all-terrain or utility task vehicles (ATV or UTV) and snowmobiles.

Most of the off-road accident victims were between 11 and 14 years of age. In two of these accidents, the fatally injured child was operating the vehicle. The other two were passengers riding on a vehicle operated by another child. None of the children operating the vehicles were licensed drivers. Only one of the victims was wearing a helmet. Three of these accidents were caused by the vehicle rolling over while riding on uneven terrain. The team found that operator inexperience, insufficient safety training, improper supervision and being out of compliance with manufacturer's recommendations were preventable risk factors in these off-road incidents.

Recommended Actions for Preventing Motor Vehicle Accident Deaths

The team's recommendations for preventing motor vehicle accident deaths primarily relate to drivers' education and safe passenger practices.

<u>For Parents and Teen Drivers</u>

Safety Restraints

Improper safety restraint usage continues to be a common factor in motor vehicle fatalities (14 of the 24 traffic fatality victims were not using an age-appropriate seat belt restraint or safety seat). Many of the fatal injuries resulting from traffic accidents may have been less severe or prevented entirely with proper seat belt or safety seat use. In Idaho, use of a seat belt or child safety seat is legally required for drivers and vehicle occupants of all ages.

Idaho's Child Passenger Safety Law requires that all children six years of age or younger be properly restrained in an appropriate child safety restraint. The stricter National Transportation Safety Board (NTSB) recommendations are based on height and weight as well as age (booster seats until 4 feet 9 inches *OR* eight years old).

To ensure that the correct safety seat is used and installed correctly, ITD recommends routine inspection by a trained professional. Updated safety seat installation tips and check sites throughout Idaho may be found at: https://itd.idaho.gov/safety/?target=child-safety-seat and www.safekids.org/coalition.

Safe Driving Habits

Parents should model good driving behavior by always wearing a seat belt, maintaining a safe speed, and not driving while distracted or under the influence of alcohol or drugs. Drivers should be aware that certain prescription drugs can cause impairment and follow doctor or pharmacist advice.

Electronic device usage while driving has been linked to an increase in distracted driving accidents. The National Highway Transportation Safety Administration (NHTSA) reports that nationally, 3,450 people were killed by distracted driving in 2016. Teens were the largest age group reported as distracted at the time of fatal crashes (www.nhtsa.gov/risky-driving/distracted-driving).

The specific scenario of a teen driver (often alcohol or drug impaired) with multiple young passengers, after midnight, was often seen in these fatal accidents. Whenever possible, teens should avoid driving late at night with other young passengers. In accordance with Idaho's zero tolerance laws (which make it illegal for those under age 21 to drive with any measurable amount of alcohol in their system), alcohol should never be consumed prior to driving. Teen-parent contracts which place restrictions of the teen driver are a useful way to communicate expectations and remind drivers to avoid risky behaviors.

ITD offers defensive driving courses at various locations for those aged 15 to 24 called *Alive at 25* (https://aliveat25.us/id/find-a-course). Law enforcement officers present traffic safety strategies for young drivers which emphasize responsible choices and decision-making while driving or riding as a passenger.

Off-Road Vehicle Safety

Recreational and utility vehicles like ATVs, UTVs, snowmobiles, and motorcycles are commonly used by young, unlicensed drivers both for work and play. Crashes can occur at any speed, particularly among inexperienced, untrained riders. The ITD reports that head and neck injuries account for a majority of serious and fatal injuries to motorcyclists.

Idaho law requires those operating any motorized vehicle (including motorcycles, motorized scooters, mopeds, and ATVs) on public roadways to have a valid driver's license and liability insurance. Any person under the age of 18 must wear a protective helmet while operating or riding a motorcycle or ATV, whether on or off road (https://itd.idaho.gov/wp-content/uploads/2016/06/motorcycle_manual.pdf). In a crash, riders wearing helmets, face/eye protection and protective clothing have a far better chance of avoiding serious injury.

Idaho law requires that any person without a valid motor vehicle license who wishes to operate an ATV or motorcycle on US Forest Service roads take an IDPR-approved safety course. Riders under age 16 must be supervised by an adult. (https://parksandrecreation.idaho.gov/activities/atv-motorbike)

Many ATVs and UTVs are designed for older teen or adult operation. Even when not mandated by law, ATV riders are urged to use caution and follow safety recommendations. *Kids Health* (http://kidshealth.org/parent/firstaid_safe/travel/atv-safety.html#) offers specific guidelines for safe ATV riding.

Parents should recognize that even when following precautions and protective laws, ATV and motorcycle riding are inherently risky activities. Operators and their parents are urged to follow safety guidelines, use proper equipment, and make sure they are using off-road vehicles in accordance with manufacturer recommendations.

Pedestrian and Riding Safety

Parents and caregivers are a child's first pedestrian safety teachers. Adults should closely supervise children when walking, biking or skating near roadways, driveways, and parking lots.

Safe Kids Worldwide reports that properly-fitted helmets while riding bikes, scooters, skates and skateboards, are the best way to prevent head injuries. Ensuring the correct fit can increase

comfort and use. Their research found that rural parents were more likely to say that helmets aren't necessary than urban parents, but children riding in rural areas have a higher risk for injury. (www.safekids.org/press-release/nearly-50-children-visit-emergency-departments-every-hour-due-injuries-bikes-scooters). St. Luke's Children's Injury Prevention program offers clinics on proper helmet with free bike and ski helmets for qualified families (stlukesonline.org/health-services/health-information/health-topics/helmet-safety).

Drivers should use caution when driving near schools and parks or anywhere that children may be present. Before backing vehicles in driveways or parking lots, they should take extra precautions to make sure the area is clear. It is important to check the locations of nearby children and to avoid relying on mirrors (which have blind spots) for keeping track of their movements.

Idaho Walk Smart, by ITD and Idaho Highway Safety Coalition (https://apps.itd.idaho.gov/apps/ohs/docs/WalkSmart_digital.pdf) reminds parents of the vulnerability of young children in navigating roadway and traffic environments. Children typically have limited understanding of traffic signals and patterns and their shorter physical stature makes them difficult for motorists to spot.

For Public Transportation Agencies

Ongoing messaging on proper seat belt/safety restraint use, bicycling safety and warnings against impaired and distracted driving may help prevent traffic fatalities. Opportunities may exist for additional public education related to safety seat installation checkpoints and pedestrian safety.

The team identified a need for additional public education related to safe riding of off-road vehicles like ATVs, motorcycles and snowmobiles. This may be achieved through collaboration with recreational and public health agencies.

Updates to the ITD crash report forms to ensure that they completely capture relevant information pertaining to the cause of the accident may provide a better understanding of risk factors. Specifically, the team requests: 1) the addition of a field for the estimated speed of vehicles at the time of the crash and 2) the addition of specific phone/device usage fields (including whether the device was handheld or hands free/Bluetooth® enabled) as options for the "contributing circumstances" listed on the form.

For Law Enforcement

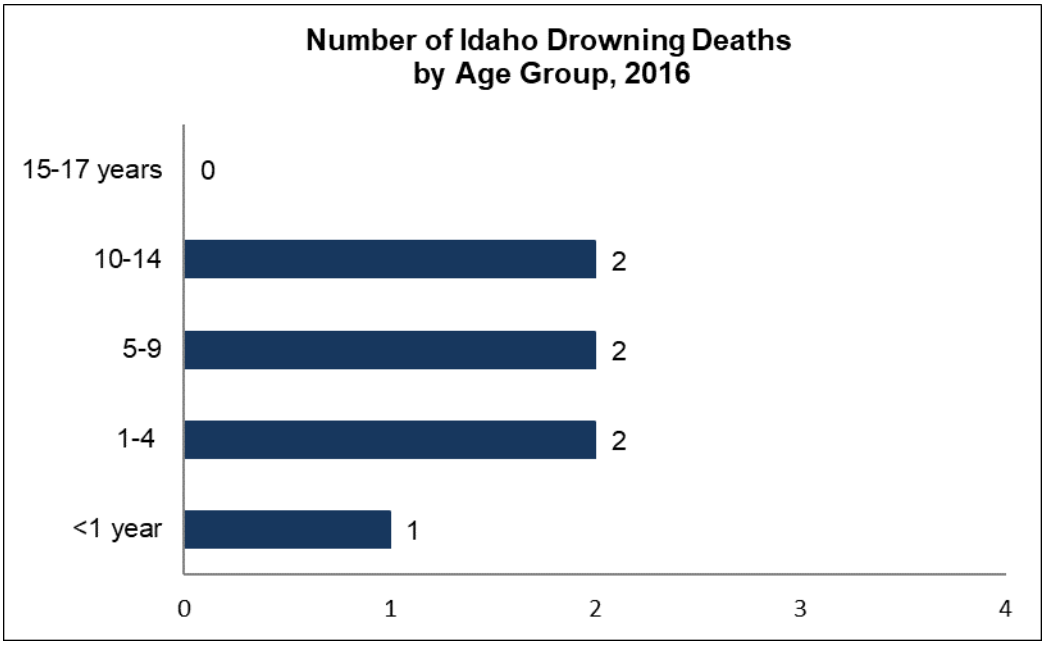
Law enforcement agencies should continue to promote compliance with vehicle safety restraint laws through existing driver's training programs like *Alive at 25*, school presentations, public education campaigns and strict enforcement of state laws.

Given the high number of fatal accidents involving an impaired driver, continued strict enforcement of alcohol and drug impairment laws is vital. Ongoing public education on the consequences of impaired driving (including the dangers of prescription drug impairment) is also recommended.

In completing narrative sections of ITD crash report forms, officers are encouraged to provide details such as estimated vehicle speed and source of driver distraction (e.g. cell phones, passengers) as a contributing cause of accidents. Although not currently required fields on crash reports, including this additional information serves to increase understanding of the cause of accidents and lead to improved preventive efforts.

DROWNING

The team reviewed the 7 drowning deaths that occurred in Idaho in 2016. Four of these deaths were to school aged children in a swimming pool or lake. Three of the victims were infants and toddlers who drowned in a bathtub (2) or open water (1).



Number of drowning deaths by location

Body of water	#
Swimming pool	3
River or creek	1
Lake or pond	1
Bathtub	2

[Based on 7 drowning deaths]

Common Factors and Associations

The CFR Team found that inadequate supervision was a factor in all 7 of the drowning deaths. In 4 of these incidents, there was no secure barrier to prevent the child from entering the water.

1. Inadequate supervision (7)
2. Unsecured access to pool or open water (4)
3. No life vest/personal floatation device (PDF) worn (1)
4. Safety hazards near play area (1)
5. Hazardous weather conditions (1)

[Based on 7 drowning deaths]

The factors observed in the bathtub drowning deaths to infants differed from those that occurred in open water. In the 2 bathtub incidents the team noted improper sleep environment or improper sleep surface, unsafe/unsanitary home environment, and a history of CPS referrals.

Recommended Actions for Preventing Drowning Deaths

According to the CDC 1-in-5 people who die from drowning are children aged 14 and younger. For every child who dies from drowning, another five receive emergency department care for nonfatal submersion injuries. The main factors that affect drowning risk include lack of swimming ability, missing barriers to open water, lack of close supervision while swimming, and failure to wear life jackets. (www.cdc.gov/HomeandRecreationalSafety/Water-Safety/waterinjuries-factsheet.html).

For Public Health Agencies

The team recommends that public education campaigns emphasize the need for installing safety barriers to prevent unsupervised access to open water. General reminders to closely supervise children and to use personal floatation devices while in or near the water may help prevent additional drowning injuries.

Warnings of the unpredictable nature of rivers, lakes and reservoirs should be directed to teens as well as parents of young children.

For Parents and Child Care Providers

Parents should take steps to prevent young children from accessing or slipping into open water from yards, playgrounds, or walking paths. Property owners should install and carefully maintain fences or other barriers to prevent children from accessing open water or swimming pools. Safety gates or doors that provide access to water should be shut securely. Floats, balls and other toys in the pool and surrounding area should be removed immediately after use so children are not tempted to enter the pool area unsupervised.

Children and teens of all ages should be closely supervised while playing in or near the water. They should choose swimming sites with lifeguards whenever possible. Even older children with swimming skills should be supervised or swim with a friend. Weather conditions should be closely monitored as they may result in abrupt changes to open water currents.

U.S. Coast Guard approved life vests or other PDFs are strongly recommended for children of all ages in or near the water. Air-filled or foam toys, (e.g. "water wings", "noodles", or inner-tubes) are not life jackets and are not designed to keep swimmers safe.

Those supervising young children should remain within arm's reach while they are in the water. They should avoid alcohol and drug use and other distractions so that they remain alert and vigilant. Parents should consider enrolling preschool aged children in formal swimming lessons, which research shows significantly reduces the risk of drowning for children aged 1 to 5 years (www.cdc.gov/HomeandRecreationalSafety/Water-Safety).

Infants and toddlers should not be left unattended, not even for a moment, while bathing in a tub of any size. Bathtubs of all types are unsafe sleep environments and should not be used as substitutes for cribs or beds, even in makeshift situations or for brief naps.

CRUSH OR FALL INJURIES

There were 4 child fatalities resulting from a fall or crush injury in 2016. Ages of the victims ranged from 4 years to 17 years.

The accidents to younger children involved playing in a hazardous environment, on or near farming/industrial equipment. Parents are reminded to closely supervise young children in unfamiliar environments and to secure heavy objects in the home and in play areas. Young children, or those who have not had formal safety training, should not be allowed to operate, ride or climb on farming equipment or vehicles.

Two teens experienced fatal head injuries after engaging in high risk recreational activities (improper horseback riding and skateboarding). Neither was wearing a helmet or other safety equipment.

American Academy of Pediatrics (AAP) reports a higher number of injuries involving skateboards and inline skates, following the increasing popularity of these activities among children of all ages. Injuries are common and are usually caused by falls and collisions with other objects. While many of these injuries are minor (fractures or sprain), severe and fatal injuries do occur and are often the result of head or chest injuries from a collision with a car. The risk of skating and skateboarding injury may be reduced with taking lessons, use of safety gear including helmets and knee and helmet pads, and following the rules of the road (www.healthychildren.org/English/healthy-living/sports/Pages/Skateboarding-and-In-Line-Skating.aspx).

Horseback riding injuries typically happen when a rider falls or is thrown from a horse. The AAP reports that unlike most other sports, the risk of injury on horseback is highest for inexperienced riders. Falls are more likely to produce serious injuries if the horse is moving quickly or if the rider is dragged or crushed by the horse. Injuries can be prevented when riders use the

appropriate equipment and tack (including helmets, saddles and bridles) and follow safety guidelines. (www.healthychildren.org/english/healthy-living/sports/pages/horseback-riding.aspx)

ACCIDENTAL SHOOTINGS (FIREARMS)

Two Idaho children died of accidentally inflicted gunshots in 2016. Both cases occurred in a home where the guns and ammunition were unsecured, allowing the child easy access.

The AAP publication *Pediatrics* reported that an average of 1,300 U.S. children die of gunshot wounds each year and another 5,790 are treated for gunshot wounds. Boys, older children and minorities are disproportionately affected. The shooter playing with a gun was the most common circumstance surrounding unintentional firearm deaths of children. *(*http://pediatrics.aappublications.org/content/early/2017/06/15/peds.2016-3486*)*

Improved coordination between agencies (i.e. CPS and law enforcement) may help identify and address unsafe situations in homes, including improper gun handling or easy access to guns and ammunition by children.

Public health messaging should include reminders of responsible gun ownership and safe handling practices (keeping guns out of reach of children, using gun locks and storing guns and ammunition in separate, secure locations).

The ASK (Asking Saves Kids, www.askingsaveskids.org) campaign is a collaboration between the Brady Center to Prevent Gun Violence and the American Academy of Pediatrics which encourages parents to ask about unsecured guns in homes where their children play.

Project Child Safe (www.projectchildsafe.org) is a non-profit organization committed to promoting firearm safety, offers additional resources such as educational materials, firearm safety tips, and free gun lock kits.

ASPHYXIATION

Asphyxiation deaths result from a traumatic event that causes a loss of oxygen including strangulation, suffocation, and chemical asphyxia. Three (3) asphyxiation deaths were to infants in the sleeping environment and are discussed in the section on sudden unexplained infant

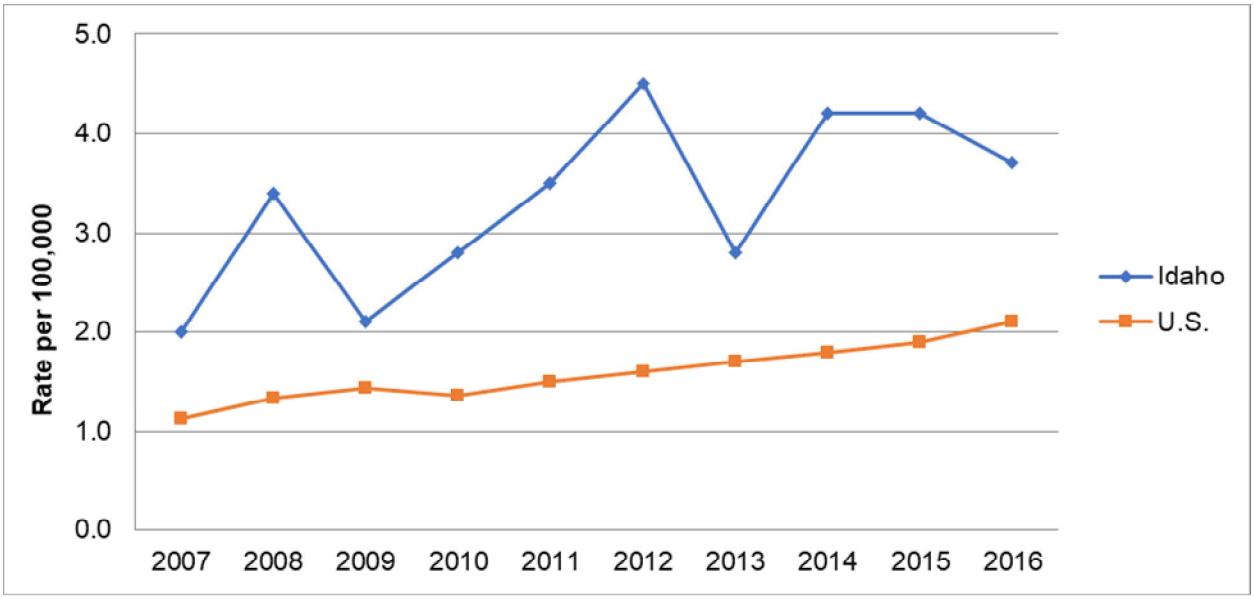
death. The 2 non-infant asphyxiation deaths each occurred under unique circumstances. Both were ruled as accidents following law enforcement and coroner investigations, with no criminal charges filed. The CFR Team did not find any common risk factors or systems issues.

SUICIDES (Intentional Self Harm)

Suicide is the second highest cause of death to Idaho children (non-infants), after accidents. Idaho's rate of youth suicide has historically ranked in the top 10 among states and is higher than the overall U.S. rate.

Idaho and U.S. Resident Suicide Deaths (Age <18) and Rates per 100,000, 2006-2015

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Number Idaho Resident suicides	**8**	**14**	**9**	**12**	**15**	**19**	**12**	**18**	**18**	**16**
Idaho Resident suicide death rate	2.0	3.4	2.1	2.8	3.5	4.5	2.8	4.2	4.2	3.7
U.S. Resident suicide death rate	1.1	1.3	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.1

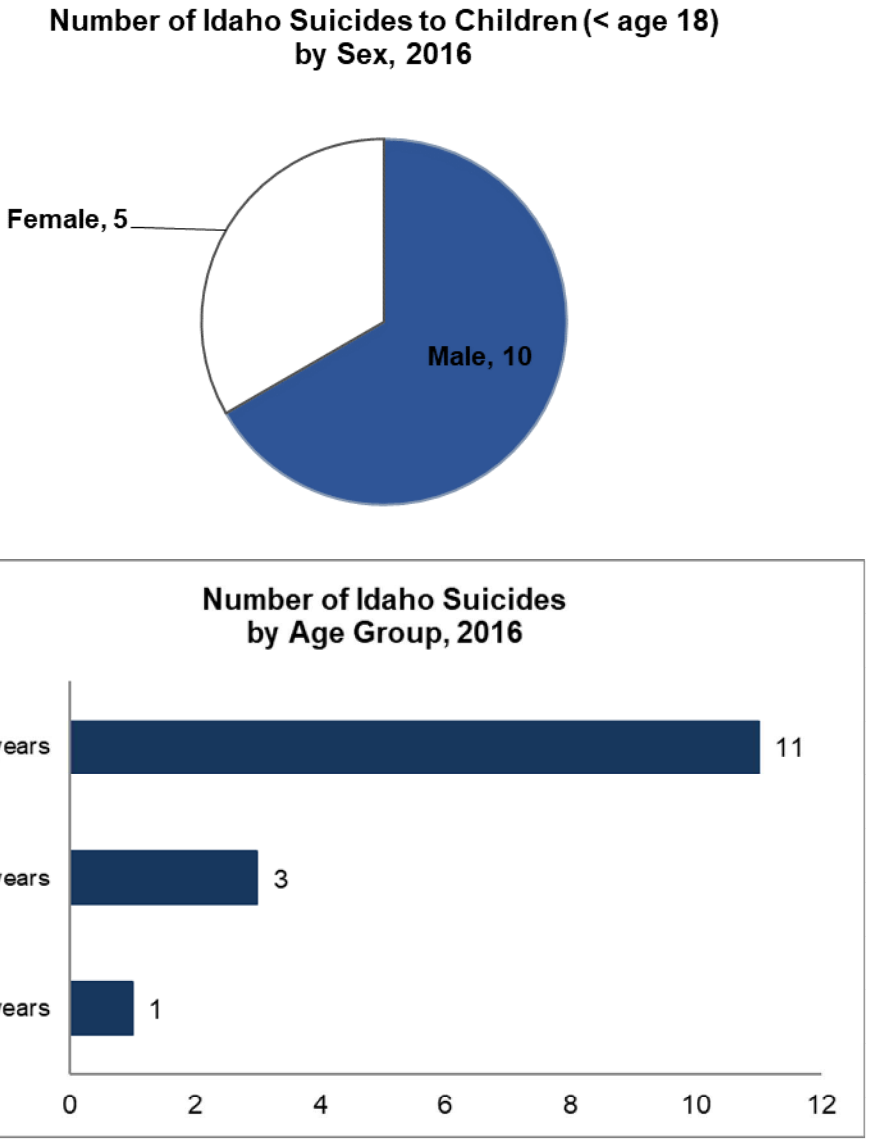


Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*
Rates based on 20 or fewer deaths may be unstable. Use with caution.

Idaho CFR Team Findings: Suicides

The CFR Team reviewed 15 suicides occurring in Idaho in 2016. Nearly two-thirds of the victims were male (10 of the 15). All of the 2016 suicide victims were teenagers. No notable racial or ethnic disparities were observed.

The National Center for Child Death Review reports that U.S. adolescent males are four times more likely to complete suicides than females. However, females are twice as likely as males to attempt suicide.

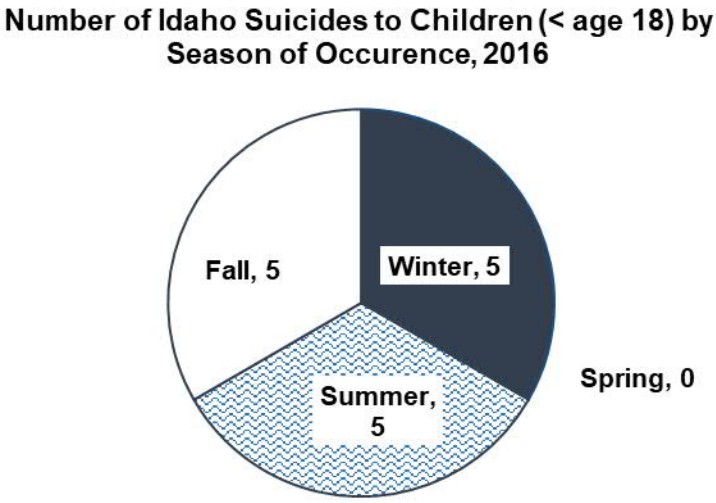


[Based on 15 suicide deaths]

In the great majority of suicides, the injury mechanism was firearms. No trend emerged with regard to seasonality.

Number of Suicides in Idaho by Mechanism, 2016

Injury Mechanism Used	#
Firearm	10
Hanging/asphyxiation	4
Drowning	1



[Based on 15 suicide deaths]

Systems Issues

The CFR Team continued to struggle with the absence of school records in completing thorough reviews. Schools deny requests for academic and behavioral history, citing Family Education Rights and Privacy Act (FERPA) restrictions. The CFR Team has made progress with the State Department of Education to find a representative to participate in case reviews and potentially to provide aggregate data or other background information that may lead to a better understanding of the common circumstances involved in youth suicide.

As with other manners of death, the team found opportunities for improved interagency communication. There were examples of law enforcement contact with families where potential

child endangerment was noted but not reported to CPS. Creating additional channels of communication between CPS and law enforcement agencies (including tribal police) may lead to better support of families at-risk, including home safety education and referrals for behavioral health treatment.

The team identified gaps in mental health treatment as a factor in some of the suicide deaths. They raised questions about the qualifications of some of the referred counselors and whether appropriate mental health treatment and/or prescription medications were consistently available.

The CFR Team had unanswered questions about the role of prescription drugs and compliance with medications in some of these deaths. Coroner and law enforcement investigations did not consistently include questions about the home or school environment, medical and mental health history, and toxicology testing of the deceased. Providing detailed information of the contributing circumstances on death certificates (e.g. diagnosed mental illness, substance abuse, toxicology results) may improve suicide prevention efforts. The Idaho Board of Pharmacy was identified as a potential resource to the CFR team for general education and to support coroner training on this topic.

Common Factors and Associations

Idaho's CFR Team found the following factors in reviewing the suicide deaths (ranked by frequency with number of instances in parenthesis):

Risks:

1. Access to firearm (10)
2. CPS history in family (8)
   Alleged physical or sexual abuse (8)
   History of past suicide attempt or ideation (8)
   Family turmoil/dysfunction/divorce (8)
   Mental health concerns (8)
   - History of diagnosed depression (4)

3. Recent history of substance abuse (7)
   - THC (5)
   - Opioid (2)

4. Recent disciplinary event at home or school (5)
5. Romantic relationship turmoil (4)
   History of self-harm/cutting (4)
6. Bullying (3)
   Adopted or foster child (3)
   Caregiver/parent history of mental health concerns (3)
   Criminal behavior of subject (3)

[Based on 15 suicides]

Easy access to a lethal method was the most common precursor to these suicides. In 2016, the great majority used an unsecured firearm as the injury mechanism. Some incidents had an impulsive component in which an emotionally distraught victim quickly accessed the weapon. These acts often followed a recent disciplinary event at home or school.

Several of the suicide victims had evidence of a complex history of generational neglect (as indicated by CPS history, suicide or criminal history of a family member, past violence or substance abuse at home). Over half of the victims had a history of mental illness (most often diagnosed depression). A similar number had a history of drug abuse or other criminal behavior.

Some of the victims had threatened or engaged in self-harm in the past. The team repeatedly noted warning signs such as self-mutilation/cutting, drug or alcohol abuse, or recent behavioral problems. It was common for the victims to have had past suicide ideation or attempts.

Teens experiencing recent relationship volatility appear to be particularly vulnerable. In reviewing the background of the suicide victims, the team noted triggering events ranging from romantic/sexual relationship conflicts, bullying by peers, family instability (including unwanted household/school moves, death of a close relative, divorce/separation, and adoption).

Recommended Actions for Preventing Suicide Deaths

While recent suicide prevention research shows that those who die by suicide have a plan to do so, IDHW's Office of Suicide Prevention acknowledges impulsivity can play a role in teen suicide. They maintain that since method substitution rarely occurs, restricting access to lethal means is highly effective.

According to IDHW's Office of Suicide Prevention, at-least 9-in-10 of those who die by suicide had a treatable mental health and/or substance abuse disorder. The warning signs for suicide are almost always present, and therefore preventable.

IDHW's Office of Suicide Prevention urges the public to be aware of the warning signs of suicide and seek help when someone exhibits the following behaviors (http://healthandwelfare.idaho.gov/Families/SuicidePrevention/tabid/486/Default.aspx):

- Threatening suicide
- Talking or writing about suicide
- Isolation or withdrawal (from family, friends, activities, etc.)
- Agitation, especially combined with sleeplessness
- Nightmares
- Previous suicide attempts
- Seeking methods to kill oneself
- Feeling hopeless or trapped

The **Idaho Suicide Prevention Hotline at 1-800-273-TALK (8255)** offers referrals to mental health professionals and other resources.

For Educators and Health Care Providers

School and community programs which encourage open communication and meaningful connections provide broader perspective and help young people navigate through academic pressures, relationship turmoil, family conflict, and other intense emotional experiences commonly encountered during the middle and high school years.

Educators and medical professionals are encouraged to take advantage of resources offered by the Idaho Lives Project (www.idaholives.org). Their mission is to foster connectedness and resilience throughout Idaho school communities to prevent youth suicide. They offer suicide prevention trainings for the public and provide instructional materials and guidance for school campaigns.

For Public Health Agencies

Research shows that the majority of those who attempt or complete suicide suffer from a mental health condition or substance abuse disorder. Many of these conditions go undiagnosed or

untreated. The CFR Team continues to see a need for improved access to high quality mental health services, particularly in rural areas of the state.

Public education campaigns related to safe storage of lethal methods such as guns, ammunition, and drugs (prescription and OTC) can prevent tragedies in volatile situations. Families with a known risk for suicide should remove firearms and certain controlled medications from the home entirely.

The team will continue to consult IDHW's Office of Suicide Prevention to integrate their findings and recommendations.

For Parents

A strong and positive connection to parents, family and/or school has been shown to provide immunity for teens when they are troubled. The risk of suicide can be significantly reduced by treating underlying mental health and substance abuse issues.

Parents should familiarize themselves with warning signs of suicide risk and promptly consult health care providers or educators when concerns arise. Suicide experts maintain that warning signs for suicide are almost always present in advance. All threats of suicide should be taken seriously. Those who go so far as to threaten suicide require attention.

Children and teens with a history of mental health concerns or suicidal ideation should not have access to a firearm in homes, vehicles, garages, workshops or any other household areas. Guns and ammunition should be stored separately, in locked locations that are out of the reach of children. Keys and combinations should be kept hidden.

As with other lethal methods, prescription and over-the-counter medications should be stored out of reach of children and teens, especially those with a history of mental health issues or who have expressed thoughts of suicide. Idaho's Office of Drug Policy provides information for safely disposing of medications: https://odp.idaho.gov/prescription-drug-take-back-program/

For Coroners and Law Enforcement Agencies

Coroners and law enforcement agencies should work cooperatively to ensure a complete investigation and that the circumstances leading to death is determined based on all available information.

The National Center for the Review and Prevention of Child Deaths offers guidelines and a questionnaire to assist investigators and reviewers of youth suicides.
It includes sections on history of the deceased, circumstances of death, injury mechanism, expressed suicidal intent, medical and mental health history, substance abuse, and family history. For guidelines on investigative protocols and tools, see:
(https://www.ncfrp.org/tools_and_resources/)

The CFR Team had unanswered questions about the role of prescription drugs and compliance with medications in suicide. Coroners should routinely include toxicology testing as a part of death investigations when suicide is a possible cause. All relevant detail regarding the role of substances or documented medical conditions as a contributing circumstance should be included on the death certificate. Consistent access to this information may lead to better understanding of precursors and contributing factors of suicide.

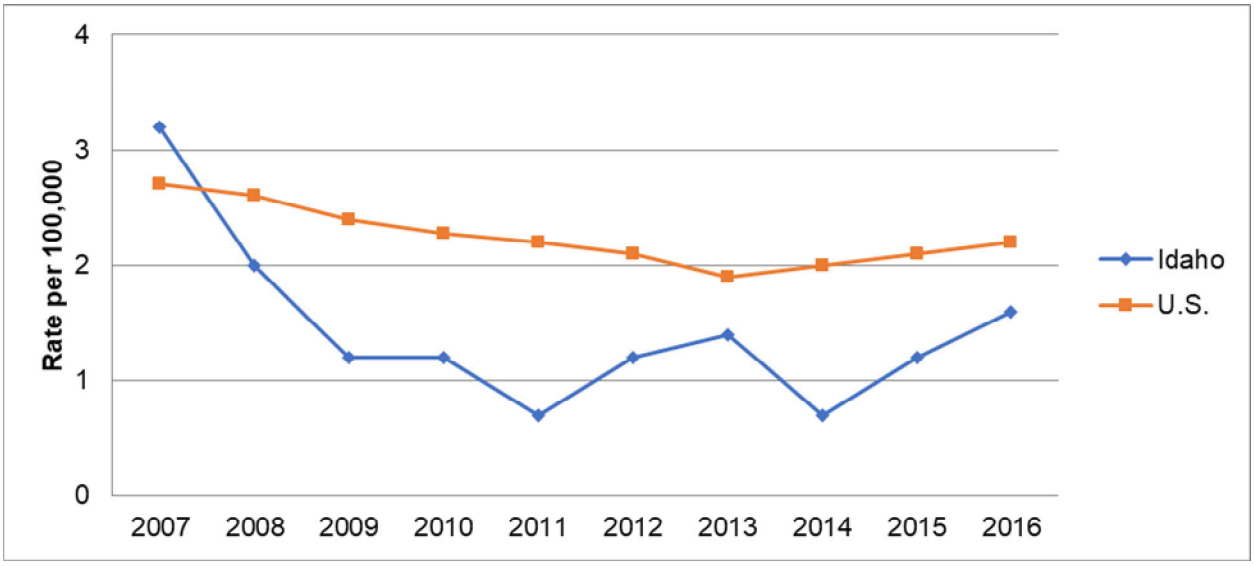
Social media accounts and electronic devices are often preferred communication channels for teens and can offer insights into the circumstances surrounding the deaths. Investigations should include searches of personal social media accounts and devices of victims, friends and family members. Investigators should exhaust all available options for obtaining passcodes and/or witness accounts of recent text exchanges or posts.

HOMICIDES (Assault)

There were 7 fatal assaults to Idaho resident children in 2016. The rate of homicide in Idaho has historically been lower than the national rate.

Idaho and U.S. Resident Homicide (Assault) Deaths (Age <18) and Rates per 100,000, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total Number Idaho Resident homicides	**5**	**5**	**3**	**5**	**6**	**3**	**5**	**7**	**2**	**7**
Idaho Resident homicide death rate	1.2	1.2	0.7	1.2	1.4	0.7	1.2	1.6	0.5	1.6
U.S. Resident homicide death rate	2.7	2.6	2.4	2.3	2.2	2.1	1.9	2.0	2.1	2.2



Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*

Rates based on 20 or fewer deaths may be unstable. Use with caution.

Idaho CFR Team Findings: Homicides (Assaults)

The team reviewed 5 assault deaths which occurred in Idaho in 2016. There were 2 additional child deaths which were investigated as homicides, but which were eventually ruled as undetermined manner based on inconclusive findings. The team findings related to these undetermined manner deaths are also included in this section. One additional homicide was pending criminal court proceedings and was deferred for a later CFR Team review.

Causes of 2016 homicides included drowning, blunt force head trauma and dehydration. Three (3) separate incidents were suspected murder/suicide events, resulting in multiple child deaths. Two (2) of the victims were infants or toddlers and 3 were school aged children. No notable racial or ethnic disparities were observed.

Common Factors and Associations

Substance abuse, mental health issues, and criminal history of the parent or caregiver are commonly observed risk factors in child homicides due to abuse and neglect. The National Center for Child Death Review cites research showing that children who die from physical abuse are often abused over time, but a one-time event causes their death. Nationally, most children and their abusers had no prior contact with CPS at the time of death.

Recommended Actions for Preventing Homicide Deaths

"Filicide" is a term used by researchers to refer to the phenomenon of parents that deliberately kill their children. A 2005 study of of filicide-suicide published in the Journal of the America Academy of Psychiatry and the Law found that 80 percent of the parents had psychiatric symptoms before committing filicide and around half of those had recently seen a physician or psychiatrist (http://jaapl.org/content/35/1/74). This confirms other national research findings that child abuse and neglect is highly correlated with mental health issues. Many of these conditions go undiagnosed or untreated.

The number of homicide deaths which involved a parent with a history of mental health issues again highlights the need for improved access to quality mental health services. The fact that children who die from physical abuse are often abused over a period of time provides opportunities for early intervention. Professionals who work closely with children should seek training to identify signs of abusive behavior and injuries and should readily report concerns to

the appropriate agencies. *Prevent Child Abuse America* offers educational materials targeted at parents and professionals (www.preventchildabuse.org).

The National Center for Injury Prevention and Control offers programs that focus on preventing abuse through parent education, stronger agency coordination, improved screening, and home visitation programs. These initiatives have been proven to be effective at the local level at reducing child maltreatment (www.cdc.gov/violenceprevention/childmaltreatment/prevention.html).

Health care providers, law enforcement officers and others who work with children should be familiar with Idaho's mandatory reporting laws (*Idaho Statute 16-1605*, *see page 27).* IDHW provides services to help protect children while providing support to strengthen families to prevent abuse and neglect. When a child's safety warrants removal from their home, IDHW personnel and law enforcement officers work closely with families to lower safety concerns and return the child home as soon as it is safe. To report suspected child abuse, neglect or abandonment in Idaho call the Careline at **2-1-1** or report to law enforcement by calling **9-1-1.**

CFR TEAM SCREENING: *Preventable Natural Deaths*

In addition to detailed reviews of deaths by external causes, a CFR subcommittee (made up of physicians, law enforcement and public health representatives from the CFR Team) screened death records certified with a manner of "natural." Causes of natural manner deaths include perinatal conditions, congenital malformations, malignancies, viral infections, cerebrovascular, and other non-ranking causes. In an effort to review all preventable deaths, the subcommittee identified cases for further review when questions were raised about the information listed the death certificate and/or if a direct link to an existing medical condition was not apparent.

The subcommittee selected 16 of the natural manner deaths for a complete CFR Team review of additional information from death certificates, birth certificates, coroner/autopsy reports, and/or medical records. The natural manner cases selected for additional review fell into the following categories for 2016:

Perinatal Conditions	5
Non-ranking/All Other Causes	11
Total Reviews of Deaths of Natural Manner	***16***

Perinatal condition deaths and home births

As a way of finding preventable risk factors and opportunities for system improvements, the subcommittee expanded their screening of Vital Statistics data for all 85 perinatal condition and congenital malformations deaths in 2016. While congenital malformation deaths were almost exclusively related to chromosomal abnormalities, most of the perinatal condition deaths involved low birth weight and/or extreme prematurity. The subcommittee referred 5 perinatal condition deaths to the CFR Team with detailed medical history and/or coroner reports. In reviewing the case history for these perinatal conditions, they frequently identified risk factors seen in other causes of infant death such as inadequate (or non-existent) prenatal care, maternal smoking, birth injuries, drug abuse or a known medical condition during pregnancy.

Idaho law requires midwives to be licensed under the Bureau of Occupational Licenses and includes minimum continuing education requirements. Additional research leading to recommendations for improved prenatal care, family and mid-wife education, and/or additional licensing requirements may help prevent some infant deaths. The CFR Team is supportive of

the recently formed Maternal Mortality Review Committee within IDHW and will look for opportunities to work cooperatively.

The subcommittee found that detailed information about birth facilities was often missing on full form birth certificates (i.e. indicating if labor and delivery was initiated outside of a hospital, and/or whether it was attended by a licensed medical professional). The CFR Team requests that certifying physicians include detail in the corresponding field of birth certificates regarding facility transfers and indicate if labor was planned or initiated at home, freestanding birth center or other location. Further, including contributing conditions and medical history on death certificates and completing prenatal history on birth certificates may lead to more informed study of factors involved in newborn infant deaths.

Refusal of medical care because of religious or personal beliefs

Since Idaho Vital Statistics does not compile the number of deaths to children who are not treated medically because of religious beliefs, it is difficult to estimate the actual number of preventable deaths to religious objectors. As previously discussed in this report's section on sudden unexpected infant death, there were a total of 5 cases in 2016 in which parents reportedly delayed/refused medical care or opted out of recommended immunizations for their infant because of personal or religious objections. The CFR Team determined that these deaths might have been prevented with timely medical treatment, compliance with scheduled vaccinations and/or proper prenatal care for the mother. In reviewing the 16 natural manner deaths, the team did not find evidence of additional child deaths in families who refused medical care due to religious beliefs.

Other natural manner deaths

Non-ranking deaths include natural manner deaths that are not categorized elsewhere. These deaths were due to varied causes such as respiratory infections, meningitis, ketoacidosis, sepsis, and gastroenteritis. While most of these deaths were to infants in their first 6 months of life, a few were to school-aged children. The subcommittee referred 11 of these cases for full team review with additional case history (including medical records, coroner reports, etc.). The CFR Team found that many of these infants and children had underlying medical conditions and/or developmental delays. Although none of the 2016 deaths were related to a positively identified influenza virus, proper hygiene and scheduled vaccinations (including an annual flu shot) can prevent the spread of viral infections which lead to severe illness.

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APPENDIX

Executive Department
State of Idaho

C.L. "BUTCH" OTTER
GOVERNOR

State Capitol
Boise

EXECUTIVE DEPARTMENT
STATE OF IDAHO
BOISE

EXECUTIVE ORDER NO. 2012-03

GOVERNOR'S TASK FORCE FOR CHILDREN AT RISK

WHEREAS, Idaho's children are her most valuable resource; and

WHEREAS, it is the responsibility of all Idahoans to provide a community system of support and protection for these children; and

WHEREAS, the protection of children from abuse and neglect is in the best interest of all Idahoans; and

NOW, THEREFORE, I, C.L. "Butch" Otter, Governor of the State of Idaho, by the authority vested in me by the Constitution and laws of the State of Idaho, do hereby order the continuance of the Governor's Task Force on Children at Risk (Task Force).

The Task Force is responsible for reviewing and developing programs, as well as facilitating local jurisdictions to operate programs designed to improve:

a. *The handling of child abuse and neglect cases, particularly cases of child sexual abuse and exploitation;*
b. *The handling of cases of suspected child abuse or neglect related fatalities;*
c. *The investigation and prosecution of cases of child abuse and neglect, particularly child sexual abuse and exploitation; and*
d. *The handling of cases involving children with disabilities or serious health-related problems who are victims of abuse or neglect.*

Further, the Task Force shall establish and support a statewide child fatality review team (CFRT) to allow comprehensive and multidisciplinary review of deaths of children younger than 18 years-old, in order to identify what information and education may improve the health and safety of Idaho's children. The statewide CFRT established and supported by the Task Force is separate and apart from child death reviews convened by the Department of Health and Welfare in circumstances where the death of a child is suspected or confirmed to have resulted from abuse or neglect.

The Task Force shall be composed of not more than 18 members appointed by the Governor. The membership shall include, but will not be limited to, the following with consideration of geographical representation:

- *Law Enforcement Community*
- *Criminal Court Judge*
- *Civil Court Judge*
- *Prosecuting Attorney*
- *Defense Attorney*
- *Child Advocate Attorney for Children*
- *Court Appointed Special Advocate Representative (where such programs operate)*
- *Health Professional*
- *Mental Health Professional*
- *Child Protective Service Agency*
- *Individual experience in working with children with disabilities*
- *Parent Group Representative*
- *Education Representative*
- *Juvenile Justice Representative*
- *Adult former victim of child abuse or neglect*
- *Individual experienced in working with homeless children/youth*

The members of the Task Force shall serve at the pleasure of the Governor for a four-year term. Members of the Task Force shall elect their chair from among their members.

The Task Force shall submit a written report by June 1 of each year to document its achievements.

The Department of Health and Welfare shall be the fiscal agent, providing support for the Task Force, and shall monitor contracts for staff to carry out the activities directed by the Task Force, as Children's Justice Act Grant funding is available.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Idaho at the Capitol in Boise on this 8th day of May in the year of our Lord two thousand and twelve and of the Independence of the United States of America the two hundred thirty-sixth and of the Statehood of Idaho the one hundred twenty-second.

C.L. "BUTCH" OTTER
GOVERNOR

BEN YSURSA
SECRETARY OF STATE