CHARLESTON COUNTY CORONER'S OFFICE

ANNUAL REPORT ON CHILD DEATHS

2024

BOBBI JO O'NEAL
CORONER

BRITTNEY MARTIN
CHIEF DEPUTY CORONER

Table of Contents

Introduction

The Charleston County Coroner's Office is dedicated to providing thorough and compassionate investigations into all deaths that occur within our jurisdiction, including those involving children. The purpose of this report is to provide an overview of child fatalities within Charleston County for the year 2024, highlighting causes, trends, and efforts to address preventable deaths. The information contained within this report is intended to foster a deeper understanding of child mortality and to aid in efforts toward prevention and awareness.

Summary: Child Deaths by Demographics

	2023		2024	
	Count	Percent	Count	Percent
Age Group				
Ages 0-1	40	56.3%	43	55.84%
Ages 1-12	11	15.5%	8	10.39%
Ages 13-17	3	4.2%	8	10.39%
Fetal Deaths/Stillbirths	17	23.9%	18	23.37%
Sex				
Male	34	47.9%	49	63.63%
Female	34	47.9%	22	28.57%
Unspecified (Stillbirth)	3	4.2%	6	7.79%
Race				
White (non-Hispanic)	25	35.2%	17	22.07%
Black (non-Hispanic)	31	43.7%	42	54.54%
Hispanic	9	12.7%	6	7.7%
Other (non-Hispanic)	2	2.8%	1	1.3%
Unspecified	4	5.6%	11	14.28%
Total Deaths	71		77	

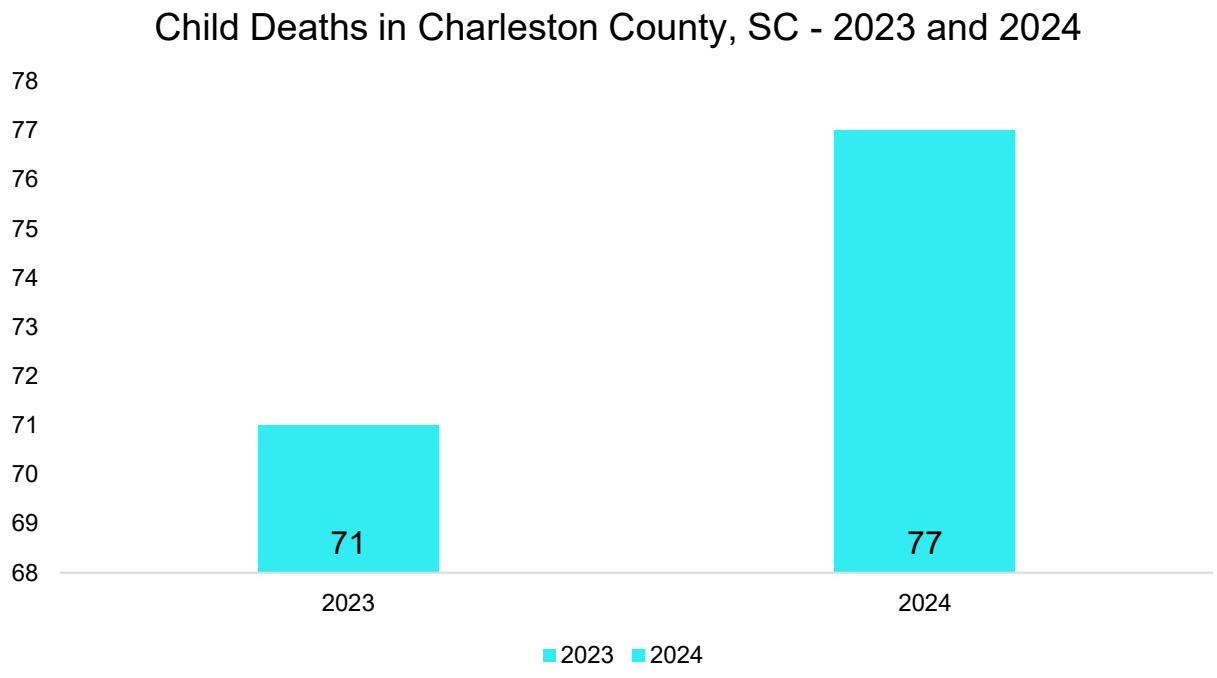
Table 1

Section 2: Overview of Child Deaths in Charleston County (2024)

2.1. Total Child Deaths:

In 2024, a total of 77 child deaths (age 0 – 17 years old) were reported. Of these 77 cases, 5 were referred to their appropriate jurisdiction (i.e. another county). The data below represents the deaths where the fatal event occurred in Charleston County. 77 deaths represent a slight increase of **8.45%** compared to the previous year (71 deaths).

- Not all deaths are mandated to be reported to the Coroner's Office. For example, a child that had a terminal illness and died while admitted to a hospital, would not be reported to the Coroner's Office. Also, a stillbirth is not reported to the Coroner's Office if it weighed less than 350 grams since such cases are usually handled by medical staff and do not require coroner involvement unless unusual circumstances arise.



2.2. Age, Race, and Sex Breakdown:

The age distribution of child deaths in 2024 is as follows:

- **Fetal/Stillbirth :** 18 deaths
- **Infants (0-1 year)**: 43 deaths
- **Children (1-12 years)**: 8 deaths
- **Teenagers (13-17 years)**: 8 deaths

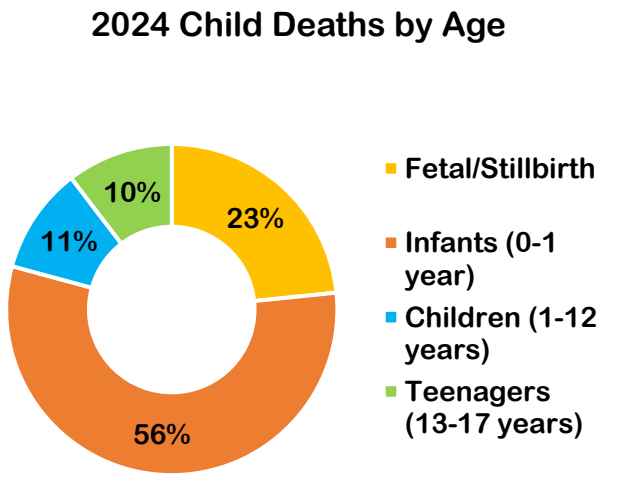


Figure 1 Child Deaths in Charleston County, SC by Age, 2024

Sex Breakdown:

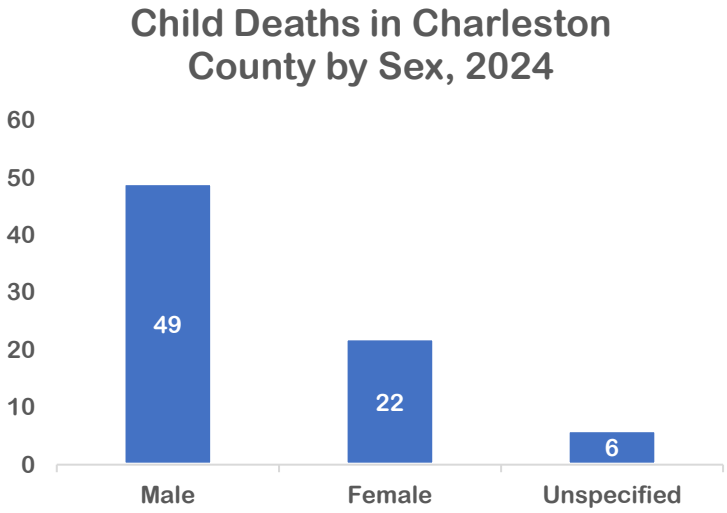
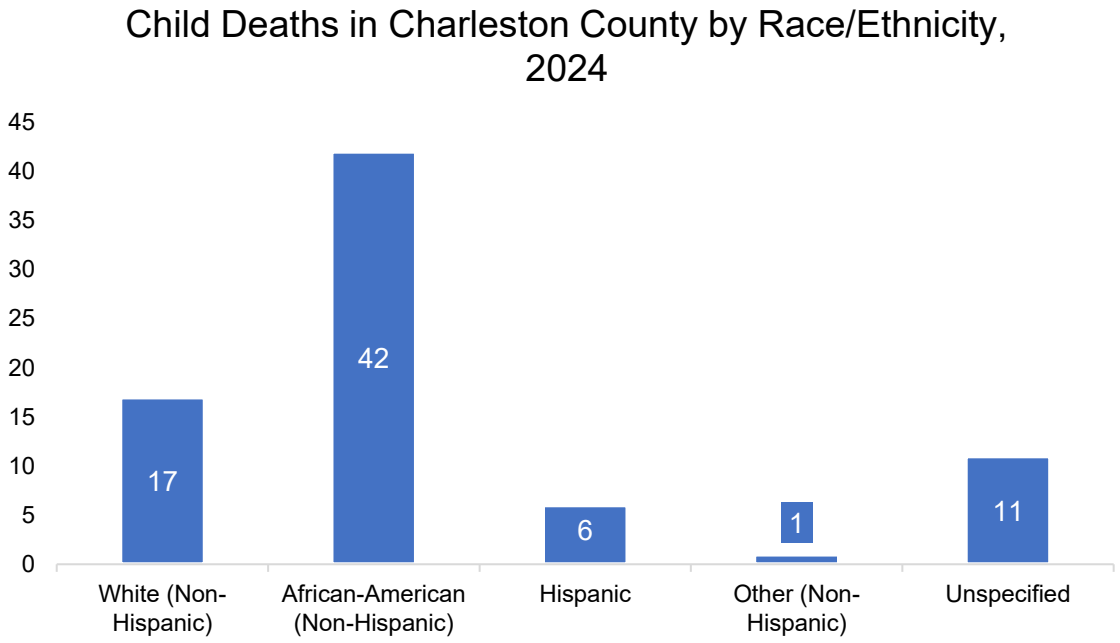


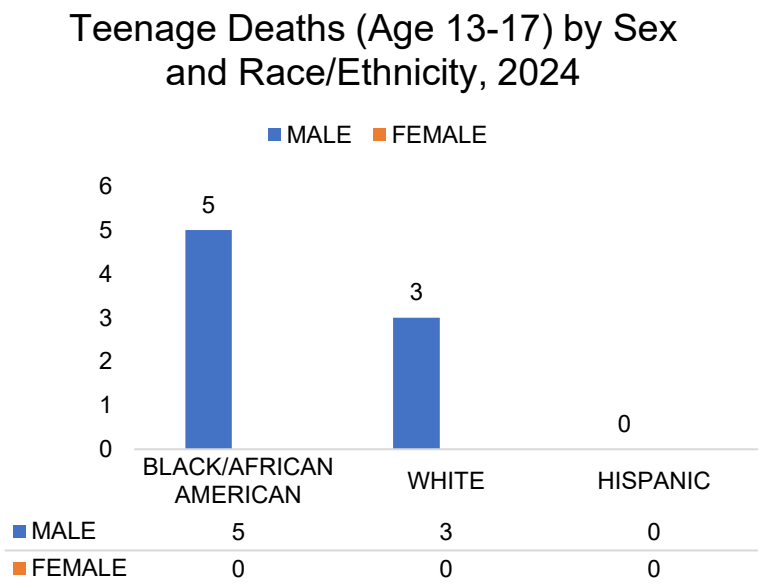
Figure 2 Child Deaths in Charleston County, SC by Sex, 2024

- **Male**: 49
- **Female**: 22
- **Unspecified (Stillbirth)**: 6

Race Breakdown:

- **White (Non-Hispanic):** 17 deaths
- **African-American (Non-Hispanic):** 42 deaths
- **Hispanic:** 6 deaths
- **Other (Non-Hispanic):** 1 death
- **Unspecified:** 11 deaths

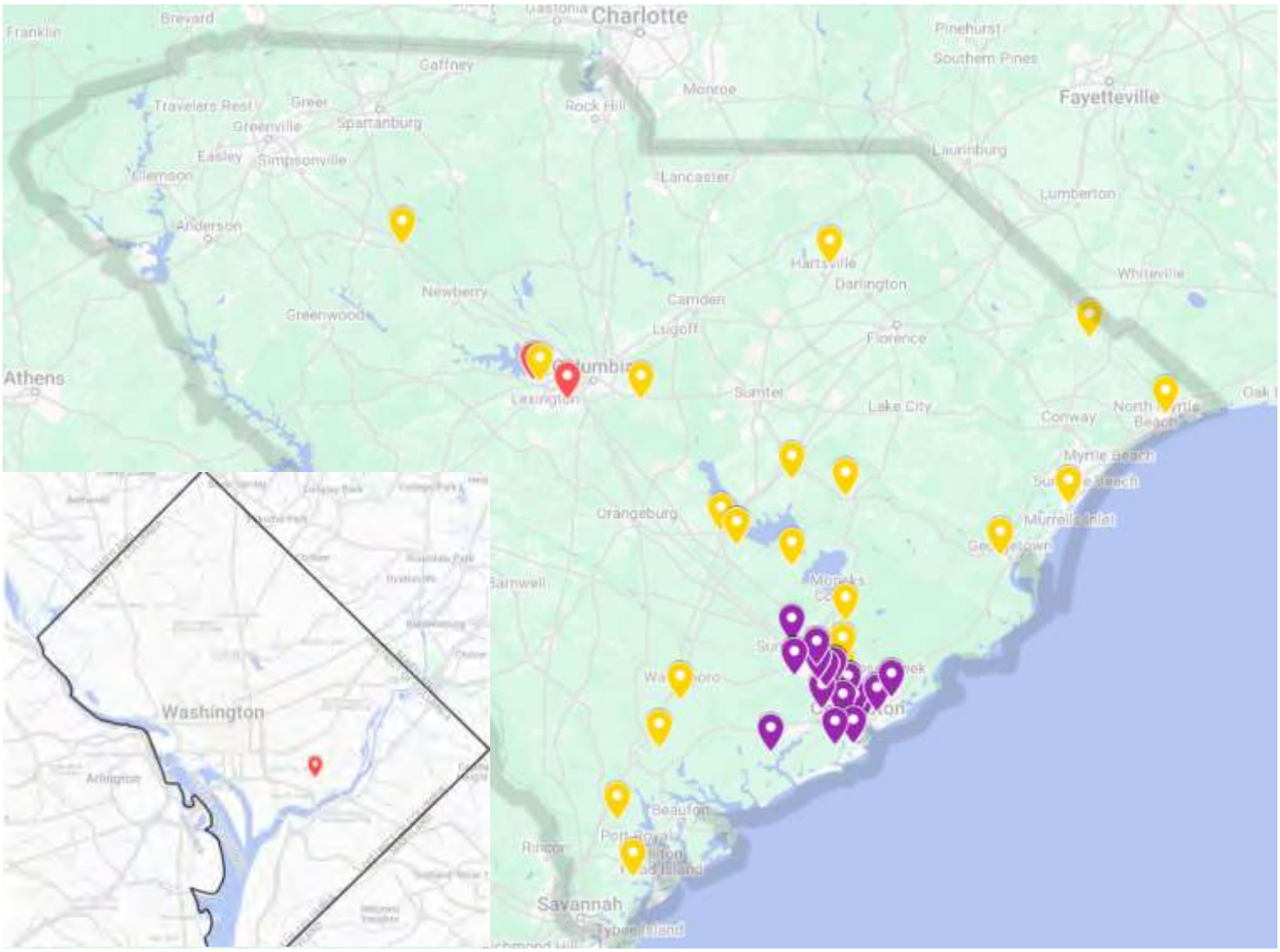




2.3. Town of Residence:

Below is a depiction of the town of residence for each decedent (excluding the 5 'other county' cases).

Residence Category	Number of Deaths
Charleston County Residence Zip Code Child was a resident of Charleston County	**48**
Non-Charleston County Residence Zip Code Includes prematurity, stillbirth, and/or medically complex pregnancy circumstances. Decedent never left hospital.	**21**
Non-Charleston County Residence Zip Code Includes deaths of non-residents that were visiting Charleston County for a reason **other than** receiving medical care.	**3**



Section 3: Manner and Cause of Death

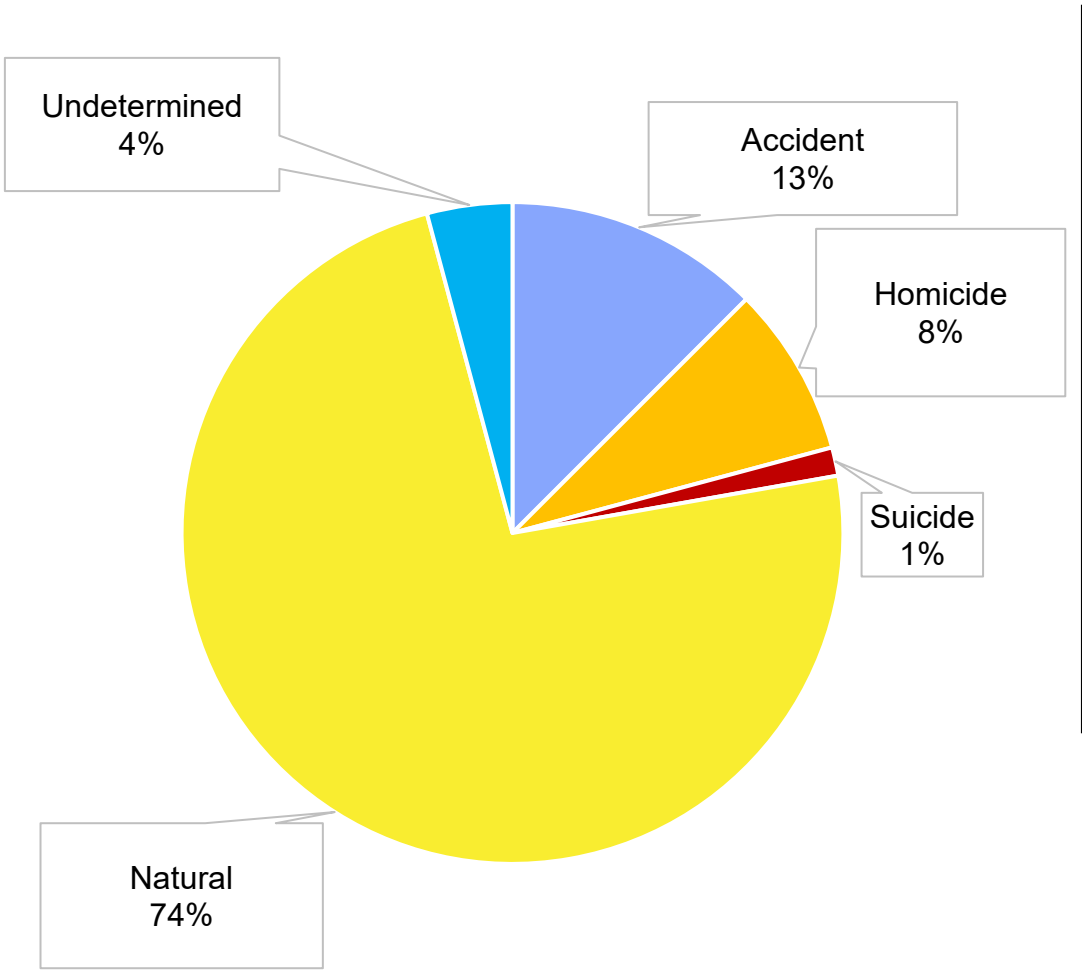
Of the 77 deaths, 5 were referred to our county incorrectly, therefore, we referred them to the correct jurisdiction. As a result, we do not have additional information on those 5 cases. Moving forward we will only be analyzing the death of those whose fatal incident occurred in Charleston County.

Child Deaths in Charleston County, SC by Manner and Circumstance, 2024		
Accident		
Cause	**Incidence**	**Percentage of total deaths**
Motor Vehicle Collision	2	2.78%
Drowning	2	2.78%
Choking	1	1.38%
Unsafe Sleep	4	5.56%
Total Accidental Child Deaths in 2024	**9**	**12.5 %**
Homicide		
Gun Violence	4	5.56%
Overdose/Acute Intoxication	1	1.38%
Blunt Force	1	1.38%
Total Homicide Child Deaths in 2024	**6**	**8.33%**
Suicide*		
*There was a single pediatric suicide death in 2024. To protect the identity of this person, no other information will be provided.	1	1.38%
Total Suicide Child Deaths in 2024	**1**	**1.38%**
Natural		
Leading conditions contributing to these deaths include prematurity and stillbirth.	53	73.61%
Total Natural Child Deaths in 2024	**53**	**73.61%**
Undetermined**		
Unsafe Sleep Factors Identified, but not confirmed	2	2.78%
Other undetermined	1	
Total Undetermined Child Deaths in 2024	**3**	**4.16%**

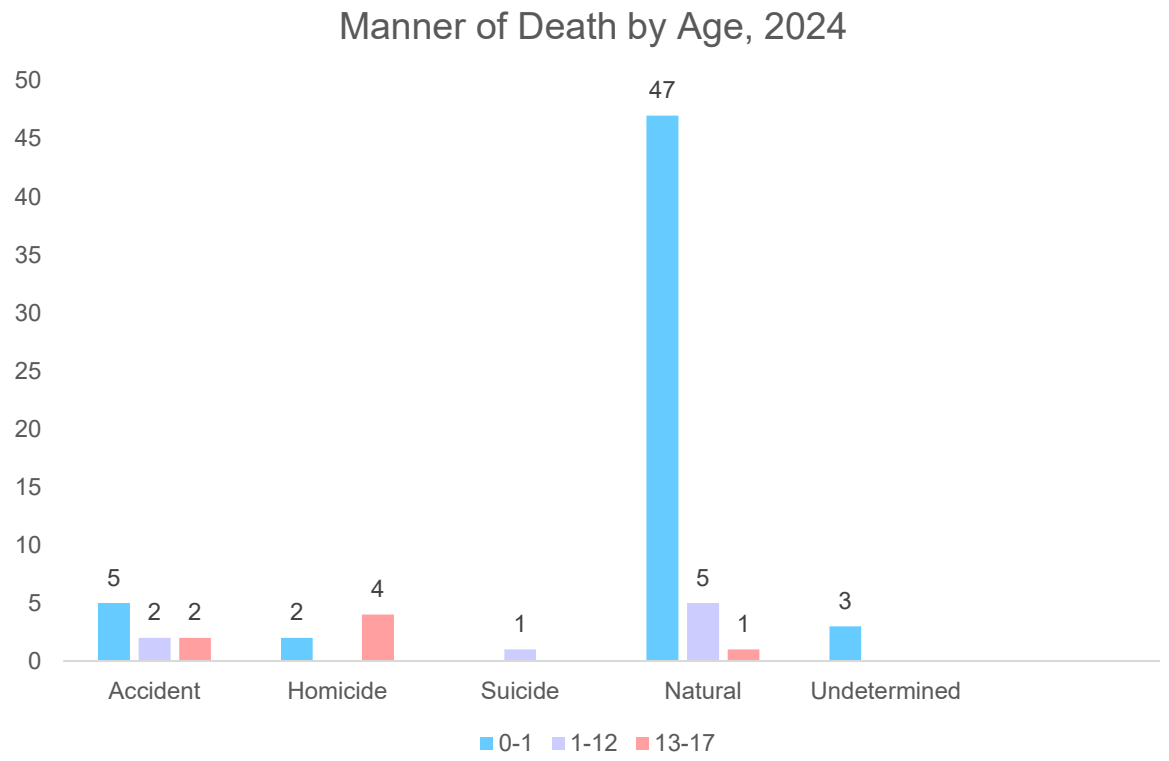
**In some cases, the cause of death remains undetermined despite a thorough investigation. This classification is used when there isn't any single manner of death that is more compelling than another. In 2024, there were a total of 3 Undetermined cases, compared to 11 Undetermined cases in 2023.

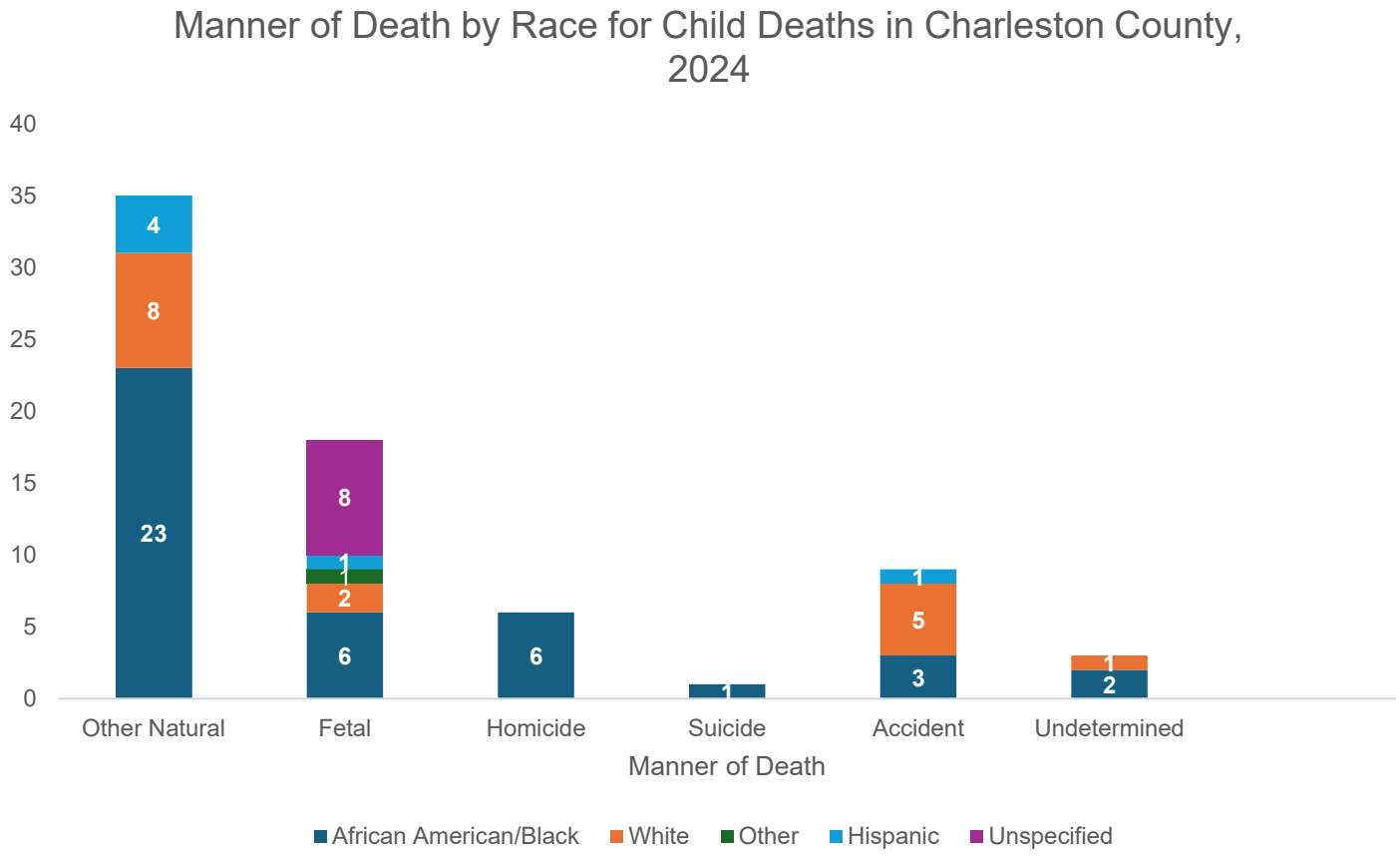
Table 2 Child Deaths by Manner and Circumstance

Child Deaths by Manner, 2024



Manner of Death	Number of Deaths
Natural	53
Accident	9
Homicide	6
Suicide	1
Undetermined	3


Manner of Death by Age, 2024
50
45
40
35
30
25
20
15
10
5
0
5
2
2
2
4
1
47
5
1
3
Accident
Homicide
Suicide
Natural
Undetermined
0-1
1-12
13-17


Manner of Death by Race for Child Deaths in Charleston County, 2024
40
35
30
25
20
15
10
5
0
4
8
23
8
1
1
2
6
6
1
1
1
5
3
1
2
Other Natural
Fetal
Homicide
Suicide
Accident
Undetermined
Manner of Death
African American/Black
White
Other
Hispanic
Unspecified

Section 4: Trends and Analysis

4.1. Decrease in Accidental Deaths:

There has been a total of 9 accidental deaths. Which is a **25%** decrease from 2023 (12 accidents). These types of deaths often involve a combination of environmental factors, lack of supervision, and safety lapses. Efforts to address this issue should include public awareness campaigns, increased enforcement of safety laws, and community-based prevention programs.

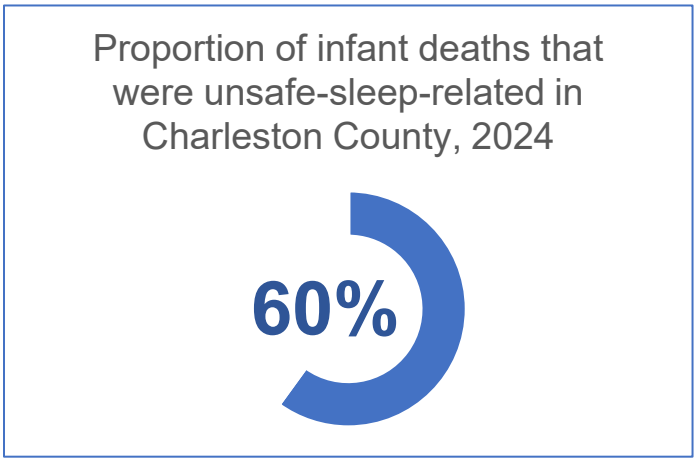
4.2. Suicide and Mental Health Concerns:

There was 1 suicide in 2024, compared to 0 in 2023. Mental health issues, bullying, and family dynamics are key factors in these cases. It is crucial for both the public and private sectors to work together to improve mental health services for children and adolescents, as well as to support youth suicide prevention initiatives.

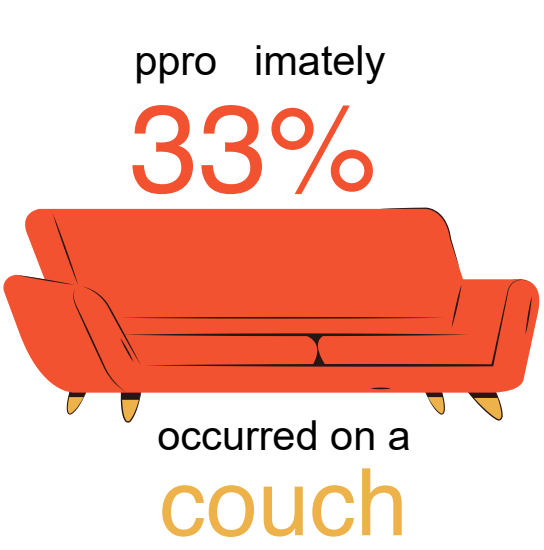
4.3. Infant Mortality (excluding natural causes and fetal deaths):

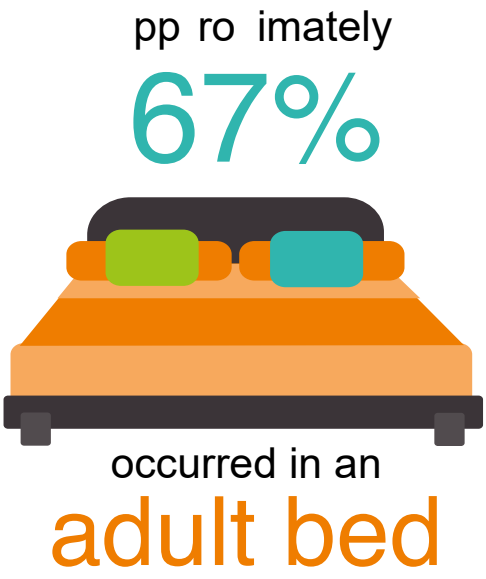
There was a total of 10 infant deaths (age 1 and under) in 2024 compared to 12 infant deaths in 2023. Infant deaths, particularly those related to **unsafe sleep-related deaths**, remain significant. In 2023 there were 10, compared to 6 in 2024.

- 60% (6 of 10) of infant deaths in 2024 were related to unsafe sleep, compared to 2023 during which 83.3% (10 of 12) of infant deaths were related to unsafe sleep. Although there was a 27.97% decrease, public education campaigns about safe sleep practices and the importance of prenatal care are essential in reducing these tragic deaths.



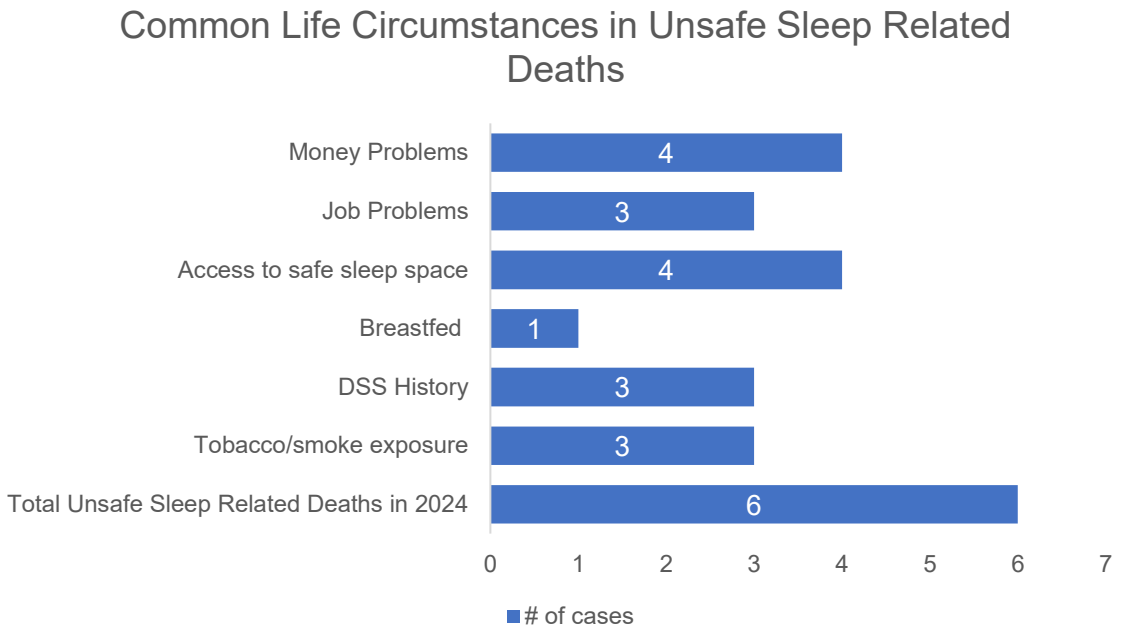
Of unsafe-sleep-related infant deaths in Charleston County in 2024:





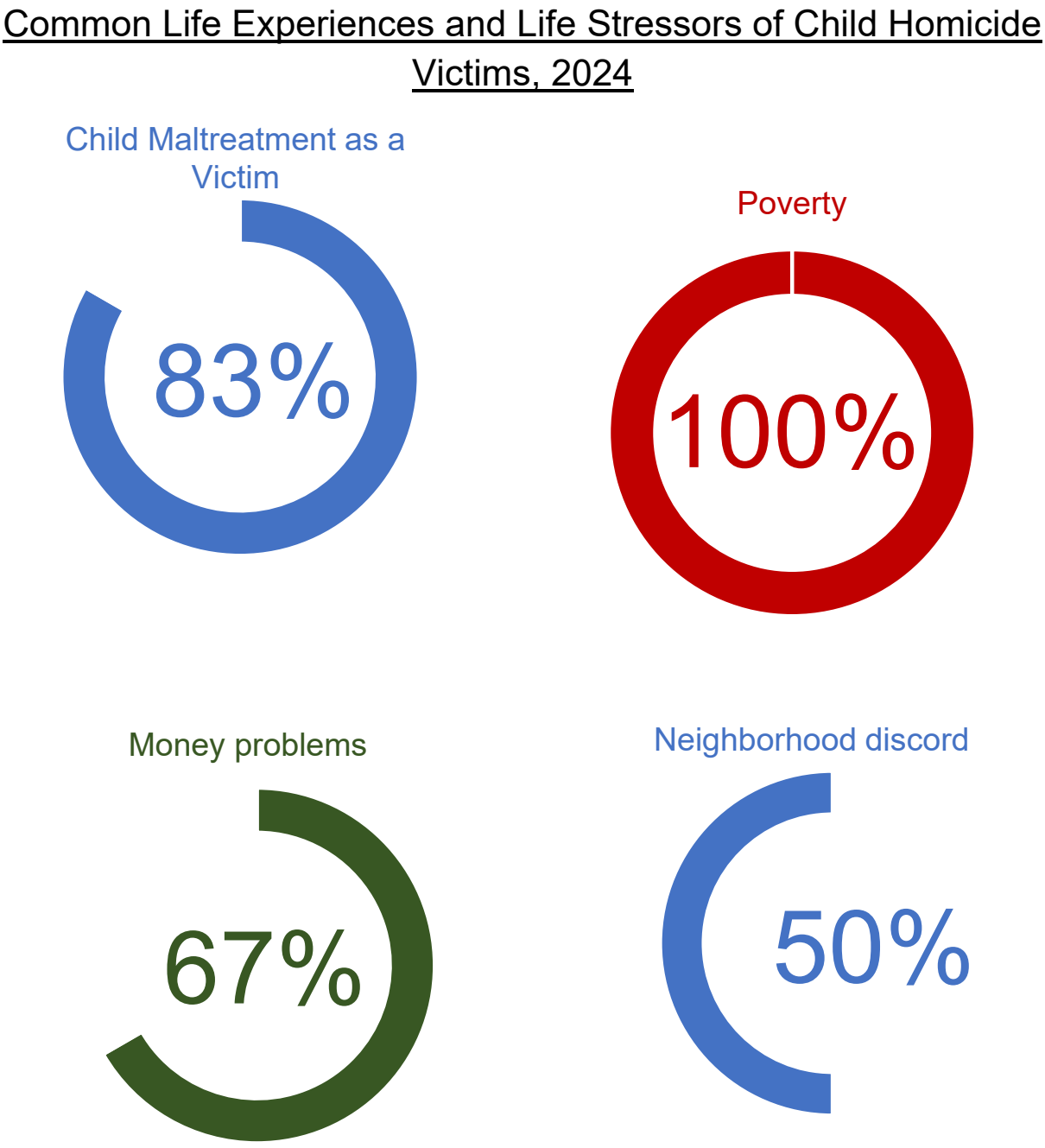
2 out of the 6 (33.3%) unsafe sleep related deaths in Charleston County in 2024 occurred on a couch.

4 out of the 6 (66.7%) unsafe sleep related deaths in Charleston County in 2024 occurred on a couch.



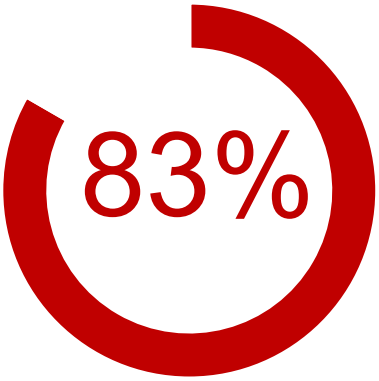
4.4 Homicides and Child Abuse:

The number of child homicides has increased since 2023. A total of 6 homicides occurred in 2024, in comparison to 0 in 2023. Tragically, some of these deaths were a result of child abuse/neglect. Greater collaboration between law enforcement, child protective services, and community organizations is necessary to combat child abuse and provide better protection for vulnerable children.

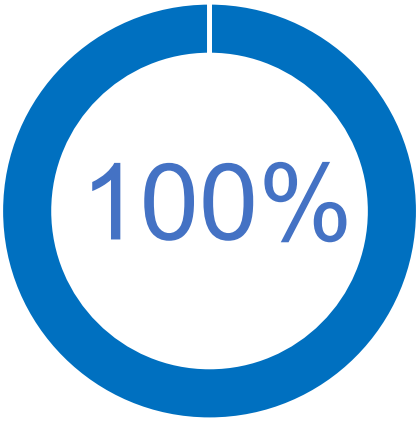


The graphics marked with an asterisk* represent experiences unique to the school-aged/teen child homicide victims

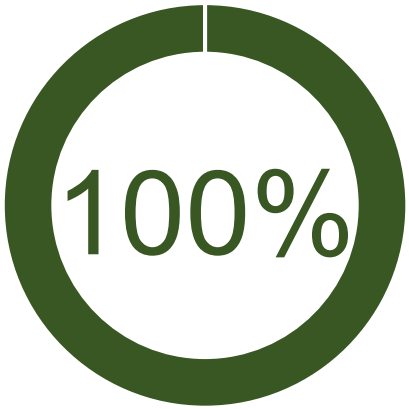
Tobacco exposure



Delinquent/criminal history*

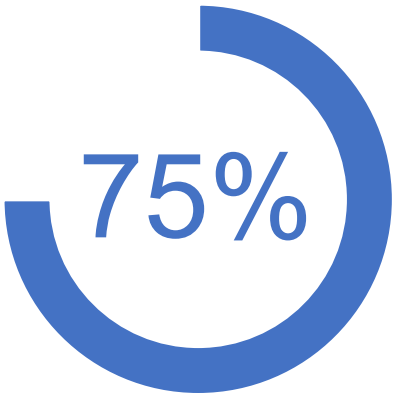


School failure*

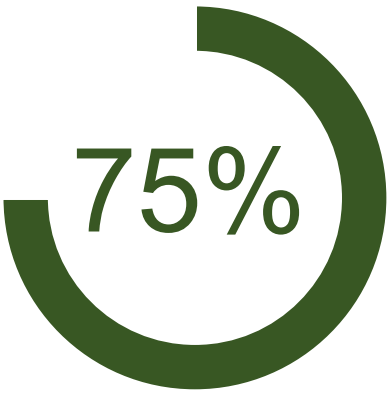


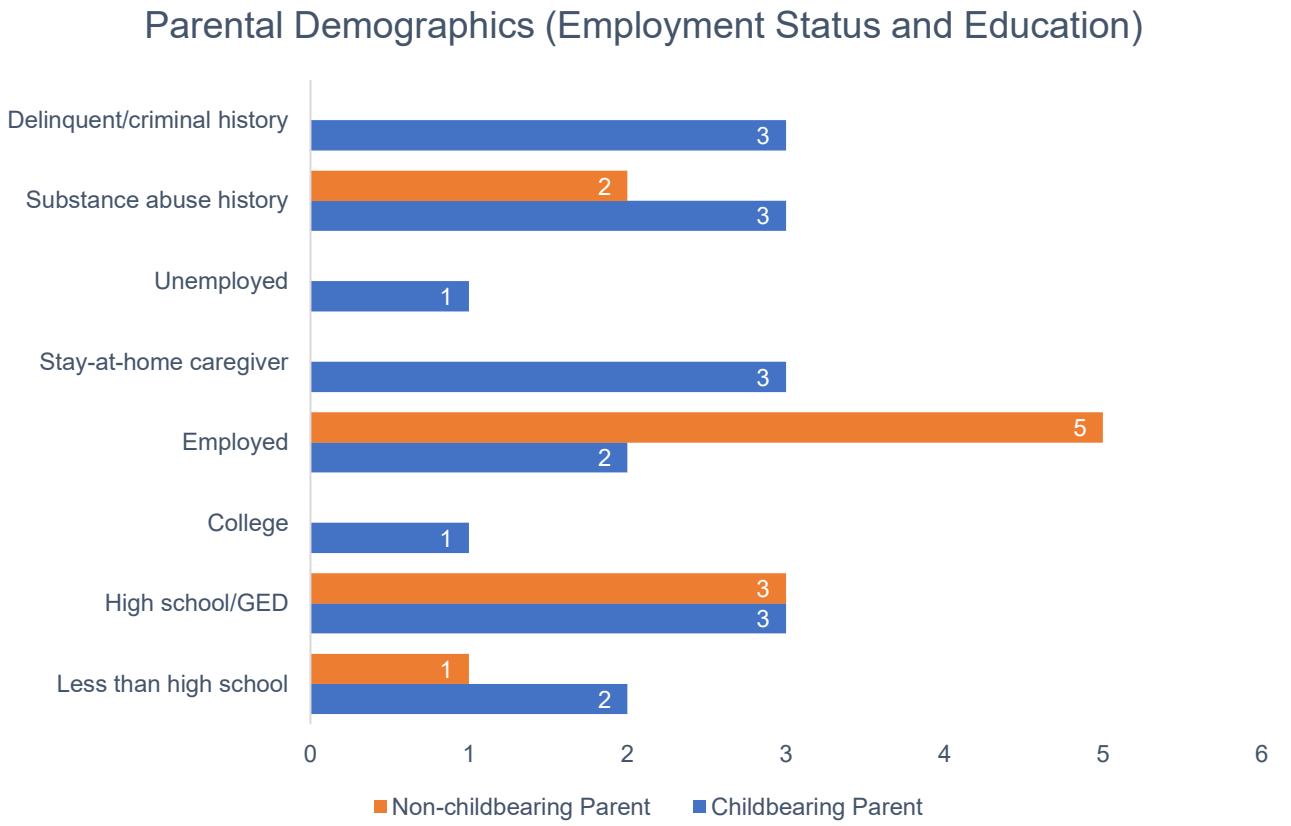
Other school problem*

Peer violence as perpetrator*



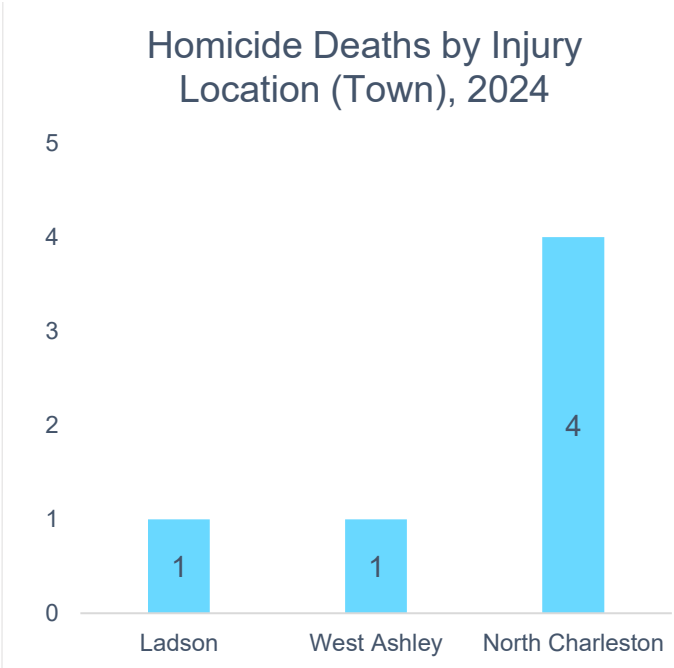
Peer violence as a victim*





Child Homicide Deaths by Mechanism	
Weapon Deaths	
Total	**4**
Firearm	4
Handgun	3
Rifle	1
Poisoning, Overdose, or Acute Intoxication	
Total	**1**
Illicit Fentanyl	1
Blunt Force	
Total	**1**
Source Unknown	1

Table 4.6. Child Homicides by Mechanism, 2024



Section 5: Preventative Measures and Initiatives

The Coroner's Office is committed to working with community partners to reduce child deaths. In 2024, several initiatives were undertaken to address key risk factors:

5.1. Community Education and Events:

- Safe-sleep education: Conducted at a local library and hosted by the MUSC Pediatric Injury Prevention Coordinator
- Community baby shower: Hosted by North Charleston Police Department
- National Injury Prevention Day: Hosted by MUSC
- Attended a safe-sleep course at the Lowcountry Pregnancy Center to observe what they offer to expecting parents
- The Coroner's Office was awarded a grant for Charlie's Kids safe-sleep board books, both Spanish and English versions to hand out during local events

5.2. Mental Health and Family Support:

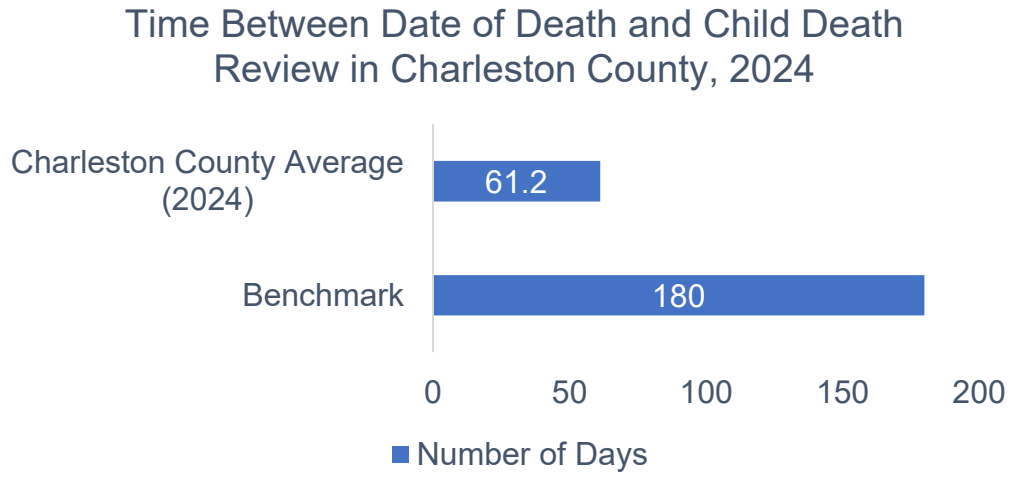
- The Coroner's Office provides families with follow-up bereavement & advocacy care: Offering resources, someone to talk to, and help navigating resources to find them help, if desired.

Section 6: CDC Cooperative Agreement: SUID/SDY Project

On January 1, 2024, the Charleston County Coroner's Office entered into a 5-year Cooperative Agreement with the Centers for Disease Control (CDC). This project is for Sudden Unexpected Infant Death (SUID) and Sudden Death in the Young (SDY) and is part of the CDC's broader efforts to reduce preventable deaths among infants and youth. While supporting those efforts, additional goals of the Charleston County Coroner's Office is to increase the quality and timeliness of SUID/SDY data and improve and/or expand upon policies and practices to standardize child death investigations. The program is run by two grant funded staff: A Child Death Review Coordinator and SDY Research Coordinator. Key aspects of the program include:

6.1 Case Investigation and Reporting Improvements:

The agreement strengthens the role of the coroner in investigating cases of SUID and SDY. This includes standardizing protocols for determining cause of death, autopsy guidelines, and collecting detailed information about the circumstances surrounding each death. Through improved investigations and data collection, the CDC as well as our local stakeholders, can help identify risk factors for preventable causes of death, leading to more targeted public health interventions.



3. Participation in the SUID/SDY Case Registry provides benchmarks for the completion of certain investigational steps. For example, the optimal time between the date of death and the date of the child death review is no more than 180 days.

6.2 Surveillance and Data Collection: Coroners have an obligation to ensure SUID and SDY deaths are accurately documented and classified. This involves consistency in how death certificates are certified, (ultimately helping health departments track trends on health disparities and evaluate response efforts), and ensuring comprehensive reports specific to infant/child death are complete so there is consistency in how these deaths are reported and tracked at the state and national levels.

To capture data on SUID/SDY cases, the Charleston County Coroner's Office Child Death Review Coordinator enters a comprehensive data set into the National Center for Fatality Review & Prevention (web-based registry). This reporting system provides users the ability to track relevant information obtained during an investigation and child death review(s), which can then be used at the local, state and national level to guide program and policy efforts.

6.3 Data Sharing and Collaboration: By collecting, entering and sharing data from the local level, the Charleston County Coroner's Office objective is to provide a clearer picture of trends and identify correlations between specific risk factors. Working closely with our stakeholders to share death investigation data helps to improve understanding of the causes of SUID and SDY and therefore, inform public health campaigns and prevention programs.

6.4 Genetic Research and DNA Banking: Another beneficial component to the CDC collaboration is NIH-sponsored whole genome sequencing research, as well as DNA banking. This opportunity is reserved for those cases whose underlying causes could benefit from further genetic research, such as cases where the cause of the fatal event could have been cardiac or neurological in origin. For example, a teenage driver in a motor vehicle crash with negative toxicology and a negative medical history, could benefit from this research, as a genetic anomaly may be a contributing factor. If researchers find anything actionable, results are shared with family as well as the Charleston County Coroner's Office to discuss next steps (i.e. genetic specialists may recommend family members receive follow up testing).

In conjunction with, or separate from the genome sequencing opportunity, next-of-kin may choose to save a sample of their child's DN at the biorepository. This offers family the opportunity to retrieve DNA in the future for additional testing, if desired.

6.5 Training and Capacity Building: The cooperative agreement supports and promotes specialized training in investigating SUID and SDY cases. Beginning in 2025, Charleston County Deputy Coroner's will be required to attend at least one child death training annually.

In 2024, two comprehensive trainings were offered:

1. A two-day in-office training presented by USC Children's Law Center. Topics included The Basics of Child Death Investigations, followed by Conducting Reenactments
2. Child Fatality Investigation: A Collaborative Approach to Death Investigations. A one-day in-person training, hosted by Berkeley County Coroner's Office.

Section 7: Postmortem Diagnostic Genetic Testing

7.1. Diagnostic Testing in Unexplained Deaths: At the beginning of 2024, the Charleston County Coroner's Office began implementing limited postmortem genetic testing (cardiac and epilepsy panels), for certain types of child death cases. These tests are paid for using funds from the 5-year cooperative agreement with the Centers for Disease Control (CDC). The purpose of genetic analysis after a child's death is to possibly determine the cause or contributing factors to the death, in a case with no other apparent cause. This type of testing can provide valuable information for understanding medical conditions that may not have been detected during the child's lifetime. Furthermore, genetic testing can detect inherited conditions that may help guide family planning for surviving family members.

7.2. Family Guidance and Follow-Up: The collaboration between the Coroner's Office and MUSC Genetics Department has been instrumental in executing the use of postmortem genetic testing. The team of genetic professionals provide families with understanding of what the results mean and if further steps are recommended for surviving family members. Furthermore, they provide the Coroner's Office and forensic pathologist with their expert opinion on whether the results could have contributed to the child's death.

Table 7.3.

Diagnostic Genetic Testing - 2024	
Child death cases receiving an autopsy	20
Child death cases meeting the criteria for genetic testing	7
Child death cases with contributory genetic findings	1

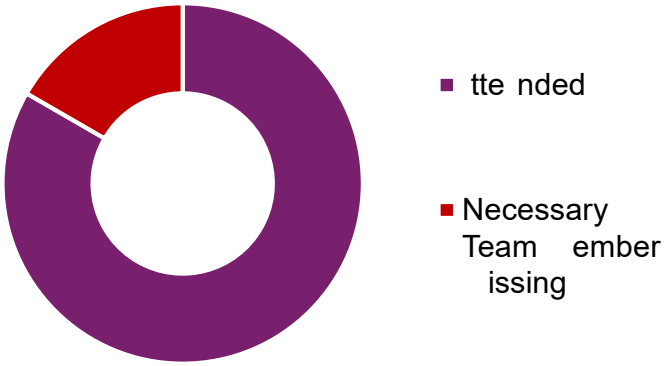
Section 8: Child Death Review Process

8.1. Standard Review Protocol: Per South Carolina State Statute (SC Code § 17-5-541), a date to review the death must be identified within 7 business days of the death. A Child Death Review (CDR) is a systematic process in which professionals from various disciplines come together to review the circumstances surrounding a child's death (age 0-17). The goal is to understand the cause of death, improve interagency coordination/communication, identify patterns or trends, and determine if there are any preventable factors that could be addressed to reduce the risk of future child deaths. If additional investigation is needed, the team will make recommendations. If deemed necessary, a follow up child death review may also be scheduled.

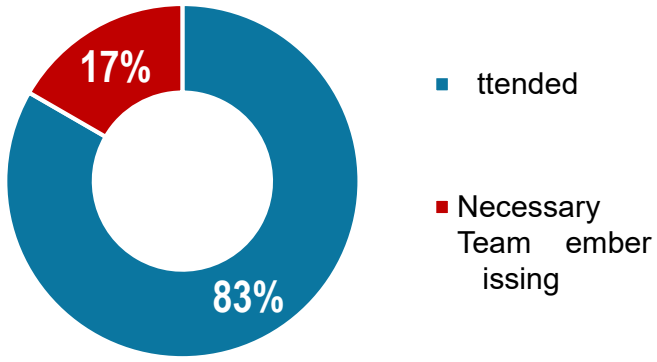
8.2. Outlining the Process of a Child Death Review:

1. **Multidisciplinary Team**: Members from various entities are invited to be a part of the review process. The following is a list of possible participants. However, each review is unique and may require a specialist or additional jurisdiction:
    a. Local law enforcement who is investigating the case
    b. Special agent from the State Law Enforcement Division's (SLED) Department of Child Fatalities assigned to the case
    c. Coroner's Office
    d. EMS and Fire Departments
    e. Forensic pathologist that conducted the autopsy
    f. Department of Social Services (DSS) representatives, both county DSS and State DSS.
    g. Public health officials (SUID/SDY Coordinators)
    h. Children's hospital representatives, such as a board-certified child abuse pediatrician and a pediatric trauma injury prevention coordinator
    i. Legal professionals, such as Solicitors
    j. Forensic toxicologist (case dependent)

C R A
F



C R A



2. **Case Review**: Each review tends to have different participants, with a few exceptions. Each team examines specific child death cases, reviewing the circumstances of each death. This may include analyzing medical records, school records, investigating the child's home environment, reviewing social and family dynamics, and determining if the death was related to abuse, neglect, unsafe environments, or other preventable causes.

3. **Identifying Risk Factors and Trends**: Through the review, the team seeks to identify any patterns, trends, or risk factors that might suggest preventable causes. For example, they might examine if certain deaths are associated with unsafe sleep environments, drug overdoses, domestic violence, or lack of access to healthcare.
4. **Recommendations for Prevention**: Based on the findings of case reviews and identified risk factors, the team may make recommendations aimed at improving child safety and preventing future deaths. These recommendations may range from changes in public policy, increased community awareness, improvements in

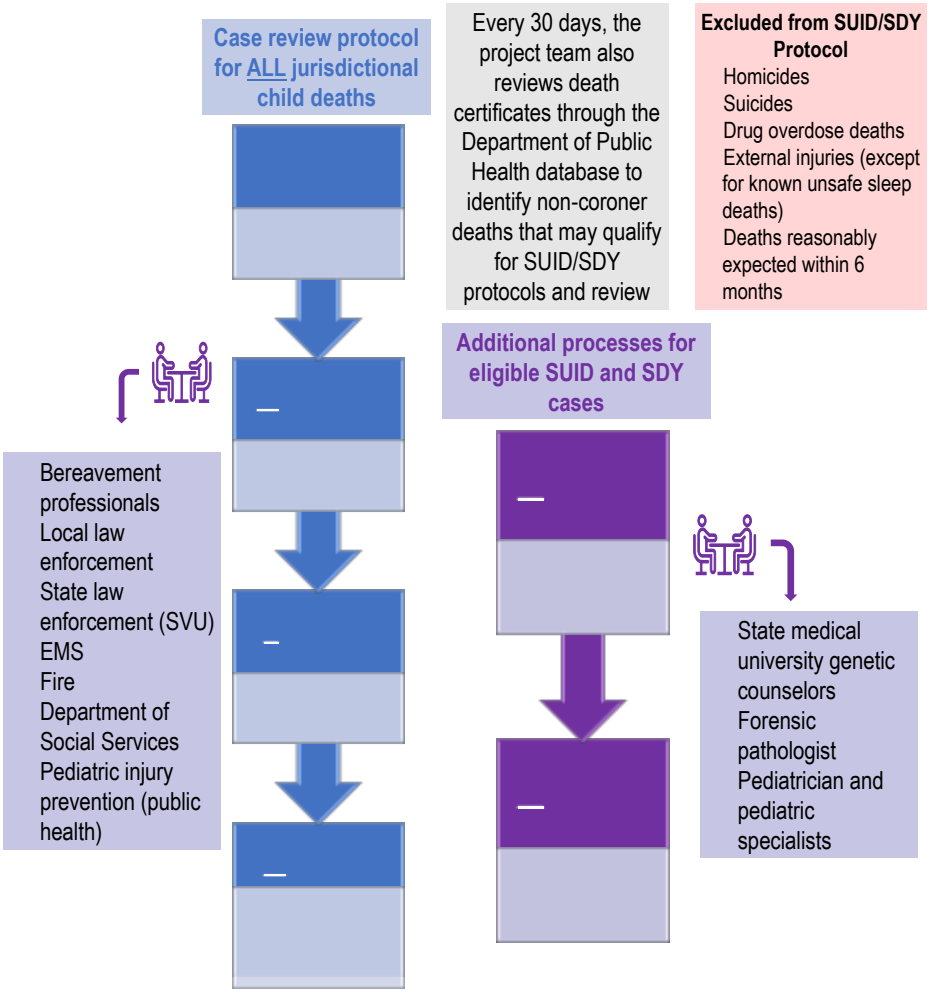
health and social services, or better training for professionals who interact with children.

5. **Data Collection and Reporting**: Data collected from the reviews is entered into the National Center for Fatality Review & Prevention Registry. With all data going to a central location, it may be used to inform public health initiatives, legislation, or community outreach programs. This could help in creating more targeted strategies to reduce child mortality, especially in cases where deaths could have been prevented with earlier intervention.

The Child Death Review process is a key component of a broader effort to improve child welfare and safety in the community. By reviewing and learning from each case, Charleston County aims to protect children and reduce the number of preventable child deaths.

Section 9: Clinical Advanced Child Death Reviews

9.1. Selection Criteria and Process:



Beginning in January 2024, the Charleston County Coroner's Office, through the Cooperative Agreement with the CDC, implemented a second child death review for select cases. To qualify, cases must be residents of Charleston County and satisfy specific criteria established by an algorithm.

The team has a specific focus on sudden and unexpected deaths that are unknown, cardiac or neurological in origin, drownings age 5 and older and drivers of motor vehicle crashes if the cause of the death is not explained by toxicology (i.e. alcohol and/or illicit drug impairment).

9.2. Advanced Review Team Composition: The clinical Advanced Review Team is led by the Child Death Review Coordinator and SDY Research Coordinator. It is comprised of various pediatric specialists (neurologist, forensic pathologist, child abuse / emergency medicine, OB/GYN, cardiologist, geneticist and genetic counselors, neonatologist/neonatal respiratory failure & lung development, and a trauma injury prevention coordinator). The clinical team aims to meet four times per year.

The goal of this process is to better understand the cause of death, identify contributing factors, and determine whether any preventable actions can be taken to prevent future deaths of similar circumstances.

9.3. Research Opportunity and Family Options: When a case qualifies for advanced review, the family of that child may be offered a unique opportunity to consent for whole genome sequencing research and/or DNA biobanking. If a family chooses to consent to genomic research, their child's DN is stored at the SUID and SDY Case Registry Biorepository at the University of Michigan.

The DNA will most likely be sequenced and studied by researchers who are trying to identify causes of sudden death in infants and children. If testing finds a change that may cause health problems for surviving family members, they will be notified. Likewise, if results are found that are helpful to understand a child's cause of death, family will be notified by the coroner's office, and next steps discussed.

Alternatively, family may choose to only consent to have their child's DN stored at the biorepository. This provides family the option to have genetic testing done now or in the future. It also allows family the opportunity to participate in other research outside the University of Michigan.

Of the 19 Child Death Reviews in 2024, 5 cases qualified for Advanced Review. 2 families consented for whole genome sequencing and Bio-banking.

Section 10: Conclusion and Future Goals:

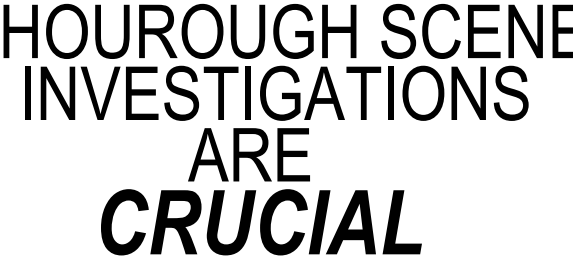
The Coroner's Office remains committed to reducing child fatalities through diligent investigation and data collection, collaboration with community partners, and prevention initiatives. While the causes of child death vary, many of these tragedies are preventable with education, awareness, and community engagement. We will continue our work to protect the children of Charleston County and to support families who have suffered the loss of a child.

10.1. Key Lessons from 2024: The year 2024 has seen a mix of progress and challenges, and we remain hopeful that through collaborative efforts, we can continue to reduce the number of preventable deaths in our community.

Below is list of lessons learned throughout our first full year engaged with the CDC Collaborative Agreement:

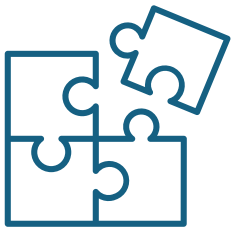
Contributing to the SUID/SDY Registry has **helped highlight common trends among similar causes of death.** Identifying these trends over the remaining 4 years of the project, will **assist our partners and stakeholders in their informed decision-making processes.** Additionally, expansion of project efforts into neighboring counties will provide a regional lens and enhance the current data set available for SUID/SDY cases.

A detailed scene investigation is vital for understanding SUID and SDY cases. Using standardized tools such as the SUID Investigation form to capture crucial details about the circumstances and conducting scene reenactments with dolls and caregivers may often reveal circumstances that an interview alone may not capture.



In our first year, implementation of this practice contributed to the clinical teams understanding of the cause of death for one case. Its availability offers the forensic pathologist another diagnostic tool that may provide insight they would not have had before.

Multidisciplinary collaboration has always been present, however, the integration of the collaborative agreement with the CDC has expanded our partnerships to include various pediatric clinical specialists, the state child review team, the Data Coordinating Center and CDC program coordinators. Each of their contributions are paramount to the success of the SUID/SDY project at the Charleston County Coroner's Office.



RELATIONSHIPS & PARTNERSHIPS

Supporting families who have lost their child

While the support of all families has always been of paramount importance to the Coroner's Office, the implementation of the SUID/SDY Project has carved out a distinct opportunity for the project team to provide families with a more tailored approach when offering grief and bereavement resources.

10.2. Goals for 2025 and Beyond: The project team looks forward to delivering on our 2025 goals and establishing new ones. In 2025, the project team will continue to expand collaboration with neighboring counties to improve data collection efforts in the National Registry. Once the team is confident the amount of data is sufficient, the goal for 2026 is to integrate those counties into the SUID/SDY Project.