

ARKANSAS LEGISLATIVE COUNCIL

Officers

Senator Bill Sample

Senate Chair

Representative Jim Dotson

House Chair

Senator Terry Rice

Senate Vice Chair

Representative Jon S. Eubanks

House Vice Chair



**Room 315, State Capitol Building
Little Rock, AR 72201**

Marty Garrity

Executive Secretary

Tel: 501-682-1937

Fax: 501-682-1936

January 19, 2018

Senator Stephanie Flowers, Chair
Senate Committee on Children and Youth
Via E-Mail

Representative Charlene Fite, Chair
House Committee on Aging, Children and Youth, Legislative & Military Affairs
Via E-Mail

Dear Senator Flowers and Representative Fite:

The Legislative Council met on January 19, 2018, and passed a motion that the at the Annual Report on the Arkansas Infant and Child Death Review Program, for review year 2015, be referred to the Senate Interim Committee on Children and Youth and the House Interim Committee on Aging, Children and Youth, Legislative and Military Affairs.

A copy of the report is attached for your information. Please contact me if I may be of assistance.

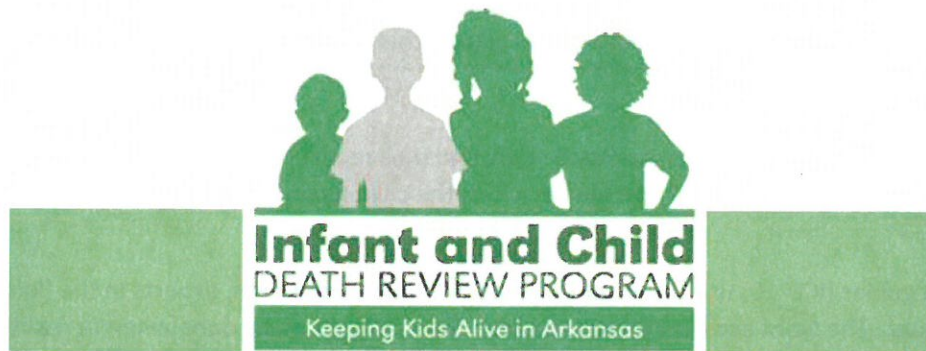
Sincerely,

A handwritten signature in black ink, appearing to read "Marty Garrity".

Marty Garrity
Executive Secretary

MG:vjf

cc: Ms. Varnaria Vickers-Smith, Committee Staff
Dr. Mary E. Aitken, Professor of Pediatrics
Dr. Hope Mullins, Program Manager, Injury Prevention Center
Mr. Max Snowden, Executive Director, Arkansas Commission on Child Abuse, Rape,
and Domestic Violence
Ms. Sherry J. Williamson, Child Abuse Project Coordinator



Arkansas Infant and Child Death Review Program

Annual Report

**Compiled:
Death Year Review: 2015**

Compiled by:

**Arkansas Infant and Child Death Review Program
Injury Prevention Center at Arkansas Children's Hospital**

Funding provided by:

The Family Health Branch of the Arkansas Department of Health (ADH)



Key notes about this Report

- In order to avoid annual reports that cross death years and thus report on the same data across multiple annual reports, this annual report is only covering cases in which the child death occurred in 2015.
- Although coding guides (ICD-10) use the word accident as a manner of death, experts in the field prefer unintentional injury. The word accident imparts a sense that nothing can be done when in reality injuries are predictable and preventable. In this report we will utilize the accidents.
- A study has shown that most CDR's struggle with developing and disseminating recommendations based on their review findings (Wirtz, SJ et al., 2011). Teams may overlook this step in the review process of addressing specific risk factors and the need for policy changes from case review. In FY 17, ADH provided additional funding to launch a statewide Safe Sleep Campaign. Results from that campaign are reported in appendix A. In FY 18, ADH provided additional funding to continue production of safe sleep campaign materials as well as conduct suicide prevention activities, a full report of this project will be included in FY 18 annual report.

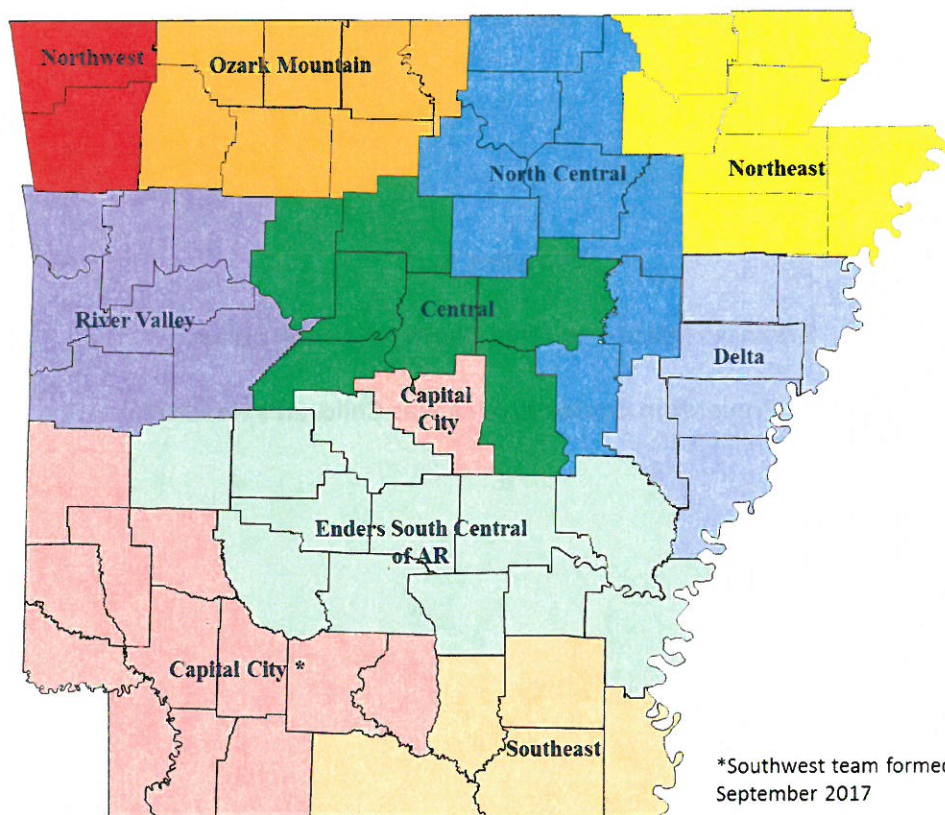


Table of Contents

Introduction	4
Reviewed Infant and Child Deaths.....	6
Manner of Death.....	6
Cause of Death.....	7
Motor Vehicle Accidents.....	8
Suicide.....	12
Asphyxia	14
Drowning.....	14
Fire	14
Undetermined.....	15
Best Practice	17
Goal of ICDR Program	17
Team Recommendation Results: Recruitment, Team Support, Data Improvement	18
Appendix A.....	19

Introduction

The Infant and Child Death Review Process: Purpose and Data

KEY FINDINGS

- In 2015, there were 438 child deaths between the 0-17 years of age
- Among the 438 all-cause deaths, 183 (42%) cases were eligible to be reviewed by local ICDR Teams.
- As of June of 2017, a total of 101 (55%) of 2015 cases were reviewed.

OF 2015 CASES REVIEWED TO DATE (N=101)...

- 51 % were accidents. With Motor-vehicle crashes the leading cause of accidental death.
- Forty-seven percent of all preventable deaths were among the age group of > 1 years of age, followed by 15-17 years of age with 24%.

Overview: The Arkansas (AR) Infant and Child Death Review (ICDR) Program established in 2010, has grown to 10 local teams that review unexpected deaths of Arkansas children under the age of 17 years old. The teams cover all 75 counties in the state, giving the ICDR Program the potential to evaluate 100% of reviewable pediatric deaths, as required by ACT 1818 of 2005. All local team members work and/or reside in the area of the team they serve, which allows firsthand insight into the local environment and needs of the community.

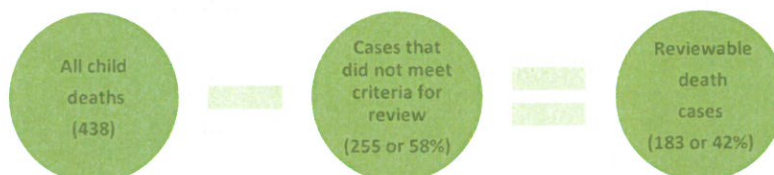
Goal: Local review teams provide the ability to examine the circumstances of the death of a child, with detailed data, through the eyes of the community and its members. The goal of the ICDR program is to collaborate with local and state agencies, community organizations and prevention experts to recommend and implement effective strategies to keep children safe.



Case Selection: Under ACT 1818 of 2005, cases that are reviewable meets any of the following criteria:

1. Child was not under the care of a licensed physician for treatment of an illness/condition that contributes to the cause of death (IE cancer, prematurity, congenital abnormalities etc.).
2. Death was due to Sudden Infant Death Syndrome (SIDS)
3. Death was due to an unknown cause
4. Death is not under criminal investigation or being prosecuted

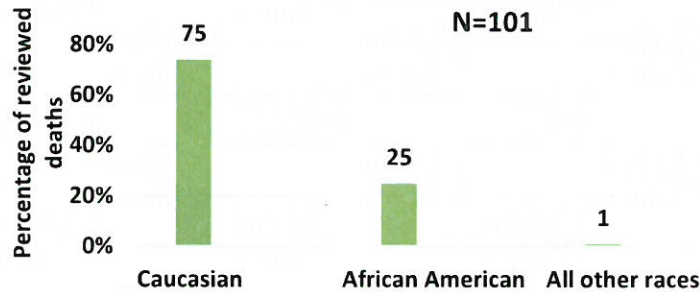
CDR Data: Information collected from multiple disciplines, at a case review, are entered into the National Center for Fatality Review and Prevention (NCFRP) data base. The data is analyzed to generate an overview and in depth annual report on the cases reviewed by the local ICDR teams. Key data entered into the NCFRP database are derived from death/birth certificates, child health records, autopsy reports, coroner's reports, sudden unexplained infant death investigation (SUIDI) forms, toxicology reports, witness interviews, on-scene investigation reports and any other documentation that teams identify as helpful in a review in order to make effective prevention recommendations.



Reviewed Infant and Child Deaths: Demographic Characteristics

During FY 17 and FY 18 teams were reviewing child deaths that occurred in 2015. Teams had a total of 183 cases that were potentially reviewable. Of those 183 cases 10 are in adjudication and are not currently reviewable, 72 cases were not reviewed due to changes within the ICDR Program and extenuating circumstances in the teams.

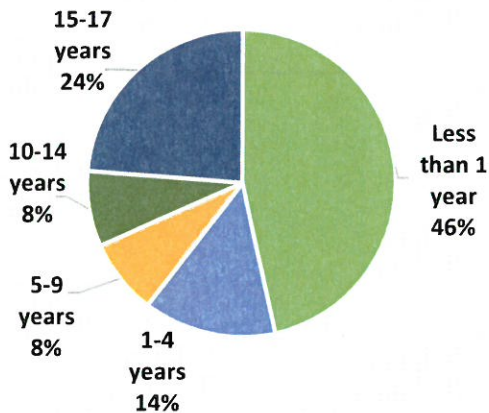
**Figure 1. 2015 Reviewed Infant and Child Deaths:
Racial Distribution**



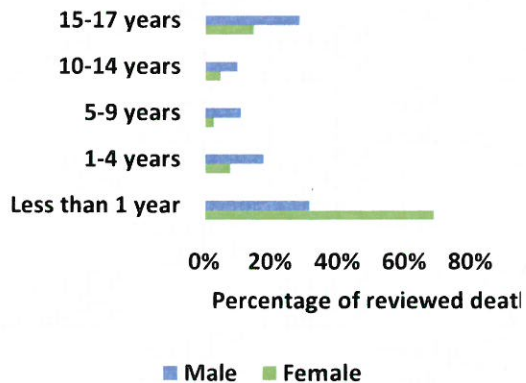
Findings N=101

- Among the reviewed deaths, 74% were Caucasian and 25% were African American (Figure 1)
- As show in Figure 2, infants less than 1 year of age accounted 47% of reviewed deaths and children ages 15-17 years old accounted for 24% of reviewed deaths.
- Twenty seven (69%) reviewed deaths were females and 20 reviewed deaths (32%) were males. (Figure 3).

**Figure 2. 2015 Reviewed
Infant and Child Deaths:
Age at Time of Death**
N=101



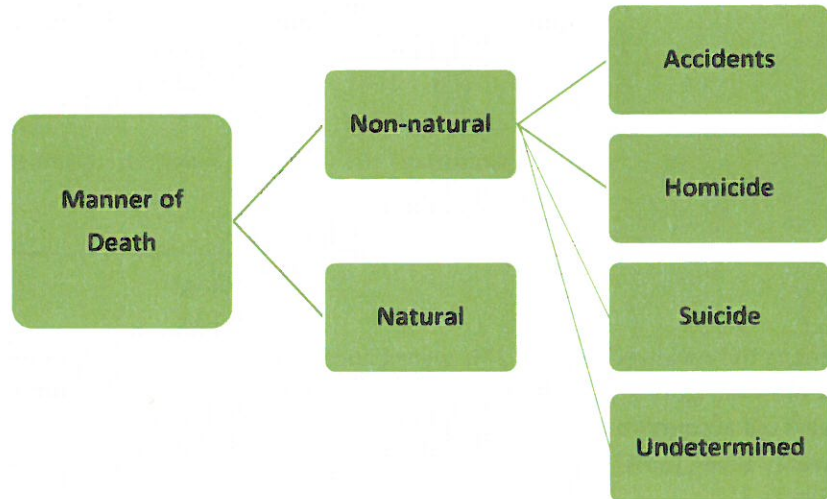
**Figure 3. 2015 Reviewed
Infant and Child Deaths:
Age and Gender Distribution**
N=101



Reviewed Infant and Child Deaths: Manner of Death

Manner of Death describes how the infant or child died and explains the cause of death. Deaths are categorized as natural or non-natural based on the manner of death. Natural deaths result from a disease process and non-natural deaths are attributed to injuries. Non-natural deaths are further classified into the following groups: accident, homicide, suicide, and undetermined. One case entered in the data base was missing all information.

Note: While the cause of death may be known (e.g., firearm related), the manner of death may still be undetermined (e.g., accident, homicide, or suicide).

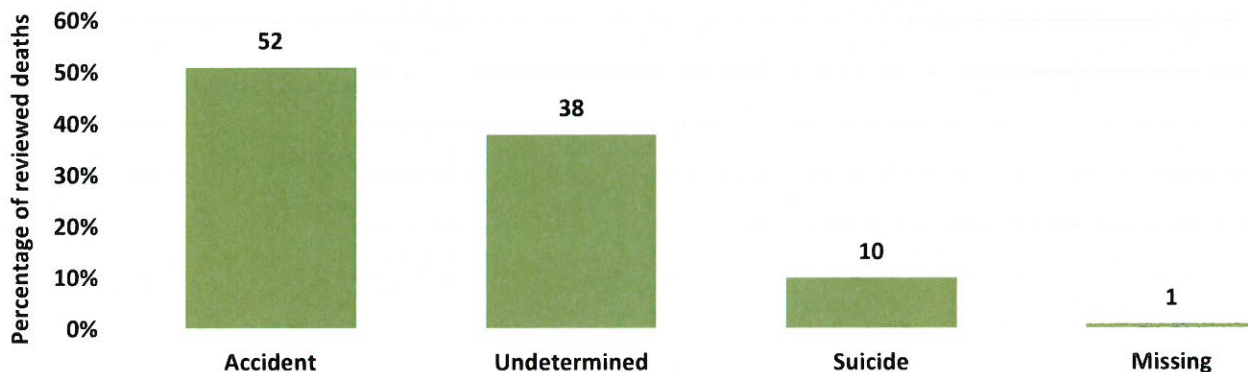


FINDINGS N=101

See Figure 4

- The majority of the reviewed cases were accident related, 51%.
- 38% of all reviewed deaths were categorized as undetermined.
- Suicide accounted for 10% of all reviewed deaths.

**Figure 4. 2015 Manner of Death:
Percentage of Deaths among Reviewed Cases
N=101**



Reviewed Infant and Child Deaths: Cause of Death

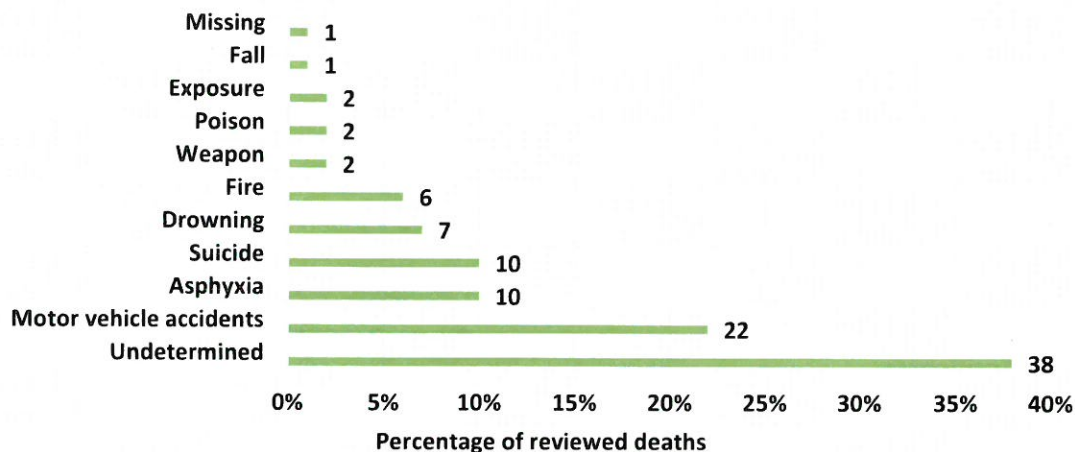
Cause of Death is the reason of a child death. A few examples include motor vehicle crash, drowning, poisoning, or fire related. The cause of death may be further classified as underlying (injury that initiated the events resulting in death) or immediate (final condition resulting in death).

FINDINGS

N=101

- Of the reviewed cases, motor vehicle accidents (MVA) were the leading cause of accidental death (22%) (Figure 5).
- Asphyxia was the second leading cause of accidental deaths (10%) (Figure 5).

Figure 5. 2015 Causes of Death: Percentage of Infant and Child Deaths among Reviewed Cases
N=101



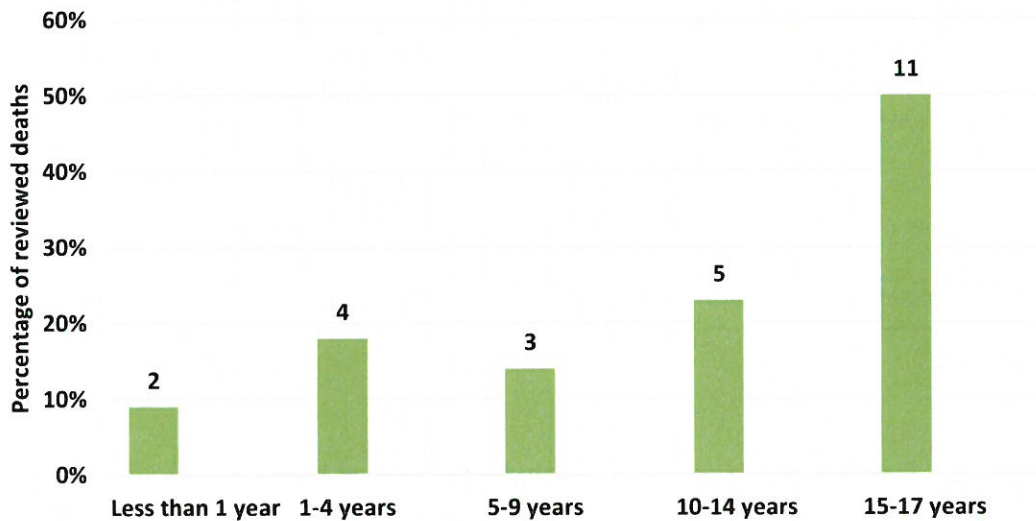
Alarming News

Traffic fatalities increased by 7 percent from 2014 to 2015 (32,744 to 35,092) for the United States. Thirty-five States showed an increase in traffic fatalities between 2014 and 2015. They accounted for an additional 2,612 fatalities from 2014 to 2015. The majority of people killed in the United States in 2015 traffic crashes were drivers (50%), followed by passengers (18%), pedestrians (15%), motorcyclists (14%), and pedal cyclist (2%). In 2015 there were 1,886 young drivers 15 to 20 years old who died in motor vehicle crashes, an increase of 9 percent from 1,723 in 2014. Additionally, an estimated 195,000 young drivers were injured in motor vehicle crashes in 2015, an increase of 14 percent from 170,000 in 2014. Arkansas had a 10% increase in traffic fatalities between 2014 and 2015.

Source: 2015 State Traffic Data Traffic Safety Fact Sheet. 2015 Young Drivers Traffic Safety Fact Sheet. Accessed at <https://crashstats.nhtsa.dot.gov>, August, 2017.

Reviewed Infant and Child Deaths: Motor Vehicle Accidents-Demographics

Figure 6. 2015 Motor Vehicle Accidents: Age Distribution
N=22



Findings
N=22

- Eleven of 22 (50%) motor MVA-related deaths occurred among teenage drivers and passengers ages, 15-17 years old (Figure 6).
- Males accounted for 68% (15) of MVA-related deaths (Figure 7).
- MVA-related deaths among Caucasians was highest at 77% (17) (Figure 8).

Figure 7. 2015 Motor Vehicle Accidents: Gender Distribution
N=101

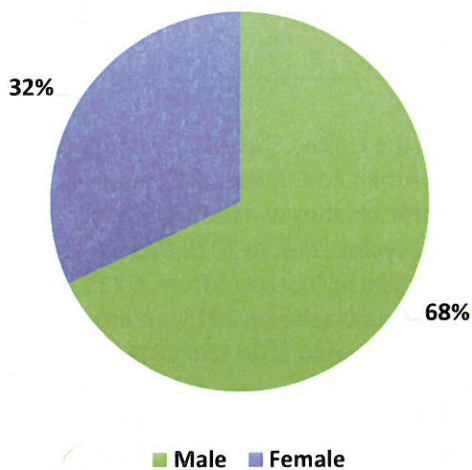
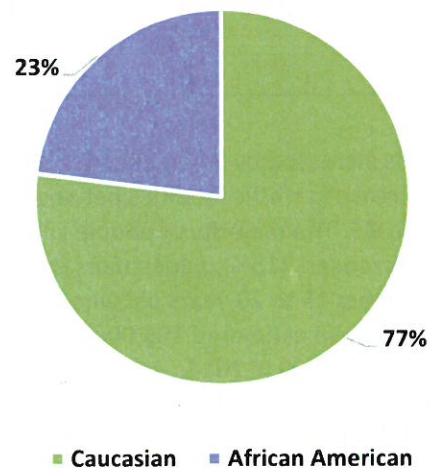


Figure 8. 2015 Motor Vehicle Accidents: Racial Distribution
N=101



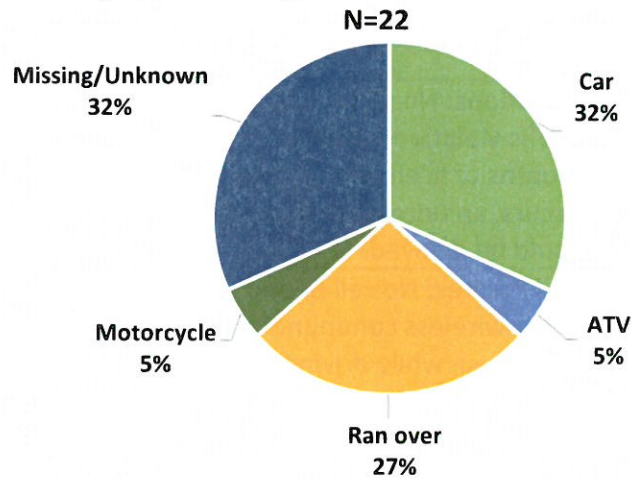
Reviewed Infant and Child Deaths: Types of Motor Vehicle Accidents

Findings

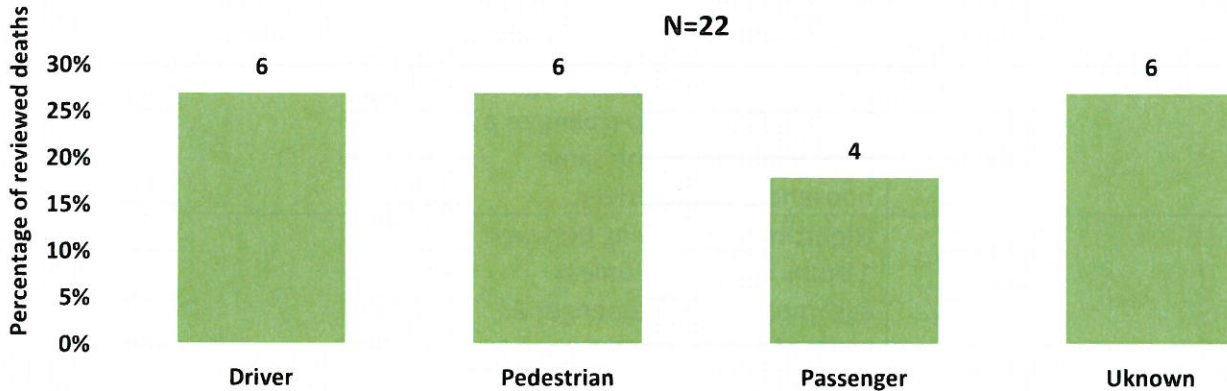
N=22

- Car accidents accounted for 32% of MVA-related infant and child deaths. ATV and motorcycle crashes accounted for 5% each of MVA-related infant and child deaths (Figure 9).
- A child was ran over in twenty seven percent of MVA-related deaths (Figure 9).
- Among the 22 motor vehicle deaths, 27% were drivers, 27% pedestrians and 18% were passengers (Figure 10). In regards to the position of the child at time of death 27% were unknown or missing.
- Restraint use needed was indicated among 10 of the 22 MVA-related infant and child deaths, 3 children were restrained and 7 were unknown.

Figure 9. 2015 Type of Motor Vehicle Accidents



**Figure 10. 2015 Motor Vehicle Accidents:
Position of Child at Time of Death**



Reviewed Infant and Child Deaths: Types of Motor Vehicle Accidents (continued)

Arkansas Graduated Driver Licensing Law, July 31, 2009

Table 1

Learner's License Must pass vision and knowledge test.	Intermediate License Must already have a learner's license.*	Unrestricted License
Minimum age 14-15 years old	Minimum age 16-17 years old	Minimum age 18 years old
Supervision: Driver accompanied by someone at least 21 years of age or older at all times.	Supervision: Driver accompanied by someone at least 21 years of age or older at all times. For six months if first licensure	
Seat Belts: Use required.	Seat Belts: Use required.	Seat Belts: Use required.
Violations: No serious accident or traffic violation(s) within six months of licensure. If violation occurs, an unrestricted license could be delayed.	Violations: No serious accident or traffic violation(s) within six months of licensure. If violation occurs, an unrestricted license could be delayed.	Violations: No serious accident or traffic violation(s) for at least 12 months prior to application.
Cell Phones: No cell phone or other wireless communication device use while driving.	Cell Phones: No cell phone or other wireless communication device use while driving.	Cell Phones: Cell phone or wireless communication is to be used hands free ONLY , while driving until driver is over 24 years of age.
	Passengers: No more than one unrelated minor passenger allowed unless there is an adult 21 years of age or older in the front passenger seat vehicle. Unrelated minor passengers is a person under 21 years of age who is not a sibling, step-sibling or a child who lives in the same household as the driver.	
	Nighttime: No driving between 11 p.m. and 4 a.m. unless accompanied by passenger 21 years of age or older, driving to and from a school activity, church-related activity or a job.	

Source: Arkansas State Legislature, Arkansas Code 27-37-702

*Mandatory holding period of six months

Reviewed Infant and Child Deaths: Types of Motor Vehicle Accidents (continued)

Table 1 represents the characteristics of Arkansas' Graduated Driver Licensing Law. Table 2 displays the current best practices for graduated driver licensing according to the Insurance Institute for Highway Safety (IIHS).

Source: http://www.iihs.org/iihs/topics/laws/gdl_calculator?state=AR on 8/21/2017

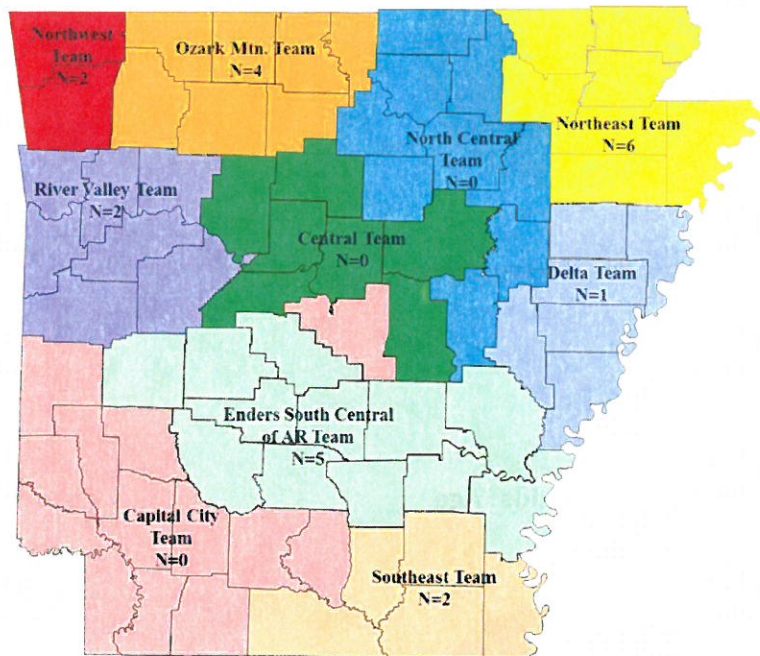
Table 2. IIHS Best Practices for Graduated Drive Licensing, US, 2017

Best Practice	Implemented in Arkansas
Permit age at 16	No
70 supervised practice hours	No
Licensing age of 17	No
8 p.m. night driving restriction	No
No teen passengers	No

**Number of Fatal Infant and Child MVA Cases per Team, AR, 2015
N=22**

Arkansas 2017 Strategic Highway Safety Plan for Younger Drivers:

- Increase enforcement of young driver laws.
- Revise or add additional legislation for young drivers.
- Increase awareness of risks to young drivers amongst teens, college age students, parents, and community members.



Reviewed Infant and Child Deaths: Suicide

Findings

N=10

- In 2015 there were 15 suicide deaths among children under 18 years of age, 10 of those deaths were reviewed.
- In 2015, Firearms accounted for 70% (7) and strangulation accounted for 30% (3 cases) of all suicides (Figure 12).
- Suicide deaths in 2015 occurred predominantly among males (60%) (Figure 13).
- In 2015, 90% of suicide deaths were among children ages 15-17 years old (Figure 14).
- One hundred percent of 2015 suicide deaths occurred among Caucasians (Figure 15).

Figure 12. 2015 Suicide: Injury Type, N=10

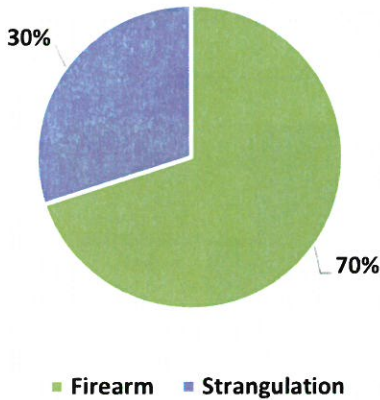


Figure 13. 2015 Suicide: Gender Distribution N=10

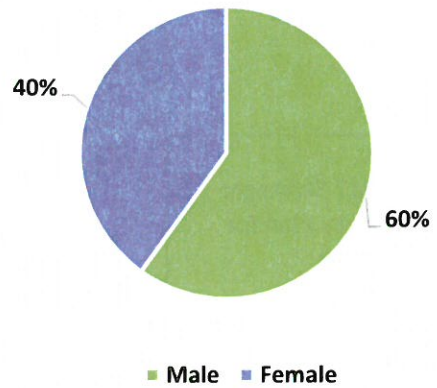


Figure 14. 2015 Suicide: Age Distribution, N=10

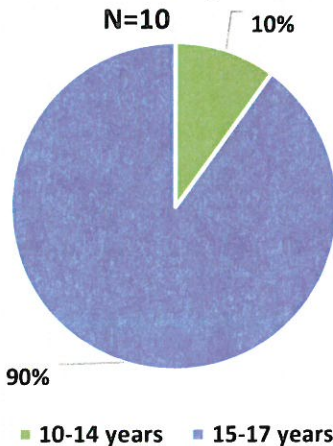
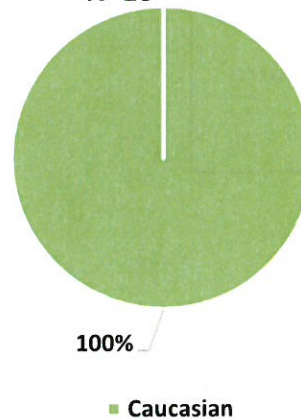


Figure 15. 2015 Suicide: Racial Distribution, N=10



Reviewed Infant and Child Deaths: Suicide (Continued)

Work in the Community: Preventing Suicide

- **Arkansas Department of Health:**
 1. Suicide Prevention Month Proclamation on 9/6/17.
 2. Collaborating with Arkansas Department of Education to promote the use of Kognito in schools.
 3. Provide Safe Talk trainings throughout the state.

- **American Foundation for Suicide Prevention:**
 1. Bring Hope: Suicide Loss and Support Training (for funeral directors)-Bentonville on 9/8/17.
 2. Northwest AR Out of the Darkness Walk- Bentonville on 9/10/17.
 3. AFSP funded guest Lecture series presenter Dr. Goldston (Clinton School of Public Service, Grand Rounds Arkansas Department of Health, Arkansas Children's Hospital)
 4. Dr. Goldston presented at ADH Grand Rounds and at ACH after Grand Rounds on 9/14/17
 5. ASIST Training at Arkansas Institute on 9/22/17-9/23/17.
 6. Texarkana Out of the Darkness Walk- Texarkana on 9/23/17.

- **ICDR:**
 1. Employ consistent responses to children at risk by supporting ongoing training efforts of the ADH: Local ICDR teams assisting with promotion of Kognito to school districts, within their team region. Participating in and promoting Safe Talk trainings.
 2. Reduce access to means by supporting Drug Take Back: Creating and distributing
 - a. Drug Take Back posters, detailing appropriate items for disposal and local take back locations, for display at drug take back locations, pharmacies, and elder care facilities.
 - b. Yard signs to increase visibility of local drug take back locations.
 - c. Large awareness banners for larger communities to promote drug take back day event.
 3. Use of high visibility media to encourage help seeking behaviors: Suicide hotline promoted through billboards in rural areas and foot walkers and mirror clings in high schools.

Reviewed Infant and Child Deaths: Asphyxia, Drowning, and Fire

Asphyxia occurs when oxygen is blocked from entering lungs resulting in death. This can be the result of obstruction such as food or blankets over the face, or from toxic air, among other things.

In 2015, 10 asphyxia related deaths were reviewed:

- Under 1 year of age (80%)
- Male (60%).
- Caucasian (60%).
- Unsafe-sleep related (60%)

Prevention:

For infants safe sleep practices can reduce infant fatalities. Follow the ABC's of safe sleep. A baby should be placed alone, on their backs and in a crib. Choking deaths for children under 5 years of age can be prevented by removing small objects from reach, cutting their food into tiny pieces, removing bibs before bedtime or nap time, and providing age appropriate toys.

Source: <https://www.safekids.org/tip/choking-and-strangulation-prevention-tips> , August 2017.

Drowning in young children typically occurs in pools, toilets or large buckets whereas drowning in older children often occurs in open bodies of water like rivers and lakes.

In 2015, 7 drowning related cases were reviewed:

- Male (71%).
- Caucasian (71%)
- The youngest child was 16 months old.

Prevention:

Never leave a young child alone. Supervision by a responsible adult is the best way to prevent drowning in children. Install a fence at least 4 feet high around all four sides of a pool. Make sure the pool gates open out from the pool, and self-closes and self-latch at a height children can't reach. Avoid inflatable swimming aids such as "floaties", they are not a substitute for approved life jackets. Empty and over turn buckets. Children should wear lifejackets in pools and open bodies of water.

Source: <https://www.aap.org>, August 2017

ICDR Team Recommendation into action:

NE Team addressed drowning occurring within Craighead Co. by recommending a pool fencing ordinance. The recommendation was moved into action and the city passed an ordinance requiring fencing around all public swimming pools.

Fire: According to National Fire Protection Association, one quarter of home fire deaths were caused by fires that started in the bedroom (source: www.nfpa.org, August 2017).

In 2015, 6 fire related cases were reviewed:

- 100 % of fire deaths were male.
- Caucasian (83%).
- Children ages 5-9 years accounted for 50% (3) of fire related deaths, children ages 1-4 years 33% (2), children 10-17 17% (1).
- The youngest child was 14 months old.

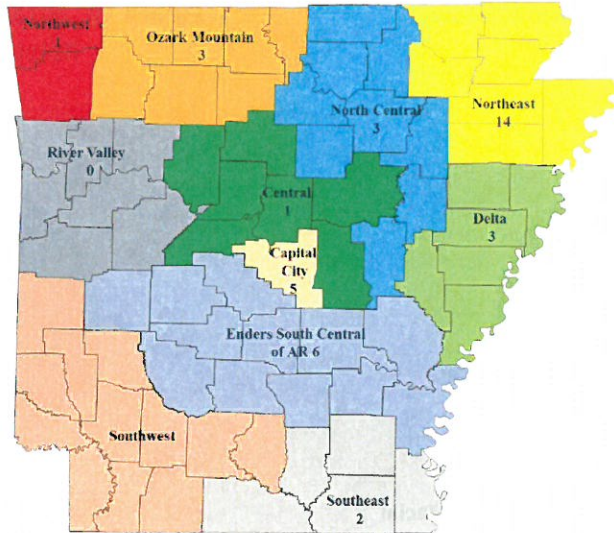
Prevention:

Install smoke alarms in furnace and sleep areas. Test batteries once a month. Do not smoke in bed and keep matches and lighters away from children. Do not wear loose-fitting clothing near a stove, fireplace, or open space heater. Place fire extinguishers around the home where the risk of fire is greatest – in the kitchen and furnace room, and near the fireplace.

Source: <https://healthychildren.org/English/safety-prevention/all-around/Pages/Fire-Safety-Planning-Saves-Lives.aspx> , August 2017.

Reviewed Infant and Child Deaths: Undetermined

Number of 2015 Reviewed Infant and Child Undetermined Cases per Team N=38

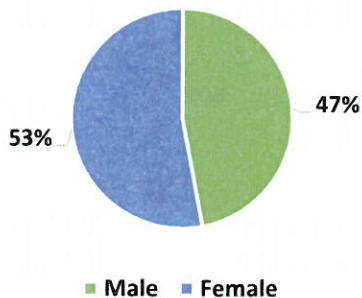


Findings N=38

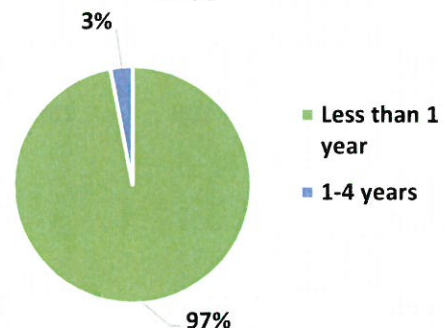
An undetermined death is ruled after a thorough investigation, both legal and medical, has been conducted and there is no conclusion as to manner of death.

- 38 cases reviewed were classified undetermined for 2015, among those, 97% (37 cases) were for children less than 1 year of age.
- Females accounted for 53%.
- Caucasian accounted for 66% (25), African American 32% (12) and multi-racial 3% (1) of reviewed undetermined cases.
- Eighty seven percent (33) of undetermined reviewed cases were resulted in unsafe sleep environments.
- In sleep related death cases the location of where the infant was sleeping is often a factor in death. 68% (15) of these deaths occurred in an adult bed.
- The youngest child was 3 days old.

**Figure 16. 2015 Undetermined: Gender Distribution
N=38**



**Figure 17. 2015 Undetermined: Age Distribution
N=38**



Reviewed Infant and Child Deaths: Undetermined (Continued)

Figure 18. 2015 Undetermined: Racial Distribution
N=38

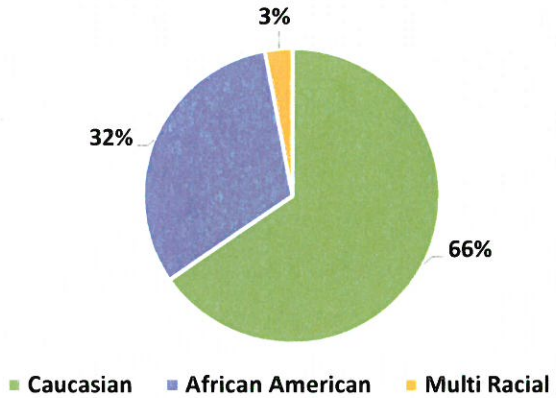


Figure 19. 2015 Undetermined: Sleep Related Incident
N=38

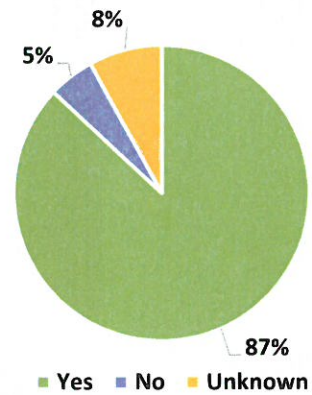
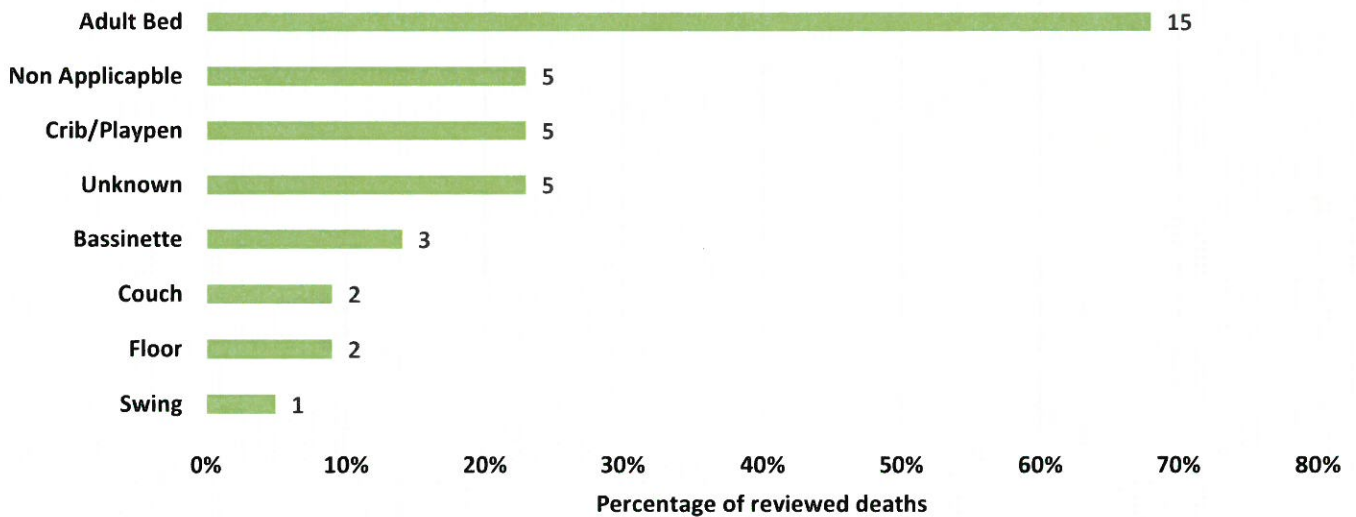


Figure 20. 2015 Undetermined: Incident Sleep Place
N=38



Reviewed Infant and Child Deaths: Best Practice

Best Practice

- Place the baby on his/her back on a firm sleep surface such as a crib or bassinet with a taut sheet.
- Avoid use of soft bedding, including crib bumpers, blankets, pillows and soft toys. The crib should be bare.
- Share a bedroom with parents, but not the same sleeping surface, preferably until the baby turns 1 but at least for first six months.
- Avoid baby's exposure to smoke, alcohol and illicit drugs.

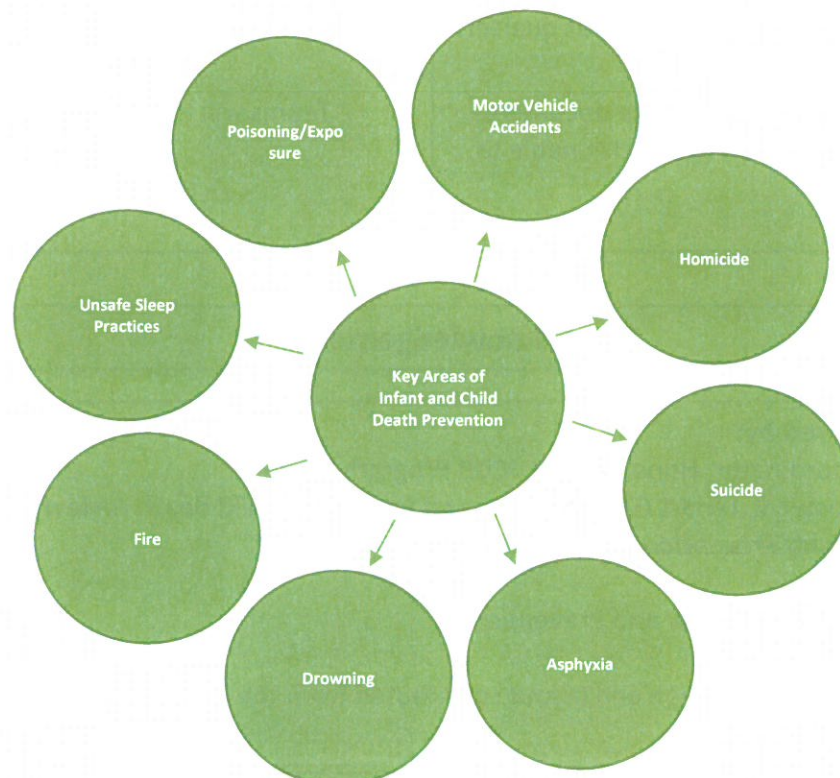
Source: <https://healthychildren.org/English/news/Pages/AAP-Announces-New-Safe-Sleep-Recommendations-to-Protect-Against-SIDS-Sleep-Related-Infant-Deaths.aspx>

Goal of the Infant and Child Death Review Program

The ICDR Program remains committed to the goal of reducing preventable child death in Arkansas. This effort requires the steadfast commitment of all local team members, ICDR Program staff staying abreast of best practices regarding child death reviews, and the assistance of partner organizations for expertise in prevention strategies.

Specific goals for the ICDR Program include:

- Continued monitoring and training of all local teams and members
- Provide resources for specific team recommendations and monitoring of teams carrying out recommendations.
- Identify and implement additional targeted prevention campaigns with local team support.



Team Recommendation Results: Recruiting, Team Support, and Improving Data

During the 2017 ICDR Annual Training and follow up local team meetings, teams were asked for recommendations based on what team members believed would benefit their team to become more effective with their case reviews and prevention recommendations. The following recommendations were made and the outcome status of those recommendations.

Team Recommendation	Outcome
Recruit more agencies to participate on ICDR Teams	Recruitment training for SE ICDR Team 7/19/17 Recruitment training for new Southwest Team 9/25/17
Recruit Prosecuting Attorney for NC ICDR Team	Coroner invited Prosecuting Attorney from Independence County to the team
Create a new member welcome packet. To provide information for new members of teams.	Welcome packet created and sent to all local team directors/coordinators September 2017
Team member cheat sheet of information to bring for case reviewed based on agency	Records/Documents by Agencies created and sent to all local team directors/coordinators September 2017
Increase SUIDI training opportunities for EMT's, Law Enforcement, and other agencies	Grant funding by Commission on Child Abuse, Rape and Domestic Violence will provide 3 SUIDI trainings a year. Two trainings in north Arkansas and one training in south Arkansas.
Teams requested that ICDR program send all cases for the year at one time rather than 3-4 per quarter.	2016 cases sent to teams after 2015 cases were completed
Centralized secured data base to house documents when a representative from an agency is unable to attend	Teams will have to supply their own data base system to house information.

Acknowledgements

This report was prepared by:

Dawn Porter, ICDR Coordinator, Hope Mullins, ICDR Program Manager

Resource: Wirtz SJ, Foster V, Lenart GA: **Assessing and improving child death review team recommendations.** *Injury Prevention* 2011; 17:i64-i70.

Data Source:

National Center for Fatality Review and Prevention

Acknowledgement:

Arkansas ICDR Annual Report design and layout contributed from the Mississippi Child Death Review Panel 2015 Annual Report

Appendix A: Safe Sleep Campaign Results (FY 17)

Infant and Child Death Review Statewide Prevention Campaign: the ABC's of Safe Sleep

Background

According to the Arkansas (AR) Infant and Child Death Review (ICDR) Program, 94% of the reviewed infant (<1 year old) deaths from 2010-2015 listed the sleeping environment as a contributing factor in the death. The AR ICDR Program, supported by the Injury Prevention Center at AR Children's Hospital and the Family Health Branch of the AR Department of Health, has responded with a statewide campaign promoting the "ABC" message for infant safe sleep: Alone, Back, Crib.

Methods

A planning committee was conducted with representatives of local ICDR teams to prioritize messages and identify dissemination strategies and outlets. The campaign consists of five elements: kick off, print materials, billboards, public transportation display, and radio advertising and social media. A graphics company created materials that were vetted through project staff for accuracy, diversity, and appeal. Materials are at or below 5th grade reading level. A pre/post campaign survey was administered to determine effectiveness of the campaign in changing knowledge, attitudes, and beliefs and the extent to which the campaign had a statewide reach.

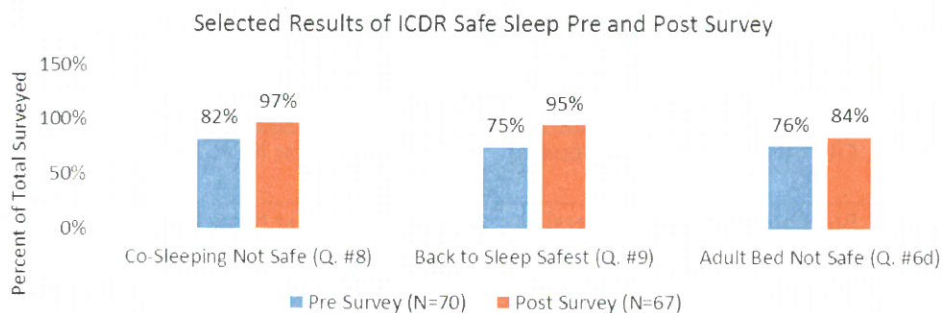
Results

The ICDR Safe Sleep campaign was initiated in October 2016 and concluded December 2016. A timeline of the campaign with corresponding results are detailed below.

A proclamation was signed by Governor Hutchinson on September 28, 2016 designating October as SIDS and Safe Sleep Awareness Month, followed by a press conference on October 28th with local media outlets providing coverage.

Survey Results

Seventy participants from 7 out of the 10 local ICDR team regions completed the 10-item- pre-campaign survey in July and August 2016. Of those surveyed, 82% believed it is not safe to sleep in the same bed as an infant (survey Q. #8), 75% believe infants are safest when sleeping on their back (survey Q. #9), and 76% identified an adult bed as an unsafe sleep surface (survey Q. #6d). In January and February 2017, the 10 item survey was repeated in 4 of the 10 local ICDR team regions. Of the 67 participants that completed the post-campaign survey, 97% believed it is unsafe to sleep in the same bed as an infant; 95% believe infants are safest when sleeping on their back; and 84% identified an adult bed as an unsafe sleep surface. These three elements show an increase in knowledge about the safest way for an infant to sleep.



Other survey results include: 28% surveyed after the campaign reported hearing or seeing some safe sleep messaging in a state office (i.e., county health units, WIC offices, DHS offices, etc.), as opposed to only 2% in the pre survey. About 16% surveyed initially reported hearing safe sleep messaging from their pediatrician or family doctor, however, it was

improved to 42% after the campaign period. Lastly, pre survey results indicated that only 7% had received any type of safe sleep brochure 90 days prior to being surveyed, and no one indicated that they've seen any safe sleep posters within 90 days. After the campaign, 58% indicated receiving a safe sleep brochure and 42% noted seeing a poster relaying the safe sleep message within the past three months.

Print Material

During the campaign, over 10,000 brochures, 10,000 door hangers and 1,500 posters were distributed to County Department of Human Services and Special Supplemental Nutrition Program for Woman, Infants and Children (WIC) offices, Department of Health local units, Children’s Advocacy Centers (CAC), child care facilities, and doctors’ offices and clinics. With the help of the AR Department of Health’s Hometown Health Improvement (HHI) network, we were able to distribute materials in all 75 counties of the state.

Billboards

Nineteen billboards were displayed from October 2016 to December 2016 to an anticipated rate of 258,000 citizens per day. Billboards were displayed in areas that have some of the highest rates of sleep-related deaths based on ICDR data. Billboard locations included:

County	City	ICDR Team
Washington County (3 locations)	Springdale	Northwest AR ICDR Team
Boone County (2 billboards)	Harrison	Ozark Mountain ICDR Team
Independence County (4 billboards)	Batesville	North Central AR ICDR Team
Pulaski County (2 billboards)	Little Rock	Capital City ICDR Team
Saline County (4 billboards)	Benton-Bryant	South Central ICDR Team
Faulkner County (2 billboards)	Greenbrier	Central AR ICDR Team
Garland County (2 billboards)	Hot Springs	South Central ICDR Team

Public Transportation Advertising

Public transportation ads, including city buses (interior and exterior), shelters and benches, were used in 4 regions with local bus services allowing the message to be mobile and viewed by audiences that may not visit outlets with print materials.

City Transit Company	Type of Ad	ICDR Team	County Targeted
Fort Smith Transit			
	City Bus Ads-exterior (4 buses)	River Valley ICDR Team	Sebastian County
	Bus Bench Ads (5 benches)	River Valley ICDR Team	Sebastian County
Intra City Transit			
	Bus Bench Ads (5 benches)	South Central ICDR Team	Garland County
Ozark Regional Transit			
	City Bus Ads-exterior (4 buses)	Northwest ICDR Team	Washington County Benton County
	Bus Shelter Ads (6 shelters)	Northwest ICDR Team	Washington County Benton County
Rock Region Metro			
	City Bus Ads-interior (50 buses)	Capital City ICDR Team	Pulaski County
	Bus Bench Ads (5 benches)	Capital City ICDR Team	Pulaski County

Social Media

Social media was used to reach millennial-aged parents, since our survey determined that social media was the preferred method that young parents used to receive parenting education. The ICDR Program was able to collaborate with other organizations, committees, and advocacy groups, such as the Collaborative Improvement and Innovation Network to Improve Infant Mortality (COIIN) and Brothers United, to promote the ABC's of Safe Sleep through their outlets as well.

Radio

Sixty second and thirty second Public Service Announcements (PSAs) were created, allowing the "ABC" message to be reinforced through the radio. The PSAs were integrated into the commercial breaks as "fillers" when spots became available. A diverse group of stations were utilized to be able to reach several audience types with the messaging. Local stations continue to utilize the PSA as often as possible, continuing to promote the ABC's of Safe Sleep.

Station	Cities	County	Local Team	Format
102.1 FM	Sherwood	Pulaski	Capital City	Urban adult contemporary
102.5 FM	Cabot	Lonoke	Central	Gospel
102.9 FM	Sheridan	Grant	South Central	News/Talk
107.7 FM	Wrightsville	Pulaski	Capital City	Top 40 (CHR)
1090 AM	Little Rock	Pulaski	Capital City	Brokered/Christian
92.3 FM	Pine Bluff	Jefferson	South Central	Urban
920 AM	Little Rock	Pulaski	Capital City	Sports
98.5 FM	Little Rock	Pulaski	Capital City	Adult contemporary
101.7 FM	Yellville	Marion	Ozark Mountain	Oldies
1240 AM	Mountain Home	Baxter	Ozark Mountain	Gospel
97.9 FM	Mountain Home	Baxter	Ozark Mountain	Country

Lessons Learned

First time prevention campaigns usually encounter barriers during implementation. Below are key barriers and strategies we implemented to alleviate these barriers and action plans to eliminate these barriers during the next fiscal year.

Barriers Encountered	How Barriers were Facilitated	Action Plan to Eliminate Similar Barriers in the Future
Lack of team engagement during the print material dissemination process. This may have been due to lack of understanding of risks and mitigating factors associated with safe sleep.	The ICDR Program staff hand delivered materials to several locations for dissemination to the public. Regional managers with the ADH Hometown Health Improvement (HHI) Network assisted with distributing print materials within their respective counties.	Provide education on risk factors and strategies for prevention of suicide at the annual ICDR meeting. In future campaigns, the ICDR Program will assemble a taskforce of selected local team members that have expressed an interest in helping with the dissemination process.
Lack of team member participation in the identification of effective billboard locations.	A local advertising agency was recommended by ACH PR that assisted the ICDR Program with the selection of eligible and effective billboard locations.	The agency that was used in the previous campaign, has since expanded their selection of billboard locations and the ICDR Program is immediately aware of potential billboard locations throughout the state.
Graphic design company that was used was not immediately able to maintain our initial timeline.	The timeline for the proofing of all graphics was extended and verbal and email communication was maintained to all vendors.	Potential to purchase graphic design tools and develop materials utilizing staff within the department. Begin initial design discussions with ACH media relations or outside design companies as soon as funding had been approved allowing for a more flexible design schedule.
Due to a new contracting signing process at ACH, execution of contracts for purchase of billboards/bus ads and PSAs took longer than anticipated.	The senior staff of the Injury Prevention Center led the efforts in following updated procedures for contracts.	Begin processing of contract approval several months in advance of needed deadlines.

Conclusion

The AR ICDR Program was able to effectively disseminate a prevention campaign through the use of several different outlet methods, allowing for our message to reach a diverse group of community members. The campaign provided a consistent message that was readily understood and easily implemented. The ABC's of Safe Sleep message and materials continue to circulate in many of the outlets, even after designated campaign end date. We hope to continue to provide the education and messaging that is needed to help reduce the risk of infants dying from sleep related incidents and to conduct statewide campaigns focused on the prevention of other leading causes of death.

