



ALABAMA CHILD DEATH REVIEW SYSTEM: 2012 REPORT



*Learning from the Past
to Protect the Future...*

DEATHS AMONG CHILDREN IN ALABAMA ALABAMA CHILD DEATH REVIEW SYSTEM

ANNUAL REPORT - 2012 DATA

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SEPTEMBER 1, 2016



The death of a child is a sentinel event that represents a tragedy for the child's family, their community, and our entire state. This is especially true when such a death could have been prevented. There have been many efforts to reduce accidental, unexpected, and unexplained child deaths over the years. The mission of the Alabama Child Death Review System (ACDRS) is to understand how, where, and why children die in Alabama in order to prevent similar deaths in the future.

The multidisciplinary methodology employed for child death review (CDR) began years ago with the systematic investigation of child abuse and neglect deaths and is now employed to review a much broader scope of deaths. In 1997, ACDRS was created under state law to review the circumstances and underlying factors of all infant and child deaths in Alabama in order to identify those deaths which possibly could have been prevented. The de-identified findings of these reviews and their subsequent recommendations are reported to state officials, state agencies, and the general public alike. In addition to collecting and reporting data, ACDRS develops new literature and educational programs on many prevention topics including child passenger safety, teen driving, safe infant sleeping, and youth suicide. ACDRS data, findings, and recommendations are used to inform policy decisions at both the state and local levels.

ACDRS consists of the State CDR Office, Local CDR Teams throughout the state, and the State CDR Team. The State CDR Office is responsible for program coordination and is instrumental in implementing strategies to make the public aware of ways to prevent future infant and child deaths. The multidisciplinary Local CDR Teams are responsible for the in-depth analysis of individual cases assigned to them by the State CDR Office and for making recommendations about how to prevent future infant and child deaths. The State CDR Team meets quarterly and serves as an advisory board. Those involved with ACDRS at every level remain committed to the mission of preventing childhood injuries and fatalities in Alabama through education and public awareness.

This report presents new data collected and analyzed related to infant and child deaths in Alabama during 2012 as well as updated data from prior years. It includes multi-year analyses and illustrates some of the trends which are so important to our research, awareness efforts, and prevention activities. It also highlights some of the past successes, significant changes, current challenges, and future plans of ACDRS. We hope that you will find this information useful and share it with other interested parties.

INTRODUCTION

ALABAMA CHILD DEATHS



There were 725 infant and child deaths in the state of Alabama in 2012. This report examines unexpected and unexplained child deaths¹ in Alabama for the 2012 year.

Each of these deaths 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 Alabama children die, the state tasks the Alabama Child Death Review System (ACDRS) with the following responsibilities: to maintain statistics on child mortality; identify deaths that may be the result of abuse, neglect, or other preventable causes; and, from that information, to develop and implement measures to help reduce the risk and incidence of future unexpected and/or unexplained deaths in Alabama.

With this report, ACDRS seeks to honor the memory of all the children who have died in Alabama. We hope that these efforts will lead to a better understanding of how we can make Alabama a safer, healthier place for children.

THE ALABAMA CHILD DEATH REVIEW SYSTEM

All 50 states in the U.S. participate in an annual Child Death Review (CDR). On September 11, 1997, the state of Alabama created the Alabama Child Death Review System (ACDRS) State Office and the Local and State Child Death Review Teams.

The Alabama Child Death Review System (ACDRS) is a prevention program, driven largely by state and local review teams, with the express purpose of protecting the lives of as many of Alabama's infants and children as possible. ACDRS is tasked to review, evaluate, and help prevent cases of unexpected or unexplained child deaths in Alabama.

¹ In this report, *unexpected or unexplained* refers to all deaths that, prior to investigation, appear possibly to have been caused by trauma, suspicious or obscure circumstances, child abuse or neglect, other agents, or SIDS.

INTRODUCTION



The ACDRS:

- Analyzes the deaths of Alabama's children
- Makes recommendations to the Governor
- Recommends and supports legislation
- Helps create policy and procedures
- Educates the public
- Reduces the number of infant and child deaths in Alabama

The ACDRS is a system comprised of three major components: the ACDRS State Office, the State Child Death Review Team (SCDRT), and Local Child Death Review Teams (LCDRTs).

Located in the Alabama Department of Public Health, within the Behavioral Health Division of the Bureau of Health Promotion and Chronic Disease, the ACDRS State Office has three full-time staff members; Director, Administrative Assistant, and Public Health Educator.

Mission

The ACDRS mission is to understand how and why children die in Alabama in order to prevent future child deaths.

Focus

The primary purpose of the ACDRS is to promote prevention, not prosecution. *Preventability* refers to the ability of an individual or community to alter the conditions that led to a child's death, thereby preventing that child's death or reducing the likelihood of future deaths.

The ACDRS achieves the prevention of child deaths through statistical analysis, education and advocacy efforts, and local community involvement.

Goals

ACDRS works toward the following goals:

- All Alabama death certificates assessed for review criteria
- All eligible cases reviewed at the local level by the appropriate Local Child Death Review Team (LCDRT)
- High participation and completion rate by the LCDRTs
- Meaningful research and recommendations
- Increased public awareness and understanding of risks
- Reductions in preventable infant and child deaths in Alabama
- The assessment of all Alabama death certificates for review criteria
- Completed reviews of all eligible cases by the appropriate Local Child Death Review Team (LCDRT)

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% of the total CFTF portion of the 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.



STATE CHILD DEATH REVIEW TEAMS (SCDRT)

The State Child Death Review Team (SCDRT) is a 28-member, multidisciplinary team, chaired by the State Health Officer (Director of the Alabama Department of Public Health). SCDRT members include various state agency directors and representatives, medical professionals, judicial and law enforcement officials, state legislators, and private citizens appointed by the Governor.

The Alabama State Review Team (ACDRT) serves as an advisory board with quarterly meetings to review findings and recommendations.

**State Child Death Review Team Members
Serving During 2015, Including Split Terms**

Thomas M. Miller, M.D. | State Health Officer | Chair

<p>GREGORY DAVIS, M.D. Coroner/Medical Examiner Jefferson County</p> <p>NANCY BUCKNER, COMMISSIONER Alabama Department of Human Resources</p> <p>COLONEL JOHN E. RICHARDSON Director Alabama Dept of Public Safety</p> <p>JAMES HENDERSON, M.D. Alabama Academy of Pediatrics Appointee</p> <p>REPRESENTATIVE RALPH HOWARD Private Citizen Governor Appointee</p> <p>DR. WILLIAM D. KING Private Citizen Governor Appointee</p> <p>J.R. SAMPLE Private Citizen Governor Appointee</p> <p>CHRIS NEWLIN Private Citizen Governor Appointee</p> <p>GINA SOUTH Network of Children's Advocacy Centers Appointee</p> <p>SCOTT ANDERSON Alabama District Attorney's Association Appointee</p> <p>CHIEF LARRY MUNCEY Alabama Association of Chiefs of Police Appointee</p> <p>SENATOR GERALD DIAL Chair Senate Health Committee</p>	<p>SHERIFF BOBBY TIMMONS Executive Director AL Sheriff's Association</p> <p>JIM REDDOCH, COMMISSIONER Alabama Department of Mental Health</p> <p>DEBRA WILLIAMS, M.D. Alabama Academy of Pediatrics Appointee</p> <p>STEPHEN BOUDREAU, M.D. Alabama Dept of Forensic Sciences Appointee</p> <p>MARIAN LOFTIN Private Citizen Governor Appointee</p> <p>DR. ERNEST WOOD Private Citizen Governor Appointee</p> <p>SALLYE LONGSHORE Private Citizen Governor Appointee</p> <p>JERRY H. WILLIAMS Private Citizen Governor Appointee</p> <p>SHERIFF BILL FRANKLIN Alabama Sheriff's Association Appointee</p> <p>KATHY MONROE, M.D. Medical Association of the State of Alabama Appointee</p> <p>CHIEF STEVEN PARRISH Alabama Association of Chiefs of Police Appointee</p> <p>REPRESENTATIVE JIM MCCLENDON Chair House Health Committee</p>	<p>MICHAEL SPARKS, DIRECTOR Alabama Department of Forensic Sciences</p> <p>JIM PERDUE, COMMISSIONER Alabama Department of Mental Health</p> <p>MELISSA PETERS, M.D. Alabama Department of Public Health Appointee</p> <p>STEVEN DUNTON, M.D. Alabama Dept of Forensic Sciences Appointee</p> <p>CHRISTY CAIN Private Citizen Governor Appointee</p> <p>REVEREND JOSEPH GODFREY Clergy Governor Appointee</p> <p>DR. DALE WISELY Private Citizen Governor Appointee</p> <p>TIMOTHY KIMBRELL Alabama Coroners Association Appointee</p> <p>ROBERT BROUSSARD Alabama District Attorney's Association Appointee</p> <p>CHIEF BRADLEY KENDRICK Alabama Association of Chiefs of Police Appointee</p> <p>SENATOR GREG REED Chair Senate Health Committee</p> <p>REPRESENTATIVE APRIL WEAVER Chair House Health Committee</p>
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LOCAL CHILD DEATH REVIEW TEAMS (LCDRTs)

Local Child Death Review Teams (LCDRTs) review individual cases and, based upon their findings, complete the appropriate data collection allowed and/or required by the community to prevent additional deaths. LCDRTs are multidisciplinary and are required to meet at least once per year, although most meet more frequently.

Local Teams are tasked with the following:

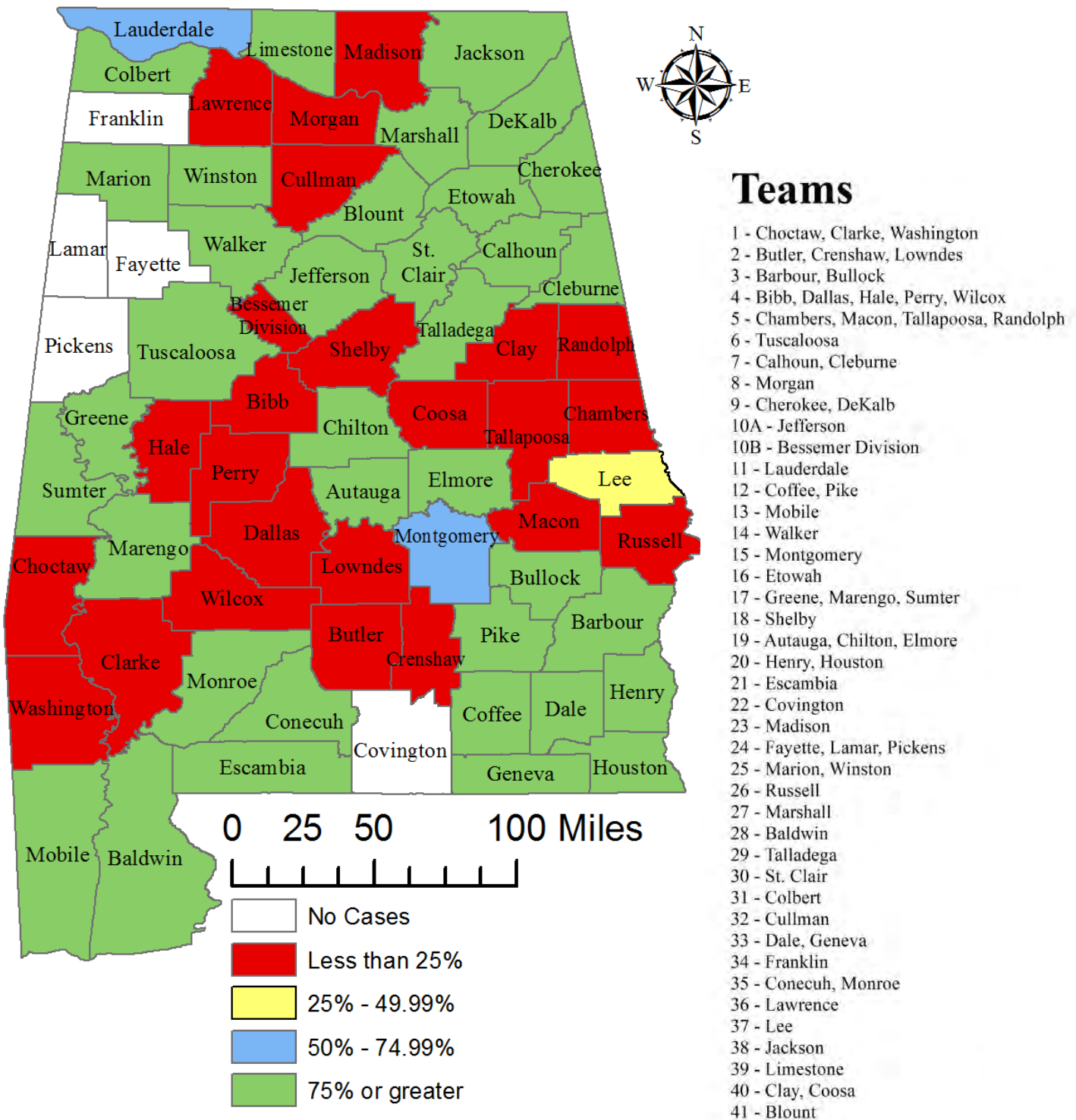
1. The identification of factors that put children at risk for injury or death.
2. The dissemination of information among agencies that provide services to children and families or investigate child deaths.
3. Improvements upon local investigations of unexpected/unexplained child deaths by additional services.
4. Improvements upon existing services and systems and identification of gaps in the community that require additional services.
5. The identification of trends relevant to unexpected/unexplained child deaths.
6. Educating the public about the causes of child deaths and its role in helping to prevent such tragedies.



LCDRT SUCCESS RATES

Between 2008 and 2012, 1,461 (36.2%) of child deaths qualified for review under the Alabama Child Death Review System (ACDRS). Of the qualifying deaths for the 2008-2012 span, Local Child Death Review Teams (LCDRTs) reviewed and returned 1,092 cases (74.7%).

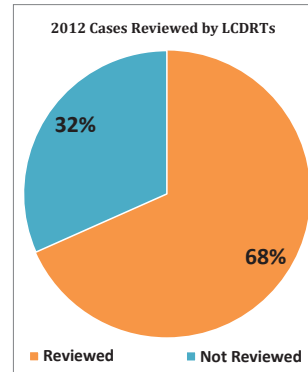
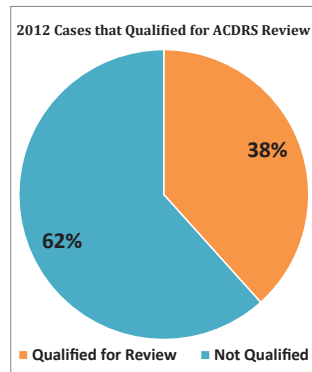
The map below illustrates the rate of completed reviews submitted to ACDRS by each Local Review Team for 2012.



LCDRT SUCCESS RATES

LOCAL CHILD DEATH REVIEW SUCCESS RATES

There were 725 child deaths in 2012, including 278 deaths that qualified for review. Of those 278 qualifying deaths, local teams returned 190 reports.



LOCAL REVIEW TEAM RECOGNITION

The ACDRS goal is to have case completion rates of 100% for each Local State Review Team. The table below recognizes the outstanding efforts of several LCDRTs that achieved this goal.

Circuit	Review Team	Number of Completed Cases
3	Barbour; Bullock	1
4	Hale	1
6	Tuscaloosa	4
7	Calhoun; Cleburne	5
9	Cherokee; DeKalb	4
10A	Jefferson	28
12	Coffee; Pike	6
13	Mobile	33
14	Walker	5
16	Etowah	5
17	Greene; Marengo; Sumter	1
19	Autauga; Chilton; Elmore	12
21	Escambia	3
25	Marion; Winston	5
27	Marshall	8
28	Baldwin	12
29	Talladega	7
30	St. Clair	4
31	Colbert	7
33	Dale; Geneva	2
35	Monroe; Conecuh	3
38	Jackson	2
39	Limestone	2
41	Blount	3



REVIEW PROCESS

The Alabama Child Death Review System (ACDRS) State 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, Local Child Death Review Teams complete the appropriate data collection forms and submit the information to the ACDRS State Office. Local Teams make recommendations to the State Team and take appropriate actions within communities to prevent additional deaths.

The ACDRS State Office collects and analyzes information submitted by the Local Teams to answer requests for specific data and generate reports.

The State Child Death Review Team meets quarterly to review the statewide data, consider Local Child Death Review Team recommendations and performance, and conduct general ACDRS business. The State Team takes action on CDR issues in the form of educational 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, unexplained, and/or unexpected.

SAMPLE CASE REVIEW TIMELINE

Sample Case Review for a 2015 Death

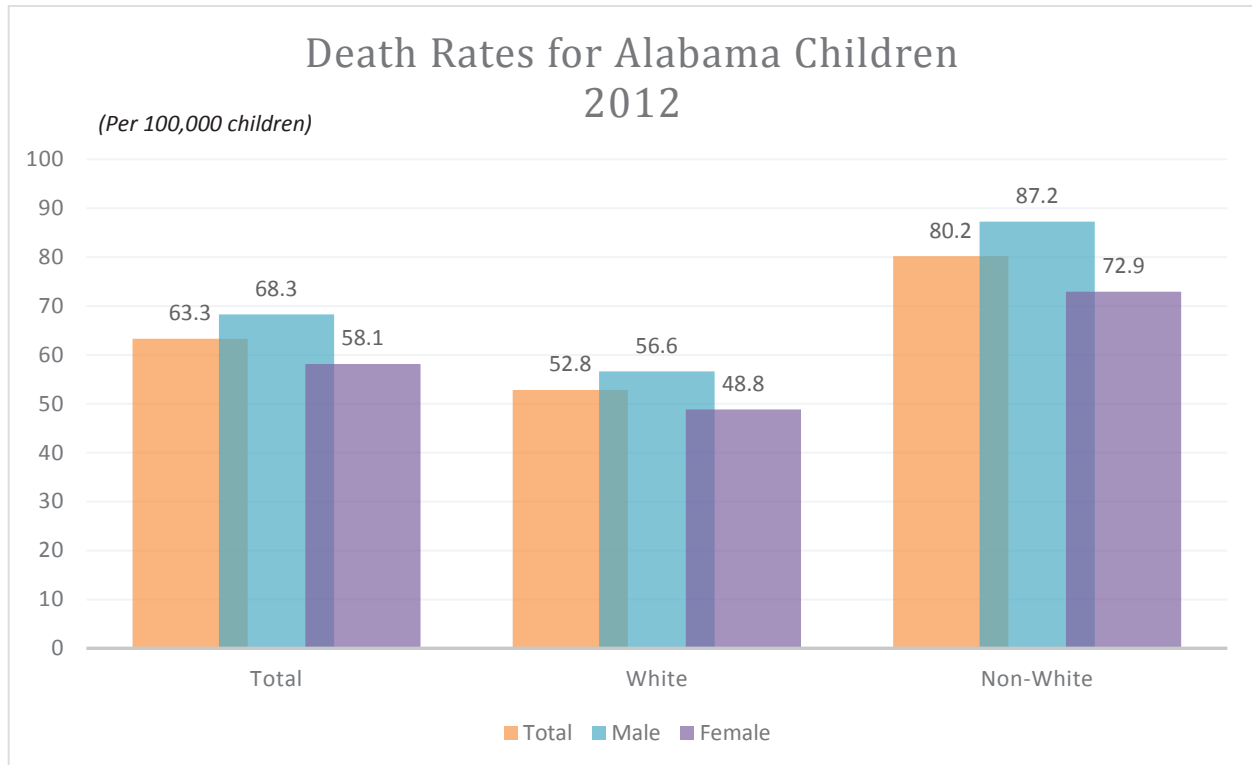
- An infant or child death occurs on September 1, 2015.
- ACDRS State Office receives the death certificate by November 1, 2015.*
- The case is assigned to the appropriate LCDRT by November 15, 2015.
- The LCDRT meets to review this specific case and others during 2015. **
- The ACDRS State Office receives the last of the 2015 death certificates by July 2016.
- April 1, 2018, is the deadline for LCDRTs to submit all reviewed and completed cases for 2015 to the ACDRS State Office.
- The ACDRS Annual Report on 2015 Data is published during 2018.

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

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

ALABAMA CHILD DEATHS IN 2012

There were 725 infant and child deaths in 2012, or 63.3 deaths per every 100,000 children. Of those deaths, 54.5% of children were male, 49% were non-white.



CHILD DEATHS BY CATEGORY



VEHICULAR ACCIDENT

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

As noted in The SCDRT 2015 Recommendations (p. 23), vehicular deaths are the leading category of preventable deaths to Alabama children less than eighteen years of age and account for between one-third and one-half of all such deaths in any given year.

Vehicular Accident ACDRS Data for 2012

There were 42 reviewed cases of death by vehicular accident for 2012. This is an increase from the previous year, for which 35 such cases were reviewed.

- In 12 (28.6%) cases, the child was a **pedestrian**.
- **Reckless driving** was the cause of accident in 11 cases (26.2%).
- **Vehicle speed** exceeding the legal limit was cited as the cause of accident in 10 cases (23.8%).
- **Drugs and alcohol** were cited as causes of the incident in 8 cases (19.1%)
- 8 cases (19.1 %) involved **young drivers** (16-17 years of age).
- The cause of accident for 3 (7.1%) cases was **driver inexperience**.
- The cause of accident for 3 (7.1%) cases was **driver distraction**.
- In 3 cases (7.1%), a **child or booster seat** was needed but not present. In one case (2.4%), the child seat was present, but was not used correctly.

Recommendations*

1. Support further enhancements and improvements to the Alabama Graduated Driver's License Law, Alabama's Child Passenger Restraint Laws, and the enforcement thereof.
2. Promote the ACDRS Teen Safety Campaign with the production and distribution of digital and print media.
3. Encourage auto dealerships to provide point-of-sale information resources on the proper installation and usage of child safety and booster seats when selling new or used vehicles.
4. Promote All-Terrain Vehicle (ATV) safety and encourage the establishment of safety standards, including a minimum age for operating full-size ATVs.
5. Promote public awareness of the dangers of leaving children unattended in vehicles.

*These recommendations are in addition to the SCDRT 2015 recommendations (p. 23).

SUDDEN UNEXPLAINED INFANT DEATH

This category includes all reviewed cases of Sudden Unexplained Infant Death (SUID), including Sudden Infant Death Syndrome (SIDS).

Sudden Unexplained Infant Death (SUID) is a broad term used to describe sudden infant deaths from a variety of causes, both internal and external. *Sudden Infant Death Syndrome (SIDS)* is a very specific type of SUID, involving the sudden death of infants between one month to one year old that cannot be explained by a thorough investigation that eliminates all external contributing causes of death and includes a complete autopsy, toxicology, examination of the death scene, and review of the clinical history.

According to the Centers for Disease Control and Prevention (CDC), about 3,500 U.S. infants die suddenly and unexpectedly each year.² Although the cause of death in many of these cases cannot be explained, most occur while the infant is sleeping. As noted in the SCDRT 2015 Recommendations (p. 23), infant sleep-related deaths are the second-leading category of ACDRS reviewed deaths.



Sudden Unexplained Infant Death (SUID) ACDRS Data for 2012

Thirteen suspected cases of SUID were reviewed for 2012, the same number reviewed for 2011. The instance of reviewed SUID cases decreased between 2008 and 2012.

Although the exact causes of SUID are unknown, safe sleep environments are shown to reduce the risks of such incidents. In six (46.2%) of the reviewed cases, the infant in question was not sleeping alone.

Information on the sleep environment for the 13 reviewed cases is included below:

Initial Sleep Position

- On back: 5 cases (38.5%)
- On stomach: 4 cases (30.8%)
- On side: 1 case (7.7%)
- Unknown: 3 cases (23.1%)

Sleep Location

- Crib: 2 cases (15.4%)
- Bassinette: 3 cases (23.1%)
- Adult bed: 4 cases (30.8%)
- Playpen: 1 case (7.7%)
- Couch: 1 case (7.7%)
- Unknown: 2 cases (15.4%)

Recommendations*

1. Increase public awareness about the dangers associated with infants sleeping with adults in adult beds.
2. Increase public awareness of “Safe to Sleep” and “Babies Sleep Safest on their Backs” programs.
3. Teach and promote the use of Alabama’s SUID Investigation protocols.
4. Increase public knowledge of and encourage strict adherence to the American Academy of Pediatrics guidelines for infant sleep safety and SIDS risk reduction.
5. Ensure all child deaths in Alabama are reported to the appropriate authorities.
6. Ensure that forensic lab capacity is sufficient to meet state needs.

*These recommendations are in addition to the SCDRT 2015 recommendations (p. 23).

² <http://www.cdc.gov/sids/>

FIRE, BURNS, OR ELECTROCUTION

This category addresses deaths resulting from burns, smoke inhalation, and/or electrocution. The types of incident include fire, scalding, etc. The documentation gathered for this report considers the source of ignition, heat, or electrocution as well as, in the case of fire, the material first ignited and details about the building on fire, if applicable.

Home fires account for 87% of all fire-related fatalities. Working smoke alarms reduce the chances of dying in a fire by nearly 50



Fire, Burns, or Electrocution ACDRS Data for 2012

Eight cases of fire, burns, or electrocution were reviewed for 2012, a significant decrease from the 14 reviewed for the previous year and a five-year low since 2008.

Of these, seven (87.5%) deaths were the result of smoke inhalation. Five (62.5%) fires took place in single-family homes, 2 (25%) in trailer or mobile homes. In one (12.5%) case of fire-related death, a Christmas tree was the material first ignited.

Information regarding the ignition, heat, or electrocution source (where applicable) is as follows:

- Cooking stove: 1 (12.5%)
- Electrical outlet: 1 (12.5%)
- Electrical wiring: 2 (25%)
- Hot bath water: 1 (12.5%)
- Unknown: 1 (12.5%)

Recommendations

1. Encourage the enforcement of laws governing smoke detector installation, testing, and inspection in all homes, including new and used manufactured homes.
2. Support local fire departments in developing, expanding, and implementing fire education activities, particularly for elementary schools and child-care facilities.
3. Encourage community education efforts to increase public knowledge of the need for installation and periodic testing of smoke detectors in homes, businesses, and places of worship.
4. Encourage families to prepare, discuss, and practice a “Home Fire/Emergency Plan” for their households.

³ <http://www.cdc.gov/sids/>



DROWNING

This category includes child deaths due to asphyxiation from submersion in a liquid.

The majority of infant drowning cases occur in bathtubs or large buckets. Swimming pools are the most common site of drowning occurrences among children aged 1-4 years. About $\frac{3}{4}$ of U.S. pool submersion deaths occur at a home. Nation-wide, African American children between 5 and 14 years old drown at rates 2.8 times higher than those of white children.⁴

Drowning ACDRS Data for 2012

ACDRS reviewed 20 cases of drowning for 2012, a five-year high since 2008. Of these, 13 (65%) deaths occurred in a pool, hot tub, or spa. The remaining seven occurred in open water, including three in lakes, two in rivers, and 2 in the ocean.

Key findings for these deaths are as follows:

- Case reports for 13 (65%) deaths showed that the child was not wearing a personal flotation device.
- In 7 (35%) cases, the child was unable to swim.
- In 6 (30%) cases, there were no barriers to the water in place.
- In 5 (25%) cases, the child was not under adult supervision.

Recommendations:

1. Support public education and awareness campaigns about water safety, with a special emphasis on the need for appropriate constant supervision of children in pools, bathtubs, open bodies of water, etc.
2. Encourage the enforcement of ordinances regarding pool fencing and signage.
3. Persuade communities to make swimming lessons and water safety classes more readily available to children and parents.
4. Encourage the use of flotation devices and the “buddy system” for children boating, fishing, or swimming in/on/near open bodies of water.

⁴ <http://www.safekids.org/fact-sheet/swimming-and-boating-safety-fact-sheet-2015-pdf>

SUFFOCATION

Child deaths recorded in this category include those that occurred due to the obstruction of the airway from any number of causes. Deaths due to suffocation can be accidents, suicides, or homicides. Most cases of suffocation fall within the following categories:



- *Sleep-related suffocation:* can include overlying, in which a person sleeping with the child unintentionally suffocates the child by rolling on top of them, or sleep-related positional asphyxia, in which the death is attributed to bedding, crib bumpers, pillows, etc.
- *Positional Suffocation:* the external airways (nose, mouth) are blocked by objects or materials, or the child becomes wedged in a small space, such as between a mattress and wall, blocking the external airways. May or may not be sleep-related
- *Choking:* food or other small object blocks the airway.
- *Confinement:* the child becomes trapped in an airtight place, such as a toy chest or automobile.
- *Strangulation:* a rope, cord, or other object wrapped around the child's neck restricts breathing.

Note: Some medical examiners or coroners will not list an infant death as suffocation due to overlaying or positional asphyxia unless there is unequivocal evidence, such as an eyewitness account. If there is no such evidence, these types of suffocation deaths may be listed as SUIDS, SIDS, or otherwise undetermined.

Suffocation ACDRS Data for 2012

For 2012, ACDRS reviewed 24 cases of death by suffocation. Ten (41.7%) deaths were attributed to either sleep-related or non-sleep-related suffocation. Sleep-related suffocation was the cause of death in seven (29.2%) cases, five (20.8%) occurring in an adult bed.

Strangulation, accidental or otherwise, accounted for six (25%) cases; choking was the cause of death in two (8.3%) cases. A rope, string, belt, or leash was the object causing strangulation in five (20.8%) events.

Recommendations:

1. Promote and encourage statewide education and awareness campaigns about safe sleeping practices and the dangers of bed sharing.
2. Promote and encourage parenting classes, especially for new and/or young parents.
3. Provide increased public education that encourages strict adherence to the American Academy of Pediatric guidelines for reducing the risks associated with infant sleep environments.

FIREARM/WEAPON-RELATED

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.



Firearm/Weapon-Related ACDRS Data for 2012:

The ACDRS reviewed 29 cases of weapon-related deaths for 2012. Nineteen (65.5%) of these involved firearms, two (6.9%) were caused by a sharp object, and one (3.5%) was caused by the use of a body part as a weapon.

In five (17.2%) cases of weapon-related death, the firearm was stored, but loaded. In six cases, the firearm was not stored. In two cases (6.9%), the weapon was stored in an unlocked cabinet. In three cases, (10.3%) the person handling the weapon was a sibling. In two cases (6.9%), the person handling the weapon was a parent (biological or stepparent).

Information regarding the use of weapon at the time of the accident is as follows:

- Self-injury (intentional): 6 cases (20.7%)
- Commission of a crime: 1 case (3.5%)
- Drive-by shooting or random act of violence: 3 cases (10.3%)
- Used during an argument: 7 cases (24.1%)
- Accidental (playing with the weapon or showing it to others): 3 cases (10.3%)
- Intimate Partner Violence: 1 case (3.5%)
- Bullying: 1 case (3.5%)

Recommendations:

1. Encourage the safe and secure storage of all firearms.
2. Encourage gun safety education for children and parents in households with firearms.
3. Support crisis teams and victim advocacy for children who witness violence.
4. Support after-school, evening education, and other recreational programs for high-risk youth.
5. Encourage community-based violence prevention programs.

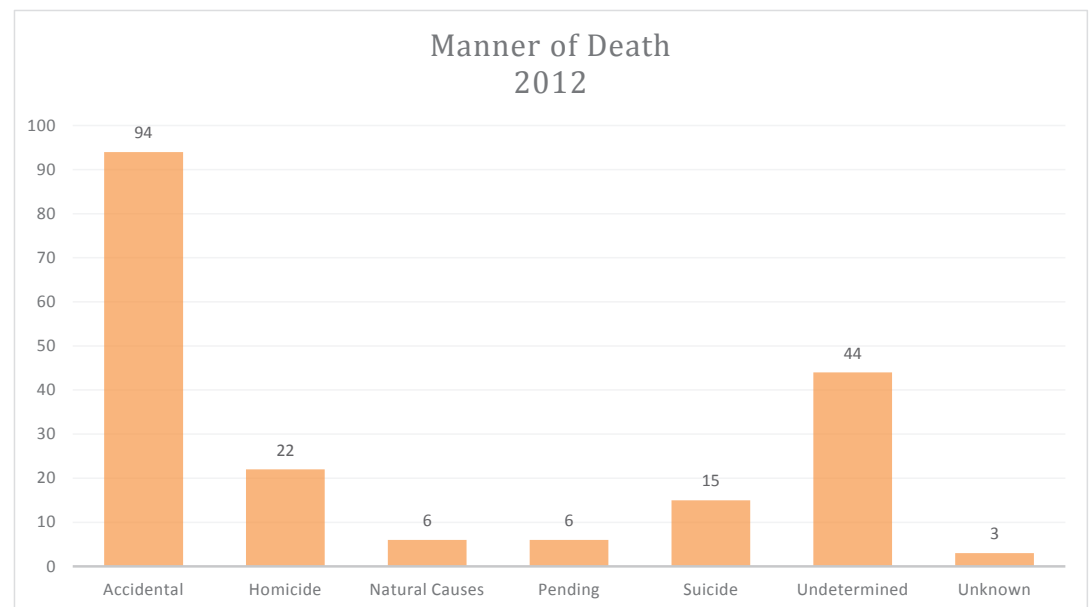
OTHER FINDINGS

MANNER OF DEATH

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*
2. *Accident*: a death resulting from a non-intentional injury.
3. *Homicide*: a death resulting from a volitional 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*: 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, a birth defect, or a congenital anomaly). In other words, death resulting from natural/medical causes, such as illness or disease. Normally, ACDRS does not review such cases. However, cases in which the cause of death is initially classified as pending or unknown are often later discovered to have occurred by natural causes.



Note:
Although Sudden Infant Death Syndrome (SIDS) is considered a natural cause of death, Local Child Death Review Teams are required by law to review all SIDS deaths.

2012 Findings for Manner of Deaths

At 49.5%, accidents were the most frequently reviewed manner of death in 2012. Homicide and suicide represent 11.6% and 7.9% of deaths in 2012, respectively.

OTHER FINDINGS

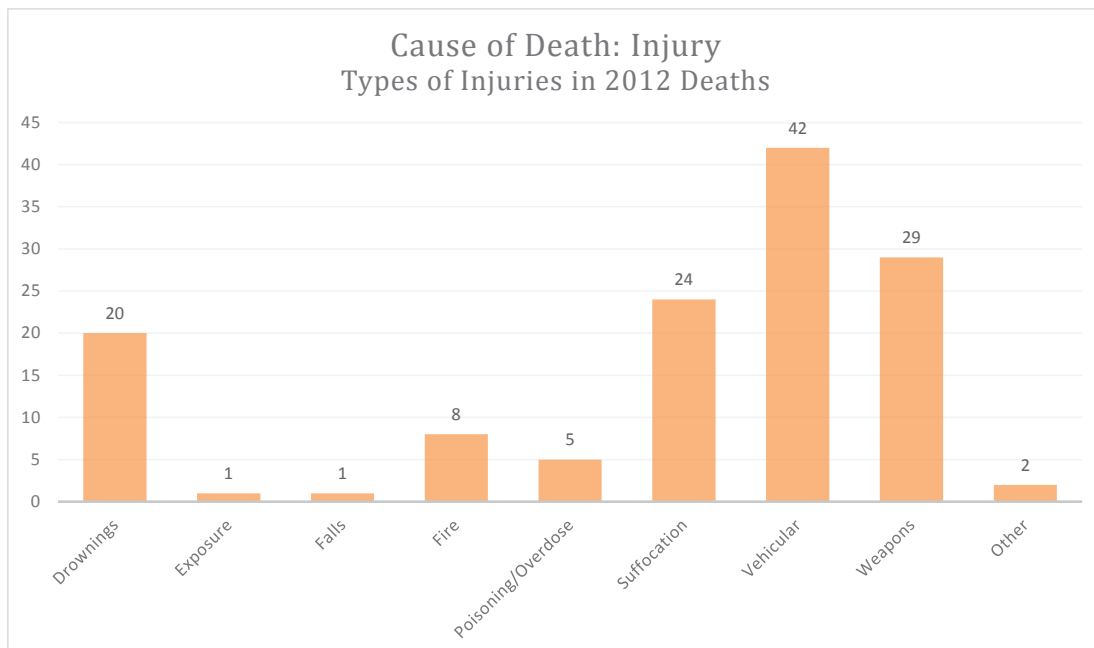
CAUSE OF DEATH

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

Injuries in 2012

In 2012, the four most frequent reviewed causes of death due to injury were:

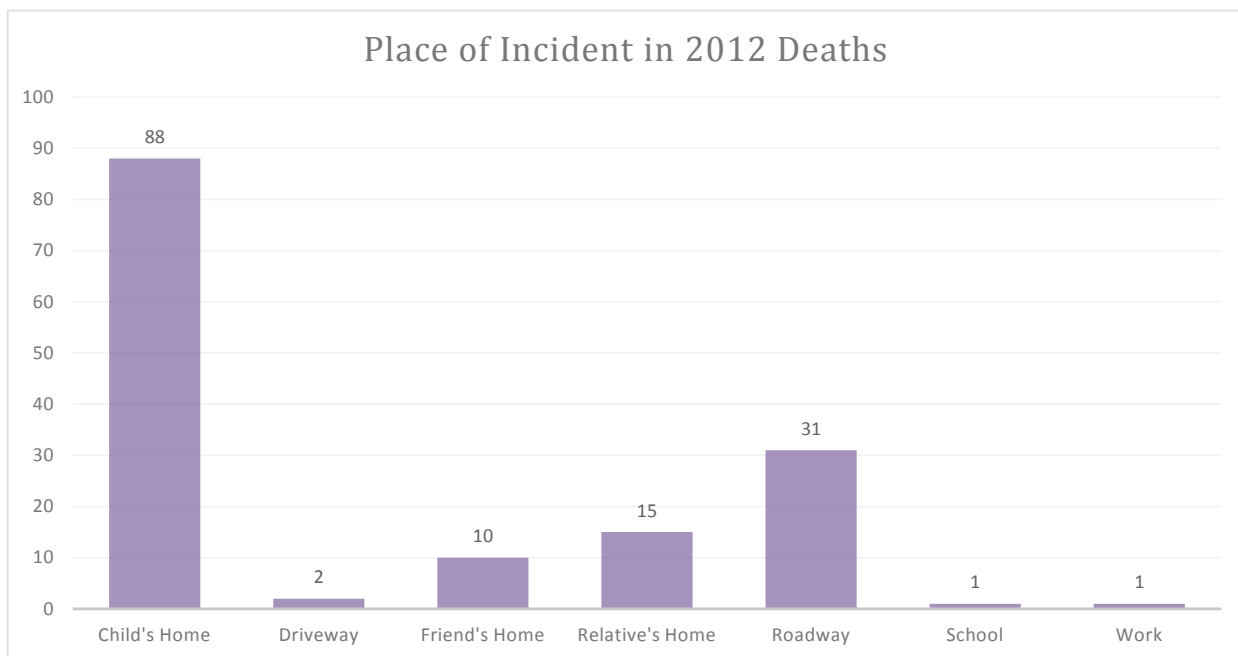
1. Vehicular involvement (22.1%)
2. Weapons (15.3%)
3. Suffocation (12.6%)
4. Drowning (10.5%)



OTHER FINDINGS

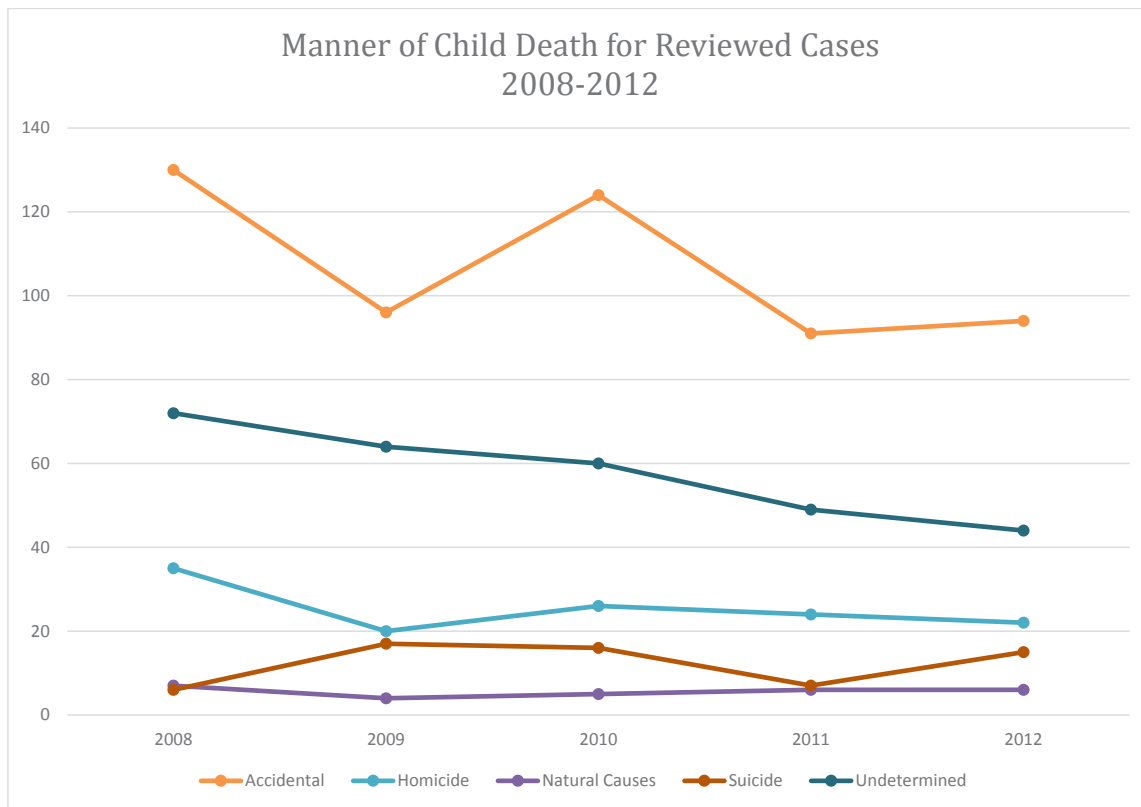
PLACE OF INCIDENT IN 2012

In 2012, the most frequent place of incident was the child's home (59.5%). Twenty-one percent of reviewed deaths occurred on a roadway.



TRENDS BY MANNER OF DEATH 2008-2012

Accident remains, by far, the leading manner of death for Alabama children, but the occurrence of these cases has decreased significantly since 2008.

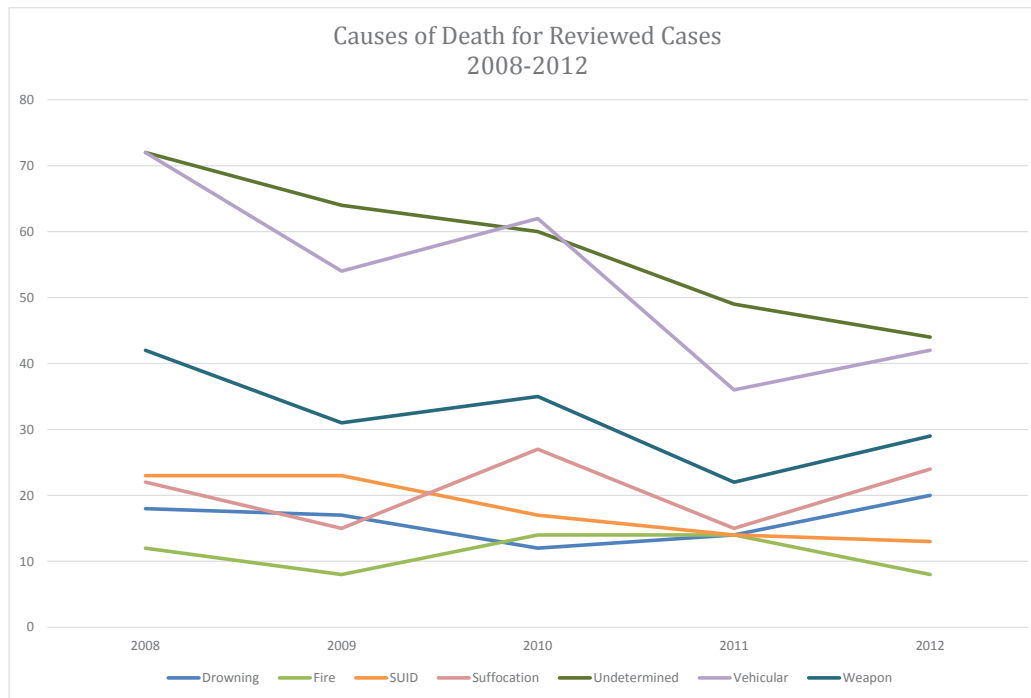




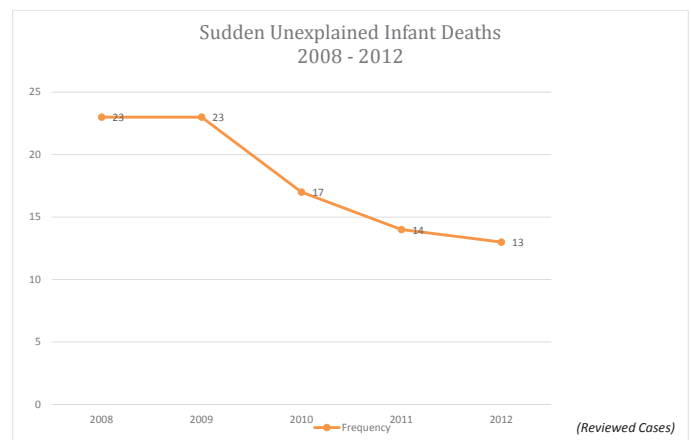
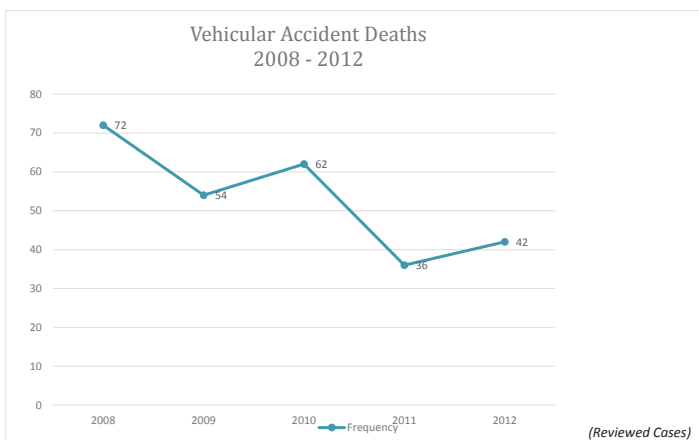
TRENDS BY CAUSE OF DEATH 2008-2012

Excluding undetermined deaths, vehicular accident has remained the leading cause of death for Alabama children since 2008, followed by firearm/weapon-related deaths. Deaths from vehicular accidents have, however, decreased greatly since 2008.

Undetermined deaths continued in steady decline, dropping to a five-year low in 2012



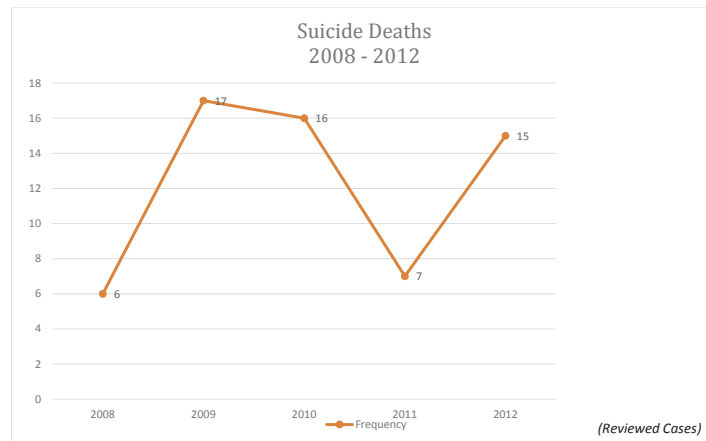
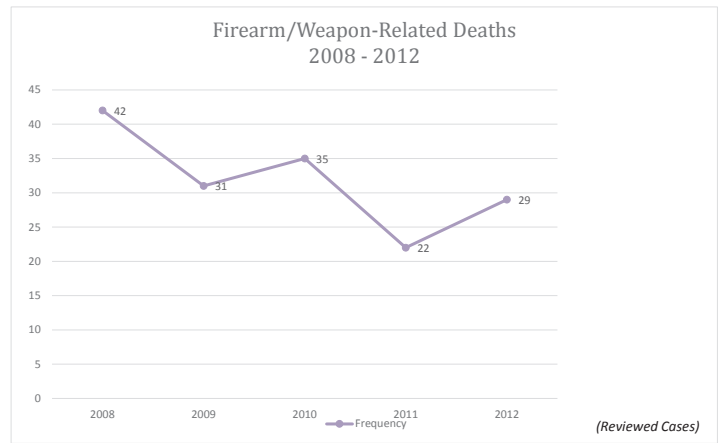
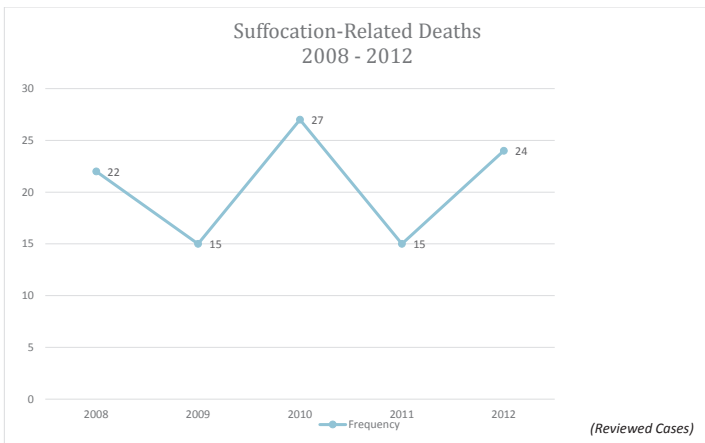
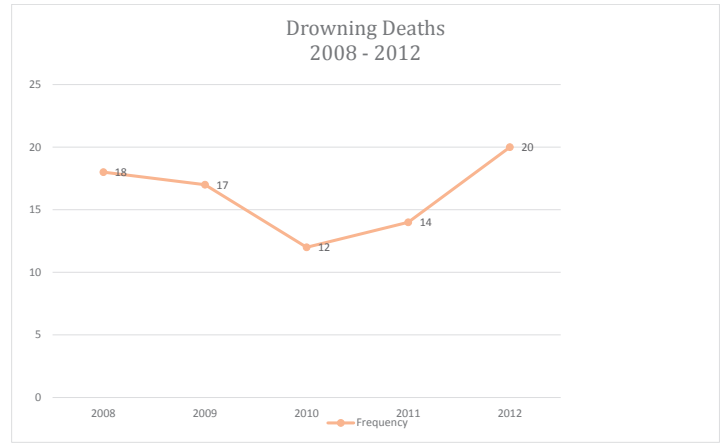
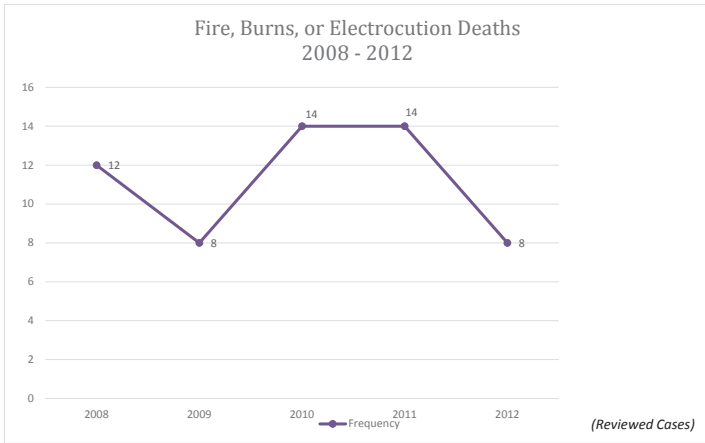
The following graphs demonstrate the trends for each category of Alabama Child Cause of Death from 2008 to 2012.



TRENDS IN ALABAMA CHILD DEATHS: 2008-2012



The following graphs demonstrate the trends for each category of Alabama Child Cause of Death from 2008 and 2012.



STATE CHILD DEATH REVIEW TEAM 2015 RECOMMENDATIONS

Periodically, the Alabama State Child Death Review Team (ACDRT) votes on recommendations believed to reduce the instances of the most frequent and preventable child deaths. All recommendations and prevention efforts are evidence-based and goal-oriented.

Below are the 2015 recommendations, based on the results of the 2012 evaluation period:

Vehicular Death Recommendations

Vehicular deaths are the leading category of preventable deaths reviewed by the Alabama Child Death Review System and, in fact, account for between one-third and one-half of all such deaths in any given year.

The State Child Death Review Team recommends:

- Comprehensive statewide awareness and education campaigns related to teen driver safety and child passenger safety.
- Enhancement of the current Graduated Driver's License (GDL) Law by increasing the limitations on late-hour driving by graduated licensees and reconsidering the current exemptions.
- Enhancement of child passenger restraint laws in accordance with the latest AAP recommendations.
- Promotion of the use of parent-teen driver contracts and log books.
- Establishment of a minimum age to operate All-Terrain Vehicles (ATVs).
- Safety training requirements for ATV operators.
- Prohibition of passengers from ATVs.
- Prohibition of passengers from open truck beds on public roads.

Infant Sleep-Related Death:

Infant sleep-related deaths are the second-leading category of preventable deaths reviewed by the ACDRT and are by far the most likely cases to be misdiagnosed as to their manners and causes.



The State Child Death Review Team recommends:

- Expansion of statewide safe infant sleep awareness and education campaigns.
- Adherence to the protocols developed by the Alabama Sudden Unexplained Infant Death Investigation (SUIDI) Team

Fatality and Injury Prevention:

Fatality prevention and injury prevention are closely related. Access to fatality data has proven essential to the accurate collection and analysis of fatality data required for effective fatality prevention efforts. At the same time, limited access to injury data in Alabama has been a significant barrier to injury prevention funding and efforts.

The State Child Death Review Team recommends:

- Securing access to comprehensive injury data in Alabama for the ADPH Injury Prevention

KEY DATES FOR 2017

January	State Team Meeting
March 19-25	National Poison Prevention Week
April	National Child Abuse Prevention Month
April 1	Deadline for completed 2014 case reviews
April 3-7	National Youth Violence Prevention Week
April	State Team Meeting
July	State Team Meeting
September	National Infant Mortality Awareness Month
September	National Suicide Prevention Awareness Month
September 10	World Suicide Prevention Day
September 17-23	Child Passenger Safety Week
October	National SIDS Awareness Month
October 8-14	National Fire Prevention Week
October	State Team Meeting
October 15-21	National Teen Driver Safety Week





A. ALABAMA STATE CHILD DEATH REVIEW SYSTEM SUCCESSES IN 2012

Since the formation of the ACDRS, the efforts of our State and Local Teams have resulted in significant reductions in preventable child injuries and deaths. We continue to see incredible results from their hard work. We are delighted to report progress in both our data collection and our special interest programs.

We recognize that every death is more than just a statistic to Alabama families and other fellow citizens. Every single infant and child death is a terrible personal tragedy, and we are dedicated to reducing the incidence of these tragedies as much as possible.

Below, we have highlighted only some of the ACDRS Team successes. Many others are identified throughout this report.

Local Child Death Review Teams

Local Child Death Review Teams (LCDRTs) are stationed in every Judicial Circuit in the state. These teams continue to meet and review child deaths that occurred within their jurisdictions. Following the delays and challenges related to the transition between data collection systems, most teams now enter current data into the national online collection system. Case completion rates continue to increase, thanks to the impressive efforts of our Local Teams.

ACDRS Training

In the past, ACDRS conducted statewide training in even-numbered years. After conducting smaller regionalized trainings in 2010, ACDRS returned to a three-day statewide training conference in 2012. The 2014 conference was held in September in Orange Beach, and culminated with a quarterly State Child Death Review Team meeting. The conference was well-attended and well-received.

Teen Driving Safety Campaign

In 2010, ACDRS began a multifaceted campaign to promote teen driving safety. We introduced a website (www.acdrs.org/teendriving) and a brochure, "Surviving Teen Driving", both of which have been well-received. We conducted a media campaign to promote these new resources. This campaign was publicly commended by the U.S. Secretary of Transportation.

Vehicular deaths continue to be the leading cause of preventable child deaths in Alabama. Safe teen driving, including proper child passenger restraint and ATV safety, remains a primary issue of concern for ACDRS.

APPENDICES

Alabama Sudden Unexplained Infant Death Investigation (SUIDI) Team

The Centers for Disease Control established standardized tools and protocols, adopted nationwide, for Sudden Unexplained Infant Death Investigation (SUIDI). The ACDRS Director chaired the Alabama SUIDI Team, which was codified as a sub-committee of the State Child Death Review Team. The Team developed a formal SUIDI training course for Alabama. The course is now required for all Coroners, Deputy Coroners, and certain law enforcement investigators. On-site training has been conducted for many groups of first responders statewide, and most of the state's Coroners and Deputy Coroners received the training at their annual conference.



The dissemination of this important information should greatly improve infant death scene investigations, the accuracy of infant death diagnoses, and the overall usefulness of the information regarding infant death collected by ACDRS.

The Alabama Cribs for Kids Program

The Cribs for Kids Program in Alabama began as a pilot program in Montgomery, Alabama. With the help of the Gift of Life Foundation, cribs and instructions for safe infant sleeping, were provided to many qualifying families in the Montgomery County area. After the success of the pilot program, Gift of Life and ACDRS expanded the program to other counties in the state. Jefferson, Mobile, Baldwin, and Escambia Counties have similar programs in place. We hope to expand the Cribs for Kids Program efforts to other Alabama counties in the future.

Child Passenger Safety Efforts

The Booster Seat Advocacy Program is a joint effort of ACDRS, Children's Hospital Southeast Child Safety Institute, University of Alabama Birmingham Department of Pediatrics, and the Alabama Department of Public Health's Injury Prevention Branch. The program was initiated after the passage of the Enhanced Child Restraint Amendment in Alabama.

Booster seats are provided to families throughout Alabama to ensure protection for children in passenger vehicles who are too large for infant seats but too small for adequate protection from seat belts alone. ACDRS Central Office staff are certified Child Passenger Safety (CPS) Technicians and routinely conduct local CPS clinics, in conjunction with other partners.

B. ARTICLES

We are pleased to include with this year's report articles covering a range of topics especially pertinent to the state of Alabama, including sports-related concussions, sleep-related infant death, and statewide efforts to reduce teen driving risks. Please enjoy the articles on the following pages, written by our expert contributors.

#UrKeys2Drive Safety Summit

Richard W. Burleson, MBA, MPH

Director, Injury Prevention Branch

ALABAMA DEPARTMENT OF PUBLIC HEALTH



I am definitely *not* the go-to person for hashtags. I have to admit that I still think “pound sign” when I see a “#” and frequently proclaim defiantly to my children and their peers that “I don’t tweet!” But there is no denying the power and influence of social media today, especially among the children and adolescents—who are the very audience we try to reach with many of our injury and fatality prevention efforts. It has been said that social media, when used strategically over time, is the most powerful form of marketing the world has ever known. Even I cannot refute that.

Thanks to generous grant support from State Farm Insurance and the cooperation of other partners at Children’s of Alabama, the Alabama Department of Transportation, Mothers Against Drunk Drivers, and the Injury Free Coalition for Kids, ACDRS has had the opportunity to participate in a series of teen driver safety summits under the banner #URKEYS2DRV. These summits focus on avoiding the known high risk factors associated with teen driving injuries and fatalities, such as distracted driving, impaired driving, and failure to properly use seat belts. Because resources are not available to present these summits in person to every student throughout the state, these programs leverage the aforementioned power of social media to amplify the reach of these efforts well beyond the groups able to attend in person.

At each #URKEYS2DRV Safety Summit, speakers whose lives have been directly affected by teen driving crashes and fatalities address the entire audience. For example, Mike Lutzenkirchen, a keynote speaker at multiple events, lost his son Philip, an Auburn University athlete, to a single-vehicle accident in 2014. Between general sessions and speakers, interactive breakout sessions are held in which smaller groups are engaged in discussions, games, and hands-on activities. Personally, I have enjoyed interacting with these wonderful students by presenting our safe teen driving material in the form of a competitive “game show” that keeps them interested and engaged while imparting important information. Other breakout sessions include driving simulators, mock trauma and intensive care demonstrations, impaired driving goggle activities, and guided peer discussions. There are also photo opportunities that encourage the attendees to post about the activities on social media throughout the day. The hope is that those who attend will share what they have learned with their peers electronically, in real-time, and in person, when they return to school the next day.

#URKEYS2DRV has been well-received by students, educators, and media alike. Past event locations have included Mobile, Tuscaloosa, Auburn, and Huntsville, and we already have #URKEYS2DRV events planned for Bessemer, Montgomery, and Florence in the coming school year. We at ACDRS greatly value our partners in this effort and the opportunity to be a part of such a positive and enjoyable undertaking.

Please check out #URKEYS2DRV on Twitter, Facebook, YouTube, and in local news sources.

Sleep-Related Infant Deaths in Alabama

Amy R. Stratton, BSN, RN

State Perinatal Program Director

ALABAMA DEPARTMENT OF PUBLIC HEALTH



A man who loses his wife is called a widower, a woman who loses her husband is called a widow, and a child with no parents is called an orphan. There is no word, however, to describe a parent who loses a child. Perhaps the absence of such a term reflects the indescribable pain that accompanies the loss of a child. Every year in the United States, more than 3,500 otherwise healthy babies die suddenly and unexpectedly. Sudden Infant Death Syndrome (SIDS), Sudden Unexplained Infant Death (SUID), and unsafe sleep environments are the leading cause of death for infants one month to one year of age. The National Center for Health Statistics estimates that 50 to 60 percent of SIDS and SUID cases are from co-sleeping, unsafe sleeping, or accidental suffocation and strangulation in bed.

In 2014, 109 Alabama infants died from SIDS, SUID, and unsafe sleep-related causes. These infant deaths accounted for 21 percent of the total infant mortality rate (IMR) in 2014. Most of these infant deaths were to full-term, normal birth weight infants, according to the Alabama Center for Health Statistics, located within the Alabama Department of Public Health. Reducing risk factors associated with deaths from SIDS, SUID, and unsafe sleep would lower Alabama's traditionally high IMR to a range comparable to national averages.

SIDS is defined as the sudden death of an infant less than one year of age whose cause of death is not immediately obvious following a complete investigation, health history, and autopsy. SUID falls under the same guidelines as SIDS, but with SUID there are some other risk factors involved such as co-sleeping in an adult bed, sleeping in a bed with unapproved objects such as stuffed animals, blankets, pillows, or bumper pads, being placed to sleep on the infant's stomach, and using props or wedges. The rate of infant deaths from sleep related conditions declined more than 50 percent following the release of the American Academy of Pediatrics safe sleep recommendations in 1992, the initiation of the Back to Sleep® campaign in 1994, and the release of the Sudden Unexplained Infant Death Investigation Reporting Form in 1996. Although the rate has reached a plateau nationally, it has continued to increase in Alabama over the last three years.

Efforts to reduce the number of SIDS, SUID, and unsafe sleep-related infant deaths in Alabama have been heightened since the inception of the Collaborative Improvement and Innovation Network (CoIIN) to Reduce Infant Mortality. The State Perinatal Program, located in the Bureau of Family Health Services, is working with national, state, and local partners to educate hospitals, providers of care, and the public about ways to reduce the risks of SIDS, SUID, and unsafe sleep related causes of infant deaths. The Alabama Safe Sleep Workgroup developed the "Alabama Collaborative on Safe Sleep: Position Statement" and the "Alabama Collaborative on Safe Sleep: A Step-by-step Blueprint for Hospital Safe Sleep Champions" to provide to hospitals developing safe sleep policies and to providers to reinforce the importance of providing safe sleep education before, during, and after pregnancy.

A three-year project, started in 2015, continues with the National Institute of Child Health and Human Development Eunice Kennedy Shriver Safe to Sleep® Campaign. Mini-grants ranging from \$500-\$2,000 are provided to fraternities, sororities, churches, community organizations, and others to conduct a safe sleep initiative that provides consistent education and resources to local communities. A SIDS Sunday Church program was conducted in October and will be continued annually to make congregations aware of risk factors and how to reduce the risk of un-safe sleep related infant deaths. Additionally, the Association of Maternal and Child Health Programs is working to conduct a Safe Sleep Media Campaign, which will design and implement public service announcements made by the State Health Officer, including wraps for public transit that display the "ABCs" (Alone, Back, Crib) of safe sleep, floor stickers with the "ABC" message placed on aisles where baby items are sold, and training for first responders to conduct the Direct On Scene Education (DOSE) Program statewide.

Providing support and consistent education about risk factors and behaviors that contribute to SIDS, SUID, and other sleep related causes of infant death must be addressed at numerous levels. Working with hospitals, providers of care, public and private organizations, community leaders, and individual communities is our best shot at altering social norms and saving infant lives. Losing one infant from SIDS, SUID, or other sleep-related causes is one too many. For this reason and countless others, our work continues!

SPORTS CONCUSSIONS

Joseph D. Ackerson, Ph.D.

Pediatric Neuropsychologist

CHAIR, ALABAMA SPORTS CONCUSSION TASKFORCE



In Alabama we love our sports, and no sport more than football. Yet, with the current media coverage, on sports-related injuries, it begs the question: are we sacrificing too many developing young brains for our viewing pleasure? According to the Centers for Disease Control, up to 3.6 million concussions are diagnosed annually as a result of sports and recreational activities, a number that includes not only organized sports but also typical childhood activities such as riding bicycles and playing in the backyard.

Unfortunately, because most concussions go unreported, these numbers are doomed to under-represent the true problem. Researchers have estimated that over a million concussion cases go untreated and unreported every year. Youth participation in organized sports represents a multi-billion-dollar industry, with an estimated 38 million children and youth participants in the United States. While high schools, and even some middle schools, have access to Certified Athletic Trainers (ATCS) and must comply with regulatory rules, the youngest and most vulnerable of our athletes have little medical supervision and almost no regulatory oversight.

Some still believe that these young children are too small and slow to experience concussions, but we know that pediatric sports-related concussion rates diagnosed in the emergency department have more than doubled from 1997-2007. Additionally, studies comparing youth athletes to collegiate and high school athletes have shown they can experience the same type of severe injuries due to the relative weakness of their necks, still-developing brains, and the proportion of their head size to the rest of their body. Yet, we can all acknowledge the significant positive physical and mental health benefits from participation in youth sports.

Fortunately, Alabama has a group of dedicated professionals that work on keeping youth sports alive without sacrificing safety concerns. In 2007, the Alabama Statewide Sports Concussion Taskforce was founded as a committee of the Alabama Statewide Head Injury Taskforce, of which the ADPH is an important contributing member. Based on a scientific review of the literature and a consensus-building approach, we developed a set of guidelines on the recognition and management of concussions that was then used to influence the Alabama High School Athletic Association (AHSAA), whose medical committee also has representation on our group, to update their guidelines in 2010. The following year, we were able to partner with the AHSAA, along with Senator Greg Reed and Representatives Ron Johnson and Paul Demarco, to help write and pass Alabama's Concussion Law (Act 2011-541, updated with a technical amendment in 2012). Alabama was one of the first southern states in the country to pass a comprehensive concussion law and remains one of the few with a statewide taskforce to serve as consultants and advocates for reducing the incidence and morbidity associated with concussions.

So what is in the Alabama law? Essentially, it requires:

1. every youth sport or recreational organization in the state annually develop guidelines informing athletes and their parents about the proper recognition and management of concussions;
2. all coaches receive annual training in the proper recognition and management of concussions; and
3. any athlete even suspected of having had a concussion must be immediately removed from participation, prohibited from returning for 24 hours (since post-concussive symptoms can evolve over time), and must be medically cleared by a licensed physician before returning to play.

We recognize that no one can be expected to avoid or identify all concussions. We believe that, by following what is now our state law, we can reduce both the number of concussions and the complications associated with them. Remember, all concussions are brain injuries, and any brain injury can be serious. By recognizing their occurrence and immediately removing the injured athlete or child from play, we can allow our youth to live active, healthy lives. When it comes to our young athletes, never forget: "When in doubt, sit them out."

For more information on our statewide efforts, please go to www.alabamatbi.org.



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