



LOUISIANA CHILD DEATH REVIEW

2019-2021
ANNUAL REPORT

Submitted To:

John Bel Edwards, Governor, State of Louisiana
Health and Welfare Committee, Louisiana Senate
Health and Welfare Committee, Louisiana House of Representatives
State and Local Child Death Review Panels

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Executive Summary

Child Death Review, 2019 – 2021

Mission Statement

The mission of the Louisiana Child Death Review is to understand how and why children die unexpectedly in Louisiana in order to prevent as many future injuries and deaths as possible. This is accomplished through comprehensive, multidisciplinary review of the circumstances that contributed to each death.

Background

The Louisiana Department of Health, Office of Public Health's Bureau of Family Health (BFH), coordinates the Child Death Review (CDR) Program. As mandated by [Louisiana Revised Statute 40:2019](#), CDRs are conducted for unexpected deaths of children under 15 years of age. State and local panels meet to review child deaths, identify risk factors, and provide recommendations for preventive action. The Louisiana CDR Program is primarily funded through the Federal Title V Maternal and Child Health Block Grant and the Centers for Disease Control and Prevention's (CDC) Sudden Unexpected Infant Death (SUID) Case Registry grant.

Summation of Data and Statistics

- Every year in Louisiana, an average of 57,808 infants are born alive.
 - Of these infants, approximately **450 die before their first birthday.**
 - **Another 206 children do not survive to their 15th birthday.**
- From 2019-2021, **1,968 children died**, representing a **yearly average of 656 infant and child deaths.**
 - During this time period, Louisiana ranked in the top 10 states with the **highest mortality rates for infants and children** in almost all age groups.
- Between 2019 and 2021, 667 infants and children died due to injury. **More than one third of all infant (less than 1 year old) and child (ages 1-14) deaths in Louisiana are due to injury and are potentially preventable.**
- **In infants, most injury-related deaths occur in the sleep environment** and are classified as Sudden Unexpected Infant Deaths (SUIDs). SUID is a term used to describe any sudden and unexpected death – whether explained or unexplained (including Sudden Infant Death Syndrome [SIDS], Accidental Suffocation or Strangulation in Bed [ASSB], and deaths coded as ill-defined) – occurring during infancy.
- **Motor vehicle crash, homicide, and drowning are the leading causes of unexpected death** for children ages 0 through 14.

About This Report

The 2019-2021 Louisiana CDR Report reflects infant and child mortality over a three-year period to achieve sufficient sample size for statistical reporting. Multi-year state and regional rates are provided, as well as annual averages of deaths and the leading causes of child death. Annual averages are provided to help estimate the magnitude of the issue in a one-year timeframe. When available, U.S. rates, Louisiana rates, Louisiana rankings in the U.S., and Healthy People (HP) Goals are provided for comparison. The report is organized into sections by age groups, risk factors, prevention recommendations for leading causes of death, and summaries of current efforts to address infant and child mortality. Additionally, the report highlights preventable deaths due to injury and other data to provide context on contributing factors. Key points and recommendations are derived from Louisiana CDR data and panel findings, national research, and the established public health evidence base. In addition to Vital Records and Child Death Case Reporting System data, Louisiana Pregnancy Risk Assessment Monitoring System (Louisiana PRAMS) data have been used to augment risk factor findings and prevention recommendations for infant mortality.

Data Sources and Methodology

Data Methods

BFH uses the International Classification of Diseases, 10th Revision (ICD-10) guidelines¹ to categorize causes of death. In addition to cause of death, BFH used death certificates to assess age, race, gender, date of death, and parish of residence. BFH analyzed data using SAS software version 9.4.

Louisiana Child Death Review Case Reporting System

Data related to Louisiana's Child Death Review are maintained in the National Center for Fatality Review and Prevention's National Fatality Review Case Reporting System.

Louisiana Pregnancy Risk Assessment Monitoring System (PRAMS)

[Louisiana PRAMS](#) is an ongoing, population-based risk factor surveillance system designed to find out more about the experiences women have before, during, and immediately following pregnancy. The survey collects quantitative and qualitative data on known risk factors for infant mortality. Louisiana PRAMS is cooperatively managed by the Centers for Disease Control and Prevention and BFH.

National Data

National level data are from [CDC WONDER](#), the [National Vital Statistics System](#) database. Louisiana rankings are based on national data, and national rates may vary slightly from state rates due to timing of reporting.

Healthy People 2030

A multi-disciplinary team of experts selected Healthy People objectives to highlight national health priorities. They select these goals every 10 years with the objective of meeting the targets by the end of the decade. All Healthy People objectives have standardized indicators with known numerators and denominators.

Data Limitations

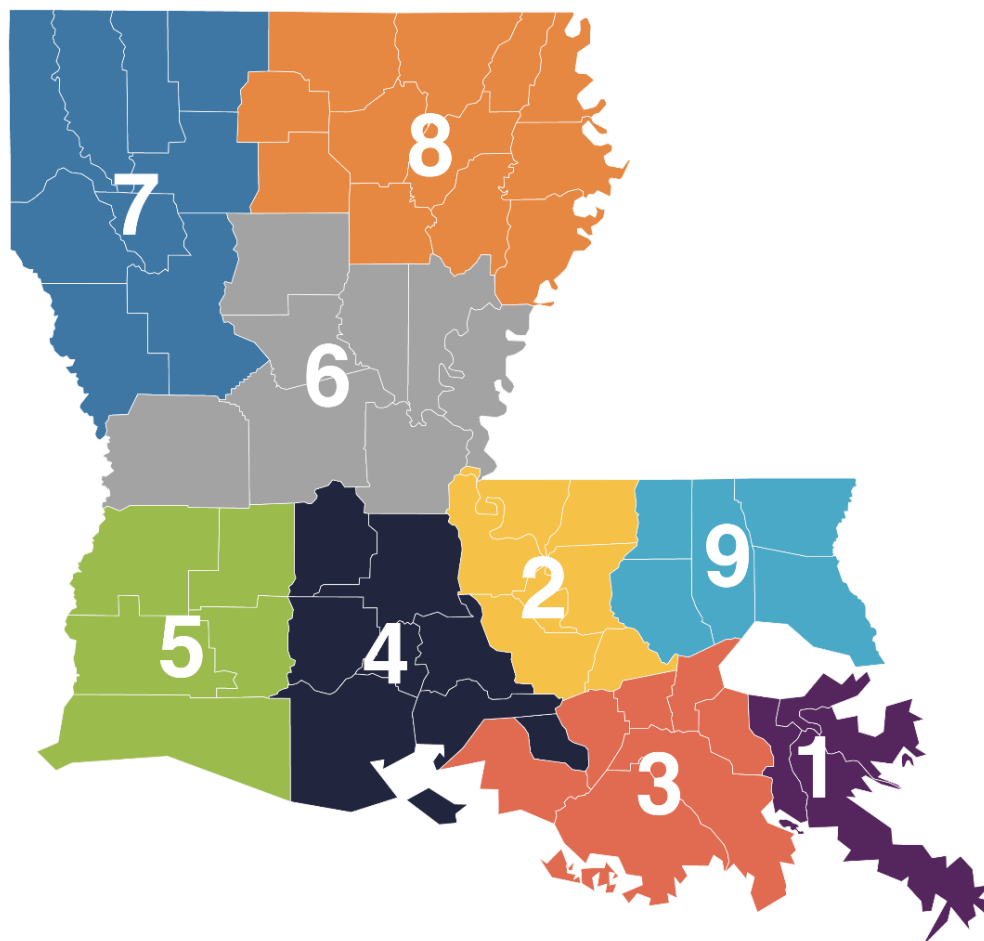
Many key indicators are presented at the regional level, and therefore have smaller counts. Rates based on counts fewer than 20 are considered unstable and should be interpreted with caution, as these numbers, percentages, or rates may change in the future with the addition or loss of a small number of cases. Unstable rates are noted with an asterisk. Trends based on unstable rates are not represented in this report. For example, the white[†] and Black[†] counts were large enough to support reliable independent analysis. Due to a smaller sample size, the Hispanic counts were not examined independently. Additionally, counts of fewer than five are suppressed to preserve confidentiality. Any cause of death category with counts fewer than five were collapsed into an "other" category.

Data Footnotes

*Rates based on counts less than 20 are unstable and may vary widely from future reports.

† Black indicates non-Hispanic Black, and white indicates non-Hispanic white.

Regional Map of Louisiana



Region	Area	Parishes within Region
1	New Orleans	Jefferson, Orleans, Plaquemines, St. Bernard
2	Baton Rouge	Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge, West Feliciana
3	Houma	Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne
4	Lafayette	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermilion
5	Lake Charles	Allen, Beaufort, Calcasieu, Cameron, Jefferson Davis
6	Alexandria	Avoyelles, Catahoula, Concordia, Grant, La Salle, Rapides, Vernon, Winn
7	Shreveport	Bienville, Bossier, Caddo, Claiborne, DeSoto, Natchitoches, Red River, Sabine, Webster
8	Monroe	Caldwell, East Carroll, Franklin, Jackson, Lincoln, Madison, Morehouse, Ouachita, Richland, Tensas, Union, West Carroll
9	Hammond/ Slidell	Livingston, St. Helena, St. Tammany, Tangipahoa, Washington



Infant Mortality in Louisiana

2019-2021 Data

Infant Mortality: All Causes

Birth to 1 Year

From 2019-2021 in Louisiana, an average of **450** infants per year died before they reached their first birthday.²



United States vs. Louisiana

The Louisiana infant mortality rate from 2019-2021 was **7.8 deaths per 1,000 live births**. The U.S. infant mortality rate during the same period was 5.5 deaths per 1,000 live births. This means that **132 fewer** babies would have died each year if Louisiana had the same infant mortality rate as the U.S.

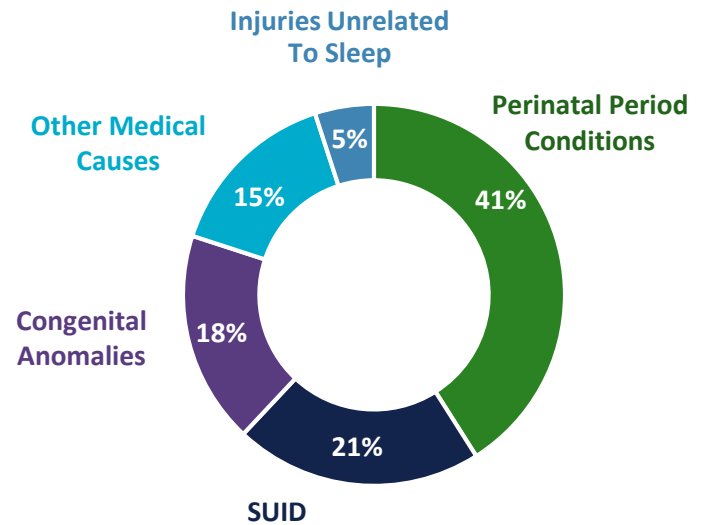
Louisiana Rate ²	U.S. Rate ³	HP2030 Goal ⁴	LA Ranking ²
7.8	5.5	5	Third highest in the U.S.

Infant Deaths by Region (2019-2021) ²	1	2	3	4	5	6	7	8	9
Average annual infant death counts	72	69	39	56	28	25	71	43	47
Infant mortality rate per 1,000 live births	6.7	8.1	8.2	7.0	7.0	6.5	11.0	10.3	6.4

Causes of Infant Death

Each year, an average of...²

- **185** infants died from conditions originating in the perinatal period
- **92** infant deaths were classified as Sudden Unexpected Infant Deaths (SUID), which primarily occur in the sleep environment
- **80** infants died from congenital anomalies
- **69** infants died from other medical causes
- **24** infants died from injuries not related to sleep environments



Key Points

- From 2019-2021, Louisiana had the third highest infant mortality rate in the country.
- Maternal health before conception and during pregnancy is closely linked to the leading cause of infant death: conditions originating in the perinatal period (see [Appendix pg. 52](#) for full definition). These conditions contributed to 41% of infant deaths. Within that category, low birth weight and premature birth are among the top conditions, both of which are risk factors for the second leading cause of infant death, SUID. SUID refers to any sudden and unexpected infant death, whether explained or unexplained. This includes Accidental Suffocation or Strangulation in Bed (ASSB), Sudden Infant Death Syndrome (SIDS), and ill-defined deaths.

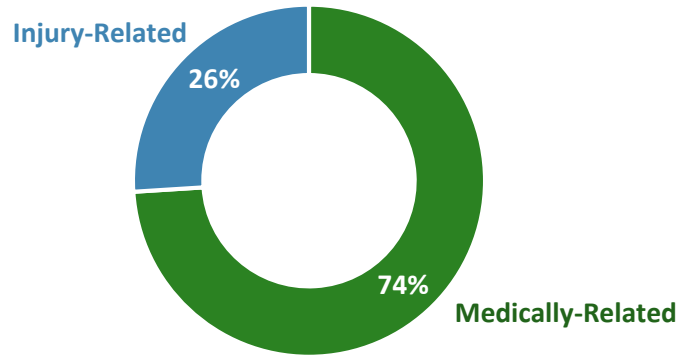
Infant Mortality: Fatal Injury

Birth to 1 Year

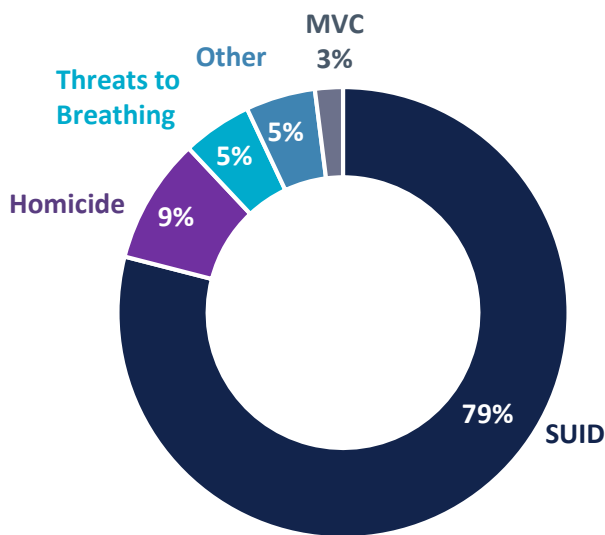
From 2019-2021, an average of **117** infants per year died from an injury before they reached their first birthday.²



About one in four infant deaths were injury-related.²



Causes of Fatal Injury



Each year, an average of...²

- **92** infant deaths were classified as Sudden Unexpected Infant Deaths (SUID)
- **11** infants died from homicide
- **6** infants died from threats to breathing
- **5** infants died from another type of unintentional injury, including drowning, falls, fire, and other unintentional causes
- **2** infants died from motor vehicle crashes (MVC)

Key Points

- A significant majority of injury-related infant deaths were classified as SUIDs and were related to the sleep environment.
- In Louisiana, most SUID deaths occur when the infant is 1 to 3 months old. The most common SUID risk factors present among these deaths are: infants sleeping in something other than a crib or bassinette (83%); infants sleeping with other people (85%); and infants sleeping with loose bedding or toys (70%). Other evidence-based risk factors for SUID include: stomach- or side-sleeping position; preterm birth or low birth weight, cigarette smoke in the home; and alcohol, drug, or tobacco use during pregnancy (see pg. 13 for more details).⁵
- 67% of homicides in infants are due to Abusive Head Trauma (AHT) and blunt force injuries.

Neonatal Mortality

Birth to 27 days

From 2019-2021 in Louisiana, an average of **259** infants per year died during the neonatal period.²



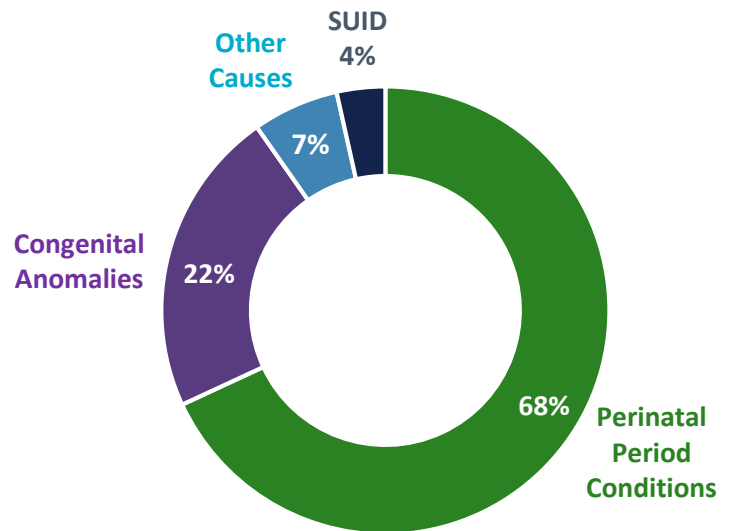
In Louisiana, the **neonatal period** (between birth and 27 days after birth) is the **period with the most infant deaths** (deaths that occur between birth and 1). The Louisiana neonatal mortality rate from 2019 to 2021 was **4.5 deaths per 1,000 live births**.

Louisiana Rate ²	U.S. Rate ³	LA Ranking ³
4.5	3.6	Seventh highest in the U.S.

Causes of Death During the Neonatal Period

Each year, an average of...²

- **175** infants died from conditions originating in the perinatal period
- **57** infants died from congenital anomalies
- **16** infants died from another cause, including injury and other medical causes
- **9** neonatal deaths were classified as Sudden Unexpected Infant Deaths (SUID)



Key Points

- Conditions originating in the perinatal period often stem from poor maternal health prior to conception. Low birth weight and preterm birth account for many of the deaths in this category, but other conditions include, but are not limited to: infections; conditions limiting the baby's ability to receive adequate oxygen; complications related to pregnancy, labor, and delivery; and hemorrhage and hematological disorders of the newborn.
- More than 40% of the deaths due to conditions originating in the perinatal period are due to extreme prematurity.
- High stress, inadequate healthcare throughout the life span and during pregnancy, and unmanaged chronic disease (e.g., high blood pressure, diabetes, etc.) negatively affect maternal health, which leads to higher rates of adverse birth outcomes.⁶

Postneonatal Mortality

28 to 365 days

From 2019-2021 in Louisiana, an average of **191** infants per year died during the post-neonatal period.²



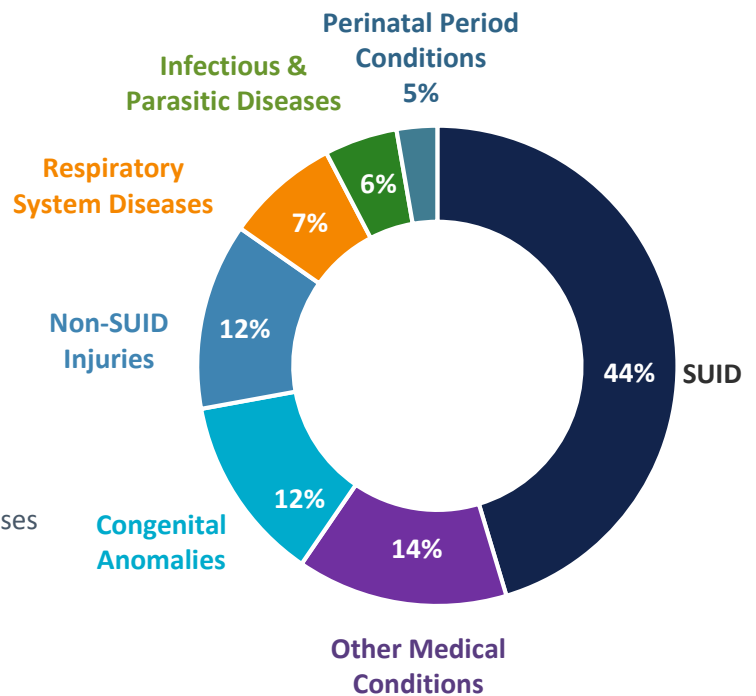
From 2019 to 2021 in Louisiana, fewer deaths occurred during the post-neonatal period than the neonatal period. However, the **causes of death common to this period are more preventable**. For example, 44% of deaths during the post-neonatal period are classified as Sudden Unexpected Infant Deaths (SUIDs). Many of these deaths could be prevented through safe sleep practices.

Louisiana Rate ²	U.S. Rate ³	LA Ranking
3.3	1.9	Third Highest in the U.S.

Causes of Death During the Post-Neonatal Period

Each year, an average of...²

- **83** infant deaths were classified as SUIDs
- **26** infants died from other medical conditions
- **23** infants died from a congenital anomaly
- **23** infants died from injury unrelated to SUID
- **12** infants died from respiratory diseases
- **14** infants died from infectious and parasitic diseases
- **9** infants died from conditions related to the perinatal period



Key Points

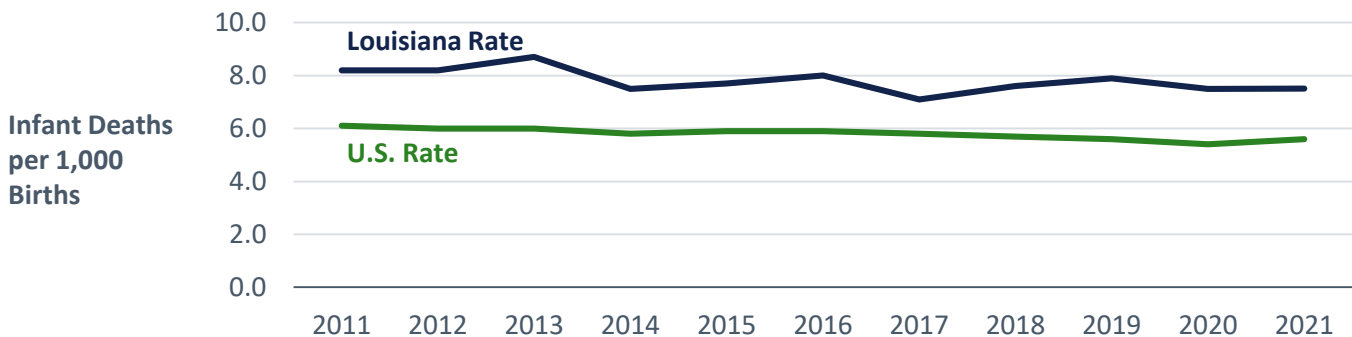
- More than half (56%) of deaths during the post-neonatal period were injury-related (this includes SUIDs).
- Almost half (44%) of infant deaths during this period were classified as SUIDs.
- SUID is considered largely preventable by reducing risk factors and increasing protective factors. Some of these risk factors, including low birth weight or preterm infants and maternal smoking, trace back to maternal health. Other risk factors are behavioral, such as caregivers placing infants to sleep on unsafe surfaces with soft bedding and toys, or environmental, such as cigarette smoke in the home.⁷ Protective factors include consistently following safe sleep practices (see pg. 13 for details), breastfeeding, regular prenatal care and well-baby check-ups, and keeping infants up to date on immunizations.⁷

Trends in Infant Mortality

Birth to 1 Year

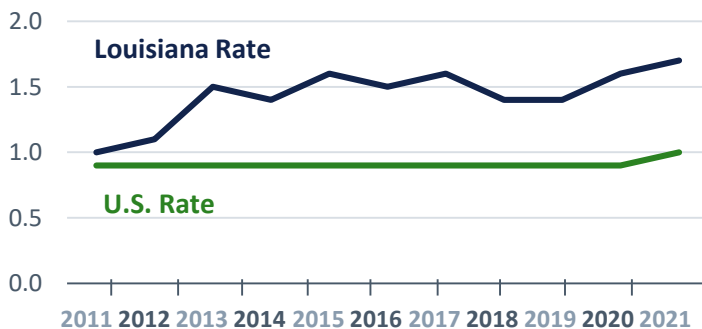
Overall Infant Mortality Over Time³

Louisiana’s infant mortality rate stayed relatively consistent from 2011 to 2021, remaining around **8 infant deaths per 1,000 births**. The Louisiana rate also remained consistently higher than the U.S. rate.



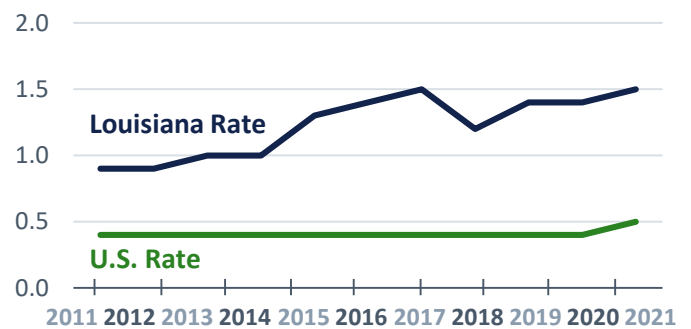
Infant Mortality Due to SUID³

While Louisiana’s infant mortality rate due to **Sudden Unexpected Infant Death (SUID)** (measured as deaths per 1,000 births) fluctuated between 2011 and 2021, the average SUID mortality rate remained around **1.6 deaths per 1,000 births**. The infant mortality rate due to SUID in Louisiana also remained consistently above the rate for the United States.



Infant Mortality Due to Injury³

The infant mortality rates due to injury (measured as deaths per 1,000 births) includes deaths due to SUID. Other causes include other threats to breathing, homicide, motor vehicle crashes, and other types of unintentional injury (including drowning, falls, and fire). From 2011 to 2021, Louisiana’s overall infant mortality rate due to injury was **1.4 deaths per 1,000 births**.



Key Points

- Overall infant and SUID mortality rates have remained relatively steady since 2010.
- Infant mortality due to injury has remained consistent in the United States as a whole but **has steadily increased** in Louisiana over the past 10 years.
- Louisiana consistently has higher infant mortality rates than the United States as a whole.
- SUID prevention is multifaceted. A major component is safe sleep prevention efforts, which have been in place in Louisiana for many years. The state has experienced insignificant fluctuations in rates from year to year, without a consistent decrease in the SUID rate. For more information on SUID, see pages 13 and 16.

Racial Disparities in Infant Mortality

Racial disparities in mortality exist throughout Louisiana and the United States, and are complex.

If a health outcome occurs more often or less often for a given group than the general population (e.g., rates of drowning among Black children versus all children), the difference between those groups is called a disparity.²³ Infant and child mortality is influenced by a range of intergenerational social, economic, clinical, and environmental determinants. Racial disparities across important *non-clinical* factors such as: income, opportunities for stable employment, affordable housing, access to preventive healthcare⁸, and access to family planning services²⁴ can exacerbate differences in infant and child mortality by race.^{9, 10}



In Louisiana, **Black[†] infants** are **more than TWICE as likely** to die as white[†] infants.

Black[†] infants are at higher risk for Sudden Unexpected Infant Death (SUID), the leading cause of injury-related infant death. Some families may find it especially difficult to follow safe sleep recommendations due to a number of social and economic reasons that could lead caregivers to believe bed-sharing is the safest option. This includes non-traditional work schedules, exhaustion, inability to afford a crib or Pack 'n Play, cultural misconceptions about safe sleep practices, or home safety concerns.^{25, 26}

Addressing structural and socioeconomic inequities, such as the ones listed above, at a community and institutional level will help reduce health disparities, as well as overall infant and child fatalities. Further, efforts to reduce inequities must address structural racism, which is a key driver of disparities in income, education, neighborhood safety, and access to quality care.

1974

“Minority health, as affected by **institutional racism***, can only improve when efforts from the entire complex of human and public services are purposefully applied to accomplish that specific goal.”²⁰

American Public Health Association

[†]Black indicates non-Hispanic Black, and white indicates non-Hispanic white.

Racial Disparities in Infant Mortality

Birth to 1 Year

Black[†] infants are at an increased risk of dying, as compared to their white[†] peers.²



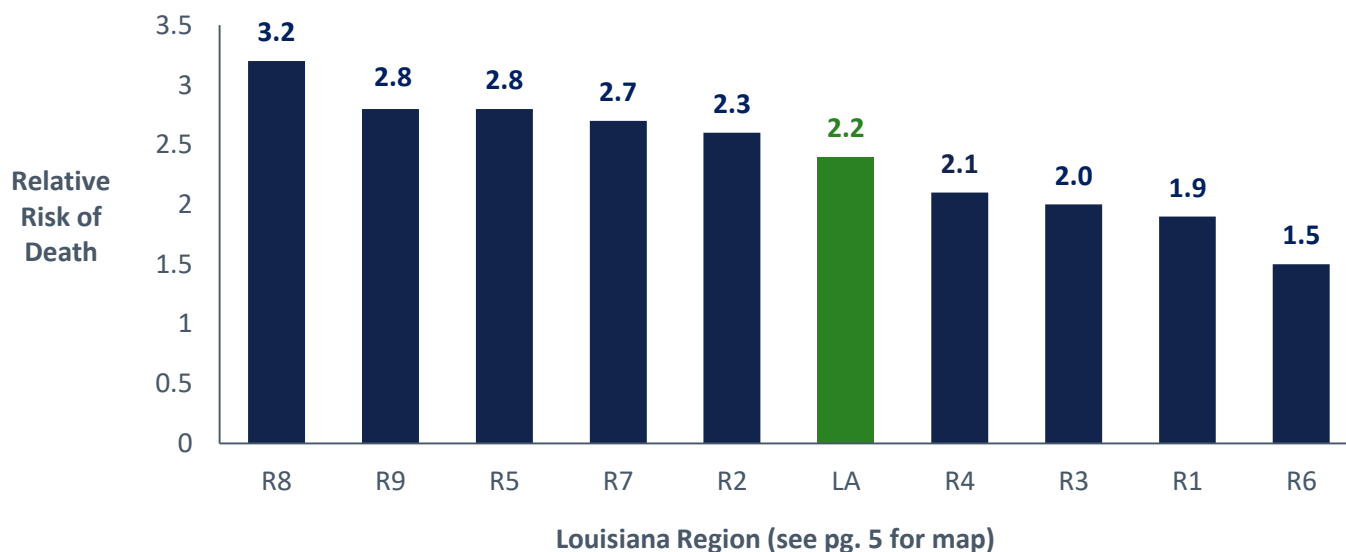
In Louisiana from 2019 to 2021, Black[†] infants were **2.4** times as likely to die as white[†] infants.

Infant Mortality Rate, 2019-2021	
Black [†]	White [†]
11.9 deaths per 1,000 live births	5 deaths per 1,000 live births

† Black indicates non-Hispanic Black, and white indicates non-Hispanic white.

Relative Risk of Infant Death for Black[†] vs. white[†] Infants

Relative risk is the probability of an event occurring in one group and not another.



Key Points

- Infant mortality affects Black infants more than white infants.
- Region 8 (Northeast Louisiana/Monroe area), Region 9 (Northshore area), Region 5 (Lake Charles area), Region 7 (Shreveport area), and Region 2 (Baton Rouge area) have the greatest racial disparity in birth outcomes. In these regions, Black[†] infants are more than twice as likely to die as white[†] infants.
- Mortality data for Hispanic infants and children were not included in racial disparity calculations because of insufficient counts – i.e. the number of Hispanic infants or children who died in Louisiana from 2019-2021 was too small for a reliable comparison against mortality rates for white[†] and Black[†] infants.

Reducing Infant Mortality in Louisiana

Driving Factors

Recommendations for Prevention

Moving Data to Action

Driving Factors and Recommendations for Prevention

Birth to 1 Year

The top causes of infant mortality are conditions originating in the **perinatal period** and causes associated with **Sudden Unexpected Infant Death (SUID)**. Many of these deaths can be prevented. The information below, including data from the 2019 Louisiana Pregnancy Risk Assessment Monitoring System (PRAMS) survey, highlights key risk factors that contribute to infant mortality and offers prevention recommendations to prevent infant deaths.

Louisiana PRAMS is an ongoing, population-based risk factor surveillance system designed to find out more about the experiences women have before, during, and immediately following pregnancy. The survey collects quantitative and qualitative data on known risk factors for infant mortality and provides a more complete understanding of the context in which infant deaths occur. More information can be found at PartnersforFamilyHealth.org/PRAMS. Both Louisiana PRAMS data and CDR data are highlighted on the following pages to determine the prevalence of known risk factors among infant deaths, and are both used to inform program and policy decisions related to reducing infant mortality.

Conditions Originating in the Perinatal Period

Pregnant women who experience chronic stress, have inadequate healthcare, or have underlying health conditions such as hypertension, diabetes, depression, or infections are at higher risk of adverse birth outcomes. Chronic stress, sometimes due to experiences of racism and discrimination, can lead to health problems for both the mother and the baby. Inadequate healthcare prior to or during pregnancy may result from barriers people face when trying to access care such as lack of transportation, sick leave/sick time, or health insurance.^{8,9} It can also mean not having access to the full range of reproductive health services, such as a full range of contraceptive options.^{8,9}

Sudden Unexpected Infant Death (SUID)

Causes of death associated with SUID include Accidental Strangulation and Suffocation in Bed (ASSB) and Sudden Infant Death Syndrome (SIDS), though sometimes the cause is unknown. Some conditions originating in the perinatal period, such as low birth weight and preterm birth, are risk factors for SUID, as are unsafe sleep practices.

Risk Factors for SUID include:⁷

- Preterm birth
- Low birth weight
- Infant sleeping on stomach or side
- Infant sharing a sleeping surface or bed-sharing with other children, pets, or adult(s), especially if the adult is drug- or alcohol-impaired
- Infant sleeping on unsafe sleep surface such as a couch or armchair
- Soft objects, weighted swaddle clothing, or weighting objects within swaddles, loose bedding, cords, wires, etc. in or near the sleeping area
- Smoking, drinking or using drugs during pregnancy

Protective Factors for SUID include:⁷

- Infant laid down to sleep on back
- Firm, flat sleeping surface, with no objects (toys, pillow, blankets, bumpers)
- Breastfeeding
- Room-sharing with a caregiver, but not in the same bed
- Smoke-free home
- Room at a comfortable temperature and infant is not overdressed
- Pacifier at nap time and bedtime
- Regular prenatal care and well-baby check ups
- Infant is up to date on immunizations

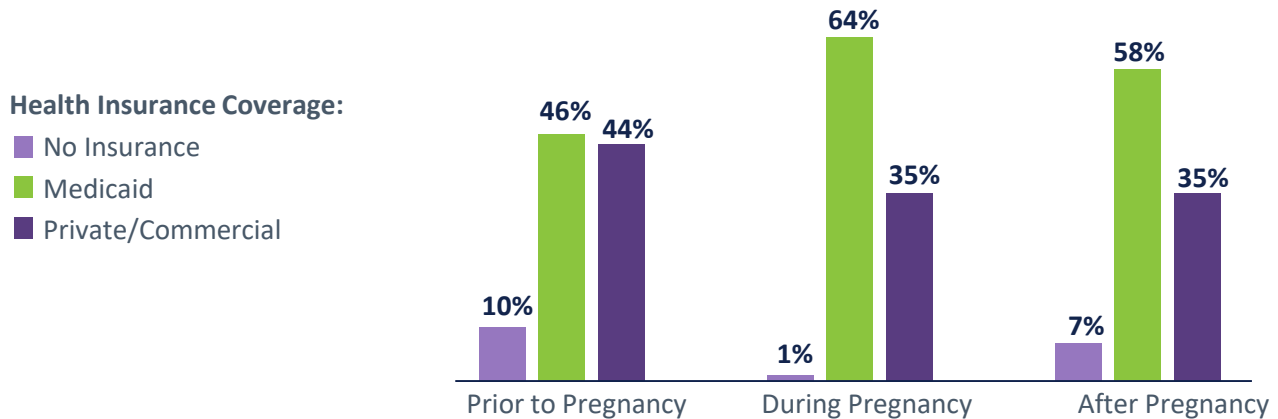


Maternal health strongly influences infant health. Helping women achieve **optimal health throughout their lives** is key to reducing infant mortality.

To remain as healthy as possible, women need adequate **health insurance coverage** and consistent **access to quality healthcare**.

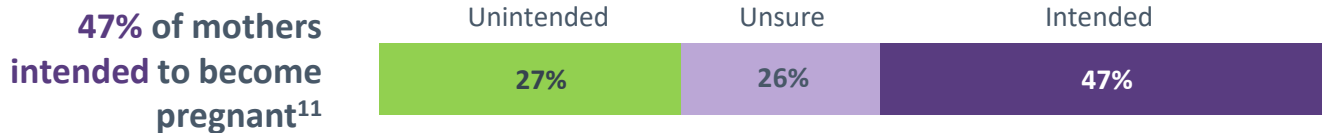
Maternal Health Insurance Coverage (2021)¹¹

Since Louisiana expanded Medicaid in 2016, the percentage of Louisiana mothers who had health insurance before pregnancy has increased by 14%. However, **10%** of Louisiana women are still uninsured prior to getting pregnant.



Pregnancy Intention (2021)

Unplanned pregnancies limit women’s opportunities to improve their health prior to becoming pregnant. Improving access to family planning services can reduce the rate of unplanned pregnancies and support women’s ability to control when they get pregnant, which may be associated with fewer adverse birth outcomes.



Maternal Health Indicators Prior to Pregnancy (2021)

Prior to their most recent pregnancy...¹¹

- **58%** of mothers were overweight or obese*
- **16%** of mothers reported they had depression
- **3%** of mothers reported they had diabetes
- **7%** of mothers reported they had high blood pressure or hypertension

**Weight criteria based on national Body Mass Index (BMI) categories and calculated from self-reported height and weight on PRAMS Survey*

Recommendation

- Improve maternal health by increasing access to family planning services and quality primary care before and between pregnancies. Services focused on care coordination and personalized support, such as home visiting programs, help women navigate insurance coverage options to ensure adequate and consistent coverage.

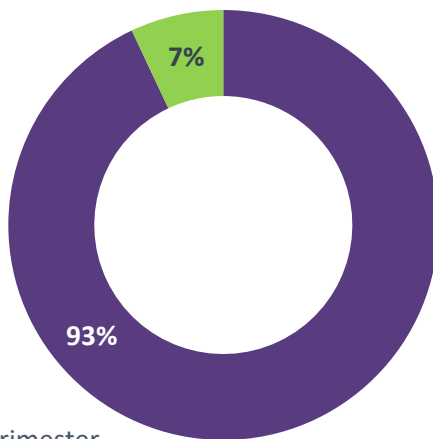
Prenatal Care

In 2021, **7%** of Louisiana mothers didn't receive prenatal care during the **first trimester**. **Early prenatal care is a key part of adequate care** and can help reduce infant mortality by allowing for timely assessment of risk factors, health education, and treatment of chronic and pregnancy-associated conditions.¹¹

Adequacy of Prenatal Care in Louisiana (2021)

Adequate prenatal care is defined as having received 80% or more of the recommended prenatal visits for gestational age based on standards set by the American College of Obstetricians and Gynecologists.^{11, 35}

Less than one in 10 (7%) Louisiana Mothers Did Not Receive Prenatal Care in First Trimester¹¹



- First Trimester
- After First Trimester

About one in four (24%) Louisiana Women Received Less than Adequate Prenatal Care²

Inadequate <50% of recommended visits	14%
Intermediate 50-79% of recommended visits	9%
Adequate 80 – 109% of recommended visits	42%
Adequate Plus 110% or more of recommended visits	35%

Data Notes:

- Less than adequate prenatal care includes “Inadequate” & “Intermediate” responses.
- The “Adequate Plus” group tends to represent women with high risk pregnancies.

Reasons for Not Receiving Early Prenatal Care (2021)

On June 1, 2016, Louisiana residents with incomes up to 138% of the federal poverty level became eligible to enroll in the state's expanded Medicaid program. Since expansion, mothers begin prenatal care earlier in pregnancy¹¹. However, despite earlier initiation times, increased Medicaid coverage is not associated with a significant effect on the total adequacy scores of prenatal care during pregnancy.¹¹ The most common reasons women reported for not receiving first trimester prenatal care included:¹¹

- I didn't know I was pregnant
- I couldn't get an appointment when I wanted
- I didn't want anyone else to know I was pregnant
- I didn't have a Medicaid or LaMoms card

Recommendations

- Increased referrals to voluntary home visiting programs that support early and adequate prenatal care by helping pregnant women get health insurance that meets their needs, find prenatal care providers, and keep up with appointments.
- Continued legislative support for Medicaid expansion in Louisiana is critical to reduce financial barriers to accessing prenatal care.

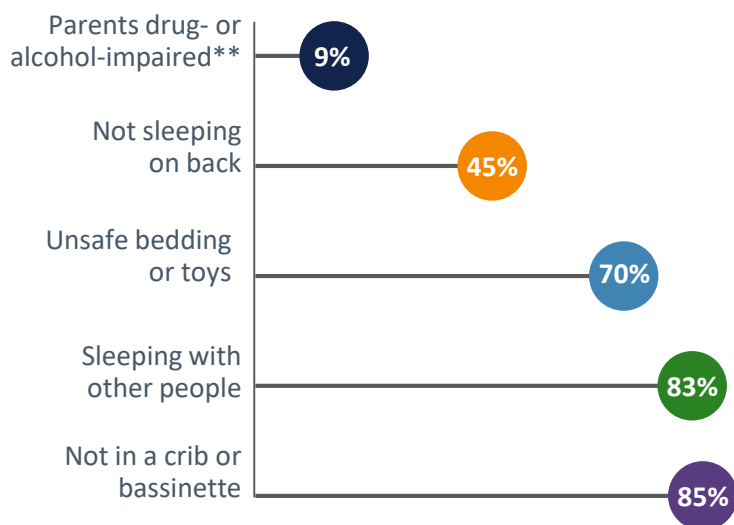
Sudden Unexpected Infant Death

70% of sleep-related deaths in Louisiana occurred by 4 months of age (2019-2021).⁵

Sudden Unexpected Infant Death (SUID) in Louisiana

In 2021, more than one in three babies (34%) in Louisiana were exposed to three or more risk factors for sleep-related death.¹¹ The American Academy of Pediatrics (AAP) cites bed-sharing as a risk factor for sleep-related infant deaths. In fact, 34% of Louisiana mothers said they sometimes, often, or always bed-share with their baby.¹¹ The AAP recommends infants sleeping in the same room as a caregiver, but on a separate surface designed for infants.⁷

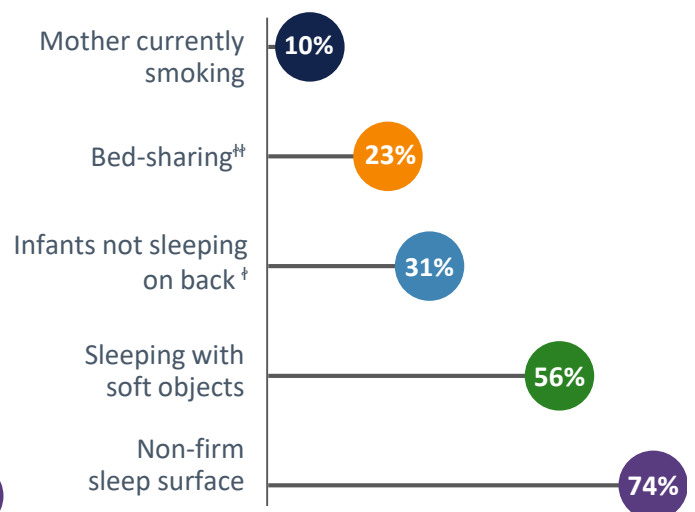
Risk Factors* Present in Louisiana SUIDs (2019-2021 CDR Data)⁵



*Multiple risk factors may be present

**Drug-or alcohol impairment may be underreported

Infant Sleep Environment Risk Factors (2021 Louisiana PRAMS Data)¹¹



† Mothers reported how infants were most often laid to sleep in the past two weeks.

†† Calculated by mothers' reports of infants sometimes, often or always bed-sharing.

Recommendations for Prevention

- Obstetricians, pediatricians, and other direct service providers are encouraged to discuss safe sleep with their patients or clients and their families. Discussions should be culturally appropriate, respectful, and nonjudgmental. Language interpreters should be used as needed.⁷
- Providers can model safe sleep environments in clinical, childcare, and community settings. This includes setting up safe sleep displays in clinic waiting rooms, workplaces, churches, daycare facilities, and more.
- The Bureau of Family Health manages Give Your Baby Space, a statewide campaign that teaches caregivers the safest ways for babies to sleep. Healthcare, public health, and community partners are encouraged to explore the website and share it with families, [GiveYourBabySpace.org](https://www.giveyourbabyspace.org).
- Agencies responsible for the training and licensure of childcare providers (both center-based and in-home) are encouraged to provide training on safe sleep practices and monitor compliance.
- Media and manufacturers should follow safe sleep guidelines in their messaging, advertising, production, and sales to promote safe sleep practices as the social norm.⁷

Moving Data to Action

Improving Birth Outcomes

The Bureau of Family Health (BFH) reviews data on the leading causes of infant and child death, selects priorities for the year, discusses recommendations from local review panels, and identifies opportunities for prevention during quarterly meetings for the State Child Death Review (CDR) Panel. BFH and various partner organizations use state and local CDR recommendations to plan activities, programs, and interventions or to support policies that prevent deaths and improve health for Louisiana families.

Listed below are BFH and partner initiatives and resources based on CDR findings, national research, and evidence-based best practices for prevention.



Improving Birth Outcomes by Supporting Families

- **LOUISIANA MATERNAL, INFANT AND EARLY CHILDHOOD HOME VISITING (LA MIECHV)** provides family support and coaching through two evidence-based home visiting models: Nurse-Family Partnership (NFP) and Parents as Teachers (PAT). These services pair families with registered nurses or parent educators who work side-by-side with clients to help them have healthier pregnancies, care for their newborns, navigate services, and reach their personal goals, including financial and educational achievements. The program's evidence-based models have been shown to reduce health complications associated with pregnancy and birth, as well as emergency room visits among participating families.³⁴ Anyone can refer a family to the MIECHV program to receive these services if they meet the eligibility requirements. To make a referral, go to PartnersForFamilyHealth.org/miechv.
 - Because mental and emotional wellbeing is also a critical part of maternal health and healthy child development, the MIECHV program includes a mental health component. Infant and Early Childhood Mental Health Clinical specialists work with home visitors to increase their capacity to support families who experience mental health and parenting challenges. The specialists engage in educational activities and individualized case discussion with home visitors, observe and assess families, coordinate with community providers, and provide evidence-based treatment for some clients, when appropriate.
- **PARTNERS FOR HEALTHY BABIES (PHB)** is a statewide resource consisting of a website (1800251baby.org) and a toll-free bilingual helpline, 1-800-251-BABY (2229). The online content and helpline connect expecting and new parents to health, financial and social services or resources.
- **BFH'S REPRODUCTIVE HEALTH PROGRAM** provides affordable comprehensive reproductive health services to men and women across the state. The following services contribute to improved birth outcomes:
 - Screening and treatment for Sexually Transmitted Infections (STIs)
 - Screening and referrals for chronic health conditions
 - Family planning counseling and a full range of contraceptive options to empower women and families to plan pregnancies and achieve healthy birth spacing.



Improving Birth Outcomes by Improving Systems

- **BFH'S REPRODUCTIVE HEALTH PROGRAM** collaborates with federally qualified health centers to integrate reproductive health services into primary care settings to increase women's access to complete healthcare before pregnancy.

Moving Data to Action

Improving Birth Outcomes, continued



Improving Birth Outcomes by Improving Systems

- **THE LOUISIANA PERINATAL QUALITY COLLABORATIVE (LAPQC)** works to improve maternal health during the perinatal period. LaPQC is a network of hospitals, perinatal care providers, public health professionals, and patient advocates who use evidence-based practices and clinical quality improvement methods to improve outcomes for women, families, and newborns. Specific quality improvement initiatives are listed below. For further information, please visit: <https://lapqc.org/>
 - **Safe Births Initiative** works to improve perinatal outcomes related to hemorrhage and hypertension, and also focuses on reducing the rate of Cesarean delivery for low-risk, first-time birthing persons in Louisiana.
 - **Improving Care for the Substance-Exposed Dyad (ICSED) Initiative** focuses on improving the identification, care, and treatment of women and neonates affected by opioids and substance use
 - **Caregiver Perinatal Depression Screening** is a 12-18 month learning collaborative working to develop quality improvement strategies that support the implementation of perinatal depression screening in pediatric settings at 1, 2, 4, and 6-month well-child visits.
 - **Reducing Maternal Morbidity Initiative (RMMI)** worked with birthing facilities to reduce hemorrhage and hypertension through the *Reducing Maternal Morbidity Initiative* (RMMI). For more information, visit the [RMMI Final Report](#).
- **LOUISIANA PROVIDER TO PROVIDER CONSULTATION LINE (PPCL) (formerly know as Louisiana Mental Health Perinatal Partnership (LAMHPP))** is a provider-to-provider consultation system for licensed healthcare clinicians serving pediatric, pregnant, and postpartum women. PPCL supports healthcare clinicians with addressing the needs of their patients who experience perinatal depression, behavioral health disorders, anxiety, substance use disorders, interpersonal violence, and related health risks and conditions. For more information, visit ldh.la.gov/ppcl.
- **Act 497 (2018 Legislative Session)** created the **Healthy Moms, Healthy Babies Advisory Council**. This council, authorized by Louisiana Revised Statute 40:2018.5 in 2018, was formed as a call to action to ensure that state initiatives addressing maternal mortality and severe maternal morbidity include an equity focus informed by community. Key findings and recommendations are summarized in the council's [final report](#) issued in March 2020. To view Act 497, visit legis.la.gov.

Moving Data to Action

Sudden Unexpected Infant Death



Sudden Unexpected Infant Death (SUID) Prevention for Families

- BFH maintains **GIVE YOUR BABY SPACE**, a statewide campaign that teaches parents and caregivers the safest ways for babies to sleep. Information and resources for families, providers, and community partners can be found at [GiveYourBabySpace.org](https://www.giveyourbabyspace.org). The website includes an interactive safe sleep quiz-style game, and videos of actual Louisiana parents and providers talking about safe sleep.
- BFH **REGIONAL MCH COORDINATORS** and community partners facilitate the following.
 - Work with hospitals, parish health units, community-based organizations, and the MIECHV program to model safe sleep environments through physical displays in clinics/offices.
 - Use teaching tools (flip books) to assist community health and social service professionals tasked with giving safe sleep presentations to caregivers and families. The flip books are designed to provide a script for presenters and visuals for the audience, and they can be used in venues without audio, video, computer, or internet access.
 - Work with local partners in central Louisiana to develop regionally-aired public service announcements which promote safe sleep using the Give Your Baby Space messaging.
 - Partner with the YMCA to offer a Spanish-language seminar on safe sleep to Latino families.
 - Mobilize the distribution of Pack ‘n Plays to families in need who were temporarily displaced as a result of severe flooding and hurricanes in 2020.
 - Trained 900+ direct service providers on evidence-based methods to reduce sleep-related deaths, including how to talk to caregivers about safe sleep. Providers included MIECHV Visitors, Louisiana Department of Children and Family Services (DCFS) case workers, and childcare providers and community partners.



Sudden Unexpected Infant Death (SUID) Prevention in Systems

- BFH’s **THE GIFT PROGRAM** promotes breastfeeding, a protective factor against SUID, by providing technical assistance to Louisiana birthing facilities to improve the quality of their maternity services, including their policies and practices around breastfeeding. A total of 42 facilities have received *Gift* Designation, and *The Gift* helped 17 of those facilities advance to receive the internationally-recognized Baby-Friendly designation.
- BFH established regional taskforces and a state CDR workgroup focused on Safe Sleep Promotion.
- BFH convened multiple family-serving programs and stakeholders to discuss parent and caregiver barriers to safe sleep and ways to mitigate any potential harm while breastfeeding in bed LDH. The group reviewed the “ABC’s of Safe Sleep” (Alone, on the Back, in a Crib) in the context of provider-family conversations that prioritize shared decision-making and focus on realistic strategies to minimize risk, as well as resources from national groups that promote harm reduction approaches for scenarios in which an infant may fall asleep while in a parent bed.
- BFH provided child injury data and research on the connection between parent-child attachment, child safety, and paid family leave to Paid Leave + US (PL+US), a state and national initiative that seeks to establish legislation requiring employers to provide paid family leave. This information was shared with Louisiana’s congressional delegation.



Child Mortality in Louisiana

2019-2021 Data

Overall Child Mortality

1 to 14 years

From 2019-2021 in Louisiana, an average of **206 children** between ages 1 and 14 died each year.²



United States vs. Louisiana

The 2019-2021 Louisiana mortality rate for children ages 1 to 14 was **24.4 deaths per 100,000 children**. The U.S. rate was 16.5 per 100,000 children for the same time period. If Louisiana had the same mortality rate as the U.S., **67 fewer children** would have died per year.

Louisiana Rate ²	U.S. Rate ³	LA Ranking ³
24.4	16.5	Third highest in the U.S.

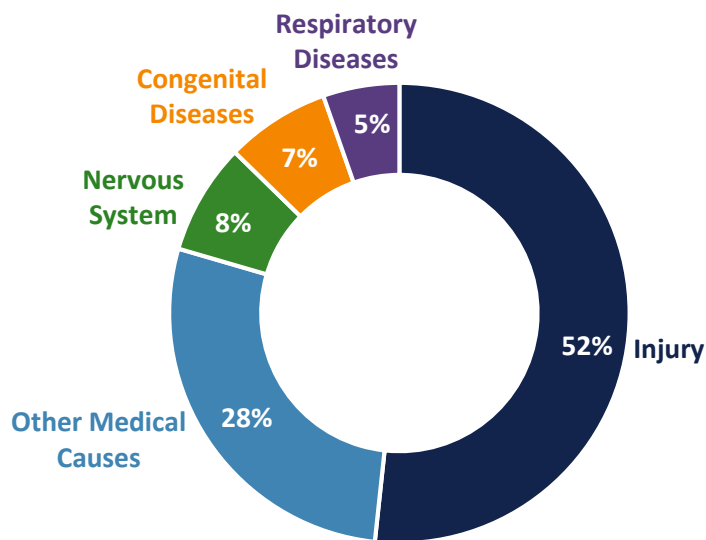
Child Deaths by Region (2019-2021) ²	1	2	3	4	5	6	7	8	9
Average annual child deaths	32	31	16	28	16	14	28	18	23
Child mortality rate per 100,000 children	21.5	25.4	22.4	23.9	26.7	25.6	28.8	29.44	20.47

**Rates based on counts less than 20 are unstable and may vary widely in future reporting years.*

Causes of Child Mortality

Each year, an average of...²

- **106** children died from injury
- **57** children died due to another medical cause
- **16** children died due to nervous system diseases
- **15** children died due to congenital anomalies
- **11** children died due to diseases of the respiratory system



Key Points

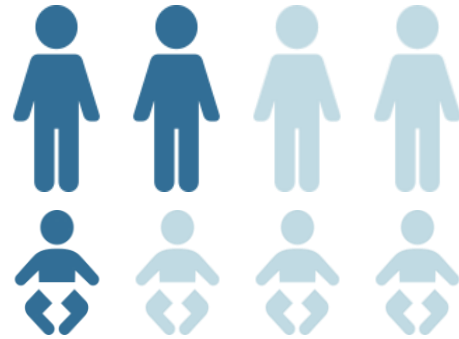
- More than half (52%) of childhood deaths (ages 1 to 14) were due to injuries. Most of these deaths are considered preventable.
- The other (48%) childhood deaths were due to a medical cause. The most common medical causes are diseases of the nervous system, diseases of the respiratory system, and deaths related to congenital anomalies.

Child Mortality: Fatal Injuries

1 to 14 years

From 2019-2021, an average of 106 children died from injuries each year. The majority of injury deaths were due to motor vehicle crashes, homicide, and drowning.²

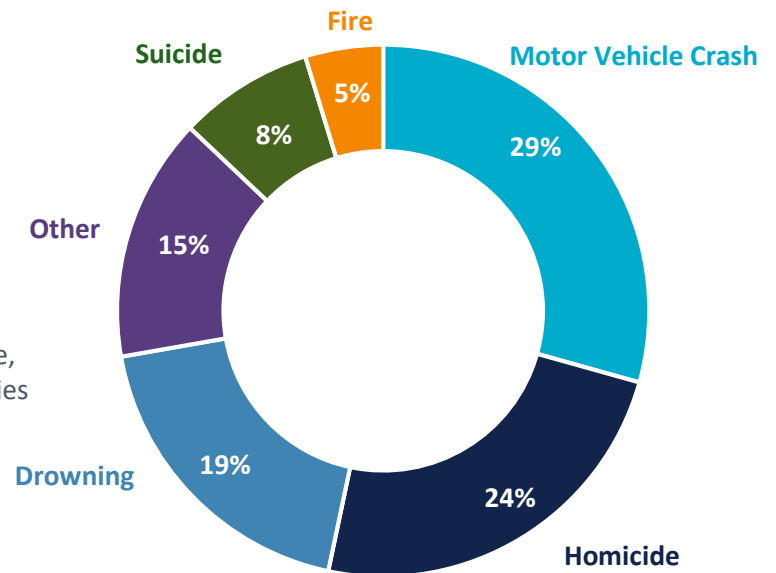
Half of child deaths were a result of injury. Injury makes up a larger percentage of deaths in childhood (52%) than in infancy (26%).



Causes of Fatal Injury

Each year, an average of...²

- 31 children died due to motor vehicle crashes
- 25 children died from homicide
- 20 children drowned
- 16 children died due to another unintentional cause, including falls, threats to breathing, and other injuries
- 9 children died from suicide
- 5 children died due to fire exposure



Key Points

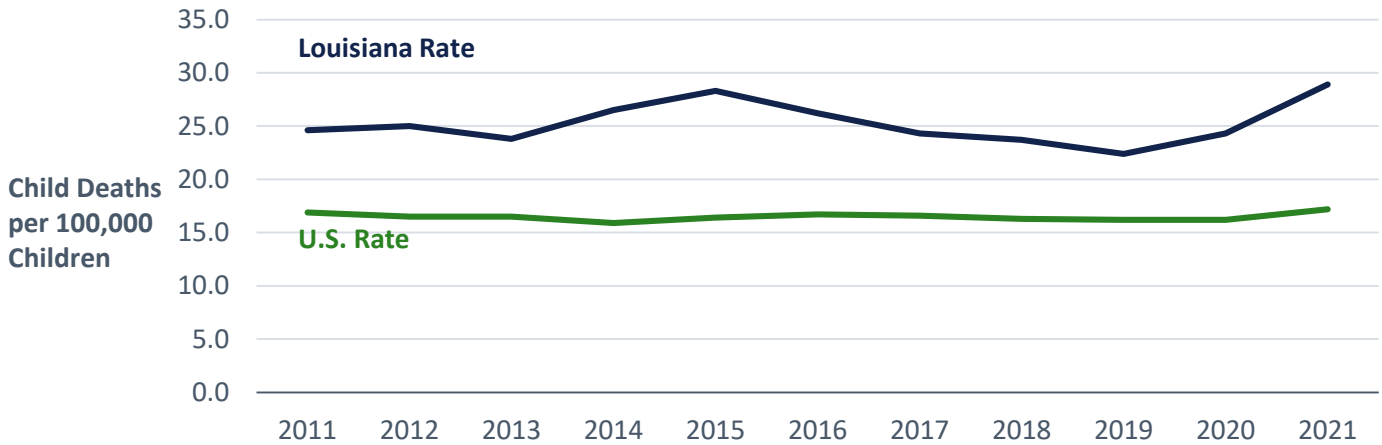
- Motor vehicle crashes, homicide, and drowning were the top causes of injury-related child deaths.
- For the majority of child deaths due to motor vehicle crashes, child restraints were not used.
- Inadequate supervision of children and lack of barriers around water were the top contributing factors in drowning deaths. Almost half (41%) of all drowning deaths occurred in swimming pools, hot tubs, or spas.

Trends in Child Mortality

1 to 14 years

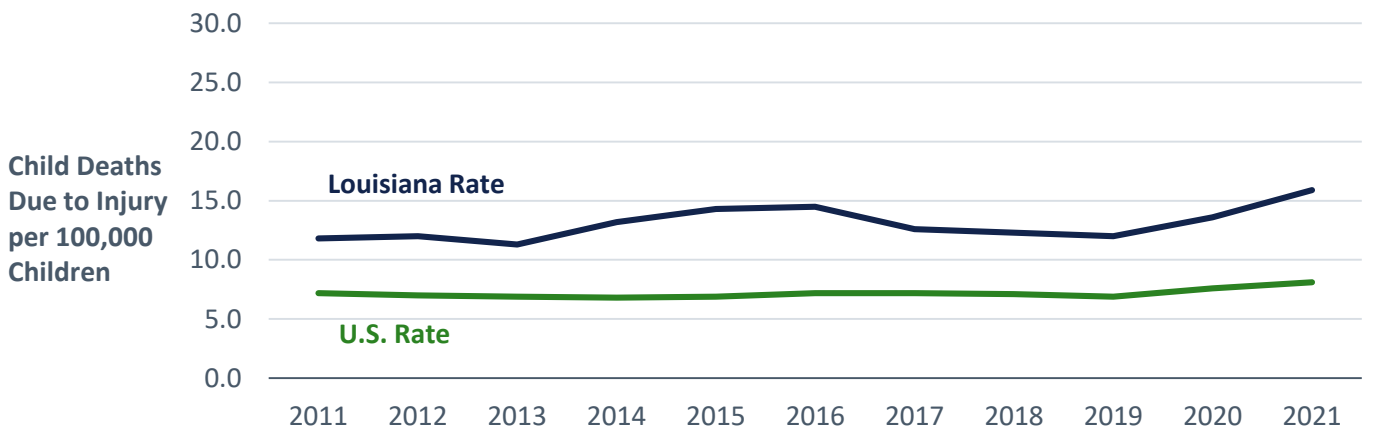
Overall Child Mortality Over Time³

Louisiana's overall child mortality rate remained relatively consistent from 2011 to 2021, hovering around **25 child deaths per 100,000 children**. The Louisiana rate also remained consistently higher than the U.S. rate.



Child Mortality Due to Injury Over Time³

Louisiana's child mortality rate due to injury remained around **14 deaths per 100,000 children** from 2011 to 2021. The child mortality rate due to injury in Louisiana has also remained higher than the rate for the United States during this time period.



Key Points

- Overall child mortality and the child mortality rate due to injury have remained relatively steady since 2010.
- Louisiana has consistently had higher child mortality rates than the United States as a whole.
- During 2018-2020, injury prevention programs have gained traction. While rates of child mortality due to injury have not yet decreased, there are promising prevention strategies on the horizon, including: providing free water safety and swim lessons to children; implementing life jacket loaner programs; training inspectors and contractors on current swimming pool and spa codes; training school health personnel on suicide prevention methods and educating about current child passenger safety laws.

Racial Disparities in Child Mortality

1 to 14 years

Racial disparities in mortality exist throughout Louisiana and the United States, and are complex.

If a health outcome occurs more often or less often for a given group than the general population (e.g., rates of drowning among Black children versus all children), the difference between those groups is called a disparity.²³ Infant and child mortality is influenced by a range of intergenerational social, economic, clinical, and environmental determinants. Racial disparities across important *non-clinical* factors such as income, opportunities for stable employment, affordable housing, and access to preventive healthcare⁸ and family planning services²⁴, can exacerbate differences in infant and child mortality by race.^{9, 10}

Low socioeconomic status is correlated with injury-related child fatalities.²⁷ Families living in economically disadvantaged communities, which are characterized by a lack of resources and effective infrastructure, may be at higher risk for unsafe conditions. Examples include:

- Families with lower incomes and limited resources may need to prioritize basic needs such as housing, food, and transportation over safety equipment. Items such as child passenger safety seats and bicycle helmets can be expensive. Many communities do not have consistent access to organizations that may provide these safety items for free or at reduced cost.
- Older vehicles are equipped with fewer safety features than newer ones.
- Economically disadvantaged neighborhoods may not have municipal swimming pools or access to no cost or low-cost water safety and swim lessons.
- Dilapidated buildings, open drainage canals, limited hazard mitigation, high rates of violent crime, poorly lit or poorly designed roadways, and limited enforcement of road safety rules put children at risk.
- Limited access to affordable, quality childcare may result in infants and children being cared for by people who do not have adequate safety training.
- Limited access to quality trauma care can result in worse injury outcomes.

Addressing structural and socioeconomic inequities, such as the ones listed above, at a community and institutional level may help reduce health disparities, as well as overall infant and child fatalities. Further, efforts to reduce inequities must address structural racism, which is a key driver of disparities in income, education, neighborhood safety, and access to quality care.

2020

“ Racism attacks people’s physical and mental health. And **racism is an ongoing public health crisis** that needs our attention now! ²¹ ”

American Public Health Association

†Black indicates non-Hispanic Black, and white indicates non-Hispanic white.

Racial Disparities in Mortality

1 to 14 years



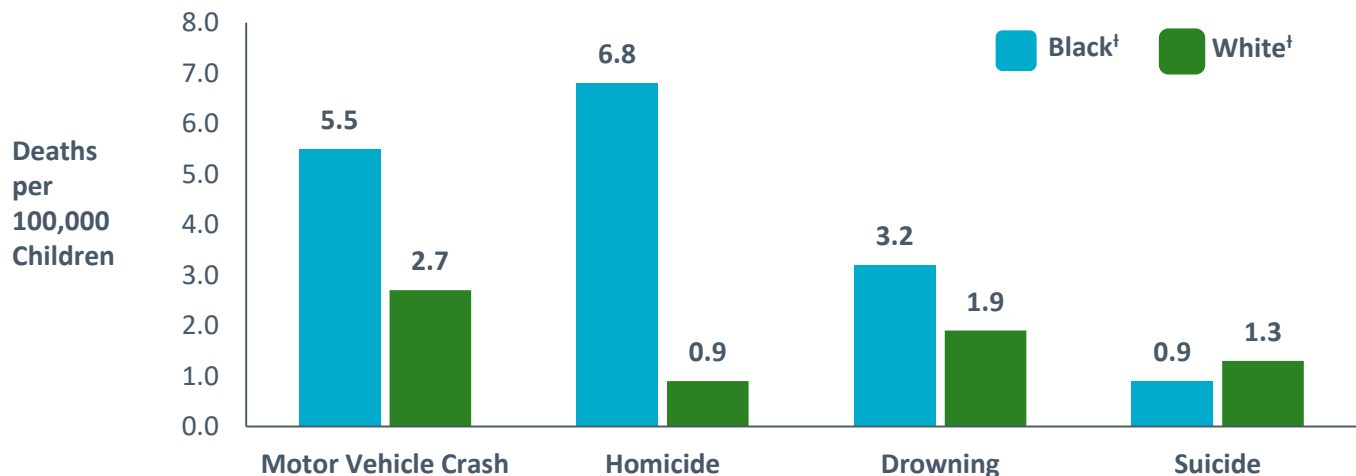
In Louisiana from 2019-2021, **Black[†] children** were **2 times as likely** to die as white[†] children.

Child Mortality Rate, 2019 - 2021	
Black [†]	White [†]
34.8 deaths per 100,000 children	17.5 deaths per 100,000 children

[†] Black indicates non-Hispanic Black, and white indicates non-Hispanic white.

Mortality Rates by Top Causes of Death & Race

In Louisiana from 2019 to 2021, **Black[†] children** in Louisiana were more likely than white children to die in a **motor vehicle crash**, due to **homicide**, or by **drowning**. **White children[†]** in Louisiana were more likely than Black children to die by **suicide**.



Key Points

- In Louisiana, child mortality affects Black children more than white children.
- Between 2019-2021, Black children were six times as likely to die from homicide as white children.
- The top cause of injury-related death for Black children was homicide.
- The top cause of injury-related death for White children was motor vehicle crashes.
- The second through fourth top causes of death each varied by race.
- Mortality data for Hispanic infants and children were not included in racial disparity calculations because of insufficient counts – i.e. the number of Hispanic children who died in Louisiana during this time period was too small for a reliable comparison against mortality rates for white[†] and Black[†] children.

Child Mortality Due to Injury

2019-2021 Data

Child Mortality Due to Injury

1– 4 Years

From 2019-2021 in Louisiana, an average of **86** children between ages 1 and 4 died each year; **42** per year died due to injury.²



United States vs. Louisiana

The Louisiana mortality rate due to injury from 2019 to 2021 for children ages 1 to 4 was **17.8 deaths per 100,000 children**. The U.S. rate was 10.2 per 100,000 children for the same time period. If Louisiana had the same mortality rate as the U.S., **18 fewer** children in this age group would have died per year.

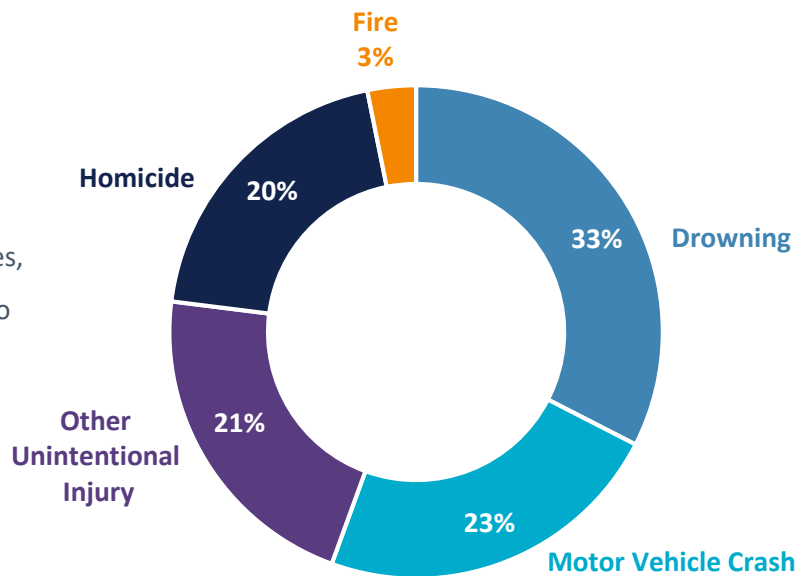
Louisiana Rate ²	U.S. Rate ³	LA Ranking ³
17.8	10.2	Third highest in the U.S.

Causes of Fatal Injury

About half of all deaths among children ages 1-4 were injury-related.

Each year, an average of...²

- **14** children drowned
- **10** children died in a motor vehicle crash
- **9** children died due to unintentional injuries, including but not limited to: falls, threats to breathing, excessive heat, and storms
- **8** died from homicide
- **1** died due to fire exposure



Key Points

- Children between ages 1 and 4 had the highest injury-related mortality rate among all children in Louisiana.
- The majority of these deaths were due to unintentional injuries: drowning, motor vehicle crashes, fire-related deaths, falls, threats to breathing, excessive heat, and storms.
- Homicide is the third leading cause of death in this age group. Specific methods of homicide in this age group include deaths due to blunt force injuries, poisoning, and firearms. Note: “other unintentional injury” also causes 21% of deaths, but this category is a grouping of multiple, less frequent causes.
- Creating safe environments for children to live, learn, and play is important for reducing fatalities due to injuries. Safe environments require a variety of physical and behavioral supports, including: size-appropriate child passenger safety restraints in vehicles, barriers around pools and natural bodies of water, smoke alarms inside homes, secure firearm storage, and attentive supervision by caregivers.

Child Mortality Due to Injury

5 – 9 Years

From 2019-2021 in Louisiana, an average of **46** children between ages 5 and 9 years died each year. **Twenty-four** children per year died due to an injury.²



United States vs. Louisiana

The Louisiana mortality rate due to injury from 2019 to 2021 for children ages 5 to 9 was **8.1 deaths per 100,000 children**. The U.S. rate was 4.8 deaths per 100,000 children for the same time period. If Louisiana had the same mortality rate as the U.S., **10 fewer** children in this age group would have died per year.

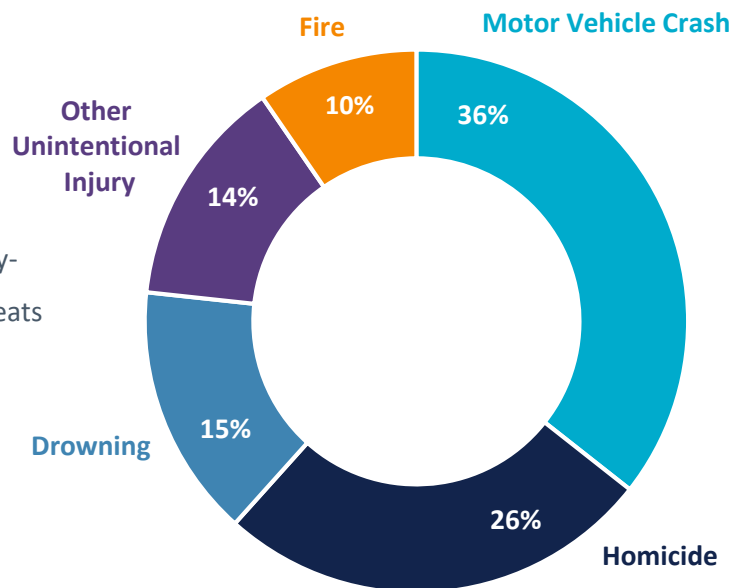
Louisiana Rate ²	U.S. Rate ³	LA Ranking ³
8.1	4.8	Third highest in the U.S.

Causes of Fatal Injury

53% of deaths among children ages 5 to 9 were injury-related.

Each year, an average of...²

- **9** children died in a motor vehicle crash
- **6** children died from homicide
- **4** children drowned
- **3** children died due to other unintentional injury-related causes, including but not limited to: threats to breathing, falls, and accidental poisoning
- **2** children died due to fire exposure



Key Points

- Motor vehicle crashes were the most common cause of injury-related death in this age group.
- Among motor vehicle crash deaths in this age group, children were more likely to die as car passengers (55%) than outside the vehicle (i.e. fewer children died as pedestrians or while playing near vehicles). A major risk factor for child passenger deaths was the absence of proper safety gear (shoulder belts, lap belts, child seats, etc.)⁴
- Among 5 to 9-year-olds, 68% of homicides were due to firearms.²

Child Mortality Due to Injury

10 – 14 Years

From 2019-2021 in Louisiana, an average of **74** children between ages 10 and 14 died each year; **39** per year died from injuries.²



United States vs. Louisiana

The Louisiana mortality rate due to injury from 2019 to 2021 for children between the ages of 10 to 14 was **12.8 deaths per 100,000 children**. The U.S. rate was 8.2 deaths per 100,000 children for the same period. If Louisiana had the same mortality rate as the U.S., **14 fewer** children in this age group would have died per year.

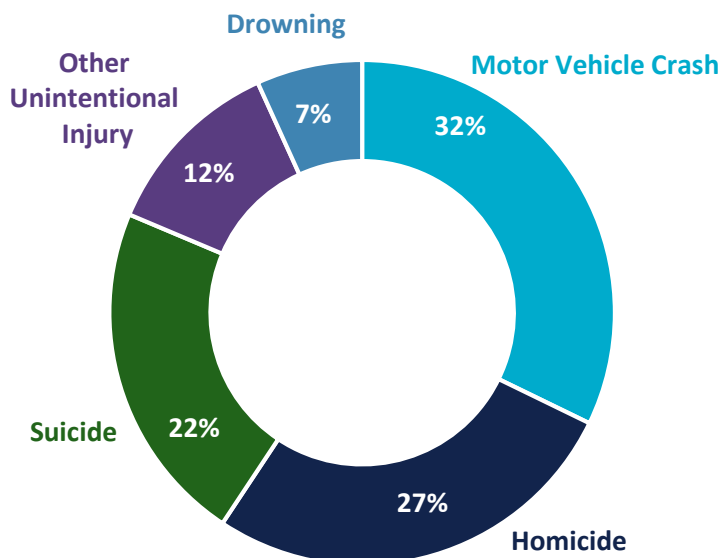
Louisiana Rate ²	U.S. Rate ³	LA Ranking ³
12.8	8.2	Sixth highest in the U.S.

Causes of Fatal Injury

53% of deaths among children ages 10 to 14 were injury-related.

Each year, an average of...²

- **13** children died in motor vehicle crashes
- **11** children died from homicide
- **9** children died from suicide
- **5** children died due to other unintentional injuries, including but not limited to: threats to breathing, falls, fire, accidental poisoning, and storms
- **3** children drowned



Key Points

- Motor vehicle crashes and homicide were the most common causes of injury-related deaths in this age group.
- Suicide is the third leading cause in this age group. CDR case reviews indicate that the top risk factors for suicide in this age group include: access to lethal means of self-harm – such as firearms – and a history of adverse childhood experiences (ACEs). ACEs include all types of abuse, neglect, and other potentially traumatic experiences that happen to people under the age of 18.
- Among motor vehicle crash deaths in this age group, children were more likely to die as car passengers (73%) than outside the vehicle as pedestrians. A major risk factor for child passenger deaths was the absence of restraints being used (shoulder belts, lap belts, etc.).⁵
- In this age group, 84% of homicides were due to firearms.¹



Reducing Child Mortality In Louisiana

Driving Factors

Recommendations for Prevention

Moving Data to Action

Driving Factors and Recommendations for Child Mortality Prevention

0 to 14 Years

The following section describes risk factors related to the leading preventable causes of child mortality due to injury, and provides recommendations for reducing risk factors, increasing protective factors, and preventing future deaths. Data on infant deaths due to injury were included to provide a more comprehensive picture of injury-related infant and child deaths in Louisiana. Reducing the risk factors and increasing the protective factors identified in this section may prevent both infant and child deaths.

Homicides are the top cause of child death in Louisiana. The homicides are predominantly due to firearms, blunt force trauma, abusive head trauma, asphyxia (suffocation), and poisoning.

Motor Vehicle Crashes are the second top cause of child death in Louisiana. These are predominantly crashes involving motor vehicles, but include all transport-related deaths, such as incidents involving all-terrain vehicles (ATV) and boats.

Drownings are the third top causes of child death in Louisiana. These predominately take place in pools, hot tubs, or spas for this age group.

The category of “Other” unintentional injury deaths includes multiple causes, such as falls, blunt force trauma, fire-related, poisoning, and asphyxia (suffocation).

In the following pages, BFH used data from the National Fatality Review Case Reporting System database to determine the prevalence of risk factors in Louisiana deaths due to motor vehicle crashes, homicide, drowning, and suicide.



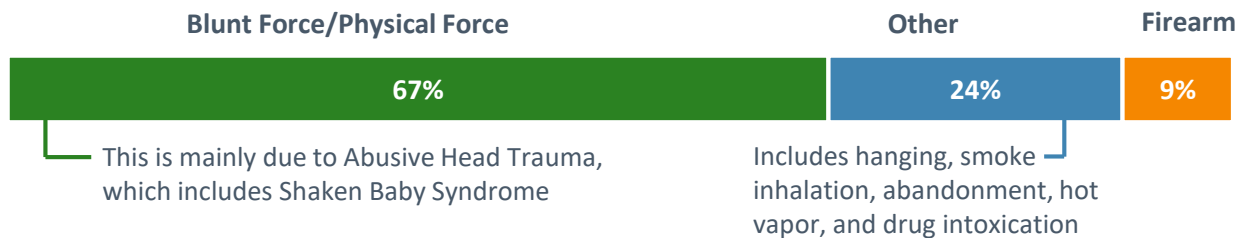
Homicide Deaths in Children

Data and Recommendations

From 2019-2021, 109 Louisiana infants and children were victims of homicide.² Infants were more likely to die from **blunt force injuries, including Abusive Head Trauma**, while children ages 1 to 14 were more likely to die from **firearms**.

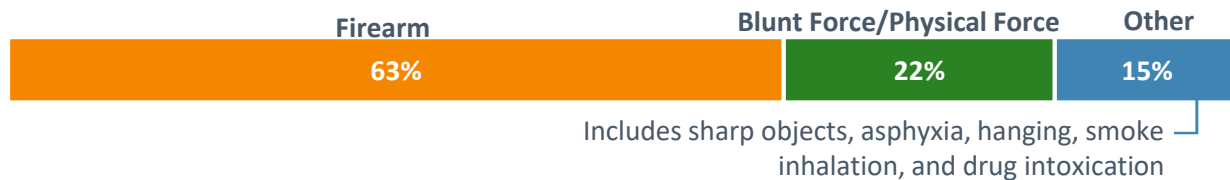
Homicide Methods

Ages birth to 1 in Louisiana²



Homicide Methods

Ages 1 to 14 in Louisiana²



There were **109** homicides between 2019-2021. However, some data providers were cautious about sharing case details under LA RS 40:2019. Therefore, CDR teams could only fully review **41** of these cases.

Recommendations

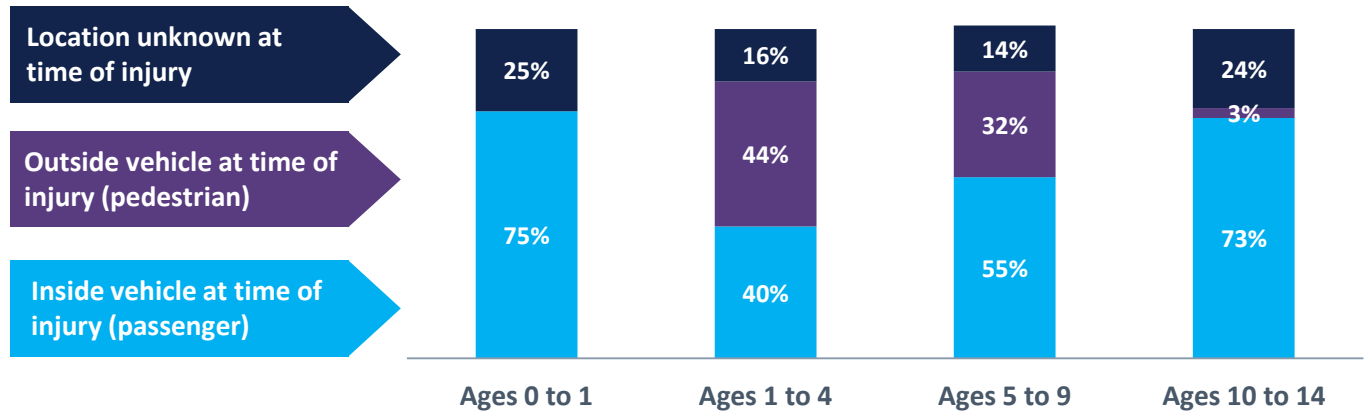
Based on recommendations from Children's Safety Network,¹⁴ American Academy of Pediatrics,¹⁵ and Safe States Alliance.¹⁶

- **Pediatricians are encouraged to regularly talk to parents about:**
 - Safely storing all firearms in children's primary home and relatives' homes. Safe storage includes locking up firearms and storing ammunition separately. Storage resources can be found at [BeSMART for Kids](#).
 - Strategies and resources for managing stressful parenting situations (e.g. excessive crying in infants, toddler meltdowns), including safe, age-appropriate methods of discipline.
- **Policymakers and public health agencies are encouraged to:**
 - Champion evidence-based interventions that promote stable, nurturing relationships between children and their caregivers. Interventions should promote positive parent-child interactions and safe child discipline.
 - Support violence prevention strategies that impact multiple health outcomes, e.g., chronic disease, injury, and violence. Learn more about these approaches in the [CDC's Connecting the Dots](#) or the [Prevention Institute's Recommendations for Preventing Gun Violence](#).
 - Encourage coroners and law enforcement to participate in CDR and the National Violent Death Reporting System (NVDRS) in Louisiana. Their collaboration is vital for collecting and analyzing comprehensive homicide data in order to inform prevention and policy efforts.
- **Sporting agencies, governmental bodies and hunting enthusiasts should:**
 - Advocate and facilitate training for novice hunters. Training should cover safe firearm handling and preventing unintentional discharge.

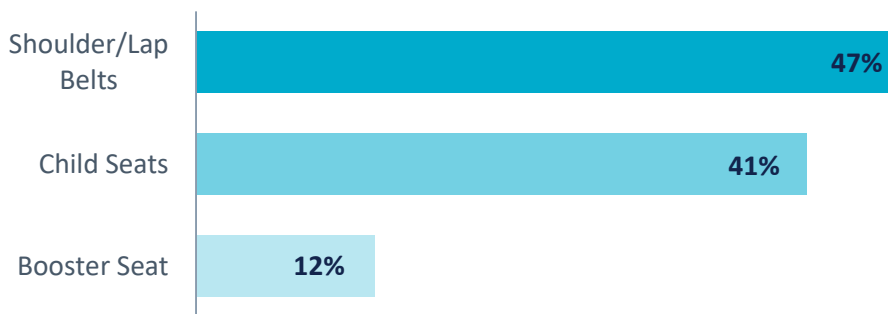
Child Motor Vehicle Crash (MVC) Deaths: Data and Recommendations

Ninety-nine infants and children in Louisiana died due to MVCs from 2019-2021.² All age groups (birth to 14) were more likely to die as **passengers** in MVCs rather than as **pedestrians**. MVCs are tied to the leading cause of injury-related death in children birth to 14 in Louisiana.

Location of Victim at time of MVC, by Age Group⁵



Safety Features Used in Child MVC Deaths⁵



Children were **restrained in 38%** of MVC deaths that occurred from 2019-2021.

Recommendations

- Pediatricians and other providers should discuss the correct type of car/booster seats parents should use, based on their child's age and size requirements and national recommendations changes as children grow.
- In 2019, Louisiana's child passenger safety (CPS) legislation reflects best practices and is one of the safest CPS laws in the country. Access to appropriate seats and assistance for correct installation should be ensured by prevention professionals.
- For the majority of child deaths due to motor vehicle crashes, child restraints were not used. Car seat distribution programs can increase the availability of free or low-cost seats for families in need. Programs that provide no-cost installation assistance are also recommended.
- Monitoring and enforcement of legislation related to child safety seats should be prioritized by safety professionals.
- Policies around improper restraint and drinking and driving should be strictly enforced.¹²
- Injury prevention professionals are encouraged to assess areas where children gather (e.g., parks, schools, libraries, etc.) for unsafe conditions, such as poor visibility, lack of cross-walks, or poorly coordinated traffic.¹³

Child Drowning Deaths

Data and Recommendations

A total of 64 infants and children in Louisiana died from drowning from 2019-2021.² Drowning was the **third leading cause of injury-related death** for children ages Birth to 14 in Louisiana.²

Top Risk Factors for Drowning in Louisiana⁵



Lack of supervision, inability to swim, and no barriers to water were key risk factors in most drowning deaths of children.⁵

Drowning Location

Of children who died from drowning in Louisiana, **almost half (41%)** drowned in a **pool, hot tub, or spa**.⁵



Recommendations

Based on shared recommendations from the CDC,¹⁷ Safe Kids Worldwide,¹⁸ and Children's Safety Network.¹⁹

Pool owners or operators and water safety instructors should:

- Emphasize or require active supervision of all children, at all times, when they are in or around water. Active supervision involves a designated adult, no distractions, and children being within an arm's reach.
- Only use flotation devices that have been approved by the US Coast Guard (USCG) for the specific weight of the child using the device. Product will have the USCG imprint on it.
- Teach children to swim close to lifeguards and to only swim in designated swimming areas.
- Maintain automatic external defibrillators (AEDs) and rescue equipment near pools.
- Require CPR and First Aid certification for pool supervisors and ensure quick phone access to call 911.
- Follow pool safety standards, secure pool/spa ladders, and install updated safety-compliant drains and pipes.
- Maintain clear visibility of pool surface and floor.

Community and municipal leaders should:

- Organize free or affordable swim lessons for children and adults.
- Increase regulations and code enforcement for barriers around pools, spas/hot tubs, and ponds.

Building officials, insurers and pool professionals should:

- Require and enforce the use of standard safety features around pools, spas and ponds, such as barriers, gates, door and pool alarms, and covers.

Pediatricians and other health and social service professionals serving families should:

- Instruct parents and caregivers to maintain constant supervision of infants while they are in bathtubs, and limit toddlers' access to all water sources, including bathtubs, fountains, buckets, and storm drains.
- Share drowning prevention health education resources with caregivers from sources such as poolsafely.gov.

Suicide Deaths in Children

Data and Recommendations

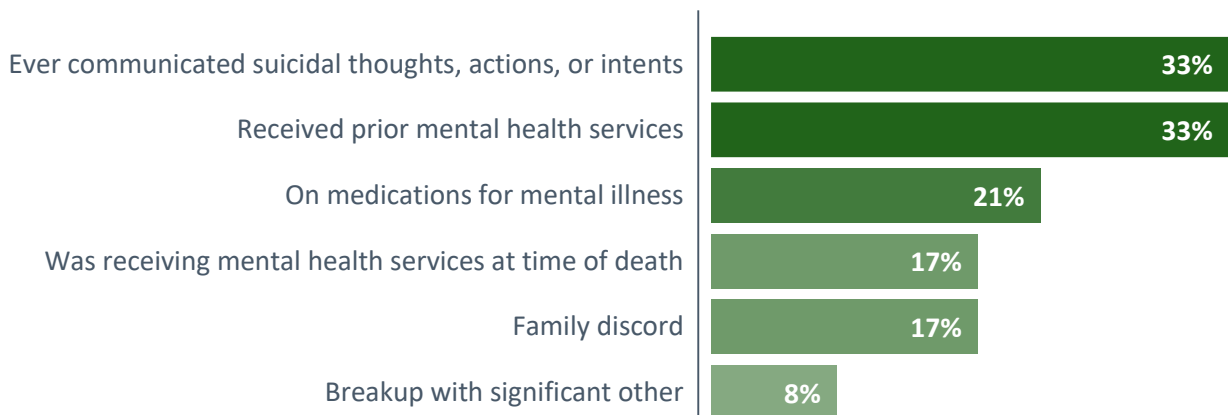
From 2019-2021, 26 children under age 15 in Louisiana died from suicide.²
Half of these suicides were completed using a firearm.

Suicide Methods



Experiences of Children who Died by Suicide

Local CDR teams reviewed 24 out of 26 child deaths due to suicide from 2019-2021. The graph below reflects only reviewed cases, and data are not mutually exclusive.



Recommendations

Based on recommendations from Children’s Safety Network,¹⁴ American Academy of Pediatrics,¹⁵ and Safe States Alliance.¹⁶

- **Pediatricians** should regularly talk to parents about how to safely store firearms in children’s primary home and relatives’ homes. Secure storage includes locking up firearms and storing ammunition separately. Secure storage resources and tips for gun owners can be found at [BeSMART for Kids](#).
- **Healthcare providers and counselors** should use valid, reliable screening tools (e.g. [ASQ Suicide Risk Screening Tool](#) or the [Beck Scale for Suicide Ideation®](#)) to assess children for suicide risk.
- **Educators and those working with youth** should receive training – such as [Living Works’ ASIST](#), [safeTALK](#), or [QPR](#) – to recognize warning signs for suicide and connect youth with help. The Louisiana Department of Education monitors compliance with training requirements for educators and school staff.
- **Policymakers** are encouraged to work with public health agencies to investigate how social determinants of health and health inequities (such as historical trauma, inequitable distribution of protective services and resources, gender norms, and others) contribute to suicide and self-harm, including firearm injuries.
- **Policymakers** should support the use of CDR and the National Violent Death Reporting System (NVDRS) in Louisiana to collect and analyze comprehensive suicide data in order to inform prevention and policy efforts.
- **The Louisiana Department of Health and partners** should promote the [988 Suicide and Crisis Lifeline](#), a national network of more than 200 accredited local crisis call centers. [988](#) responds to calls, chats and texts to provide 24/7, free and confidential emotional support to people experiencing suicidal crisis, emotional distress, substance use, or mental health challenges.

Moving Data to Action

General Injury Prevention

Injury and violence prevention is essential to creating a healthy environment for all Louisiana children. Not only are injury and violence a leading cause of death for Louisiana children, but it can also have a lifelong impact on those who survive. **Injury and violence prevention efforts aim to stop injury before they happen so children, families, and communities can feel safe.**



General Injury Prevention Efforts

Prevention initiatives completed by BFH to address Child Mortality:

- Expanded [BFH injury prevention efforts](#) by securing funding for additional statewide programming to prevent the leading causes of childhood injury. Funding was provided through the CDC's Core State Violence and Injury Prevention Program, the National Violent Death Reporting System, and the Consumer Product Safety Commission's *Pool Safely* initiative.
- Established topic-specific regional taskforces and workgroups across the state through Community Action and Advisory Teams. Topics include: Infant Safe Sleep, Child Passenger Safety, Father Involvement, Advocacy and Public Safety, and Child Death Prevention.
- Facilitated Injury Free Louisiana (IFLA) Training Academy trainings to teach community providers about the shared risk and protective factor approach to prevent multiple forms of injury and violence. This approach is designed to produce interventions that impact multiple adverse health outcomes, including substance misuse, unintentional injury, violence, and chronic disease.
- Established surveillance and data communication processes to provide prevention stakeholders with information to inform program and policy efforts.
- Expanded the Adverse Childhood Experiences (ACE) Educator program. This involved developing resources for improved training on ACEs and trauma-informed care and supporting the promotion of the [Louisiana Parent Line \(1-833-LA-CHILD\)](#) for parenting support.



Moving Data to Action

Child Passenger Safety

Correctly-installed child seat restraints could help prevent child deaths in motor vehicle accidents. Collaboration between health professionals, safety professionals, law enforcement and policy makers can help Louisiana families learn to safely secure their children in motor vehicles and prevent child deaths.



Child Passenger Safety and Motor Vehicle Crash Prevention for Families

- Collaborated with Regional Transportation Safety Coalitions to train car seat technicians, open seat safety check stations, promote car seat giveaways, and assist with correct installation.
- Worked with the Louisiana Passenger Safety Task Force to create regional contact cards listing all car seat technicians certified in both general child passenger safety and safety for [Children and Youth with Special Health Care Needs](#).
- Coordinated with emergency department providers and emergency medical personnel on two large Louisiana Department of Wildlife and Fisheries events to promote ATV safety.
- Collaborated with Highway Safety Coalition to organize a training on transport for Children and Youth with Special Healthcare needs for Child Passenger Safety Technicians.



Child Passenger Safety and Motor Vehicle Crash Prevention Through System Improvement

- Provided data and recommendations for improving child passenger safety, including seat location and booster seat use, as well as Graduated Driver's Licensing to the Louisiana Highway Safety Commission (LHSC) and other professional partners. LSHC and Louisiana State Police used this information to support legislation that aligned with best practices. Today, [Louisiana's child passenger safety law](#) is one of the most protective in the country.
- Partnered with LSU's Highway Safety Research Group - the Center for Analytics & Research and Transportation Safety – to participate in data integration, linkage, and specialized analyses.
- Completed data analysis linking Louisiana motor vehicle crash data with hospitalization injury data, which revealed the need to emphasize booster seats in child passenger safety legislation.
- Identified motor vehicle crash prevention as a priority for the 2019-2020 State Child Death Review. A subgroup will determine the best ways to change cultural norms around child passenger safety, increase passenger safety for children with special health needs and child passengers in emergency transport vehicles, and make car seats more available.

Moving Data to Action

Drowning Prevention

As one of the top three leading causes of death for Louisiana children, drowning prevention efforts can save lives before families get near water. Water safety education at the community and system levels are essential to keeping children safe near water.



Drowning Prevention Support for Families

- Coordinated with partners to distribute [Pool Safely](#) materials (water safety and drowning prevention education) to parents and caregivers.
- Expanded access to free water safety and swim instruction in areas with few resources.
- Partnered with the YMCA to provide a Spanish-language water safety class for Latino families.
- Coordinated with local media outlets to air public service announcements promoting swim safety, using *Pool Safely* messaging.



Drowning Prevention Through System Improvement

- Established a state CDR workgroup on drowning prevention. The workgroup used data to identify opportunities for prevention and submit a proposal for funding.
- Received a Consumer Product Safety Commission *Pool Safely* grant that allowed BFH and partners to build a collaborative model to:
 - Offer free or low-cost swim lessons in areas lacking these resources.
 - Conduct trainings on new pool construction safety standards and pool safety operation requirements in collaboration with the State Fire Marshall's Office.
 - Provide public education around water safety and drowning prevention.
 - Develop partnerships and support local prevention initiatives in underserved communities.
- Updated drowning and water safety infographics/fact sheets to share drowning data and prevention recommendations with State CDR partners across the state. These materials are used in combination with *Pool Safely* materials to support annual water safety promotion efforts throughout the summer, especially during drowning prevention month (May).
- Coordinated with the state YMCA Alliance and the Governor's Office on the YMCA's *Safety Around Water* Initiative.
- Provided swim lessons for children with special healthcare needs and expanded the number of instructors certified to teach these children through a collaboration with West Jefferson Medical Center and Greater New Orleans YMCA.
- Partnered with nonprofit organizations to provide free swim lessons for families in the Northshore, Monroe, and Houma/Thibodaux areas.
- Partnered with Children's Water Safety Awareness to distribute life jackets to families in the Houma/Thibodaux areas.

Moving Data to Action

Violence Prevention



Violence Prevention Support for Families

- Worked with parents through BFH’s MIECHV program to support positive parent-child interactions, emotional health, and nurturing familial relationships. MIECHV also screens for Intimate Partner Violence (IPV) and refers clients to domestic violence and IPV resources.
- Worked with the Tulane Violence Prevention Institute (VPI), Children’s Hospital, and Louisiana DCFS to lay the foundation for an Essentials for Childhood Initiative. This approach focuses on preventing adverse childhood experiences, promoting resilience, shifting cultural norms around discipline, and engaging businesses to adopt more family-friendly policies.
- Identified secure firearm storage as a priority for the 2019-2021 State CDR. The State CDR was tasked with examining best practices and developing campaign messaging. This led to the [Be SMART Louisiana campaign](#) that promotes responsible gun ownership to protect kids and reduce child gun deaths.
- Supported promotion of the [VIA LINK Louisiana Parent Line](#): 833-LA-CHILD (833-522-4453).



Violence Prevention Through System Improvements

- Gathered data on homicide, suicide, and unintentional firearm fatalities using the National Violent Death Reporting System (NVDRS) starting in 2017. NVDRS helps public health agencies understand the circumstances contributing to violent deaths by connecting records from medical examiners, coroners, law enforcement, toxicologists, and vital statistics.
- Created recommendations using CDR data and panel expertise for how law enforcement can:
 - Improve and track the status of child death investigations.
 - Increase recognition and reporting of child abuse and neglect.
- Supported mandated reporting seminars designed to prevent deaths due to child abuse and neglect. Audiences included the Louisiana Emergency Response Network, Louisiana Emergency Room Nurses Association, DCFS, Emergency Medical Services, law enforcement, teachers, social workers, and childcare providers.
- Joined a national Children’s Safety Network Child Safety Learning Collaborative focused on preventing suicide and self-harm. BFH is promoting training for school-based professionals to recognize students who may be considering self harm or suicide.
- Worked with regional suicide prevention taskforces to promote suicide prevention training, and to create a Suicide Prevention Plan and Crisis Intervention Quick Resource Guide.
- Secured additional funding for suicide prevention in Louisiana. This work includes organizing suicide prevention trainings for professionals working with children and youth.
- Provided data and recommendations related to preventing abusive head trauma for a legislative proposal focused on educating high school students on Shaken Baby Syndrome.
- Continued collaborating with the Louisiana Foundation Against Sexual Assault to educate middle, junior, and high school students on preventing physical and emotional aggression.
- Collaborated with Columbia University, Tulane University’s VPI, and Solutions Journalism Network to host a media workshop on covering sensitive injury and violence topics.
- Act 320 (2021 Legislative Session) created a domestic violence fatality review within LDH.



Children and Youth with Special Healthcare Needs

Injury Prevention and
Recommendations

Recommendations and Considerations

Children and Youth with Special Healthcare Needs

Since 2016, in an effort to address the needs of all children in Louisiana in a more equitable way BFH has included a Family Advisor in various workgroups and initiatives. In 2018, a Family Advisor joined the Louisiana State CDR panel to provide a family perspective to case reviews, especially with regard to injury prevention for children and youth with special healthcare needs. While deaths among this population may be few in number, they are no less tragic. In many instances, simple accommodations and systems-level checks and balances can prevent serious injuries and deaths.

The following recommendations and considerations focus on protecting children and youth with special healthcare needs from the leading causes of fatal injury. They are informed by Louisiana CDR case reviews and national recommendations.



Motor Vehicle Passenger Safety

- Early intervention specialists, case managers, respite and attendant care service providers, pediatricians, and allied health providers should:
 - Ensure every child has an appropriately sized and supportive car seat. Providers may need to make referrals for seating assessments, write prescriptions, or provide letters of medical necessity for payer authorizations.
 - Educate caregivers and families on wheelchair transportation safety protocols, including the need for secure locking systems and appropriate head and neck supports.
 - Contact the [Community Injury Prevention Program](#), which offers child car seat assessments and education at fitting stations in each region of Louisiana by nationally certified child passenger safety technicians. View the [Special Needs Resources Card](#) for a list of regional technicians certified in transportation needs of children with special healthcare needs.
- Providers and public health agencies should work with families to provide letters of medical necessity when appropriate. Louisiana Medicaid Managed Care Organizations are required to pay for transportation accommodations, including specialized car seats, for families that can demonstrate medical necessity. More transportation safety resources, including those focused on accommodations for children with special health needs can be found at: chop.edu/resources/water-safety-your-special-needs-child
- Place identifiers that convey personal health information or medical diagnoses on or inside cars to quickly alert emergency responders to passengers' special health needs in the event of a crash. Examples of identifiers include seat belt clips or notification stickers that indicate a condition such as deafness, autism, paralysis, rare protocol needs, inability to speak, etc. Providers and agencies serving children with special healthcare needs should consider partnering with community organizations to provide personal health identifiers to families for use in their cars.
- Expand awareness for vehicle heat safety and the importance for all caregivers and families, but children with special healthcare needs can be particularly vulnerable. Children with chronic medical conditions may be at higher risk in extreme heat situations, as they can be more sensitive to heat, less likely to sense or respond to changes in temperature or may take medications that compound the effects of extreme heat.²⁸
- More information about motor vehicle safety and transportation considerations for children and youth with special needs can be found at PreventInjury.pediatrics.iu.edu/special-needs. The website has resources for providers – including a guide to child safety seats and passenger restraints, special considerations by medical condition, and up-to-date information about safety recommendations and equipment – as well as a parent-friendly Frequently Asked Questions page.

Recommendations and Considerations

Children and Youth with Special Healthcare Needs



Preventing Suicide and Homicide

Homicide includes deaths due to child abuse and neglect

- Screening for emotional, behavioral, and mental health conditions and subsequent referrals to services for the whole family should be part of care coordination efforts and policies. Early access to behavioral health supports for parents of children with special healthcare needs, the children themselves, and their siblings is protective against depression, anxiety, and toxic stress.³¹
- The Department of Education and local school boards are encouraged to collaborate with community and national partners to implement anti-bullying and inclusion campaigns in schools.³³ Students with disabilities are more likely to be bullied by their peers and are more likely to experience social isolation.³²
- Home visiting, parent education, and family support programs should be expanded and enhanced to meet the needs of families of children and youth with special healthcare needs. While these parents can benefit from the traditional coaching on parenting, life skills, and family health, they could also use additional systems navigation skills and stress management/coping techniques³¹ to help learn what is needed to care for a child with special healthcare needs.
- Promote the [988 Suicide & Crisis Lifeline](#), a national network of local crisis centers that provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, seven days a week in the United States. Supports include specific resources for [Individuals with Neurodivergence](#), [Youth, Deaf and Hard of Hearing](#), and [Maternal Mental Health](#) among many others. Call or text 988.



Specialized Equipment

- When families need special medical or safety devices:
 - Pediatricians should provide prescriptions, referrals, and letters of medical necessity to Durable Medical Equipment (DME) companies.
 - Allied health professionals should provide operating and safety education to families who need to use the equipment.
 - Respective vendors should provide regular maintenance and safety inspections and maintain documentation of these activities.
 - Case managers should routinely inquire about equipment issues or needs and facilitate appropriate referrals.
- Insurance companies should expedite authorizations for specialized medical equipment such as the following:
 - Oxygen concentrators
 - Ventilators
 - Bilevel Positive Airway Pressure (BiPAP) machines
 - Suction machines
 - Hospital beds
 - Wheelchairs
 - Stenders/standing aids
 - Enteral feeding pumps
 - Generators for a backup power source (may be provided through insurance or community organizations)

Recommendations and Considerations

Children and Youth with Special Healthcare Needs



Water Safety

- Early intervention specialists, case managers, respite and attendant care service providers, pediatricians, and allied health providers should ensure children have appropriately supportive bath equipment. Providers and public health agencies may need to make referrals for seating assessments, write prescriptions, or provide letters of medical necessity for payer authorizations.
- Providers should familiarize themselves with and refer families to community organizations that offer swimming lessons specifically for children and youth with special healthcare needs, such as [JoJo's Hope](#).²⁹
- “Search” for certified trainers trained to help children with autism, sensory and motor coordination, anxiety, trauma, or simple discomfort in the water. [Swim Angelfish](#) is a leader in adaptive swim instruction providing a certified training program for swim instructors to teach adaptive swim lessons.
- The following resources offer water safety tips for families of children with special needs:
 - chop.edu/resources/water-safety-your-special-needs-child
 - safekids.org/video/water-safety-families-children-special-needs



Fire Safety

- For families who receive in-home early intervention services, case management, attendant or respite care services, allied health services, or home health services, providers should:
 - Regularly document fire safety education and fire drill demonstrations.
 - Perform and document environmental scans noting any risks or hazards.
 - Verify the presence of working smoke detectors, fire extinguishers, and window stickers identifying the location of the child’s bedroom for firefighters. If any of these items are missing in the home, refer families to community organizations that provide smoke detectors, replacement batteries, fire extinguishers, and identifying window stickers.³⁰
- Families with children who are deaf or hard of hearing should use smoke detectors that use visual alarm indicators, such as flashing lights, especially in the room where the child sleeps. Families may contact a Louisiana Commission for the Deaf [Regional Service Center](#) for assistance. Contact information for service centers can be found at ldh.la.gov/LCD.



Appendices

Overview Child Death Review

A Quick Guide to the Child Death Review Process

What is the purpose of the Child Death Review (CDR)?

The Louisiana Department of Health (LDH), Office of Public Health (OPH), Bureau of Family Health (BFH), coordinates the Child Death Review (CDR) Program. Per [R.S. 40:2019](#), reviews are mandatory for all unexpected deaths of children under 15 years of age. State and local panels meet to review child deaths, identify risk factors, and provide recommendations to help reduce the occurrence of child mortality in the future. Review panels are made up of multidisciplinary groups of professionals. These groups are also called case review teams.

What is the difference between the state and local CDR programs?

The state team reviews cases when there are issues that cannot be resolved at the local level or that require policy initiatives that are better addressed by the state panel. The state team is also consulted whenever there are clusters of similar cases in multiple regions throughout the state.

What types of deaths are reviewed?

Deaths of children between birth and 14 years of age who die unexpectedly in Louisiana are eligible for case review, regardless of resident status. Commonly reviewed cases include deaths attributable to unintended injuries, homicide (including those due to child abuse and neglect), suicide, SUID, and unknown causes.

Does anyone review other types of deaths?

There are two other mortality review systems currently used by BFH. These are the Pregnancy Associated Mortality Review (PAMR) and the Fetal Infant Mortality Review (FIMR). Cases in which mothers die during or within one year of pregnancy are reviewed through PAMR. Cases involving infant deaths that do not meet CDR criteria may be reviewed through the FIMR system. These cases include infants who died of medical causes between birth and their first birthday. Finally, deaths due to child abuse and neglect are also reviewed by the Department of Children and Family Services (DCFS). Currently FIMR is currently inactive.

How are the deaths identified?

The Office of State Registrar and Vital Records provides data on newly registered deaths to the Bureau of Family Health's mortality surveillance team each month. Regional Maternal and Child Health (MCH) Coordinators use these data to identify deaths in their respective regions.

What happens after a death is identified?

The Regional MCH Coordinators obtain case information from medical records, autopsies, death scene investigations, and first responder reports. This information is entered into a secure database and used for surveillance at the state level and to create case summaries which are presented for review at regional CDR meetings. The review process uses data to create recommendations to prevent similar deaths in the future.

Who decides what deaths will be presented at the CDR meetings?

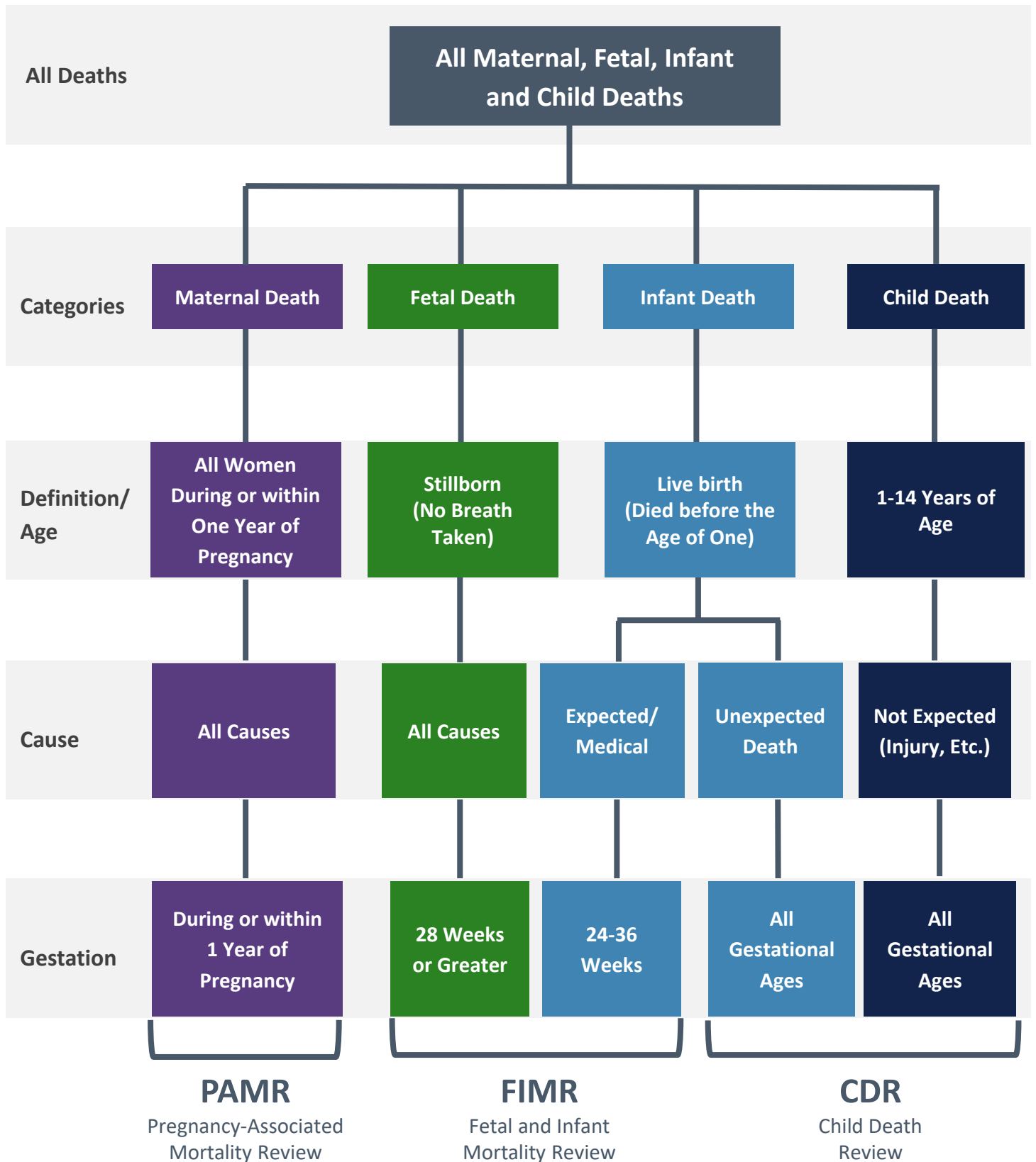
Regional MCH Coordinators are registered nurses charged with, among other duties, coordinating CDR meetings in each of their public health regions. All unexpected deaths of children under 15 years of age are reviewed by CDR teams. In Louisiana, Regional MCH Coordinators use information gathered from case abstraction to determine which cases meet CDR criteria. Criteria are based on age at death, residency status, and cause of death. Please see page 48 for Death Review Algorithm.

How are the recommendations from the CDR meetings used?

Recommendations from the CDR meetings are referred to regional Community Advisory and Action Teams (CAATs). Community advisory and action teams are comprised of multidisciplinary stakeholders who develop action plans based on the recommendations generated from the CDR meetings.

Death Review Algorithm

Bureau of Family Health Case Review Determination



2019-2021 State CDR Members

Position	Current Incumbent
State Health Officer, or designee	Joseph Kanter, M.D./ Lacey Cavanaugh, M.D.
Secretary of the Louisiana Department of Health, or designee	Jane Herwehe
Secretary of the Department of Children and Family Services, or designee	Lori Miller
Superintendent of the Office of the State Police, or designee	Lieutenant Dave Kolb/Barry Ward
State Registrar of the Office of Vital Records, or designee	Devin George
Attorney General, or their designee	Alicia Wheeler
Member of the Senate, appointed by the President of the Senate	Honorable Yvonna Dorsey-Colomb/ Honorable Regina Barrow
Member of the House of Representatives, appointed by the Speaker of the House of Representatives	Honorable Scott Simon / Honorable Julie Emerson
Commissioner of the Department of Insurance, or designee	Rebecca DeLaSalle, J.D.
Representative of the Louisiana Partnership for Children and Families	Sandra Adams
Executive Director of the Highway Safety Commission, or the Department of Public Safety and Corrections	Lisa Freeman, J.D.
District Attorney, appointed by the Louisiana District Attorneys Association	Sunny Funk
Sheriff appointed by the Louisiana Sheriffs Association	Lauren Meher
State Fire Marshal, or designee	Lorre Claiborne
Assistant Secretary of Behavioral Health, or designee	Robyn Thomas
Police Chief, appointed by the Louisiana Association of Chiefs of Police	Chief Tommy Clark / Chief Frank Edwards
Coroner, appointed by the president of the Louisiana Coroner's Association	James Groody
Health professional with expertise in Sudden Infant Death Syndrome	Laurel Kitto
Pediatrician with experience in diagnosing and treating child abuse & neglect	Laura Clayton Kleinpeter, M.D.
State Superintendent of Education, or designee	Janice Zube
Director of the Bureau of Emergency Medical Services, or designee	Amanda Perry
Louisiana Title V Family Leader, Louisiana Birth Defects Monitoring Network Program Manager	Julie Johnston
Four citizens from the state at large who represent different geographic areas of the state	Pam Cart Ashlyn Melton Shana Toole Dawn Vick, M.D. / Laurel Kitto

Regional Maternal and Child Health Coordinators and Mortality Surveillance Team

Region	Coordinator
Region 1	Rosa Bustamante-Forest, A.P.R.N., M.P.H. (2014–2020) Kristy Ferguson, B.S.N. (2020–2022) Stefanie Winters, R.N., IBCLC (2023–Current)
Region 2	Kelly Bankston, B.S.N., R.N. (2013–2019) Rachel Purgatorio, B.S.N., R.N. (2020–2022) Kristen Faulgoust, B.S.N., R.N. (2023–Current)
Region 3	Nicole Soudelier, B.S.N., R.N. (2013–2020) Danielle Mistretta, B.S.N., R.N. (2020– Current)
Region 4	Debra Feller, R.N.
Region 5	Jade Marler, R.N.
Region 6	Lisa Norman, R.N. (2003-2021) Kayla Livingston, B.S.N., R.N. (2021–Current)
Region 7	Shelley Ryan-Gray, B.N., R.N.
Region 8	Sara Dickerson, B.S.N., R.N.
Region 9	Martha Hennegan, R.N.
Maternal and Child Health Coordinator Supervisor	Rosaria Trichilo-Lucas, MPH (2019–2021) Rachel Hyde, RN, MPH (2022) Sara Dickerson, RN, BSN (2023–Current)
Mortality Surveillance Epidemiologist	Jada Brown, M.P.H. (2021–2023)

Note: With the exception of the Regional Maternal and Child Health Coordinators, local CDR membership is voluntary. Therefore, local CDR meetings do not always include the same members.

Acronyms and Key Terms

Acronym	Expansion
ASSB	Accidental Suffocation and Strangulation in Bed (ICD 10 code W75) ¹
BFH	Bureau of Family Health
CDR	Child Death Review
CMDCA	Congenital malformation, deformation and chromosomal abnormality
LDH	Louisiana Department of Health
FIMR	Fetal and Infant Mortality Review
ICD	International Classification of Diseases
MCH	Maternal and Child health
MVC	Motor Vehicle Crash
OPH	Office of Public Health
PAMR	Pregnancy-Associated Mortality Review
PRAMS	Pregnancy Risk Assessment Monitoring System
SIDS	Sudden Infant Death Syndrome (ICD 10 code R95) ¹
SUID	Sudden Unexpected Infant Death (ICD 10 codes W75, R95, and R99*) ¹

*R99 refers to unknown cause of death

Key Term	Definition
Fetal death	Stillborn with gestation greater than 20 weeks or birth weight greater than 350 grams
Infant death	Deaths of infants under 1 year of age
Low birth weight	Less than 2,500 grams at delivery (5.5 lbs.)
Neonatal death	Deaths of infants under 28 days of age
Perinatal death	Fetal deaths plus deaths of infants under 7 days of age
Post-neonatal death	Deaths of infants that occur between 28 days and 365 days after birth

Cause of Death Explanations

Cause of Death	Explanation
Congenital malformations, deformations and chromosomal abnormalities (CMDCA)	Referred to as “Congenital anomalies” throughout Report for ease of reading. This category includes anencephaly and similar malformations, congenital hydrocephalus, spina bifida, other congenital malformations of the nervous system, congenital malformations of the heart, other congenital malformations of the circulatory system, congenital malformations of genitourinary system, congenital malformations and deformations of musculoskeletal system, limbs and integument, Downs syndrome, Edward syndrome, Patau syndrome, other congenital malformations and deformations, and other chromosomal abnormalities not elsewhere classified.
Conditions originating in the perinatal period	Also referred to as “Perinatal Period Conditions” throughout report for ease of reading. This category includes disorders related to the length of gestational age and fetal growth (prematurity and low birth weight), effects from maternal factors and complications, infections specific to the perinatal period, hemorrhage and hematological disorders, and other perinatal conditions.
Diseases of the nervous system	This category includes inflammatory diseases of the central nervous system, systemic atrophies primarily affecting the central nervous system, degenerative diseases of the nervous system and cerebral palsy, and other paralytic syndromes.
Diseases of the circulatory system	This category includes rheumatic fever; hypertensive diseases; ischemic heart disease; pulmonary heart disease and diseases of pulmonary circulation; cerebrovascular diseases; diseases of arteries, arterioles and capillaries; and diseases of veins, lymphatic vessels, and lymph nodes.
Diseases of the respiratory system	This category includes respiratory infections, influenza, pneumonia, lung diseases due to external agents, and diseases of the pleura.
External causes of mortality (injuries)	This category includes deaths from injuries (unintentional and intentional) and causes not related to a medical condition, including motor vehicle accidents, other and unspecified transport accidents, cuts, falls, accidental discharge of firearms, homicide, suicide, drowning and submersion, accidental suffocation and strangulation in bed, and other suffocation and strangulation.
Infectious and parasitic diseases	This category includes transmissible diseases, including intestinal infectious diseases, tuberculosis, zoonotic bacterial diseases, spirochetal diseases, rickettsioses, and viral diseases.
Sudden infant death syndrome (SIDS)	This category includes deaths among infants less than one year of age that occur suddenly and for which the causes of death are not able to be determined even after a full investigation and autopsy.
Sudden unexpected infant death (SUID)	SUID is a term used to describe any sudden and unexpected death, whether explained or unexplained (including Sudden Infant Death Syndrome [SIDS], Accidental Suffocation or Strangulation in Bed [ASSB], and ill-defined deaths), occurring during infancy.

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Other Sources:

Bureau of Family Health website, Partners for Family Health: PartnersForFamilyHealth.org

For Additional Information:

Please contact the Bureau of Family Health at 504-568-3504 or Jada Brown, MPH at Jada.Brown@LA.gov

Cooperative Data Agreement

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Regional Surveillance Reports

2019-2021 Data

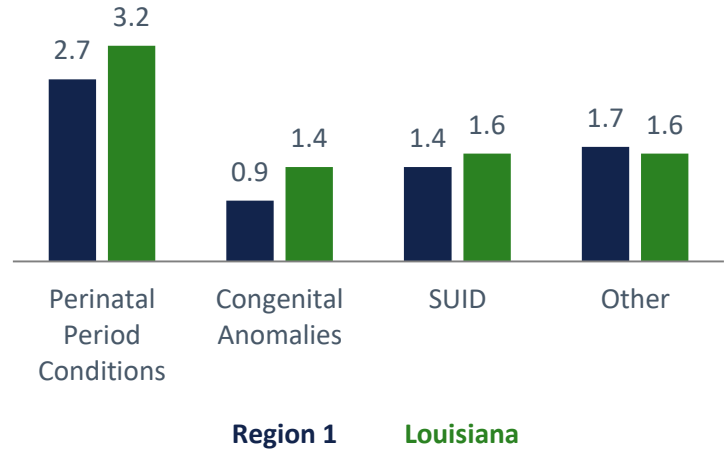
Region 1 Mortality Surveillance Report, 2019-2021

Greater New Orleans Area | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 1:

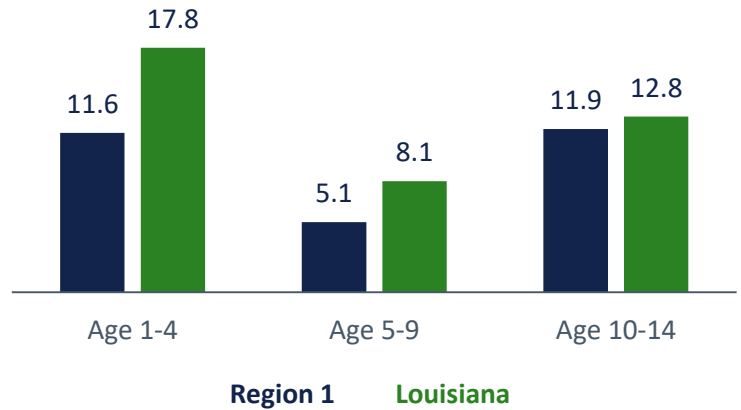
- Death rate is per 1,000 live births.
- **Region 1's infant mortality rate is 6.7 deaths per 1,000 live births, lower than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 1:

- Deaths are per 100,000 children.
- Region 1 has **lower rates of child mortality due to injury** than Louisiana for **children ages 1 to 4, 5 to 9, and 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 1¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Drowning	Homicide	Homicide
2	Homicide	MVC	**	Suicide
3	**	Other	**	MVC

Drowning is the leading cause of death in **ages 1 to 4**. **Homicide** is the leading cause of death in **ages 5 to 9, and 10 to 14**. **SUID** is the leading cause of death in **infants less than 1**.

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

***Other indicates death from another type of unintentional injury, including falls, threats to breathing, and other injuries

Source: 1. Louisiana Vital Records, 2019-2021

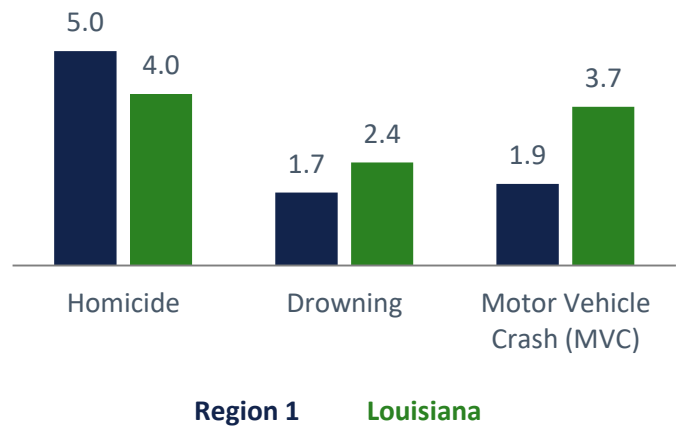
Region 1 Mortality Surveillance Report, 2019-2021

Greater New Orleans Area | Published August 2023

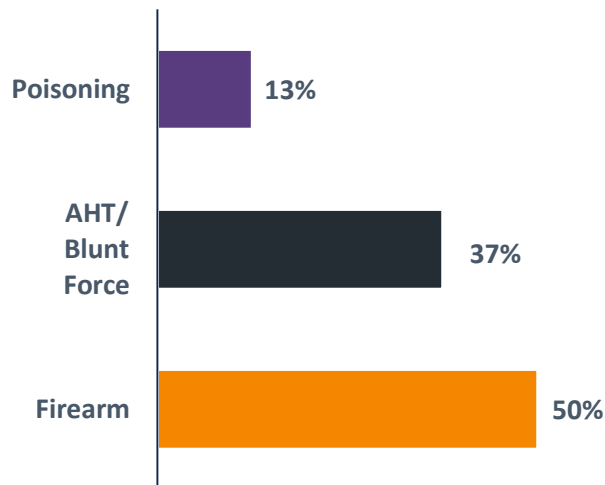
Top Causes of Injury Deaths in Children Ages Birth to 14 between 2019-2021¹

About Child Death Due to Injury in Region 1:

- Deaths are per 100,000 children ages birth to 14.
- **Region 1's total unexpected child death rate** of children ages birth to 14 years between 2019-2021 is **11.7 per 100,000 children**. Louisiana's is 14.4.
- **Region 1 surpasses Louisiana** in the rate of deaths by **homicide**.
- Region 1 has the third **highest homicide death rate** of the nine regions in the state.



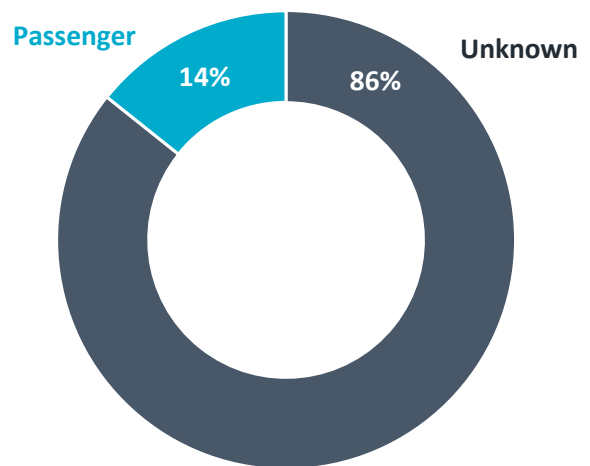
Means Used in Homicide Deaths of Children Ages Birth to 14 years in Region 1, 2019-2021¹



About Homicide Deaths:

- Homicide deaths in infants and children in Region 1 are commonly due to **abusive head trauma (AHT), blunt force injuries, and firearms**.

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 1, 2019-2021²



About Motor Vehicle Crash Deaths:

- **86%** of the motor vehicle crash deaths occur when the **child's position was unknown**.
- Another **14%** of deaths occur when the **child is a passenger**.

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

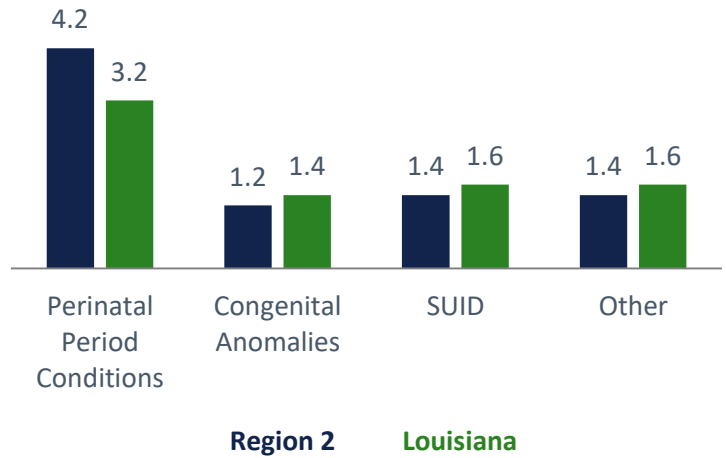
Region 2 Mortality Surveillance Report, 2019-2021

Baton Rouge Area | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 2:

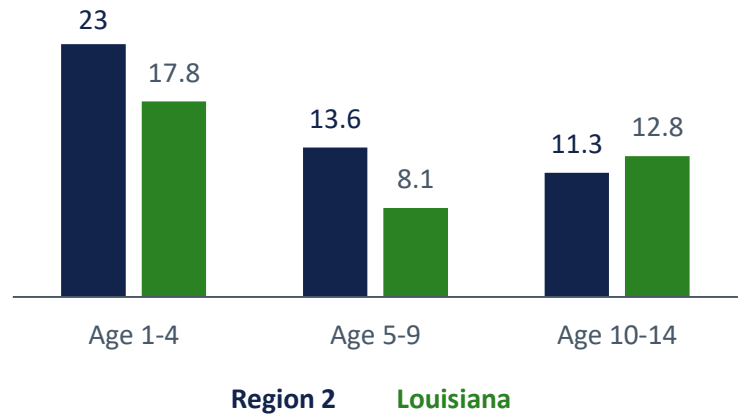
- Death rate is per 1,000 live births.
- **Region 2's infant mortality rate is 8.1 deaths per 1,000 live births, greater than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category** includes respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 2:

- Deaths are per 100,000 children.
- Region 2 has **higher rates of child mortality due to injury** than Louisiana for **children ages 1 to 4, and 5 to 9.**
- Region 2 has **lower rates of child mortality due to injury** than Louisiana for **children 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 2¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Drowning	MVC	Homicide
2	Homicide	MVC (Tie)	Fire (Tie)	MVC
3	**	Homicide (Tie)	Drowning (Tie)	**

Drowning is the leading cause of death in **ages 1 to 4. Motor vehicle crashes** is the leading cause of death in **ages 5 to 9. Homicide** is the leading cause of death in **ages 10 to 14. SUID** is the leading cause of death in **infants less than 1.**

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

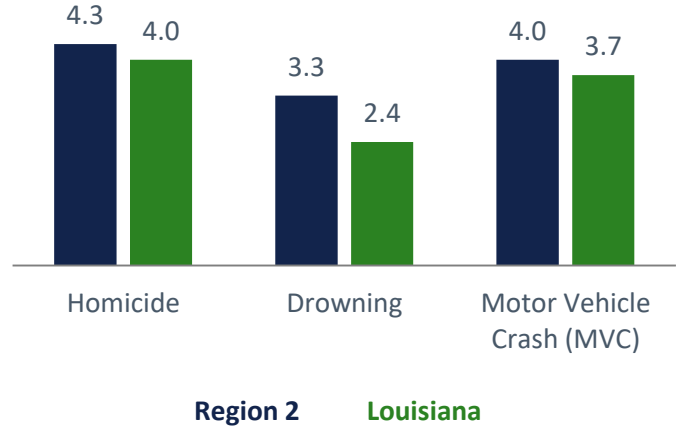
Region 2 Mortality Surveillance Report, 2019-2021

Baton Rouge Area | Published August 2023

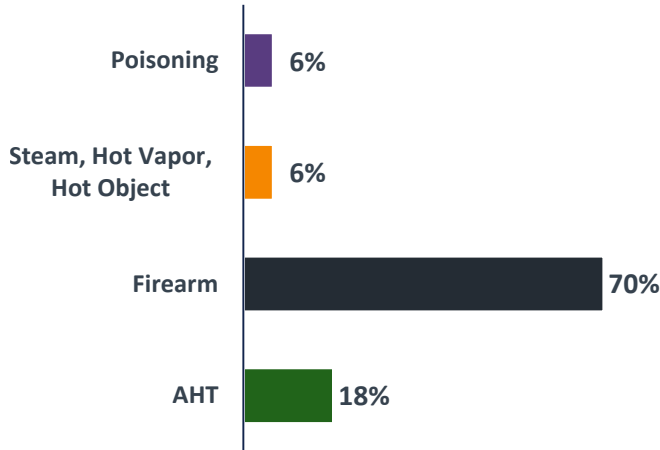
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 2:

- Deaths are per 100,000 children ages birth to 14.
- **Region 2's total unexpected child death rate** of children ages birth to 14 between 2019-2021 is **16.2 per 100,000 children**. Louisiana's is 14.4.
- **Region 2 surpasses Louisiana in the rate of deaths by homicide, drowning, and motor vehicle crash.**



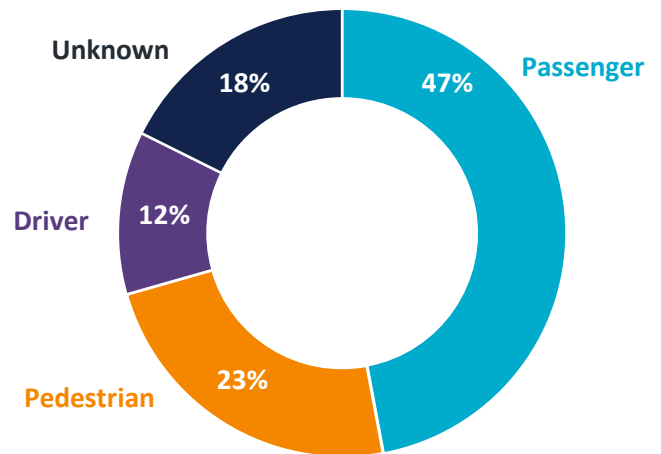
Types of Homicide Deaths in Children Ages Birth to 14 in Region 2, 2019-2021¹



About Homicide Deaths:

- **More than half are due to Firearms.**
- **The remaining deaths** were due to hanging or strangulation, poisoning, burning, and abusive head trauma (AHT).

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 2, 2019-2021²



About Motor Vehicle Crash Deaths:

- **Almost half of Motor Vehicle Crash deaths occur in vehicle passengers.**

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

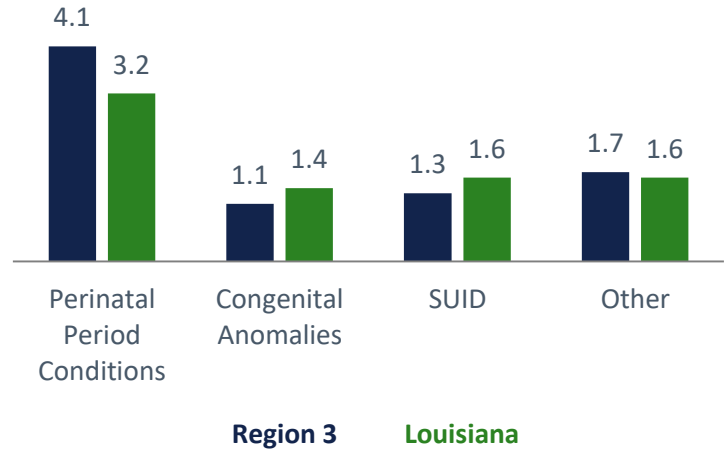
Region 3 Mortality Surveillance Report, 2019-2021

South Central Louisiana | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 3:

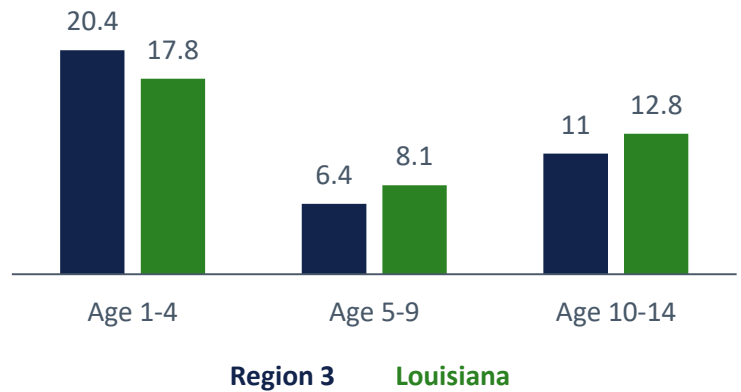
- Death rate is per 1,000 live births.
- **Region 3's infant mortality rate is 8.2 deaths per 1,000 live births, greater than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 3:

- Deaths are per 100,000 children.
- Region 3 has **higher rates of child mortality due to injury** than Louisiana for **children ages 1 to 4.**
- Region 3 has **lower rates of child mortality due to injury** than Louisiana for **children ages 5 to 9 and 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 3¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	MVC	**	MVC
2	**	Drowning (Tie)	**	Homicide
3	**	Homicide (Tie)	**	**

Motor vehicle crashes are the leading cause of death in ages **1 to 4 and 10 to 14.** **SUID** is the leading cause of death in **infants less than 1.**

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

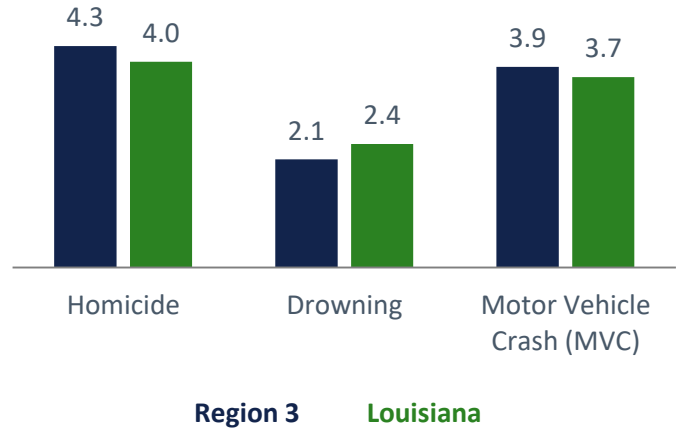
Region 3 Mortality Surveillance Report, 2019-2021

South Central Louisiana | Published August 2023

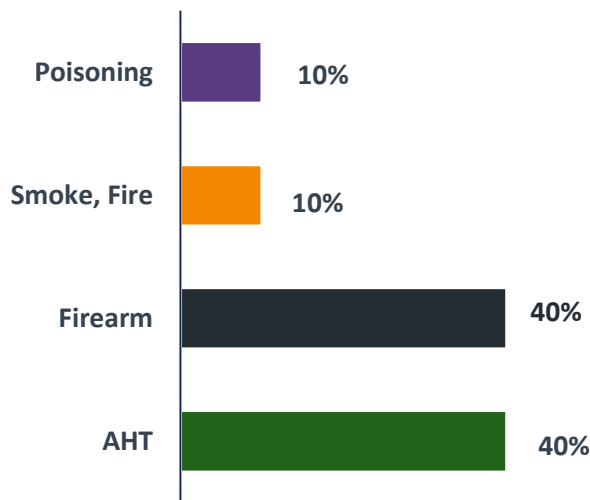
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 3:

- Deaths are per 100,000 children ages birth to 14.
- **Region 3's total unexpected child death rate** of children ages birth to 14 between 2019-2021 is **13.7 per 100,000 children**. Louisiana's is **14.4**.
- **Region 3 surpasses Louisiana** in the rate of deaths by homicide and motor vehicle crash.



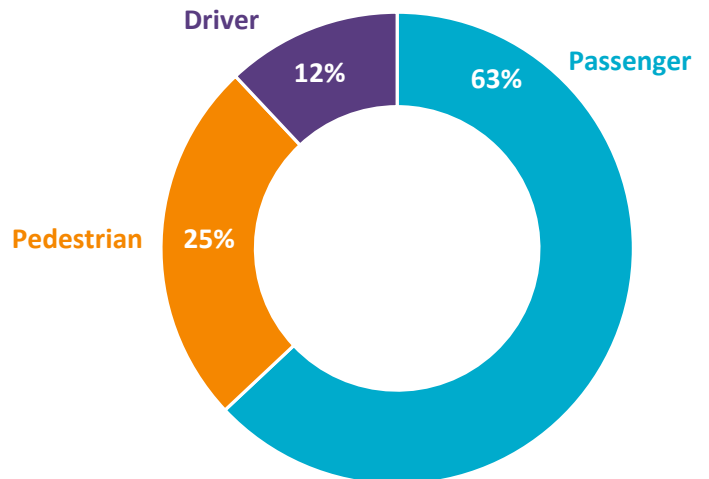
Types of Homicide Deaths in Children Ages Birth to 14 in Region 3, 2019-2021¹



About Homicide Deaths:

- **40% of homicides** are due to firearms.
- **40% of homicides** are due to abusive head trauma (AHT).
- **The remaining deaths** were due to hanging or strangulation, poisoning, and burning

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 3, 2019-2021²



About Motor Vehicle Crash Deaths:

- **63% of the motor vehicle crash deaths** occur when the child is a passenger in the vehicle.
- Another **25% of deaths** occur when the child is a pedestrian.

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

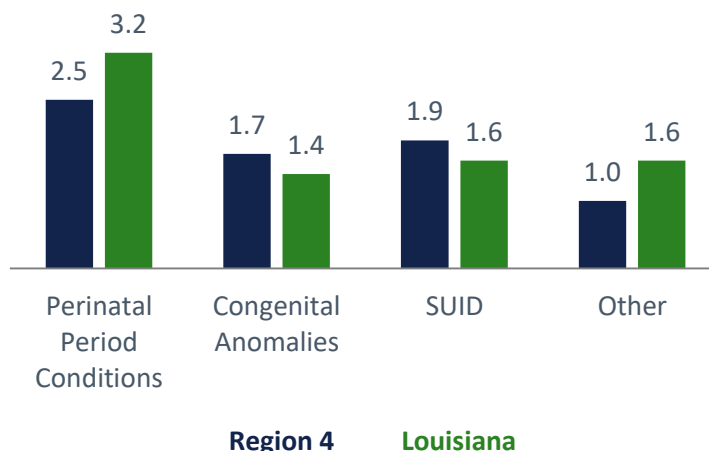
Region 4 Mortality Surveillance Report, 2019-2021

Acadiana | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 4:

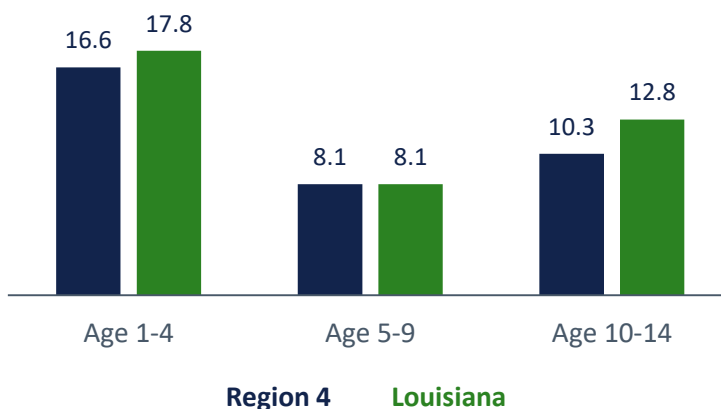
- Death rate is per 1,000 live births.
- **Region 4's infant mortality rate is 7 deaths per 1,000 live births, lower than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 1:

- Deaths are per 100,000 children.
- Region 4 has the **same child mortality rate due to injury** as Louisiana for **children ages 5 to 9.**
- Region 4 has **lower rates of child mortality due to injury** than Louisiana for **children ages 1 to 4, and 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 4¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	MVC	MVC	MVC
2	**	Drowning	**	Suicide
3	**	**	**	**

Motor vehicle crashes are the leading cause of death in ages 1 to 4, 5 to 9, and 10 to 14. SUID is the leading cause of death in infants less than 1.

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

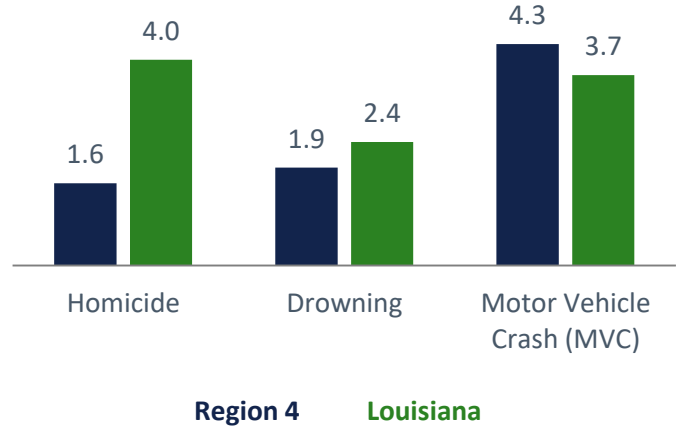
Region 4 Mortality Surveillance Report, 2019-2021

Acadiana | Published August 2023

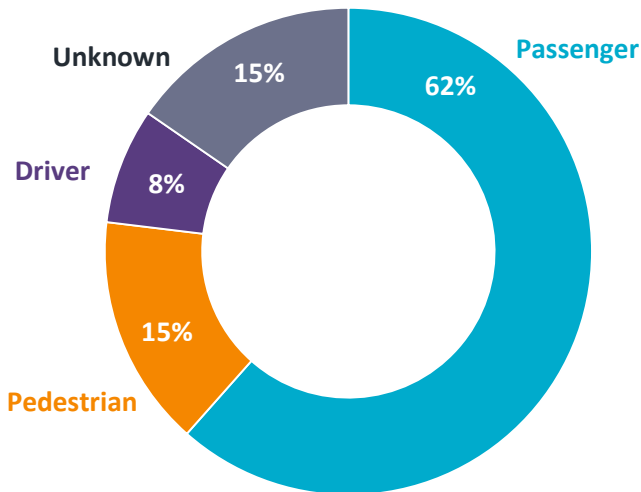
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 4:

- Deaths are per 100,000 children ages birth to 14.
- **Region 4's total unexpected child death rate** of children ages birth to 14 between 2019-2021 is **12.1 per 100,000 children**. Louisiana's is 14.4.
- **Region 4 surpasses Louisiana in the rate of deaths by motor vehicle crash.**
- Region 4 has the **third highest motor vehicle crash death rate** of the nine regions in the state.



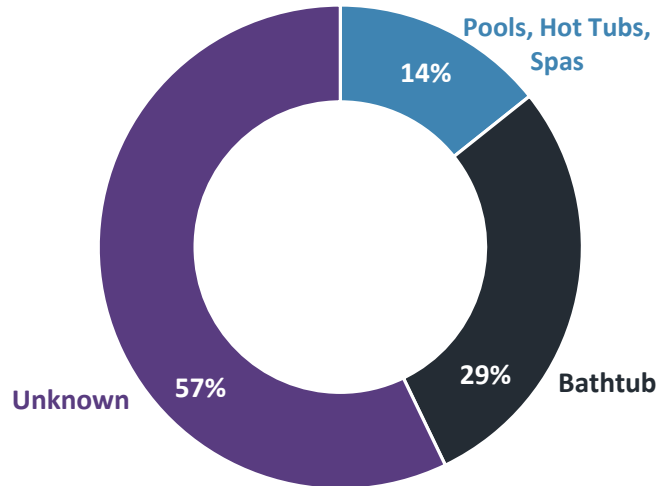
Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 4, 2019-2021²



About Motor Vehicle Crash Deaths:

- **More than half** of motor vehicle crash deaths occur in vehicle passengers.

Types of Drowning Deaths in Children Ages Birth to 14 in Region 4, 2019-2021²



About Drowning Deaths:

- **29 %** of Region 4 drowning deaths occurred in a bathtubs.
- The **most common contributors to drowning deaths** are **lack of barriers to water** and **lack of supervision.**²

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

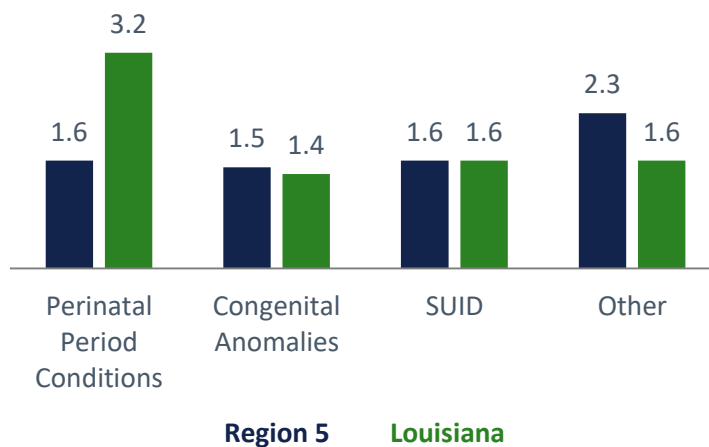
Region 5 Mortality Surveillance Report, 2019-2021

Southwest Louisiana | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 5:

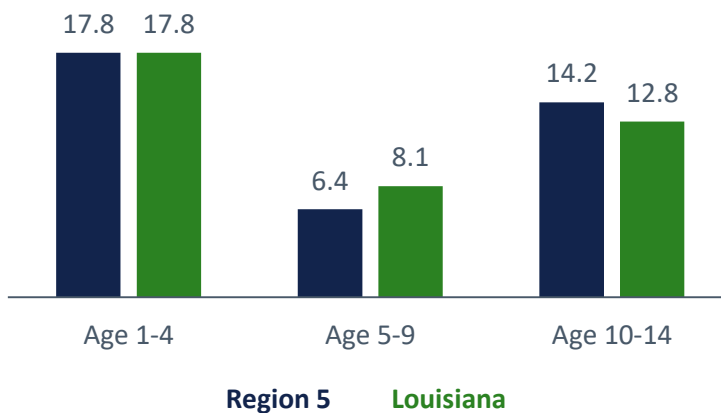
- Death rate is per 1,000 live births.
- **Region 5's infant mortality rate is 7 deaths per 1,000 live births, lower than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 5:

- Deaths are per 100,000 children.
- Region 5 has **the same child mortality rate due to injury** as Louisiana for **children ages 1 to 4.**
- Region 5 has **higher rates of child mortality due to injury** than Louisiana for **children ages 10 to 14.**
- Region 5 has **lower rates of child mortality due to injury** than Louisiana for **children ages 5 to 9.**



Top Causes of Unexpected Death by Age Group in Region 5¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Drowning	MVC	MVC
2	**	**	**	**
3	**	**	**	**

Drowning is the leading cause of death in **ages 1 to 4.** **motor vehicle crashes** are the leading cause of death in **ages 5 to 9 and 10 to 14.** **SUID** is the leading cause of death in **infants less than 1.**

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

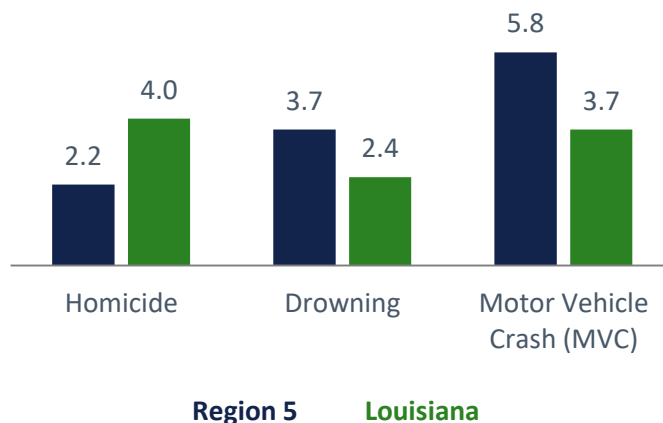
Region 5 Mortality Surveillance Report, 2019-2021

Southwest Louisiana | Published August 2023

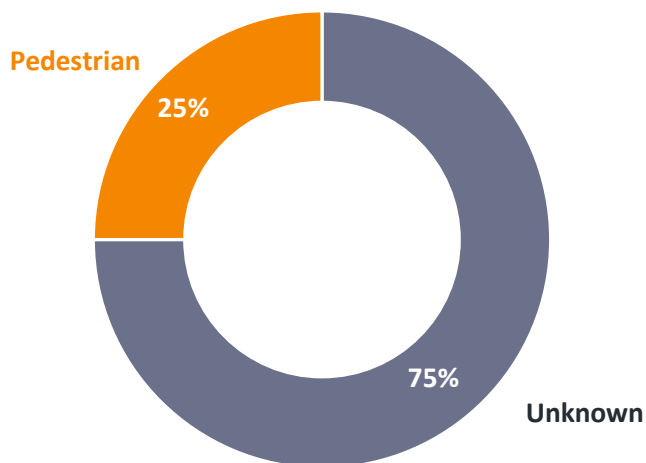
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 5:

- Deaths are per 100,000 children ages birth to 14.
- **Region 5’s total unexpected child death rate of children ages birth to 14 between 2019-2021 is 14.8 per 100,000 children. Louisiana’s is 14.4.**
- **Region 5 surpasses Louisiana in the rate of deaths by drowning and motor vehicle crash.**
- **Region 5 has the highest motor vehicle crash death rate and the second the highest drowning death rate of the nine regions in the state.**



Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 5, 2019-2021²

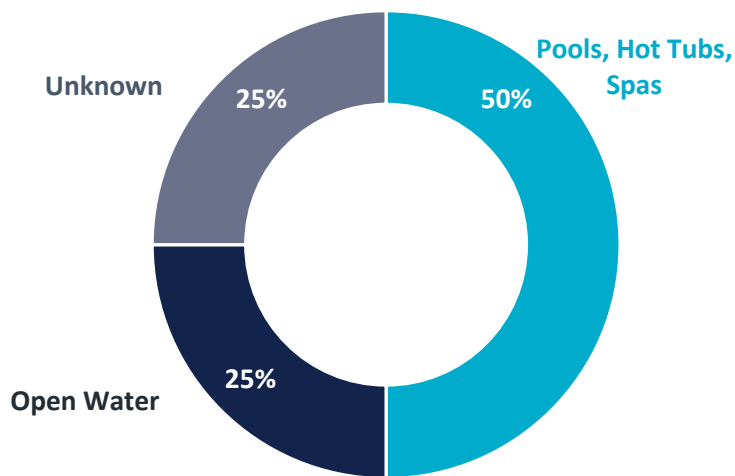


About Motor Vehicle Crash Deaths:

- **25% of the MVC deaths occur in pedestrians.**
- **75% of cases the child’s position at death was unknown**

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

Types of Drowning Deaths in Children Ages Birth to 14 in Region 5, 2019-2021²



About Drowning Deaths:

- **50% of Region 5 drowning deaths occurred in pools, hot tubs, and spas.**
- **The most common contributors to drowning deaths are lack of barriers to water and lack of supervision.²**

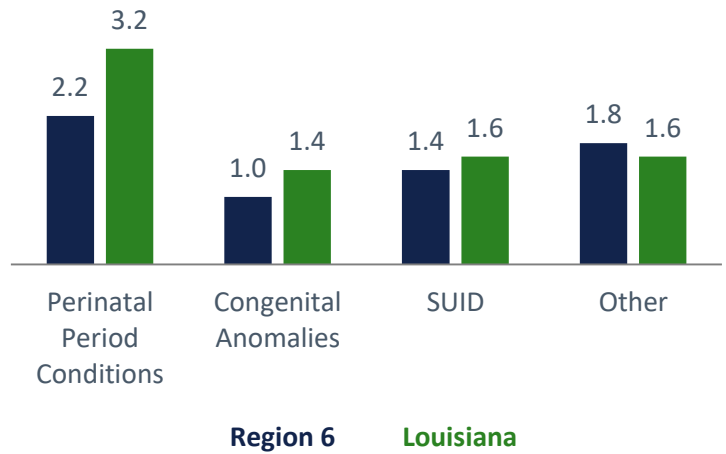
Region 6 Mortality Surveillance Report, 2019-2021

Central Louisiana | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 6:

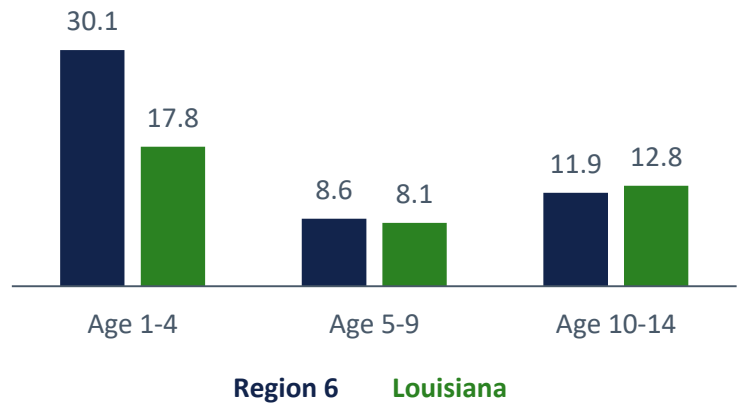
- Death rate is per 1,000 live births.
- **Region 6's infant mortality rate is 6.5 deaths per 1,000 live births, lower than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 6:

- Deaths are per 100,000 children.
- Region 6 has **higher rates of child mortality due to injury** than Louisiana for **children ages 1 to 4 and 5 to 9.**
- Region 6 has **lower rates of child mortality due to injury** than Louisiana for **children ages 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 6¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Drowning	**	MVC
2	Homicide	MVC	**	**
3	**	**	**	**

Drowning is the leading cause of death in **ages 1 to 4.** **motor vehicle crashes** is the leading cause of death in **ages 10 to 14.** **SUID** is the leading cause of death in **infants less than 1.**

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

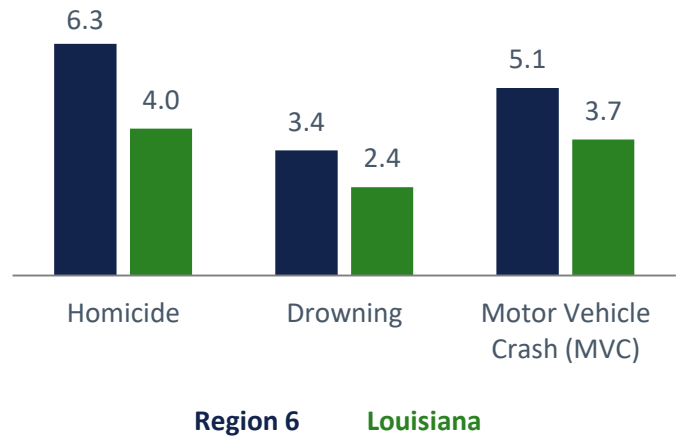
Region 6 Mortality Surveillance Report, 2019-2021

Central Louisiana | Published August 2023

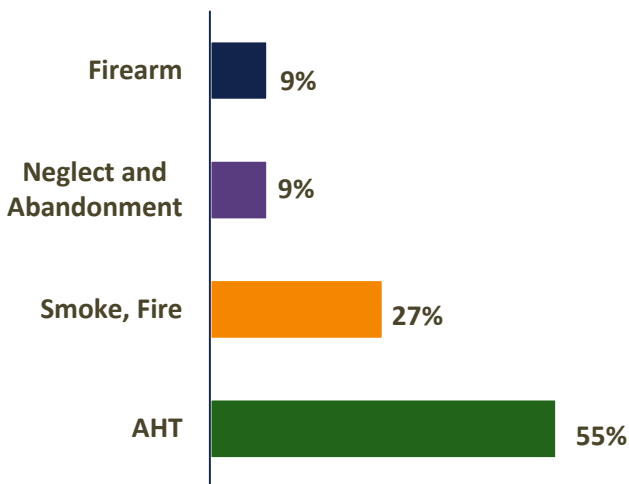
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 6:

- Deaths are per 100,000 children ages birth to 14.
- **Region 6's total unexpected child death rate** of children ages birth to 14 between 2019-2021 is **20.5 per 100,000 children**. Louisiana's is **14.4**.
- **Region 6 surpasses Louisiana** in the rate of deaths by **homicide, drowning, and motor vehicle crashes**.
- Region 6 has the **highest homicide death rate, the second highest motor vehicle crash death rate and the third highest drowning death rate** of the nine regions in the state.



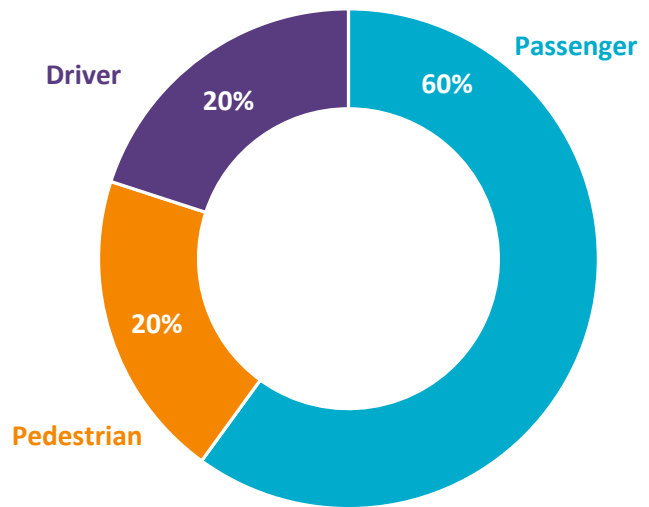
Types of Homicide Deaths in Children Ages Birth to 14 in Region 6, 2019-2021¹



About Homicide Deaths:

- **More than half** of Region 6 homicides are due to **abusive head trauma (AHT)** and **27%** of Region 6 homicides are due **smoke and fire inhalation**.

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 6, 2019-2021²



About Motor Vehicle Crash Deaths:

- **More than half** of MVC deaths occur in **vehicle passengers**.
- **In 20%** of MVC deaths the child was either **driving or a pedestrian**.

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

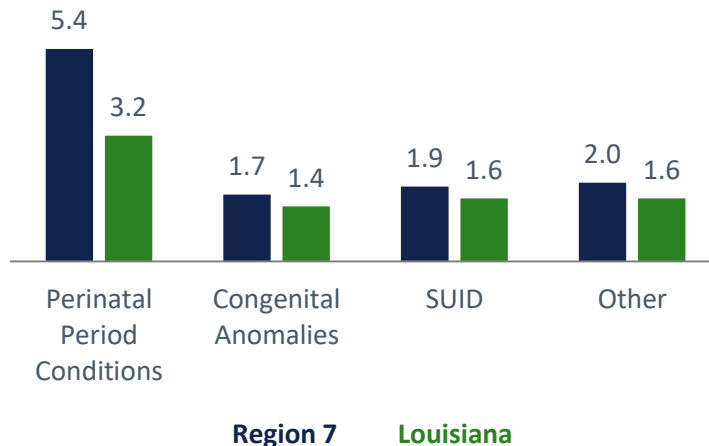
Region 7 Mortality Surveillance Report, 2019-2021

Northwest Louisiana | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 7:

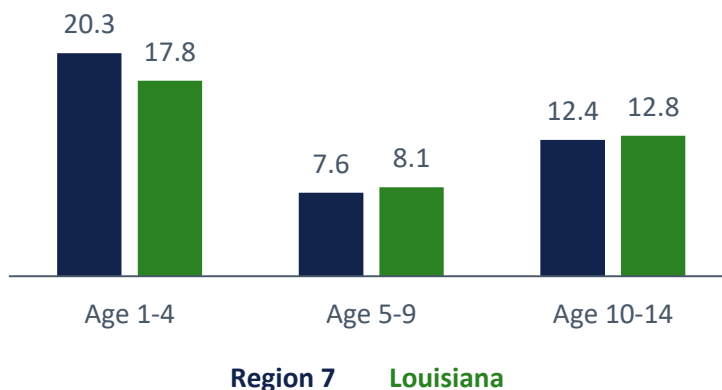
- Death rate is per 1,000 live births.
- **Region 7's infant mortality rate is 11 deaths per 1,000 live births, greater than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 7:

- Deaths are per 100,000 children.
- Region 7 has **higher rates of child mortality due to injury** than Louisiana for **children ages 1 to 4.**
- Region 7 has **lower rates of child mortality due to injury** than Louisiana for **children ages 5 to 9 and 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 7¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Homicide	MVC	Suicide (Tie)
2	Homicide (Tie)	Drowning (Tie)	**	MVC (Tie)
3	Threats to Breathing (Tie)	MVC (Tie)	**	Homicide

Homicide is the leading cause of death in **ages 1 to 4**. **Motor vehicle crashes** is the leading cause of death in **ages 5 to 9**. **Suicide and motor vehicle crashes** are tied for the leading cause of death in **ages 10 to 14**. **SUID** is the leading cause of death in **infants less than 1**.

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

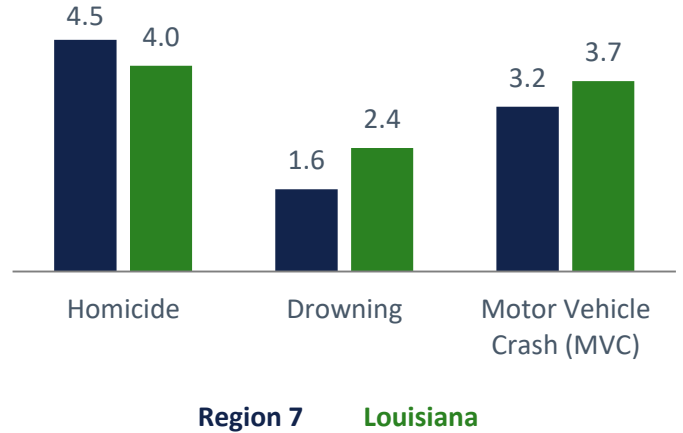
Region 7 Mortality Surveillance Report, 2019-2021

Northwest Louisiana | Published August 2023

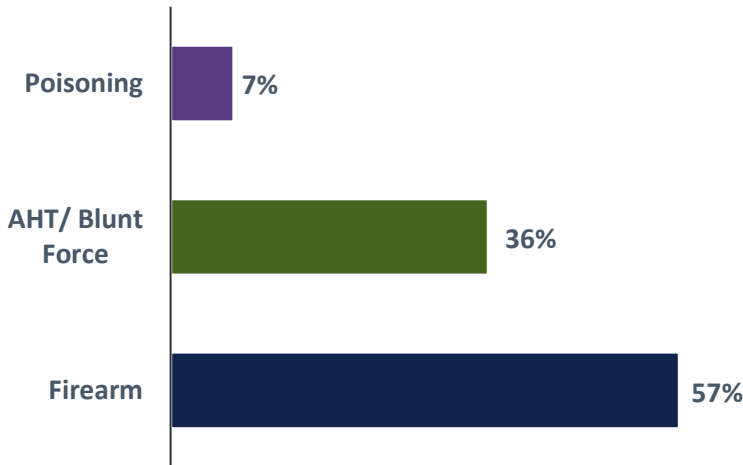
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 7:

- Deaths are per 100,000 children ages 0 to 14.
- **Region 7's total unexpected child death rate** of children ages birth to 14 between 2019-2021 is **14.3 per 100,000 children. Louisiana's is 14.4.**
- **Region 7 surpasses Louisiana** in the rate of deaths by homicide.



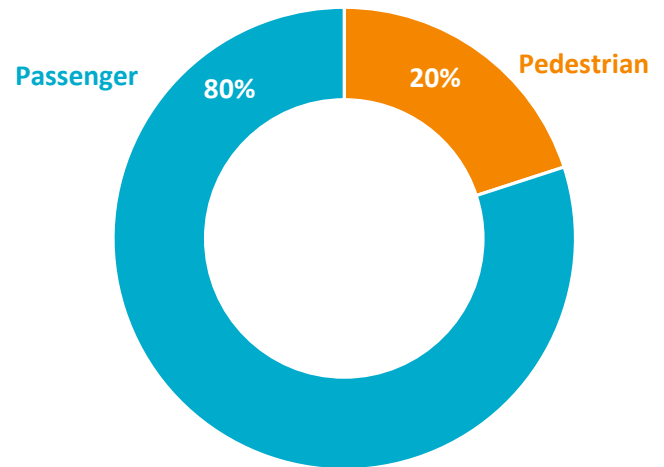
Means Used in Homicide Deaths of Children Ages Birth to 14 in Region 7, 2019-2021¹



About Homicide Deaths:

- **More than half** of homicide deaths in Region 7 occur due to **firearms**.
- **The remaining deaths** were due poisoning, and **abusive head trauma (AHT), or blunt force injuries.**

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 7, 2019-2021²



About Motor Vehicle Crash Deaths:

- **More than three out of four** MVC deaths in Region 7 occur when the **child is a passenger** in the vehicle.

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

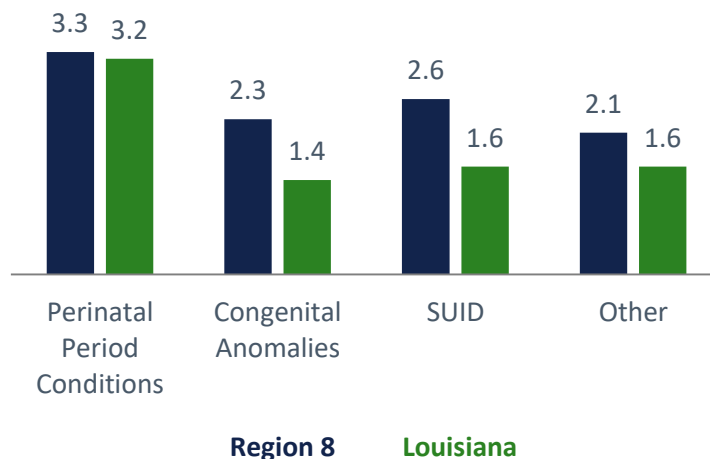
Region 8 Mortality Surveillance Report, 2019-2021

Northeast Louisiana | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 8:

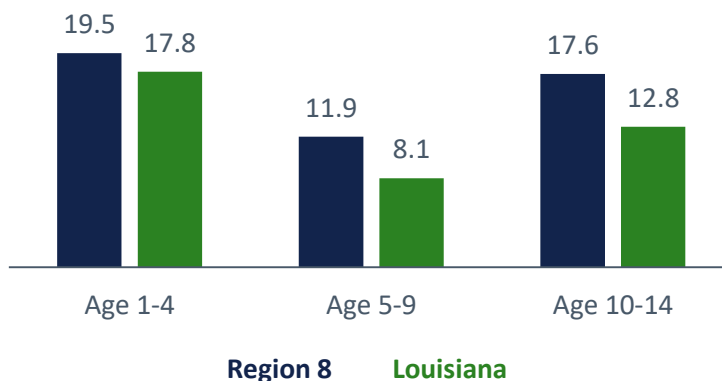
- Death rate is per 1,000 live births.
- **Region 8's infant mortality rate is 10.3 deaths per 1,000 live births, greater than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 8:

- Deaths are per 100,000 children.
- Region 8 has **higher rates of child mortality due to injury** than Louisiana for **children ages 1 to 4, 5 to 9, and 10 to 14.**



Top Causes of Unexpected Death by Age Group in Region 8¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Drowning	MVC	Homicide
2	Homicide	Other***	**	**
3	**	**	**	**

Drowning is the leading cause of death in **ages 1 to 4**. **Motor vehicle crashes** is the leading cause of death in **ages 5 to 9**. **Homicide** is the leading cause of death in **ages 10 to 14**. **SUID** is the leading cause of death in **infants less than 1**.

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

***Other indicates death from another type of unintentional injury, including falls, threats to breathing, and other injuries

Source: 1. Louisiana Vital Records, 2019-2021

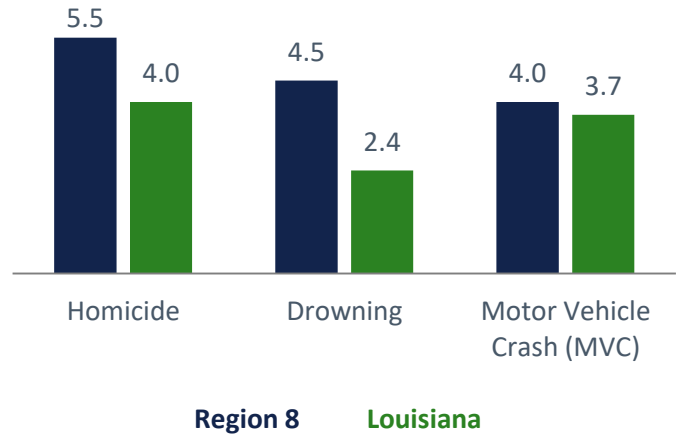
Region 8 Mortality Surveillance Report, 2019-2021

Northeast Louisiana | Published August 2023

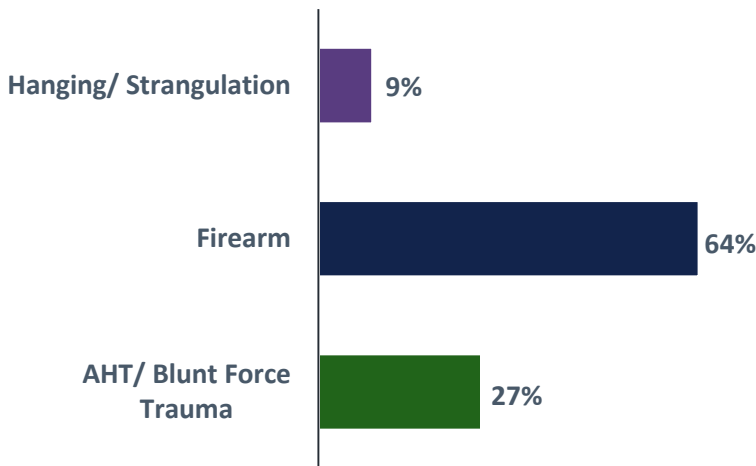
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 8:

- Deaths are per 100,000 children ages birth to 14.
- **Region 8's total unexpected child death rate** of children ages birth to 14 between 2019-2021 is **19.5 per 100,000 children**. Louisiana's is **14.4**.
- **Region 8 surpasses Louisiana** in the rate of deaths by **homicide, drowning, and motor vehicle crash**.
- Region 8 has the **highest drowning death rate and second highest homicide death rate** of the nine regions in the state.



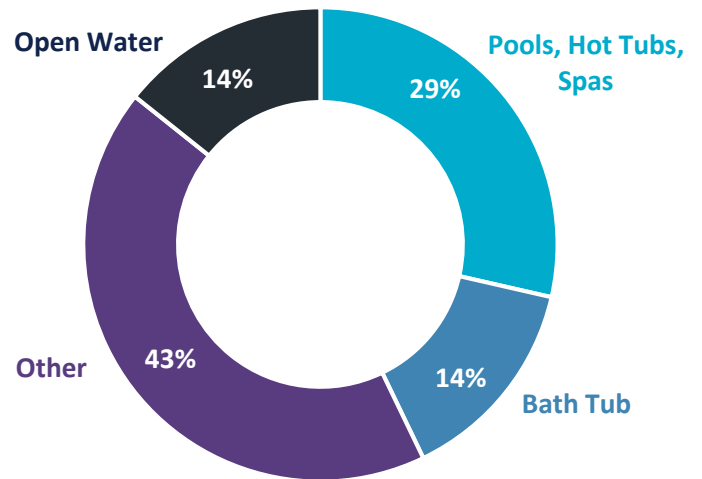
Types of Homicide deaths in Children Ages Birth to 14 in Region 8, 2019-2021¹



About Homicide Deaths:

- **More than half** of homicide deaths in Region 8 occur due to **firearms**.

Drowning Deaths in Children Ages Birth to 14 in Region 8, 2019-2021²



About Drowning Deaths:

- **29%** of child drowning deaths occur in **pools, hot tubs, and spas**.
- The **most common contributors to drowning deaths** are **lack of barriers to water and lack of supervision**.²

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review

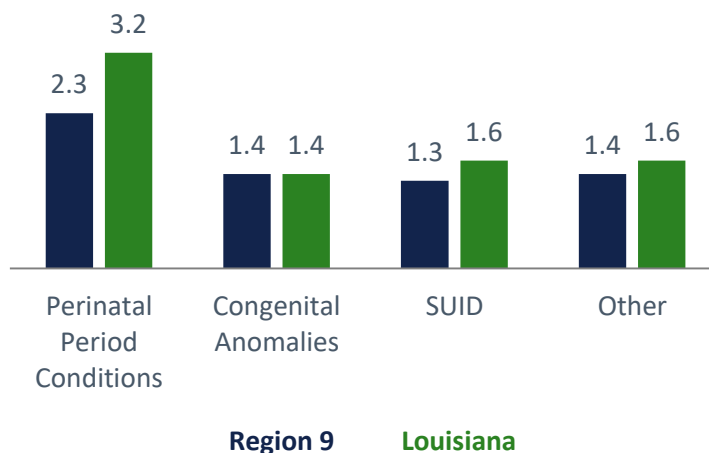
Region 9 Mortality Surveillance Report, 2019-2021

Northshore Area | Published August 2023

Top Causes of Infant Death (Medical and Injury) between 2019-2021¹

Infant Death in Region 9:

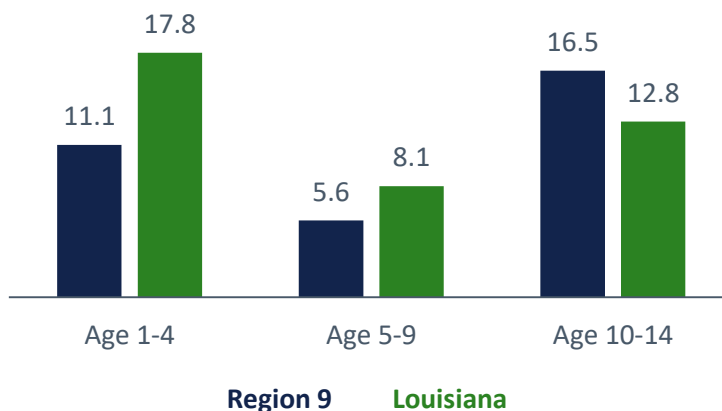
- Death rate is per 1,000 live births.
- **Region 9's infant mortality rate is 6.4 deaths per 1,000 live births, lower than Louisiana's rate of 7.8.**
- **The Healthy People 2020 Goal for infant mortality is 5 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category includes** respiratory conditions, circulatory diseases, threats to breathing, inhalation of food or objects, injuries, etc.



Child Mortality Rate due to Injury by Age Group between 2019-2021¹

About Child Mortality Due to Injury in Region 9:

- Deaths are per 100,000 children.
- Region 9 has **higher rates of child mortality due to injury** than Louisiana for **children ages 10 to 14.**
- Region 9 has **lower rates of child mortality due to injury** than Louisiana for **children ages 1 to 4 and 5 to 9.**



Top Causes of Unexpected Death by Age Group in Region 9¹

Rank	Age 0-1	Age 1-4	Age 5-9	Age 10-14
1	SUID*	Drowning (Tie)	Falls	MVC
2	Homicide	Homicide (Tie)	**	Suicide
3	Threats to breathing	**	**	Homicide

Drowning and homicide are the leading causes of death in **ages 1 to 4**. Falls is the leading cause of death in **ages 5 to 9**. MVC is the leading cause of death in **ages 10 to 14**. SUID is the leading cause of death in **infants less than 1**.

*Sudden Unexpected Infant Death

** Blank boxes indicate causes with very few cases. These causes are hidden to protect individual privacy.

Source: 1. Louisiana Vital Records, 2019-2021

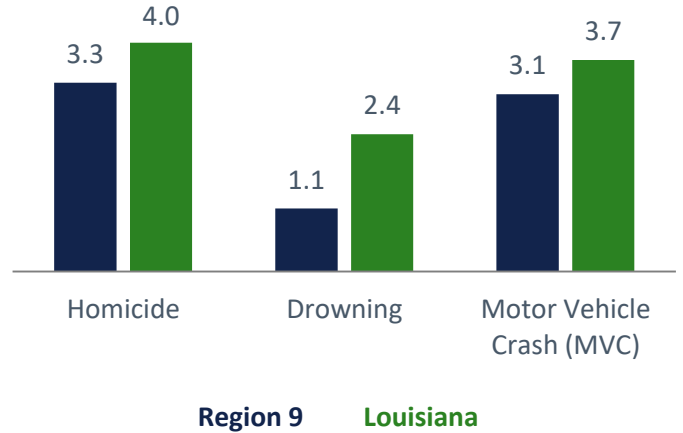
Region 9 Mortality Surveillance Report, 2019-2021

Northshore Area | Published August 2023

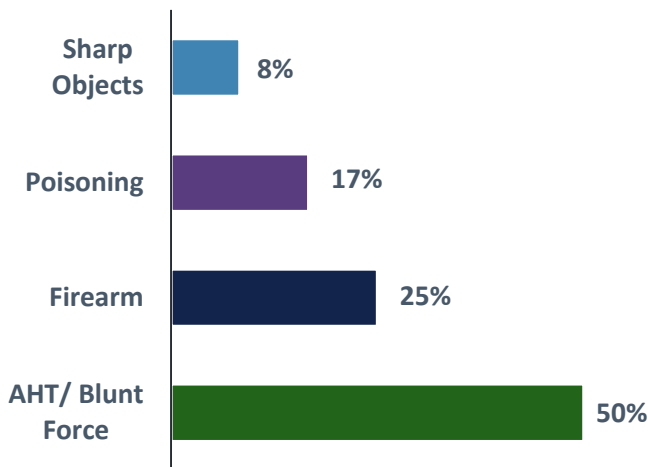
Top Causes of Injury Deaths in Children Ages 0-14 between 2019-2021¹

About Child Death Due to Injury in Region 9:

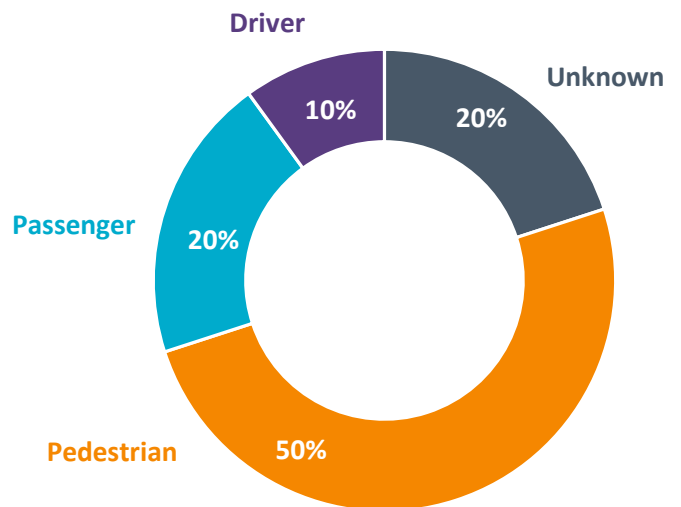
- Deaths are per 100,000 children ages birth to 14.
- **Region 9's total unexpected child death rate of children ages birth to 14 between 2019-2021 is 12.8 per 100,000 children. Louisiana's is 14.4.**



Means Used in Homicide Deaths of Children Ages Birth to 14 in Region 9, 2019-2021¹



Types of Motor Vehicle Crash (MVC) Deaths in Children Ages Birth to 14 in Region 9, 2019-2021²



About Homicide Deaths:

- **Half of homicide deaths in infants and children are due to abusive head trauma (AHT), or blunt force injuries.**

About Motor Vehicle Crash Deaths:

- **Half of the deaths occur when the child is a pedestrian.**
- **Another 20% of deaths occur when the child is a passenger.**

Sources: 1. Louisiana Vital Records, 2019-2021; 2. Louisiana Child Death Review