



Arkansas Infant and Child Death Review Program

FY 18 report on deaths occurring in 2016

Compiled by:

Arkansas Infant and Child Death Review Program

Arkansas Children's Hospital Injury Prevention Center

Funding provided by:

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



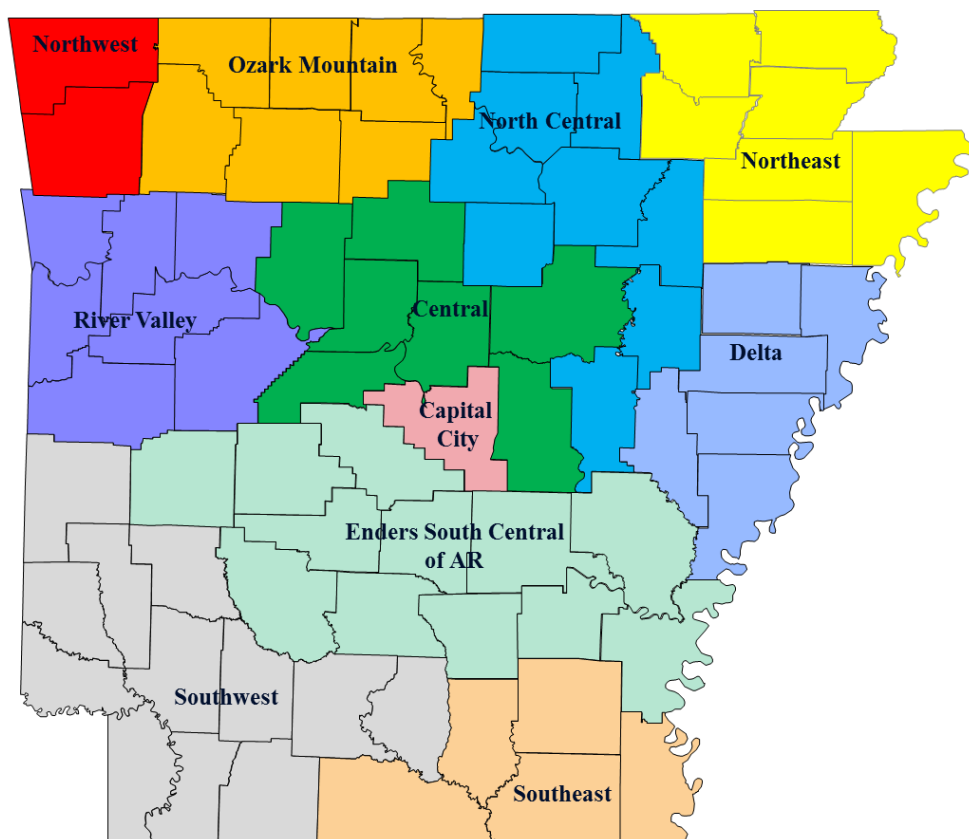
Key notes about this Report

Arkansas Infant and Child Death Review Program Vision and Mission Statement

Vision Statement: Eliminate all preventable infant and child deaths in Arkansas.

Mission Statement: To review all unexpected infant and child deaths in the state of Arkansas. These reviews result in the development of interventions and recommendations through multidisciplinary team collaboration, community education and policy.

- Previous annual reports were compiled on a calendar year, rather than fiscal year, resulting in duplicate death data being reported. For clarity, this annual report is being reported on a fiscal year, matching the funding stream, and is only covering cases in which the child death occurred in 2016.
- Although coding guides (ICD-10) use the term “accident” as a manner of death experts in the field refer to injuries as unintentional. The word accident imparts a sense that nothing can be done when in reality injuries are predictable and preventable. This report will utilize accident as appropriate for this report.
- Southwest team was formed in FY 18 and began reviewing cases in October, 2017.



Introduction

The Infant and Child Death Review Process: Purpose and Data

KEY FINDINGS

- In 2016, there were 470 child deaths between the 0-17 years of age
- Among the 470 all-cause deaths, 183 (38%) cases were eligible for review by local ICDR teams.
- In 2015, 55% of eligible cases were reviewed. In 2016, 78% of eligible cases were reviewed

OF 2016 CASES REVIEWED (N=141)

- Thirty nine percent were accidents, with motor-vehicle crashes the leading cause of accidental death.
- Forty-six percent of all preventable deaths were among children ≤ 1 years of age, followed by 15-17 years of age with 24%.

Overview: Established in 2010, the Arkansas (AR) Infant and Child Death Review (ICDR) Program has expanded to 11 regional teams that review unexpected deaths of Arkansas children under the age of 18. The teams cover all 75 Arkansas counties, 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 prevent future deaths in similar circumstances.



Case Selection: Under ACT 1818 of 2005, cases that are reviewable meet 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.).
1. Death was due to Sudden Infant Death Syndrome (SIDS)
2. Death was due to an unknown cause
3. Death is not under criminal investigation or being prosecuted

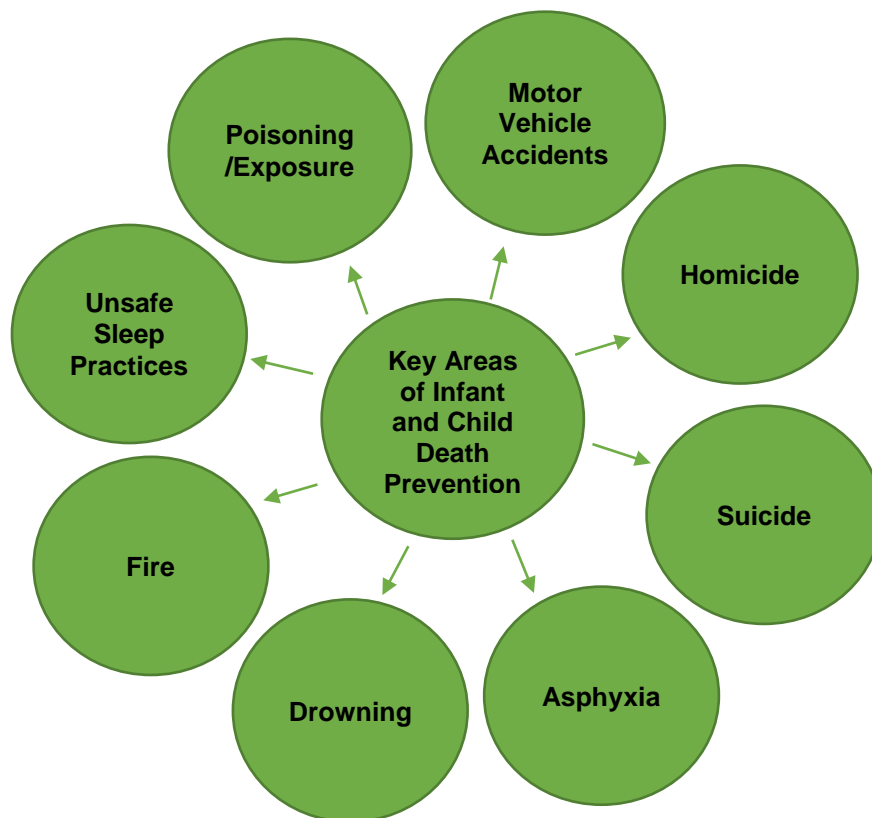
CDR Data: Information collected from multiple disciplines at a case review are entered into the National Center for Fatality Review and Prevention (NCFRP) data base. The data is analyzed to generate an overview and in-depth annual report on the cases reviewed by the local ICDR teams. Key data entered 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.



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:

- Continue 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.



Reviewed Infant and Child Deaths: Demographic Characteristics

During FY 18, teams reviewed child deaths that occurred in 2016. Teams had a total of 180 cases that were potentially reviewable. Of those 180 cases, 17 were in adjudication and are not currently reviewable, and 22 were not reviewed. For the remainder of the report, data has been compiled on the 141 cases that have been reviewed.

Findings

N=141

- Among the 2016 reviewed deaths, 111 (79%) were Caucasian and 27 (19%) were African American (Figure 1).
- Infants less than 1 year of age accounted for 73 (53%) of reviewed deaths and children ages 15-17 years old accounted for 29 (21%) of reviewed deaths (Figure 2).
- Ninety-two (65%) reviewed deaths were males and 49 (35%) reviewed deaths were females (Figure 3).

Notable Finding: Comparing 2016 reviewed deaths to 2015 showed an increase in Caucasian deaths and a decrease in African American deaths.

**Figure 1. Reviewed Infant and Child Deaths:
Racial Distribution
2015 vs 2016**

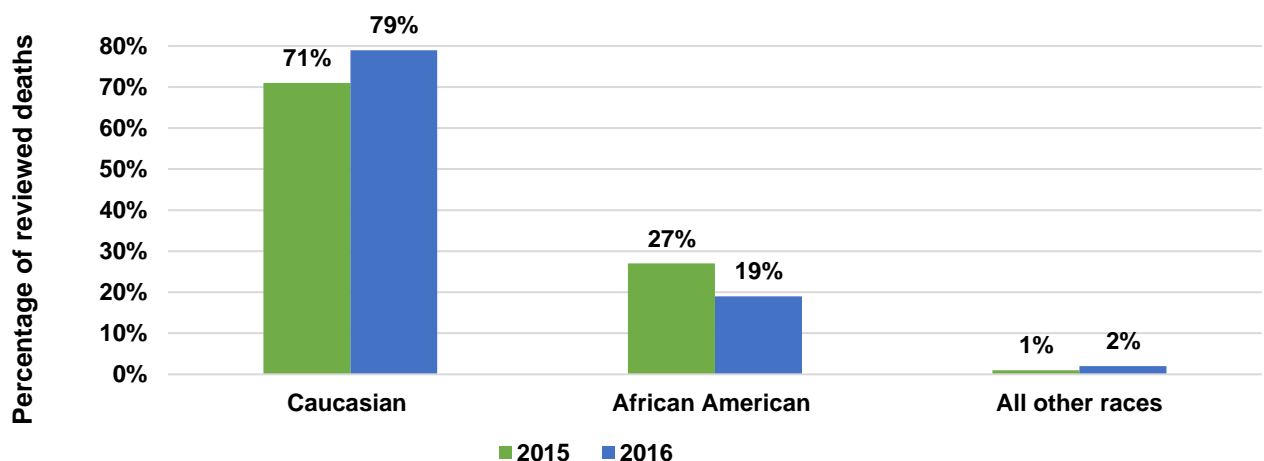


Figure 2. Reviewed Infant and Child Deaths: Age at Time of Death, 2016
N=141

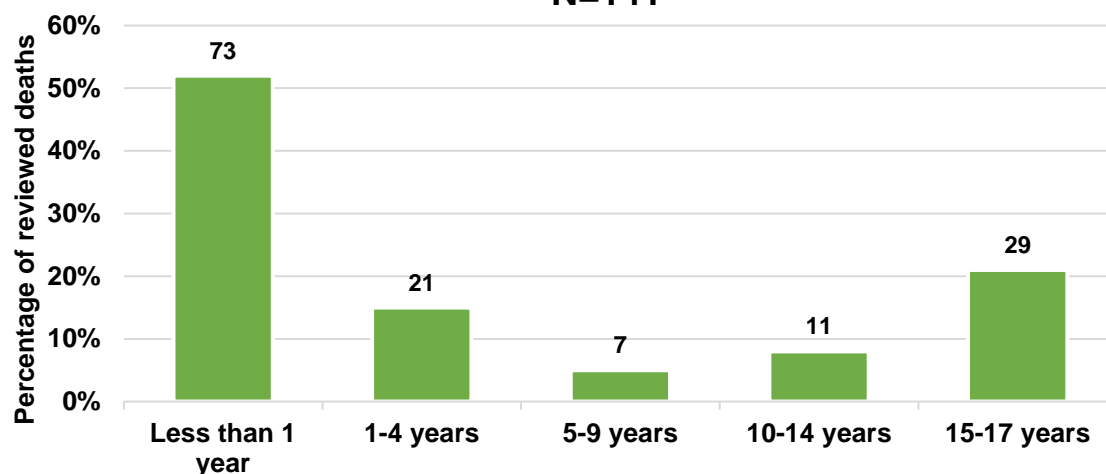
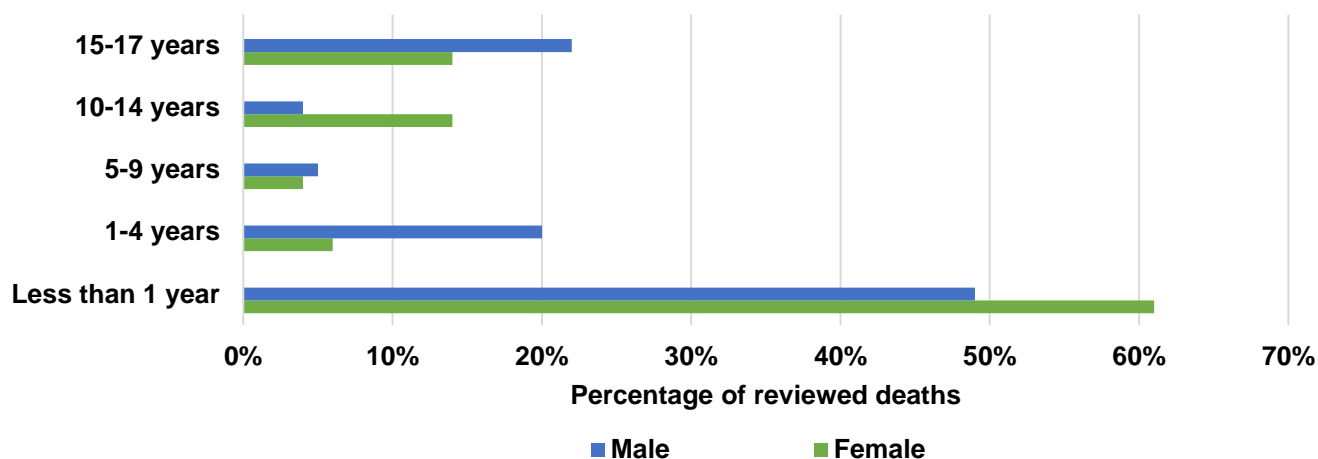


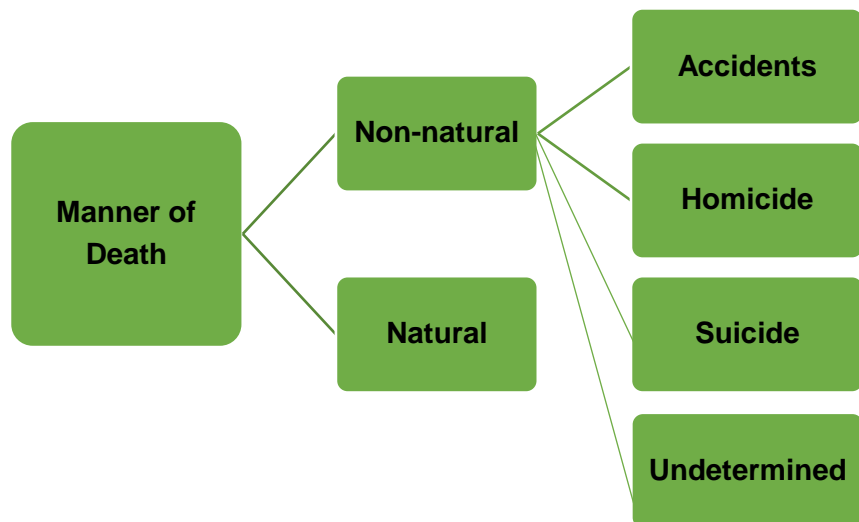
Figure 3. Reviewed Infant and Child Deaths: Age and Gender Distribution, 2016
N=141



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.

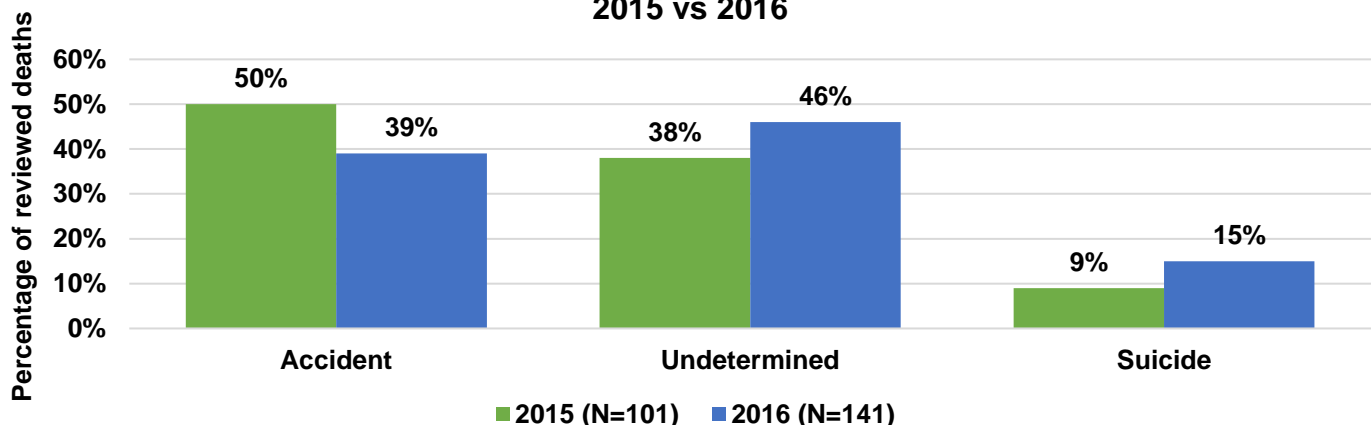
Note: While the cause of death may be known (e.g., firearm related), the manner of death may still be undetermined (e.g., accident, homicide, or suicide).



FINDINGS

- Comparing 2016 vs 2015, there was an 11% decrease in accidental deaths, 8% increase in undetermined deaths, and a 6% increase in suicide deaths that were reviewed (Figure 4).

**Figure 4. Manner of Death:
Percentage of Deaths among Reviewed Cases
2015 vs 2016**



Reviewed Infant and Child Deaths: Cause of Death

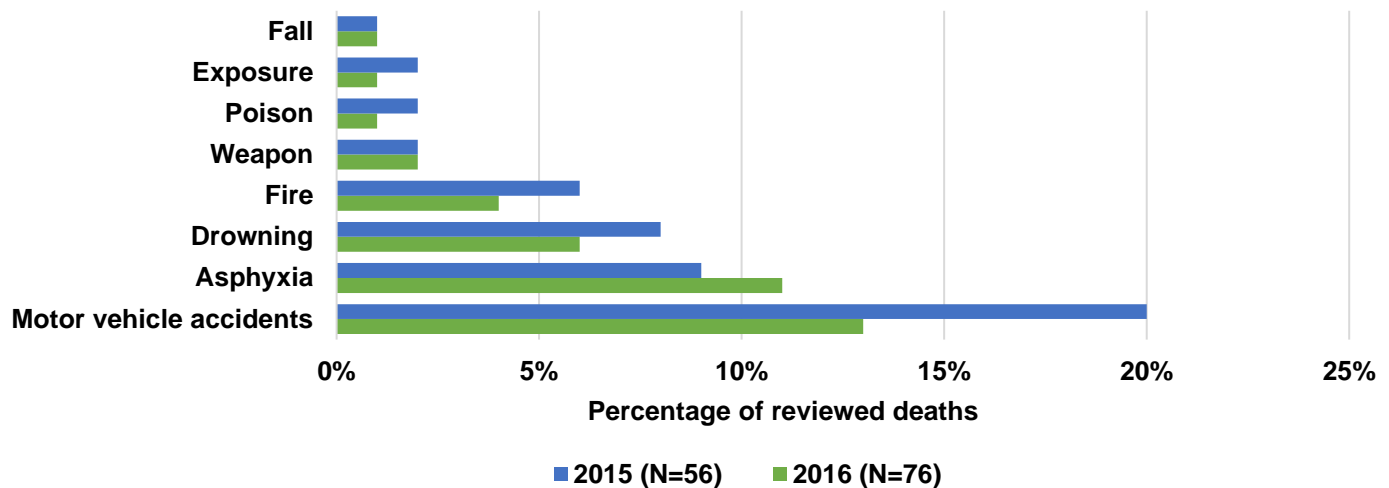
Cause of Death is the reason a child died. A few examples include motor vehicle crash, drowning, poisoning, or fire related. The cause of death may be further classified as underlying (injury that initiated the events resulting in death) or immediate (final condition resulting in death).

FINDINGS

- Of the reviewed 2016 cases, motor vehicle accidents (MVA) were the leading cause of death (13%) (Figure 5).
- Asphyxia was the second leading cause of 2016 accidental deaths reviewed (11%) (Figure 5).

Notable findings: Compared to 2015 data, there was a 2% increase in Asphyxia deaths reviewed in 2016. There were decreases in poison (<1%), fire (<2%), drowning (<2%), and MVA (<7%) deaths reviewed in 2016.

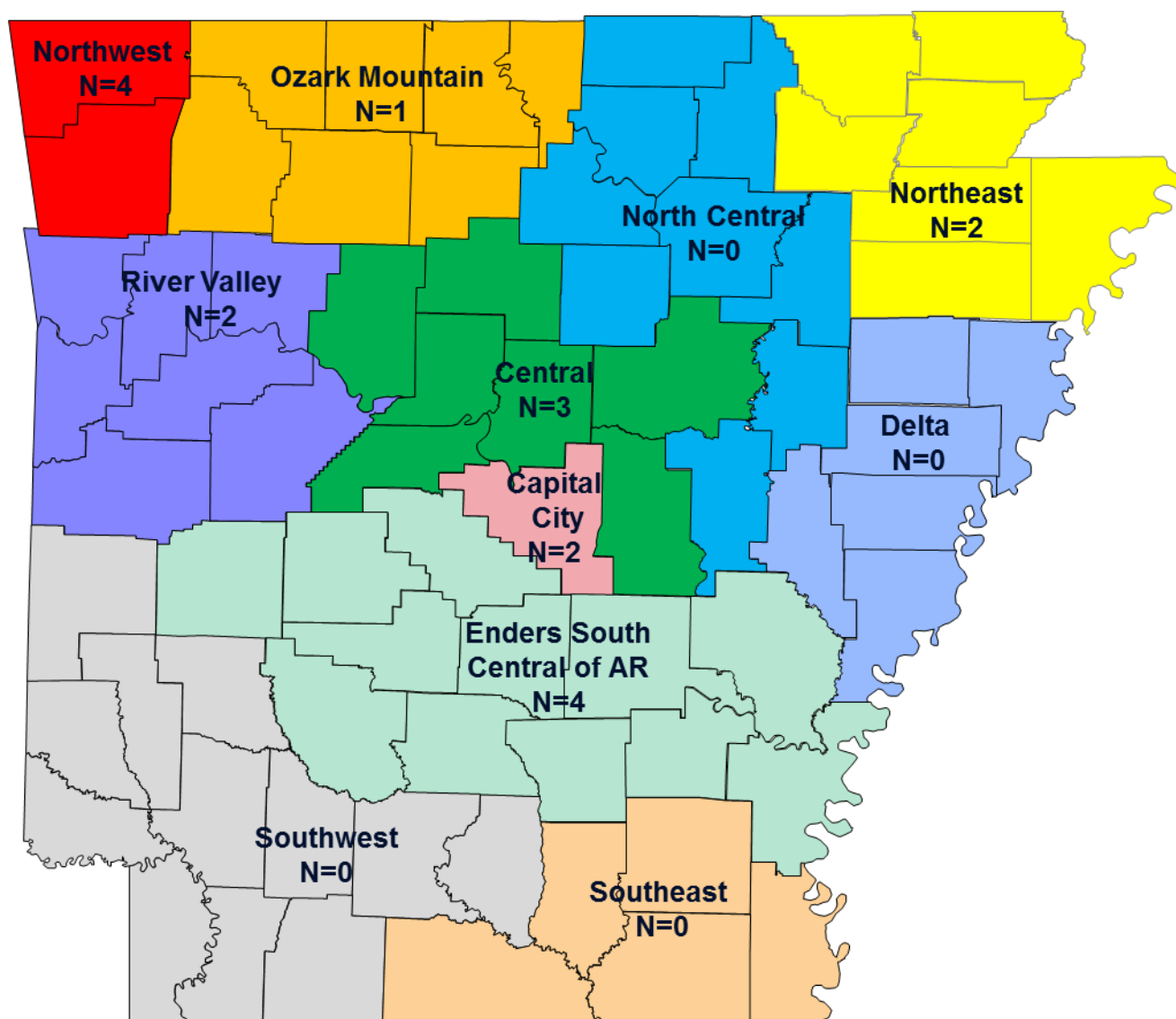
**Figure 5. Causes of Death: Percentage of Infant and Child Deaths among Reviewed Cases
2015 vs 2016**



Reviewed Infant and Child Deaths: Motor Vehicle Accidents

- Local ICDR teams reviewed 18 MVA deaths that occurred in 2016. The state map indicates the number of crashes in each team region.
- Table 1 represents the Arkansas 2017 Strategic Highway Safety Plan for Young Drivers.
- Table 2 represents the Insurance Institute Highway Safety (IIHS) Best Practices for Graduated Driver Licensing, US, 2017.

Number of Fatal Infant and Child MVA Cases per Team, 2016 N=18



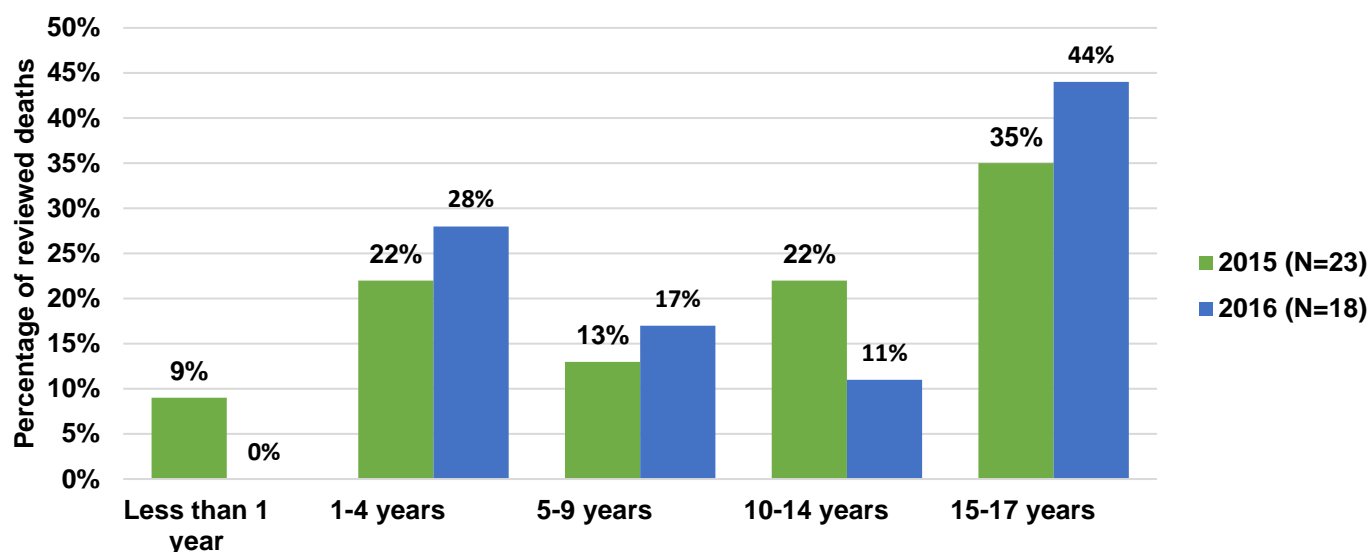
Reviewed Infant and Child Deaths: Motor Vehicle Accidents-Demographics

Findings N=18

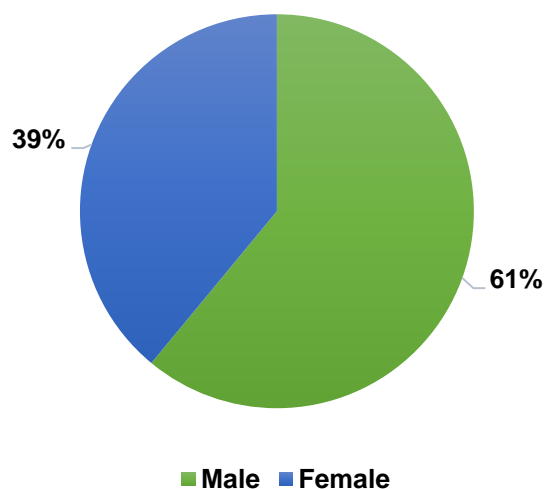
- Eight of 18 (44%) motor MVA-related deaths occurred among teenage drivers and passengers ages, 15-17 years old (Figure 6).
- Males accounted for 11 (61%) of MVA-related deaths (Figure 7).
- MVA-related deaths among Caucasians was highest at 13 (72%) (Figure 8).

Notable findings: Comparing 2016 data to 2015 data showed an increase in MVA-related deaths among children ages 1-4 years (>6%), 5-9 years (>4%), and 15-17 years (>9%).

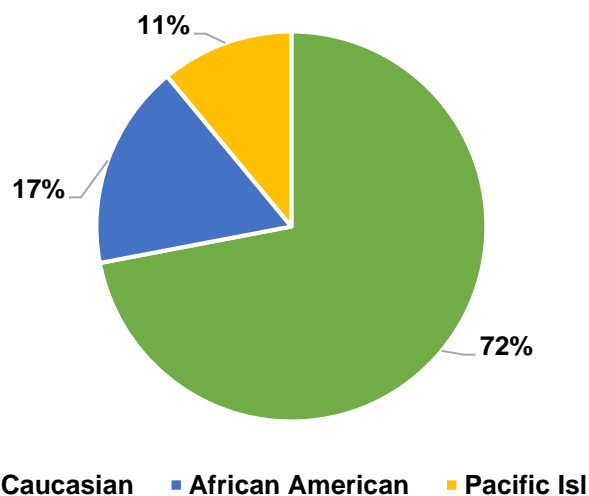
**Figure 6. Motor Vehicle Accidents: Age Distribution
2015 vs 2016**



**Figure 7. Motor Vehicle Accidents:
Gender Distribution, 2016
N=18**



**Figure 8. Motor Vehicle Accidents:
Racial Distribution, 2016
N=18**



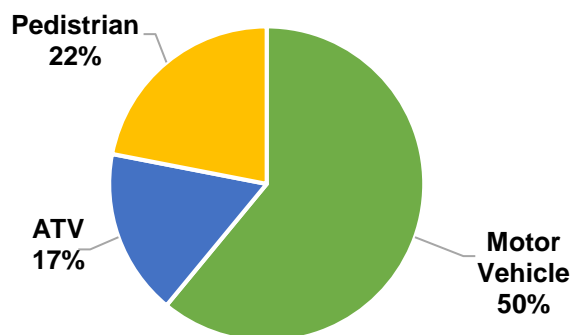
Reviewed Infant and Child Deaths: Types of Motor Vehicle Accidents

Findings

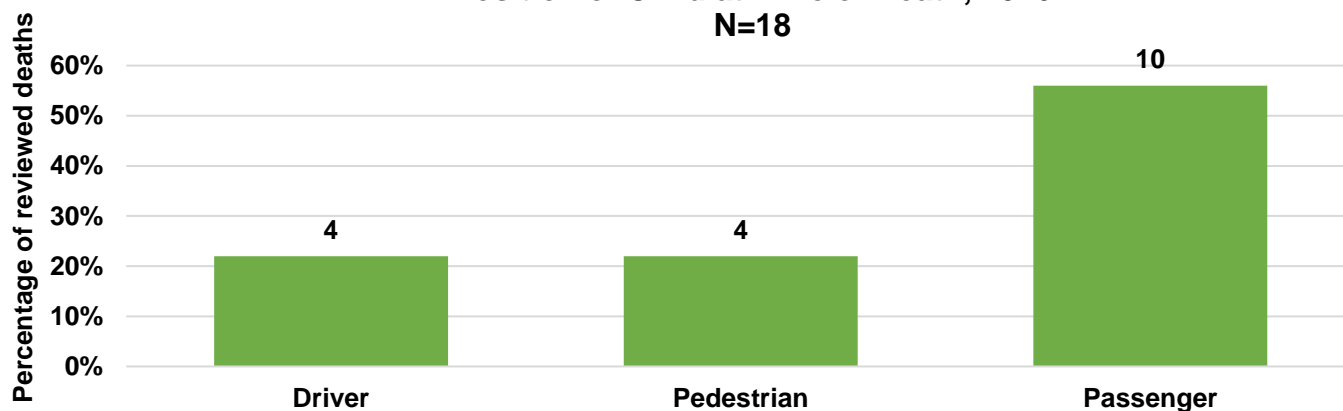
N=18

- Motor vehicle accidents accounted for 11 (50%) of MVA-related infant and child deaths and pedestrians for 4 (22%) of MVA-related infant and child deaths (Figure 9).
- Among the 18 motor vehicle deaths, 4 (22%) were drivers, 4 (22%) pedestrians and 10 (56%) were passengers (Figure 10).
- The data element “restraint use needed” was reported when a child was not wearing a seat belt or seated in a child restraint seat, among 15 (53%) of the 18 MVA-related infant and child deaths; the children were not appropriately restrained.

Figure 9. Type of Motor Vehicle Accidents, 2016
N=18



**Figure 10. Motor Vehicle Accidents:
Position of Child at Time of Death, 2016**
N=18



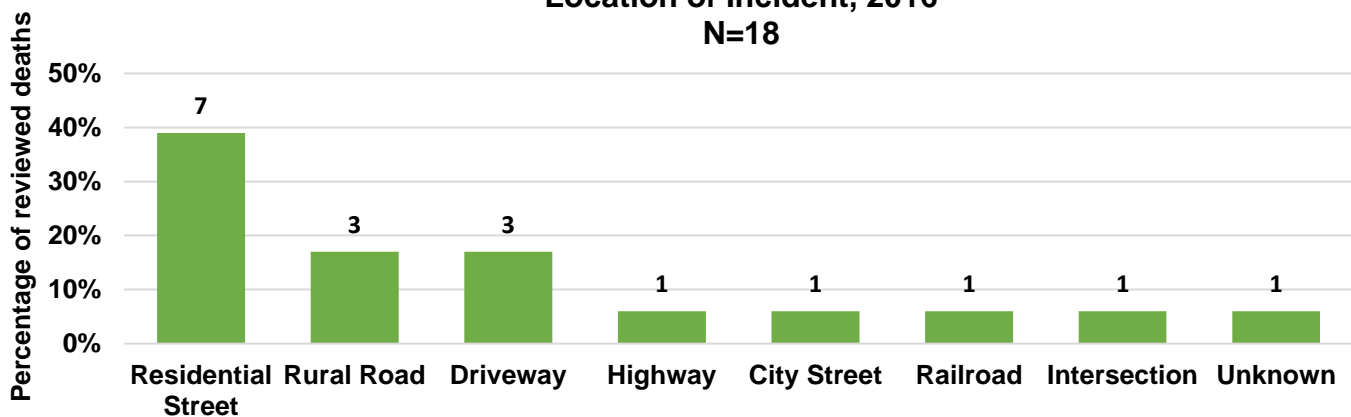
Reviewed Infant and Child Deaths: Location of Motor Vehicle Accidents

Findings

N=18

- The incident location of motor vehicle accidents was collected on infant and child deaths.
- Seven (39%) of MVA occurred on residential streets; 3 (17%) occurred on rural roads and driveway. (Figure 11).

**Figure 10. Motor Vehicle Accidents:
Location of Incident, 2016
N=18**



Alarming News

- Traffic fatalities increased by 2,295 from 2015 to 2016 (35,485 to 37,461) for the United States.
- Thirty-nine states, including Arkansas, showed an increase in traffic fatalities between 2015 and 2016.
- The majority of people killed in the United States in 2016 traffic crashes were drivers (50%), followed by passengers (17%), pedestrians (14%), motorcyclists (16%), and pedal cyclist (2%).
- In the United States in 2016, there were 1,908 young drivers 15 to 20 years old who died in motor vehicle crashes, almost no change from the 1,903 young drivers who died in 2015.
- Arkansas had a 1% decrease in traffic fatalities between 2015 and 2016.

Source: 2016 State Traffic Data Traffic Safety Fact Sheet. 2016 Young Drivers Traffic Safety Fact Sheet. Accessed at <https://crashstats.nhtsa.dot.gov>, September, 2018.

**Arkansas 2017 Strategic Highway Safety Plan
Area Action for Plan: Young Drivers**

Table 1

Strategy	Action
Increase awareness of risks to young drivers amongst teens, college age students, parents, and community members.	<ul style="list-style-type: none"> • Conduct media campaign to increase awareness of Graduated Driver's License (GDL) and dangers of texting and driving. Include social media outlets such as Twitter, Facebook, Instagram, etc. • Expand and continue support of coalitions for safer teen driving. • Expand and continue support of peer led education activities statewide. • Expand and continue support of teen/parent education activities in communities across the state. Examples: Teen Driving Rodeo, Teen Driving Safety Week, mock crash reenactment and discussion, parent/teen education, pledge parties, GDL awareness. • Continue support of GDL education through driver control offices. • Develop and distribute guide for teaching teens to drive. To include lessons for nighttime and rainy weather. • Develop and implement use of GDL video for parents while waiting at DMV including mandatory sign off that video has been viewed. • Develop and implement use of GDL video for teens viewed before driving portion of drivers test. • Develop and implement programs to increase traffic safety knowledge, attitude, and behavior among college age students.
Increase enforcement of young driver laws.	<ul style="list-style-type: none"> • Educate law enforcement regarding risks for young drivers and the GDL law. • Create formal process for letting law enforcement know about new young driver laws. • Educate judges regarding risks for young drivers and GDL law, encouraging administering consequences for violators. • Host GDL check points, similar to sobriety check points. • Increase number of tickets written for violations of GDL. • Mandate documented hands on driving practice before licensure. • Eliminate age waivers. • Revise GDL to only 1 passenger, for intermediate drivers, with no caveats. • Require vehicle marking for easy identification of intermediate drivers.
Revise or add additional legislation for young drivers.	<ul style="list-style-type: none"> • Revise standards for on road portion of driver's testing to increase time in car to include demonstrations of specific skills (i.e.: left turns, merging, etc.). • Revise violation penalties to include community service for young drivers as well as monetary fine. • Suspend license for violation of GDL. • Oppose actions to repeal or negatively amend teen driving laws that are currently in place. • Mandate offering driver education in schools. • Redirect funds from some traffic fines to support teen driving education.

Reviewed Infant and Child Deaths: Prevention Strategies for Motor Vehicle Accidents

As identified the Arkansas 2017 Strategic Highway Safety Plan Area Action Plan for young drivers, Teen Driving Rodeo's are recommended as a method to increase awareness of risks to young drivers amongst teens, college age students, parents, and community members.



Table 2. Insurance Institute Highways Safety (IIHS) Best Practices for Graduated Drive Licensing, US, 2017

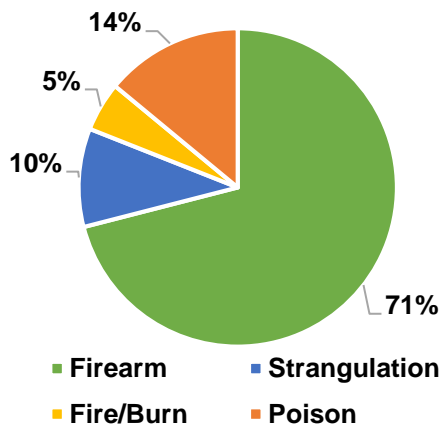
Best Practice	Implemented in Arkansas	Arkansas Regulations
Permit age at 16	No	Permit age at 14
70 supervised practice hours	No	No minimal supervised practice hours required
Licensing age of 17	No	Learners licensing can be issued at age 14
8 p.m. night driving restriction	No	11 p.m.- 4 a.m. night driving restriction for 16-17 year old license drivers only
No teen passengers	No	1 unrelated passenger for 16-17 year old licensed drivers

Findings

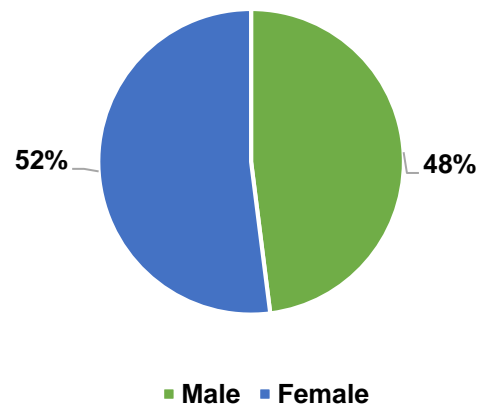
N=21

- In 2016, firearms accounted for 15 (71%) and poison accounted for 3 (14%) of all suicide deaths (Figure 12).
- Suicide deaths in 2016 occurred predominantly among 11 females (52%) (Figure 13).
- In 2016, 15 (71%) suicide deaths were among children ages 15-17 years old (Figure 14).
- Nineteen (90%) of 2016 suicide deaths occurred among Caucasians (Figure 15).

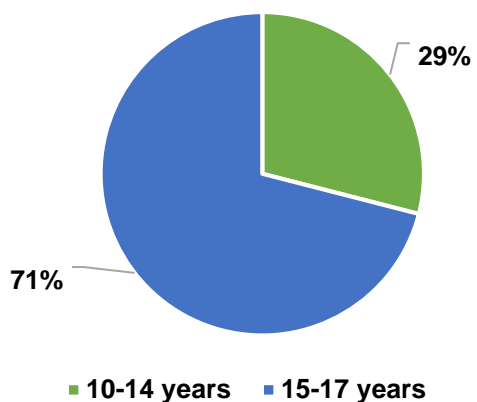
**Figure 12. Suicide:
Injury Type, 2016
N=21**



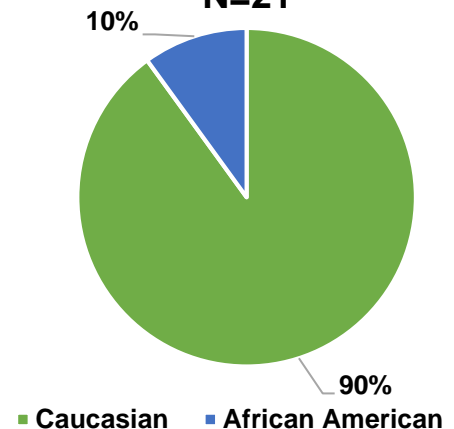
**Figure 13. Suicide:
Gender Distribution, 2016
N=21**



**Figure 14. Suicide:
Age Distribution, 2016
N=21**



**Figure 15. Suicide:
Racial Distribution, 2016
N=21**



Reviewed Infant and Child Deaths: Suicide (Continued)

Findings N=41

- When collecting data for suicide deaths, a child's death could have more than one circumstance and/or history factor that may have contributed to that child's death.
- Social circumstances include when a child talked about suicide, made previous suicide threats or a note was left.
- Behavioral circumstances is when a child previously attempted suicide, had a history of self-mutilation, or running away (Figure 16).
- Social circumstances and social history were the primary responses of a child dying by suicide (Figure 16 and 17).

Notable findings: Team members are able to provide this data from the child's social media, in/out-patient mental health treatment records, law enforcement records, hospital and school reports.

Figure 16. Suicide: Circumstances, 2016
N=41

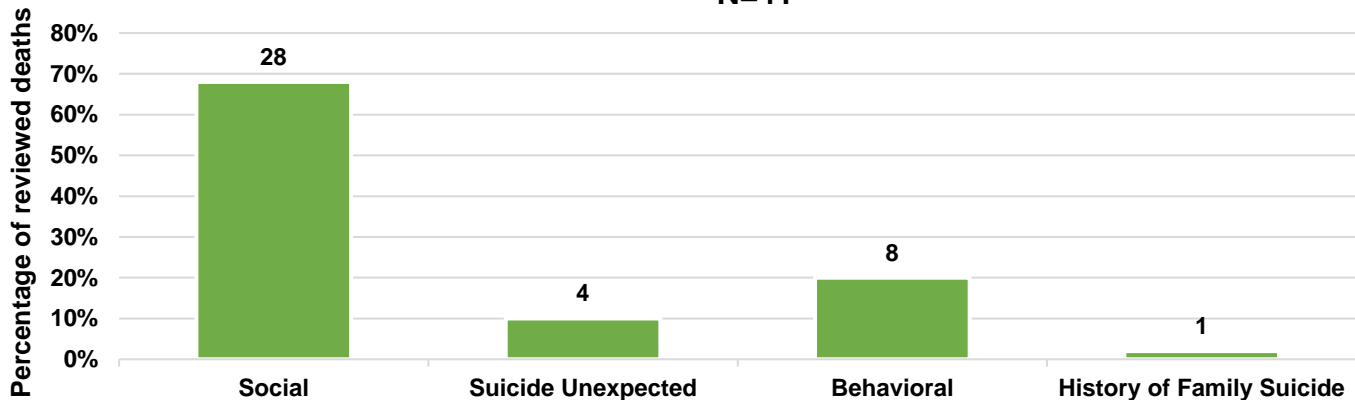
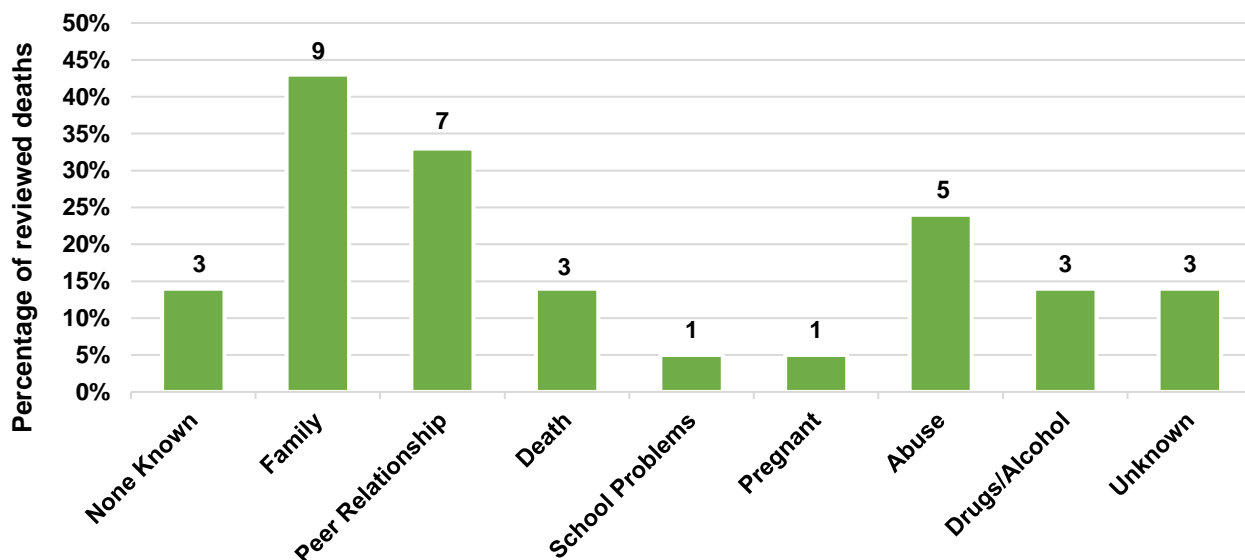


Figure 17. Suicide: Known Risk Factors, 2016
N=35

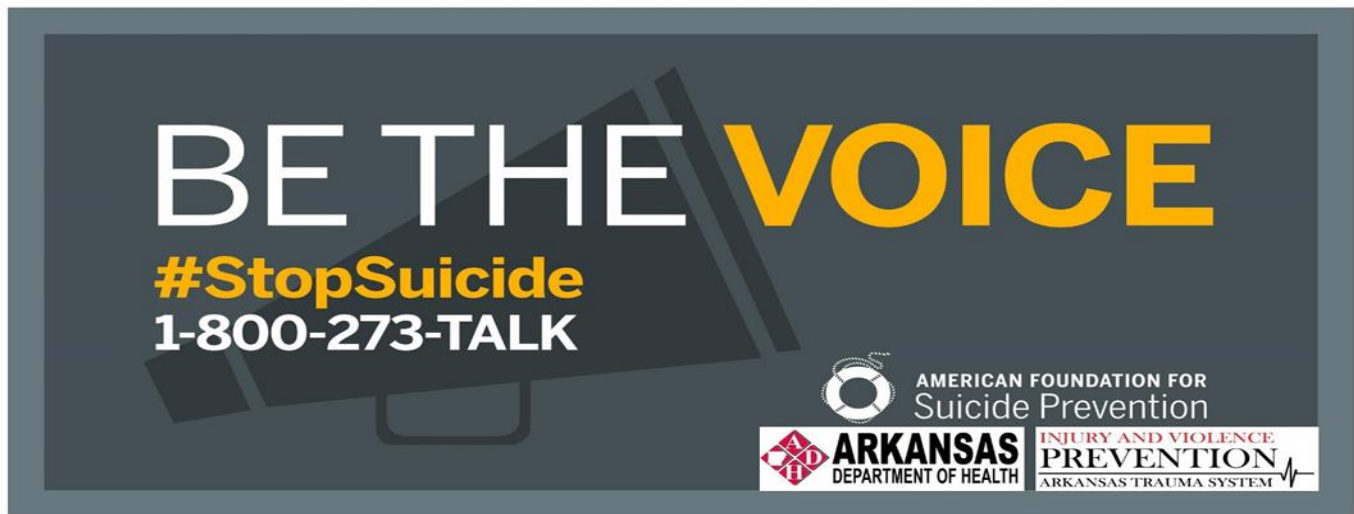


Work in the Community: Preventing Suicide

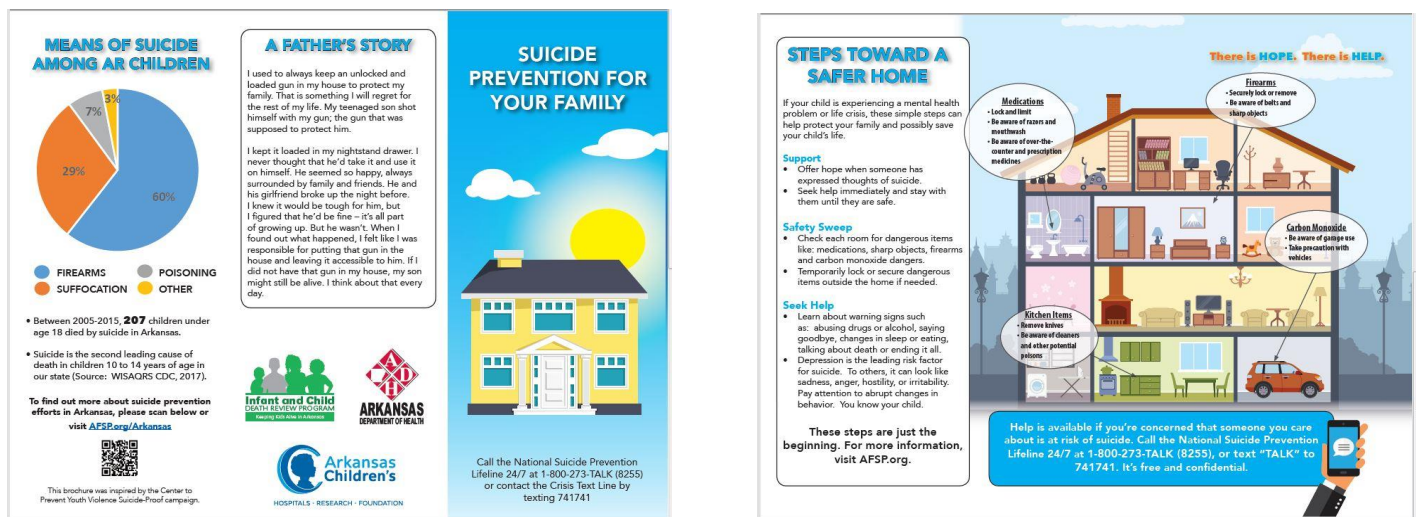
- **Arkansas Department of Health:**
 1. Suicide Prevention Month Proclamation on 9/6/17.
 2. Provide SafeTALK trainings throughout the state.
- **American Foundation for Suicide Prevention:**
 1. Bring Hope: Suicide Loss and Support Training (for funeral directors)-Bentonville on 9/8/17.
 2. Northwest AR Out of the Darkness Walk- Bentonville on 9/10/17.
 3. AFSP funded guest Lecture series guest presenter (lecture delivered at Clinton School of Public Service, Grand Rounds Arkansas Department of Health, Arkansas Children's Hospital)
 4. ASIST Training at Arkansas Institute on 9/22/17-9/23/17.
 5. Texarkana Out of the Darkness Walk- Texarkana on 9/23/17.
 6. #RealConvo website launched in October 2017.
- **ICDR Program:**
 1. 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.
 2. 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.
 3. Create suicide message concept for parents of children 9-12 years old and conduct three focus groups.
 4. Pilot floor graphics and mirror clings in 5 Arkansas public schools around the state and conduct student, nurses, counselors, and custodian surveys.
 5. More details on results of suicide campaign for FY18 can be found in the appendix.
- **ICDR Capital City Team:**
 1. Identified a gap with educating parents of children at risk for suicide, restricting lethal means, such as firearms and drugs, and what those means may be.
 2. The team used the concept from the Rhode Island Health Department (with their permission) to create a suicide means restriction brochure.
 3. The brochure was finalized and distributed in November, 2017.
 4. There were 7,000 brochures disseminated between November 2017 to April 2018.
- **ICDR Endres South Central Team:**
 1. Conducted SafeTALK Training at the Saline County Sheriff's Office in October 2017.



Reviewed Infant and Child Deaths: State-wide and ICDR Local Teams in Action Suicide Prevention



Suicide prevention billboard messaging displayed during FY'17 state-wide Suicide Prevention Campaign.



Capital City team's Suicide Prevention for Your Family brochure.

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.

There were 15 (11%) asphyxia related deaths reviewed that occurred in 2016.

- Eight (53%) of asphyxia related deaths reviewed were among children <1 year of age.
- Ten (67%) asphyxia deaths were sleep-related.
- Majority of asphyxia deaths reviewed were among males 10 (67%) and Caucasians 12 (80%).
- The youngest child was 10 days old.

Prevention:

Safe sleep practices can reduce asphyxia-related fatalities among infants.

- 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 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.

There were 9 (6%) drowning related deaths reviewed, occurred in 2016.

- Drowning deaths reviewed were all males 9 (100%).
- Seven (78%) of the deaths were among Caucasians.
- The youngest child was 1 year 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, that self-closes with self-latches 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

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).

There were 5 (4%) fire related deaths reviewed in 2016.

- Three (60%) accounted for majority of fire related deaths.
- Fire-related deaths reviewed occurred among Caucasians (100%).
- Children ages 1-4 years accounted for 2 (40%) of fire related deaths.
- The youngest child was 6 months old.

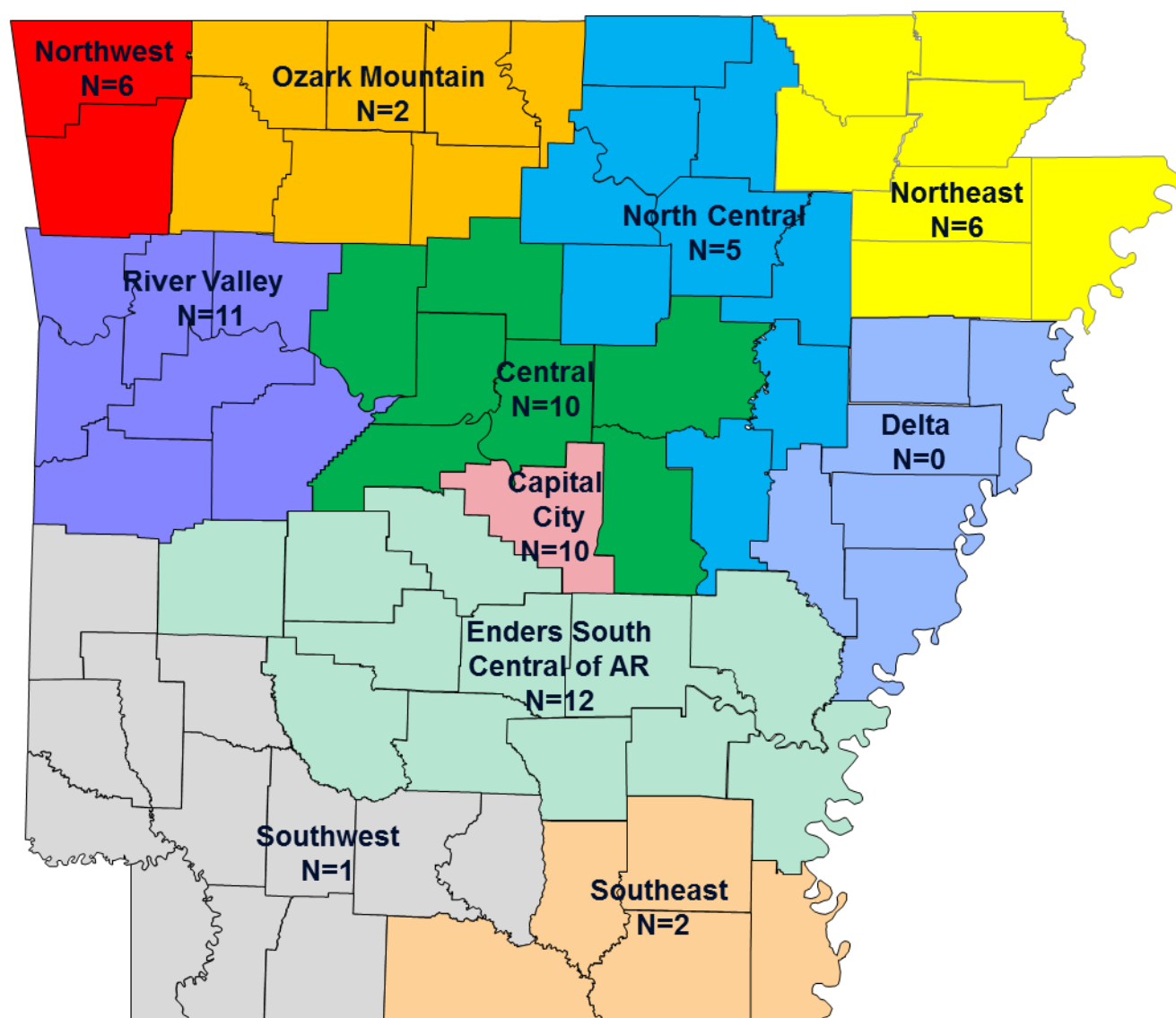
Prevention:

- 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

The Arkansas map indicates location of 2016 undetermined deaths reviewed by team region.



Findings

N=65

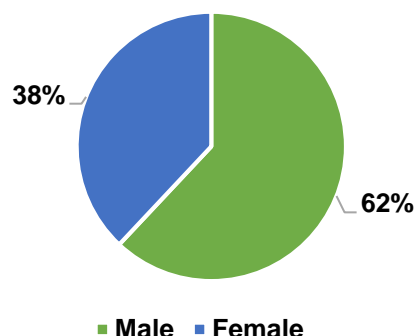
An undetermined death is ruled after a thorough investigation, both legal and medical, has been conducted and there is no conclusion as to mechanism or manner of death.

- Males accounted for 40 (62%) of undetermined deaths in infants <1 year of age.
- Caucasian accounted for 48 (74%) of reviewed undetermined cases.
- Sixty one (92%) of undetermined reviewed cases were sleep associated. The location of these deaths are indicated in Figure 19.

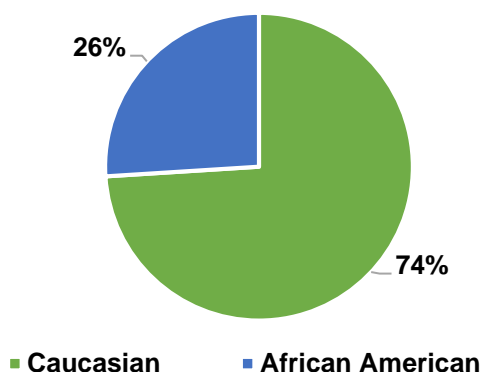
For sleep-related death cases the location of where the infant was sleeping is often a factor in death.

- Thirty four (52%) of sleep-related deaths occurred in an adult bed.
- The youngest child was 7 days old.

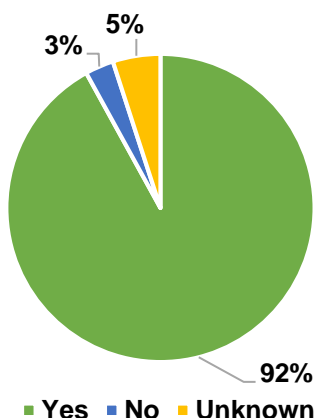
**Figure 16. Undetermined:
Gender Distribution, 2016**
N=65



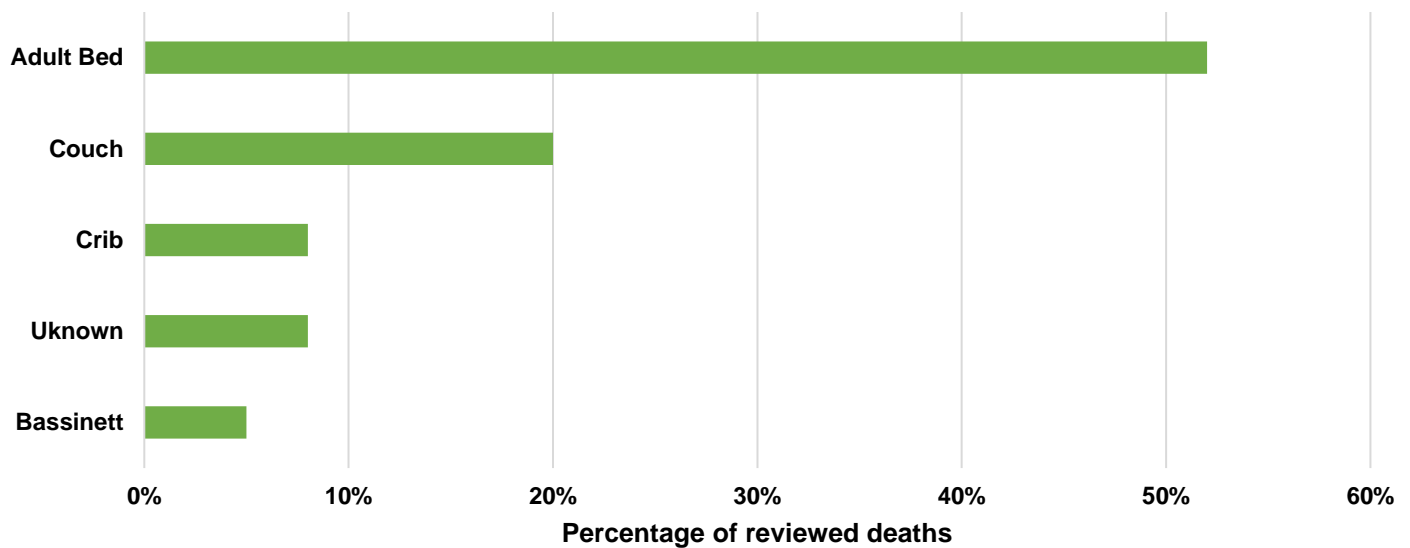
**Figure 17. Undetermined:
Racial Distribution, 2016**
N=65



**Figure 18. Undetermined:
Sleep Related Incident, 2016**
N=65



**Figure 19. Undetermined: Incident Sleep Place, 2016
N=61**



Reviewed Infant and Child Deaths: Safe Sleep Best Practices

- 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>

Reviewed Infant and Child Deaths: State-wide and ICDR Local Teams in Action Safe Sleep

- On 9/13/18, Governor Hutchinson signed the Arkansas Infant Safe Sleep Awareness Month Governor's Proclamation.
- Safe sleep messaging was displayed on 19 billboards as part of the state-wide Safe Sleep Campaign.
- The ICDR NW Team conducted county wide social media education posts about proper dressing of infants during winter months. The team posted and shared safe sleep messaging on their local and county law enforcement face book pages in October 2017.
- The ICDR NE Team identified a need for a safe sleep satellite site in Jonesboro. A safe sleep satellite is where expected or new parents can received safe sleep and home safety education and receive products if there is a need. The Children's Clinic of Jonesboro became a safe sleep satellite site on April 13, 2018. Members of the local team are also medical staff at The Children's Clinic of Jonesboro.



State-wide Safe Sleep Campaign billboard message, FY'17.

FY 18 ICDR Accomplishments

Program Accomplishments:

- The ICDR SW Team was formed and began reviewing cases October, 2017 (the addition of the SW Team provided state-wide coverage for case reviews).
- Drug Take Back Materials were created and disseminated by 11 local teams.

Local Team Accomplishments:

- Capital City Team created a suicide means restriction brochure to educate parents of children with suicide ideation. The need for the brochure was based on cases reviewed. Over 7,000 brochures were disseminated state wide within first 6 months.
- NE Team members at a pediatric clinic becoming a safe sleep satellite site, where safe sleep education and products are provided to expecting and new parents. The need for the satellite site was based on cases reviewed. This is an ongoing program at the pediatric clinic.

Future Actions: FY 19 and Beyond

ICDR Program:

- Provide funding discretionary projects for local teams to use to assist implementing recommendations.
- Create a Fetal Infant Mortality Review program that will target all infant deaths that are not SUIDS or SIDS.
- Create an Opioid Mortality Review program that will target opioid deaths in children under 18.

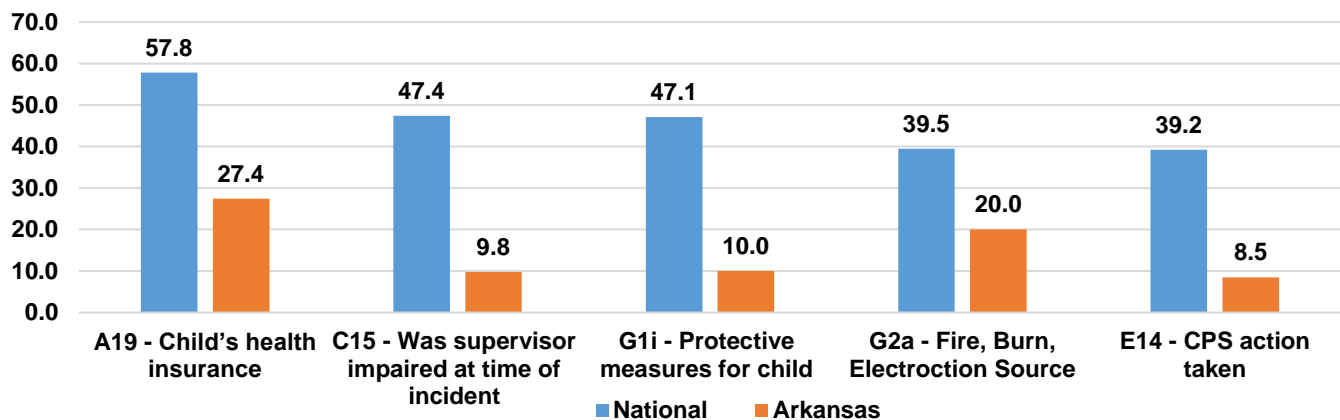
Local Teams:

- Endres South Central Team will be planning and hosting a community wide event, educating Pans/Pandas.
- Central Team will implement a Teen Driving Roadeo event, educating teen drivers and parents about motor vehicle safety and risks with distracted driving.
- Capital City Team will have local law enforcement SUIDI trained and conduct doll re-enactments on infant deaths that occur in Pulaski County.
- Delta Team will be trained in safety baby showers and a safe sleep satellite site will be implemented in Crittenden County.
- Delta Team will partner with Phillips County to pilot Arkansas Drug Take Back: Monitor, Secure, Dispose project.

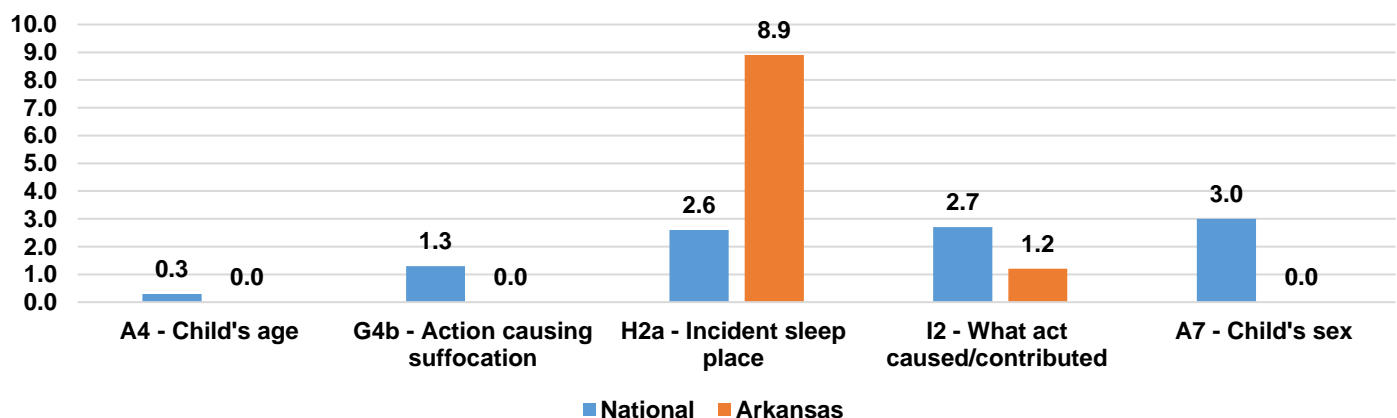
ICDR Program Results: Improving Quality of Data National vs Arkansas

The National Center for Fatality Review and Prevention (NCFRP) provides Data Quality Initiatives for the National Fatality Case Reporting System (NFR-CRS). The goal of the Data Quality Initiative is to improve the quality and consistency of data collected and entered into the NFR-CRS. This report is generated yearly. With 2016 data collected and entered in the NFR-CRS, Arkansas has had a significant decrease in Missing/Unknown data, when compared to 2015.

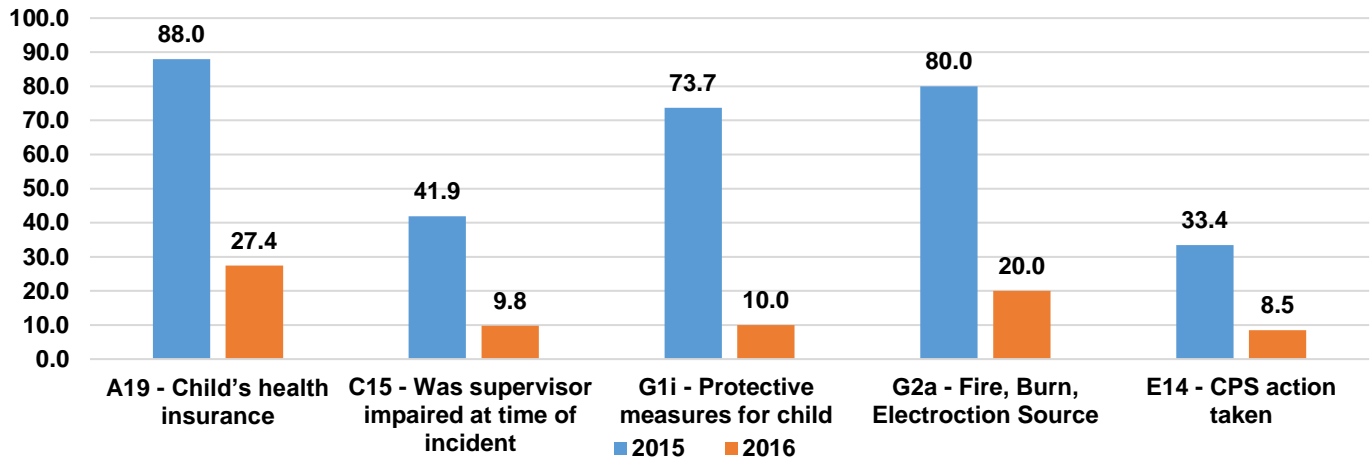
Core Variables with Highest Missing/Unknown % How does your state compare on these measures?



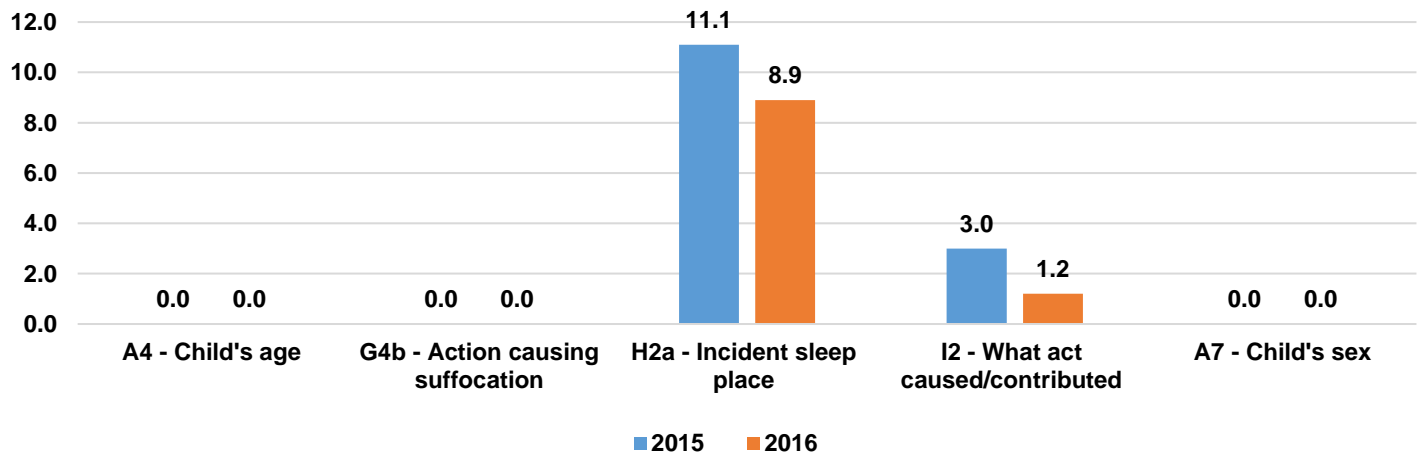
Core Variables with Lowest Missing/Unknown % How does your state compare on these measures?



Core Variables with Highest Missing/Unknown % Arkansas 2015 vs 2016



Core Variables with Lowest Missing/Unknown % Arkansas 2015 vs 2016



Acknowledgements

This report was prepared by:

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

Data Source:

National Center for Fatality Review and Prevention

Appendix A: Suicide Prevention Campaign Results (FY 18)

Infant and Child Death Review Statewide Prevention Campaign: Education Outreach Scope of Work FY' 18

Background

Local Infant and Child Death Review teams identified suicide prevention as a priority need for Fiscal Year 18. According to the 2016 Annual ICDR Report, 11% of cases reviewed between 2010 and 2015 were suicides. Among the children who died by suicide 52% had a previously diagnosed mental health issue. After reviewing the cases, the local ICDR teams recommended improved services, prevention education, and policy changes.

Methods

A suicide prevention campaign was conducted by representatives of local ICDR teams. The campaign consists of 5 elements: 1) Increase the implementation of the number of schools that have written policies from the ADH Injury Prevention Program, 2) promote suicide trainings within schools and communities, 3) increase restricted access to medications, 4) increase awareness of risks among parents of child <12 years and 5) utilize high visibility media to encourage help-seeking behaviors. See Figure 1.

Figure 1:

FY 18 Campaign on Suicide Prevention

Educational Recommendations from Teams: #1 Better education to school administrators and students on risk factors and intervention for potentially suicidal students; #2 Incorporate suicide training with substance abuse trainings in schools

Situation	Priorities	Inputs	Outputs		Outcomes		Impact Long Term
			Activities	Lead Partner	Short Term	Medium Term	
1) All schools in AR have received model policies from the ADH Injury Prevention Program via GLS funding.	Increase the number of schools that have written policies	Advocacy	Engage CDR Panel in enlisting ADE promotion of model policies	AR ICDR ADH IVP	Collaborative meeting establishing action plan	Training and TA needs met	ADE mandate requiring suicide policy
2) All certified school personnel are required to receive 2 hours of education every 5 years. The IPC conducted training on suicide prevention to school counselors during SY 14-15 thru ADE-sponsored workshops. There is no expectation of how this education is used.	Employ consistent responses to children at risk and/or in crisis	Peer-to-peer education Resilience and support for children from military families	Promote use of <u>Kognito</u> programs in public schools	ADH IVP Local ICDR teams	Safe Talk training for all ICDR teams	Each team identifies 3 schools to encourage use of programs, a total of 30 schools	20% of public school systems use programs.
3) 3.2% of deaths reviewed by ICDR were by poisoning, overdose, or acute intoxication	Restrict access to means by parents	Proper disposal of unused drugs	Promote Drug Take Back events & permanent stations	AR ICDR Local ICDR teams	Distribute locations of drop boxes to all ICDR teams	Increase in number of drugs collected	Decreased availability of drugs for recreational and suicidal use
4) There is a gap in messaging for children < 12 years and their parents	Increase awareness of risks among parents	Public awareness campaign	Tailored multi-media messaging	AR ICDR Local ICDR teams	Creation and distribution of materials	Changes in perception of risk and recognition	Increase in parents who seek advice and assistance from pediatricians, family physicians, and mental health providers for their children.
5) Public awareness promoting use of the suicide hotline is lacking	Use high visibility media to encourage	Public awareness campaign	Conduct traditional and social media	AR ICDR	Increased awareness of resources	Increased use of suicide hotline	Decrease in number of suicides in rural areas of Arkansas

An ICDR suicide prevention workgroup was formed with 13 team members participating in two face-to-face meetings and numerous email conversations. The workgroup was instrumental in the development of drug take back materials and administration of evaluation surveys.

A survey was administered before and after the campaign to determine effectiveness of the campaign in changing, knowledge, attitudes, and beliefs and the extent to which the campaign had a statewide reach. Ten of eleven teams participated

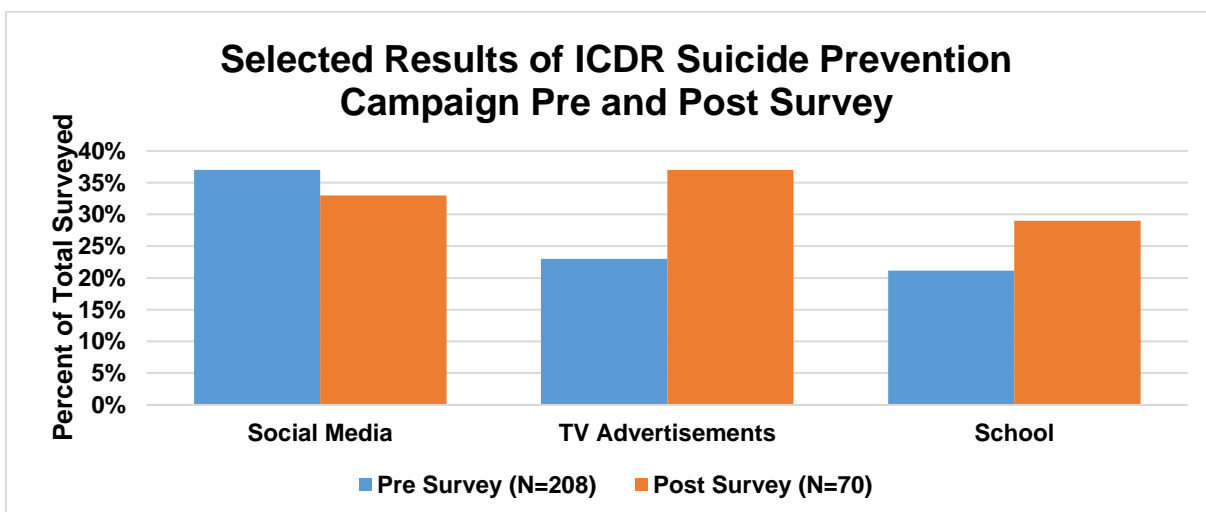
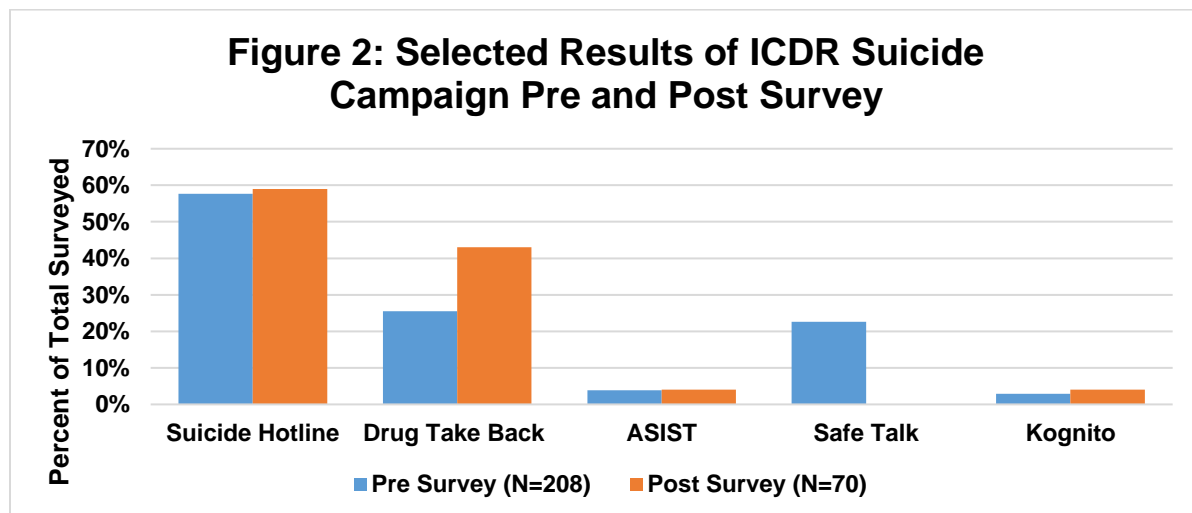
Results

The ICDR Suicide Prevention campaign was initiated in August 2017.

Through efforts of the Injury and Violence Prevention of the Arkansas Department of Health (ADH), a proclamation was signed by Mayor Mark Stodola of Little Rock on September 6, 2017 designating September as Suicide Prevention Awareness Month.

Survey Results

Two hundred and eight participants (100 children ages 13-19 and 108 adults over 20 years of age) completed the 7-item pre-campaign survey in August 2017. Participants were asked about exposure to suicide prevention, within the last three months. Of those surveyed, 58% had read, seen or heard information about the Suicide Hotline, 25% about Drug Take Back (Figure 2). Participants were asked where they may have read, heard, or seen information about suicide prevention. Of those surveyed, 37% identified social media, 23% TV advertisement and 21% exposed to suicide prevention messaging at school (Figure 3).



ICDR Panel

Over the last year, ADH provided all Arkansas schools with a model policy on how to address suicide-related death and/or any death of a student. A letter issued by the ICDR Panel encouraged the Arkansas Department of Education (ADE) to support and encourage schools to implement the model policy in order to respond swiftly, appropriately and efficiently when a student dies, especially if the death is by suicide.

Safe Talk /Kognito/ASIST Trainings

Safe Talk and ASIST trainings prepares anyone 15 or older to identify the warning signs of suicide in others in order to provide life-saving resources to those who need them. Safe Talk and ASIST trainings were promoted to local ICDR teams. Teams were encouraged to attend and invite community members to attend. One local ICDR Team hosted a Safe Talk training in October 2017. Kognito, an online simulation training for faculty and students, teaches participants how to have a conversation with students that may show signs of suicide ideation. Kognito was launched to all public schools in August 2017, by the Injury and ADH. Local ICDR Teams encouraged their local schools to participate in the Kognito program.

Drug Take Back Print Material

Materials already exist on forming a drug take back site, however, information promoting locations and what is allowable to drop off were not readily available. The ICDR suicide prevention task force helped develop and review materials promoting the drug take back initiative to fill the gap. Promotional material developed included large reusable banners for display at well-traveled community locations promoting drug take back days. Yard signs were created for display in front of take back sites in order to increase visibility within the community. The task force was also instrumental in the creation of a poster outlining what can appropriately be deposited at take back locations. The poster is available for display in pharmacies, drug take back locations, community centers, health units and other public locations. During the campaign, 944 posters, 200 yard signs and 25 banners were distributed to permanent drug take back sites and businesses around the state. These materials promote the two annual National Drug Take Back Days, location of permanent disposal sites, and encourage disposal throughout the year. With the help of the ADH Hometown Health Improvement (HHI) network and local ICDR teams, we were able to distribute materials in all 75 counties of the state. Drug Take Back Materials continue to be requested.

**Parent Messaging for Children <12 Years*

Messaging for parents of children <12 years is difficult due to misconceptions that children of this age do not have circumstances in their life that would lead them to die by suicide. However, through case reviews, teams are identifying circumstances that lead to suicide in children <12 (i.e, bullying, relationships, family). A messaging concept was created for parents of children under 12 years of age. Focus groups were conducted at religious organizations in March, 2018. The target audience were parents of children under the age of 12 years. Feedback received indicates that a web-based resource needs to be developed to provide information to parents. The concept is currently undergoing more feedback and edits.

Floor Graphics/Mirror Clings

Floor graphics and mirror clings are high-visibility media used to encourage health seeking behaviors. ICDR partnered up with American Foundation for Suicide Prevention (AFSP) to create 2.5'x3' floor graphics and mirror clings that will have suicide prevention messaging and provide a link to the afsp.org/RealConvo website. The Real Convo website is teen centered and promotes help seeking behaviors. This recommendation from AR ICDR Teams is now, through AFSP, a national campaign. The floor graphics and mirror clings were piloted in 5 high schools across the state. The pilot process began in March 2018. Students, nurses, custodians, and counselors were surveyed about the materials in April of 2018. The student survey asked if the students noticed the materials and if they had conversations about the materials. Of the 280 students surveyed, 66% noticed new suicide materials in their school, 60% noticed the floor graphics and 62% noticed the mirror clings. Students were asked if the materials sparked a conversation with others. Of those surveyed, 42% had a conversation with someone else and 92% of those conversations were with friends. QR codes on floor graphics and mirror clings would send a user to the #RealConvo website. Students were asked if they used the QR codes, of those surveyed 77% did not try to use it. Students were also asked if they believed suicide prevention messaging was needed in their school, of those surveyed 93% strongly agreed. Nurses were asked if there were any slips, trips or falls reported as a result of the floor graphics placed and no injuries were reported. Counselors were asked if any students had conversations with them about the materials placed and some counselors did have students come and speak to them about the materials. Custodians were asked if there were any difficulties cleaning over or around the materials and there were none indicated. The custodians did indicate that the mirror clings were being taken down by students in the bathroom and thrown away. This statement was found to be true when the Program Coordinator did not find mirror clings in any bathroom upon return to schools.

Billboards

The AFSP “Be The Voice” message and the National Suicide Hotline number was promoted by ADH and the ICDR for consistent messaging. Seven billboards were displayed beginning October 30, 2017, to an anticipated reach of 176,000 citizens per day. Rental of billboard space was continued through March with the “Be The Voice” message and “Help Us Prevent Suicide”. Billboards were displayed in rural areas of communities that may not have access to prevention messaging and in larger communities. Billboard locations included:

County	City	ICDR Team
Washington County (1 billboard)	Springdale	Northwest AR ICDR Team
Boone County (1 billboards)	Harrison	Ozark Mountain ICDR Team
Independence County (3 billboards)	Batesville/Newport	North Central AR ICDR Team
Saline County (1 billboard)	Benton-Bryant	South Central ICDR Team
Garland County (1 billboard)	Hot Springs	South Central ICDR Team

Lessons Learned

Based on lessons learned from the Safe Sleep Campaign in FY17, we were successful in avoiding the same barriers, such as lack of participation and engagement among team members and receiving materials from print company in a timely manner. An unexpected outcome from this year's campaign was under estimating the popularity of the drug take back materials and the continued demand for safe sleep materials. Materials such as yard signs and banners were in high demand, requiring us to place multiple orders to fill requests. We also needed to order more safe sleep materials than originally predicted. An additional barrier was delivering take back materials before the October take back date. Some counties received their materials a few days before the event as items were hand delivered due to the bulkiness of the banners and yard signs. However materials are reusable and will be utilized during the April campaign as well.

In regards to the teen messaging in schools, the mirror clings were not effective as the students removed them from the bathrooms. The QR Code on the floor graphics were not used, as the students were not allowed to use their phones during school hours.

Conclusion

The AR ICDR Program was able to effectively disseminate a prevention campaign through the use of several different outlets, 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 suicide prevention messaging and drug take back 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 suicide deaths.

FY'18 and Beyond

Suicide Prevention Resource Packets for Arkansas Schools

AR ICDR Program is partnering with multiple suicide prevention organizations to create a suicide prevention resource packet for schools in the state. Local teams will help disseminate letters and response cards to local schools within their communities. Upon return of response cards, suicide prevention resource packets will be sent out. Local team members will help deliver packets. AR ICDR Program will track how many response cards are delivered with how many are received.

Arkansas Drug Take Back: Monitor, Secure, Dispose pilot project

AR ICDR Program is partnering with the Phillips County Opioid Awareness and Prevention Initiative (PCOAP) to provide training for doctors and pharmacists educating patients about monitoring, securing, and proper disposal of medications. The (PCOAP) will be provided talking points, education materials, and lock boxes. Pre and post surveys will be conducted to evaluate the effectiveness of education provided between doctor/pharmacist and patient.