
ACDRS
ALABAMA CHILD DEATH REVIEW SYSTEM
ALABAMA PUBLIC HEALTH
DEATHS AMONG CHILDREN IN ALABAMA
Alabama Child Death Review System
2016 REPORT

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Scott Harris, M.D., M.P.H.
State Health Officer

Michele Jones, M.S.
Chief of Staff

Jamey Durham, M.B.A.
Director
Bureau of Prevention, Promotion, and Support

Diane Beeson, M.B.A.
Director
Behavioral Health Division

Gloria Davis, L.G.S.W.
Director
Surveillance Branch

Kimberly Gordon, L.I.C.S.W
Program Manager
Alabama Child Death Review System

Nicole Lovvorn, L.B.S.W.
Program Coordinator
Alabama Child Death Review System

Stuart Hoyle, M.P.H.
Epidemiologist
Injury Prevention and Fatality Review Branch

Alabama Child Death Review System
The RSA Tower, Suite 960
201 Monroe Street, Montgomery, AL 36104
(334) 206-2085 • (334) 206-3723 (Fax)
www.alabamapublichealth.gov/cdr

Alabama Department of Public Health
Bureau of Prevention, Promotion, and Support
Surveillance Branch

This report is based on the most recent data available as of August 2019.

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Introduction

Alabama enacted legislation in 1997 creating the Alabama Child Death Review System (ACDRS) to review and identify unexplained or unexpected child deaths in Alabama with the purpose of developing strategies to prevent such deaths from occurring. ACDRS has worked with 42 Local Child Death Review Teams (LCDRTs), the State Child Death Review Team (SCDRT), and the Alabama Department of Public Health (ADPH) central office staff to collect, review, consolidate, and utilize information on more than 1,400 child deaths since 2010. ACDRS's structure relies upon the time and effort volunteered by our team members throughout the state for in-depth reviews and prevention recommendations that provide the insight needed to prevent these deaths from continuing to occur. ADPH central office staff are grateful for each individual and organization who make these efforts possible on behalf of Alabama's children.

In 2016, there were 824 infant and child deaths in the state of Alabama. Every child death is a tragedy, especially for the family and friends of the children lost. However, each death also serves as a powerful warning that other children remain at risk. To better understand how and why children die, the state tasks ACDRS with the following responsibilities: maintain statistics on child mortality; identify deaths that may result from abuse, neglect, or other preventable cases; and from that information, develop and implement measures to help reduce the risk and incidence of future unexplained or unexpected child deaths in Alabama.

Child death reviews make a difference. Through death reviews, ACDRS has identified motor vehicle incidents; sleep-related deaths; and firearm, weapons, and assault-related deaths as the leading causes of death for 2016. This report highlights the leading manners and causes of death for Alabama's children, significant risk factors burdening children, recommendations created by SCDRT to reduce preventable child deaths, and statewide initiatives that have been established due to the child death review process. ACDRS seeks to honor the memory of children who have died in Alabama with this report. The hope is that these efforts will lead to a better understanding of how Alabama can be a safer, healthier place for children.

Three Tiers of the Alabama Child Death Review System

A. ADPH Central Office Staff

The State Child Death Review Office is situated within the ADPH, Bureau of Prevention, Promotion, and Support for administrative and budgetary purposes. The ACDRS central office consists of four staff members: ACDRS Program Manager, Program Coordinator, Local Team Assistant, and an Epidemiologist. ADPH Central Office staff is responsible for sending death certificates, providing technical assistance, and overseeing the data review process of LCDRTs. ADPH central office staff also assist with the development of prevention initiatives, public awareness campaigns, and special interest programs.

B. State Child Death Review Team

SCDRT is a multidisciplinary, multiagency review team, composed of 28 members which are listed below and the first 7 of whom are ex officio members:

- The Jefferson County Coroner, Medical Examiner.
- The State Health Officer who serves as Chair.
- One member appointed by the Alabama Sheriff's Association.
- The Director of the Alabama Department of Forensic Sciences.

- The Commissioner of the Alabama Department of Human Resources.
- The Commissioner of the Alabama Department of Mental Health and Mental Retardation.
- The Director of the Alabama Department of Public Safety.
- A pediatrician with expertise in Sudden Infant Death Syndrome appointed by the Alabama Chapter, American Academy of Pediatrics.
- A health professional with expertise in child abuse and neglect appointed by ADPH.
- A family practice physician appointed by the Alabama Academy of Family Physicians.
- A pediatric pathologist appointed by the Alabama Department of Forensic Sciences.
- Eight private citizens appointed by the Governor.
- A member of the clergy appointed by the Governor.
- A representative of the Alabama Coroner's Association.
- A representative of the Alabama Network of Children's Advocacy Centers.
- A representative of the Alabama Sheriff's Association.
- A representative of the Alabama District Attorney's Association.
- A specialist in pediatric emergency medicine appointed by the Alabama Medical Association.
- A representative of the Alabama Association of Chiefs of Police.
- Chair of the Senate Health Committee or his/her designee and the Chair of the House Health Committee or his/her designee.

SCDRT serves as an advisory board with quarterly meetings to:

- Identify factors which make a child at risk for injury or death.
- Collect and share information among State Team members and agencies which provide services to children and families or investigate child deaths.
- Suggest and recommend improving coordination of services and investigations to appropriate, participating agencies.
- Identify trends relevant to unexpected/unexplained child injury and death.
- Review reports from local child death teams and upon request of a local team, individual cases of child deaths.
- Provide training and written materials to local teams to assist them in carrying out their duties.
- Develop a protocol for child death investigations and revise the protocol as needed.
- Educate the public in Alabama regarding the incidence and causes of child injury and death and the public role in aiding in reducing the risk of such injuries and deaths.
- Provide the Governor and the Legislature with an annual, written report including but not limited to, SCDRT's findings and recommendations of each of its duties; and provide copies of such report to the public.

C. Local Child Death Review Teams

Currently, all 67 counties in Alabama are represented by one of 42 multidisciplinary LCDRTs based in each judicial circuit within Alabama. The district attorneys within these judicial circuits are responsible for appointing a local coordinator and/or overseeing the child death review process for their circuit. Each Alabama county is included in a LCDRT jurisdiction.

The following individuals are LCDRT members:

1. The county health officer.
2. The director of the county Department of Human Resources.
3. The county district attorney.
4. The medical examiner.
5. The local coroner.
6. An investigator with a local sheriff's department who is familiar with homicide investigation.
7. An investigator with a local police department who is familiar with homicide investigation.
8. A pediatrician, or if no pediatrician is available, a primary care physician appointed by the county medical society.
9. A representative from a local child advocacy center, if one exists.

The role of LCDRTs is to hold local review sessions that collect, review, consolidate, and report information regarding child death to the State Team and ADPH central office staff. The purpose of these reviews is to decrease the incidence of unexpected or unexplained child injury and death by providing a better understanding of the circumstances surrounding death. LCDRTs accomplish this purpose by completing the following tasks:

1. The identification of factors which make a child at risk of injury of death.
2. The dissemination of information among the agencies which provide services to children and families, or which investigate child deaths or provide services.
3. The improvement of local investigations of unexpected/unexplained child deaths by participating agencies.
4. The improvement of existing services and systems and assisting in the establishment of additional services and systems to fill in gaps in the community.
5. The identification of trends relevant to unexpected/unexplained child injury and death.
6. Educating local public regarding the incidence and causes of child injury and death, and the public role in aiding and reducing the risk of such injuries and deaths.

Reviews by LCDRTs are essential in formulating recommendations that will modify risk factors at both local and state levels. Furthermore, LCDRT reviews of child deaths occurring in 2016 are the foundation for this report.

National Fatality Review Case Reporting System (NFR–CRS)

LCDRTs and ADPH use NFR-CRS as a database and data collection methodology to capture information regarding the circumstances surrounding each reviewed child's death. This database serves as a case reporting tool that documents the often-complex conversations, discussions, and report reviews that happen during the death review process. NFR-CRS also documents many descriptive aspects of the death such as the child's demographics, investigative actions, services provided or needed, risk factors, and LCDRT recommendations on how to prevent future child deaths in Alabama.

Alabama Child Death Review System Funding

ACDRS funding originates in Alabama's portion of the National Tobacco Settlement (NTS), through the Children First Trust Fund (CFTF). The sum of the funding equals 1 percent of the total CFTF portion of NTS but is not to exceed $300,000.

The Alabama Medicaid Agency also provides some supplemental funding to ACDRS through a reimbursement agreement. These funds are used solely for education and outreach efforts.

Alabama Child Death Review System's Prevention Initiatives

ACDRS has reviewed more than 4,200 child deaths since 2000. Due to these reviews, educational programs and prevention initiatives such as the Teen Driver Safety Campaign, Alabama Sudden Unexpected Infant Death Investigation (SUIDI) Team, the Booster Seat Advocacy Program, and the Healthy Start: Never Ever Shake a Baby Program have been developed.

A. Sudden Unexpected Infant Death Investigation Trainings

To improve data quality and reduce sleep-related child deaths, ACDRS conducted Child Injury and Death Scene Re-enactment and Scene Reconstruction Training sessions. Each session provided investigative protocols for law enforcement, Emergency Medical Services (EMS), district attorneys, medical examiners, coroners, and child protective services. ADPH social workers and nurses were also in attendance. Participants learned the skills necessary to conduct investigations; such as how to conduct witness interviews, how to perform doll reenactment, and how to develop narrative reports for forensic pathologists that will provide the foundation for a more accurate determination of the cause of injury and the person(s) responsible.

By the completion of the training, investigators were provided the necessary tools and knowledge to accurately complete SUIDI. Standardized reporting forms from the Centers for Disease Control and Prevention (CDC) and SUIDI demonstration dolls were distributed to investigators as investigative tools. The provided training, materials, and tools were based off nationally established CDC curriculum and aligned with CDC guidelines. These trainings and tools should greatly improve infant death scene investigations, the accuracy of infant death diagnoses, and the overall usefulness of the information regarding infant deaths collected by ACDRS. Thorough and standardized investigations will assist ACDRS in obtaining better data. Better data will lead to improved and targeted prevention strategies statewide.

More information about safe sleep practices for children and other educational materials can be found on the ADPH website, alabamapublichealth.gov, by searching for Sudden Unexpected Infant Death (SUID) and Safe Sleep.

B. Teen Driver Safety

ACDRS and the Injury Prevention Branch of ADPH collaborated to create publications to raise awareness of the Graduated Driver's License (GDL) Law as well as information regarding the risks that teen drivers face. In addition, through a partnership with State Farm and Children's of Alabama, ADPH produced #UrKeys2Drv Teen Driving Summit which provides an interactive, educational experience for teen drivers. More about this topic, risk factors, and links to informational materials can be found on the ADPH website, alabamapublichealth.gov, by searching for teen driver safety.

C. Car and Booster Seat Clinics

ADPH has Child Passenger Safety Technicians certified through Safe Kids to educate caregivers on proper installation of their child's car seat. In addition to educating caregivers on proper installation, pregnant women and families receiving federal assistance are eligible to receive a car seat provided by ACDRS. In 2016, a total of 1,565 seats were provided to children of eligible families. More about this topic, information about state law, and links to informational materials can be found on the ADPH website, alabamapublichealth.gov, by searching for child restraints or car seats.

D. Healthy Start: Never Ever Shake a Baby

To raise public awareness and prevent child death and injury resulting from Shaken Baby Syndrome, ADPH and ACDRS collaborated with many coalition partners on a statewide campaign including television public service announcements (PSAs), educational materials, presentations, billboards, and radio PSAs among other methods to communicate the message, "Never Ever Shake a Baby." More about this topic can be found on the ADPH website, alabamapublichealth.gov, by searching for Never Ever Shake a Baby.

ACDRS continues to rely on SCDRT, LCDRTs, strategic partners, and the public to promote the program's mission. Although significant improvements have been made, ACDRS will continue to make strides that reduce child death through awareness, education, and prevention efforts.

2019 Recommendations to the Governor and Legislature

State Child Death Review Team Recommends the Following: Implement Prevention Education Statewide

Statewide

- Use alternative channels such as social service agencies, houses of worship, and youth organizations to implement prevention education statewide.
- Improve media coverage on suicide prevention to encourage those who are vulnerable or at risk to seek help.
- Support annual suicide prevention education in schools to promote emotional well-being and connectedness among the entire school community.
- Encourage the safe storage of firearms by distributing gun locks as a safety precaution.
- Implement public education and awareness campaigns about the need for adult supervision around open bodies of water.
- Expand and mandate SUIDI training for EMS, law enforcement, coroners, and child protective services.
- Provide new parent education regarding newborn and infant safety recommendations such as safe sleep environments and car seat use/installation.
- Increase rural car seat distribution/education.
- Prevent co-sleeping through public education and awareness campaigns.

Build Partnerships to Serve Alabama's Children and Families

- Establish a partnership with Nurse-Family Partnership.
- Increase collaboration with the Alabama Suicide Prevention and Resources Coalition (ASPARC).
- Encourage implementation of a Drug Abuse Task Force.

Educate, Enforce, and Improve Graduated Drivers License Policy

- Educate parents and law enforcement of GDL Law.
- Support further enhancement of the GDL by improving night driving restrictions for teen drivers (10 p.m. -5 a.m.).
- Include a questionnaire to determine knowledge of the GDL policy in the drivers' education exam.
- Implement a Statewide Teen Driver Safety Course for high school sophomores.

Cooperate and Collaborate for Legislative Action

- Improve ACDRS case review rates by considering alternative lead agencies for LCDRTs.
- Improve gun safety laws.

Improve Public and Private Funding for Children's Services

- Advocate for increased funding for children's services.
- Increase funding for mental health.
- Explore private funding as an avenue for additional support of ACDRS.

Create a Comprehensive Data System to Improve Prevention Initiatives

- Establish a standardized case management system for coroners and medical examiners.
- Increase collection and utilization of new sources data.
- Utilize the Social-Ecological Model: A Framework for Prevention as a structure for prevention efforts.

Key Findings

In 2016, ACDRS reviews were completed for 185 child deaths or 62.3 percent of the cases eligible for review. Cases that meet criteria for review are those involving deaths in Alabama of infants and children from live birth to less than 18 years of age whose deaths are considered unexpected or unexplained. Reviewed cases are categorized based on the manner and cause of death. Manner of death is classified based on the circumstances surrounding death. Cause of death refers to the primary underlying cause of a death which is the disease or injury/action initiating the sequence of events that led directly to death, or the circumstances of the accident or violence that produced the fatal injury. The five manner of death categories reviewed by ACDRS are accidents, homicides, suicides, undetermined manners, and pending/unknown manners of death:

- Accidents (unintentional injury deaths) accounted for 79 reviewed deaths.
- Homicides accounted for 21 reviewed deaths.
- Suicides accounted for 10 reviewed deaths.
- Undetermined manner accounted for 63 reviewed deaths.
- Pending or unknown cases accounted for 12 reviewed deaths.

Motor Vehicle Incidents

In 41 reviewed 2016 deaths, the child was involved in a fatal motor vehicle incident:

- In 19 reviewed motor vehicle cases, the child was a passenger in the car during the incident.
- In 7 reviewed motor vehicle cases, the child was a pedestrian struck by a motor vehicle.
- In 12 reviewed motor vehicle cases, the child was the driver of the motor vehicle.
- In 8 reviewed motor vehicle cases, speeding contributed to death.

Sleep-related Death

In 36 reviewed 2016 deaths, the child was sleeping or in the sleep environment at the time of death:

- In 28 reviewed sleep-related cases, the child was not sleeping on a recommended sleep surface (such as a crib or bassinet).
- In 26 reviewed deaths, the child was co-sleeping with either an adult or another child on the same sleep surface.

Firearm, Weapon, and Assault-related Deaths

In 33 reviewed 2016 deaths, a firearm, weapon, or assault was involved:

- In 21 reviewed weapon and assault cases, the child's death involved firearms:
  - In 15 reviewed deaths, handguns were involved.
- In 21 reviewed cases, homicide was the cause of death.
- In 10 reviewed cases, suicide was the cause of death.

Sudden Unexplained Infant Death

In 31 reviewed 2016 deaths, reviewers classified the incidents as SUID:

- In 13 reviewed incidents, the child was sleeping on an unsafe sleep surface.
- In 71 percent of incidents, the child was 4 months of age or younger.

Additional External Causes of Death

Drowning

In 17 reviewed 2016 deaths, drowning was the cause of death:

- In 6 reviewed drowning deaths, open water was involved, and the majority of these open water deaths occurred in rivers.
- In 8 reviewed drowning deaths, death occurred in pools, hot tubs, or spas.

Suffocation

In 12 reviewed 2016 deaths, asphyxiation was the cause of death and 11 of those asphyxiations were sleep-related deaths due to hazards in the sleep environment.

Fires

In less than 5 reviewed 2016 deaths, fires and fire-related injuries were the cause of death.

Poisoning or Overdose

In less than 5 reviewed 2016 deaths, intentional or unintentional poisonings and overdoses were the cause of death.

Location of Death

In 98 reviewed 2016 deaths, the death occurred at the child's residence, which is the leading location for child death in Alabama. Interstates, highways, roads, and streets were the second leading location for child death with 37 reviewed 2016 deaths.

Deaths by Age Categories

Less Than 12 Months of Age

In 85 reviewed deaths for 2016, children were less than 12 months of age:

- Children were less than 2 months of age in 50 reviewed deaths.
- Children were less than 4 months of age in 66 reviewed deaths.
- Undetermined manner of death was the most common manner of death for this age group (61 deaths).

1 to 4 Years

In 23 reviewed deaths for 2016, children were aged 1 to 4 years of age. Among reviewed deaths:

- Accidents were the leading manner of death in this age group with 15 deaths.
- Drowning was the leading cause of death with 7 deaths.

5 to 8 Years

In 13 reviewed deaths for 2016, children were aged 5 to 8 years of age. Among reviewed deaths:

- Accidents were the leading manner of death in this age group with 12 deaths.
- Vehicle incidents were the leading cause of death with 7 deaths.

9 to 12 Years

In 11 reviewed deaths for 2016, children were aged 9 to 12 years of age. Among reviewed deaths:

- Accidents were the leading manner of death in this age group with 8 deaths.
- Vehicle incidents were the leading cause of death with less than 5 deaths.

13 to 16 Years

In 31 reviewed deaths for 2016, children were aged 13 to 16 years of age. Among reviewed deaths:

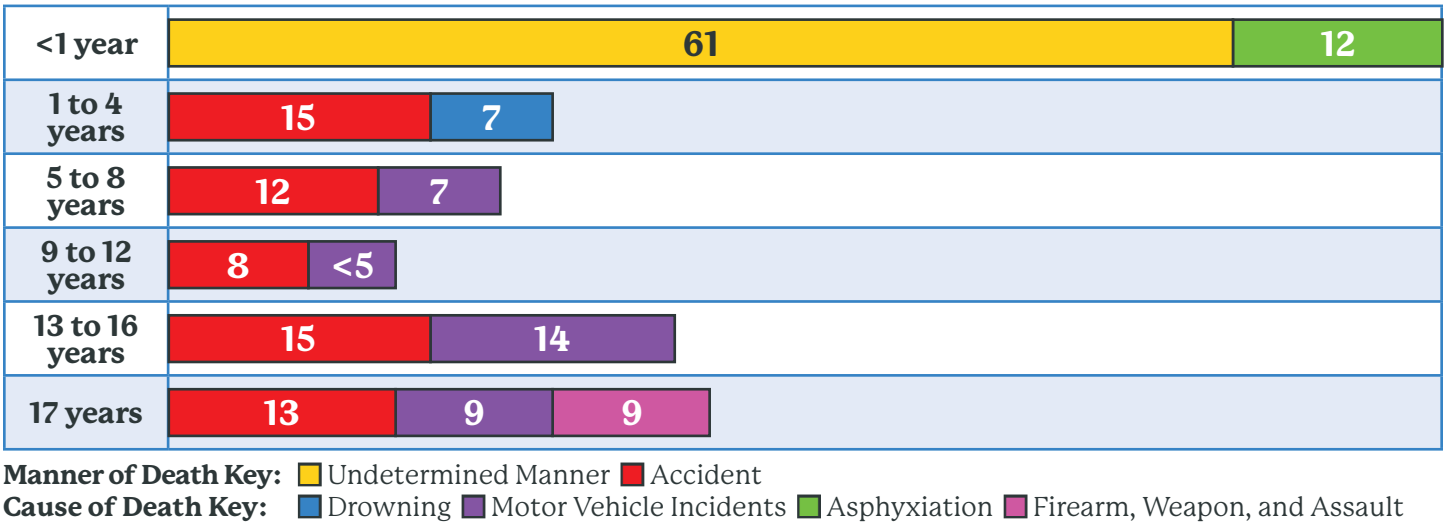
- Accidents were the leading manner of death in this age group with 15 deaths.
- The second leading manner of death was suicide with 8 deaths.
- Vehicle incidents were the leading cause of death with 14 deaths.
- Assault or weapon-related death was the second leading cause with 13 deaths.

17 Years

In 22 reviewed deaths for 2016, children were aged 17 years of age. Among reviewed deaths:

- Accidents were the leading manner of death in this age group with 13 deaths.
- The leading causes of death were motor vehicle incidents and weapon or assault-related deaths, both with 9 deaths.

Leading Manner and Cause of Death by Age Category - 2016 Reviewed Child Deaths



Review Process and Timeline

Review Process

The ACDRS central office receives copies of all Alabama death certificates issued for decedents under 18 years of age. ACDRS assesses each certificate to determine if it meets review criteria. Cases that meet the criteria are then assigned to the appropriate LCDRT on a case-by-case basis.

Upon reviewing individual cases, LCDRTs complete the appropriate data collection form and submit the information to the ACDRS state office. LCDRTs make recommendations to SCDRT and take appropriate actions within communities to prevent additional deaths.

The ACDRS central office collects and analyzes information submitted by LCDRTs to answer requests for specific data and generate reports.

SCDRT meets quarterly to review the statewide data, consider LCDRT recommendations and performance, and conduct general ACDRS business. SCRDT acts on ACDRS issues in the form of education programs, informational publications, and other similar efforts.

Case Review Criteria

To be considered for ACDRS review, the case must meet the following criteria:

- The deceased must have died in Alabama.
- The deceased must have been born alive. ACDRS does not review fetal deaths.
- The deceased must be less than 18 years of age.
- The cause of death must be non-medical, unexpected, or unexplained.

Sample Case Review Timeline

Sample case review:

- An infant or child death occurs on September 1.
- The ACDRS central office receives the death certificate by November 1.*
- The case is assigned to the appropriate LCDRT by November 15.
- The LCDRT meets to review this specific case and others that year.**
- The ACDRS central office receives the last of the previous year's death certificates by July of the following year.
- LCDRTs must submit all reviewed and completed cases for a reporting year to the ACDRS central office by April 1 of the third calendar year.

**Due to unavoidable delays, certificates are sometimes received several months after the death occurs.*

***By law, each Local Team is required to meet at a minimum of once per calendar year. All information necessary to the review process may not be available for several months after the death occurs.*

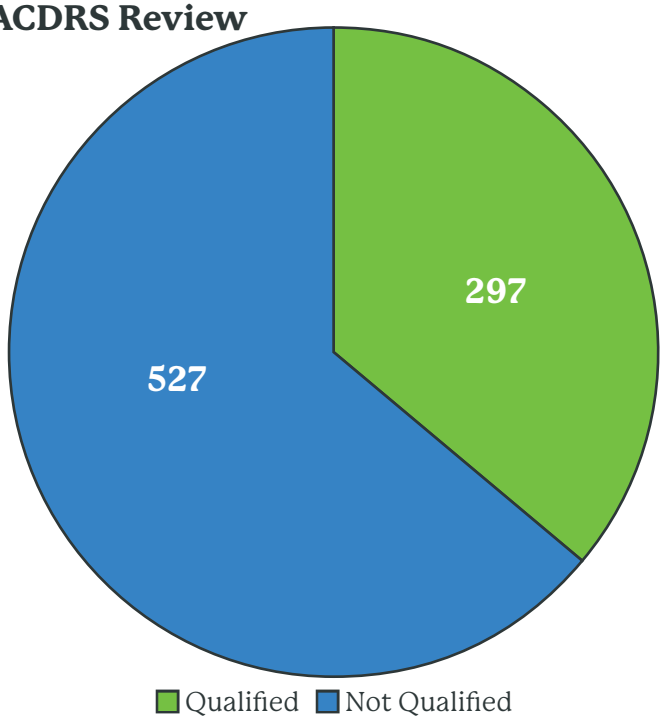
2016 Reviewed Child Deaths

Local Child Death Review Team Success Rates:

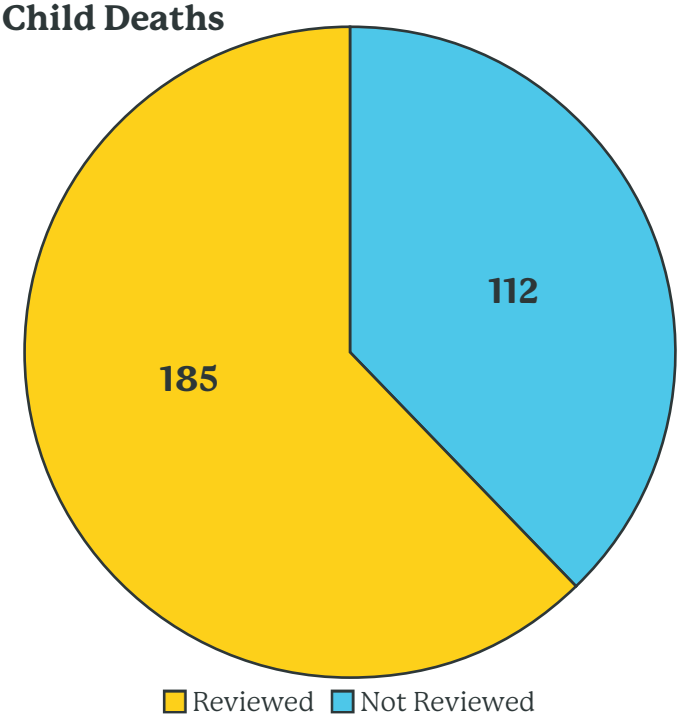
For the 5-year span between 2012 and 2016, 1,415 cases qualified for review under ACDRS (out of 4,046) which constitutes 35 percent of all child deaths. Of these qualifying cases for the 2012 to 2016 span, LCDRTs reviewed and returned 927 or 65.5 percent.

There was a total of 824 child deaths in Alabama in 2016*, and 297 qualified for review under ACDRS guidelines. Of qualified cases, LCDRTs returned 185 completed reviews or 62.3 percent.

2016 Child Deaths - Qualifying for ACDRS Review



2016 Child Deaths - Reviewed Child Deaths

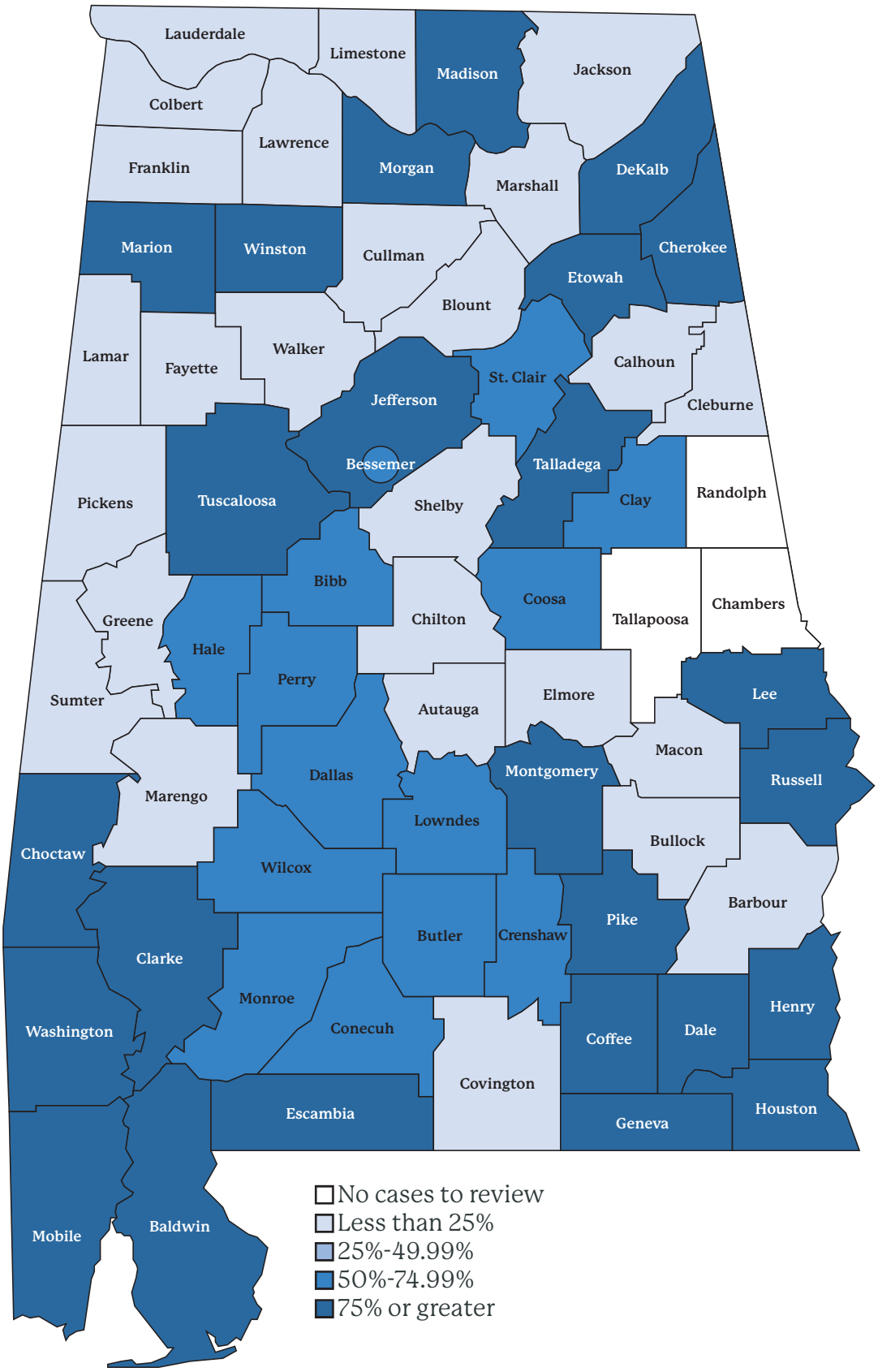


Local Child Death Review Teams with 100 Percent Case Review Completion

The table below recognizes the outstanding efforts of several LCDRTs that achieved this goal.

Review Team County(s)	Number of Completed Cases
Morgan	9
Cherokee and DeKalb	7
Coffee and Pike	1
Mobile	22
Montgomery	20
Etowah	9
Henry and Houston	9
Escambia	2
Marion and Winston	2
Russell	1
Baldwin	7
Talladega	4
Lee	3

2016 Review Completion Rate by County



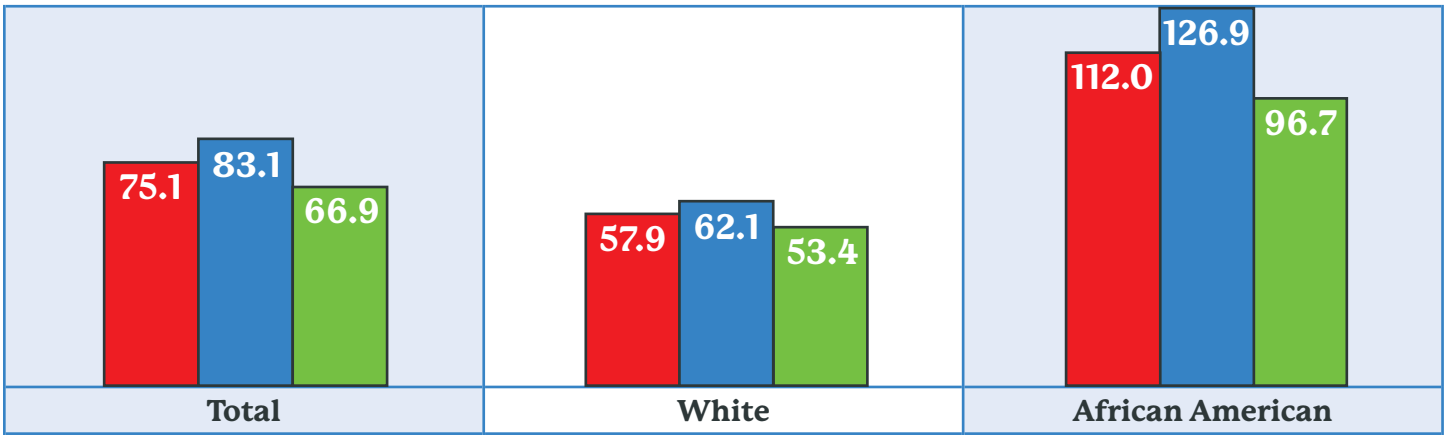
LCDRT Recognition	
Team 1	Choctaw, Clarke, Washington
Team 2	Butler, Crenshaw, Lowndes
Team 3	Barbour, Bullock
Team 4	Bibb, Dallas, Hale, Perry, Wilcox
Team 5	Chambers, Macon, Tallapoosa, Randolph
Team 6	Tuscaloosa
Team 7	Calhoun, Cleburne
Team 8	Morgan
Team 9	Cherokee, DeKalb
Team 10A	Jefferson
Team 10B	Bessemer
Team 11	Lauderdale
Team 12	Coffee, Pike
Team 13	Mobile
Team 14	Walker
Team 15	Montgomery
Team 16	Etowah
Team 17	Greene, Marengo, Sumter
Team 18	Shelby
Team 19	Autauga, Chilton, Elmore
Team 20	Henry, Houston
Team 21	Escambia
Team 22	Covington
Team 23	Madison
Team 24	Fayette, Lamar, Pickens
Team 25	Marion, Winston
Team 26	Russell
Team 27	Marshall
Team 28	Baldwin
Team 29	Talladega
Team 30	St. Clair
Team 31	Colbert
Team 32	Cullman
Team 33	Dale, Geneva
Team 34	Franklin
Team 35	Conecuh, Monroe
Team 36	Lawrence
Team 37	Lee
Team 38	Jackson
Team 39	Limestone
Team 40	Clay, Coosa
Team 41	Blount

Alabama Child Death Rates for 2016

There were 824 infant and child deaths in 2016, or 74.1 deaths per 100,000 children. Of these deaths, 50.8 percent were white, 46.7 percent were African American, and 2.5 percent were various other races. Male children constituted 56.3 percent of child deaths in 2016.*

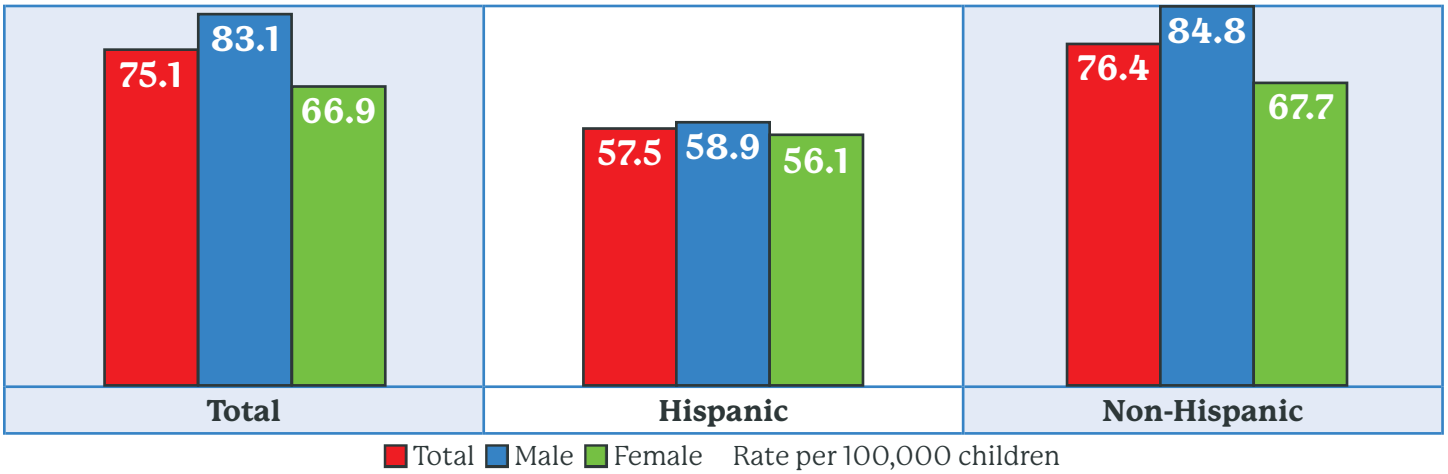
As the following graph indicates, African American children suffer from a disproportionately higher rate of death than white children. This higher rate of death for African American children is apparent even though African American children make up a smaller proportion of the total child population in Alabama than white children. In 2016, the African American population in Alabama aged 17 years or younger was approximately 340,000 children, while the white population in Alabama for the same age group was approximately 724,000 children.*

Death Rates for Alabama Children by Race - 2016*



As the following graph indicates, Hispanic children suffer from a noticeably lower rate of death than children of other ethnicities. This lower rate of death for Hispanic children is apparent even though these children make up a much smaller proportion of the total child population in Alabama (7.3 percent) than children of other ethnicities. In 2016, the Hispanic population of Alabama aged 17 years or younger accounted for 46 of 824 deaths (5.6 percent).*

Death Rate for Alabama Children by Ethnicity - 2016*



**Centers for Disease Control and Prevention (CDC) WONDER - https://wonder.cdc.gov/ucd-icd10*

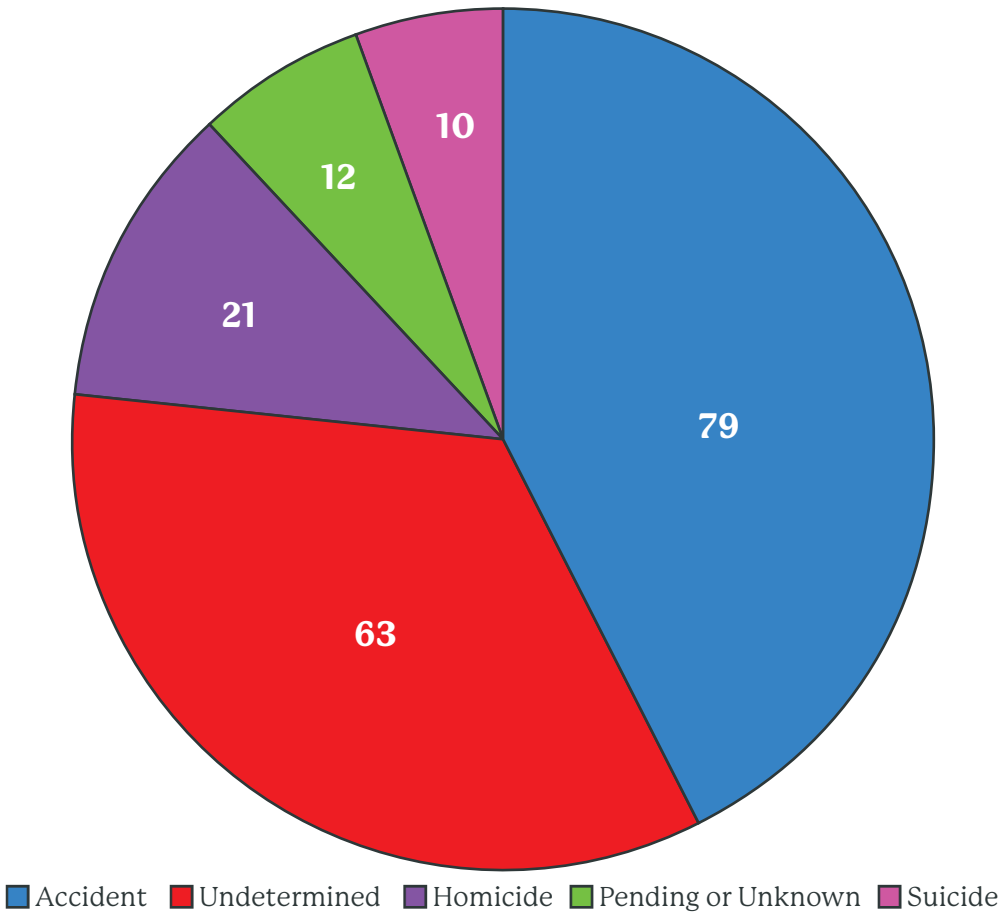
Manner of Death Summary – 2016 Reviewed Deaths

Manner of death is a determination of the broad classification of death and is typically made by a coroner, medical examiner, police, or other official. The distinction between manner and cause of death is that cause is a specific disease, injury, or other mechanism of death whereas manner is primarily a legal determination.

For the purposes of this report, manner of death refers to one of the six general categories of death listed on the Alabama Death Certificate. The six categories are:

1. *Pending Investigation:* a death which is still under review by coroners or medical examiners.
2. *Accident:* a death resulting from a non-intentional injury.
3. *Homicide:* a death resulting from an intentional act committed by another person to cause fear, harm, or death.
4. *Suicide:* a death that results from an intentional, self-inflicted act committed to do self-harm or death.
5. *Undetermined Circumstances (Undetermined):* a death in which, after all available information has been considered, information pointing to one manner of death is no more compelling than one or more competing manners of death.
6. *Natural Causes:* death not due to external means (i.e., a death that occurred as the expected outcome of a disease, birth defect, or congenital anomaly). In other words, death resulting from natural or medical causes, such as illness or disease. Normally, ACDRS does not review such cases. However, reviewed cases in which the cause of death is initially classified as pending or unknown are commonly discovered upon review to have occurred by natural causes.

Count of 2016 Reviewed Deaths by Manner of Death



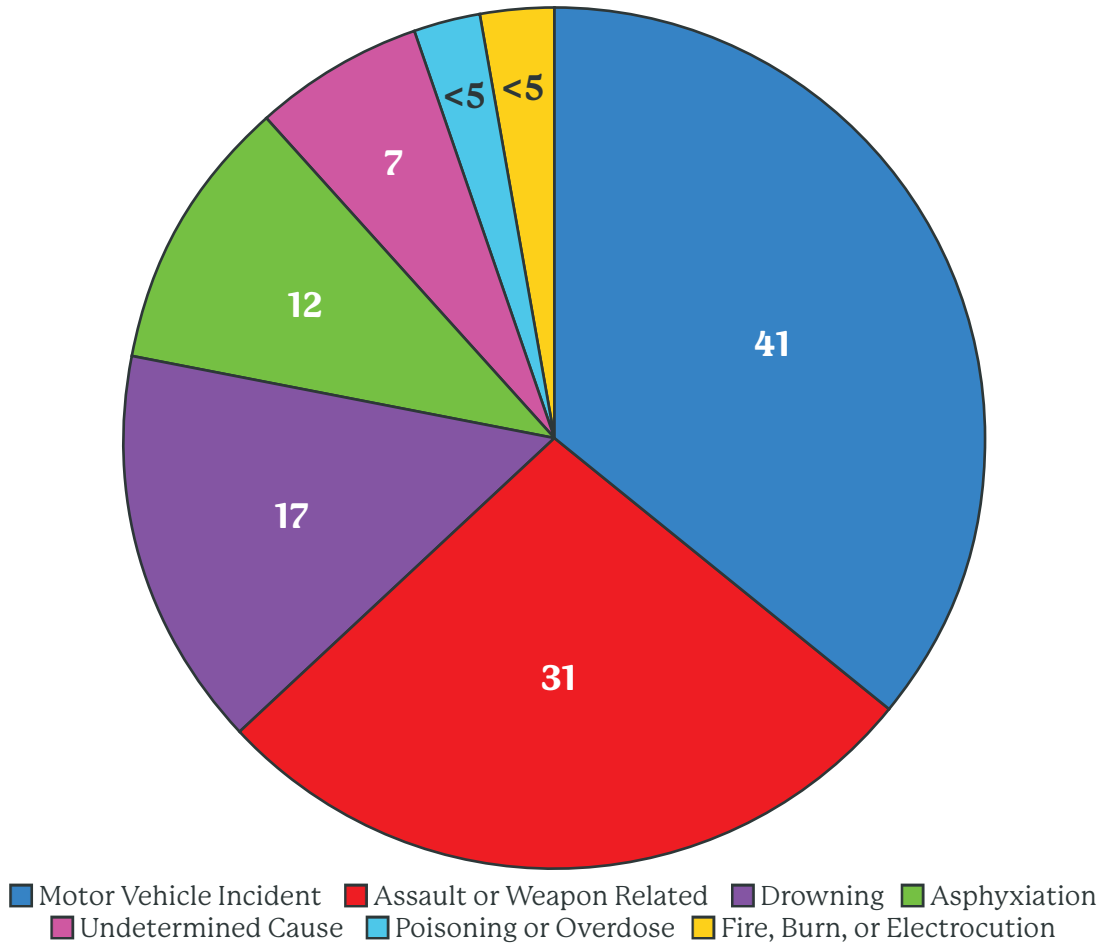
Cause of Death Summary – 2016 Reviewed Deaths

For the purposes of this report, the term cause of death refers to the disease, injury, or mechanism of action initiating the sequence of events that leads directly to death, or the circumstances of the accident or violence that produced the fatal injury.

In 2016, the four most frequently reviewed causes of death due to injury were:

1. Motor vehicle incidents (41 deaths).
2. Assault and weapon-related causes (31 deaths).
3. Drowning (17 deaths).
4. Asphyxiation (12 deaths).

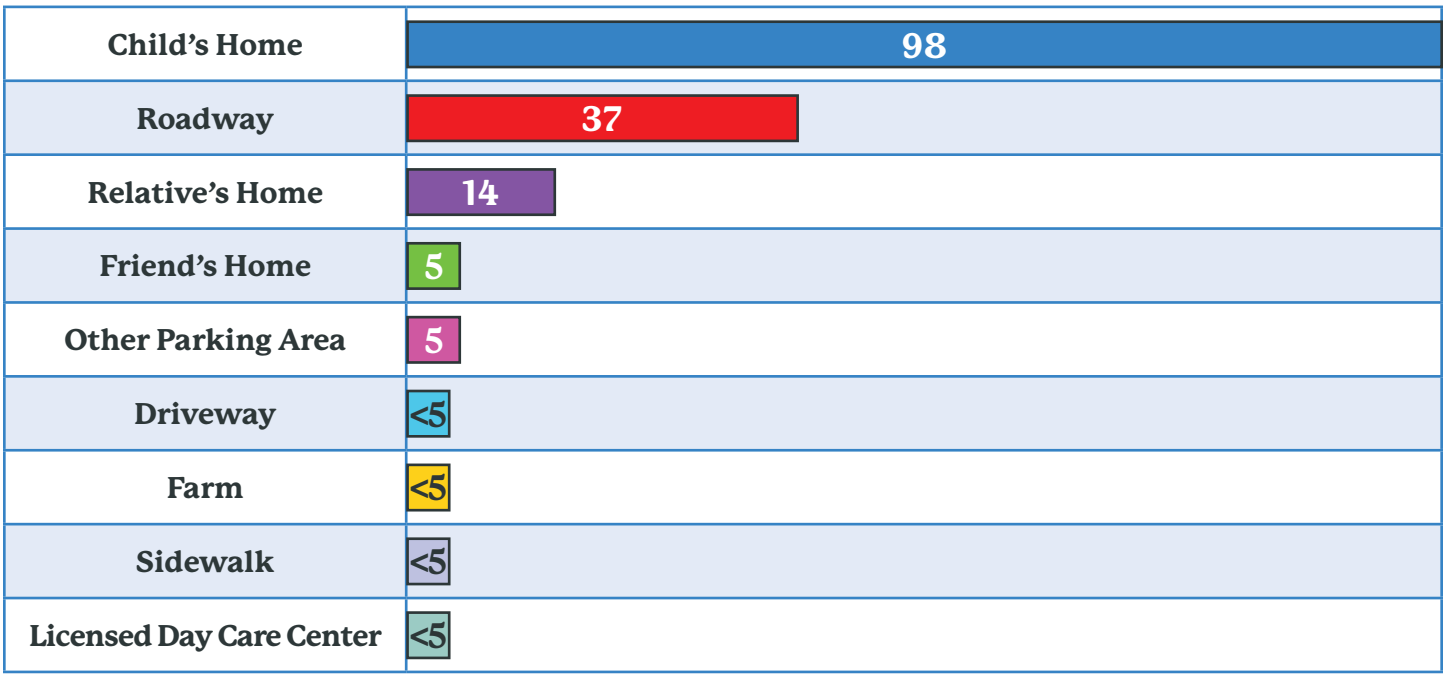
Count of 2016 Reviewed Deaths by Cause of Death



Location of Death Summary – 2016 Reviewed Deaths

In 2016, the most frequent place of incident was the child's home (98 cases). The second most common location of death was a roadway (37 cases).

2016 Reviewed Child Deaths by Age Catagory, Manner, and Cause of Death



Review of the Common Causes of Child Death in Alabama

A. Motor Vehicle Incidents – 2016 Reviewed Deaths

This category includes all deaths occurring to children who are drivers, passengers, pedestrians, or occupants of all forms of vehicles, including bicycles, motorcycles, all-terrain vehicles (ATVs), trains, etc. The manner of death is usually accidental but can also include suicides or homicides.

There were 41 reviewed cases of death by motor vehicle incident for 2016.

Child position in or out of vehicle:

- In 7 reviewed deaths, the child was a pedestrian.
- In 19 reviewed deaths, the child was a passenger.
- In 12 reviewed deaths, the child was the driver of the vehicle.

Circumstances contributing to motor vehicle incident:

- In 8 reviewed deaths, speeding was reported as contributing to death.
- Less than 5 reviewed deaths were reported as due to drug or alcohol use.
- Less than 5 reviewed deaths were reported as due to reckless driving.

Seatbelt and other restraint use:

- In less than 5 reviewed deaths, a car seat was needed and present, but not used at the time of the incident.
- In less than 5 reviewed deaths, a car seat was present and used correctly at the time of the incident.
- In less than 5 reviewed deaths, a booster seat was needed but was not available at the time of the incident.
- In less than 5 reviewed deaths, a shoulder belt was present but either not used or used incorrectly at the time of the incident.

B. Sleep-related Deaths – 2016 Reviewed Deaths

Sleep-related deaths are deaths that can be attributed to specific causes or factors in the sleep environment and are distinct from SUID which cannot be attributed to any established cause or contributing factor. These deaths typically occur in children under 12 months of age, just as SUIDs, and are commonly classified as undetermined manners of death due to the difficulty of establishing convincing contexts of injury for such deaths. These deaths may be contributed to by improper sleep surfaces, co-sleeping, toys or other objects in the sleep environment, and various other hazards to the child's health.

There were 36 reviewed, non-SUID deaths linked to various hazards in the sleep environment during 2016.

Cause of death:

- In 10 reviewed deaths, the cause of death was unintentional asphyxia.
- In the remaining 26 sleep-related deaths, sleep environment was found to contribute to the deaths, but a specific cause of death was unable to be determined conclusively.

Sleep surface:

- In 5 reviewed deaths, the child was sleeping on a safe sleep surface such as a crib or bassinet.
- In 28 reviewed deaths, the child was sleeping on an unsafe sleeping surface. Of these 28 reviewed deaths, 21 of the sleep surfaces were adult beds.

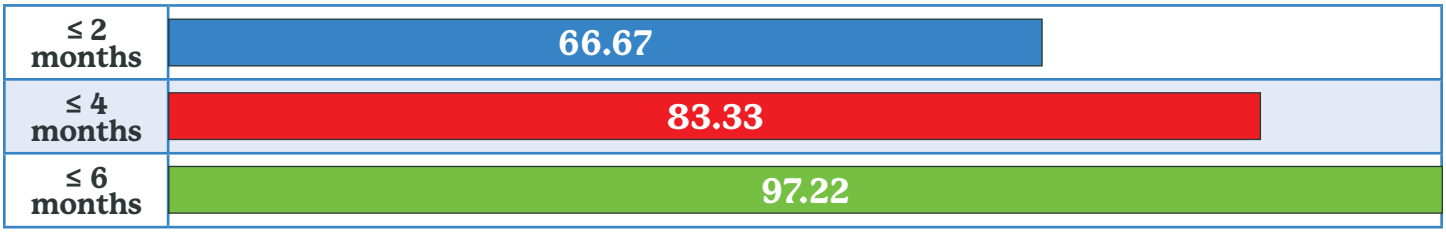
Co-sleeping:

- In 19 reviewed deaths, the child was sleeping with an adult on the same sleep surface.
- In 7 reviewed deaths, the child was sleeping with another child on the same sleep surface.

Objects in the sleep environment:

- In 18 reviewed deaths, the child was sleeping with a blanket in the sleep area.
- In 5 reviewed deaths, the child was sleeping with a pillow in the sleep area.
- In 5 reviewed deaths, the child was sleeping with a comforter in the sleep area.

Sleep-related Deaths by Age - 2016 Reviewed Deaths



Percent of Total Deaths

C. Firearm, Weapon, and Assault Deaths – 2016 Reviewed Deaths

This category includes deaths due to weapon-related injuries, accidentally or intentionally inflicted. Types of weapons include firearms, sharp or blunt instruments, a person's body part, explosive devices, etc. The use of the weapons in this category may be determined as self-injury; the result of violence, such as gang-related activity; the result of aggressive behavior, such as bullying or a heated argument; or accidental, as in cases of a child playing with the weapon or showing it to friends.

LCDRTs reviewed 33 cases of assault or weapon-related deaths for 2016. In 21 of these deaths a firearm was used, and handguns were the most commonly used firearm in these deaths (15 deaths).

Firearm storage:

- In 9 reviewed deaths, the firearm used was not stored or was in an unsecured location such as under a mattress, pillow, or unlocked cabinet.
- In 5 reviewed deaths, the firearm was either stored loaded or was stored in the same location as ammunition for the firearm.

Owner of the firearm:

- In 5 reviewed deaths, the owner of the firearm was either the child or a relative of the child.

D. Homicides and Suicides

Homicides accounted for 21 of the 33 reviewed firearm, weapon, and assault deaths for 2016. Of these deaths, 15 were due to firearms. Physical assaults and poisonings were among the remaining causes of death.

Suicides accounted for 10 of the 33 reviewed deaths for 2016, and 6 of these deaths were due to firearm use.

E. Sudden Unexplained Infant Death – 2016 Reviewed Deaths

SUID consists of the following three most commonly reported types: Sudden Infant Death Syndrome (SIDS), unknown cause deaths, and asphyxiations.

SUID is a broad term used to describe sudden infant deaths from a variety of causes, both internal and external, involving the sudden death of infants aged 1 month to 1 year. SIDS is a very specific type of SUID, that cannot be explained by a thorough investigation which eliminates all external contributing causes of death and includes a complete autopsy, toxicology, examination of the death scene, and review of the clinical history.

There were 31 reviewed SUID incidents during 2016.

Cause of death:

- There were less than 5 reviewed SUID incidents in which the cause of death was listed as unintentional asphyxia. The remaining reviewed SUID incidents were listed as undetermined deaths.

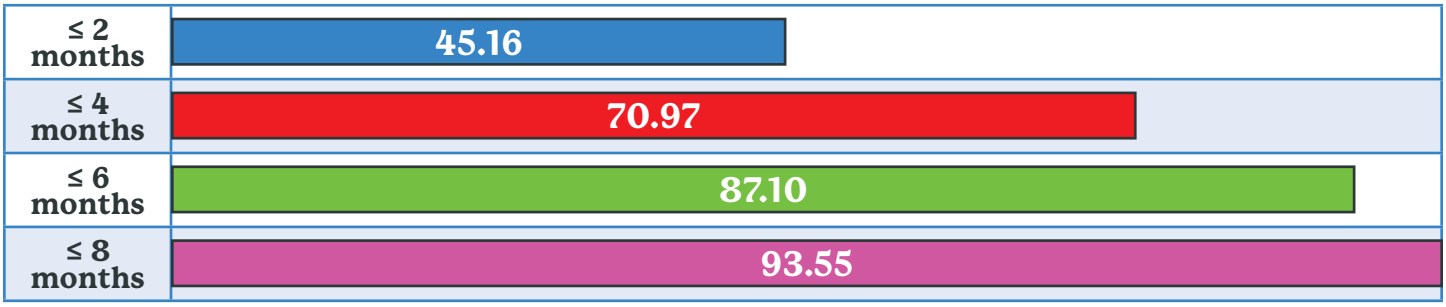
Sleep surface:

- In 6 reviewed incidents, the child was sleeping on a safe sleep surface (such as a crib, bassinet, etc.).
- In 13 reviewed incidents, the child was sleeping on an unsafe sleep surface. Of these 13 incidents, 9 of the sleep surfaces were adult beds.

Co-sleeping:

- In 6 reviewed incidents, the child was sleeping with an adult on the same sleep surface.
- In less than 5 reviewed incidents, the child was sleeping with another child on the same sleep surface.

SUID Incidents by Age - 2016 Reviewed Deaths



Percent of Total Deaths

The Social-Ecological Model: A Framework for Prevention

Preventing child death requires a focused approach based on data and evidence. SCDRT recommendations to the legislature are based on the analysis of ACDRS data and the Social-Ecological Model of Health Promotion.

The individual level represents the individual who might be affected by child injury and death risk factors. SCDRT recommends implementing prevention strategies that will increase the individual's knowledge and influence attitudes and beliefs regarding:

- Bed-sharing, prone sleep positioning, and excess bedding.
- Safer storage of lethal means (i.e., firearms, medications, sharp objects, etc.).
- Child maltreatment.

The interpersonal level examines close relationships that may increase the risk of child injury and death. SCDRT recommends implementing prevention strategies that will facilitate individual level behavior change by affecting social and cultural norms regarding:

- Education and family support to encourage positive child development.
- Parenting focused prevention programs.

The community level focuses on identifying child injury and death risk factors within settings where relationships take place (i.e., schools, workplaces, neighborhoods, etc.). SCDRT recommends implementing prevention strategies that will improve the community response within these settings by:

- Approaching mental health as a community issue.
- Providing access to statewide prevention education.
- Conducting public awareness and educational campaigns.
- Collaborating with coalitions to expand resources.

The organizational level represents changing individual behaviors by influencing organizational systems (i.e. local health departments, coalitions, law enforcement, etc.). SCDRT recommends the following prevention strategies that are appropriate for this level:

- Expanding and mandating SUIDI Training for EMS, law enforcement, coroners, and child protective services to obtain better investigative data for child-injury cases and sleep-related deaths.
- Identifying innovative channels and agencies to establish partnerships for prevention education.

The policy enabling environment level represents child injury and death prevention at the policy level. SCDRT recommends affecting change at the policy level by:

- Translating the GDL Law to parents and law enforcement statewide.
- Collaborating with coalitions and other community organizations to change or develop new teen driver safety policies, suicide prevention initiatives, and new parent education policies.
- Improving gun safety laws.

State Child Death Review Team Members

Scott Harris, M.D., M.P.H.
State Health Officer/Chair

Scott Anderson
Alabama District Attorney's Association Appointee

Tom Anderson
Alabama District Attorney's Association Appointee

Jannah M. Bailey
Private Citizen
Governor Appointee

Lynn Beshear, Commissioner
Alabama Department of Mental Health

Melanie Bridgeforth
Private Citizen
Governor Appointee

Nancy Buckner, Commissioner
Alabama Department of Human Resources

Christina Cochran, M.D.
Medical Association of the State of Alabama Appointee

Gregory Davis, M.D.
Coroner/Medical Examiner
Jefferson County

Angelo Della Manna, Director
Alabama Department of Forensic Sciences

Senator Gerald Dial
Chair
Senate Health Committee

Candice Dye, M.D.
Alabama Department of Public Health Appointee

Sheriff Bill Franklin
Alabama Sheriff's Association Appointee

Reverend Joseph Godfrey
Clergy
Governor Appointee

Timothy Kimbrell
Alabama Coroners Association Appointee

Marian Loftin
Private Citizen
Governor Appointee

Sallye Longshore
Private Citizen
Governor Appointee

Katie Beth McCarthy
Network of Children's Advocacy Centers Appointee

Chris Newlin
Private Citizen
Governor Appointee

Marsha Raulerson, M.D.
Alabama Academy of Pediatrics Appointee

Colonel John E. Richardson
Director
Alabama Department of Public Safety

David Rydzewski, M.D.
Alabama Department of Forensic Sciences Appointee

Gina South
Network of Children's Advocacy Centers Appointee

Michael Sparks, Director
Alabama Department of Forensic Sciences

Chief Jerry Taylor
Alabama Association of Chiefs of Police Appointee

Michael A. Taylor, M.D.
Private Citizen
Governor Appointee

Sheriff Bobby Timmons
Executive Director
Alabama Sheriff's Association

Charles Ward, Director
Alabama Department of Public Safety

Representative April Weaver
Chair
House Health Committee

Jerry H. Williams
Alabama Coroners Association Appointee

Key Dates for 2020

State Team Meeting
January 23, 2020

Child Death Review Conference
August 24-27, 2020

Quarterly Meeting Tentative Dates
April 2020, July 2020, and October 2020