Mississippi Child Death Review Panel 2022 Annual Report

A REVIEW OF 2018 INFANT AND CHILD MORTALITY

MISSISSIPPI STATE DEPARTMENT OF HEALTH

Submitted to:

Chairmen of the House Public Health and Human Services Committee

Senate Public Health and Welfare Committee

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Acknowledgements

This report reflects the hard work of the Mississippi Child Death Review Panel and those who respond directly to infant and child fatalities. Without the work of coroners, medical examiners, law enforcement, emergency medical services, physicians, social service agencies, and countless others, the Child Death Review Panel would not be able to review these deaths.

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Foreword

Every child death is a significant event for Mississippi families. The toll that each loss takes on our communities is significant. There is no possible way to quantify the grief that each family and community bears with these losses and we acknowledge those families and the suffering they have endured with the deaths of these children, who are irreplaceable members of our society.

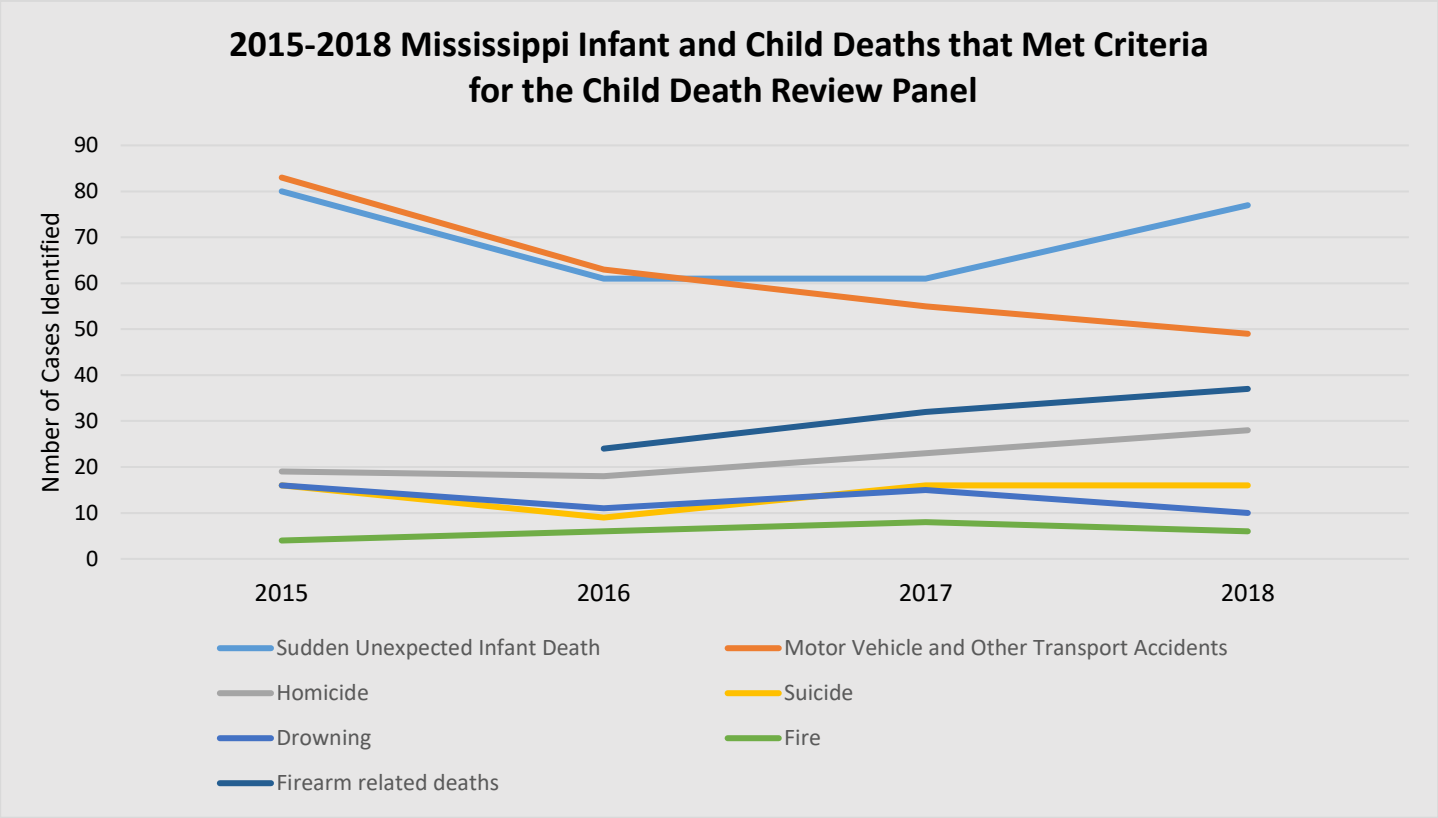
The Mississippi Child Death Review Panel is tasked with the challenging task of examining pediatric deaths from a range of preventable causes, by taking a close look at the details of each death and identifying those significant factors that played a role in these children's deaths. Based on the data gathered through our examinations the team then makes recommendations on where we can improve the health and safety of children in Mississippi.

This report is the result of a year long effort in the review of preventable child deaths in Mississippi in 2018. It is the product of numerous dedicated professionals representing agencies across the state and involves every county. Members of the Child Death Review Panel volunteer their time and effort to generate this report and the recommendations that are made with the single goal of reducing pediatric deaths in Mississippi. It is our hope that this report raises awareness of critical issues facing our children today and that the readers of this report would take action based on these recommendations to join us in protecting our most valuable resource, our children.

Executive Summary

This report summarizes the infant and child deaths related to unintentional injuries or violence that occurred in 2018. These often sudden and unexpected deaths greatly impact the lives of families and community members. These deaths also impact Mississippi. By reviewing the circumstances and risk factors associated with the death, it provides a lens on how to better safeguard infants and children in the state from untimely deaths.

In 2018, there were 534 infant and child deaths. Of these deaths, 204 were due to injuries or violence related to accidents, homicides, suicides or considered undetermined. The majority were sudden unexpected infant deaths and motor vehicle/other transport accidents—the most preventable deaths accounting for 126 deaths, 77 and 49 respectively. Between 2015 and 2018, motor vehicle/other transport accident deaths decreased from 83 to 49 deaths. Sudden unexpected infant deaths have increased from 2017 to 2018. Deaths related to firearms have been trending up wards from 2016 to 2018, 24 to 37 respectively. There were 28 homicides in 2018, the highest it has been in the last three years. Fire and drowning deaths have decreased from 2015 to 2018. Suicides have had a slow increase since 2016. Continued diligence in tracking the prevalence of these fatalities is necessary to see if prevention efforts are working and, if not, how to change direction.



Child Death Review Panel Members

State Medical Examiner	*Vacant*
University of Mississippi Medical Center, Pathologist	*Vacant*
Appointee, Lieutenant Governor	*Vacant*
Appointee, Speaker of the House of Representatives	Dr. Amanda Penny
State Coroners Association	David Ruth
Mississippi Chapter of the American Academy of Pediatrics	Dr. Randy Henderson
Office of Vital Records and Statistics	Melanie Parks
Attorney General's Office	Teri Gleason Maya Edwards Nakia McLaurin
State Sheriff's Association	Sheriff K.C. Hamp Commander Persundra Jones
Mississippi Police Chiefs Association	*Vacant*
Mississippi Child Protective Services	Regina Lacking Tara LeBlanc
Children's Advocacy Center	Karla Tye
State Chapter of the March of Dimes	*Vacant*
Mississippi State SIDS & Infant Safety Alliance	Cathy Files
Mississippi Children's Safe Center	Dr. Scott Benton Amanda Sanford
Safe Kids Mississippi	Elizabeth Foster
Mississippi State Fire Marshal's Office	Brad Smith
Mississippi Supreme Courts	Justice Dawn Beam
University of Mississippi Medical Center, *Ad hoc Members*	Amber Kyle, Chair Michelle Goreth
Mississippi State Department of Health, *Ad hoc Members*	Monica Stinson Teresa Windham
Child Death Review Coordinator	Victoria Walker
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Introduction

The Mississippi Child Death Review Panel (CDRP) was established by House Bill 560 becoming effective July 1, 2006. The intent of the legislation is to foster the reduction of infant and child mortality and morbidity in Mississippi and to improve the health status of infants and children. The review of these fatalities provide insight on factors that lead to the death, trends of behavior patterns, increases or decreases in the number of causes of death, and gaps in systems and policies that hinder the safety and wellbeing of Mississippi's children. Through the review process, the CDRP develops recommendations on how to most effectively direct state resources to decrease infant and child deaths in Mississippi.

Child Death Review Process

The CDRP reviews all child deaths from birth to under 18 years old due to unnatural causes. This excludes child deaths due to cancer, congenital anomalies, prematurity, and communicable diseases. Causes of death categorized as "undetermined/unknown" are also reviewed if natural causes cannot be ruled out. Most cases reviewed are residents of Mississippi; however, non-Mississippi residents are reviewed if the incident and/ or death occurred in Mississippi.

Child death cases are provided by the Mississippi State Department of Health Office of Vital Statistics by the calendar year. The cases are categorized by manner of death as accident, homicide, suicide, undetermined, pending investigation, or natural causes. Cases with cause of death indicated as injury, actions that lead directly to the death, or circumstances of an accident that produced the fatal injury are selected for review. These selected cases largely fall into the following causes of death: Sudden Unexplained Infant Death (SUID), Sudden Infant Death Syndrome (SIDS), motor vehicle accidents, homicides, suicides, fire-related, drowning, and other. The category of "other" includes incidents by which a small number of cases appeared in that calendar year.

Cases are prepared for panel review by gathering death investigation reports, SUIDI forms, autopsy reports, toxicology reports, police reports, and any other documents that can clearly demonstrate the sequence of events that led to the death. Each case is reviewed individually by a panel member who is responsible for presenting the case summary to the panel at large for further discussion. It is through this process that the panel develops recommendations to decrease the number of infant and child fatalities.

Lack of documentation is one of greatest hindrances to the efficiency of the CDRP. The CDRP depends on thoroughly completed, timely, and accurate reports to assess the circumstances that led to the child's death. Without this information, the CDRP is not able to fully execute its duties.

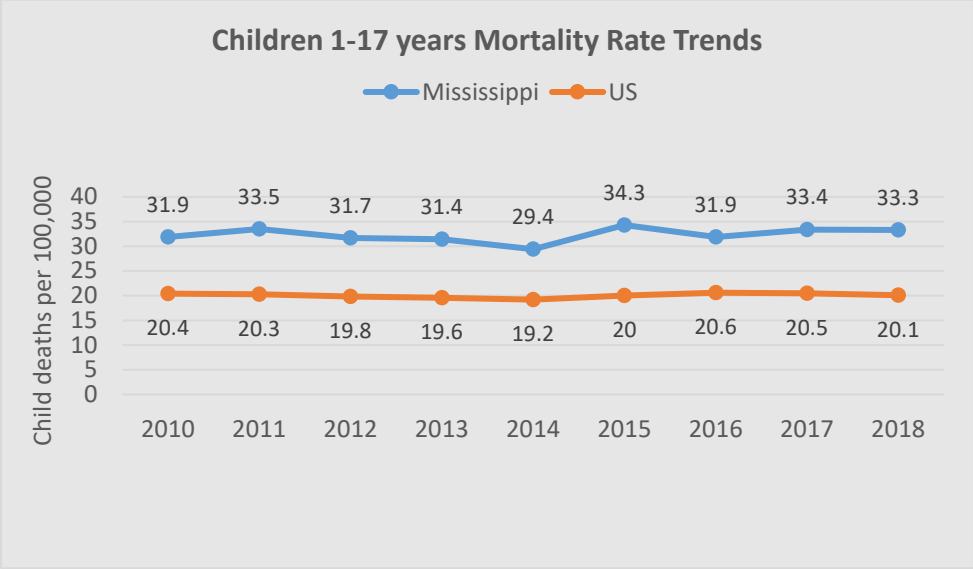
Purpose and Data Sources

This annual report provides an overview of the cases reviewed by CDRP and its recommendations. This report is compiled using Mississippi Vital Statistics and the National Fatality Review Case Reporting System. The National Fatality Review Case Reporting System assists the CDRP with tracking trends and risk behaviors in the cases reviewed.

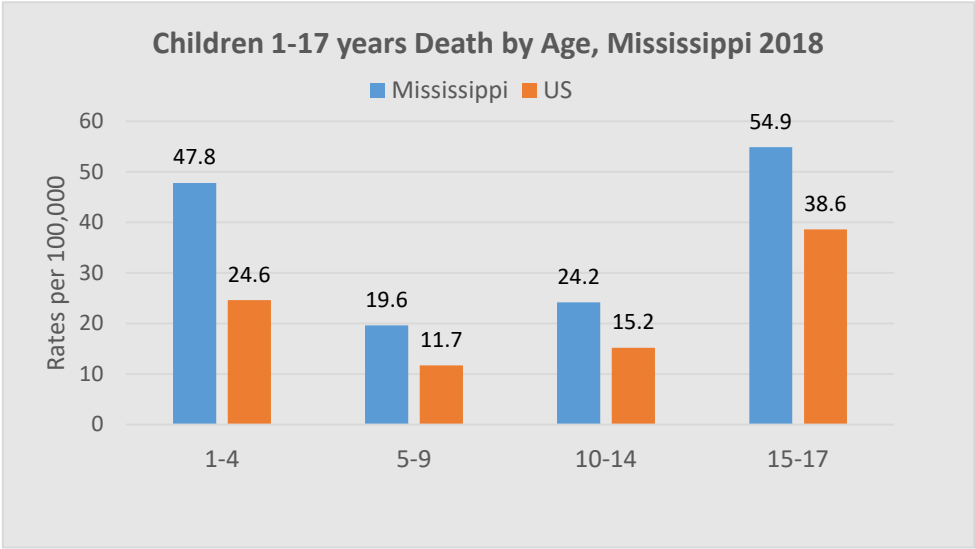
2018 Child and Infant Mortality

Child Mortality

In 2018, there were 534 deaths that occurred from children under 18 years old, including 311 deaths among infants and 223 deaths among children 1 to under 18 years old. The overall child death rate has declined from 2010 to 2018 in the US. For Mississippi, the child death rate has increased from 2010 to 2018. The child death rate in Mississippi is still higher than the national average. In both Mississippi and the US, the child death rate is highest among children ages 15-17 years followed by those ages 1-4.

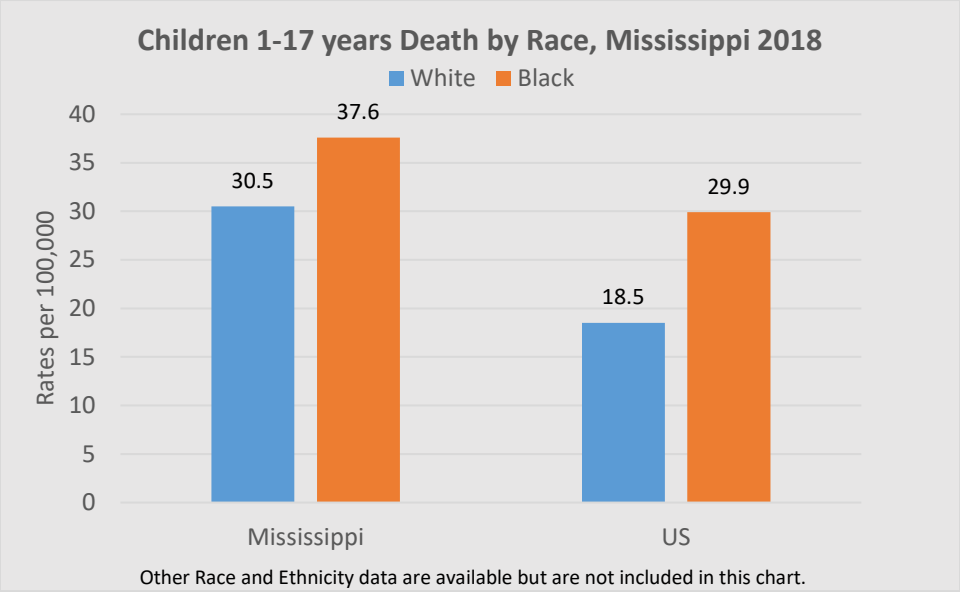


Data Sources: Mississippi Vital Statistics and CDC Wonder

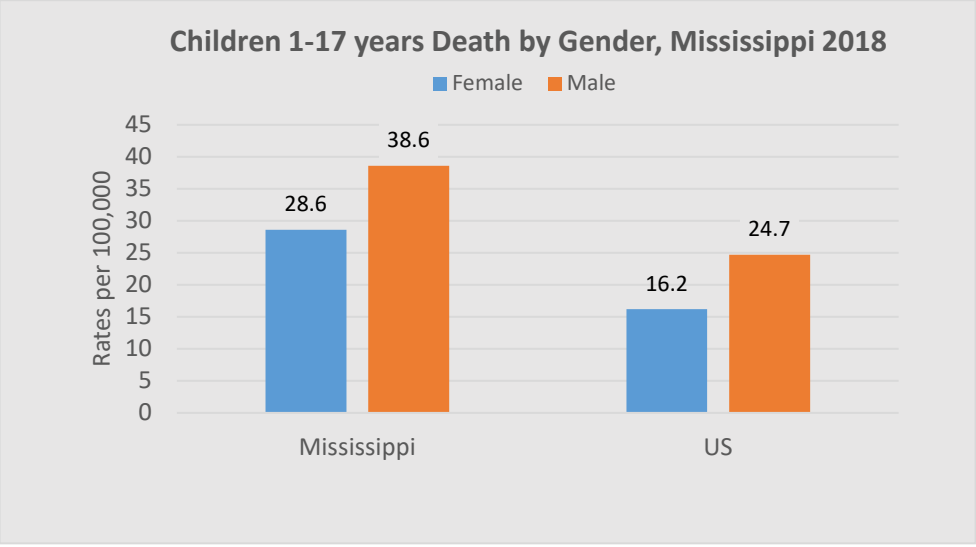


Data Sources: Mississippi Vital Statistics and CDC Wonder

Additionally, the child death rate is higher among Blacks compared to Whites in both the US and Mississippi. The child mortality rate among males is higher than females in both the US and Mississippi.



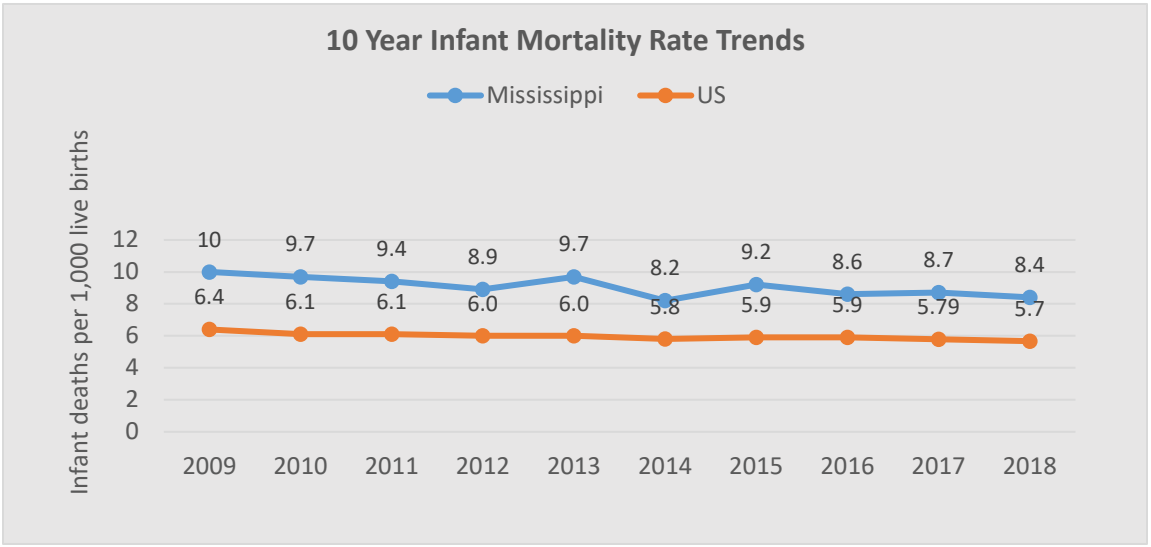
Data Sources: Mississippi Vital Statistics and CDC Wonder



Data Sources: Mississippi Vital Statistics and CDC Wonder

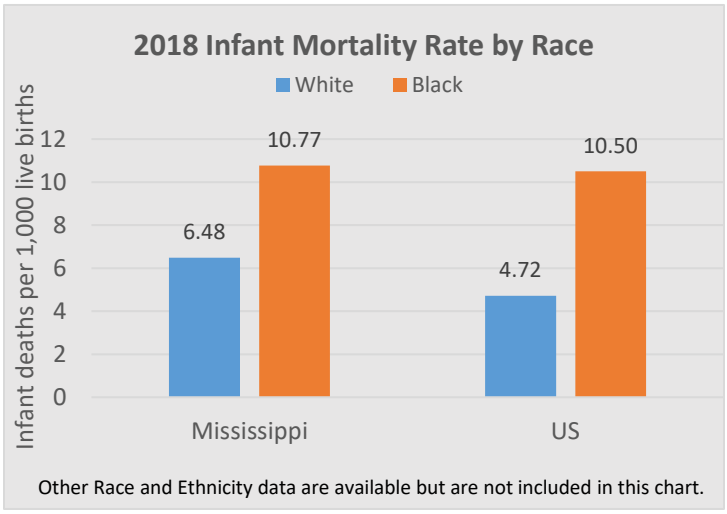
Infant Mortality

In 2018, there were 322 infant deaths that occurred from birth to 365 days of age. The overall infant mortality rate declined from 2009 to 2018 in both the US and Mississippi. However, the infant mortality rate in Mississippi is still higher than the national average.

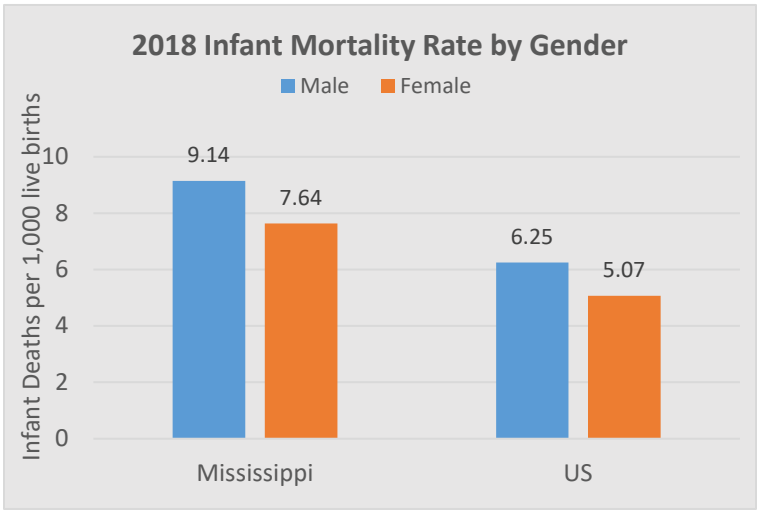


Data Source: Mississippi Vital Statistics and CDC Wonder

The infant mortality rate among Blacks is almost twice compared to the Whites in both US and Mississippi. The infant mortality rate among males is slightly higher than females in both US and Mississippi.



Data Source: Mississippi Vital Statistics and CDC Wonder



Data Source: Mississippi Vital Statistics and CDC Wonder

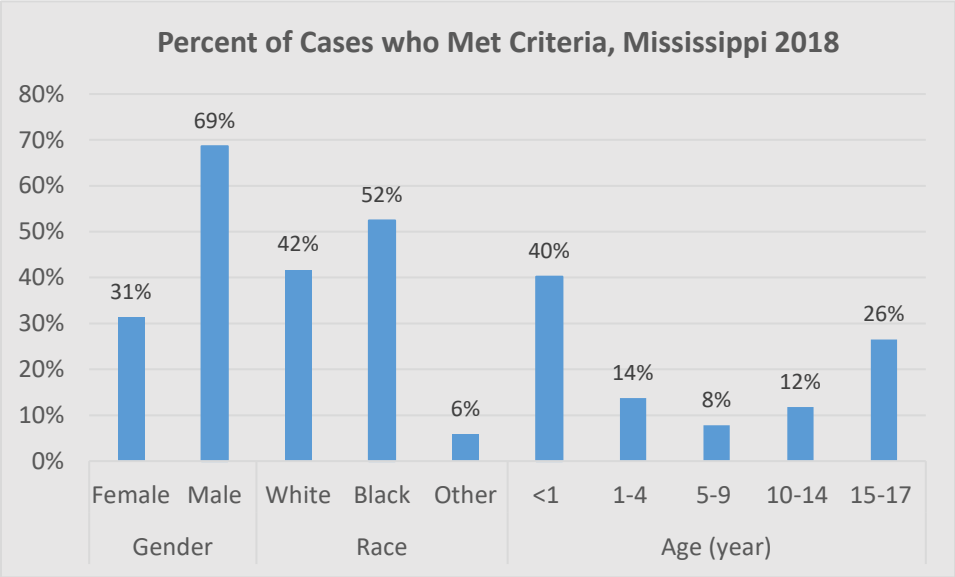
Reviewed Case Findings

Demographics

Overall, 204 deaths met criteria for review by the CDRP. Of those, 64 (31%) were female and 140 (69%) were male; 85 (42%) were White, 107 (52%) Black, 12 (6%) were Other races; 82 (40%) were infant, 28 (14%) aged 1-4 years old, 16 (8%) aged 5-9 years, 24 (12%) aged 10-14 years, and 54 (26%) aged 15-17 years.

The Child Death Review Panel reviewed 134 of the 204 cases that met the criteria. Of those reviewed, 44 cases (33%) were female, and 91 cases (69%) were male; 64 (48%) cases were White and 62 (46%) cases were Black, and 8 (6%) cases were Other races. In addition, 61 (40%) were infant, 20 (14%) aged 1-4 years old, 9 (8%) aged 5-9 years, 16 (12%) aged 10-14 years, and 28 (26%) aged 15-17 years.

Infants accounted for 40% (80 cases) of all cases that met the criteria for review and 46% (61 cases) of all cases reviewed by the CDRP. Children aged 1-17 years accounted for 60% (122 cases) of all cases that met the criteria for review and 54% (73 cases) of all cases reviewed by the CDRP.

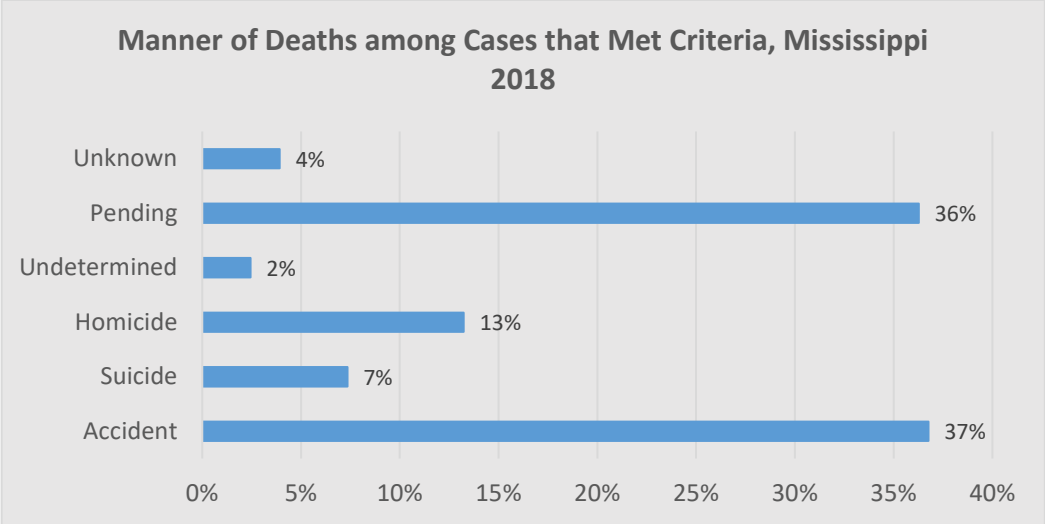


Data Source: Mississippi Vital Statistics

Manner and Cause of Death

By manner of death, of the 204 cases that met the criteria for review, the majority or 75 cases (37%) had accident related death, 15 cases (7%) suicide, and 27 cases homicide (13%). The manner of death was undetermined for 5 cases (2%), 74 cases had pending manner of death (36%), and 8 cases had unknown manner of death (4%).

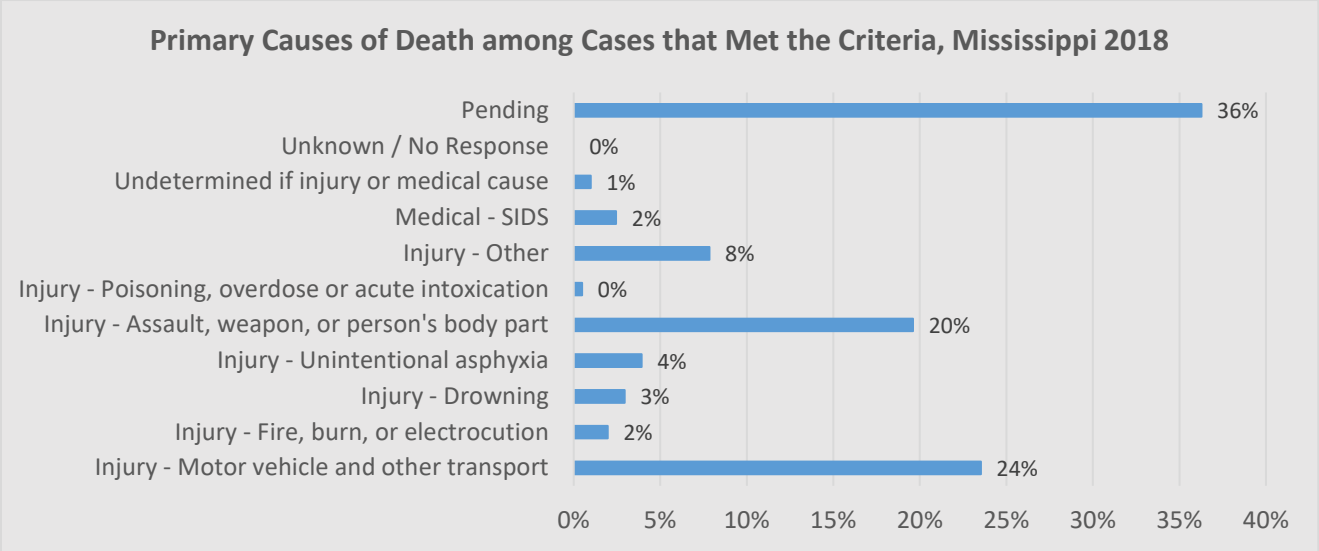
Of 204 cases who met the criteria, CDRP reviewed 134 cases. Of those 134 cases, the majority or 54 cases (40%) had pending as their official manner of death. There were 45 accident related death cases (34%), 8 cases (6%) suicide, and 16 cases homicide (12%). The manner of death was undetermined for 5 cases (4%), and 6 cases had unknown manner of death (4%).



Data Source: Mississippi Vital Statistics

Of the 204 cases that met criteria for review, 48 cases (24%) were MVA and other transport-related death, 4 fire-related cases (2%), 6 drowning cases (3%), 8 unintentional asphyxia (4%), 40 assault-related cases (20%), 1 case (0%) poisoning-related death, and 5 SIDS cases (2%). 16 cases (8%) had other injuries causes, and 0 cases had unknown cause of death (0%). 2 cases were undetermined if injury or medical cause and 74 (42%) cases had pending causes of death.

Of the 134 cases reviewed by the CDRP, 26 cases (19%) were MVA and other transport-related death, 4 fire-related cases (3%), 4 drowning cases (3%), 5 unintentional asphyxia (4%), 24 assault-related cases (18%), 1 case (1%) poisoning-related death, 5 (4%) SIDS cases. Seven cases (5%) had other injuries causes, and 0 cases (0%) had unknown cause of death. Two cases were undetermined if injury or medical cause and 56 (42%) cases had pending causes of death.

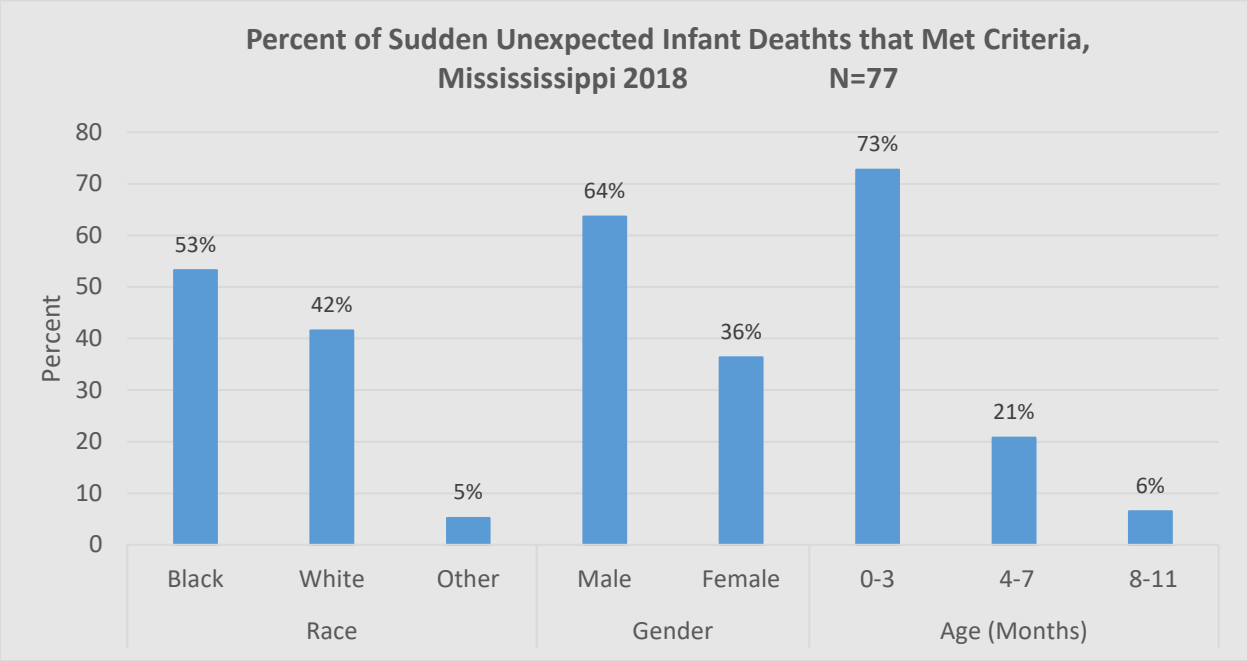


Data Source: Mississippi Vital Statistics

Infant Deaths: Sudden Unexpected Infant Death and Sudden Infant Death Syndrome

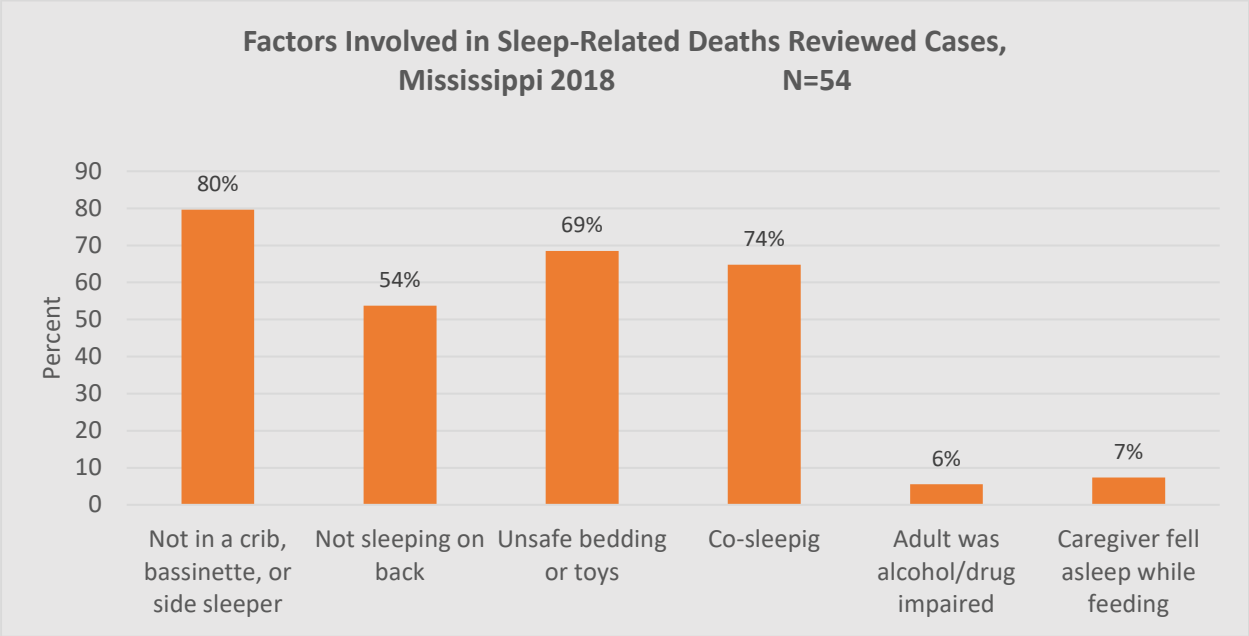
In 2018, there were 77 infant deaths that classified as sudden unexpected infant death (SUID). SUID is a term used to describe the sudden and unexpected death of an infant less than 1 year old in which the cause is not known before investigation. Sudden unexpected infant deaths often occur in the sleep environment or during sleep. Sudden unexpected infant deaths fall into three major causes of death: undetermined, Sudden Infant Death Syndrome (SIDS), or accidental suffocation or asphyxiation

Of the 77 sudden unexpected infant death cases that met the criteria for review, 59 cases were reviewed by the CDRP. Of the cases reviewed, 26 cases (44%) were White, 29 cases (49%) were Black, and 4 cases (7%) reviewed listed 'Other' as their race. By age in months, 52 cases (88%) were 0-3 months, 5 cases (8%) were 4-7 months, and 2 cases (3%) were 8-11 months. Eighteen cases (31%) were female, and 41 cases (69%) were male.



Data Source: Mississippi Vital Statistics

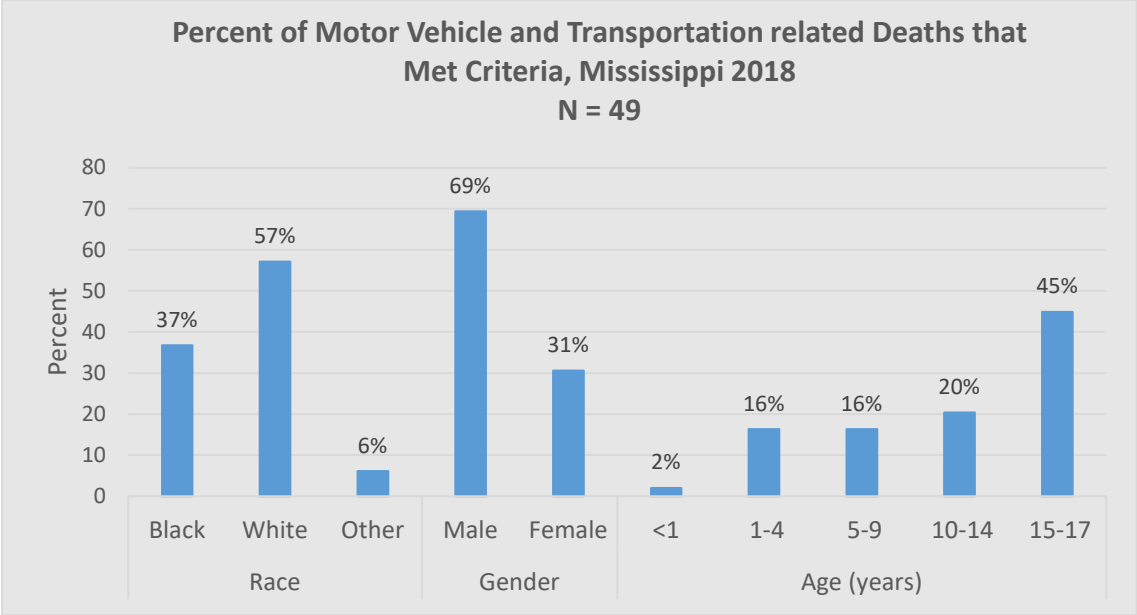
Of the 59 cases reviewed, 54 were found to have sleep environment related factors. Eighty percent (43 cases) did not sleep in a crib, bassinette, side sleep, or baby box, 54% (29 cases) were not sleeping on their back, 69% (37 cases) had unsafe bedding or toys in the sleeping area, 74% (40 cases) were sleeping with other people (including sleeping with obese adults), 6% (3 cases) had adults who were impaired by drug or alcohol at the time of the incident, and 7% (4 cases) had the caregiver/supervisor to fall asleep while feeding (including bottle and breast feeding). Unsafe sleep practices (infants not sleeping alone, on their back, or in a crib, bassinet, or pack n'play) continue to be a contributing factor of sudden unexpected infant deaths.



Data Source: National Center for Fatality Review Case Reporting System

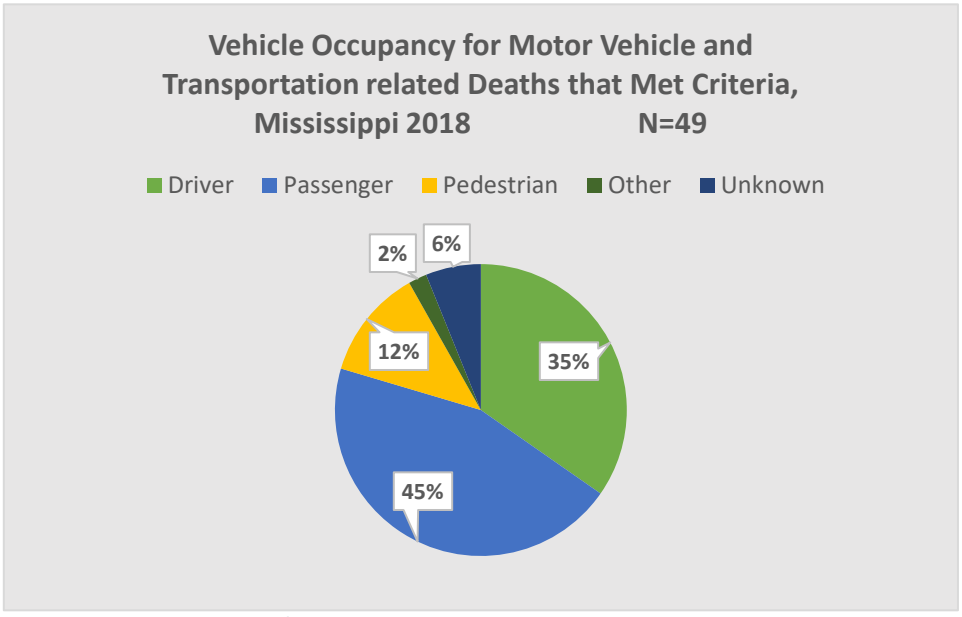
Motor Vehicle and Other Transport Accidents

There were 49 MVA and transport-related death in 2018 that met criteria for review. This was a decrease from the 55 MVA and transport-related deaths that occurred in 2017. Of the 49 cases, 26 were reviewed by the CDRP. Twenty cases (77%) were White, and 6 cases (23%) were Black; 16 cases (62%) were male and 10 cases (38%) were female. Three cases (12%) were aged 1-4 years, 4 cases (15%) were aged 5-9 years, 7 cases (27%) were aged 10-14 years, and 12 cases (46%) were aged 15-17 years.



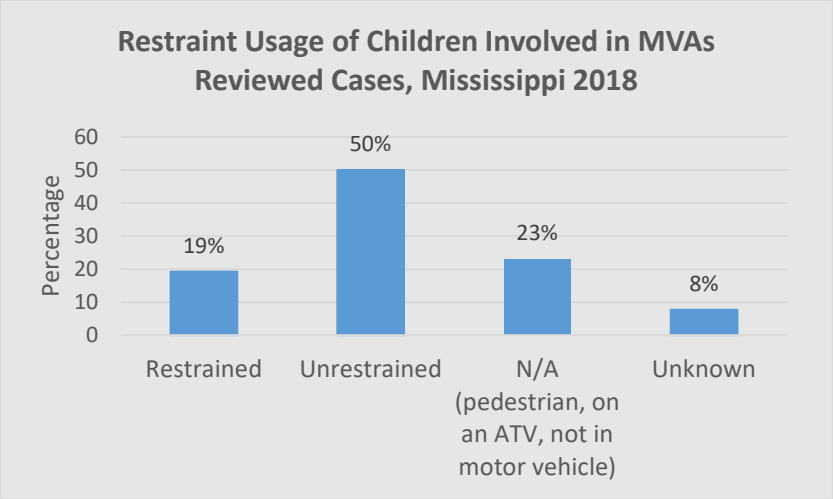
Data Source: Mississippi Vital Statistics

The majority of cases were positioned as passengers, followed by drivers, among those who met criteria for review. Of the cases that met criteria, 17 cases (35%) were drivers in the MVA (including ATVs), 22 cases (45%) were passengers, and 6 cases (12 %) were pedestrians.

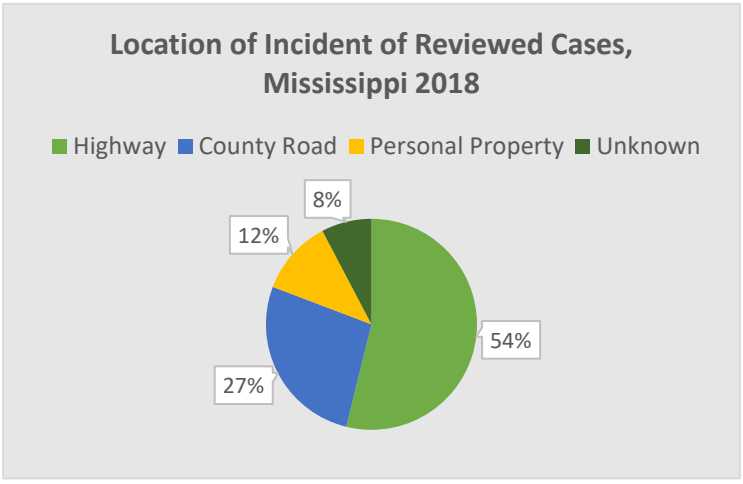


Data Source: Mississippi Vital Statistics

Of the 26 deaths reviewed, 5 cases (19%) were wearing seat belts in the MVA, 13 cases (50%) were not wearing seat belts, 6 cases (23%) were either a pedestrian, were not in a motor vehicle, or on an ATV, and 2 cases (8%) had this information missing from their case. Of the motor vehicle and other transportation related cases reviewed 14 cases (54%) occurred on highways while 7 cases (27%) happened on county roads and 3 cases (5.6%) occurred on personal property. Two cases (8%) did not give specific detail on the accident location.



Data Source: Mississippi Department of Transportation

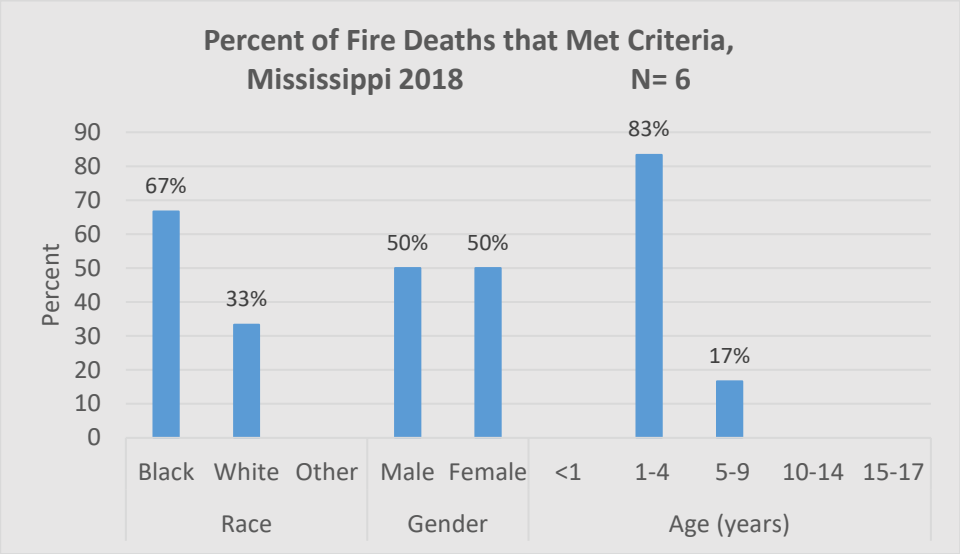


Data Source: Mississippi Department of Transportation and Mississippi Vital Statistics

Fire, Burn, or Electrocution

There were 6 fire-related deaths in 2018 that met criteria for review; all were reviewed by the CDRP. Of those, 4 cases (67%) were Black, and 2 cases (33%) were White. Three cases (50%) were female and 3 cases (50%) were males. All fire-related deaths occurred in the age group between 1 and 9 years. Eighty-three percent (5 cases) were aged 1-4 years, 17% (1 case) were aged 5-9 years.

Of the fire cases reviewed, 2 cases (33%) involved a trailer or mobile home, 2 cases (33%) were in single homes, 1 case (17%) was identified as Other, and 1 case (17%) was identified as multiple home dwelling. Smoke alarm presence were noted in only 1 case (17.0%) and the smoke alarm presence was unknown for 4 cases (67%). One case (17%) included a child who was not supervised, and three cases (50%) noted the source of origin was electrical.

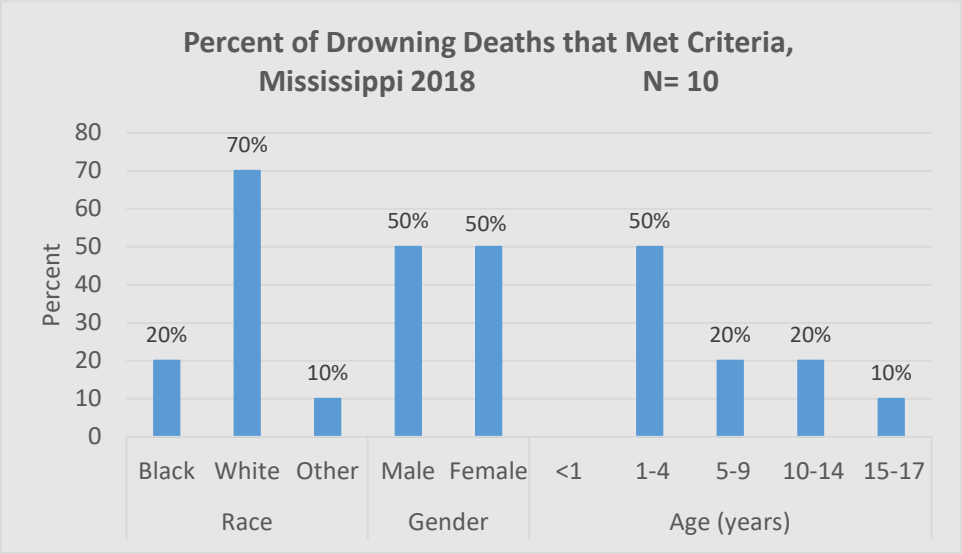


Data Source: Mississippi Vital Statistics

Drowning

There were 10 drowning-related deaths in 2018 that met criteria for review. Of these 6 cases were reviewed, 83% (5 cases) were White, and 17% (1 case) were identified as Other. Fifty percent (3 cases) were male and female respectively. Five cases (66%) were aged 1-4 years, one case (17%) was aged 10-14 years, and one case (17%) was aged 15-17 years.

Of the drowning cases reviewed, 33% (2 cases) were in a lake, river, pond, or creek, and 67% (4 cases) were in a pool, hot tub, or spa. During the review it was only noted in 1 case (17%) that the child could swim. All cases were noted for lack of supervision.

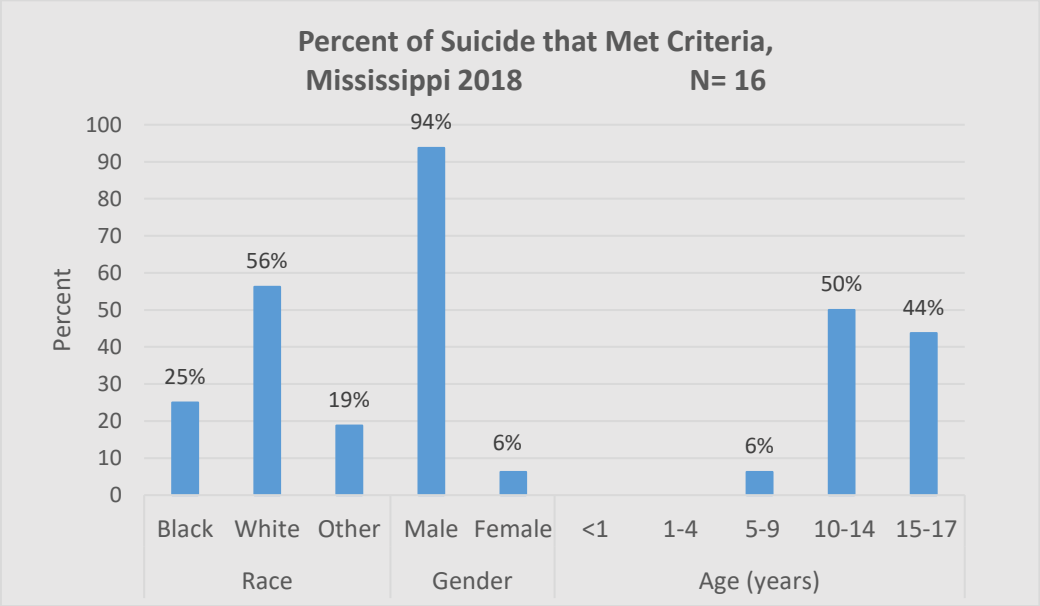


Data Source: Mississippi Vital Statistics

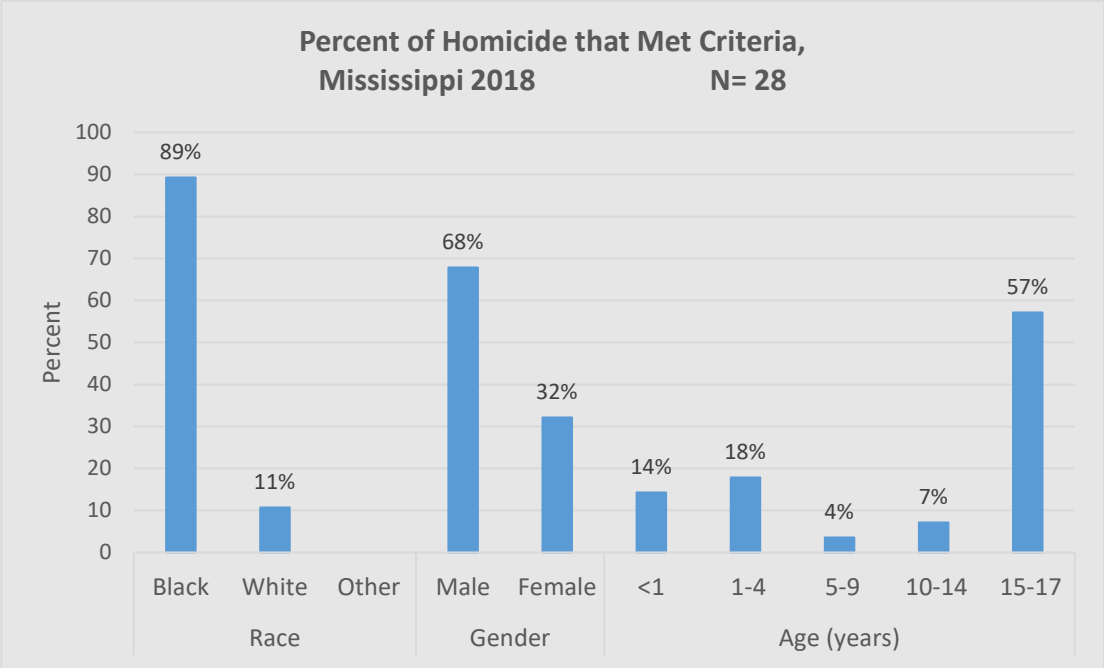
Suicide, Homicide, and Firearm-related Deaths

There were 16 suicide deaths in 2017 that met criteria for review. The CDRP reviewed 8 cases, 75% (6 cases) were White, and 25% (2 cases) was identified as Other. Seven cases (88 %) were male and 1 case (12%) were female. Five cases (62%) were aged 10-14 years and 3 cases (38%) were aged 15-17 years.

Of the suicide cases reviewed, one case (12%) involved a child talking about suicide prior to the act, and 3 cases (38%) had left a note. Of the cases reviewed, an argument or incident occurred prior to the act in three cases (38%). One cases (12%) noted serious school problems with the child before the act was committed.



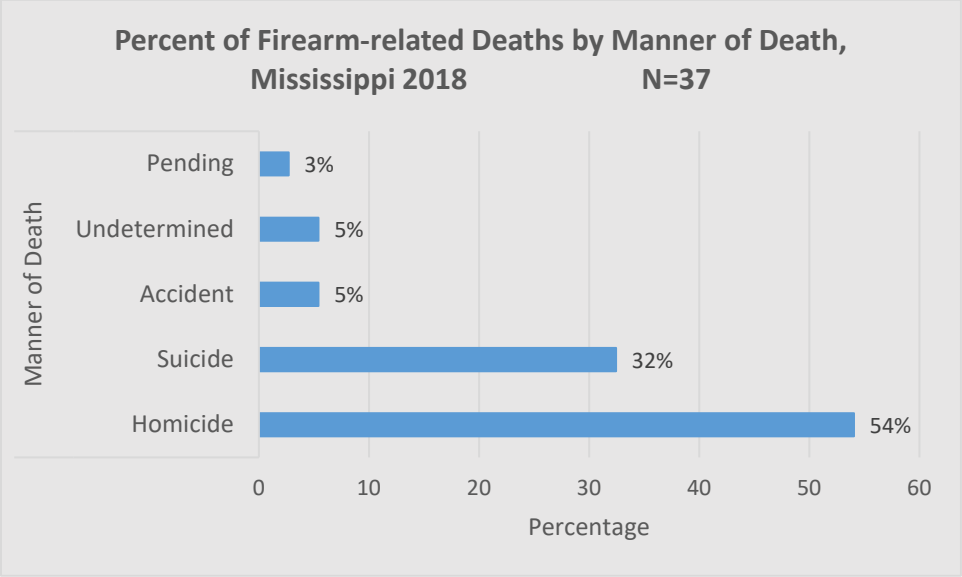
There were 28 homicide deaths in 2018 that met criteria for review. The CDRP reviewed 16 cases, 2 cases (12%) were White, and 14 cases (88%) were Black. Six cases (38%) were female and 10 cases (62%) were male. There were 3 cases (14.3%) aged <1 year. The remainder occurred in the age group between 1 and 17 years. Two case (12%) were aged less than 1, 5 cases (31%) were aged 1-4 years, 1 case (6 %) was aged 5-9 years, 2 cases (12%) were aged 10-14 years, and 6 cases (38 %) were aged 15-17 years.



Data Source: Mississippi Vital Statistics

Among suicide, homicide, accident, and undetermined manner of deaths, there were 37 cases that had a cause of death related to firearms. There were 2 cases (5%) with the manner of death ruled as accident, 2 cases (5%) with the manner of death being undetermined, 20 cases (54%) with the manner of death being homicide, and 12 cases (32%) with the manner of death being ruled as suicide. One case (3 %) was pending the manner of death.

Of the 5 cases (14%) of accident, undetermined, and pending manner of death caused by firearm, all cases were male; and 4 cases (80%) were Black and 1 case (20%) was White. By age, 1 case (20%) was aged 10-14 years and 4 cases (80%) were aged 15-17 years.



Data Source: Mississippi Vital Statistics

Recommendations and Prevention Efforts

The Child Death Review Panel makes the following recommendations to the Chairmen of the House Public Health and Human Services Committee and the Senate Public Health and Welfare Committee.

State Leaders:

- Legislation that requires firearms to be traced through the Bureau of Alcohol, Tobacco, and Firearms and Explosives when a child has been injured or fatally injured by a firearm.
- Representative from the Department of Mental Health assigned to the Child Death Review Panel.
- Representative from the District Attorney's Office assigned to the Child Death Review Panel.

Healthcare System and Providers:

- Mass media campaigns discouraging co-sleeping and a realistic approach to helping put babies to sleep.
- Increase awareness about the need of prenatal visits and support groups. Highlight areas where prenatal support group exists, their success and where these support groups are not available.

School Administrators, Teachers, and Counselors:

- Incorporating a curriculum on risky behaviors for new drivers in high school health courses.

Local Leaders, Communities, and Families:

- More calls to the Child Protection Services hotline for infant and child fatalities from accidents, homicides, suicides, or any injury related deaths.
- Public service announcements on water safety, swimming safety, and other safety precautions for residential lakes, ponds, and pools.
- Public Service announcements on fire safety and the importance of smoke alarms in homes.