

LOUISIANA CHILD DEATH REVIEW

2018-2020

**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, 2018 – 2020

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 (LDH), Office of Public Health (OPH), 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 Sudden Unexpected Infant Death Case Registry grant.

Summation of Data and Statistics

Every year in Louisiana, an average of 59,000 infants are born alive. Of these infants, approximately **464 die before their first birthday**, and **another 192 children do not survive to their 15th birthday**. From 2018-2020, **1,966 children died**, representing a **yearly average of 656 infant and child deaths**. During this time period, Louisiana ranked in the top ten states with the **highest mortality rates for infants and children** in almost all age groups.

The CDR program focuses on preventable and unexpected deaths. Between 2018 and 2020, 628 infants and children died due to injury. **About one third of all infant (less than 1 year of age) and child (ages 1-14 years) 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 years.

About This Report

To achieve sufficient sample size for statistical reporting, the 2018-2020 Louisiana CDR Report reflects infant and child mortality over a three-year period. 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. The report highlights preventable injury deaths, and additional data are included 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

Data from LDH's Office of the State Registrar and Vital Records were used to determine causes of death. BFH uses the International Classification of Diseases (ICD-10) guidelines¹ to categorize causes of death. In addition to cause of death, death certificates were used to assess age, race, gender, date of death, and parish of residence. Data were analyzed 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 LDH-OPH-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 2020

Healthy People objectives are selected by a multi-disciplinary team of experts to highlight national health priorities. Every 10 years, goals are selected 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

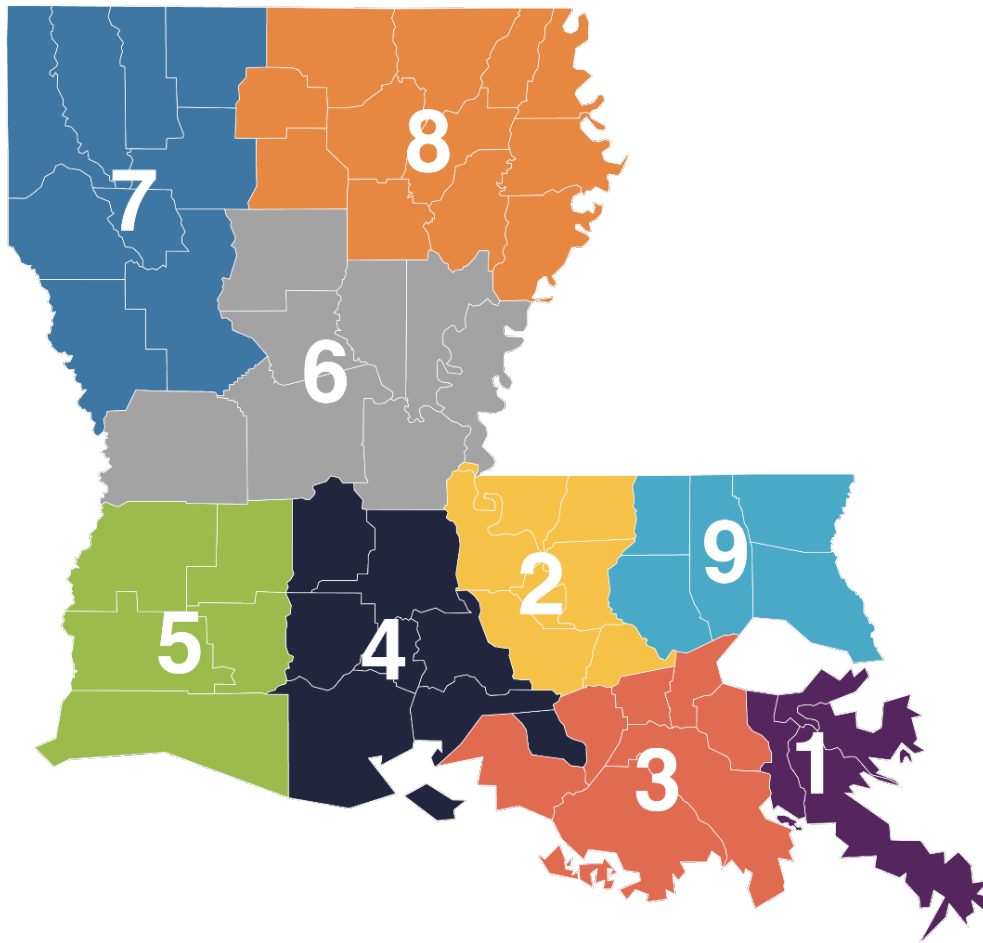
Many key indicators are presented at the regional level, and therefore have smaller counts. Rates based on counts fewer than 20 are considered unstable and should be interpreted with caution, as these numbers, percentages or rates may change in the future with the addition or loss of a small number of 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 5 are suppressed to preserve confidentiality. Any cause of death category with counts fewer than 5 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

2018-2020 Data

Infant Mortality: All Causes

Birth to 1 year

From 2018-2020 in Louisiana, an average of **464** infants per year died before they reached their first birthday.²



The Louisiana infant mortality rate from 2018-2020 was **7.9 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. **139 fewer** babies would have died each year if Louisiana had the same infant mortality rate as the U.S.

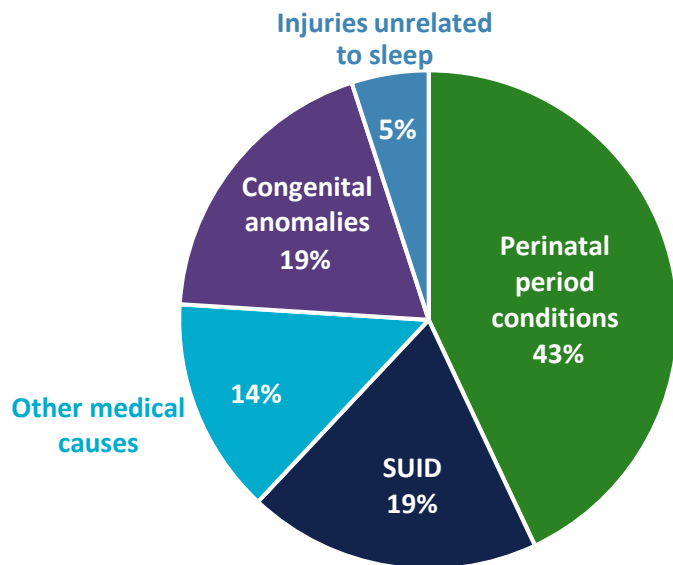
Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking ²
7.9	5.6	6.0	2nd highest in the U.S.

Infant Deaths by Region (2017-2019) ²	1	2	3	4	5	6	7	8	9
Average annual infant death counts	76	71	40	55	30	27	74	40	49
Infant mortality rate per 1,000 live births	7.0	8.3	8.3	6.9	7.1	7.0	11.3	9.5	6.8

Causes of Infant Death

Each year, an average of...²

- **198** infants died from conditions originating in the perinatal period
- **90** infant deaths were classified as Sudden Unexpected Infant Deaths (SUID), which primarily occur in the sleep environment
- **87** infants died from congenital anomalies
- **67** infants died from other medical causes
- **22** infants died from injuries not related to sleep environments



Key Points

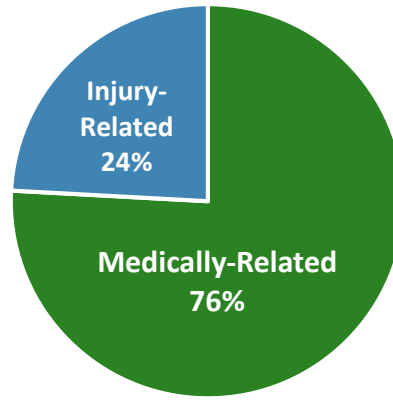
- From 2018-2020, Louisiana had the second highest infant mortality rate in the country.
- Maternal health before conception and during pregnancy is closely linked to the leading cause of infant death: conditions originating in the perinatal period (see [Appendix pg. 52](#) for full definition). 43% of infant deaths are due to these conditions. Within that category, low birth weight and premature birth are among the top conditions. Both are risk factors for SUID, the second leading cause of infant death. 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

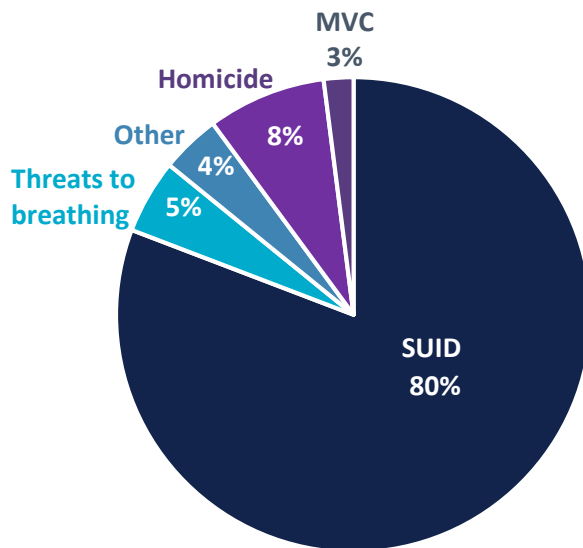
Birth to 1 year

From 2018-2020, an average of **112** infants per year died from an injury before they reached their first birthday.²

About 1 in 4 infant deaths were **injury-related**.²



Causes of Fatal Injury



Each year, an average of...²

- **90** infant deaths were classified as Sudden Unexpected Infant Deaths (SUID)
- **9** 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 (86%); infants sleeping with other people (67%); and infants sleeping with loose bedding or toys (67%). 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
- 57% of homicides in infants are due to Abusive Head Trauma (AHT) and blunt force injuries.

Neonatal Mortality

Infant deaths between 0 and 27 days

From 2018-2020 in Louisiana, an average of **276** infants per year died during the neonatal period.²



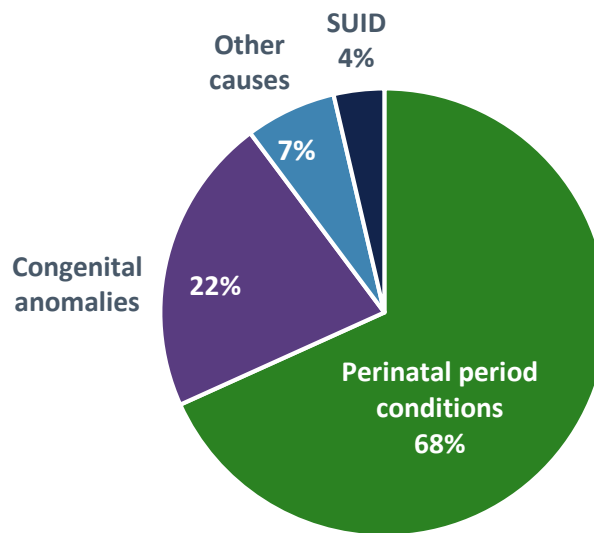
In Louisiana, the **neonatal period** (between 0 and 27 days after birth) is the **period with the most infant deaths** (deaths that occur between birth and 1 year of age). The Louisiana neonatal mortality rate from 2018 to 2020 was **4.7** deaths per 1,000 live births.

Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking ³
4.7	3.7	4.1	6 th highest in the U.S.

Causes of Death During the Neonatal Period

Each year, an average of...²

- **187** infants died from conditions originating in the perinatal period
- **59** infants died from congenital anomalies
- **18** infants died from another cause, including injury and other medical causes
- **10** 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.
- Over 40% of the deaths due to conditions originating in the perinatal period are deaths 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

Post-neonatal Mortality

Infant deaths between 28 and 365 days

From 2018-2020 in Louisiana, an average of **188** infants per year died during the post-neonatal period.²



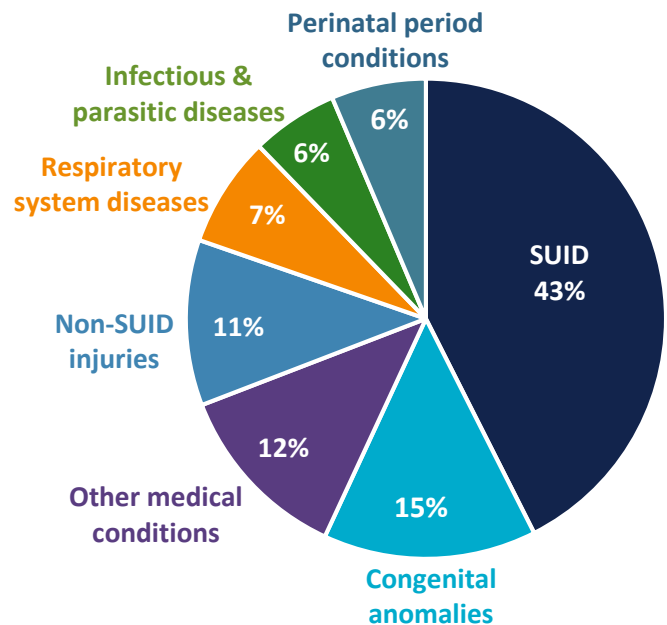
From 2018 to 2020 in Louisiana, fewer deaths occurred during the post-neonatal period than the neonatal period. However, the **causes of death common to this period are more preventable**. For example, 43% of deaths during the post-neonatal period are classified as Sudden Unexpected Infant Deaths (SUIDs). Many of these deaths could be prevented through safe sleep practices.

Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking
3.2	1.9	2.0	2 nd Highest in the U.S.

Causes of Death During the Post-Neonatal Period

Each year, an average of...²

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



Key Points

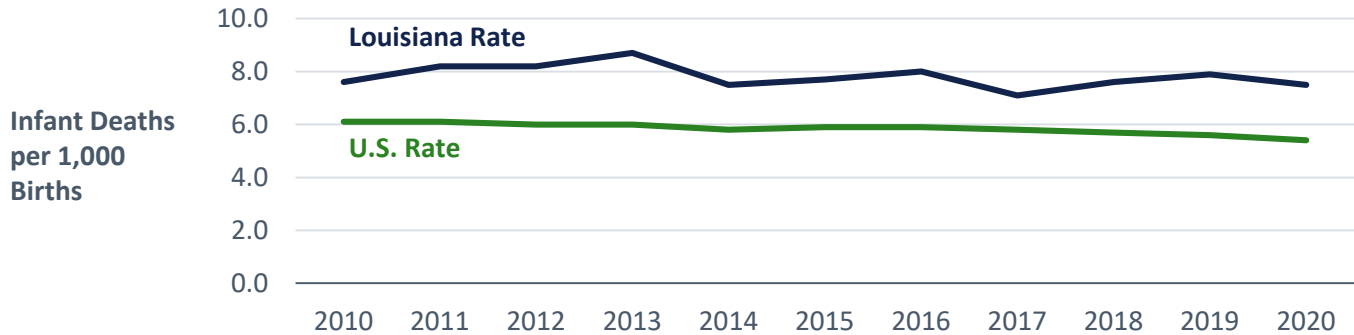
- Over half (54%) of deaths during the post-neonatal period were injury-related (this includes SUIDs).
- Almost half (43%) of infant deaths during this period were classified as SUIDs.
- SUID is considered largely preventable by reducing risk factors and increasing protective factors. Some of these risk 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 or 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

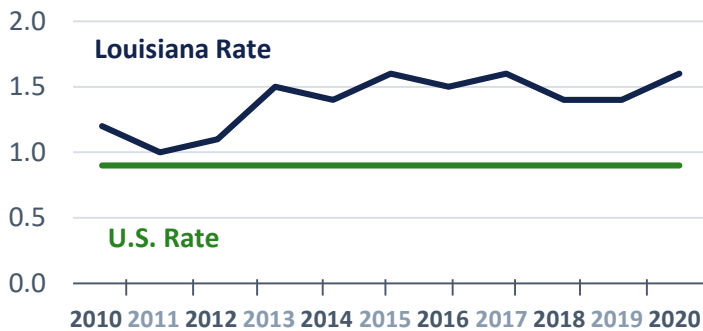
Overall Infant Mortality Over Time³

Louisiana’s infant mortality rate stayed relatively consistent from 2010 to 2020, remained around **8 infant deaths per 1,000 births**. The Louisiana rate also remained consistently higher than the United States rate.



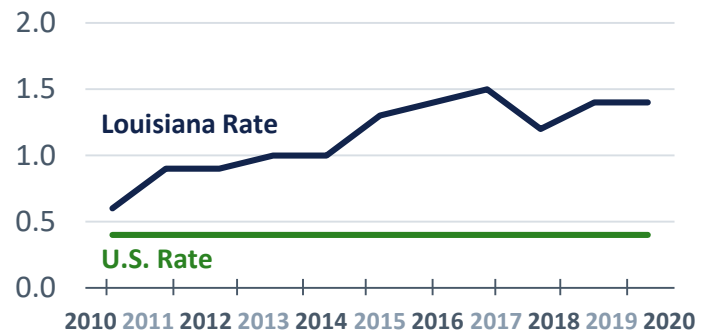
Infant Mortality Due to SUID³

While Louisiana’s infant mortality rate due to **Sudden Unexpected Infant Death (SUID)** (measured as deaths per 1,000 births) fluctuated between 2010 and 2020, the average SUID mortality rate remained around **1.4 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) seen below 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 2010 to 2020, Louisiana’s overall infant mortality rate due to injury was **1.1 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.

Reducing Infant Mortality in Louisiana



Driving factors behind the leading causes of infant deaths and recommendations for prevention

Infant Mortality (Birth to 1 Year)

Driving Factors and Recommendations for Prevention

The top causes of infant mortality include conditions originating in the perinatal period and causes associated with Sudden Unexpected Infant Death (SUID). Many of these deaths can be prevented. The next three pages highlight key risk factors that contribute to infant mortality and provide prevention recommendations.

Conditions originating in the perinatal period are often related to maternal health status. Chronic stress (sometimes due to experiences of racism and discrimination) and inadequate healthcare, coupled with conditions such as hypertension, diabetes, depression, or infections, can lead to adverse birth outcomes. Inadequate healthcare prior to or during pregnancy may be due to the barriers people face when trying to access care, including a lack of transportation, sick leave/sick time, or health insurance.^{8,9} Unequal treatment on the basis of race or insurance type may also deter people from regularly using healthcare services.⁸ Further, the healthcare facilities and providers that people do access may not provide adequate reproductive health services, such as a full range of contraceptive options.^{8,9}

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

Additional Data Sources

In order to gain a more complete understanding of the context in which infant deaths occur, this section includes information from the 2019 Louisiana Pregnancy Risk Assessment Monitoring System (PRAMS) Survey and case review data from Louisiana CDR, maintained on the [National Fatality Review Case Reporting System](#).

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 data are highlighted on the following pages. More information can be found at [PartnersforFamilyHealth.org/PRAMS](#). Additional Louisiana PRAMS data and reports can be found at [PartnersforFamilyHealth.org/data-center](#). Louisiana CDR data are used in the following pages to determine the prevalence of known risk factors among deaths. Both data sources are used to inform program and policy decisions related to reducing infant mortality.

Preconception Health and Family Planning

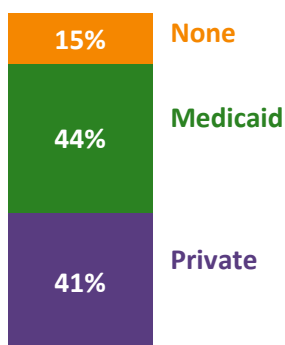


Maternal health strongly influences infant health. Helping women achieve **optimal health throughout their lives** is key to reducing infant mortality. To remain as healthy as possible, women need adequate **health insurance coverage** and consistent **access to quality healthcare**.

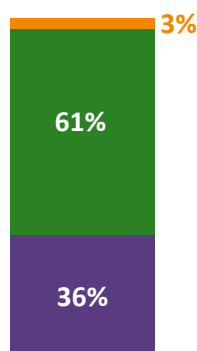
Maternal Health Insurance Coverage (2020)¹¹

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.

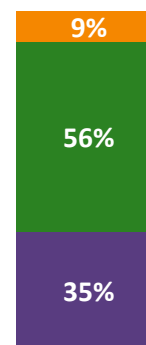
Insurance Prior to Pregnancy



Insurance During Pregnancy



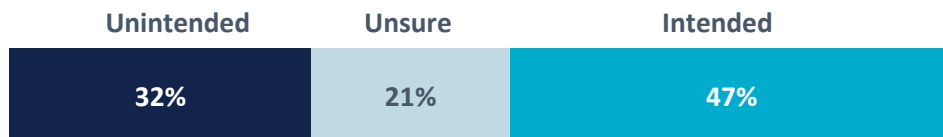
Insurance After Pregnancy



Pregnancy Intention (2020)

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.

47% of Mothers Intended to Become Pregnant¹¹



Maternal Health Indicators Prior to Pregnancy (2020)

Prior to their most recent pregnancy...¹¹

- 56% of mothers were overweight or obese*
- 14% of mothers reported they had depression
- 4% of mothers reported they had diabetes
- 8% 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.

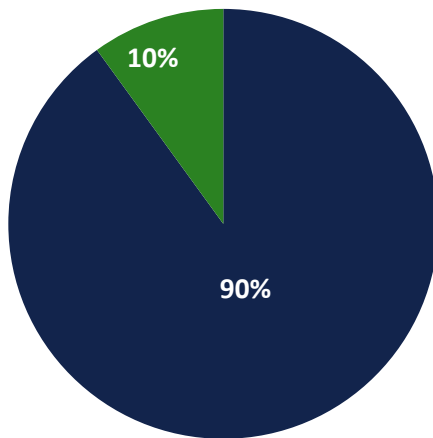
Prenatal Care

In 2020, **9%** of Louisiana mothers didn't receive prenatal care during the **first trimester**. **Early care is a key part of adequate care** and can help reduce infant mortality.¹¹

Adequacy of Prenatal Care in Louisiana (2020)

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

About **1 in 10 (9%)** Louisiana Mothers **Did Not Receive Prenatal Care in First Trimester**¹¹



■ First trimester ■ After First trimester

About **1 in 4 (23%)** 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 (2020)

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

- Didn't know I was pregnant
- Couldn't get an appointment when I wanted
- Doctor/health plan wouldn't start earlier
- I didn't have a Medicaid or LaMoms card*

Recommendations

- Home visiting programs 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.

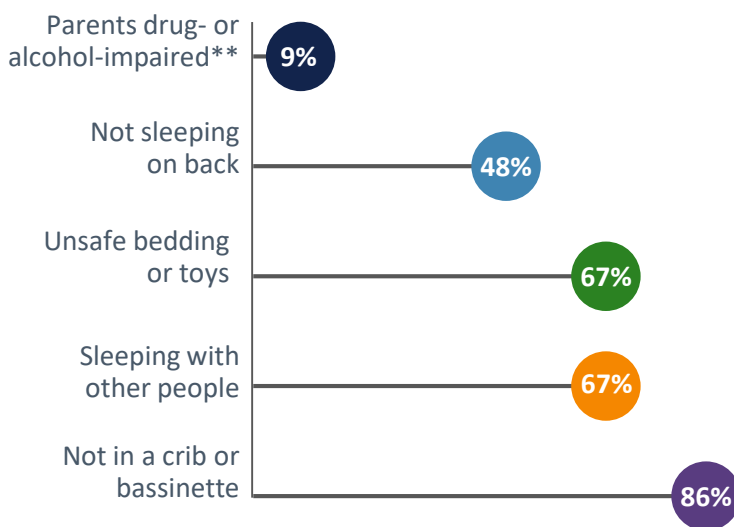
Sudden Unexpected Infant Death

71% of sleep-related deaths in Louisiana occurred by 4 months of age (2018-2020).⁵

Sudden Unexpected Infant Death (SUID) in Louisiana

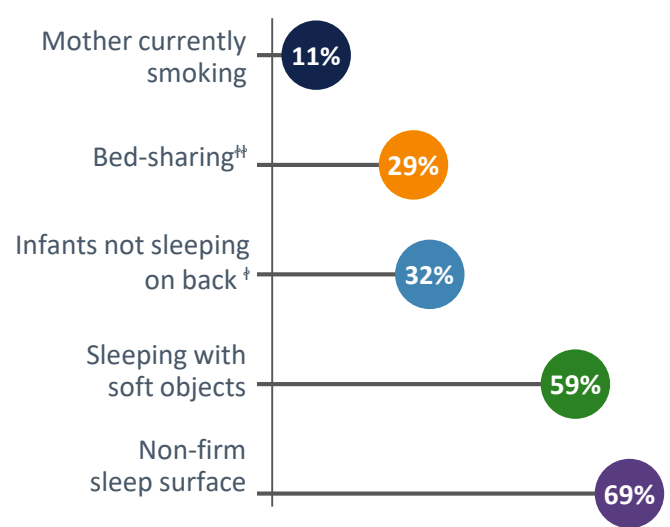
In 2020, more than 1 in 4 babies (29%) in Louisiana were exposed to 3 or more risk factors for sleep-related death.¹¹ 29% of Louisiana mothers said they sometimes, often or always bed-share with their baby.¹¹ The American Academy of Pediatrics (AAP) cites bed-sharing as a risk factor for sleep-related infant deaths. 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 (2018-2020 CDR Data)⁵



*Multiple risk factors may be present
 **Drug- or alcohol impairment may be underreported

Infant Sleep Environment Risk Factors (2020 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

- 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, [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



Child Mortality in Louisiana

2018-2020 Data

Overall Child Mortality

1 to 14 years

From 2018-2020 in Louisiana, an average of **192** children between ages 1 and 14 years old died each year.²



The 2018-2020 Louisiana mortality rate for children ages 1 to 14 years was **22.6 deaths per 100,000 children**. The U.S. rate was 16.2 per 100,000 children for the same time period. If Louisiana had the same mortality rate as the U.S., **54 fewer** children would have died per year.

Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking ³
22.6	16.2	-	5 th highest in the U.S.

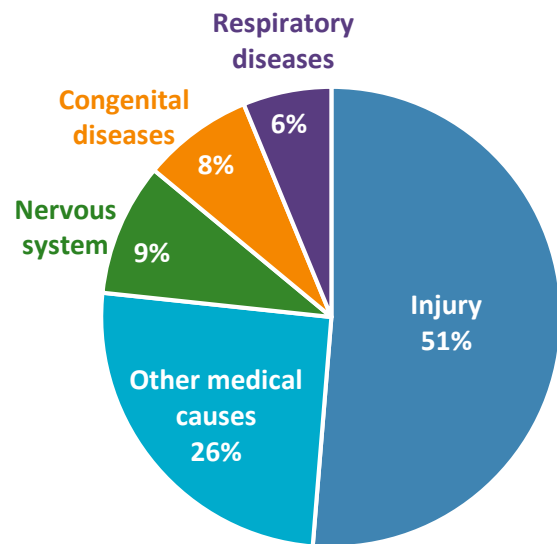
Child Deaths by Region (2018-2020) ²	1	2	3	4	5	6	7	8	9
Average annual child deaths	31	29	15	22	15	12	25	19	25
Child mortality rate per 100,000 children	20.6	23.4	20.3*	19.1	25.4*	21.1*	25.6	30.2*	22.1

**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

- **99** children died from injury
- **49** children died due to another medical cause
- **18** children died due to nervous system diseases
- **15** children died due to congenital anomalies
- **12** children died due to diseases of the respiratory system



Key Points

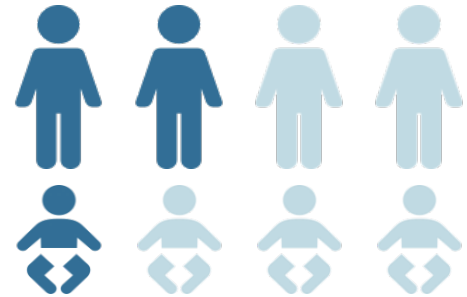
- More than half (51%) of childhood deaths (ages 1 to 14 years old) were due to injuries. Most of these deaths are considered preventable.
- The other (49%) childhood deaths were due to a medical cause. The most common medical causes are diseases of the nervous system, diseases of the respiratory system, and deaths related to congenital anomalies.

Child Mortality: Fatal Injuries

1 to 14 years

From 2018-2020, an average of 99 children died from injuries each year. The majority of injury deaths were due to motor vehicle crashes, homicide, and drowning.²

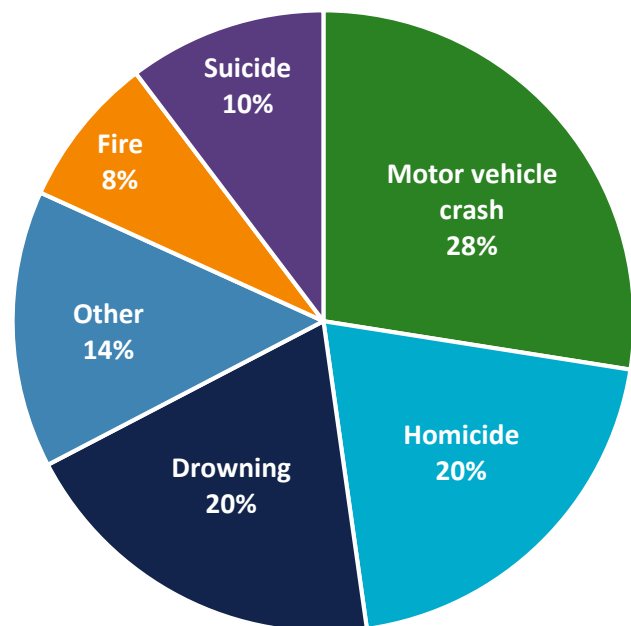
Half of child deaths were a result of injury. Injury makes up a larger percentage of deaths in childhood (51%) than in infancy (24%).



Causes of Fatal Injury

Each year, an average of...²

- 27 children died due to motor vehicle crashes
- 20 children died from homicide
- 19 children drowned
- 14 children died due to another unintentional cause, including falls, threats to breathing, and other injuries
- 10 children died from suicide
- 8 children died due to fire exposure



Key Points

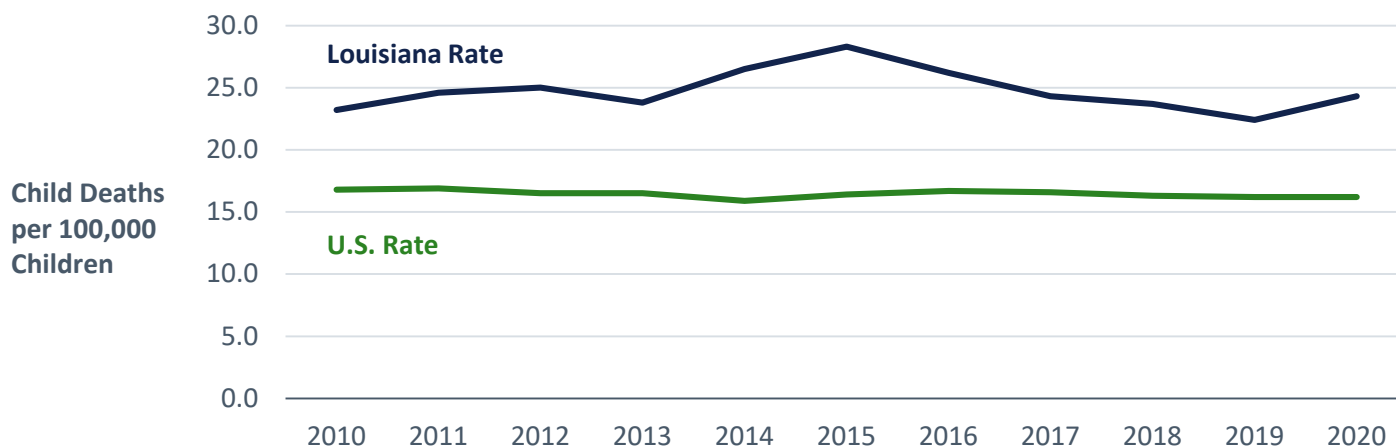
- Motor vehicle crashes, homicide, and drowning were the top causes of injury-related child deaths.
- For the majority of child deaths due to motor vehicle crashes, child safety seats were either not used or used incorrectly.
- Inadequate supervision of children and lack of barriers around water were the top contributing factors in drowning deaths. More than half (54%) of all drowning deaths occurred in swimming pools, hot tubs, or spas.

Trends in Child Mortality

1 to 14 years

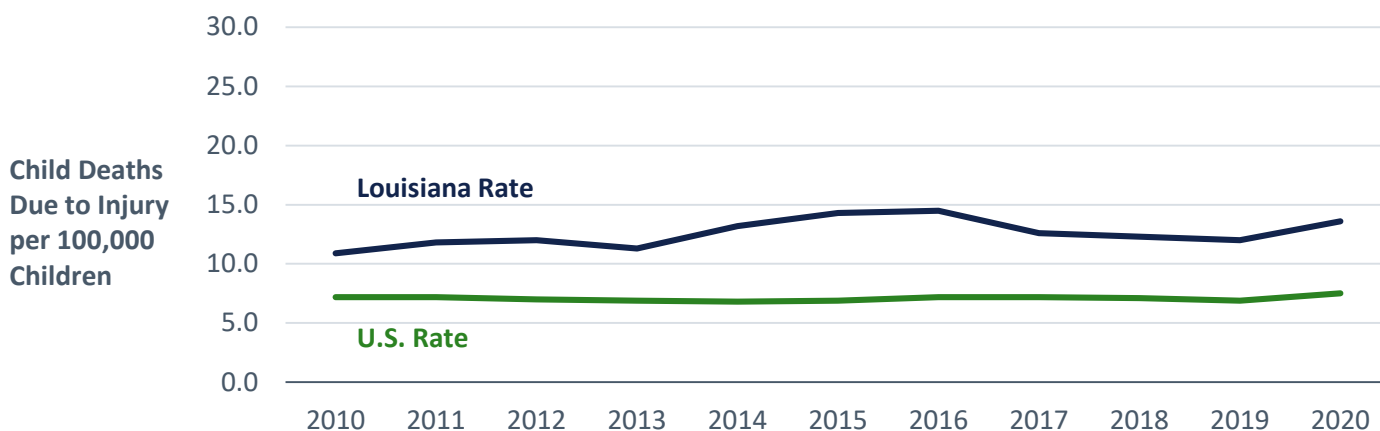
Overall Child Mortality Over Time³

Louisiana's overall child mortality rate remained relatively consistent from 2010 to 2020, 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 **13 deaths per 100,000 children** from 2010 to 2020. 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.

Child Mortality Due to Injury

2018-2020 Data

Child Mortality Due to Injury

Ages 1–4 years

From 2018-2020 in Louisiana, an average of **80** children between ages 1 and 4 years died each year. **39** per year died due to injury.²



United States
vs. Louisiana

From 2018 to 2020, the Louisiana mortality rate due to injury for children ages 1 to 4 was **16.1 deaths per 100,000 children**. The U.S. rate was 9.9 per 100,000 children for the same time period. If Louisiana had the same mortality rate as the U.S., **15 fewer** children in this age group would have died per year.

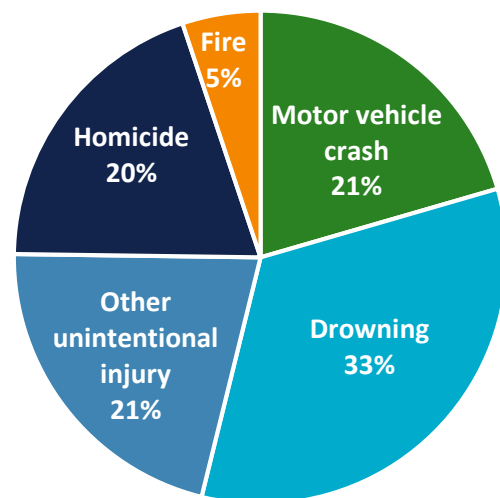
Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking ³
16.1	9.9	-	4 th highest in the U.S.

Causes of Fatal Injury

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

Each year, an average of...²

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



Key Points

- Children between ages 1-4 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 3rd 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

Ages 5 – 9 years

From 2018-2020 in Louisiana, an average of **45** children between ages 5 and 9 years died each year. **24** per year died due to an injury.²



The Louisiana mortality rate due to injury from 2018 to 2020 for children ages 5 to 9 years was **7.8 deaths per 100,000 children**. The U.S. rate was 4.5 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.

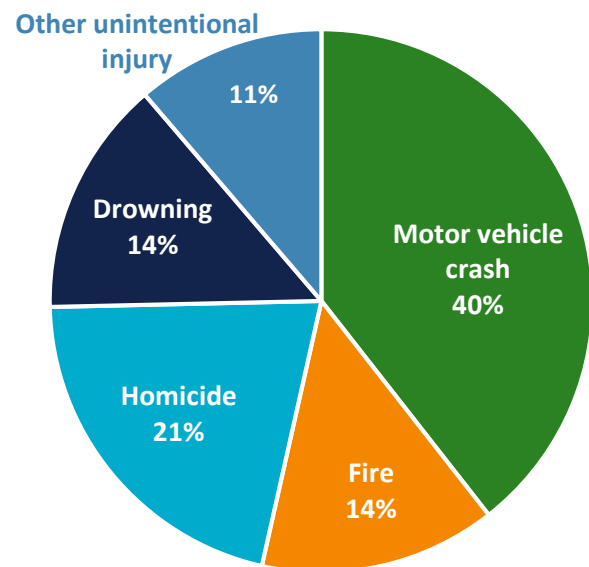
Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking ³
7.8	4.5	-	3 rd highest in the U.S.

Causes of Fatal Injury

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

Each year, an average of...²

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



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 (66%) 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.) or improper use of safety gear.⁴
- Among 5 to 9 year olds, 67% of homicides were due to firearms.²

Child Mortality Due to Injury

Ages 10 – 14 years

From 2018-2020 in Louisiana, an average of **68** children between ages 10 and 14 years died each year. **34** per year died from injuries.²



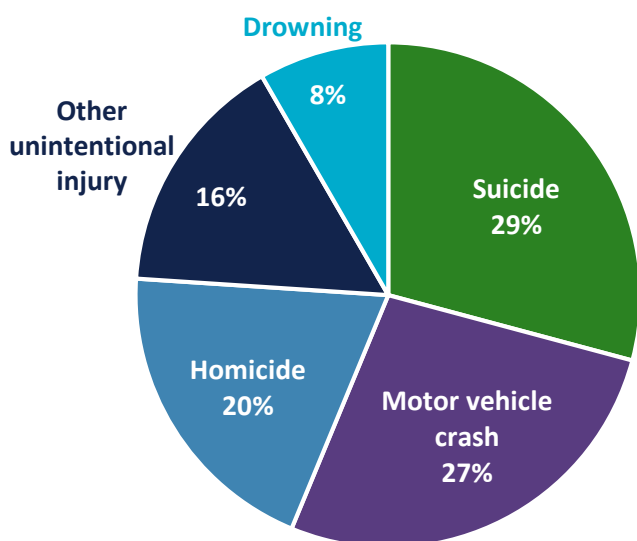
United States vs. Louisiana

Louisiana’s mortality rate due to injury from 2017 to 2019 for children between the ages of 10-14 years was **11.2 deaths per 100,000 children**. The U.S. rate was 7.4 deaths per 100,000 children for the same period. If Louisiana had the same mortality rate as the U.S., **11 fewer** children in this age group would have died per year.

Louisiana Rate ²	U.S. Rate ³	HP2020 Goal ⁴	LA Ranking ³
11.2	7.8	-	7 th highest in the U.S.

Causes of Fatal Injury

51% of deaths among children ages 10-14 years were injury-related.

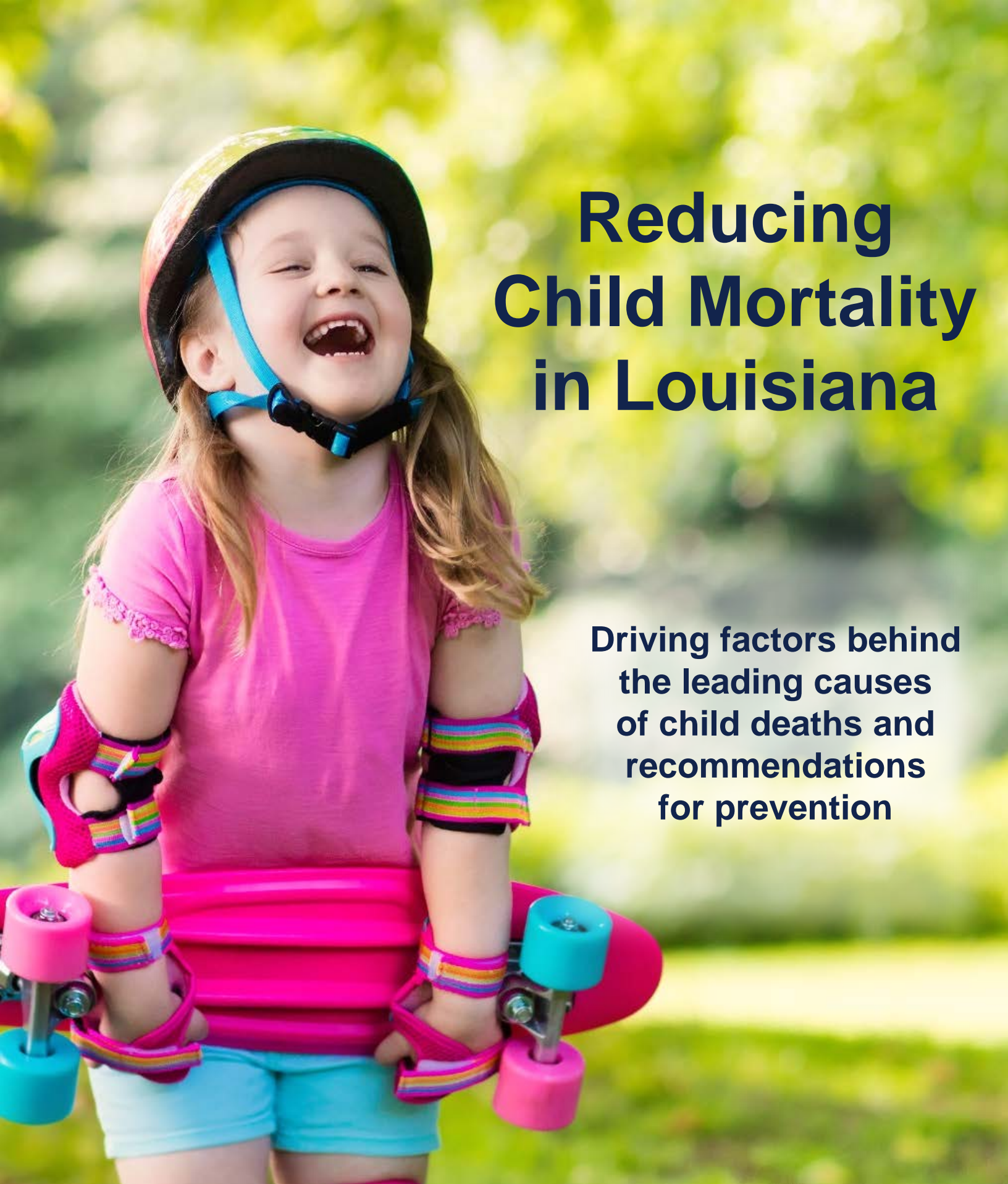


Each year, an average of...²

- **10** children died from suicide
- **9** children died in motor vehicle crashes
- **7** children died from homicide
- **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

- Suicides and motor vehicle crashes were the most common causes of injury-related deaths in this age group.
- Suicides exceed homicides in this age group. Louisiana 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 (71%) than outside the vehicle as pedestrians. A major risk factor for child passenger deaths was the absence or improper use of safety gear (shoulder belts, lap belts, etc.).⁵
- In this age group, 76% of homicides were due to firearms.¹



Reducing Child Mortality in Louisiana

**Driving factors behind
the leading causes
of child deaths and
recommendations
for prevention**

Child Mortality (Ages 0 to 14 years)

Driving Factors and Recommendations for Prevention

The following section highlights risk factors for 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 these leading causes have also been included to provide a more complete picture of injury-related infant and child deaths in Louisiana. Further, reducing the risk factors and increasing the protective factors identified in this section work to prevent both infant and child deaths.

Motor vehicle crashes (MVC) and Homicides are tied for the 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. The homicides are predominantly due to firearms, blunt force trauma, abusive head trauma, asphyxia (suffocation), and poisoning. Drowning are the second top causes of child death in Louisiana. The category of “Other” unintentional injury deaths includes multiple causes, such as falls, blunt force trauma, fire-related, poisoning, and asphyxia (suffocation).

During and following Regional and State Child Death Reviews, data were analyzed and organized, then added to the National Fatality Review Case Reporting System database. Data from this database were used in the following pages to determine the prevalence of risk factors in Louisiana deaths due to motor vehicle crashes, homicide, drowning, and suicide.

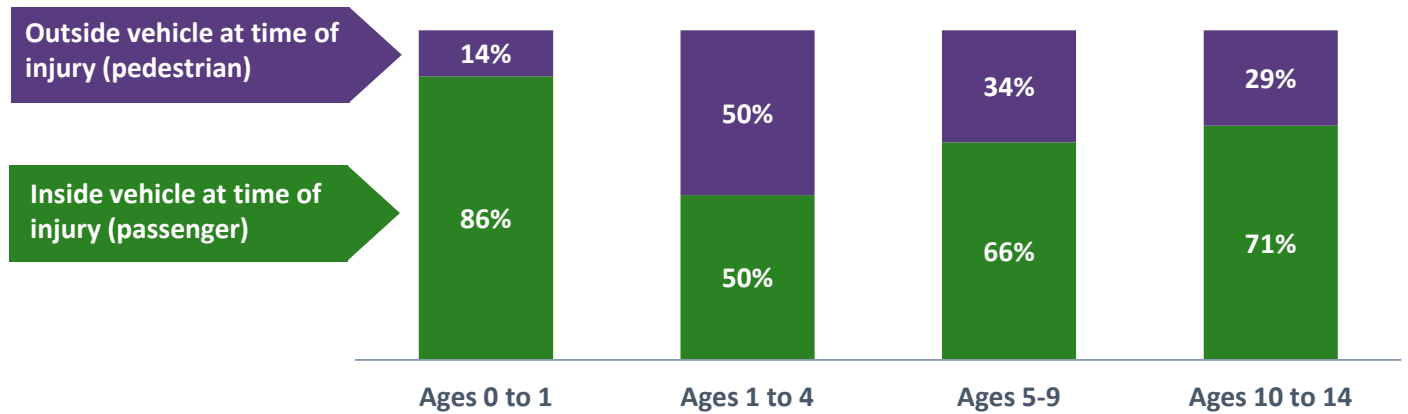


Child Motor Vehicle Crash (MVC) Deaths

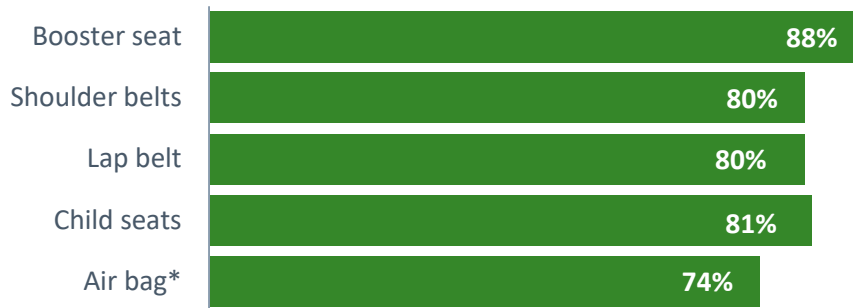
Risk Factors & Recommendations, 2018-2020 data

87 infants & children in Louisiana died due to MVCs from 2018-2020. ² All age groups 0 -14 years 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 0-14 years in Louisiana.

Location of Victim at time of MVC, by Age Group⁵



Safety Features Used Incorrectly, Not Present, or Unknown in Child MVC Deaths⁵



NOTES: Updated child passenger safety legislation went into effect in 2019. This data reflects only 2018-2020 deaths.

*The **air bag** category includes cases where there was either no air bag or the air bag malfunctioned.

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 change as children grow.
- As of 2019, Louisiana’s child passenger safety (CPS) legislation reflects best practices and is one of the safest CPS laws in the country. Prevention professionals should ensure that all families have access to appropriate seats and assistance for correct installation.
- For the majority of child deaths due to motor vehicle crashes, child safety seats, and seat belts were either not used or used incorrectly. 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.
- Safety professionals should monitor enforcement of legislation related to child safety seats.
- 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

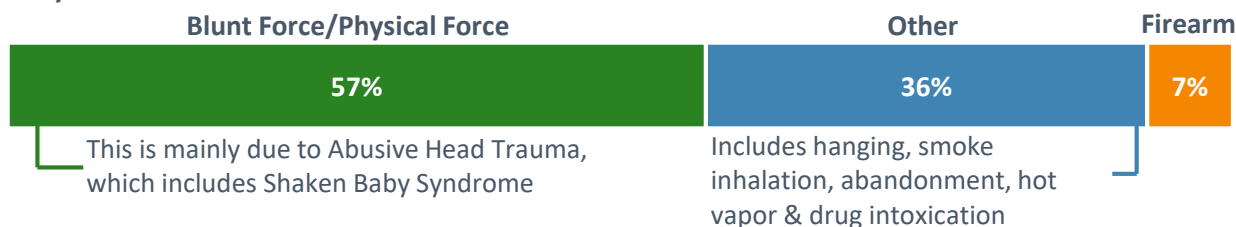
Homicide Deaths in Children

Risk Factors & Recommendations, 2018-2020 data

87 Louisiana infants & children were victims of homicide from 2018-2020.² Infants were more likely to die from **blunt force injuries, including Abusive Head Trauma**, while children ages 1-14 years were more likely to die from **firearms**.

Homicide Methods

Ages 0-1 year in Louisiana²



Homicide Methods

Ages 1-14 years in Louisiana²



There were **87** homicides between 2018-2020. However, some data providers were cautious about sharing case details under LA RS 40:2019. Therefore, CDR teams could only fully review **39** of these cases.

Recommendations

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

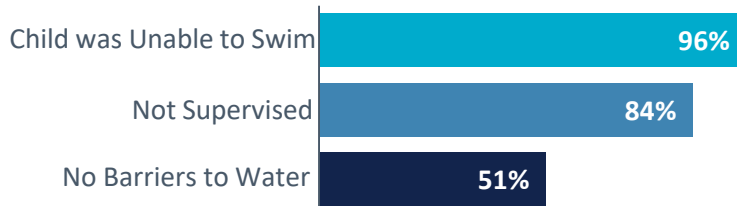
- Pediatricians are encouraged to regularly talk to parents about:**
 - Safely storing all firearms in children's primary home and relatives' homes. Safe storage includes locking up firearms and storing firearms and ammunition separately. Storage resources can be found at [BeSMART for Kids](#).
 - Strategies 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 Drowning Deaths

Risk Factors & Recommendations, 2018-2020 data

58 infants and children in Louisiana died from drowning from 2018-2020. ² Drowning was the **3rd leading cause of injury-related death** for children ages 0-14 years in Louisiana. ²

Top Risk Factors for Drowning in Louisiana⁵



- Most children who drowned **did not know how to swim**. **Lack of supervision** or **barriers to water** were key risk factors. ⁵

Drowning Location

Of children who died from drowning in Louisiana, **over half (60%)** 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 floatation 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 & pipes.
- Maintain clear visibility of pool surface & 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

Risk Factors & Recommendations, 2018-2020 data

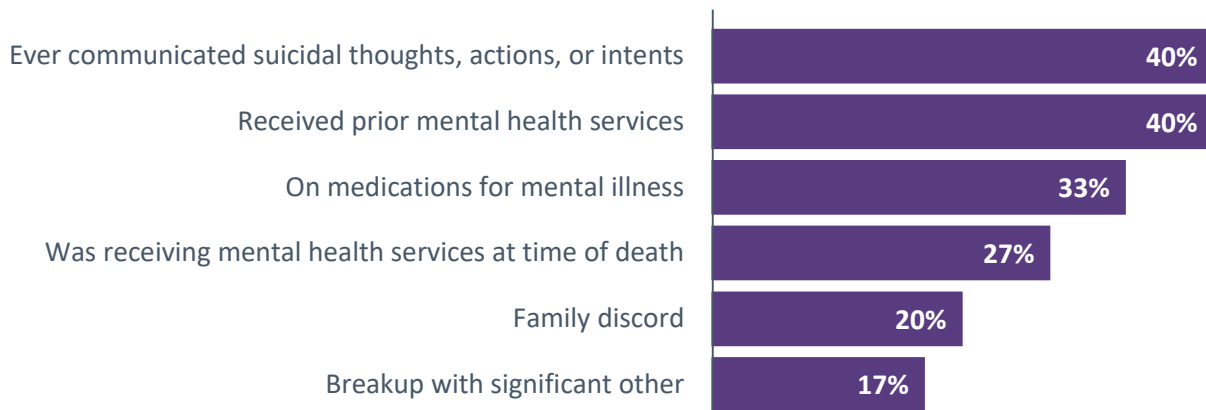
From 2018-2020, 30 children under age 15 in Louisiana died from suicide.²
 More than **a third of these suicides** were completed using a **firearm**.

Suicide Methods



Experiences of Children who Died by Suicide

Local Child Death Review teams reviewed 28 out of 30 child deaths due to suicide from 2018-2020. 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 evidence-based interventions that work to increase community connectedness and resilience; build individual empathy and emotional regulation skills; and teach children positive behaviors and relationship-building. These interventions are designed to prevent children from using violence against themselves or others.

Racial Disparities

Infant and Child Mortality: 2017-2019 Data

1974

American Public Health Association

“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

2020

American Public Health Association

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

*Institutional racism is the “societal allocation of privilege based on race.”²²

Racial Disparities in Mortality

Infants ages 0 to 1 year, and children ages 1 to 14 years

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

In Louisiana, **Black† infants are more than twice as likely to die as white† infants. Black† children are almost twice as likely to die as white† children.**

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, such as non-traditional work schedules, exhaustion, inability to afford a crib or Pack ‘n Play, cultural misconceptions about safe sleep practices, or home safety concerns that lead caregivers to believe bed-sharing is the safest option.^{25, 26}

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 free 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 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.

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

Racial Disparities in Mortality

Infants, Birth to 1 year

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



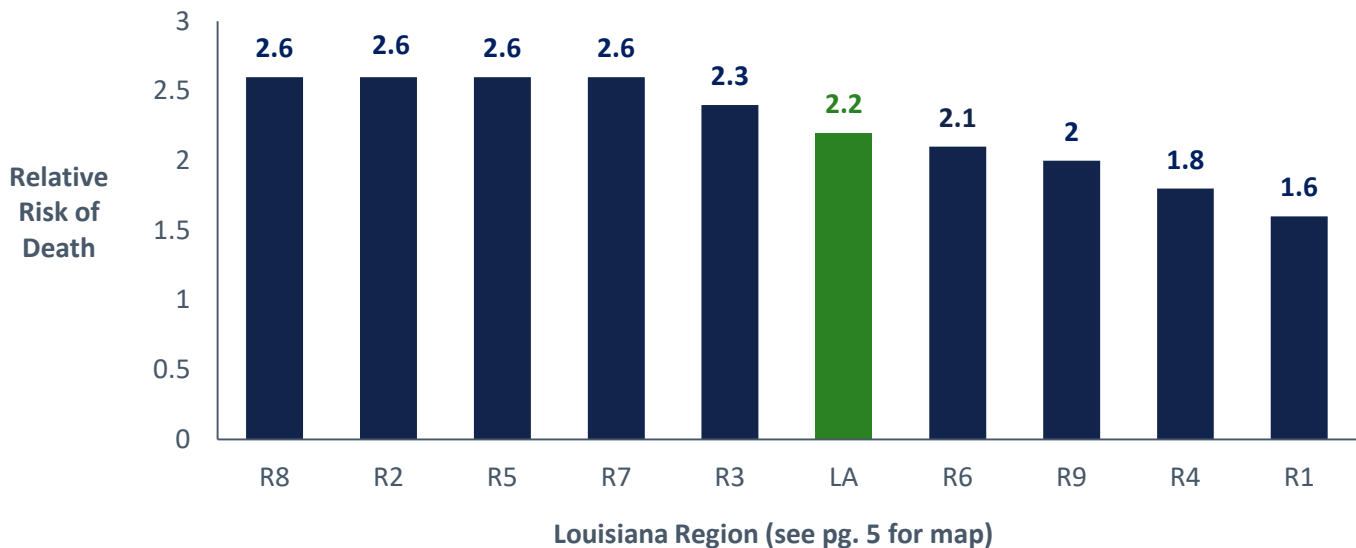
In Louisiana from 2018 to 2020, Black[†] infants were **2.2 times as likely to die** as white[†] infants.

Infant Mortality Rate, 2018-2020	
Black [†]	White [†]
12.0 deaths per 1,000 live births	5.5 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 2 (Baton Rouge Area), Region 5 (Lake Charles Area), and Region 7 (Shreveport Area) have the greatest racial disparity in birth outcomes. In these regions, Black[†] infants are 2.6 times 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 2018-2020 was too small for a reliable comparison against mortality rates for white[†] and Black[†] infants.

Racial Disparities in Mortality

Children ages 1 to 14 years

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



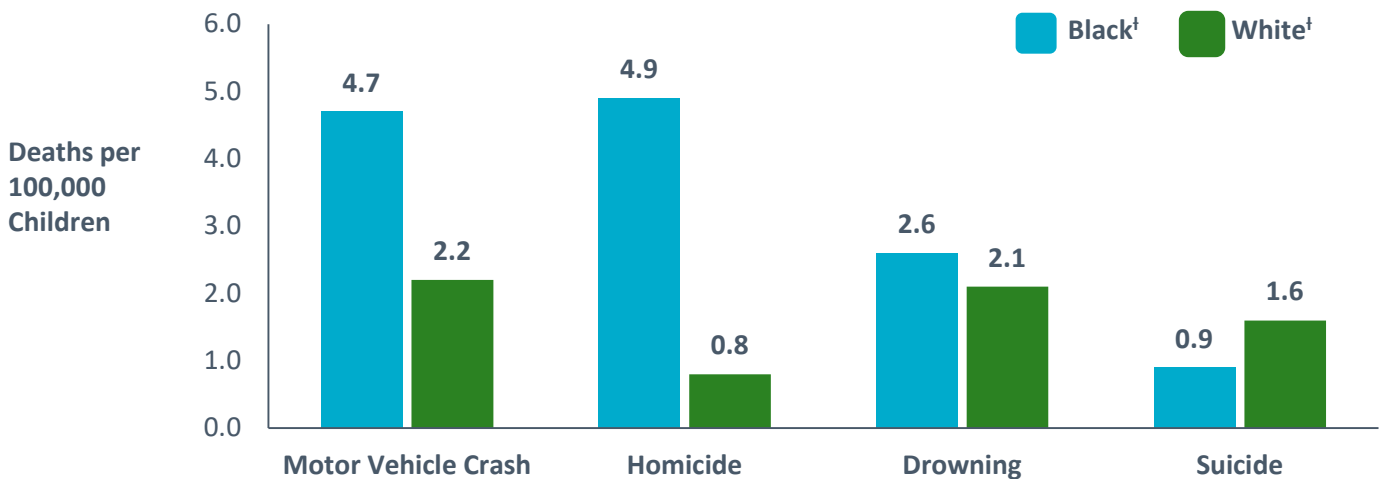
In Louisiana from 2018 to 2020, Black[†] children were **1.7 times as likely to die** as white[†] infants.

Child Mortality Rate, 2018 - 2020	
Black [†]	White [†]
31.3 deaths per 100,000 children	18.1 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 2018 to 2020, **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 2018-2020, Black children were six times as likely to die from homicide as white children.
- While the top cause of injury-related death for both Black and 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.



Injury Prevention Recommendations & Considerations:

Children and Youth with Special Health Care Needs

Recommendations and Considerations

Children and Youth with Special Health Care Needs

Since 2016, in an effort to address the needs of all children in Louisiana in a more equitable way, the Bureau of Family Health (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 health care 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 health care 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.
- Louisiana Medicaid Managed Care Organizations are required to pay for transportation accommodations, including specialized car seats, for families that can demonstrate medical necessity. Providers and public health agencies should work with families to provide letters of medical necessity when appropriate. 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
- Identifiers that convey personal health information or medical diagnoses can be placed 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 health care needs should consider partnering with community organizations to provide personal health identifiers to families for use in their cars.
- Vehicle heat safety awareness is important for all caregivers and families, but children with special health care 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 Health Care 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.
- Some community organizations offer swimming lessons specifically for children and youth with special health care needs, such as [JoJo's Hope](#).²⁹ Providers should familiarize themselves with organizations in their area that provide this service, and refer families.
- [Swim Angelfish](#) is a leader in adaptive swim instruction providing a certified training program for swim instructors to teach adaptive swim lessons. “Search” for certified trainers trained to help children with autism, sensory and motor coordination, anxiety, trauma, or simple discomfort in the water.
- 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.

Recommendations and Considerations

Children and Youth with Special Health Care Needs



Preventing Suicide and Homicide

Homicide includes deaths due to child abuse and neglect

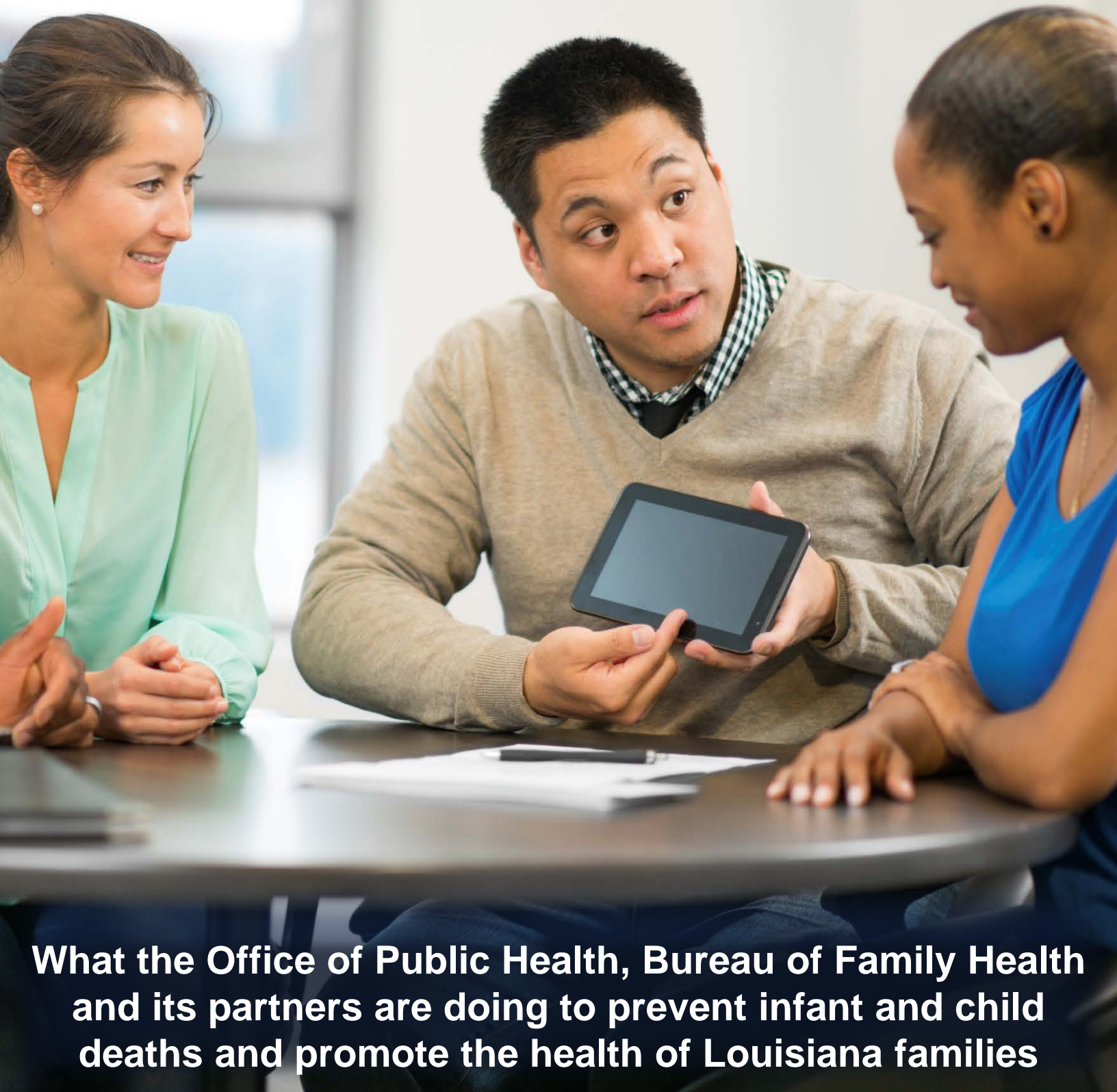
- Early access to behavioral health supports for parents of children with special health care needs, the children themselves, and their siblings is protective against depression, anxiety, and toxic stress.³¹ Screening for emotional, behavioral and mental health conditions and subsequent referrals to services for the whole family should be part of care coordination efforts and policies.
- Students with disabilities are more likely to be bullied by their peers and are more likely to experience social isolation.³² 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
- 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 health care 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's needed to care for a child with special health care needs.



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)

Moving Data to Action



What the Office of Public Health, Bureau of Family Health and its partners are doing to prevent infant and child deaths and promote the health of Louisiana families

Moving Data to Action

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. The Louisiana Department of Health (LDH), Office of Public Health (OPH), 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.

The categories listed below include the CDR findings, national research, best practices, statewide surveillance systems, programs, and recommendations coordinated and facilitated by the partnering organizations, BFH, and its CDR team.

Improving Birth Outcomes



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 For more information, visit 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 state project 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.

Moving Data to Action

Improving Birth Outcomes



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.
- **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: ldh.la.gov/LaPQC
 - **Safe Births Initiative** — This initiative does improvement work 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** — This initiative focuses on improving the identification, care, and treatment of women and neonates affected by opioids and substance use
 - **Caregiver Perinatal Depression Screening** — The Caregiver Perinatal Depression Screening in Pediatric Clinics Pilot 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)** — LaPQC 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 Mental Health Perinatal Partnership (LAMHPP)** is a provider-to-provider consultation system for licensed healthcare clinicians serving pregnant and postpartum women and their families. LAMHPP supports healthcare clinicians to address the needs of their patients including perinatal depression, anxiety, substance use disorders, interpersonal violence, and related health risks and conditions. For more information, visit lamhpp.org.
- **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.

Sudden Unexpected Infant Death (SUID) Prevention



Supporting 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. The website includes an interactive safe sleep quiz style game, and videos of actual Louisiana parents and providers talking about safe sleep.
- Works with hospitals, Parish Health Units, community-based organizations, and the MIECHV program to model safe sleep environments through physical displays in clinics/offices.

Moving Data to Action

Sudden Unexpected Infant Death (SUID) Prevention



Supporting Families

- Uses 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 to the audience, and they can be used in venues without audio, video, computer or internet access.
- Worked with local partners in central Louisiana to develop regionally-aired public service announcements which promote safe sleep using the Give Your Baby Space messaging.
- Partnered with the YMCA to offer a Spanish-language seminar on safe sleep to Latino families.
- Mobilized 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 direct service providers on evidence-based methods to reduce sleep-related deaths, including how to talk to caregivers about safe sleep. Providers included Maternal, Infant and Early Childhood Home Visitors, Louisiana Department of Children and Family Services (DCFS) case workers, and childcare providers.



Improving 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. 42 facilities have received *Gift* Designation, and *The Gift* helped 17 of those facilities advance to receive the internationally-recognized Baby-Friendly designation.
- Established regional taskforces and a state CDR workgroup focused on Safe Sleep Promotion.
- 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 for the Louisiana Department of Health. 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. The group reviewed resources from national groups that promote harm reduction approaches for scenarios in which an infant may fall asleep while in a parent bed.
- 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.
- Collaborated with the University of Louisiana Lafayette to explore the use of simulation to improve nursing students’ knowledge and retention of infant safe sleep practices. Tested a modified training for use in hospital settings.
- Evaluated the feasibility, desirability, and effectiveness of "baby boxes" as a means to promote safe sleep, in response to [House Concurrent Resolution 58 of the 2017 Legislative Session](#). In 2018, BFH concluded that research does not support the “baby box” as an effective method to reduce sleep-related deaths but may have utility during emergencies/disasters.

Moving Data to Action

General Injury Prevention



Improving Systems

- 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.
- Implemented the Injury Free Louisiana (IFLA) Training Academy 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.

Child Passenger Safety and Motor Vehicle Crash Prevention



Supporting 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 [CYSHCN](#).
- 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.



Improving Systems

- 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. LHSC 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

Violence Prevention



Supporting 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 2019-2020 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).



Improving Systems

- Began gathering 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.
- Hosted trainings on shared risk and protective factors for violence through the Injury Free Louisiana (IFLA) initiative and Adverse Childhood Experiences (ACEs) Educator program. BFH secured funding to expand the IFLA model across the state, and to add content on developing interventions for unintentional injury and substance use disorders.
- 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 included 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.

Moving Data to Action

Drowning Prevention



Supporting Families

- Coordinated with partners to distribute [PoolSafely](#) 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.
- Collaborated with Safe Kids Coalition to host a water safety event.
- Coordinated with local media outlets to air public service announcements promoting swim safety, using [PoolSafely](#) messaging.



Improving Systems

- 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 allows 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 Tank Proof to provide free swim lessons for families in the Northshore and Monroe areas.
- Partnered with Children's Water Safety Awareness to provide free swim lessons to children and distribute life jackets to families in the Houma/Thibodaux areas.

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 0 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 the Bureau of Family Health. 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).

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?

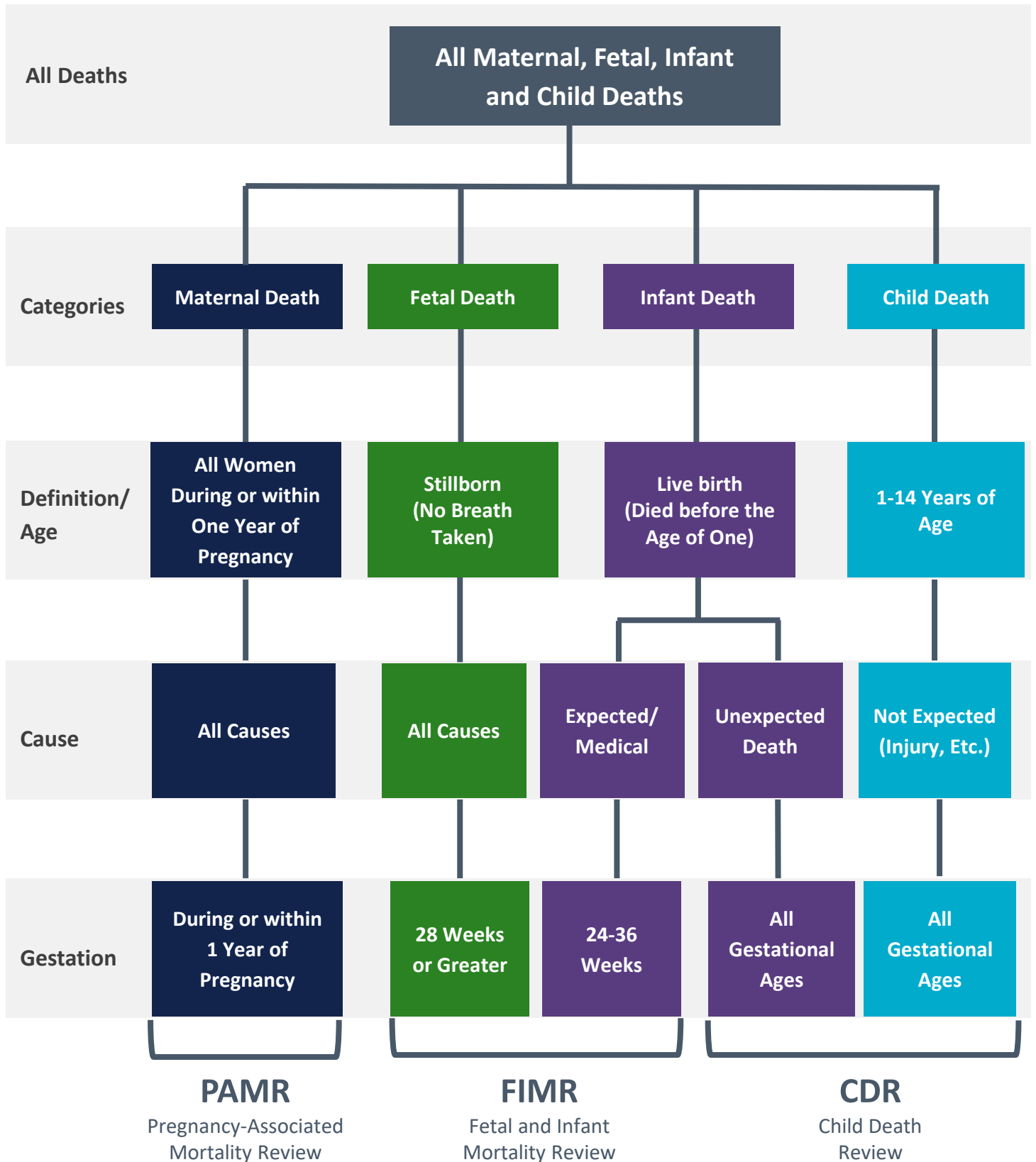
Regional MCH Coordinators are registered nurses charged with, among other duties, coordinating CDR meetings in each of their public health regions. All unexpected deaths of children under 15 years of age are reviewed by CDR teams. In Louisiana, Regional MCH Coordinators use information gathered from 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



2018-2020 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
Forensic Pathologist, certified by the American Board of Pathology and licensed to practice medicine in the state, and appointed by the chairman of the Louisiana State Child Death Review Panel subject to Senate confirmation	Michael Cramer, M.D.
Pathologist experienced in pediatrics, appointed by the Louisiana Pathology Society	Deborah Cavalier, M.D.
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)
Region 2	Kelly Bankston, B.S.N., R.N. (2013-2019) Rachel Purgatorio, B.S.N., R.N. (2020-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, R.N.
Region 9	Martha Hennegan, R.N.
Statewide Surveillance Manger	Rosaria Trichilo, M.P.H. . (2018-2021)
Maternal and Child Health Mortality Surveillance Manager	Rachel Hyde, R.N, M.P.H. (2022- Current)
Mortality Surveillance Epidemiologist	Jada Brown, M.P.H.

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.

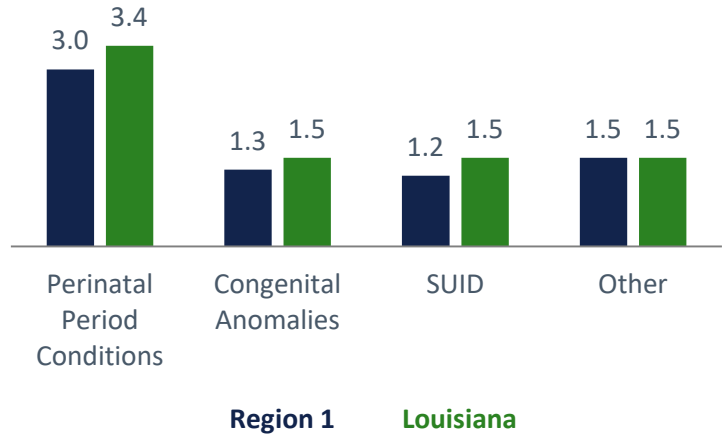
Region 1 Mortality Surveillance Report, 2018-2020

Greater New Orleans Area | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 1:

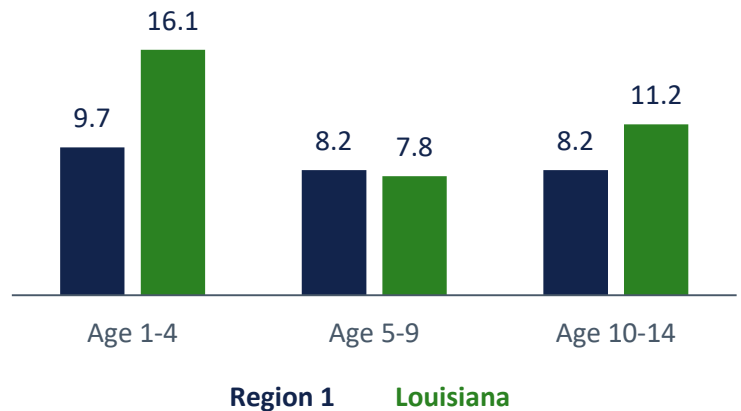
- Death rate is per 1,000 live births.
- **Region 1's infant mortality rate is 7.0 deaths per 1,000 live births, lower than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

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 1-4 and 10-14.**
- Region 1 has **higher rates of child mortality due to injury** than Louisiana for **children ages 5-9.**



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*	Homicide	Homicide	Homicide (Tie)
2	Homicide	Drowning	Drowning	Suicide (Tie)
3	**	**	**	**

Homicide is the leading cause of death in **ages 1-4, and 5-9.** **Homicide and Suicide** are the leading causes of death in **ages 10-14.** **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, 2018-2020

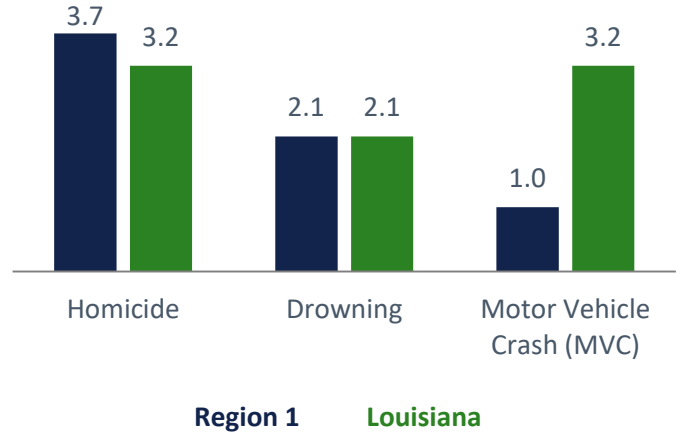
Region 1 Mortality Surveillance Report, 2018-2020

Greater New Orleans Area | Published August 2022

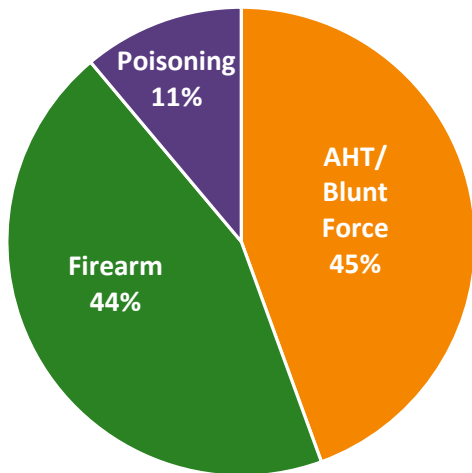
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 1:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 1's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **9.7 per 100,000 children**. Louisiana's is 13.1.
- **Region 1 surpasses Louisiana** in the rate of deaths by **homicide**.
- Region 1 has the **3rd highest homicide death rate** of the 9 regions in the state.



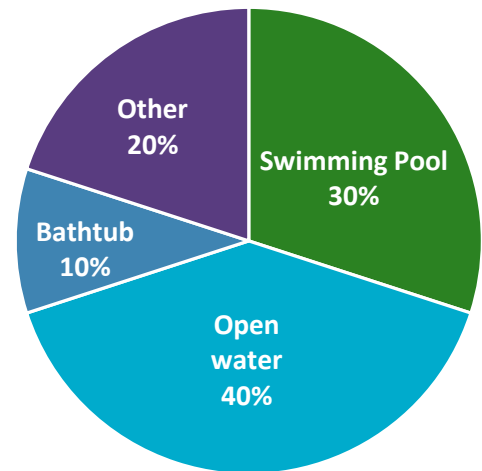
Means Used in Homicide Deaths of Children Ages 0-14 years in Region 1, 2018-2020¹



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 Drowning Deaths in Children Ages 0-14 years in Region 1, 2018-2020²



About Drowning Deaths:

- Most drowning deaths occurred in **open water** such as lakes, rivers, and oceans.
- The most common contributors to drowning deaths are **lack of barriers to water and lack of supervision**.²

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

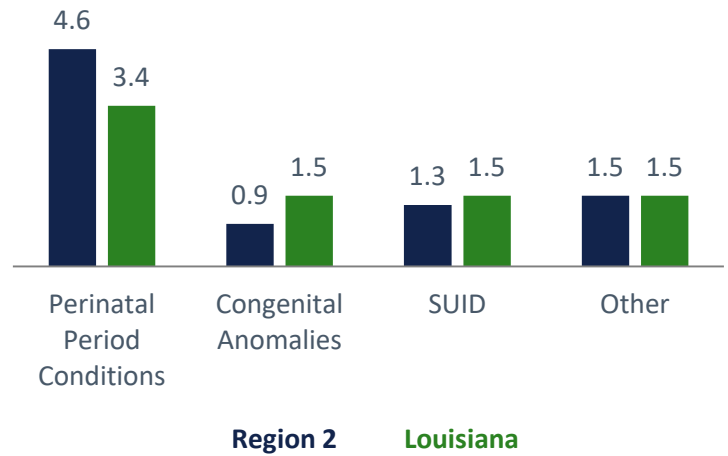
Region 2 Mortality Surveillance Report, 2018-2020

Baton Rouge Area | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 2:

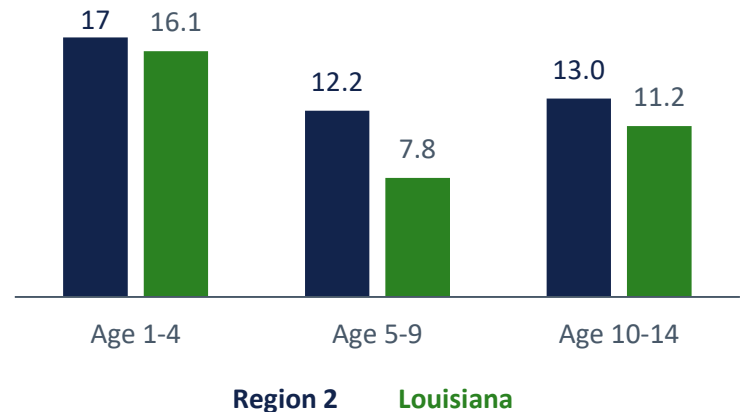
- Death rate is per 1,000 live births.
- **Region 2's infant mortality rate is 8.3 deaths per 1,000 live births, greater than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

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 1-4, 5-9, and 10-14.**



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	MVC (Tie)
2	Homicide	MVC	Fire	Suicide(Tie)
3	**	Homicide	**	Homicide

Drowning is the leading cause of death in **ages 1-4**. **Motor Vehicle Crashes** is the leading cause of death in **ages 5-9**. **MVC and Suicide** are the leading causes of death in **ages 10-14**. **SUID** is the leading case 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, 2018-2020

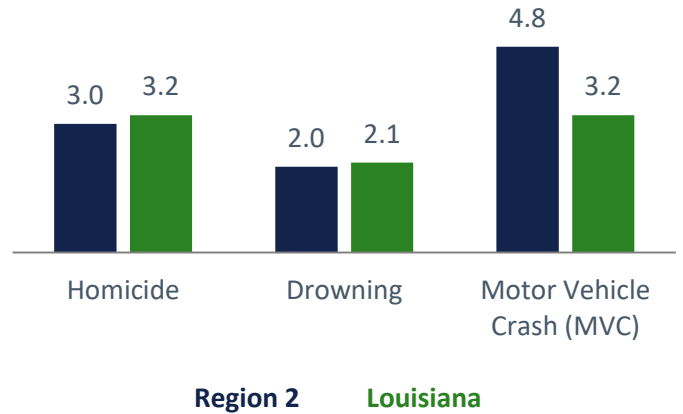
Region 2 Mortality Surveillance Report, 2018-2020

Baton Rouge Area | Published August 2022

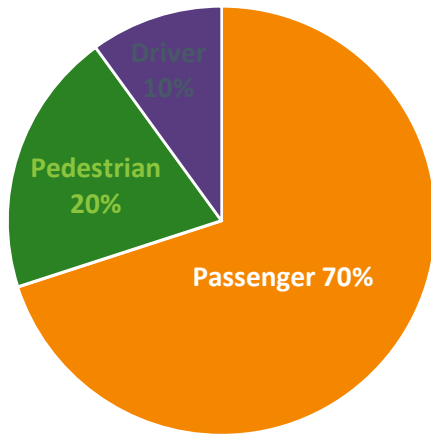
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 2:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 2's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **15.5 per 100,000 children**. Louisiana's is 13.1.
- **Region 2 surpasses Louisiana in the rate of deaths by Motor Vehicle Crash.**
- Region 2 has the **2nd highest Motor Vehicle Crash death rate** of the 9 regions in the state.



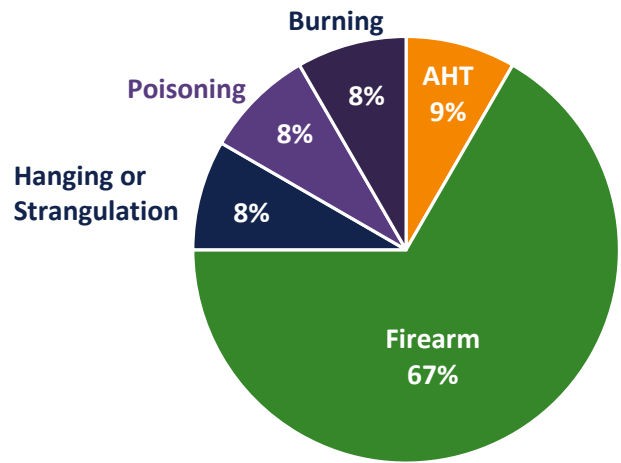
Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 2, 2018-2020²



About Motor Vehicle Crash Deaths:

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

Types of Homicide Deaths in Children Ages 0-14 years in Region 2, 2018-2020¹



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).

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

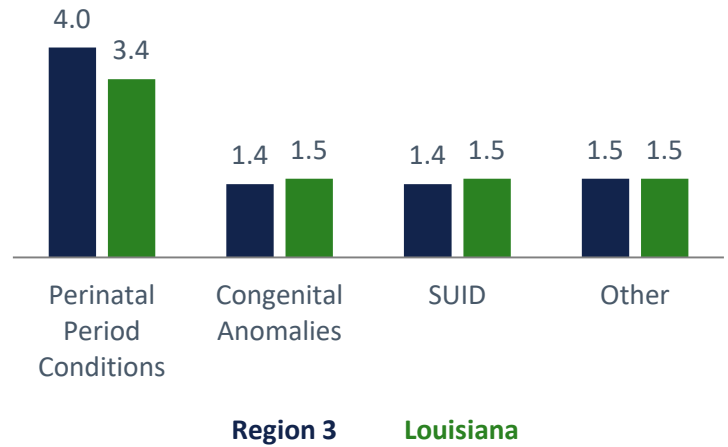
Region 3 Mortality Surveillance Report, 2018-2020

South Central Louisiana | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2017-2019¹

Infant Death in Region 3:

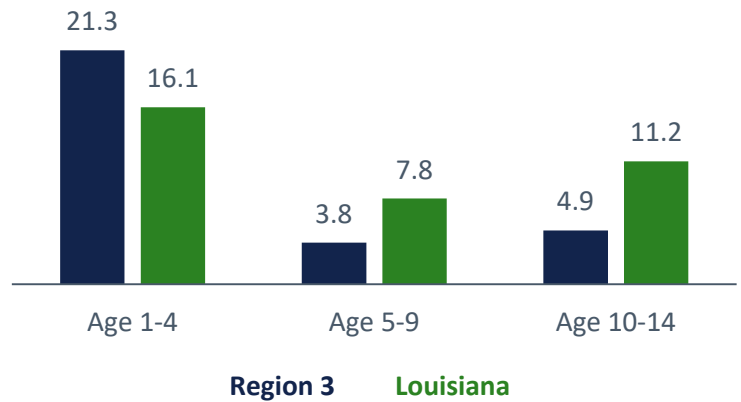
- Death rate is per 1,000 live births.
- **Region 3's infant mortality rate is 8.3 deaths per 1,000 live births, greater than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

About Child Mortality Due to Injury in Region 3:

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



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*	Drowning	**	**
2	**	MVC	**	**
3	**	Homicide	**	**

Drowning is the leading cause of death in **ages 1-4**. **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, 2018-2020

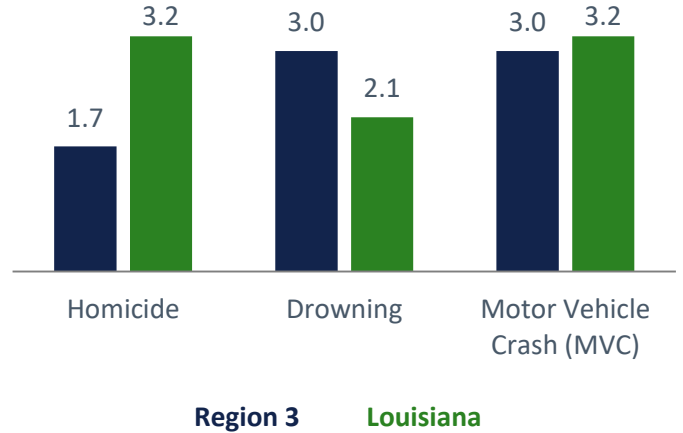
Region 3 Mortality Surveillance Report, 2018-2020

South Central Louisiana | Published August 2022

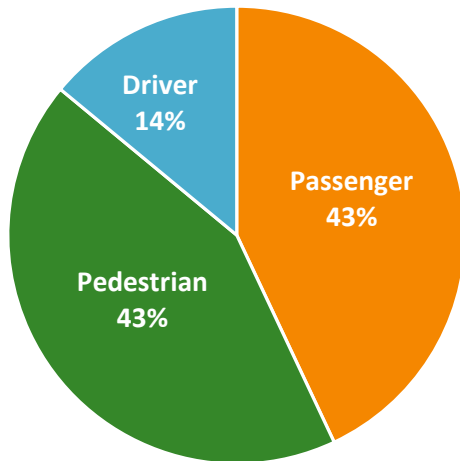
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 3:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 3's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **9.3 per 100,000 children**. Louisiana's is 13.1.
- **Region 3 surpasses Louisiana** in the rate of deaths by **Drowning**.
- Region 3 has the **3rd highest drowning death rate** of the 9 regions in the state.



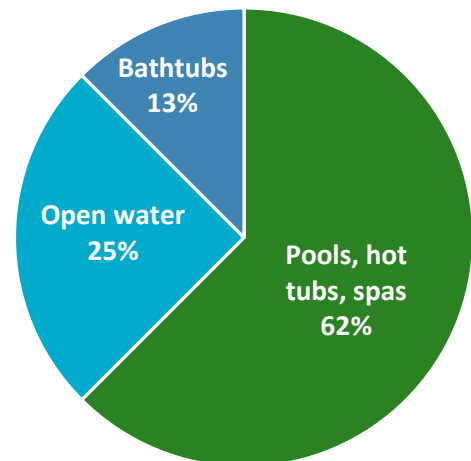
Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 3, 2018-2020²



About Motor Vehicle Crash Deaths:

- **43%** of the motor vehicle crash deaths occur when the child is a **passenger** in the vehicle.
- Another **43%** of deaths occur when the child is a **pedestrian**.

Types of Drowning Deaths in Children Ages 0-14 years in Region 3, 2018-2020²



About Drowning Deaths:

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

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

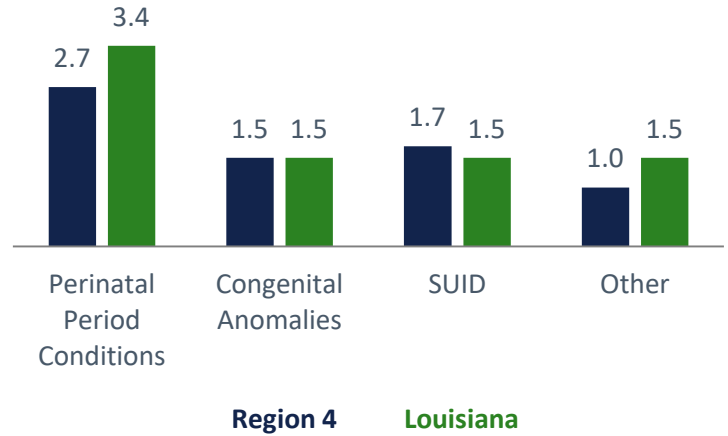
Region 4 Mortality Surveillance Report, 2018-2020

Acadiana | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 4:

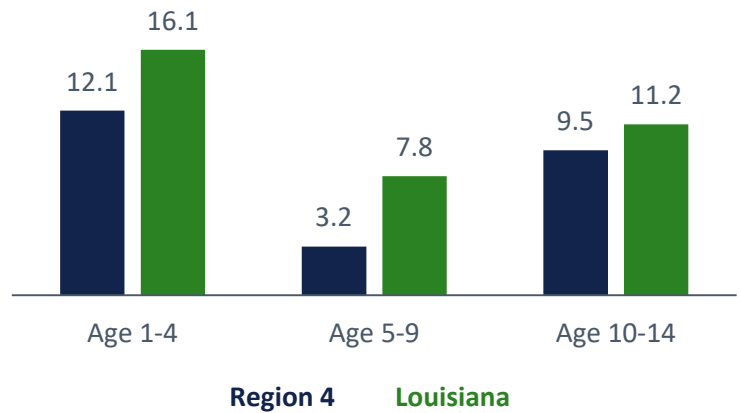
- Death rate is per 1,000 live births.
- **Region 4's infant mortality rate is 6.9 deaths per 1,000 live births, lower than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

About Child Mortality Due to Injury in Region 1:

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



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	Threats to Breathing	Drowning	**	Suicide
3	**	**	**	**

Motor Vehicle Crashes is the leading cause of death in ages 1-14. **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, 2018-2020

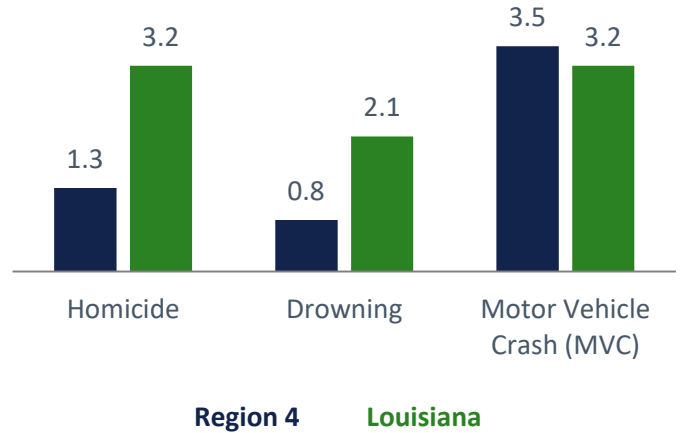
Region 4 Mortality Surveillance Report, 2018-2020

Acadiana | Published August 2022

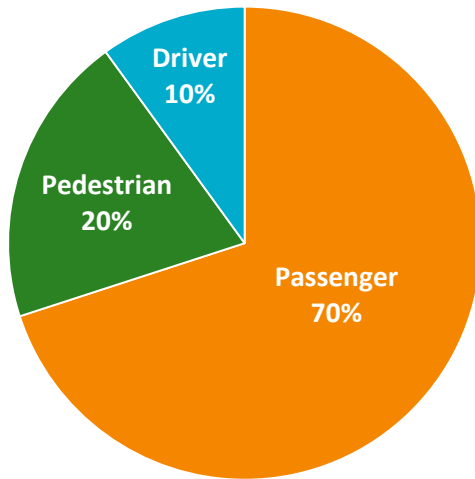
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 4:

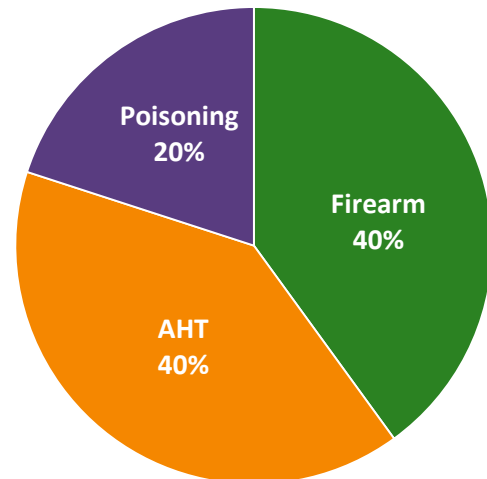
- Deaths are per 100,000 children ages 0-14 years.
- **Region 4's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **9.9 per 100,000 children**. Louisiana's is 13.1.
- **Region 4 surpasses Louisiana** in the rate of deaths by **Motor Vehicle Crash**.



Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 4, 2018-2020²



Types of Homicide Deaths in Children Ages 0-14 years in Region 4, 2018-2020²



About Motor Vehicle Crash Deaths:

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

About Homicide Deaths:

- **40%** of Region 4 homicides are due to **firearms**.
- **40%** of homicides are due to **Abusive Head Trauma (AHT)**.

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

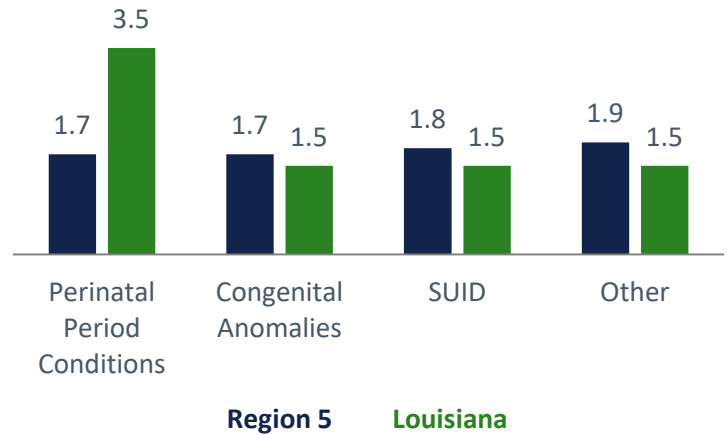
Region 5 Mortality Surveillance Report, 2018-2020

Southwest Louisiana | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 5:

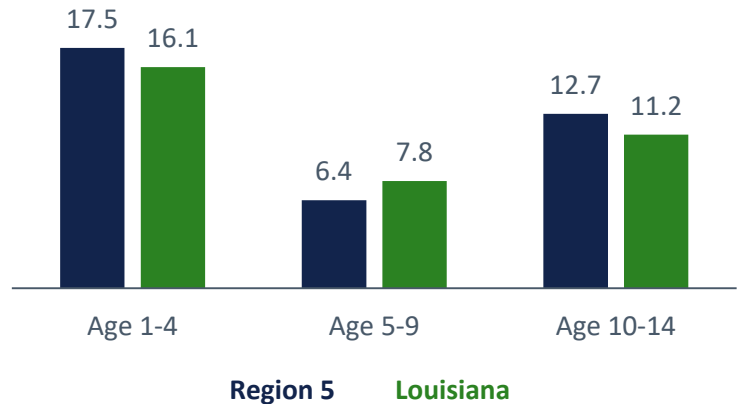
- Death rate is per 1,000 live births.
- **Region 5's infant mortality rate is 7.1 deaths per 1,000 live births, lower than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

About Child Mortality Due to Injury in Region 5:

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



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	Homicide
2	**	**	**	**
3	**	**	**	**

Drowning is the leading cause of death in **ages 1-4.** **Motor Vehicle Crashes** is the leading cause of death in **ages 5-9.** **Homicide** is the leading cause of death in **ages 10-14.** **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, 2018-2020

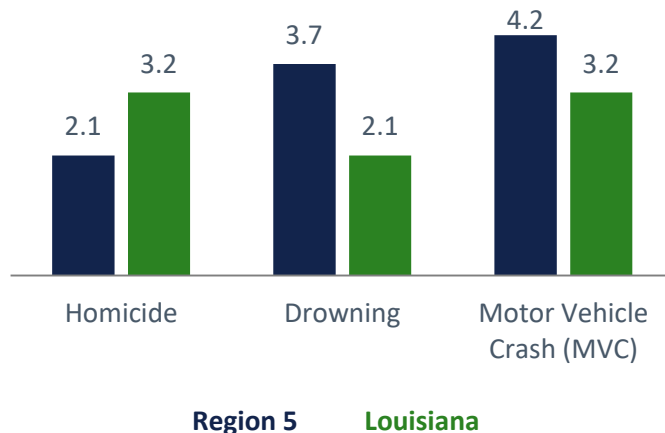
Region 5 Mortality Surveillance Report, 2018-2020

Southwest Louisiana | Published August 2022

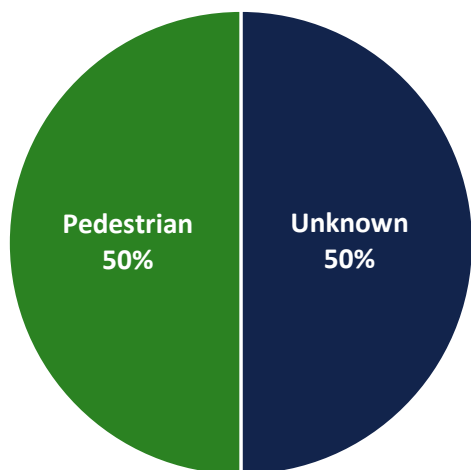
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 5:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 5's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **13.7 per 100,000 children**. Louisiana's is 13.1.
- **Region 5 surpasses Louisiana** in the rate of deaths by **drowning and motor vehicle crashes**.
- Region 5 has the **highest drowning death rate and the 3rd highest motor vehicle crash death rate** of the 9 regions in the state.



Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 5, 2018-2020²

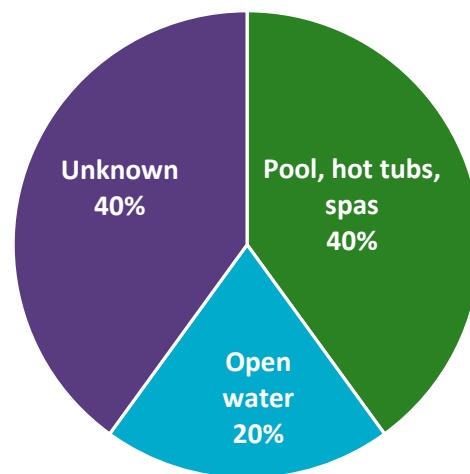


About Motor Vehicle Crash Deaths:

- **50% of the MVC deaths occur in pedestrians.**
- **50% of cases the child's position at death was unknown**

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

Types of Drowning Deaths in Children Ages 0-14 years in Region 5, 2018-2020²



About Drowning Deaths:

- **40% 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

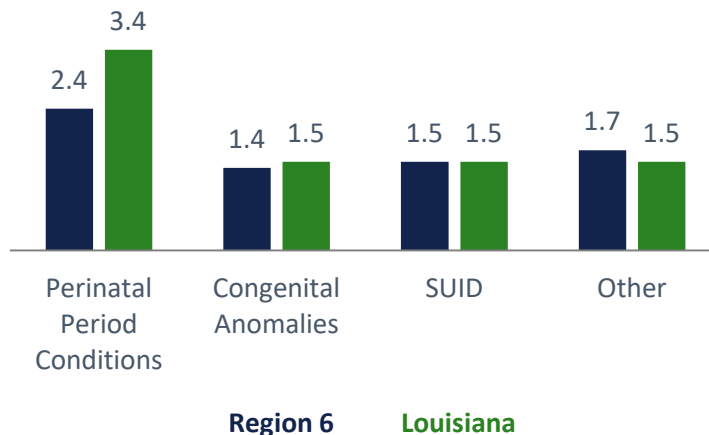
Region 6 Mortality Surveillance Report, 2018-2020

Central Louisiana | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 6:

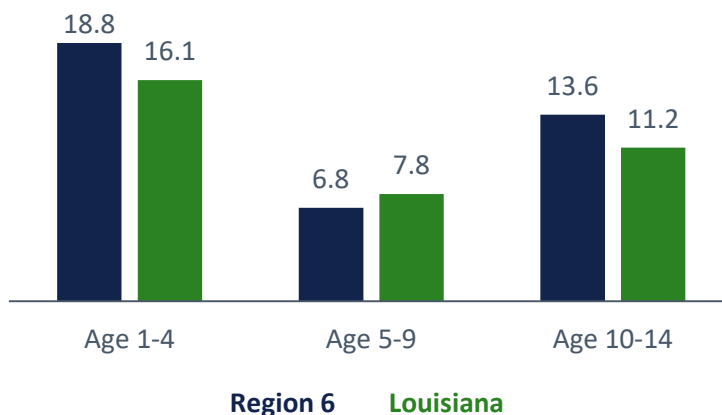
- Death rate is per 1,000 live births.
- **Region 6's infant mortality rate is 7.0 deaths per 1,000 live births, lower than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

About Child Mortality Due to Injury in Region 6

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



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*	**	**	MVC
2	Homicide	**	**	**
3	**	**	**	**

Motor Vehicle Crashes is the leading cause of death in ages **10-14.** **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, 2018-2020

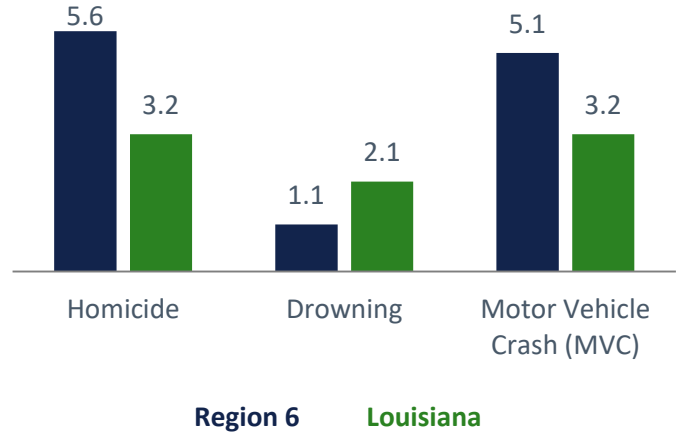
Region 6 Mortality Surveillance Report, 2018-2020

Central Louisiana | Published August 2022

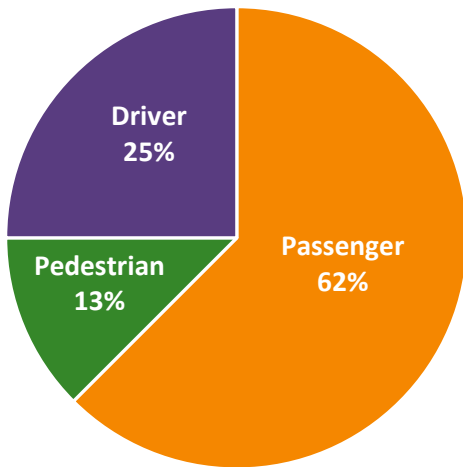
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 6:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 6's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **16.9 per 100,000 children**. Louisiana's is 13.1.
- **Region 6 surpasses Louisiana in the rate of deaths by homicide and motor vehicle crashes.**
- Region 6 has the **highest homicide and motor vehicle crash death rate** of the 9 regions in the state.



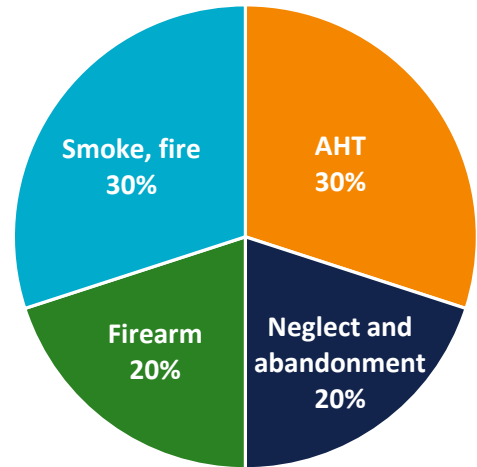
Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 6, 2018-2020²



About Motor Vehicle Crash Deaths:

- **More than half** of MVC deaths occur in **vehicle passengers**.
- In **25%** of MVC deaths the child was **driving the vehicle**.

Types of Homicide Deaths in Children Ages 0-14 years in Region 6, 2018-2020¹



About Homicide Deaths:

- **A third** of Region 6 homicides are due to **abusive head trauma (AHT)** and another **third** of Region 6 homicides are due **smoke, and fire inhalation**.

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

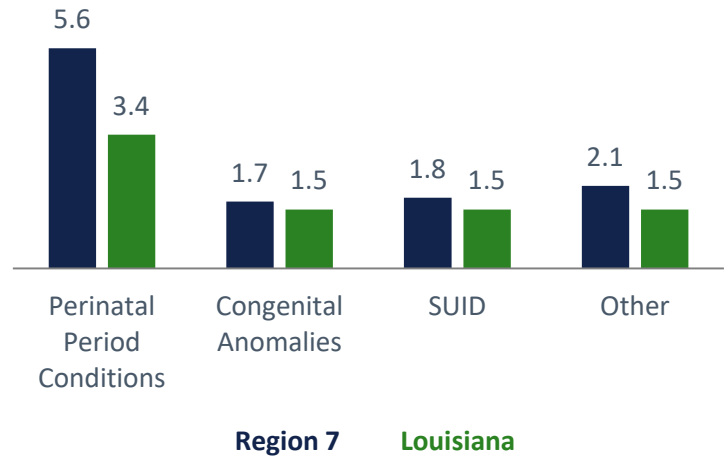
Region 7 Mortality Surveillance Report, 2018-2020

Northwest Louisiana | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 7:

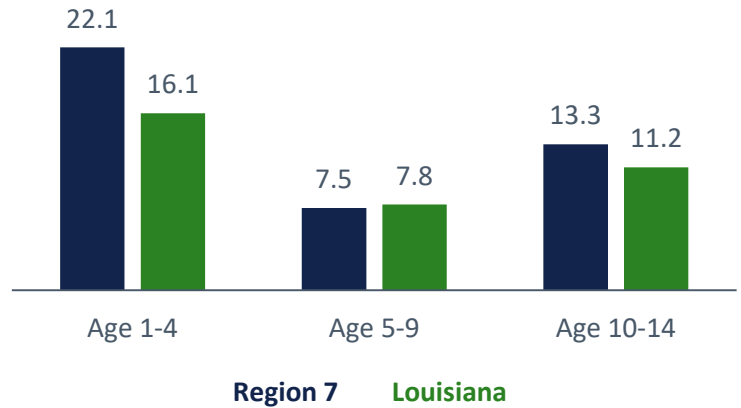
- Death rate is per 1,000 live births.
- **Region 7's infant mortality rate is 11.3 deaths per 1,000 live births, greater than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

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 1-4 and 10-14.**
- Region 7 has approximately the **same child mortality rate due to injury** as Louisiana for **children ages 5-9.**



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
2	Homicide	Drowning	**	MVC
3	Threats to Breathing	**	**	**

Homicide is the leading cause of death in **ages 1-4**. **Motor Vehicle Crashes** is the leading cause of death in **ages 5-9**. **Suicide** is the leading cause of death in **ages 10-14**. **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, 2018-2020

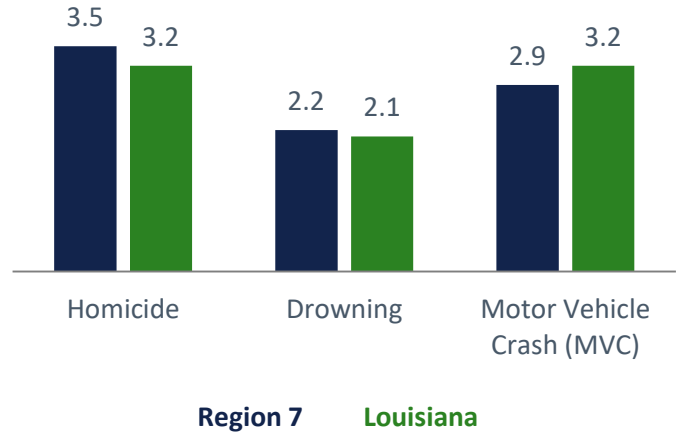
Region 7 Mortality Surveillance Report, 2018-2020

Northwest Louisiana | Published August 2022

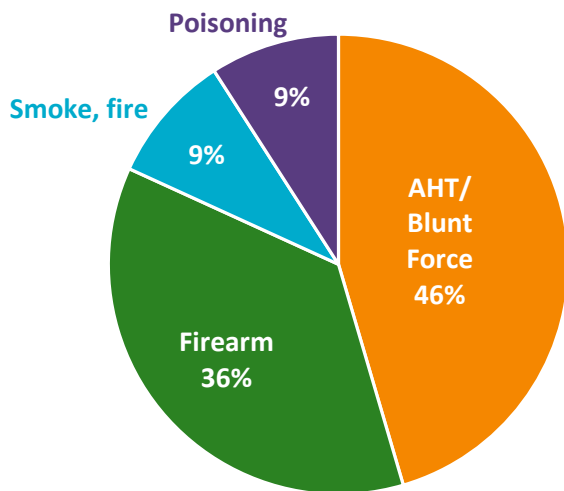
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 7:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 7's total unexpected child death rate of children ages 0-14 years between 2018-2020 is 15.6 per 100,000 children.** Louisiana's is 13.1.
- **Region 7 surpasses Louisiana in the rate of deaths by homicide and drowning.**



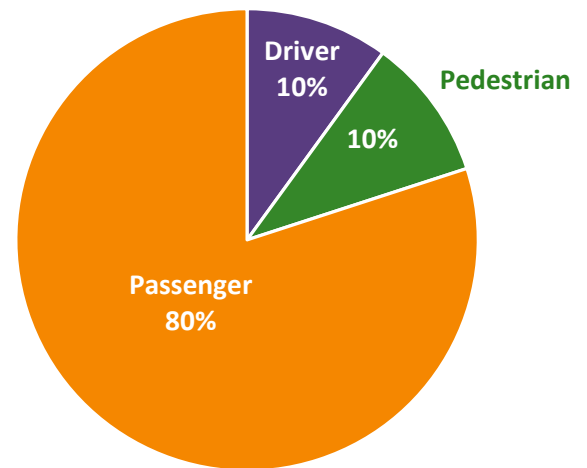
Means Used in Homicide Deaths of Children Ages 0-14 years in Region 7, 2018-2020¹



About Homicide Deaths:

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

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 7, 2018-2020²



About Motor Vehicle Crash Deaths:

- **More than 3 out of 4** MVC deaths in Region 7 occur when the **child is a passenger** in the vehicle.

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

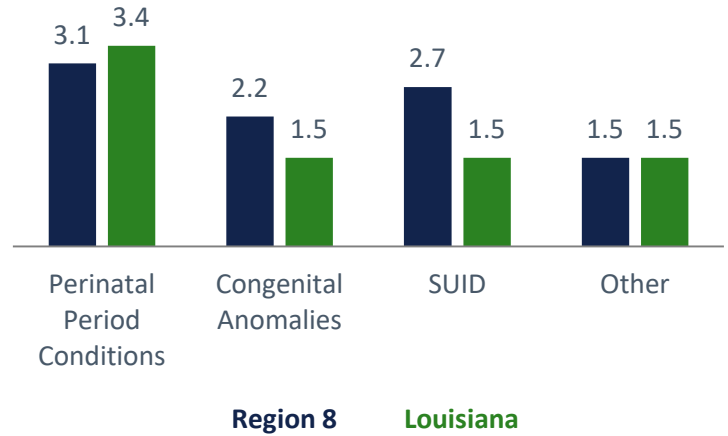
Region 8 Mortality Surveillance Report, 2018-2020

Northeast Louisiana | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 8:

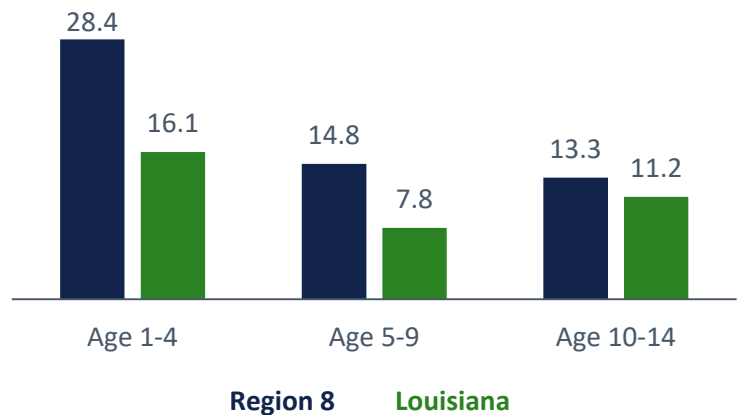
- Death rate is per 1,000 live births.
- **Region 8's infant mortality rate is 9.5 deaths per 1,000 live births, greater than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

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 1-4, 5-9, and 10-14.**



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*	Other***	MVC (Tie)	**
2	Homicide	Drowning	Homicide (Tie)	**
3	**	**	**	**

Other is the leading cause of death in **ages 1-4**. **Motor Vehicle Crashes and Homicide** are the leading causes of death in **ages 5-9**. **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, 2018-2020

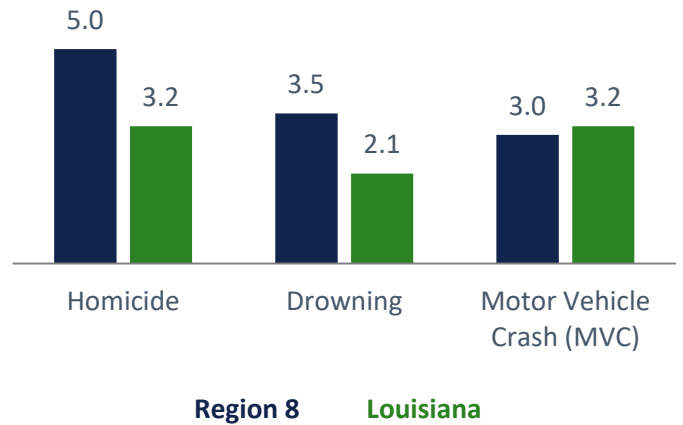
Region 8 Mortality Surveillance Report, 2018-2020

Northeast Louisiana | Published August 2022

Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

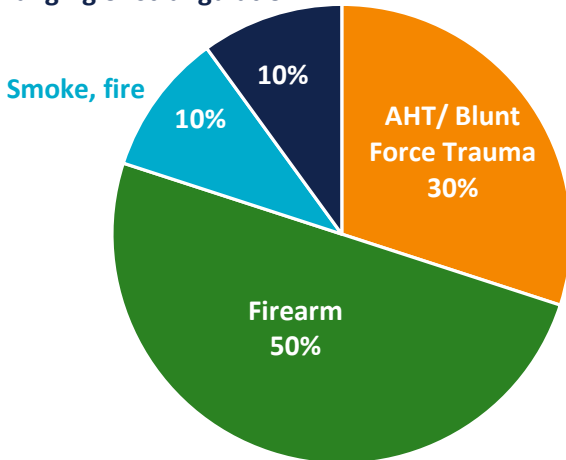
About Child Death Due to Injury in Region 8:

- Deaths are per 100,000 children ages 0-14 years.
- **Region 8's total unexpected child death rate** of children ages 0-14 years between 2018-2020 is **19.3 per 100,000 children**. Louisiana's is 13.1.
- **Region 8 surpasses Louisiana in the rate of deaths by homicide and drowning.**
- Region 8 has the **2nd highest homicide and drowning death rate** of the 9 regions in the state.



Types of Homicide deaths in Children Ages 0-14 years in Region 8, 2018-2020¹

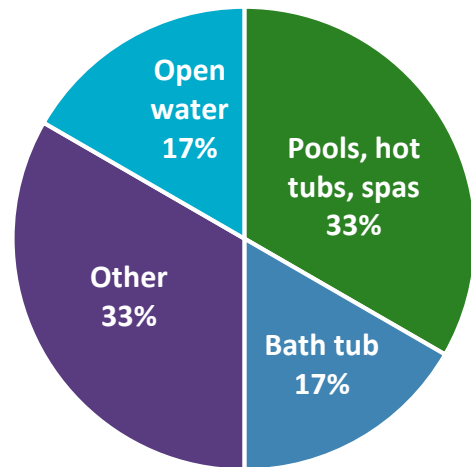
Hanging or strangulation



About Homicide Deaths:

- **Half of homicide deaths in Region 8 occur due to Firearms.**

Drowning Deaths in Children Ages 0-14 years in Region 8, 2018-2020²



About Drowning Deaths:

- **A third 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, 2018-2020; 2. Louisiana Child Death Review

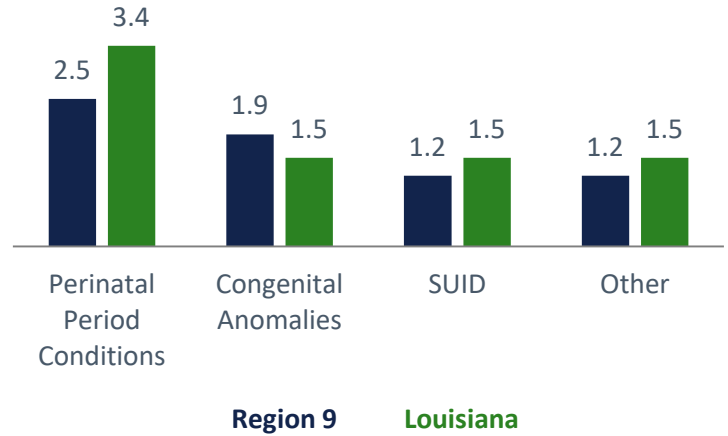
Region 9 Mortality Surveillance Report, 2018-2020

Northshore Area | Published August 2022

Top Causes of Infant Death (Medical and Injury) between 2018-2020¹

Infant Death in Region 9:

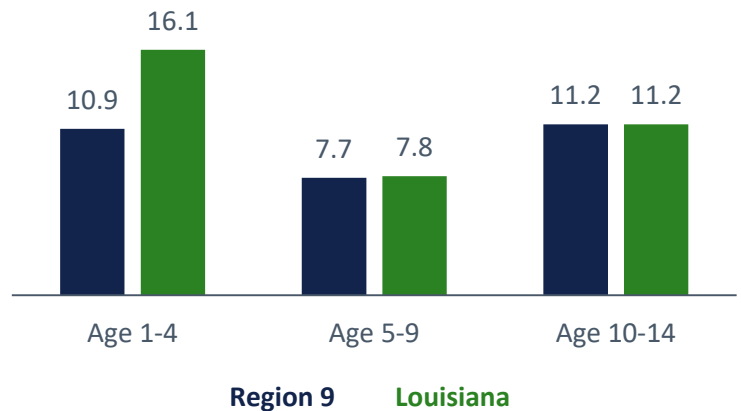
- Death rate is per 1,000 live births.
- **Region 9's infant mortality rate is 6.8 deaths per 1,000 live births, lower than Louisiana's rate of 7.9.**
- **The Healthy People 2020 Goal for infant mortality is 6.0 per 1,000 live births.**
- **SUID** is Sudden Unexpected Infant Death.
- **Other category 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 2018-2020¹

About Child Mortality Due to Injury in Region 9:

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



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	MVC	MVC (Tie)
2	Homicide	**	**	Suicide (Tie)
3	**	**	**	Homicide

Drowning is the leading cause of death in **ages 1-4.** **Motor Vehicle Crashes** is the leading cause of death in **ages 5-9.** **MVC and Suicide** are the leading causes of death in **ages 10-14.** **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, 2018-2020

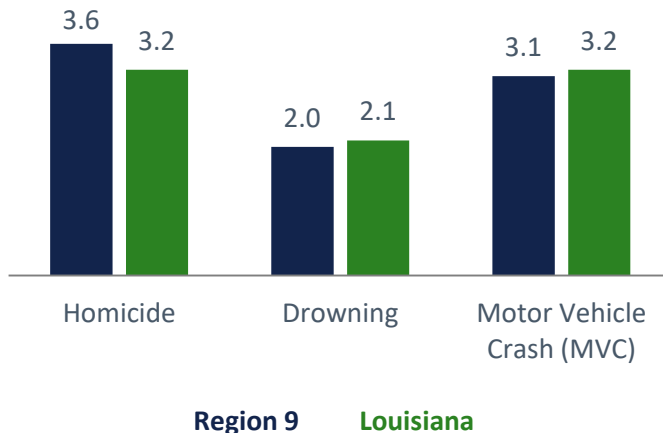
Region 9 Mortality Surveillance Report, 2018-2020

Northshore Area | Published August 2022

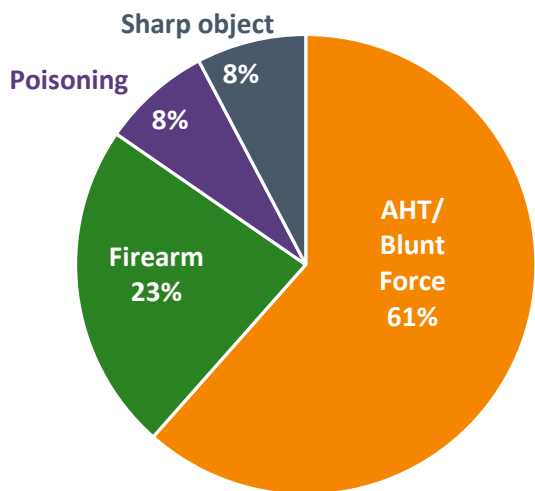
Top Causes of Injury Deaths in Children Ages 0-14 years between 2018-2020¹

About Child Death Due to Injury in Region 9:

- Deaths are per 100,000 children ages 0-14 years.
- Region 9's total unexpected child death rate of children ages 0-14 years between 2018-2020 is **13.1 per 100,000 children**. Louisiana's is 13.1.
- Region 9 surpasses Louisiana in the rate of deaths by homicide.



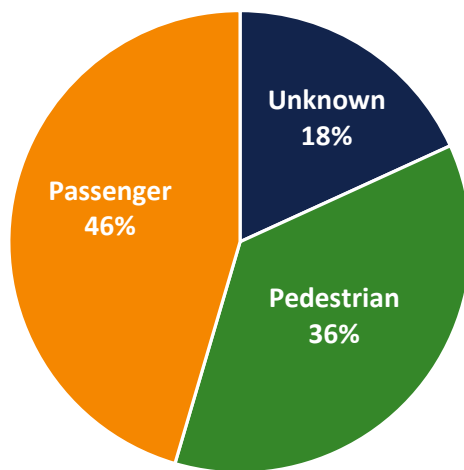
Means Used in Homicide Deaths of Children Ages 0-14 years in Region 9, 2018-2020¹



About Homicide Deaths:

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

Types of Motor Vehicle Crash (MVC) Deaths in Children Ages 0-14 years in Region 9, 2018-2020²



About Motor Vehicle Crash Deaths:

- **46%** of the motor vehicle crash deaths in Region 7 occur when the child is a **passenger** in the vehicle.
- Another **36%** of deaths occur when the child is a **pedestrian**.

Sources: 1. Louisiana Vital Records, 2018-2020; 2. Louisiana Child Death Review

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Other Sources:

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

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Cooperative Data Agreement

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