Child Deaths in Idaho

2018

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

Prepared April 2021

TABLE OF CONTENTS

IDAHO CHILD FATALITY REVIEW
2018

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 on Children at Risk (CARTF). The following members were appointed and participated in 2018 reviews:

Tahna Barton, Court Appointed Special Advocates (CASA), CFR Team Chair
Jerrilea Archer, Ada County Sheriff's Office (retired),
Susan Bradford, MD, Pediatrician, Family Medicine Residency of Idaho
Josie Bryan, Program Coordinator, St. Luke's Children's Injury Prevention
Justin Clemons, Fire Fighter/Paramedic, Pocatello Fire Department
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Alana Minton, JD, Court Programs and Services Manager for Child Protection, Idaho Supreme Court
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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*, (Former) CFR Principal Research Analyst *(analytical and reporting support)*
Christine Hahn, MD*, Idaho State Epidemiologist, Medical Director, Idaho Department of Health and Welfare *(subcommittee member)*
Gayla Smutny, PhD*, Principal Research Analyst, Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare *(analytical and reporting support)*

**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 *(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 2018 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 IDHW's Bureau of Vital Records and Health Statistics identified the deaths using the Vital Records system and retrieved death certificates. A subcommittee met separately from review team meetings 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 the 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 confidentiality requirements of the Family Educational Rights and Privacy Act (FERPA).

Of 179 child deaths occurring in Idaho in 2018, 98 were selected for detailed review by the CFR Team. Deaths that were *not* selected for full CFR Team review included most deaths due to congenital anomalies, malignancies or other diagnosed medical conditions.

2018 Deaths to Children (Birth to Age 18) Occurring in Idaho

	Total	Screened by CFR Subcommittee	Reviewed by CFR Team
Perinatal Conditions	46	46	10
Congenital Malformations	21	21	0
Unintentional Injuries (Accidents)	39	39	39
Suicide	27	27	27
Unexplained Infant Death*	13	13	13
Assault (Homicide)	2	2	1**
Malignancies	8	8	0
Flu/Pneumonia	0	0	0
Non-ranking/All Other Causes	23	23	8***
	179	**179**	**98**

**Includes Sudden Unexplained Infant Death (SUID) as well as "ill-defined" undetermined causes of infant death.*
***1 homicide case was pending court proceedings, so review was deferred.*
****2 injury deaths of undetermined manner were reviewed and summarized with homicides; 6 non-ranking cause deaths were reviewed with natural manner deaths.*

The CFR Team met six times between January 2020 and January 2021 to conduct 2018 case reviews. Risk factors, systems issues, missing information, 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 a later 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 IDHW 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 on all Idaho residents (regardless of where the incident occurred or where the child actually died) and CFR data is based on 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, IDHW. 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 2018. The team was formed by the Governor's Task Force on Children at Risk (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 98 deaths to children under the age of 18 which occurred in Idaho during calendar year 2018. 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 noted Family Educational Rights and Privacy Act (FERPA) restrictions in denying record requests.

SUMMARY OF FINDINGS

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 2018, there were 13 SUID cases occurring in Idaho. Additionally, the team reviewed 6 infant deaths caused by accidents in the sleeping environment.

Unsafe sleep environment (e.g. on adult sized mattresses, thick bedding, couches, car seats), smoking and/or vaping in pregnancy and/or in the home, and illicit drug or alcohol use by parents were common risk factors in these infant deaths. Many of the SUID deaths occurred in families with a history of Child Protection Services (CPS) referrals and/or when parents had themselves had suffered adverse childhood experiences (ACEs), (a negative or traumatic event that occurs before a person reaches 18 years of age – i.e. neglect, abuse, experiencing or witnessing violence in the home) (https://www.cdc.gov/violenceprevention/aces/index.html). Infant swaddling was also a risk associated with several of the SUID deaths. Continued promotion of American Academy of Pediatrics (AAP) safe sleep guidelines, scheduled immunizations, and breastfeeding is recommended. Additional investments in family support services such as home visiting programs (with awareness of intergenerational maltreatment patterns), mental health resources, and parent and childcare education may support at risk families and prevent infant deaths.

Motor Vehicle Accidents

In 2018, 14 children died in motor vehicle accidents. Most of the victims were older teenagers and an equal number of males and females died. Aggressive and/or reckless driving and failure to obey road rules were top contributing causes. Driver error was found to be a factor in all the traffic accidents involving a teen driver.

As was also the case in 2017, the team noted the majority of 2018 motor vehicle accident fatalities occurred on Idaho's rural roads. Lack of proper safety restraint usage (seat belt or safety seat) and inattentive driving continue to be major modifiable risk factors. Ongoing public reminders of safe driving practices along with expanded access to driver's training are recommended actions for preventing motor vehicle fatalities.

Drowning

There were 8 drowning deaths in 2018. Six of these fatalities occurred in Idaho rivers - two involved toddlers or preschoolers who accidentally entered or slipped into the water and two involved teenagers who were attempting to swim across a river. Echoing patterns from previous

years, 2018 drowning deaths to older children and teens typically occurred while swimming in a river.

Inadequate supervision was a risk factor in most drowning accidents. Parents should remain alert and nearby while children or teens are playing in or around the water. Public education campaigns encouraging the use of U.S. Coast Guard approved personal floatation devices (PFDs) and safety barriers to prevent access to open water or pools may prevent drowning deaths. Children of all ages may benefit from swimming lessons and water safety courses.

Overdose

There were 4 child deaths caused by accidental overdose of an illicit drug or prescribed medication in 2018. Nationally, drug overdose deaths have increased steadily since 1999 and most are related to opioid abuse.

Recommended actions for reducing overdose include improving prescribing practices, promoting drug monitoring programs, and expanding access to substance abuse treatment. Medications should be stored out of reach of children and teens. Unused medications should be disposed of in a safe location.

Crush, Fall, and Non-Traffic Injuries

There were 5 injuries related to falls or being crushed in a non-traffic accident in 2018. Two of these accidents involved all-terrain vehicles (ATVs). Varied circumstances were involved in the other three accidents.

Recommended actions to prevent these types of accidents include ATV and farm equipment safety education.

Suicides

The team reviewed Idaho's 27 youth suicides occurring in 2018. Those who died by suicide were predominantly male and ranged in age from 12 to 17, with two-thirds in their later teen years. Hanging was the most common method used, following closely by firearms. Past suicidal ideation, relationship turmoil, access to firearms, and depression were the most commonly observed precursors.

IDHW's Suicide Prevention Program (SPP) provides resources for recognizing the warning signs and supporting those at risk for suicide. They stress that warning signs are almost always present, and conditions are treatable. Proposed approaches to reducing suicide include gun safety education and expanded access to mental health treatment (particularly in rural

communities). Families, educators and community organizations are encouraged to strengthen protective factors like strong social connections, conflict resolution skills, and cultural/religious beliefs which support self-preservation.

Homicides

The team reviewed 1 child death which was the result of homicide and 2 violent injury deaths with underdetermined manner. Causes included firearm shootings and strangulation. Two victims were teens and one was a toddler.

A family history of substance abuse, illicit drug use at the time of the incident, and access to firearms were among the risk factors noted. Each of the violent incidents occurred in families with a history of CPS involvement and/or ACEs. The number of deaths involving family instability suggests a need for greater access services that support families. Those who work with children should be familiar with the signs of abusive behavior and injuries and readily report concerns. Interagency cooperation can help ensure families receive the support they need.

Preventable Natural Manner Deaths

Perinatal conditions

As part of an effort to identify preventable risk factors in newborn infant deaths, the team reviewed 10 perinatal condition deaths.

Nearly all perinatal condition deaths were related to low birth weight and/or prematurity. Lack of prenatal care, tobacco use in pregnancy, illicit drug use, and home births were repeatedly observed as modifiable risk factors. Women are encouraged to seek prenatal care early in pregnancy to diagnose any health conditions and for support in modifying behaviors that could impact their own and their infant's health. Mothers who choose home birth, especially those with high risk pregnancies, should be informed of the benefits of delivering in a medical facility in case of birth complications. To help the team better understand the factors involved in perinatal condition deaths, physicians, midwives and other certifiers of state death records are requested to consistently provide details related to labor and delivery along with the mother's prenatal history.

Refusal of medical treatment due to religious or personal beliefs

The CFR Team found that 2 infant deaths in 2018 occurred in families that refused or delayed medical care/treatment because of religious or personal beliefs.

The 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.

Other natural manner deaths

Non-ranking deaths include natural manner deaths that are not categorized elsewhere. These deaths were due to varied causes or related to underlying medical conditions. Causes included septicemia, cerebral palsy, gangliosidosis, meningitis, and metabolic disorders.

No 2018 deaths were related to the influenza virus or to other coronavirus infections. However, proper hygiene and scheduled vaccinations (including an annual flu shot) can prevent the spread of infections and are especially important for medically vulnerable children.

Key Recommendations for Preventing Child Deaths in Idaho

- **Call 9-1-1 immediately at first sign of distress**

  In a medical emergency, seconds count and first responders are trained to save lives. When severe injury or illness occurs, react quickly. Call 9-1-1 first and avoid self-transporting children to hospital.

- **Expand home visiting programs**

  Home visiting programs have proven successful at helping families create nurturing, healthy households. Programs like those offered through the Division of Public Health, local public health agencies, and non-profits offer referrals for resources like infant and childcare, home safety planning, nutritional support, CPR training, housing assistance, and for help with substance abuse or mental health concerns.

- **Facilitate interagency cooperation**

  Law enforcement officers, medical providers, coroners, social workers and public health officials are encouraged to work together to support at-risk families as well as in investigating child welfare concerns. Those who work with children should be familiar with the state's mandatory reporting requirements (*Idaho Code § 16-1605*) and report concerns to IDHW.

- **Perform toxicology testing more frequently**

  Wider and more consistent use of toxicology testing could provide vital information for understanding whether substances caused, contributed to or were not related to child deaths. The CRF Team recommends toxicology tests be performed on children who die as well as on caretakers and others involved when a child dies (e.g., all drivers involved in traffic fatalities; supervisors involved in drowning deaths).

- **Expand access to mental health services**

  Some child deaths are linked to mental health concerns of the parent, caretaker, or the child. Improving access to high quality treatment and reducing social stigma of seeking care may help prevent suicide and homicide deaths as well as accidental deaths resulting from inadequate child supervision.

- **Invest in underserved populations in rural communities**

  Improving access to medical treatment facilities, EMS/first responder services and public health education in geographically isolated regions has the potential to save lives. Rural families may benefit from community-based primary prevention programs and services with targeted messaging on topics like parenting/infant care, suicide prevention, early childhood education, and safe driving habits.

- **Follow infant safe sleep practices**

  Unsafe sleep environment is closely associated with sudden unexplained infant death. Parents and caretakers should be made aware of and comply with the AAP's safe sleep recommendations related to sleep surface (in infants' own cribs, uncluttered with toys or thick bedding) and sleeping position (on their backs).

- **Recognize the warning signs of suicide**

  Widespread familiarity with the warning signs of suicide and knowledge of the resources available to help youth in a crisis can stem child suicide deaths.

- **Use seat belts or age-appropriate safety seats**

  Using lap and shoulder seat belts or properly installed infant safety seats or booster seats prevents severe injury and death in motor vehicle accidents.

- **Follow safe gun handling practices**

  Store ammunition and firearms separately, in a secure location. Keep weapons, keys and passcodes away from young children and those with a history of mental health concerns.

- **Store medications safely**

  Securely store medications and other toxic substances out of children's reach. Use child safe containers for prescription and over the counter drugs. Safely dispose of unused prescription medications.

- **Improve prescribing practices**

  Health providers should follow CDC's recommendations for reducing abuse of opioids and other prescription medications.

RECENT ACTIONS AND COLLABORATIVE EFFORTS

Advancing Child Health and Safety in Idaho

Although the COVID-19 pandemic had a relatively limited impact on the CFR Team and its ability to review 2018 child fatalities and produce this annual report, it did more severely limit prevention measures. The following actions and collaborative efforts moved forward in 2020 despite the challenges posed by the pandemic.

- **Safe Sleep Message Campaign.** For October 2020's Safe Sleep Awareness Month, the Maternal and Child Health (MCH) Program re-ran their Safe Sleep social media campaign which included an animated 30-second PSA, with the messaging "*Alone. Back. Crib. Every Nap. Every Night*". To broaden outreach efforts, the MCH Program translated the campaign into Spanish and developed a culturally appropriate animated video to run alongside the English version. Additionally, an audio file was created and used for radio ads on Idaho's Spanish-speaking radio stations and the program's educational brochure was translated into Spanish and made available to the public. (https://publicdocuments.dhw.idaho.gov/WebLink/DocView.aspx?id=3648&dbid=0&repo=PUBLIC-DOCUMENTS&searchid=dfa1e9f4-85af-424d-9d10-ee64003e1347)

- **Additional Safe Sleep Initiatives.** The Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program partnered with the MCH Program to complete a statewide continuous quality improvement (CQI) project, aimed at improving safe sleep rates for infants enrolled in MIECHV-funded programs. The CQI project lasted from October 2019 to October 2020. The MCH Program supplied cribs, sleep sacks, and brochures to Local Implementing Agencies (LIAs) throughout the project period. Families received safe sleep education before they were supplied with safe sleep products. Home Visitors surveyed caregivers, before and after receiving safe sleep education and caregivers could take the survey in English or Spanish. Parents who reported their babies never bed-shared, always slept on their backs, and never slept with soft bedding increased from 32% in 2019 to 47% in 2020.

- **New Funding for Home Visiting Programs.** In 2020, The Idaho State Legislature appropriated $1million to support home visiting programs and an additional $840,000 from general funds to Medicaid for home visiting in the form of a State Plan Amendment

(SPA). This money allows for home visiting expansion across all 44 counties in Idaho. The SPA allows Medicaid to be billed for qualifying home visits and funds not billed may be reimbursable through the MIECHV Program managed by the Division of Public Health, within the IDHW.

- **Health Districts Home Visiting Programs Continue.** All seven Idaho health districts continue to provide evidence-based home visiting programs using the *Parents as Teachers and Nurse Family Partnership,* and one district continues an Infant and Early Childhood Mental Health home visiting program. 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.

- **Maternal Mortality Review.** In 2019, the Idaho legislature passed a bill to create a Maternal Mortality Review Committee (MMRC) in Idaho. The committee has met formally twice to review the deaths that occurred in 2018 and 2019. 2018 deaths have been completely reviewed and an annual report has been created and provided to the legislature. The MMRC is meeting to review those 2019 deaths whose records were difficult to collect. In addition, the Maternal Mortality Review (MMR) Program has requested 2020 deaths and will begin record requests and abstraction in the coming months. The committee plans to review 2020's deaths during the summer of 2021.

- **Idaho Suicide Prevention Program (SPP) Efforts**. SPP is striving to train a minimum of 25,000 Idahoans to recognize the warning signs of suicide, approach sensitive conversations, and refer those at-risk to suicide care and support resources. In 2020, the program acquired 15,000 *Question, Persuade, Refer* (QPR) gatekeeper training units to support this goal. As of March 2021, SPP confirmed over 22,800 Idahoans had completed the training.

  SPP also sponsors youth-focused programming through subgrants to the State Board of Education which partners with Idaho Lives Project to implement prevention, intervention and postvention to schools across the state. The partnership provided direct support,

gatekeeper and peer-led trainings, suicide ideation screening and evidence-informed prevention resources to schools and community organizations.

As of 2020, all seven (7) Public Health Districts now employ suicide prevention coordinators to facilitate regional suicide prevention initiatives and training sessions via *Local Collectives*--coalitions of businesses, community members, and survivors.

- **Department of Education Participation in CFR Team Suicide Case Review Meeting**. In 2020 a representative from the Department of Education participated as a guest in the review of 2018 suicide fatalities. This individual not only observed the CFR Team at work but also meaningfully participated in case reviews providing insight from the perspective of a professional educator. This was a meaningful step for two reasons. First, the CFR Team has long been interested in having a representative from the field of education on the team. Secondly, Department of Education support is crucial to the team's ongoing desire to review applicable academic and behavioral records from schools in their effort to conduct detailed, thorough case reviews, particularly when the team has information from other sources indicating bullying or relationship issues at school may have been contributing circumstances in a child's death.

POPULATION AND YOUTH DEMOGRAPHICS

The total population of Idaho in 2018 was estimated at 1,787,065. Of that number, 448,201 (about 25%) were children under the age of 18. Hispanics represented just over 18% of the state's child population.

Population	Number	Percent
Idaho total	1,787,065	100%
Age 0-17	**448,201**	**25.1%**
Residents, age 0-17 by sex		
Males	228,944	51.1%
Females	219,257	48.9%
Residents age 0-17 by race		
White	418,758	93.4%
Black	8,894	2.0%
American Indian or Alaska Native	11,763	2.6%
Asian/Hawaiian/Pacific Islander	8,786	2.0%
*Residents age 0-17 by ethnicity**		
Hispanic	82,662	18.4%
Non-Hispanic	365,539	81.6%

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

Source: U.S. Census Bureau

OVERVIEW: IDAHO MORTALITY DATA, THREE-YEAR AGGREGATE (2017-2019)

As a framework for understanding 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.

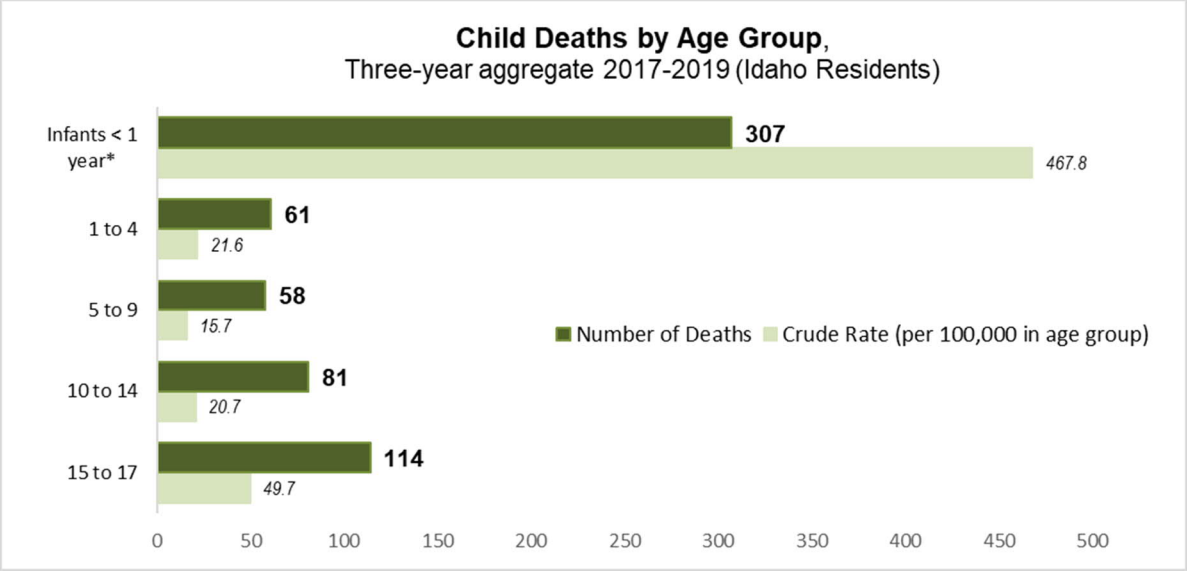
The number and cause of death to Idaho children varied by age group. There was a total of 621 deaths to infants and children (under age 18) between 2017 and 2019. Infants (under 1 year of age) have a much higher death rate than older children, comprising 49% of these deaths (307). Common causes of infant deaths were birth defects and conditions originating in the perinatal period such as short gestation/low birth weight, SUID, and maternal conditions. Those in their late teen years (15 to 17) have a higher death rate than younger (non-infant) children. The leading cause of death to teens is unintentional injury (accidents) followed by suicide.

Leading Causes of Death to Idaho Child Residents, Three-year aggregate, 2017-2019

Rank	***Infants (under 1 year of age)***
1	Congenital malformations/chromosomal abnormalities (birth defects)
2	Short gestation/low birth weight
3	Sudden unexpected infant death
4	Maternal complications of pregnancy
5	Complications of placenta, cord, membranes
6	Accidents
7	Respiratory distress of newborn
8	***Tie:*** Diseases of the circulatory system *and*
	Bacterial sepsis of newborn
9	***Tie:*** Labor and delivery complications, *and*
	Neonatal hemorrhage, *and*
	Intrauterine hypoxia and birth asphyxia

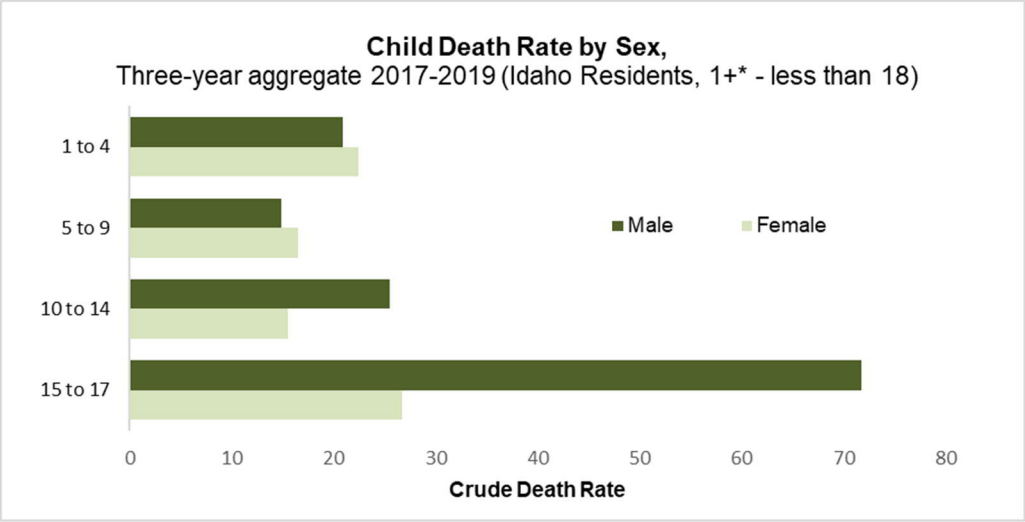
Rank	***Children (Age 1-17 years)***
1	Accidents
2	Intentional Self-Harm (Suicide)
3	Malignant Neoplasms
4	Congenital Malformations (birth defects)
5	Diseases of Heart
6	Assault (Homicide)

Mirroring patterns for the U.S. as a whole, the three-year aggregate death rate for Idaho infants (under 1 year of age) was substantially higher than for all other age groups between 2017 and 2019. Older teenagers (15 to 17 years of age) in Idaho also died at a higher rate than those in younger age groups (1 to 14 years of age) between 2017 and 2019.



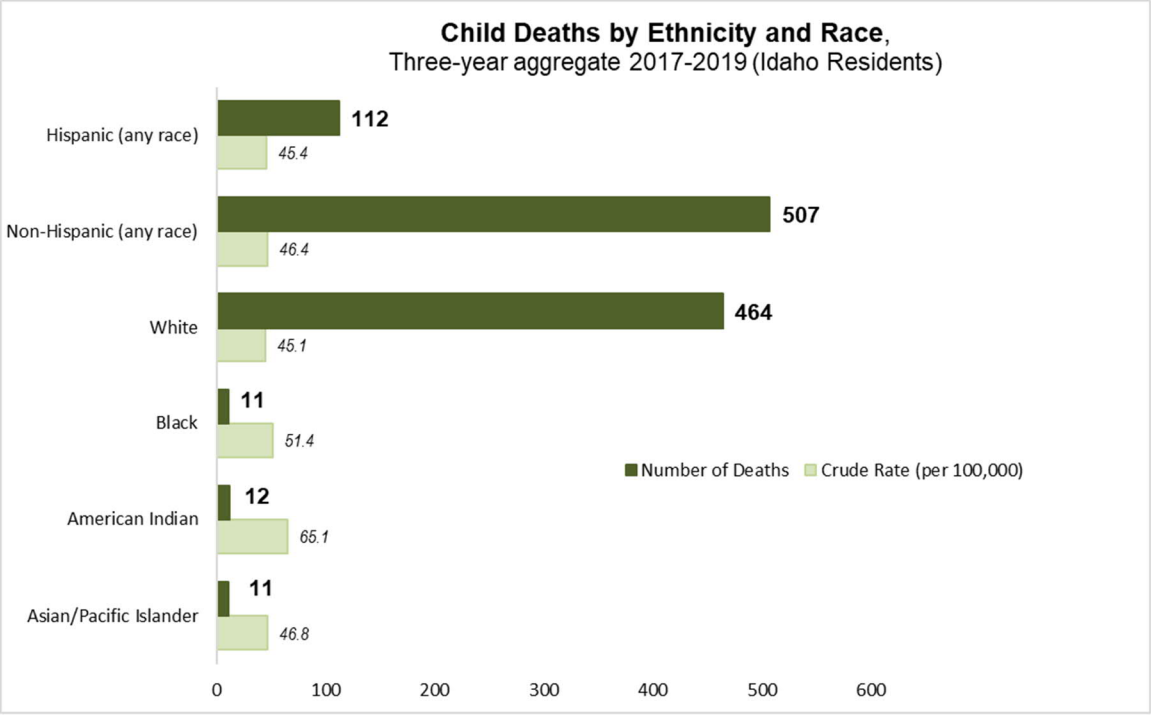
* Rate for infants under the age of 1 year is based on 100,000 live births

The overall death rate for male children (51.6 per 100,000) was significantly higher than for female children (40.9 per 100,000) between 2017 and 2019. While instructive, this fact masks discrepancies between age groups. Females in younger age groups died at a slightly higher rate than males but males in the older age groups died at substantially higher rates than females. This is particularly pronounced in the 15-17 old year age group where males had a three-year death rate nearly 3 times that of females in the same age group.



*Infants < 1 year were purposely excluded from this figure given their much higher crude death rates. Between 2017-2019 male infants died at a slightly higher rate than female infants (476.9 for males compared to 458.3 for females – based on 100,000 live births).

Overall, children of Hispanic origin had a death rate comparable to that of non-Hispanics. While the rate for American Indians (65.1 deaths per 100,000) appears to be higher than for other races, the small number of recorded deaths (12 over three years) makes it difficult to draw firm conclusions. Although none of the differences between race categories are statistically significant, it suggests 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 a direct cause is not known, most of these deaths occur while the infant is in an unsafe sleeping environment (www.cdc.gov/sids/AboutSUIDandSIDS.htm).

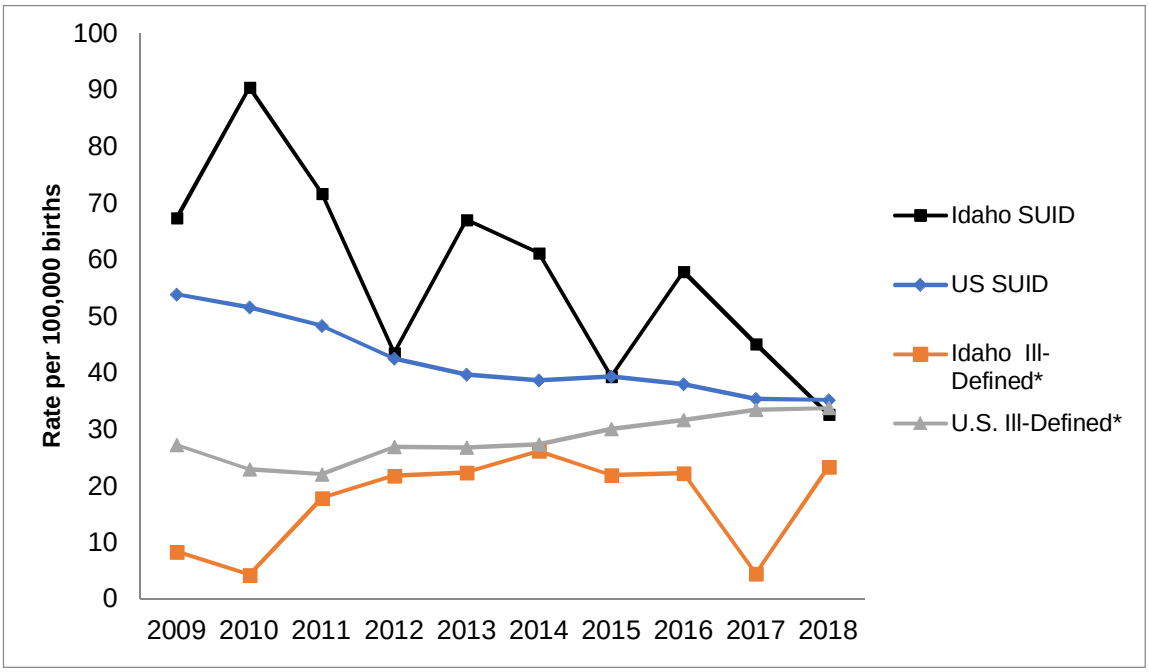
Infant deaths not meeting the CDC's definition of "SUID" (see above) may be reported as "other ill-defined and unknown causes of mortality." Historically, the SUID death rate has been higher for Idaho than for the U.S. overall while the rate of ill-defined infant deaths has been lower. The total combined number of Idaho SUID plus ill-defined infant deaths dropped to a decade low (12) in 2018. Although the single year change in the SUID rate is not statistically significant, the CFR Team expects ongoing improved practices throughout the state following recently updated coroner training which focused on thorough investigation techniques and consistent coding.

Idaho and U.S. Resident SUID Deaths (< age 1 year)
and Rates per 100,000 Births, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Number Idaho Resident SUID deaths	**16**	**21**	**16**	**10**	**15**	**14**	**9**	**13**	**10**	**7**
Idaho Resident SUID death rate	67.4	90.5	71.7	43.6	67.1	61.2	39.4	57.9	45.1	32.7
U.S. Resident SUID death rate	53.9	51.6	48.3	42.5	39.7	38.7	39.4	38.0	35.4	35.2

Idaho and U.S. Resident Ill-Defined Infant Deaths (< age 1 year) and Rates per 100,000 Births, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Number Idaho Resident Ill-defined infant deaths	**2**	**1**	**4**	**5**	**5**	**6**	**5**	**5**	**1**	**5**
Idaho Resident Ill-defined death rate	8.4	4.3	17.9	21.8	22.4	26.2	21.9	22.3	4.5	23.4
U.S. Resident Ill-defined* death rate	27.2	23.0	22.1	26.9	26.8	27.4	30.1	31.7	33.4	33.8



*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.

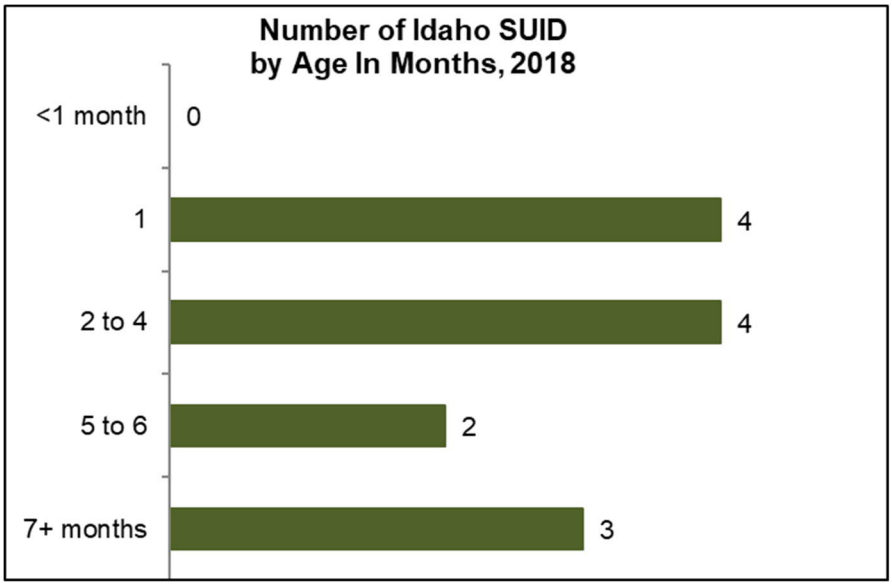
Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*

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

Idaho CFR Team Findings: Unexplained Infant Death

In 2018, the CFR Team reviewed eight 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 as "SUID" in this report. Because of their common circumstances, the CFR reviewed SUID cases along with five additional infant deaths classified as "undetermined" cause (for a total of thirteen SUID/undetermined infant deaths).

According to the AAP, most SUID events in the U.S. occur when a baby is between two and four months old, and during the winter months. In 2018, most Idaho SUID infant deaths occurred between 1 and 4 months of age.



[Based on 13 SUID/Undetermined cause cases]

In 2018, Idaho SUID deaths were spread quite evenly across the four meteorological seasons (three-month groupings based on the annual temperature cycle and the calendar – e.g., winter includes December, January, and February) with 3 deaths each in spring, summer, and fall and 4 deaths in winter.

In 2018, 2 of the 13 infants (15%) who died of SUID were of Hispanic origin while in 2017 the team observed that 6 of the 9 infants (66%) who died of SUID were of Hispanic origin. This large one-year difference underscores racial and ethnic disparities are best understood by examining data collected over several years.

Systems Issues

Inadequate or Inconsistent Agency Cooperation

The team found multiple instances in which law enforcement and/or coroner agencies did not notify CPS of an infant death, despite other children living in the home. There were also cases where information sharing and cooperation between agencies might have prompted legal or CPS intervention for family support and/or child protection measures.

Further, there were cases where police, coroners, and IDHW case workers separately investigated issues of concern, possibly duplicating efforts and/or missing relevant information. The team found opportunities for agencies to combine efforts in investigating infant deaths. This extra step may be especially valuable in cases where the infant's medical and social history is limited.

Infant Death Investigations

SUID is a diagnosis of exclusion to be made only if there is no other possible cause of death. A comprehensive investigation for unexplained infant deaths includes an autopsy, scene investigation, as well as social and health history. The CFR Team noted marked improvement in following CDC and state guidelines related to investigating and coding unexplained infant deaths. Updated statewide coroner trainings encourage the use of CDC's Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) and emphasize the importance of completing autopsies to rule out all possible causes of death. While most agencies apparently use such resources to guide and inform investigations, the CFR Team still found SUID cases that were not thoroughly investigated (e.g. no autopsy conducted).

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 half (4 out of 8) of the cases where SUID was the stated cause of death, the manner of death was certified as "natural" which did 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

Coroner and law enforcement agencies face challenges of a growing state population, resulting in higher caseloads. Additional resource allocation may be needed to support proper investigations and complete documentation.

Parent and Caretaker Education and Support Services

The CFR Team noted opportunities for expanding access to post-birth education and support services for parents in hospitals and clinics related to infant and child-care as well as providing education to daycare providers and individuals who babysit infants. Promoting knowledge of safe-sleep environment, feeding, hygiene, and infant CPR and may help prevent additional infant deaths.

Common Factors and Associations

Unsafe sleep environment was noted in the great majority of 2018 Idaho SUID and infant deaths of undetermined cause. Examples of improper sleep environment included adult sized mattresses, couches, car seats, infant swings, and bouncer chairs. Car seats are to be used for safe transportation of infants and should not be used as an alternative to a crib or bassinet. Infants should sleep alone, on their backs on a firm, flat surface with no soft bedding. 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 observed in nearly one-third of these incidents. The team also found instances in which the infant was sleeping with an adult who met the clinical definition of obesity (having a Body Mass Index of 30 or above). In national studies, parent obesity has been identified as a risk factor in co-sleeping infant deaths.

The CFR Team found the majority of the SUID deaths occurred in families where parents had experienced ACEs such as neglect or abuse during their own childhoods, potentially resulting in a cycle of intergenerational maltreatment (IGM) or neglect. In such cases, the families often had a history of CPS referrals as well as an unstable, hazardous or unsanitary home environments. "Unstable" home environments include those without a consistent adult caretaker or with a parent with mental health and/or substance abuse issues. Examples of "hazardous/unsanitary homes" included those with floors or other surfaces strewn with uncontained food waste, soiled diapers, pet feces, cigarette butts, and/or illicit drugs and paraphernalia within harm's reach. In some cases, beds and cribs were cluttered with toys, clothing or other household items to the point that they were not usable for sleep. Such conditions may or may not meet the legal standard of child neglect but documenting health and safety hazards may help identify families with a need for additional support.

Prenatal smoking (as self-reported by mothers and recorded on birth certificates) and smoking or vaping in or around the home (mentioned in law enforcement reports) were frequently noted in SUID cases (5 of 13 deaths) and may be underreported. Infant swaddling was also a risk factor in five of the thirteen deaths. Nearly every case of SUID in 2018 involved a combination of risk factors such as unsafe sleep environment, tobacco smoke exposure, swaddling, and/or hazardous home environment.

Accidents in the Sleeping Environment

The CFR Team also reviewed six 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, unsafe sleep environments and/or improper sleep surfaces, parental illicit drug or alcohol abuse, a family history of CPS referrals, and smoking or vaping during pregnancy and/or in the home.

Recommended Actions for Understanding and Preventing SUID

In the following tables SUID prevention recommendations are grouped by target audience to facilitate expedient review of key recommendations by profession or role. The CFR Team encourages all readers to review the general recommendations as well as other recommendations that may touch on professional crossover areas.

Table 1: General SUID Prevention Recommendations
Improve Communication Between Agencies / Increase Understanding of Mandatory Reporting Requirements Expanded communication between CPS, law enforcement, coroner's offices, and heath care and/or childcare providers could prevent future child deaths. Improving the understanding of mandatory reporting requirements[1] and encouraging health and safety concerns be immediately reported to law enforcement or to the IDHW by calling 2-1-1 also has the potential to avert child fatalities.
Follow American Academy of Pediatrics (AAP) Safe Sleep Guidelines 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, and avoidance of tobacco smoke exposure (https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/A-Parents-Guide-to-Safe-Sleep.aspx).
Immunize Infants in Accordance with AAP and CDC Recommendations Evidence suggests that vaccinations may have a protective effect against SUID (http://pediatrics.aappublications.org/content/138/5/e20162938).
Encourage Breastfeeding AAP research found that just two months of breastfeeding, even when combined with bottle feeding formula, provides the same benefit as exclusive breastfeeding. Along with reducing the risk of viral infection, other properties of breastmilk may also reduce risk of sudden infant death through their influence on brain development (https://www.aappublications.org/news/2017/10/30/BreastfeedingSIDS103017).
Increase Understanding of Intergenerational Maltreatment (IGM) / Continue to Invest in Parent and Childcare Education While the topic of IGM is complex and research is limited, evidence suggests there is an association between a parent's experience of childhood maltreatment and the maltreatment experienced by his or her own children. Along with staying abreast of new findings related to IGM, the CFR Team suggests continued investments in parent and childcare provider education programs which have helped reduce child maltreatment in the general population. Family support services such as home visiting programs and infant CPR training are also encouraged.

[1] Idaho Code § 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."

Table 2: Recommendations for Coroners and Law Enforcement on SUID Prevention
Perform Toxicology Tests on Parents/Caretakers The CFR Team recommends blood alcohol and/or drug testing of parents or caretakers as a routine part of infant death investigations to better understand the role of alcohol or drug impairment in SUID cases.
Use CDC's SUID Investigation Form Consistently 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, decedent and caretaker toxicology, etc.) and consistent documentation help to identify commonalities and risk factors which can prevent future deaths.
Work with Partner Agencies to Investigate Family Health and Safety Concerns Law enforcement agencies and coroners are encouraged to work cooperatively and share information with partner agencies (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. 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.
Notify CPS When Other Children are in the Home It is essential the IDHW be notified of a child death when other children are in the home so caseworkers can take steps to ensure the safety and support of all involved household members.
Coroner Training Recommendations
To better understanding the circumstances involved in SUID, the CFR Team identified opportunities for continued coroner training on the following topics: guidelines for coding and detailing findings on death certificates[2]; SUID Investigation; and Inter-agency collaboration.
Law Enforcement Training Recommendations
Law enforcement officers should be familiar with the factors that are commonly associated with infant deaths and use them to inform investigations. Trainings incorporating recent research findings and recommendations on infant death investigations are offered throughout Idaho by The Governor's Task Force on Children at Risk (www.idcartf.org), state coroner associations, and through Public Agency Training Council (www.patc.com).

[2] Most unexplained infant deaths in Idaho appeared to be thoroughly investigated and included scene re-enactments, autopsies and/or review of medical history. However, as seen in past years, there were several instances in which "cause" and "manner" were coded inconsistently on death certificates. According to state and CDC guidelines, cause of death should only be coded as SUID 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.

Table 3: Recommendations for Public Health Agencies on SUID Prevention
Continue Public Education Campaigns Public education campaigns should continue to emphasize safe sleep environment as well as the importance of prenatal visits, scheduled vaccinations, and calling 911 at the first sign of distress.
Educate Childcare Providers The CFR Team found educational opportunities related to safe sleep environment and infant CPR. Along with recommending training on these topics as part of care facility guidelines, training in these key areas could also be included as part of licensing requirements.
Expand Home Visiting Programs Home visiting programs support families as they build and maintain nurturing, healthy households. Expanded access and greater awareness of such programs via public health and non-profit agencies is recommended to prevent or correct unsafe situations for infants and young children.
Utilize Case Workers to Provide Education During Home Visits Case workers play a key role in educating parents and childcare providers. They are often in a unique position to identify and rectify unsafe sleep environments and other hazards during home visits. As part of demonstrating safe sleep practices, workers and other health educators should clarify that the protective factors of breastfeeding do not negate the high risk of co-sleeping and urge parents to avoid the risk of falling asleep during infant feedings.
Ensure Health Educators Have Key Knowledge Health educators 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, hazardous living spaces) as well as protective factors like social and emotional support, access to mental health treatment/therapy, and parenting education. They are encouraged to stay abreast of emerging research related to intergenerational patterns of child maltreatment and to be aware of the warning signs. (www.childwelfare.gov/pubs/issue-briefs/intergenerational/)
Connect Families in Need with Items that Facilitate Safe Sleep Depending on the local area, “cribettes” (pack and plays) and other safe sleep items may be available to families in need. The IDHW’s 2-1-1 Idaho Careline can be utilized to connect those in need to local resources.

Table 4: Recommendations for Health Care Professionals on SUID Prevention
Educate Parents Health care professionals play an important role in educating parents on the protective factors of prenatal care, breastfeeding, timely immunizations and safe sleep environment. As part of staying current on SUID research, they should be familiar with 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).
Endorse and Model AAP Risk Reduction Measures Providers, including staff in newborn nurseries and NICU should endorse and model AAP risk-reduction recommendations, particularly related to safe sleep. Although currently concentrated in a few communities in Idaho, programs like *"Cribs 4 Kids"* and *"Sleep in Heavenly Peace"* donate safe cribs and beds to families via partner organizations (the IDHW's 2-1-1 Idaho Careline can be utilized to connect those in need to available local resources). Expanding access to these or similar programs through partnerships with rural hospitals or remote public health clinics might help reach other families in need.
Provide Home Visit Referrals The team urges support and referrals for home visiting programs and parent education for high-risk families (e.g. parents who have experienced abuse or neglect, or those with a history of mental illness or substance abuse). Home visiting programs are offered through local public health districts and other community 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.
Reassure Parents About Immunizations The CDC stresses that timely vaccinations are essential in providing immunity to life-threatening diseases. Parents may need reassurance from their medical providers of vaccine safety and the benefits of complying with the CDC's immunization schedule (www.cdc.gov/vaccines/schedules/parents-adults/resources-parents.html).

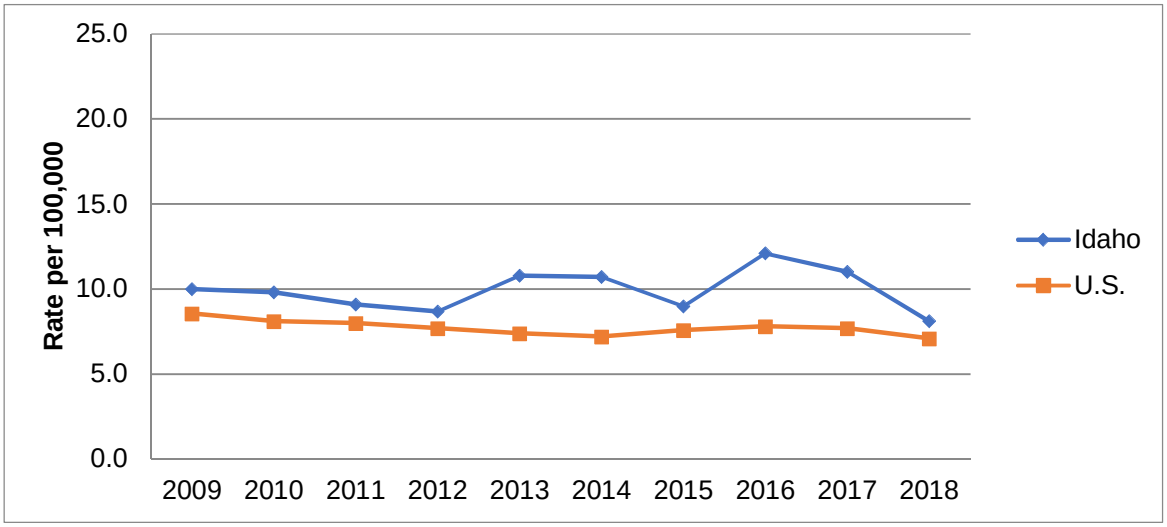
Table 5: Recommendations for Parents and Child Care Providers on SUID Prevention
Take Advantage of Childcare Courses and Home Visiting Services Many hospitals and community education centers offer parenting and childcare classes which include subjects like infant sleep safety, nutrition, first aid and CPR, along with tips for handling the physical and emotional demands of parenting. Local public health districts and other community agencies 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 abuse and mental health referrals, and home safety plans. Contact IDHW's 2-1-1 Idaho Careline for information on eligibility, to seek family support, or report a safety concern.
Follow Safe Sleep Guidelines Parents and care providers should be familiar with AAP safe sleep recommendations and follow them closely (https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/safe-sleep/Pages/Safe-Sleep-Recommendations.aspx). Parents and care providers should also be familiar the "ABCs of Safe Sleep. Baby should always sleep Alone. Baby should always sleep on their Back. Baby should always sleep in a Crib. (https://healthandwelfare.idaho.gov/health-wellness/healthy-infants-children/safe-sleep).
Immunize to Reduce Risk Recent AAP research confirms that staying current with immunizations significantly reduces the risk of infant death. Routine childhood vaccines are available at no cost or reduced cost if financial barriers are a consideration. For information on where to obtain vaccines in Idaho see: (https://healthandwelfare.idaho.gov/services-programs/children-families/child-and-adolescent-immunization).
Breastfeed Infants Mothers are strongly encouraged to breastfeed newborn infants to reduce SUID risk. Even those who choose to combine breastfeeding with formula for just the first few months of life are providing significant protective benefits.
Avoid Smoking or Vaping Tobacco smoke exposure has been repeatedly shown to increase the risk of infant death. There is no safe level of smoking or vaping during pregnancy or around infants. Idaho's Project Filter offers the "Quit Now" program to support cessation efforts: http://projectfilter.org.
Call 9-1-1 /Avoid Self-Transport Parents and caretakers are reminded to **call 9-1-1** immediately when an infant or child appears to be in distress and to avoid transporting to medical facilities in personal vehicles. In these situations, every second is critical, and prompt medical assistance by professional first responders can save a life.

UNINTENTIONAL INJURIES

Unintentional injuries (accidents) are those that were not planned or that were accidentally inflicted by another person. Nationally, the leading causes of fatal accidents are motor vehicle collisions, drowning, fires, and poisoning. The 2018 rate of accident deaths in Idaho dropped by nearly 3% from the prior year but remained slightly higher than the overall U.S. rate.

Idaho and U.S. Resident Accident Deaths (Age <18)
and Rates Per 100,000, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total number Idaho Resident accident deaths	**42**	**42**	**39**	**37**	**46**	**46**	**39**	**53**	**49**	**36**
Idaho Resident accident death rate	10.0	9.8	9.1	8.7	10.8	10.7	9.0	12.1	11.0	8.1
U.S. Resident accident death rate	8.6	8.1	8.0	7.7	7.4	7.2	7.6	7.8	7.7	7.1

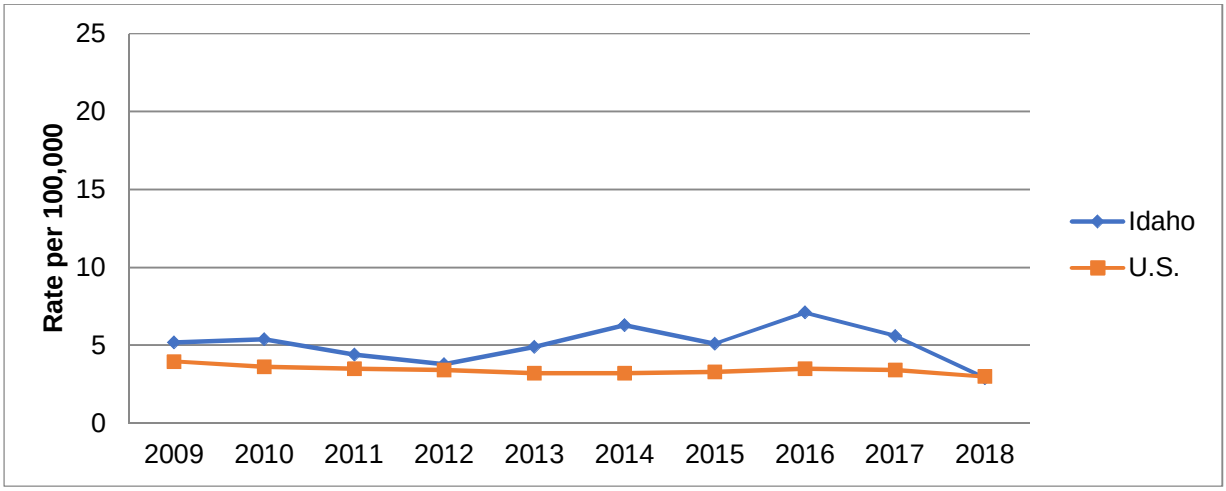


Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*

In 2018, Idaho's rate of child motor vehicle fatalities dropped substantially from the prior five years and was nearly identical to the overall U.S. rate.

Idaho and U.S. Motor Vehicle Accident Resident Deaths (Age <18) and Rates per 100,0000, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total number Idaho Resident accident deaths	**22**	**23**	**19**	**16**	**21**	**27**	**22**	**31**	**25**	**13**
Idaho Resident accident death rate	5.2	5.4	4.4	3.8	4.9	6.3	5.1	7.1	5.6	2.9
U.S. Resident accident death rate	4.0	3.6	3.5	3.4	3.2	3.2	3.3	3.5	3.4	3.0



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

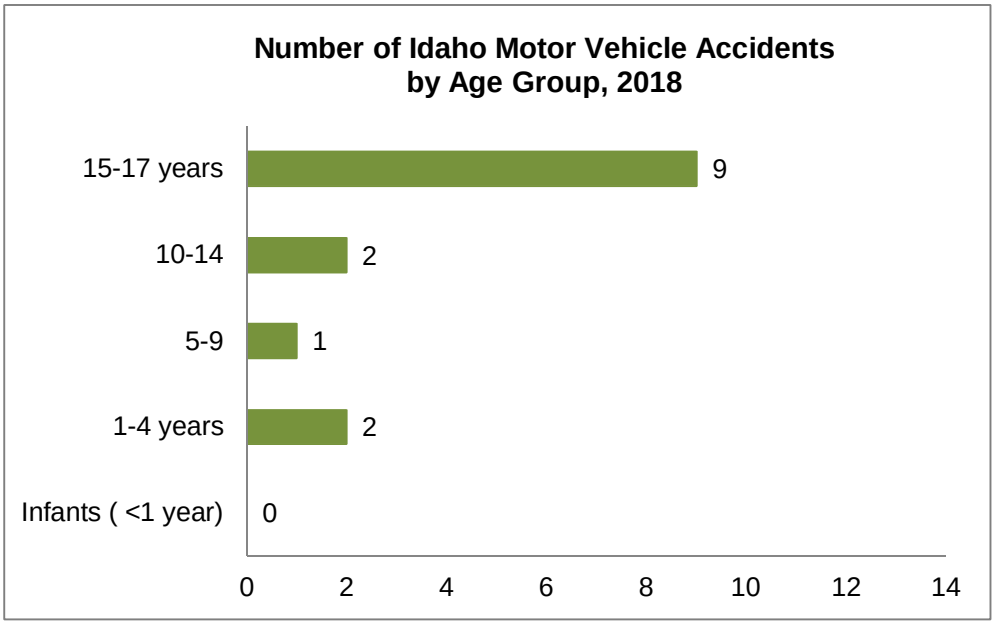
Rates based on 20 or fewer deaths may be unstable. Use with caution.

Idaho CFR Team Findings: Accidents

In 2018, there were 39 accidental deaths to children occurring in Idaho. Motor vehicle accidents (14) were the top cause of accidental deaths followed by drowning deaths (8). Less commonly occurring types of accidents for the year were drug or medication overdoses (4), crush or fall injuries (3), non-traffic motor vehicle accidents (2), and asphyxiation and suffocation deaths to infants and children (2). Six accidental infant deaths occurring in the sleeping environment are discussed in this report's section on SUID.

MOTOR VEHICLE ACCIDENTS

The CFR Team reviewed the 14 motor vehicle deaths that occurred in Idaho in 2018. Nine of the deaths were among children 15-17 years of age. Deaths were evenly split between males and females with seven fatalities in each group. Six of the deaths occurred to passengers while five were drivers and three were pedestrians. No ethnic or racial disparities were observed.



Two accidents resulted in multiple fatalities. As such, the team reviewed 12 separate 2018 motor vehicle accidents. Additionally, three accidents involved pedestrians and another accident involved a non-traffic vehicular fire. The following findings are based on 10 separate motor vehicle accidents which occurred on a *road or in street traffic*.

Rural Roads

Seven of the ten 2018 motor vehicle accidents that took place on a roadway occurred on a rural road.

Vehicle Type

Pick-ups (4) were the most common type of vehicle involved in these traffic fatalities followed closely by SUVs/Vans (3). The two fatalities involving an ATV/UTV occurred during the same accident and both children who died were passengers of the vehicle. Just one accident involved a car. There were no fatal accidents to children involving bicycles or motorcycles in 2018 or in 2017.

Teen Drivers

One-half (5) of the traffic accidents involved a teen driver. Driver error (e.g., reckless driving, improper overtaking on rural roads, or distracted driving) was a factor in each of the crashes involving a teen driver. Other risk factors for accidents with teen drivers included alcohol or drug impairment, late night driving, graduated license violations, speeding, and/or lack of seatbelt use.

Season of Accident

Along with considering the road and traffic conditions at the time of the accident, the CFR Team captured the time of year that the accident occurred. The majority (6) of 2018 traffic accidents occurred in the summer. Three transpired in the spring and the remaining 1 accident took place in the fall.

Seat Belt and Safety Restraint Usage

Improper safety restraint (i.e. seat belt or safety seat) was found to be a key preventable risk factor in motor vehicle fatalities. In fact, of the 10 traffic fatalities reviewed, the team was able to confirm that just half (5) of the victims were using a seat belt or an age-appropriate child safety seat. For two of the victims, safety restraint usage could not be conclusively determined, based upon information provided in law enforcement and Idaho Transportation Department (ITD) crash reports.

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 ITD crash reports. Given the relatively small number of motor vehicle traffic accidents (10) in 2018, no

substantial patterns of cited circumstances emerged. However, improper overtaking/passing, excess speed, inattention or distracted driving, and following too closely were each cited twice.

Systems Issues

The ITD crash report includes a field for toxicology results (blood alcohol content and drug test) of all drivers involved in the accident. However, in 2018 there were four instances where this information was missing and others that indicated that no toxicology was conducted. Resource issues and specific policies may prevent law enforcement agencies from conducting toxicology testing when intoxication is not obviously apparent or when intoxication from a single substance (e.g. alcohol) was already determined. Complete and consistent toxicology testing (to include testing for prescription medications) of all drivers would help to better address the factors involved in motor vehicle crashes. Further the CRF Team believe toxicology testing of other vehicle occupants could in some cases provide a richer understanding of circumstances playing a role in motor vehicle accidents and recommends wider toxicology testing in motor vehicle accident investigations.

Inattention or distracted driving was selected as a contributing circumstance in 2 of the traffic accidents. However, 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) might also be related to distracted driving. Providing information on the cause of the accident and the source of driver distraction (as detailed in a narrative section of the ITD form) may help to better understand the magnitude of distracted driving as a cause of motor vehicle accidents. More thorough investigations into the sequence of events and the drivers' activities prior to these accidents will lead to better understanding of the causes and may ultimately help to 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 help better identify the preventable factors, thus improving driver education and public messaging.

Non-Traffic Fatalities

In 2018, there were 4 *non-roadway* accident fatalities. Common risk factors were improper vehicle backing, inadequate supervision of young children, and parental/family instability.

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 traffic and non-traffic accidents. This additional step provides information that may enhance public education and safety messaging.

Common factors in 2018 fatal motor vehicle accidents were rural roads, teen drivers, reckless and/or aggressive driving, and failure to obey traffic signs and signals. Half of all 2018 motor vehicle fatalities to children occurred on a rural road and when considering just *traffic*-related fatalities, 70% took place on rural roads. Specifically, two collisions involved a teen driver attempting a pass another vehicle on a rural road.

Most of the motor vehicle accidents were caused by driver error such as failing to obey signs and signals, improper overtaking/passing, and driving in an aggressive or reckless fashion. Due to inexperience, teen drivers may be prone to errors which can cause serious accidents. It was common to see an interplay of multiple risk factors present in the same accident. The combination of a speeding teen driver, with inattentive driving was often observed in the same accident.

Recommended Actions for Preventing Motor Vehicle Accident Deaths

In addition to the specific recommendations outlined below, the team recommends ongoing public reminders of safe driving practices as well as continued emphasis on driver's training for teens. Idaho public school districts offer driver training programs in cooperation with the Department of Education. Courses are open to all Idaho residents (including non-students) between the ages of 14 ½ and 21. Further, 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). In these courses, law enforcement officers present traffic safety strategies for young drivers which emphasize responsible choices and decision-making while driving or riding as a passenger.

Table 6: Recommendations for Public Transportation Agencies to Prevent Motor Vehicle Fatalities
Continue Messaging / Explore Expanded Public Education Ongoing messaging on proper seat belt/safety restraint use, bicycling safety, and warnings against impaired, distracted and aggressive driving may help prevent additional traffic fatalities. Opportunities may exist for additional public education related to safety seat installation checkpoints and pedestrian safety.
Update ITD Crash Report Forms 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.

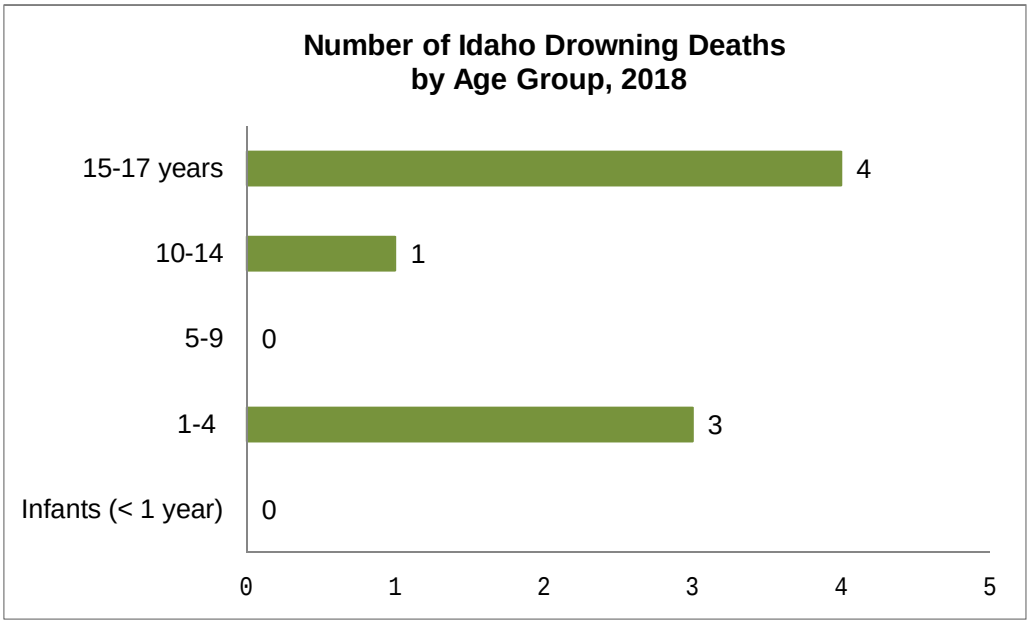
Table 7: Recommendations for Law Enforcement to Prevent Motor Vehicle Fatalities
Continue Strict Enforcement of Drug and Alcohol Impairment Laws Continued strict enforcement of alcohol and drug impairment laws is vital. Ongoing public education on the consequences of impaired driving (including the dangers of prescription drug impairment) is recommended.
Provide More Details in Crash Reports In completing narrative sections of ITD crash report forms, officers are encouraged to include details such as estimated vehicle speed, source of driver distraction (e.g. cell phones, passengers) and aggressive driving behaviors (e.g. speeding, unsafe passing, tailgating, emotional/angry drivers) as a contributing cause. Providing detailed information serves to better identify various causes of accidents and may lead to improved driver education and preventive efforts.
Promote Compliance with Vehicle Safety Restraint Laws 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.

Table 8: Recommendations for Parents and Teen Drivers to Prevent Motor Vehicle Fatalities
Recognize Distinct Challenges Presented by Rural Roads Despite lower traffic volume and usage, U.S. rural roads account for over half of the nation's vehicular deaths (https://www.ncsl.org/research/transportation/traffic-safety-on-rural-roads.aspx). Idaho's rural roadways present distinct safety hazards, particularly for less experienced teen drivers. National research indicates that rural crashes are commonly attributed to speeding, alcohol and/or lack of safety restraint usage. The CFR Team emphasizes that recommendations on safety restraints and safe driving habits are especially important when driving in rural areas. https://safety.fhwa.dot.gov/local_rural/training/fhwasa14082/
Use Safety Restraints Properly Many of the fatal injuries resulting from traffic accidents may have been less severe or prevented entirely with proper seat belt or child safety seat use. Depending on the age and size of the infant or child, the appropriate restraint may be a rear facing car seat, forward facing car seat, or a belt positioning booster seat.(https://www.stlukesonline.org/health-services/health-information/health-topics/car-seat-safety). 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. IDHW's 2-1-1 Idaho Careline can be used to connect families in need of car seats and/or booster seats to resources in their local community.
Instill Safe Driving Habits *Recognize the Risk Posed by Using Electronic Devices* The National Highway Transportation Safety Administration (NHTSA) reports that electronic device usage while driving has been linked to an increase in distracted driving accidents. Teens were the largest age group reported as distracted at the time of fatal crashes (https://www.nhtsa.gov/risky-driving/distracted-driving). *Stop Aggressive Driving* According to Idaho Transportation Department (ITD), aggressive driving is a contributing factor in nearly half of all crashes in Idaho and teen drivers are more than 4 times as likely as adults to be involved. Shift Idaho offers tips for recognizing and reacting to aggressive drivers at: (https://shift-idaho.org/aggressive-driving/) *Avoid Multiple Passengers* Teen drivers are 2.5 times more likely to engage in risky behaviors when driving with one teenage peer and 3 times more likely to do so when driving with multiple passengers. The National Highway Transportation Safety Board (NTHSB) recommends parents enforce Idaho's graduated licensing law related to multiple passengers as well as set their own rules and consequences for their teens driving with multiple passengers. (https://www.nhtsa.gov/road-safety/teen-driving) *Use Teen-Parent Driving Contracts to Set Driving Expectations* Teen-parent contracts for driving guidelines and restrictions are a useful way to communicate expectations and remind new drivers to avoid risky behaviors.

Table 9: Recommendations for Preventing Pedestrian and Rider Fatalities
Ensure Children are Adequately Supervised Adults and caregivers should closely supervise children when walking, biking, skating or riding scooters near roadways, driveways, and parking lots. During nighttime or early morning hours, walkers and riders should exercise extra caution and wear light colored clothing, reflectors and safety lights so that drivers are able to see them more easily. *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 children in navigating roadway and traffic environments.
Drive With Extra Caution Near Child-Centered Areas Drivers should use caution when driving near schools and parks or other locations where 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.
Use Helmets to Protect Against Head Injuries 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. IDHW's 2-1-1 Idaho Careline can be used to connect those in need of a helmet to resources in their local community.

DROWNING

The team reviewed eight drowning deaths that occurred in Idaho in 2018. Half (4) of those who died were teenagers who drowned in rivers in four separate Idaho counties. In two of these instances teens who knew how to swim were attempting to swim across a river without a personal flotation device (PFD). In both cases, older individuals who were swimming with them were able to successfully cross the river. However, the strength of the current and the unpredictable nature of water conditions inherent in the rivers exceeded the swimming capabilities of the younger swimmers in both cases. Toddler or preschool aged children who drowned in 2018 typically entered a river or a canal.



Systems Issues

The team found examples in which coroner reports were missing, appeared to be incomplete or left them with unanswered questions. As with other cause of child deaths, routinely performing toxicology testing of the decedent and/or caregiver would help to better understand the circumstances involved. Interagency cooperation (especially between CPS and law enforcement) may help identify unsafe home situations and prevent child deaths.

Common Factors and Associations

The CFR Team noted inadequate supervision as a factor in half of the drowning accidents. Children of all ages were often swimming or playing near water without wearing an approved PDF. The incidents involving younger children often occurred on properties with no safety barriers to prevent access to swimming pools or open water.

Recommended Actions for Preventing Drowning Deaths

According to the CDC, drowning is the second leading cause of accidental death for children between the ages of 1 to 14 years. 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).

Table 10: Recommendations for Public Health Agencies to Prevent Drowning Deaths
Continue Public Education Campaigns The CFR Team recommends public education campaigns emphasize the importance of safety barriers or door alarms to prevent unsupervised access to open water and swimming pools. General reminders to closely supervise children and to use approved personal floatation devices while in or near the water may help prevent additional drowning injuries.
Add Signage Near Natural Swimming Areas Adding signage near entry points of frequented river, creek, and lake swimming areas with warnings of the risks of swimming in natural waterways is a step the CFR Team endorses for preventing future accidental drowning deaths.
Warn of Swimming Dangers The CFR Team also recommends general warnings of the unpredictable nature of rivers, lakes and reservoirs be directed to teens and pre-teens of all swimming ability levels, as well as parents of young children.
Enhance Water Safety Training for Refugees The CFR Team has continued to observe instances of drowning deaths to children from families that had recently resettled from other countries. Popular water sports played in Idaho's lakes and rivers present hazards which may not be familiar to those of different cultures or prior home environments. The Idaho Refugee Health Program has also previously identified a need for enhanced training on water safety. Agencies should ensure that water safety training (including access to swimming lessons, PFD usage, life saving techniques, and drowning prevention) is part of resettlement education.

Table 11: Recommendations for Parents and Caregivers to Prevent Drowning Deaths
Supervise Children and Teens Near Water at All Times 1. Children and teens of all ages should be closely supervised while playing in or near the water. To prevent drowning injuries, the CDC advises everyone to know the basics of swimming (floating, moving through the water) and cardiopulmonary resuscitation (CPR). 2. Those supervising young children while swimming should remain alert and within arm's reach. As drowning happens quickly, parents and caretakers should avoid alcohol and drug use and distracting activities while children are playing in or near water. Research shows that participation in swimming lessons reduces the risk of drowning for children aged 1 to 5 years (www.cdc.gov/HomeandRecreationalSafety/Water-Safety). 3. Even older children who demonstrate basic swimming skills should be supervised and should avoid swimming alone. Weather conditions should be closely monitored as they may result in abrupt changes to open water currents.
Add Child Safety Gates and Barriers to Open Water and Pools 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 four-sided fences (with self-closing and self-latching gates) or other barriers to prevent children from accessing open water or swimming pools. Fences should completely separate the house and play area from the pool. Pool toys and floats should be removed immediately after use so that children are not tempted to enter the pool area unsupervised.
Use Personal Floatation Devices (PFDs) U.S. Coast Guard approved PFDs or life vests 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 vests and are not designed to keep swimmers safe.

Table 12: Recommendations for Coroners and Law Enforcement to Prevent Drowning Deaths
Perform Full and Uniform Toxicology Tests Alcohol impairment is a well-known risk factor in drowning deaths and both illicit drugs and prescribed medication may also play a role in drowning deaths (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6474464/). As such, the CFR Team recommends widespread use of toxicology testing of the child decedent and of the caregiver(s)/supervisor(s) involved in drowning deaths.

OVERDOSE

There were 4 child deaths caused by accidental overdose of an illicit drug or prescribed medication in 2018. The CDC reports a steady increase in U.S. drug overdose deaths since 1999. Nationally, most of these deaths involve a prescription or illicit opioid.

Recommended actions for reducing drug overdose include improved opioid prescribing practices (to reduce exposure and prevent abuse), promoting drug monitoring programs, and expanding access to substance abuse treatment.

Medications should be stored out of reach of children and teens, especially those with a history of substance abuse and mental health concerns. Drug Free Idaho (www.drugfreeidaho.org/our-programs) offers information on youth programs and provides locations for safely disposing of unused and expired medications.

CRUSH, FALL, AND NON-TRAFFIC INJURIES

There were five fatal crush, fall, and non-traffic injuries in 2018. Common risk factors in these fatalities included lack of adult supervision, small children left unsupervised in a farm environment, not wearing helmets, lack of driving experience, and not following ATV manufacturer's recommendation regarding age and riding conditions.

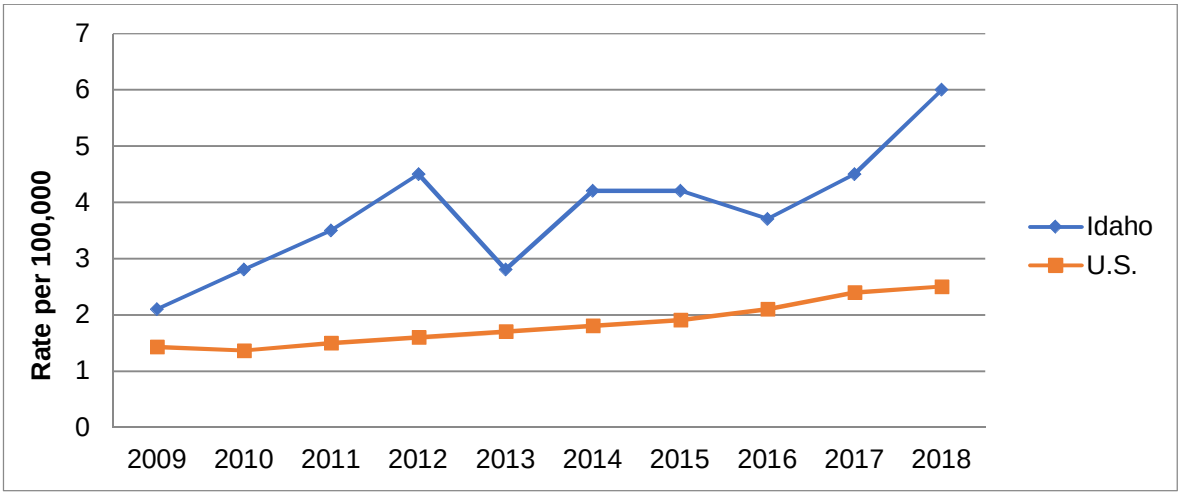
Recommendations for preventing these types of accidents include education about ATV safety (https://kidshealth.org/en/parents/atv-safety.html) and participation in farm equipment safety training (https://nasdonline.org/7180/d002405/tractor-safety-background-information-activity-book.html).

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 is substantially higher than the overall U.S. rate and ranks in the top 10 among states. In 2018, the rate of youth suicide increased to its highest point within the past decade and the gap between Idaho's youth suicide rate and that of the U.S. overall widened substantially.

Idaho and U.S. Resident Suicide Deaths (Age <18)
and Rates per 100,000, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Number Idaho Resident suicides	**9**	**12**	**15**	**19**	**12**	**18**	**18**	**16**	**20**	**27**
Idaho Resident suicide death rate	2.1	2.8	3.5	4.5	2.8	4.2	4.2	3.7	4.5	6.0
U.S. Resident suicide death rate	1.4	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.4	2.5

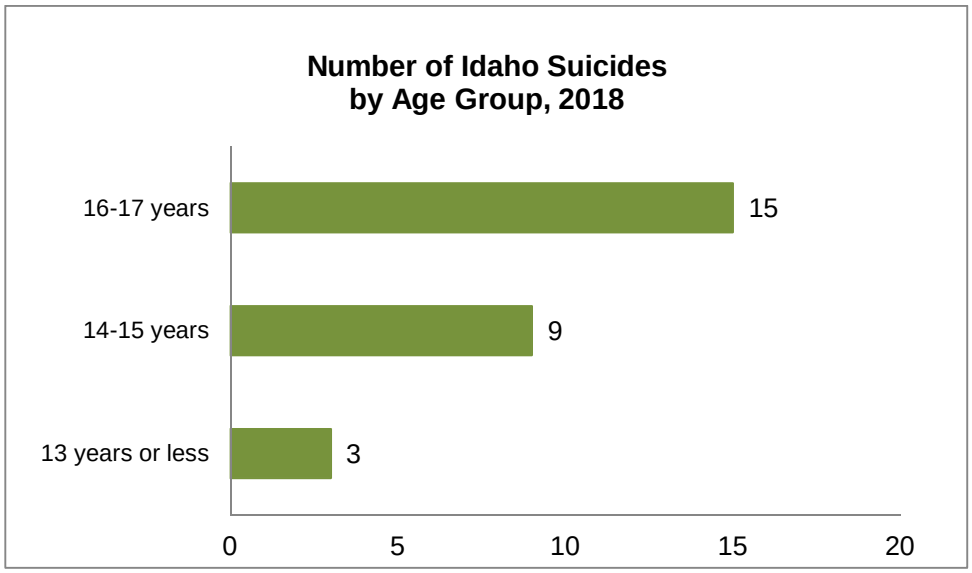


Source: *Bureau of Vital Records and Health Statistics, Idaho Department of Health and Welfare*
Rates based on 20 or fewer deaths may be unstable. Use with caution.

Idaho CFR Team Findings: Suicides

The CFR Team reviewed 27 suicides occurring in Idaho in 2018. As in previous years, the majority (74%) of those who died were male. However, in 2017, males comprised 95% of those children under 18 who died by suicide indicating a substantial upward increase in the number of females who died by suicide in 2018 – 26% in 2018 compared to 5% in 2017. The National Center for Child Death Review (www.ncfrp.org) 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.

In 2018, just over half (55%) those who died by suicide were 16-17 years of age and there were three suicides among children thirteen years of age or younger.



[Based on 27 suicide deaths]

In 2018, young females (those in the 14-15 year old and 13 or less age groups) died of suicide at a higher rate than males in these same age ranges. While this finding may represent a one year anomoly, this potential pattern should be assessed in future years.

2018 Suicide Sex by Age Group Comparison

Age Group	Female	Male
13 or less years	29% (2)	5% (1)
14 - 15 years	43% (3)	30% (6)
16 - 17 years	29% (2)	65% (13)
Total	100% (7)	100% (20)

Eighty-five percent (23) of the children who died by suicide in 2018 were White and Non-Hispanic. The remaining 15% (4) were even split between multi-racial children and American-Indian children.

In 2018, hanging was the most common mechanism of injury and constitued 55% (15) of the suicides reviewed by the team while firearms were the mechanism of injury used in the remaining 45% (12) of cases. This was a departure from 2017 when firearms were used as the mechanism of injury in 65% of cases. Males were equally likley to use hanging or firearms as the method of injury in 2018 while females were more likely to use hanging.

Number of Suicides in Idaho by Mechanism and Gender, 2018

	Injury Mechanism Used	
Gender	**Firearm**	**Hanging/asphyxiation**
Male	10	10
Female	2	5

Suicide deaths in 2018 were more prevalent in the winter months (10) and least common in the fall months (2). However, four suicide deaths occurred in both the months of August and May. These are months of transition for students when the school year is either beginning or ending and may be times of parituclar stress for young people. This potential patterns will be monitored by the CFR Team in coming years.

Systems Issues

As noted in past years, CFR Team reviews were hampered by the absence of school records that may have provided key insights, especially in cases where other information the team was able to access (e.g., law enforcement reports) indicate bullying or relationship issues at school may have been impacting a child who died. Schools deny requests for academic and behavioral history, based on the confidentiality requirements in the FERPA. However, an Idaho Department of Education representative participated in the review of 2018 suicide deaths and not only assessed the case review process but also meaningfully contributed to the reviews, without sharing student-specific data, by bringing professional expertise to bear and providing insights useful to the CFR Team. While an ongoing agreeable solution is still under discussion, Department of Education participation in case reviews was viewed as an important step in resolving this systems issue.

The team found other opportunities for improved interagency communication in preventing youth suicides and/or providing survivor support. There were a few examples of law enforcement contact with families where potential child endangerment was noted but not reported to CPS.

Additionally, there were instances in which either a coroner or a law enforcement agency did not complete an investigation, which may result in an incomplete understanding of the circumstances leading to these deaths. The CFR Team had unanswered questions about the role of drugs and compliance with prescribed medications in some of the suicide deaths. Coroner and law enforcement investigations did not consistently cover home or school environment, medical and mental health history, or include toxicology testing of the deceased. Providing detailed information of the contributing circumstances on death certificates (e.g. diagnosed mental illness, substance abuse history, toxicology results) may improve suicide prevention efforts.

Common Factors and Associations

Many of those who died by suicide had threatened or engaged in self-harm in the past. Along with past ideation and attempts, examples included substance abuse and self-mutilation/cutting. The team noted a wide range of triggering events including romantic/sexual relationship conflicts, alleged bullying by peers, and family discord or turmoil (e.g. argument with parents). In some cases, suicides followed a recent disciplinary event at home that involved parents taking away cell phones which may have engendered exaggerated feelings of isolation or prevented the child from reaching out for help.

Easy access to a lethal method (notably, firearms) was also a common factor identified in these suicides. Some incidents had an impulsive component involving an emotionally distraught person who was able to quickly access a firearm.

The team found evidence of one possible “cluster” in which two of those who completed suicide were close in age and may have lived in the same area and attended the same school.

Over forty percent of the suicide decedents had a documented history of mental illness (most often diagnosed with depression). Over one-third had a history of family instability (as indicated by CPS involvement, ACEs, adoption or foster care, mental illness and/or other severe medical issue of a parent).

Although less common, the CFR Team observed over several review years that some teens who completed suicide tended toward high academic achievement and/or outstanding performance in extracurricular activities. As the risk factors for suicide are complex and varied, those who work with youth should be mindful that those most vulnerable do not strictly fit any specific profile.

Table 13: Suicide Prevention Recommendations for Everyone
Know the Warning Signs IDHW's Office of Suicide Prevention encourages *everyone* to be familiar with the warning signs for suicide which are nearly always present: • Threatening, talking or writing about suicide • Isolation or withdrawal (from family, friends, activities, etc.) • Agitation, especially combined with sleeplessness • Nightmares • Previous suicide attempts or seeking methods • Feeling depressed, hopeless, trapped • Showing unexplained anger and aggression • Changes in eating, sleeping, personal care or substance use • Taking unnecessary risks/recklessness • Loss of interest in favorite activities or hobbies • Chronic headaches, stomach aches or fatigue • Sudden, unexpected loss of freedom or fear of punishment or humiliation (http://healthandwelfare.idaho.gov/Families/SuicidePrevention/tabid/486/Default.aspx).
Take Action in Crisis Situations If a person threatens suicide or has a weapon, **call 911** immediately. The **Idaho Suicide Prevention Hotline** accepts texts and phone calls **at 1-208-398-HELP (4357)**. The hotline provides crisis intervention, emotional support, resource referrals, and follow-up.
Obtain Training QPR (Question, Persuade, and Refer) Gatekeeper Training for Suicide Prevention saves lives by providing practical, proven suicide prevention training to anyone in a position to recognize and refer someone at risk of suicide (e.g., parents, friends, neighbors, teachers, coaches, caseworkers, police officers). The 1 to 2-hour course is offered by certified QPR instructors in person or online. Customizable trainings for practitioners are also offered (https://qprinstitute.com/).
Restrict Access to Lethal Means Restricting access to lethal weapons and substances may disrupt the chain of events leading to an attempt and is a highly effective way to prevent suicides. Suicidal individuals typically give advance thought to the method and make a detailed plan for completing the act. However, most are highly ambivalent about death right up until the last moments. Further, method substitution rarely occurs. In teen suicides, there is sometimes an element of impulsivity related to a triggering event. A triggering event (e.g. disciplinary action, relationship loss, or public embarrassment) may push an already suicidal person closer to an attempt and as such not having the means at hand to complete the attempt may save lives.
Recognize the Power of Key Protective Factors Key protective factors for suicide include strong social connections (to trusted adults, peers and community groups), access to effective clinical care, conflict resolution skills, and cultural or religious beliefs which support self-preservation. Proactively fostering these protective factors should be a priority for everyone who works with teens and tweens.

Table 14: Recommendations for Educators for Preventing Suicide
Utilize Resources Offered by the Idaho Lives Project Educators are encouraged to access resources offered by the Idaho Lives Project (www.idaholives.org). Their goal is to create a network and culture of connectedness, resiliency and strength that will result in fewer students arriving at the point of feeling suicidal. They offer suicide prevention trainings for gatekeepers and students along with safe messaging guidelines for activities and events. Idaho Lives follows the "Sources of Strength," an evidence-based program which has been found to not only reduce suicide, but also decrease other risky behaviors.
Encourage Communication and Connections School and community programs which encourage open communication and meaningful connections provide broader perspective to help young people navigate through academic pressures, relationship turmoil, family conflict, and other intense emotional experiences. Teachers and counselors may serve as valued role models who young people may approach for emotional support and advice.
Explore Printing Suicide Prevention Hotline Number on Student ID Badges State laws in Wisconsin and California mandate a suicide prevention hotline number be printed on student ID badges. The CRF Team recommends Idaho schools explore this possibility and intends to track the evidence of the effectiveness of this measure in preventing youth suicides.

Table 15: Recommendations for Health Care Professionals for Preventing Suicide
Conduct Mental Health Screening / Collaborate with Behavioral Health Providers Health care providers are encouraged to include mental health screening to identify those at risk and to establish treatment protocols or referrals to appropriate behavioral healthcare. The Suicide Prevention Resource Center (www.sprc.org/settings/primary-care/toolkit?sid=508) and Health Resources and Services Administration (HRSA) (www.ruralhealthinfo.org/toolkits/suicide) offers resources for medical practices.
Follow Best Practices in Creating Care Transition Plans Health care providers are encouraged to follow best practices in care transitions when youth in suicidal crisis move from inpatient to outpatient care. Best practices include involving family and other natural support's in the patients care, inpatient and outpatient providers working collaboratively to details the responsibilities of each organization, and jointly developing a safety plan https://www.sprc.org/resources-programs/best-practices-care-transitions-individuals-suicide-risk-inpatient-care.
Conduct Prescription Drug Follow-ups In some cases, the CRF Team reviewed it was evident a child had been prescribed medications for mental health and/or other conditions, but it was unclear if the child was taking the medication(s) as prescribed. Well-documented follow-up regarding adherence to prescribed medication may help save lives.
Refer to the YES Program (https://youthempowermentservices.idaho.gov/) The Youth Empowerment Services (YES) Program is a system of care for youth in Idaho under 18 who may benefit from mental health support. Health care provides are urged to refer families who may not be able to afford mental health care to the YES program.

Table 16: Recommendations for Public Health Agencies for Preventing Suicide
Increase Public Education Aimed at Parents Public Health Agencies are encouraged to increase parental awareness of suicide risk and protective factors as well make parents aware of information about youth mental health (https://www.nami.org/Your-Journey/Teens-Young-Adults).
Increase Gun Safety Education Nationally, firearm ownership and access have been correlated with higher rates of youth suicide. A 2020 report by the RAND Corporation ranks Idaho as fourth in average household firearm ownership rates nationwide (at 60%), behind only Montana, Wyoming, and Alaska (https://www.rand.org/pubs/tools/TL354.html) Gun safety education (including safe storage and removing gun access for at-risk individuals) is a proposed approach to reducing Idaho's high number of suicides. *Project Child Safe* (www.projectchildsafe.org) is a non-profit organization committed to promoting firearm safety. It offers additional resources such as educational materials, firearm safety tips, and free gun lock kits.
Promote Greater Access to Mental Health Treatment in Rural Areas The CFR Team continues to see a need for more mental health resources throughout Idaho. Access to treatment is particularly limited in rural areas, where research indicates the need may be more pronounced.

Table 17: Recommendations for Parents for Preventing Suicide
Collaborate with Health Care Workers and Educators In addition to being familiar with the warning signs of suicide risk, parents should readily consult health care providers and/or educators when concerns arise about their child's mental health.
Remove or Properly Store Lethal Items Those with a history of mental health concerns or suicidal ideation should not have access to a firearm in homes, vehicles, workshops or any other household areas. Guns and ammunition should be stored separately, secured with locks and kept out of the reach of children. Keys and passcodes should be kept hidden. As with any other lethal method, prescription and over-the-counter medications should be secured and kept out of reach of children and teens.
Promote Connection A strong and positive connection to parents, family and/or school has been shown to provide immunity for teens when they are troubled. Today's teens face pressures of technology, school/work demands, and many have challenging family and peer dynamics. They often lack life experience, maturity and perspective to manage the effects of their stressors. Young people should be encouraged develop relationships with trusted adults whom they can approach for support when they (or their friends) are struggling.
Limit Screen Time / Monitor Internet Use American Academy of Child and Adolescent Psychiatry (https://www.aacap.org/) reports that 90% of teens have used social media, with an average of 9 hours a day spent online (outside of schoolwork). While there are benefits of connecting with friends and exploring shared interests, potential risks of social media include exposure to harmful/explicit content, dangerous people, cyberbullying, and privacy concerns. Social media may also be the primary place where young people express their feelings or share activities with peers. Parents are encouraged to communicate with their children to reach agreements for monitoring internet use and to limit screen time. AACAP offers more tips for developing safe and appropriate rules for social media use: (https://www.aacap.org/AACAP/Families_and_Youth/Facts_for_Families/FFF-Guide/Social-Media-and-Teens-100.aspx).

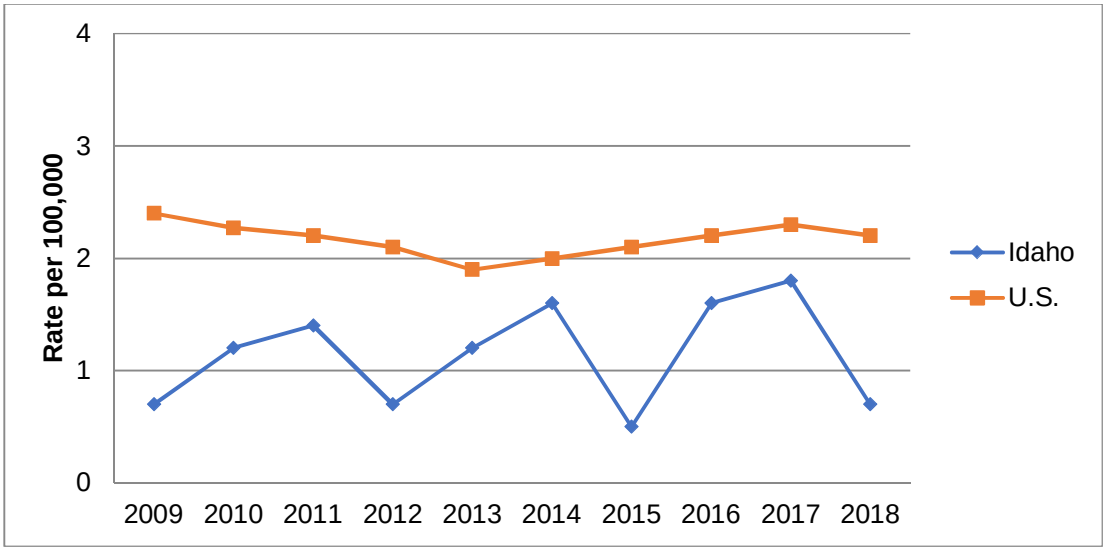
Table 18: Recommendations for Coroner and Law Enforcement for Preventing Suicide
Investigate Cooperatively Coroners and law enforcement agencies should work cooperatively in suicide investigations so conclusions are based on all available information. A Suicide Death Investigation Form developed by the Colorado Department of Public Health and designed to be used a multiple stages of the death investigation process may serve as a useful resource (https://cdphe.colorado.gov/suicide-prevention/suicide-investigation-form).
Provide Referrals for Family Members Officers and coroners are often the first point of contact for friends and family members following a tragic loss to suicide. Investigators may be in the best position to ensure that bereavement and counseling services are available for school personnel, peers, and loved ones. Resources and referrals are available through SPRC (www.sprc.org) and Idaho Lives Project (www.idaholives.org).
Coroners: Conduct Toxicology 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 contributing circumstances should be included on the death certificate. Consistent access to this information may lead to better understanding of precursors and contributing factors of suicide.
Law Enforcement: Search Social Media Accounts and Devices Suicide 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 device passcodes and/or witness accounts of recent text exchanges or posts.
Law Enforcement Training Recommendations
Law enforcement officers are encouraged to enroll in QPR (Question, Persuade, and Refer) Gatekeeper Training for Suicide Prevention (https://qprinstitute.com/professional-training) to help learn to recognize the warning signs of crisis and know how to respond. Specialized modules are available for law enforcement, corrections officers, first responders, and others.
High quality law enforcement reports of suicide deaths facilitate detailed case reviews and assist in the development of targeted prevention strategies. Resources that may assist law enforcement include: the Suicide Prevention Resource Center (Law Enforcement section) (https://www.sprc.org/settings/law-enforcement) and PoliceOne Academy courses (https://www.policeoneacademy.com/law-enforcement-training/).

HOMICIDES (Assault)

There were 3 fatal assaults to Idaho resident children in 2018. While the rate of homicide in Idaho has historically been lower than the national rate, the size of the gap varies widely by year.

Idaho and U.S. Resident Homicide (Assault) Deaths (Age <18) and Rates per 100,000, 2009-2018

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total Number Idaho Resident homicides	**3**	**5**	**6**	**3**	**5**	**7**	**2**	**7**	**8**	**3**
Idaho Resident homicide death rate	0.7	1.2	1.4	0.7	1.2	1.6	0.5	1.6	1.8	0.7
U.S. Resident homicide death rate	2.4	2.3	2.2	2.1	1.9	2.0	2.1	2.2	2.3	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 3 assault deaths which occurred in Idaho in 2018. One homicide case was pending criminal court proceedings and it was deferred for a later review leaving one homicide case for CFR Team review. Additionally, there were two child deaths investigated by authorities as possible homicide or child neglect cases, but which were eventually ruled as undetermined manner based on inconclusive findings. The team included these undetermined cause deaths for a total of three homicide or suspected homicide cases occurring in 2018.

Causes of the 2018 homicides included firearm shootings and strangulation. Two of victims were teenagers and one was a toddler. In each case the children who died were male and two were Hispanic. Family instability was involved in each case and gang involvement was a major factor in one of the cases and a contributing factor in another.

Common Factors and Associations

A family history of substance abuse, CPS history, ACEs, gun access, drug use, and gang involvement were observed as common risk factors in Idaho's 2018 homicide and assault deaths.

The CDC notes that many risk factors for youth violence are linked to experiencing toxic stress, or stress that is prolonged and repeated. Toxic stress can negatively change the brain development of children and youth and may result from issues like living in impoverished neighborhoods, living in homes with violence, mental health problems, substance abuse, and other instability.
https://www.cdc.gov/violenceprevention/youthviolence/riskprotectivefactors.html.

Recommended Actions for Preventing Homicide Deaths

As seen in other causes of child endangerment, youth violence may be rooted in a pattern of intergenerational maltreatment. The CFR Team has observed over the years that many of these violent episodes occur in families with a history of CPS involvement, some dating back to the parents' own childhood years.

Proven, effective prevention strategies are those focused on building safe, supportive and nurturing families and home environments. Child Welfare Information Gateway provides examples of community-based primary prevention programs which may serve as a model for state and local organizations (https://www.childwelfare.gov/topics/preventing/). The CDC also recommends that youth violence prevention strategies focus on interventions at all social

ecological levels (the individual, relational, community, and societal levels) https://www.cdc.gov/violenceprevention/youthviolence/prevention.html.

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 (https://preventchildabuse.org/).

Interagency cooperation can help ensure families receive the support they need and prevent future tragedies. Enhanced communication between law enforcement and CPS, particularly with regards to minors who may still reside in homes where violent episodes have occurred, could protect children and aid families in volatile situations.

PREVENTABLE NATURAL DEATHS

In addition to detailed reviews of deaths by external causes, a CFR subcommittee (made up of members of 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. As part of their review of preventable child deaths, the subcommittee identified cases for further review when questions were raised about the information listed on the death certificate and/or if a direct link to an existing medical condition was not apparent in an effort to identify preventable risk factors and opportunities for system improvement.

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: 10 perinatal conditions; 6 non-ranking/all other causes

Perinatal Condition Deaths and Home Births

Although congenital malformation deaths were almost exclusively related to chromosomal abnormalities, most perinatal condition deaths involved low birth weight and/or extreme prematurity. Inadequate prenatal care by a licensed medical professional (whether late or non-existent) was commonly noted in the perinatal condition deaths. Smoking in pregnancy and illicit drug use was also observed. In some cases, home birth was a factor.

The team recommends that women visit a licensed health care provider when planning to become pregnant, or at latest, within the early weeks of pregnancy. A pre-pregnancy medical visit promotes a healthy pregnancy by ensuring that immunizations are up-to-date and that any existing health conditions are diagnosed and well controlled. High risk pregnancies can be identified and treated early on. In addition to screening for maternal and fetal health risks, providers can offer advice and referrals for nutritional support, tobacco or drug cessation and infant care (https://www.womenshealth.gov/pregnancy/youre-pregnant-now-what/prenatal-care-and-tests).

Two of the infants who died of perinatal condition were born at home or in a freestanding birth center. The team concluded that these deaths might have been prevented with proper prenatal care and/or if the infant had been born in a medical facility with access to specialized NICU care. Women are encouraged to seek prenatal care early in pregnancy to diagnose any health conditions and for advice and support in modifying behaviors that could impact their infant's and their own health. To support further research on this topic, physicians, midwives and other certifiers of death certificates are encouraged to consistently provide details related to labor and delivery along with the mother's prenatal history.

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 maternal and infant deaths. As part of this effort, the CFR Team will work cooperatively with the recently formed Maternal Mortality Review Committee within IDHW.

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. In reviewing infant and child deaths of *all* causes, the team found evidence that 2 deaths in 2018 were to infants from families who refused medical care on the basis of religious beliefs. The 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.

Other Natural Manner Deaths

Non-ranking deaths include natural manner deaths that are not categorized elsewhere. These deaths were due to varied causes or related to underlying medical conditions. Causes included septicemia, cerebral palsy, epilepsy, gastroenteritis, and metabolic disorders. While none of the 2018 deaths were related to a positively identified influenza virus, one death was attributed to pneumonia and in this case the child had been fully immunized. However, proper hygiene and scheduled vaccinations (including an annual flu shot) can prevent the spread of infections and are especially important for medically vulnerable children.

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