Child Death Review

2024 Annual Legislative Report

Prepared by:

Bureau of Family Health

Office of Public Health

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LOUISIANA DEPARTMENT OF HEALTH

Submitted to:

Jeff Landry, 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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Acknowledgements:

This report was compiled and written by the Louisiana Department of Health, Office of Public Health, Bureau of Family Health staff responsible for the Louisiana Child Death Review. Amy Zapata, MPH, is the Director of the Bureau of Family Health. Louisiana Child Death Review is led by Rebecca Majdoch, MPH, Data to Action Team Lead.

The Louisiana Department of Health, Office of Public Health's Bureau of Family Health coordinates the Child Death Review Program. As mandated by Louisiana Revised Statute 40:2019, child death reviews are conducted for unexpected deaths of infants and children ages 0 through 14.

We recognize the team at the Bureau of Family Health whose dedication and hard work made this report possible, including the data collection specialists and case review coding specialist who extracted the medical records to collect the data and the communication staff who edited and designed the report.

Surgeon General, Ralph L. Abraham, M.D., provided the vital records data presented. The work of so many contributors—including the parish coroners, forensic pathologists, death scene investigators, law enforcement personnel, first responders, state and local Child Death Review Panel members, hospital administrators, healthcare providers, social service agencies, and all others who have assisted in the process of gathering data—has been invaluable in creating meaningful death reviews and prevention recommendations. We also offer many thanks to those providing care and bereavement assistance to families affected by the loss of a child.

Last, we honor the families of children represented in this report. It is our sincere hope that the activities of Louisiana Child Death Review Panel will prevent future tragedies.

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Executive Summary

The Louisiana Department of Health, Office of Public Health, Bureau of Family Health is responsible for coordinating state and local child death review panels that review unexpected, injury-related child deaths, identify risk factors, and provide recommendations for preventive action. The Louisiana Child Death Review Panel is authorized and mandated through the Louisiana Legislature in Louisiana Revised Statute 40:2019 to establish a child death investigation protocol, collect data, and report and share results and recommendations. The Child Death Review report examines infant and child injury-related mortality from 2020 to 2022, identifies trends, and provides recommendations to help reduce the occurrence of child mortality in the future.

Summation of Data and Statistics

- From 2020 to2022, an average of 56,990 infants were born alive in Louisiana each year.
    - A yearly average of **429 infants died before their first birthday.**
    - A yearly average of **218 children over the age of one did not survive to 15**.
- From 2020 to2022, **1,941 children died**, representing a **yearly average of 647 infant and child deaths.** During this time period, Louisiana ranked in the top 10 states with the **highest mortality rates for infants and children** in almost all age groups.
- Between 2020 and 2022, 682 infants and children died due to injury. **More than one-third of all infant (less than one year old) and child (ages one to 14) deaths in Louisiana are injury-related. Injury-related deaths are potentially preventable.**
    - **In infants, most injury-related deaths occur in the sleep environment** and are classified as Sudden Unexpected Infant Deaths. This term used to describe any sudden and unexpected death—whether explained or unexplained (including Sudden Infant Death Syndrome, accidental suffocation, or strangulation in bed and deaths coded as ill-defined or having an unknown cause)—occurring during infancy.
    - **Injury-related deaths, specifically homicides, motor vehicle crashes, and drownings, are the leading causes of all deaths for children ages one to 14.**
- Children with special healthcare needs are at higher risk of injury-related death, especially drowning and homicide due to child maltreatment. [1,2,3]

Key Prevention Recommendations from the Child Death Review Panel

- Establish comprehensive bereavement resources and services to Louisiana families.
- Implement screenings for social determinants of health and mental health, as well as safety screenings for caregivers and children before and during well-child or primary care visits.
- Assess and provide additional resources and supports for infants and children with special healthcare needs.
- Encourage health plans to reimburse and offer incentives for child injury prevention devices and services.
- Increase access to and utilization of home visiting programs.
- Implement first responder protocols for responding to and reporting child fatality cases.
- Implement routine toxicology screening for child fatalities and children in the emergency room.
- Increase funding for and accessibility to high-quality, affordable child care centers.

Introduction

The Louisiana Department of Health, Office of Public Health, Bureau of Family Health is responsible for coordinating state and local child death review panels that review unexpected child deaths, identify risk factors, and provide recommendations for preventive action. Overall, the Bureau works to promote the health of Louisiana families throughout their lifetime through programs and initiatives to improve the health of pregnant women, babies, children, teens, adults, and youth with special healthcare needs.

Our vision is for Louisiana to be a state where all people are valued to reach their full potential, from birth through the next generation. Our mission is to elevate the strengths and voices of individuals, families, and communities to catalyze transformational change to improve population health and achieve equity. The Louisiana Child Death Review Panel and this report are some of the ways the Bureau of Family Health works to advance maternal and child health outcomes in the state.

Legislative Mandates

Investigation of unexpected deaths among infants and children under the age of 15 has been a part of the state's public health activities since 1992, when the legislature mandated that such deaths be investigated in order to "… reduce the incidence of injury and death to infants and children…" (see Louisiana Revised Statute 40:2019). Unexpected deaths, according to the statute, are those deaths that are the result of undiagnosed disease or related to trauma in which the surrounding circumstances are suspicious, obscure, or otherwise unexplained. A clinical diagnosis of death due to Sudden Infant Death Syndrome (SIDS) is also considered an unexpected death. The law outlines requirements for the investigations and for entities required to report deaths, as well as for access to and protections of records. Additionally, the statute authorized the establishment of the State Child Death Review Panel and local panels, which are charged with reviewing the cases and making recommendations on policy or other measures to prevent deaths in the future.

Louisiana Child Death Review

Coordinated by the Bureau of Family Health, the Louisiana Child Death Review utilizes a thorough and multidisciplinary review process for unexpected, injury-related deaths in Louisiana among infants and children ages 0 through 14 to understand and prevent infant and child deaths. Records related to the unexpected death of a child reviewed in this process are confidential. The primary goal of these case reviews is not to evaluate the investigations or handling of specific cases, but rather to analyze these deaths at both the state and local levels to uncover opportunities for improving investigations and enhancing future prevention efforts.

Commonly reviewed cases include deaths attributable to unintended injuries, homicide (including those due to child abuse and neglect), suicide, Sudden Unexpected Infant Death (SUID), and unknown causes. Case information is obtained from the Office of State Registrar and Vital Records, hospital medical records, autopsies, death scene investigations, and first responder reports to create case summaries presented for review at child death review panel meetings.

Review panels are made up of multidisciplinary groups of professionals, including state health officials, legislators, law enforcement, coroners, pathologists, healthcare professionals, and other statewide agencies. In Louisiana, there are nine local child death review panels and one state child death review panel. Collaboratively, child death review panels review the de-identified case summaries. Panels

identify risk and protective factors and provide recommendations to reduce the occurrence of child death across the state.

Recommendations developed during child death review panel meetings are referred to the regional Community Action and Advisory Teams (multidisciplinary partners who develop child-injury prevention action plans) and injury and violence prevention partners for implementation. The State Child Death Review Panel uses the recommendations to influence state-level prevention strategies and policies. To further enhance prevention efforts, topic-specific workgroups are established through the state panel that focuses on specific prevention initiatives to implement. Please see Appendix C for the Child Death Review Process. For more detailed information on the Louisiana Child Death Review process, please visit partnersforfamilyhealth.org/childdeathreview.

Data Sources and Methodology

The Louisiana Child Death Review report reflects infant and child unexpected/injury-related deaths (mortality) from 2020 to2022.[5] Data over a three-year period is examined to achieve a sufficient sample size for statistical reporting. Multi-year state and regional rates are provided, as well as annual averages of deaths and the leading causes of child death. Annual averages are provided to help estimate the magnitude of the issue in a one-year timeframe. Key points and recommendations are derived from Louisiana Child Death Review data and panel findings, national research, and the established public health evidence base.

When available, national rates, Louisiana rates, and Louisiana rankings in the U.S. are provided for comparison. National-level data is from the U.S. Centers for Disease Control and Prevention WONDER,[6] 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. In addition to Vital Records and Child Death Case Reporting System data, Louisiana Pregnancy Risk Assessment Monitoring System[7] data has been used to augment risk factor findings and prevention recommendations for infant mortality. For more information on the Louisiana Pregnancy Risk Assessment Monitoring System, visit partnersforfamilyhealth.org/prams.

Many key indicators are presented at the regional level in the state (see Appendix A), 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 between one and four are suppressed to preserve confidentiality. Any cause of death category with counts fewer than five were collapsed into an "other" category.

2020 to 2022 Infant and Child Mortality Data and Recommendations for Prevention: 0 to 14 Years

Injury-related deaths are deaths that result from an injury, which can be intentional or unintentional. Intentional injuries are inflicted on purpose, either by the victim or another person. Unintentional injuries are not inflicted on purpose. There are risk factors related to the leading preventable causes of injury-related mortality and recommendations for reducing risk factors, increasing protective factors, and preventing future infant (less than one year old) and child (ages one through 14) deaths.

Homicides are the top cause of injury-related child death in Louisiana. The homicides are injuries inflicted by another person with intent to injure or kill, by any means. The homicides seen in this report are predominantly due to firearms, blunt force trauma, abusive head trauma, asphyxia (suffocation) and poisoning.

Motor vehicle-related crashes are the second leading cause of injury-related child death in Louisiana. These are predominantly crashes involving motor vehicles, but include all transport-related deaths, such as incidents involving all-terrain vehicles (ATVs), as well as children who were parties to the crash as pedestrians or cyclists.

Drownings are the third-leading cause of injury-related child death in Louisiana. These predominately take place in pools, hot tubs, or spas for this age group.

Suicides are another common cause of injury-related child death in Louisiana. More than half of these suicides were due to firearms.

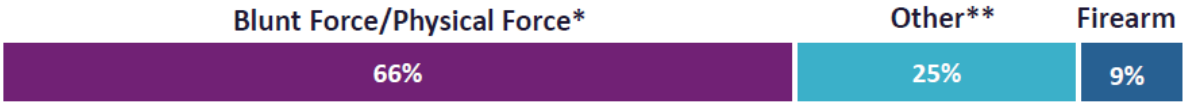
The Bureau of Family Health used data from the National Fatality Review Case Reporting System database to determine the prevalence (frequency) of risk factors in Louisiana deaths due to motor vehicle crashes, homicide, drowning, and suicide.

Injury and violence specific to infants and children with special healthcare needs is underreported. A primary reason is that death certificate data does not include diagnoses or conditions indirectly related to the cause of death. Examples include autism, deafness, blindness, or conditions resulting in reduced mobility. Infants and children with special healthcare needs require additional supports and resources.

Homicide Deaths

From 2020 to 2022, 118 Louisiana infants and children were victims of homicide.[2] These are injuries inflicted by another person with intent to injury or kill, by any means, and can include assaults or sequelae of assault (See Appendix G: Cause of Death Explanations). Infants (under one) were more likely to die from blunt force injuries, including abusive head trauma, while children ages one to 14 were more likely to die from firearms.

Homicide Methods: Ages birth to one in Louisiana[2]



*Blunt force/physical force is mainly due to Abusive Head Trauma, which includes Shaken Baby Syndrome.
**Other includes hanging, smoke inhalation, abandonment, hot vapor and drug intoxication.

Homicide Methods: Ages one to 14 in Louisiana[2]

*Other includes sharp objects, asphyxia, hanging, smoke inhalation and drug intoxication.

Recommendations

Healthcare systems are encouraged to promote provider participation in the Louisiana Prenatal Quality Collaborative's Caregiver Perinatal Depression Screening Learning Collaborative. The collaborative is a quality improvement initiative focused on improving the implementation of perinatal depression screening, using a validated tool, and referral to resources in pediatric clinics at the one-, two-, four- and six-month well-child visits, in accordance with recommendations from the American Academy of Pediatricians.

Healthcare systems are encouraged to implement programs such as PROTECT, a hospital violence intervention program for victims who are 17 years of age and under (currently being offered at Ochsner LSU Health Shreveport and Monroe). This program works with victims, alongside their families, while they are being treated for firearm-related injuries.

Pediatricians should regularly discuss the following information with caregivers and parents:

- Secure firearm storage: Encourage secure storage of firearms in children's homes and relatives' homes. Safe storage includes locking up firearms and storing firearms and ammunition separately. Free resources can be found at BeSMART for Kids Louisiana.
- Strategies for managing stressful parenting situations: Provide strategies and resources for managing stressful situations such as excessive crying in infants or toddler meltdowns, including safe, age-appropriate methods of discipline.
- Trauma-informed counseling resources: Share resources for trauma-informed counseling for family members of victims and witnesses of gun violence.

First responders on a scene are encouraged to have clear protocols on how to report cases to the Department of Children and Family Services (DCFS) and follow through to ensure cases get reported to

the intake center. Cases should remain open until an autopsy is completed and shared with law enforcement. First responder agencies are encouraged to provide emotional support to staff members who provide or have provided care to child victims.

State policymakers are encouraged to consider legislation around the following:

- Red flag laws that require mandatory surrender of firearms for all persons who present as a danger to themselves or others, including people with a documented history of domestic abuse.
- Universal background checks prior to all gun sales and transfers, including those performed by private sellers, wherever the sale or transfer takes place.
- Waiting periods between applying for a firearm license and being able to purchase a gun, with longer waiting periods for people with a documented history of psychiatric illness.
- Completion of a firearm safety training for any individual purchasing a firearm. Training should include education around gun safety, responsible gun ownership, and risks of sharing guns with individuals with a history of violent behavior. Parents should discuss gun safety and storage with their children after completing the course.

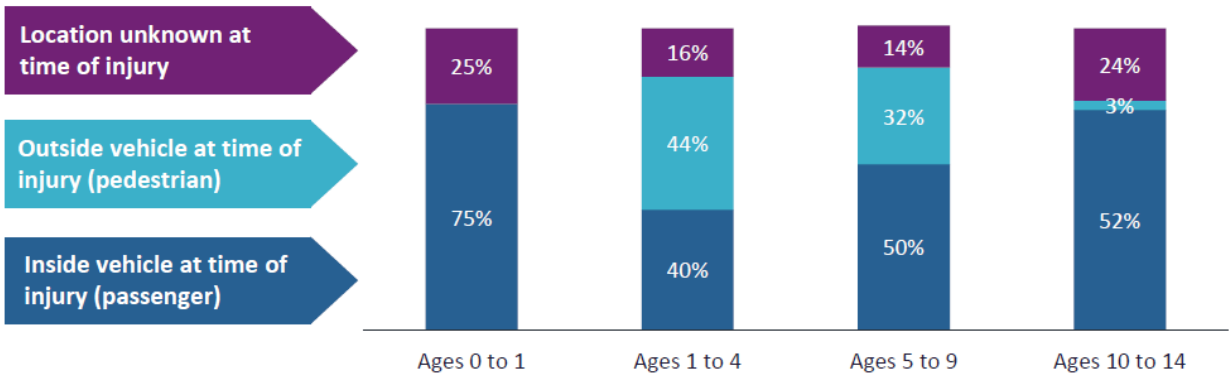
Community agencies are encouraged to support and implement the following:

- Community child and adolescent engagement, including recreational activities and social-emotional support activities, such as community gardens.
- Mentorship and counseling programs incorporated into the rehabilitation process for offenders in the juvenile justice system.
- Evidence-based violence intervention programs that focus on the primary prevention of violence (i.e. cure violence, silence is violence, PROTECT). Make sure these programs reach the families most likely to experience gun violence and include strategies on how to de-escalate and interrupt cycles of retaliatory violence.
- Partnerships with agencies that have a fatherhood initiative program (i.e. Healthy Start) to increase the number of male role models who can provide education and prevention programs for youth and teens in communities with high rates of violence.

Motor Vehicle Crash Deaths

From 2020 to 2022, 86 infants and children in Louisiana died in motor vehicle crashes. [2] A motor vehicle crash, also known as a car crash, traffic collision, or motor vehicle collision, is when a vehicle collides with another vehicle, person, animal, or stationary or moving object. (See Appendix G: Cause of Death Explanations) **Motor vehicle crashes are the second-leading cause of injury-related death in infants and children, from birth to 14, in Louisiana. Infants and children, birth to 14, were more likely to die as passengers in motor vehicle crashes than as pedestrians.**

Location of Victim at time of Motor Vehicle Crash, by Age Group[5]



Safety Features Used in Child Motor Vehicle Crash Deaths[5]

Children were **restrained in 37 percent of MVC deaths** that occurred from 2020-2022.

Recommendations

Pediatricians should regularly discuss the importance of appropriate child safety restraint use at each visit with both children and their caregivers. Refer families to the **Louisiana Passenger Safety Taskforce** for resources such as car seat check events and designated child restraint fitting stations that are available across the entire state.

The Louisiana Highway Safety Commission and Louisiana State Police are encouraged to create a Louisiana comprehensive online safety training and educational materials for all-terrain vehicle (ATV) owners, with a focus on proper operation, safety regulations, and legal requirements, and to ensure such resources are accessible and mandatory for review before an ATV purchase.

Insurance providers are encouraged to offer incentives for drivers who complete an ATV safety course (such as **ATV Rider Course**), especially for children under 17, to promote responsible riding. Ensure these requirements are reflected in insurance rewards.

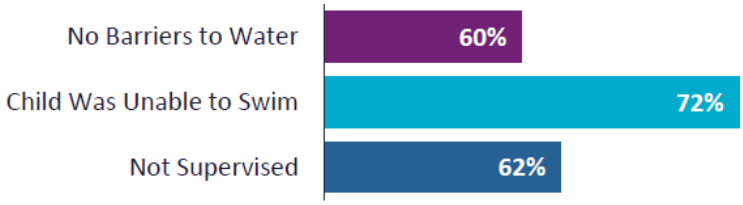
State policymakers are encouraged to consider legislation that addresses all of the following:

- Revises the Louisiana Graduated Driver's License licensure eligibility requirement for 16-year-olds and under to extend through age 17 and state that the driver "may not transport more than one passenger under 21 years of age between 6 p.m. and 5 a.m. unless the passenger is immediate family" (except in cases of emergency).
- Requires ATV rider safety courses for all ATV purchasers, with supporting legislation for ATV dealers to provide education regarding ATV safety guidelines for child and teenage drivers at the time of purchase.
- Mandates the enforcement of existing laws prohibiting ATVs on public roadways via executive order. This legislation should outline specific enforcement procedures, establish penalties for violations, and allocate necessary resources for law enforcement agencies. Additionally, it should include provisions for training officers on the new enforcement measures and mechanisms for assessing the policy's effectiveness in enhancing public safety.
- Requires all people possessing a valid driver's license to complete annually, or at least every two years, continuing education on updated motor vehicle laws. This could be completed and submitted through the Louisiana's Department of Motor Vehicles website. If not a legislatively mandated requirement, insurance companies could incentivize rates for annual continuing education course completion.

Drowning Deaths

From 2020 to 2022, a total of 63 infants and children in Louisiana died from drowning, making it the third leading cause of injury-related death. [2] Deaths in this category can include accidental drownings or submersions (See Appendix G: Cause of Death Explanations).

Top Risk Factors for Drowning in Louisiana[5]



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

Drowning Location of children who died from drowning in Louisiana**, almost half (43%)** drowned in a **pool, hot tub, or spa.** [5]

Recommendations

Pool owners, water safety instructors, and community agencies 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 arm's reach. Increase awareness that children with medically complex diagnoses (i.e. autism or seizure disorders) may be at higher risk of drowning.
- Promote drowning prevention materials from sources such as **poolsafety.gov** or **Safe Kids** and increase public awareness of drowning as a major cause of preventable death in children.

Policymakers and community and municipal leaders should:

- Promote legislation to allow all children under the age of 12 to be provided swim lessons through Medicaid or private insurance reimbursement.
- Require by law or ordinance that open ponds in residential areas must be fenced and/or have warning signs.
- Require building officials and insurers to enforce the use of standard safety features around pools, spas, and ponds, such as barriers, gates, door and pool alarms, and covers.
- Support and fund lifejacket loaner programs at public swimming and boating sites. Explore partnerships with the Louisiana Department of Wildlife and Fisheries to implement lifejacket loaner programs.

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.

- Assess elopement or wandering risk for children with autism and developmental disabilities and provide education and resource information to parents, including information on GPS location tracking devices for elopement response in children with autism and developmental disabilities.

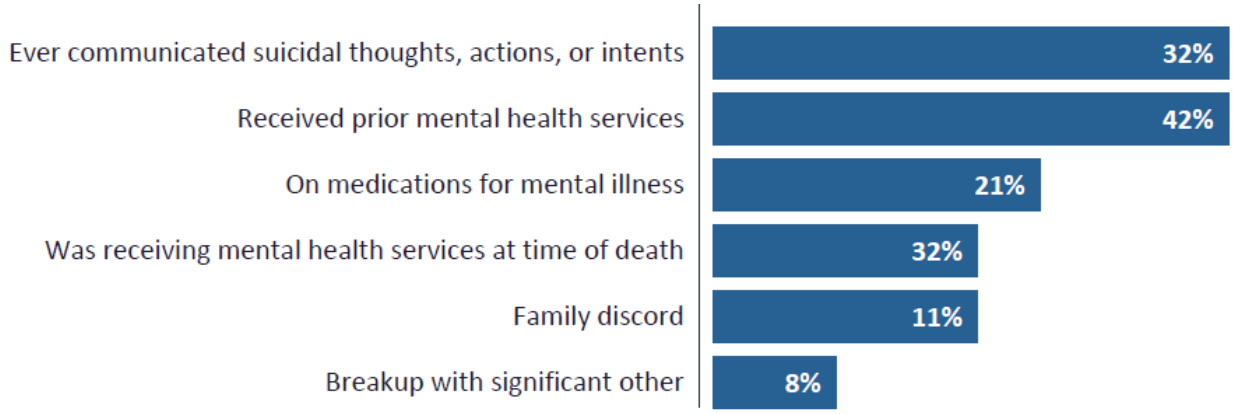
Suicide Deaths

From 2020 to 2022, 26 children from birth to the age of 14 in Louisiana died from suicide. Suicide is a death that occurs from a purposefully self-inflicted poisoning or injury. Of the 26 suicide deaths, half of the fatalities were completed using a firearm.

Suicide Methods

Experiences of Children who Died by Suicide

Local child death review panels reviewed 19 out of 26 child deaths due to suicide from 2020 to 2022. The graph below reflects only reviewed cases, and the data is not mutually exclusive.



Recommendations

- **Pediatricians** should regularly talk to parents about safely storing all firearms in children's homes and relatives' homes. Safe storage includes locking up firearms and storing firearms and ammunition separately. Free resources can be found at **BeSMART for Kids Louisiana**.
- **Pediatricians** should utilize evidence-based suicide risk screening tools for pediatric patients ages 12 and up, following **AAP guidelines**.
- **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.
- **School systems** are encouraged to increase suicide prevention activities, including staff and student education, by adopting **LDOE recommendations and model policies for suicide prevention**.
- **Policymakers** are encouraged to support diverse and sustainable funding for the full continuum of crisis response, including but not limited to lifeline call centers (someone to call), mobile crisis response services (someone to respond), and crisis respite and stabilization centers (somewhere to go).

- **Policymakers** should continue to support federal funding for evidence-based suicide prevention training, such as **Living Works' ASIST**, **safeTALK** or **QPR**, for youth and youth-serving agencies.
- **Healthcare systems** should increase availability of behavioral health providers in medically underserved and provider shortage areas, as well as expand telehealth options for mental health and substance use treatment.
- **Louisiana Department of Health and other state agencies** should encourage and support education and training on how to integrate strengths-based, trauma-informed approaches into clinical, community, and school settings. For more information and sector-specific resources, visit the **Whole Health Louisiana Initiative** and **Adverse Childhood Experiences Educator Program**.

2020-2022 Infant Mortality Data in Louisiana: Birth to One Year

Infant Mortality: All Causes

From 2020 to 2022 in Louisiana, an average of 429 infants per year died before they reached their first birthday.[2]

The Louisiana infant mortality rate from 2020 to 2022 was **7.5 deaths per 1,000 live births**. The U.S. infant mortality rate during the same period was **5.5 deaths per 1,000 live births**. This means that **115 fewer** babies would have died each year if Louisiana had the same infant mortality rate as the U.S.

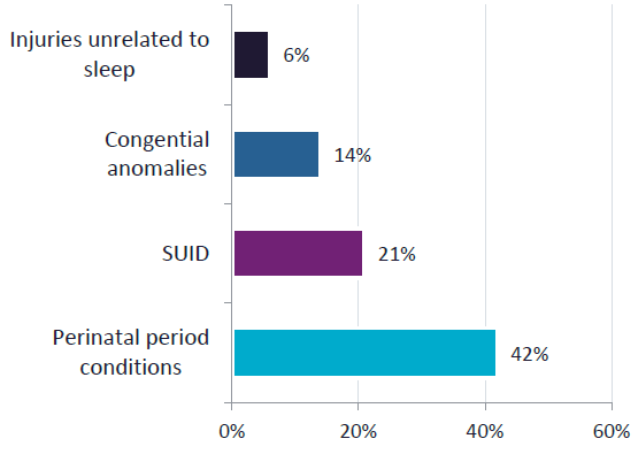
Louisiana Rate	US Rate	LA Ranking[5]
7.5	5.5	Third highest in the U.S.

Infant Deaths by Region (2020-2022)[2]	1	2	3	4	5	6	7	8	9
Average annual infant death counts	70	74	34	57	23	23	65	42	42
Infant mortality rate per 1,000 live births	6.7	8.7	7.3	7.1	6.0	6.1	10.2	10.2	5.6

Top Causes of Infant Death

Each year, an average of…[2]

- **180** 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**.
- **62** infants died **from congenital anomalies**.
- **24** infants died **from injuries that were not related to sleep environments**.



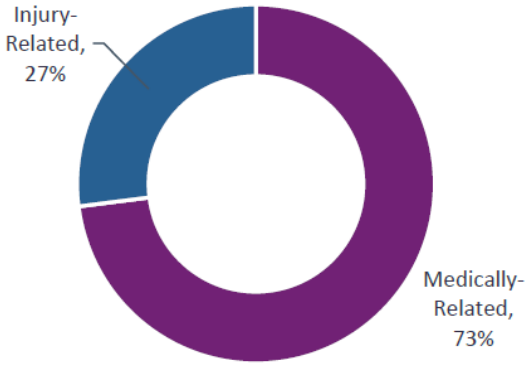
Key Points

- From 2020 to 2022, Louisiana had the third highest infant mortality rate in the country.
- Maternal health before conception and during pregnancy is closely linked to the leading cause of infant death: conditions originating in the perinatal period (See Appendix G: Cause of Death Explanations). These conditions contributed to 41% of infant deaths. Within that category, low birth weight and premature birth are among the top conditions, both of which are risk factors for the second leading cause of infant death, Sudden Unexpected Infant Death (SUID). SUID refers to any sudden and unexpected infant death, whether explained or unexplained. This includes accidental suffocation or strangulation in bed, Sudden Infant Death Syndrome (SIDS) and ill-defined deaths or having an unknown cause.

Infant Mortality: Injury-Related Fatalities

From 2020 to 2022, an average of 115 infants per year died from an injury before they reached their first birthday.[2]

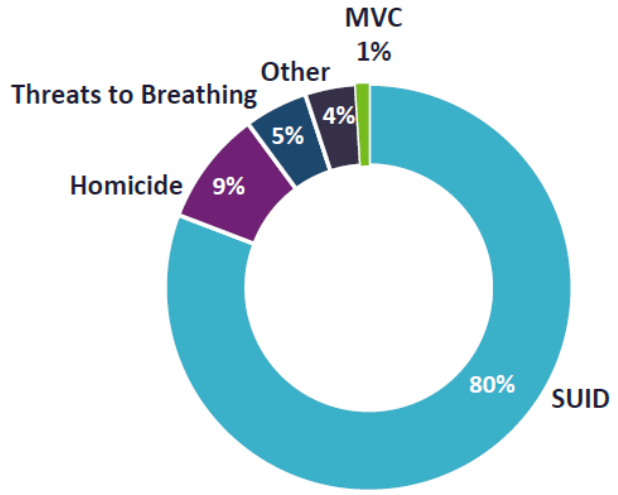
About one in four infant deaths were injury-related.[5]



Sudden Unexpected Infant Deaths (SUID) is the Leading Cause of Injury-Related Fatalities

Each year, an average of…[2]

- **90** infant deaths **were classified as Sudden Unexpected Infant Deaths (SUID)**.
- **11** infants died **from homicide**.
- **5** infants died **from threats to breathing (i.e. choking)**.
- **5** infants died **by other types of unintentional injury**.
- **1** infant 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 one to three months old. The most common SUID risk factors present among these deaths are: infants sleeping somewhere other than a crib or bassinette (79%); infants sleeping with other people (87%); and infants sleeping with loose bedding or toys (71%).

- 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]
- Sixty-eight percent of homicides in infants are due to abusive head trauma and blunt force injuries.

Post-neonatal Mortality: 28 to 365 days

From 2020 to 2022 in Louisiana, an average of 196 infants per year died during the post-neonatal period.[2]

A CLOSER LOOK

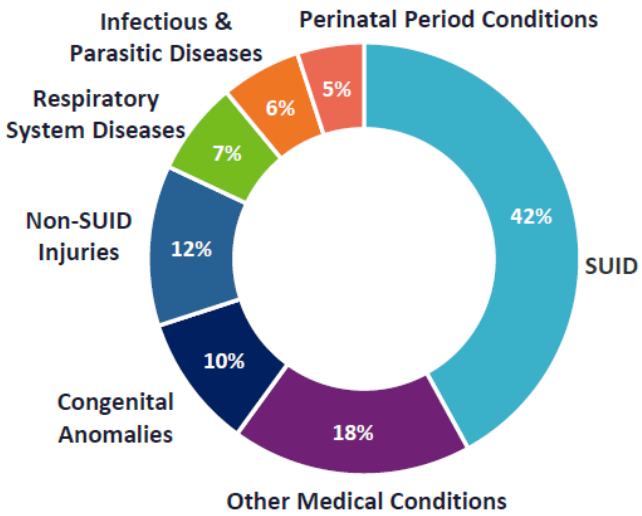
From 2020 to 2022 in Louisiana, fewer deaths occurred during the post-neonatal period (28 to 365 days of life) than the neonatal period (0 to 27 days of life). However, the **causes of death common to this period are more preventable.** For example, 42% of deaths during the post-neonatal period are classified as Sudden Unexpected Infant Deaths (SUIDs). Many of these deaths could be prevented through safe sleep practices.

Louisiana Rate[2]	U.S. Rate[3]	LA Ranking
3.4	**1.9**	**Second Highest in the U.S.**

Causes of Death during the Post-Neonatal Period

Each year, an average of…[2]

- **82** infant deaths **were classified as SUIDs**.
- **35** infants died **from other medical conditions**, including those related to the circulatory or nervous systems.
- **23** infants died **from injury unrelated to SUID**.
- **19** infants died **from a congenital anomaly**.
- **14** infants died **from infectious and parasitic diseases**.
- **13** infants died **from conditions related to the perinatal period**.
- **10** infants died **from respiratory diseases**.



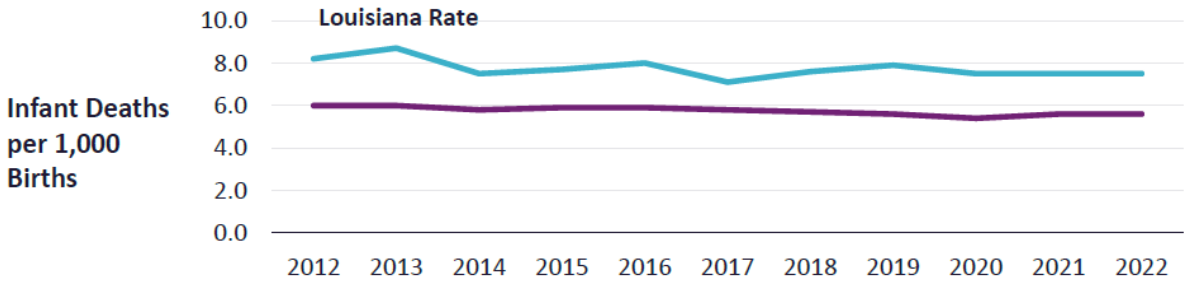
Key Points

- More than half (54%) of deaths during the post-neonatal period were injury-related (this includes SUIDs).
- Almost half (42%) of infant deaths during this period were classified as SUIDs.
- SUID is considered largely preventable by reducing risk factors and increasing protective factors. Some of these risk factors, including low birth weight or preterm infants and maternal smoking, trace back to maternal health.
- Other risk factors are behavioral, such as caregivers placing infants to sleep on unsafe surfaces with soft bedding and toys, or environmental, such as cigarette smoke in the home.[7]
- Protective factors include consistently following safe sleep practices (review the Reducing Infant Mortality in Louisiana section of this report for detail), breastfeeding, regular prenatal care and well-baby check-ups, and keeping infants up to date on immunizations.[7]

Trends in Infant Mortality

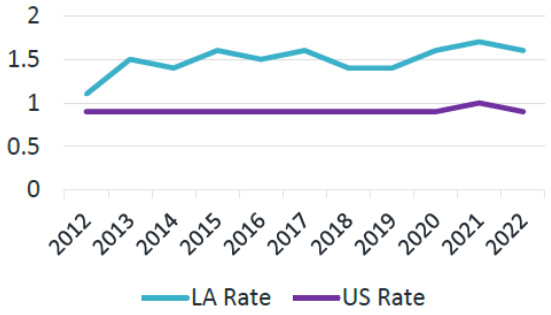
Overall Infant Mortality over Time[3]

Louisiana's infant mortality rate stayed relatively consistent from 2011 to 2022, remaining around **7 to 8 infant deaths per 1,000 births.** The Louisiana rate also remained consistently higher than the U.S. rate.



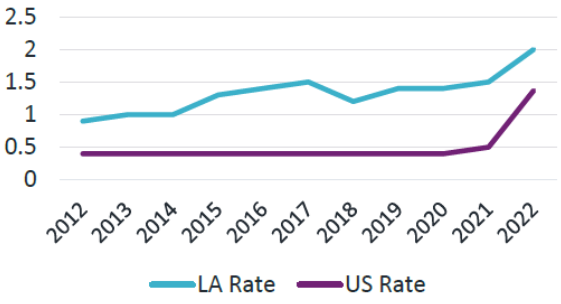
Infant Mortality Due to Sudden Unexpected Infant Death[3]

While Louisiana's infant mortality rate due to Sudden Unexpected Infant Death (SUID) (measured as deaths per 1,000 births) fluctuated between 2012 and 2022, the average SUID mortality rate remained around 1.6 deaths per 1,000 births. The infant mortality rate due to SUID in Louisiana also remained consistently above the rate for the United States.



Injury-Related Infant Mortality[3]

The injury-related infant mortality rates (measured as deaths per 1,000 births) includes deaths due to SUID. Other causes include deaths that do not fit into the standardized injury categories established by the U.S. Centers for Disease Control and Prevention (See Appendix G: Cause of Death Explanations). From 2012 to 2022, Louisiana's average overall infant injury-related mortality rate was 1.1 deaths per 1,000 births.



Key Points

- Overall infant and SUID mortality rates have remained relatively steady since 2010.
- Injury-related infant mortality 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, review the Reducing Infant Mortality in Louisiana section of this report.

Racial Disparities in Infant Mortality

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

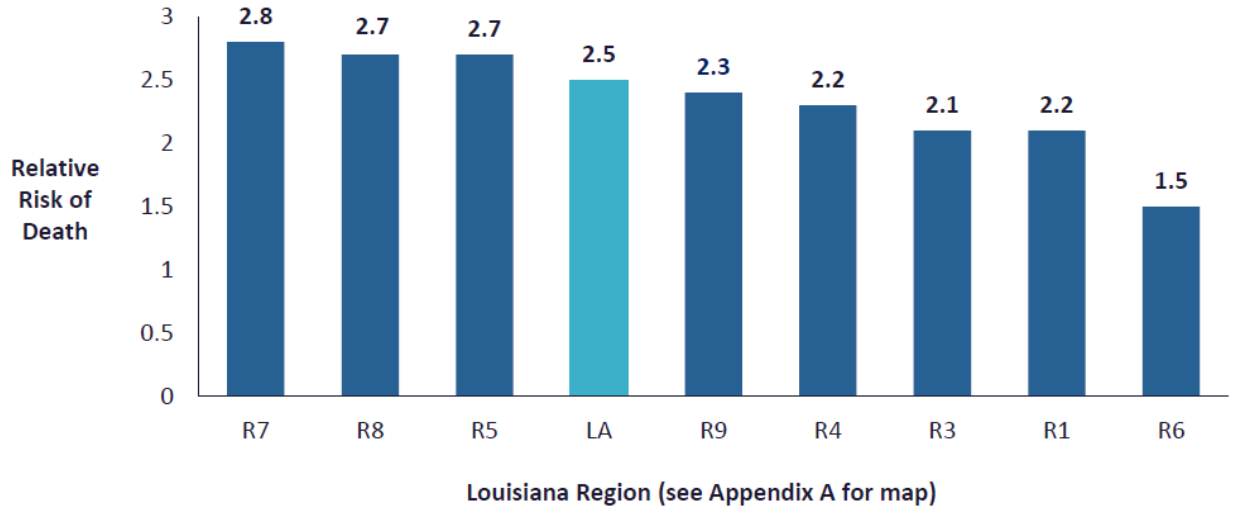
A CLOSER LOOK

In Louisiana from 2020 to 2022, Black† infants were 2.5 times as likely to die as white† infants.

Infant Mortality Rate, 2020-2022	
Black†	**White†**
11.9 deaths per 1,000 live births	**4.8 deaths per 1,000 live births**

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

Infant Mortality Rate for Black† vs. white† Infants by Region



Key Points

- Infant mortality affects Black infants more than white infants.
- Region 7 (Shreveport area), Region 8 (Monroe area) and Region 5 (Lake Charles area) have the greatest racial disparity in birth outcomes. In these regions, Black† infants are more than twice as likely to die as white† infants.
- Mortality data for Hispanic infants and children were not included in racial disparity calculations because of insufficient counts – i.e. the number of Hispanic infants or children who died in Louisiana from 2020 to 2022 was too small for a reliable comparison against mortality rates for white† and Black† infants.

Racial Disparities in Infant Mortality

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

If a health outcome occurs more often or less often for a given group than the general population (e.g., rates of drowning among Black children versus all children), the difference between those groups is called a disparity.[23] Infant and child mortality is influenced by a range of intergenerational social, economic, clinical, and environmental determinants. Racial disparities across important nonclinical factors such as income, opportunities for stable employment, affordable housing, access to preventive healthcare,[8] and access to family planning services[24] can increase differences in infant and child mortality by race.[9, 10]

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

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

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

American Public Health Association

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

Reducing Infant Mortality in Louisiana

The top causes of infant (birth to one year) mortality are conditions originating in the **perinatal period** and causes associated with **Sudden Unexpected Infant Death (SUID).** Many of these deaths can be prevented.

Both Louisiana Pregnancy Risk Assessment Monitoring System data and Child Death Review data are used to determine the prevalence of key risk factors that contribute to infant mortality and offers prevention recommendations to prevent infant deaths. The data is used to inform program and policy decisions related to reducing infant mortality.

Louisiana Pregnancy Risk Assessment Monitoring System is an ongoing, population-based risk factor surveillance system designed to find out more about the experiences women have before, during, and immediately following pregnancy. The survey collects quantitative and qualitative data on known risk factors for infant mortality and provides a more complete understanding of the context in which infant deaths occur. More information can be found at **PartnersforFamilyHealth.org/PRAMS**.

Conditions Originating in the Perinatal Period

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

Sudden Unexpected Infant Death

Causes of death associated with Sudden Unexpected Infant Death (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]

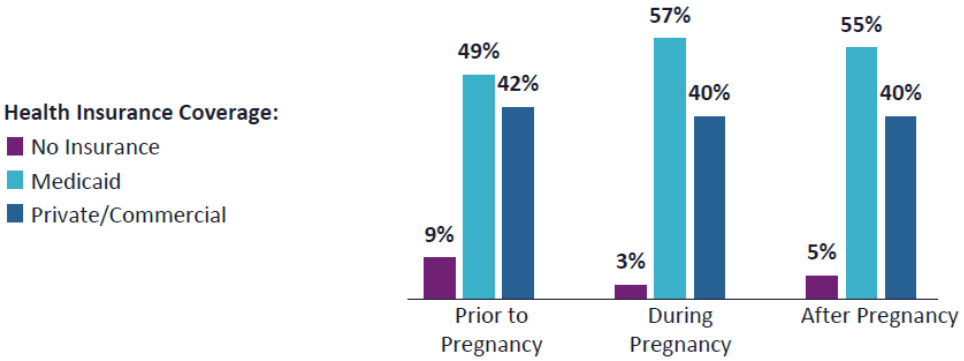
- Infant laid down to sleep on back
- Firm, flat sleeping surface, with no objects (toys, pillow, blankets, bumpers)
- Breastfeeding
- Room-sharing with a caregiver, but not in the same bed
- Smoke-free home
- Room at a comfortable temperature and infant is not overdressed
- Pacifier at nap time and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

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.

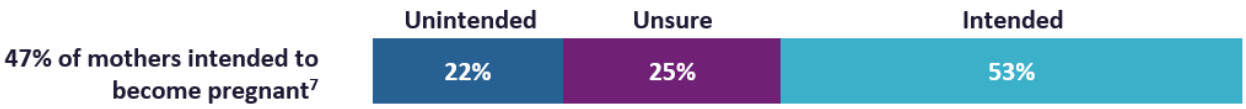
Maternal Health Insurance Coverage (2022)[11]

Since Louisiana expanded Medicaid in 2016, the percentage of Louisiana mothers who had health insurance before pregnancy has increased. However, **9%** of Louisiana women are still uninsured prior to getting pregnant.



Pregnancy Intention (2022)

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



Maternal Health Indicators Prior to Pregnancy (2022)

Prior to their most recent pregnancy…[11]

- **64%** of mothers were overweight or obese.*
- **12%** of mothers reported they had depression.
- **7%** of mothers reported they had high blood pressure or hypertension.
- **2%** of mothers reported they had diabetes.

**Weight criteria is based on national Body Mass Index (BMI) categories and calculated from self-reported height and weight on Pregnancy Risk Assessment Monitoring System 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.

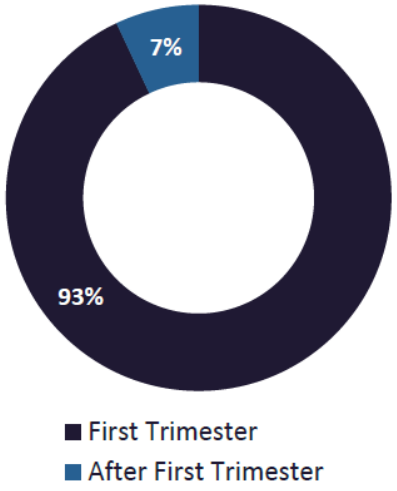
Prenatal Care

In 2022, 7% of Louisiana mothers didn't receive prenatal care during the first trimester. Early prenatal care is a key part of adequate care and can help reduce infant mortality by allowing for timely assessment of risk factors, health education, and treatment of chronic and pregnancy-associated conditions.[11]

Adequacy of Prenatal Care in Louisiana (2022)

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

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



About one in four (24%) Louisiana Women Received Less than Adequate Prenatal Care[5]

Inadequate <50% of recommended visits	15%
Intermediate 50-79% of recommended visits	8%
Adequate 80 – 109% of recommended visits	39%
Adequate Plus 110% or more of recommended visits	38%

Data Notes:

- **Less than adequate prenatal care includes "Inadequate" and "Intermediate" responses.**
- **The "Adequate Plus" group tends to represent women with high-risk pregnancies.**

Reasons for Not Receiving Early Prenatal Care (2022)

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 the expansion, more mothers begin prenatal care earlier in pregnancy.[11]

However, despite earlier initiation times, increased Medicaid coverage is not associated with a significant effect on the total adequacy scores of prenatal care during pregnancy.[11] The most common reasons women reported for not receiving first trimester prenatal care included:[11]

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

Recommendations

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

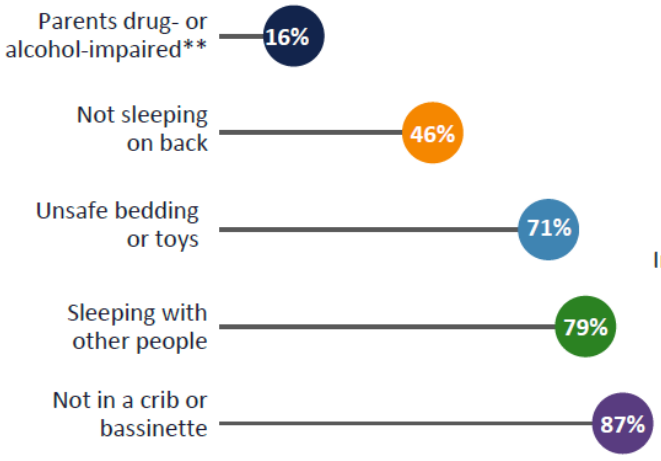
Seventy percent of sleep-related deaths in Louisiana occurred by four months of age (2020 to 2022).[5]

Sudden Unexpected Infant Death (SUID) in Louisiana

Sudden unexpected infant death is a sudden and unexpected death of a baby aged younger than 1 year. For these deaths, there is no obvious cause before investigation. Sudden unexpected infant deaths often happen during sleep or in the baby's sleep area.

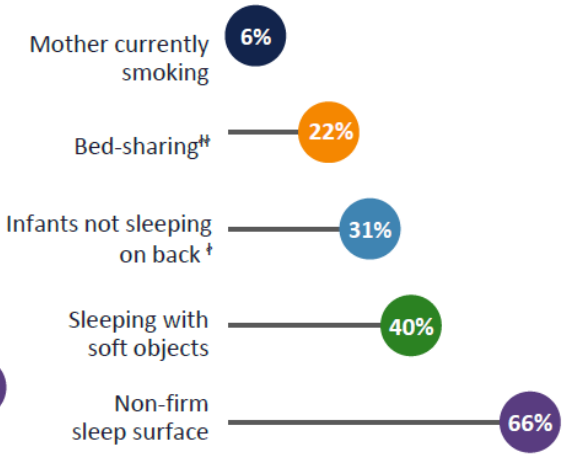
In 2022**, more than one in three babies** (33 %) in Louisiana were exposed to **three or more risk factors for sleep-related death**.[11] The American Academy of Pediatrics (AAP) cites bed-sharing as a risk factor for sleep-related infant deaths. In fact, **22 %** of Louisiana mothers said they **sometimes, often, or always bed-share** with their baby.[11] The AAP recommends infants sleeping in the same room as a caregiver, but on a separate surface designed for infants.[7]

Risk Factors* Present in Louisiana SUIDs (2020-2022 Child Death Review Data)[24]



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

Infant Sleep Environment Risk factors (2022 Louisiana Pregnancy Risk Assessment Monitoring System Data)[7]



‡ 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

- Healthcare providers are encouraged to incorporate the following in their safe sleep policies and practices:
  - Education in culturally appropriate methods suited to different learning styles to best convey the information (i.e. caregivers reciting information back). Language interpreters should be used as needed.
  - Education and training that includes strategies for caregivers to cope with environmental stressors (infant crying, lack of sleep, etc.).

    - Encourage lactation support programs and persons to incorporate safe sleep education into their teaching, as well as encourage breastfeeding mothers to have a plan in place to prevent falling asleep with infant.
    - Ensure your hospital has safe sleep practices in place. Best practices include training for staff and patients, hospital signage, and participation in community SUID or safe sleep tasks forces. Additional provider resources can be found at the National Institutes of Health.
    - Increase referrals to home visiting programs (Nurse-Family Partnership or Parents as Teachers) prior to hospital discharge after delivery.
    - Offer telemedicine services for patients to alleviate stressors related to attending pediatric appointments (i.e. lack of transportation).
- Pediatric offices are encouraged to follow up with patients if newborn appointments are missed.
- Healthcare, public health, and community partners are encouraged to share the **Give Your Baby Space** website with families.
- Policymakers are encouraged to:
    - Support policies that provide universal home visiting resources to all pregnant persons and families in Louisiana. Home visiting program eligibility should be offered to parents of multiple children regardless of insurance status.
    - Support legislation that increases the number of affordable and safe licensed day care centers.
    - Ensure Louisiana "Home Alone" laws for children match or exceed the national recommendation from Safe Kids to have a caregiver present for children under the age of 12. These laws should be simply stated and specific, so that they are easily understood by parents and caregivers.
- 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.
- Law Enforcement and Coroner Offices should incorporate SUID investigation processes and forms into onboarding training improve and streamline SUID investigations.
- Coroners and death scene investigations should always complete SUID Investigation forms for every SUID.

2020 to 2022 Child Mortality Data in Louisiana: One to 14 Years

Overall Child Mortality One to 14 years

From 2020 to 2022 in Louisiana, an average of 218 children ages one through 14 died each year.[2]

The 2020-2022 Louisiana mortality rate for children ages one to 14 **was 26.2 deaths per 100,000 children**. The U.S. rate was 16.9 per 100,000 children for the same time period. If Louisiana had the same mortality rate as the U.S., **77 fewer** children would have died per year.

Louisiana Rate[2]	U.S. Rate[3]	LA Ranking[3]
26.2	16.9	Third highest in the U.S.

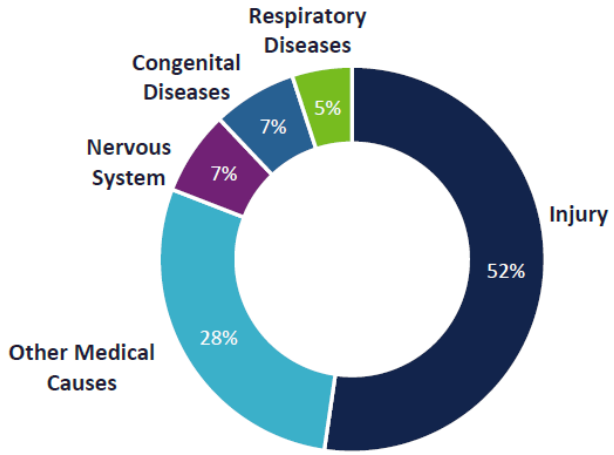
Child Deaths by Region (2020-2022)[2]	1	2	3	4	5	6	7	8	9
Average annual child deaths	36	34	17	32	15	17	28	16	23
Child mortality rate per 100,000 children	24.8	28.1	24.5	27.8	26.2	31.2	29.3	26.3	20.2

**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]

- **113** children died **from injury**.
- **62** children died **due to another medical cause**.
- **15** children died **due to nervous system diseases**.
- **15** children died **due to congenital anomalies**.
- **11** children died **due to diseases of the respiratory system**.



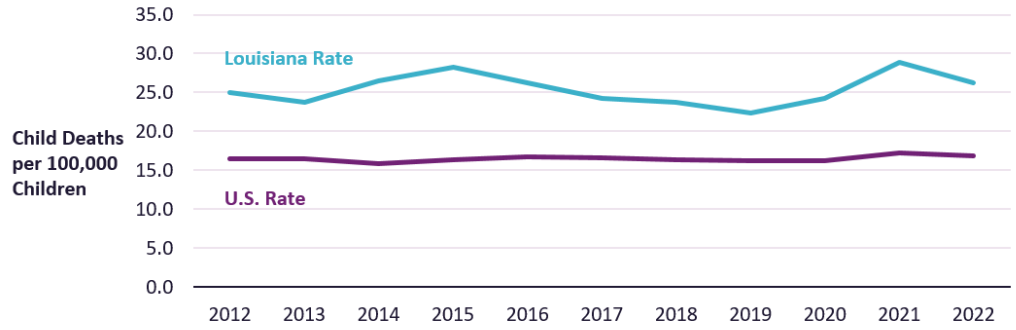
Key Points

- More than half (54 %) of childhood deaths (ages one to 14) were injury-related. Injury-related deaths include deaths caused by injuries that are intentional or unintentional, including homicides, suicides, drowning, motor vehicle crashes, etc. Most of these deaths are considered preventable.
- The most common causes of childhood deaths not related to injury are diseases of the nervous system, diseases of the respiratory system, and deaths related to congenital anomalies.

Trends in Child Mortality

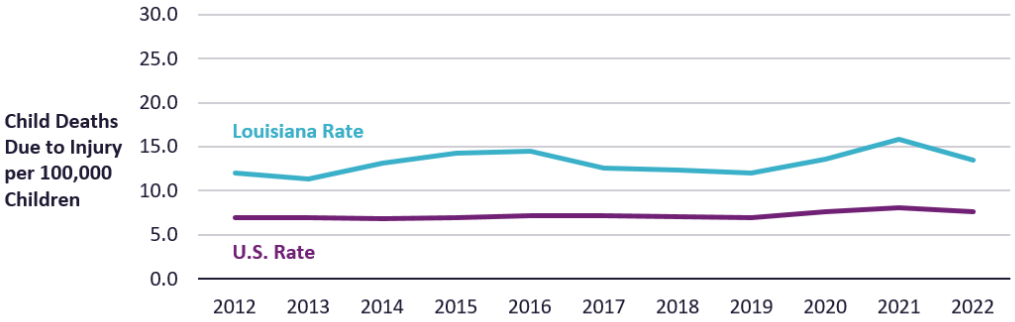
Overall Child Mortality over Time[3]

Louisiana's overall child (one to 14 years) mortality rate remained relatively consistent from 2012 to 2022, hovering around **25 child deaths per 100,000 children.** The Louisiana rate also remained consistently higher than the U.S. rate.



Child Injury-Related Mortality over Time[3]

Louisiana's child injury-related mortality rate remained around **14 deaths per 100,000 children** from 2012 to 2022. The child injury-related mortality rate in Louisiana has also remained higher than the rate for the United States during this time period.



Key Points

- Overall child mortality and the injury-related child mortality rate have remained relatively steady since 2010.
- Louisiana has consistently had higher child mortality rates than the United States as a whole.
- Injury prevention programs have gained traction. While rates of injury-related child mortality have not yet decreased, there are promising prevention strategies on the horizon. These include:
    - 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.
    - Educating about current child passenger safety laws.

Racial Disparities in Child Mortality

Racial disparities in child (one to 14 years) mortality exist throughout Louisiana and the United States, and are complex.

If a health outcome occurs more often or less often for a given group than the general population (e.g., rates of drowning among Black children versus all children), the difference between those groups is called a disparity.[23] Infant (less than a year) and child (one to 14 years) 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 healthcare[8] and family planning services[24], can increase differences in infant and child mortality by race.[9, 10]

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

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

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

"Racism attacks people's physical and mental health. And **racism is an ongoing public health crisis** that needs our attention now!" [21]

American Public Health Association

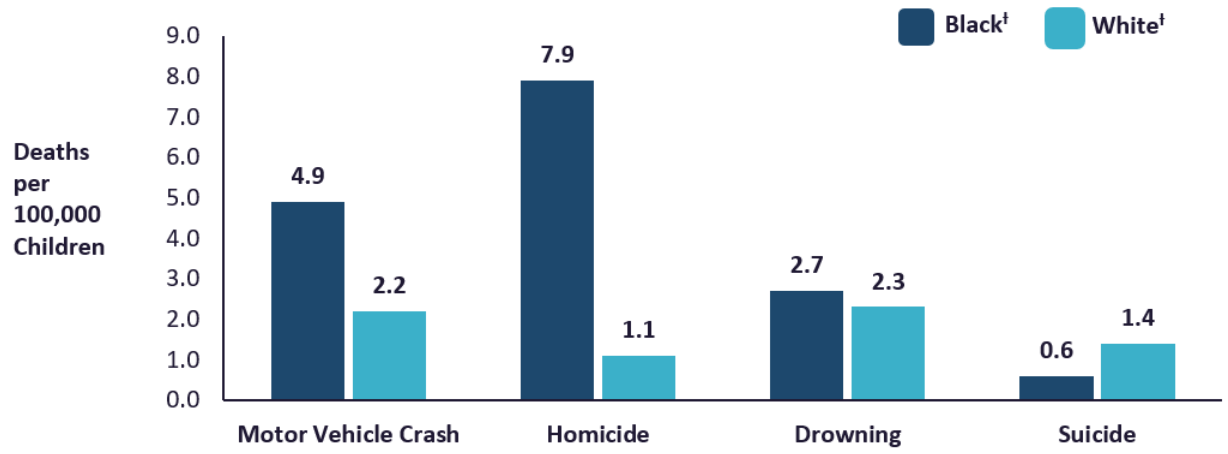
In Louisiana from 2020-2022, **Black[ɬ] children** were **two times as likely** to die as white[ɬ] children.

Child Mortality Rate, 2020–2022	
Black[ɬ]	**White[ɬ]**
38.7 deaths per 100,000 children	17.7 deaths per 100,000 children

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

Mortality Rates by Cause of Injury Death and Race

In Louisiana from 2020 to 2022, **Black[ɬ] children** in Louisiana were more likely than white children to die by **homicide**, due to **motor vehicle crash** or by **drowning**. **White[ɬ] 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 2020 and 2022, Black children were seven times as likely to die from homicide as white children.
- The top cause of injury-related death for Black children was homicide.
- The top cause of injury-related death for white children was drowning.
- The second leading cause of injury-related death for both Black and white children was motor vehicle crashes.

- 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[ǂ] and Black[ǂ] children.

Injury-Related Fatalities

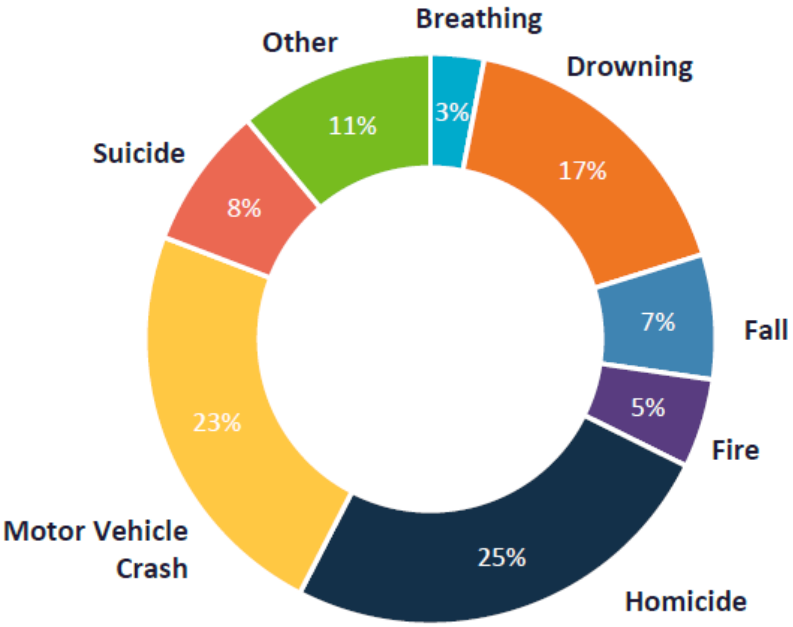
From 2020 to 2022, an average of 113 children (aged one to 14) died from injuries each year. The majority of injury-related deaths were due to motor vehicle crashes, homicide, and drowning.[2]

Half of child deaths were injury-related. Injury-related deaths makes up a larger percentage of deaths in childhood (52%) than in infancy (27%).

Causes of Injury-Related Fatalities

Each year, an average of…[2]

- **29** children died from homicide.
- **26** children died due to motor vehicle crashes.
- **20** children drowned.
- **9** children died due to suicide.
- **5** children died due to fire exposure.
- **8** children died from a fall.
- **3** children died due to threats to breathing.



Key Points

- Homicide, motor vehicle crashes, and drowning were the top causes of injury-related child deaths.
- For the majority of child deaths due to motor vehicle crashes, child restraints were not used.
- Inadequate supervision of children and lack of barriers around water were the top contributing factors in drowning deaths. Almost half (43%) of all drowning deaths occurred in swimming pools, hot tubs, or spas.

Injury-Related Fatalities: One to Four Years

From 2020 to 2022 in Louisiana, an average of 92 children between ages one and four died each year. Forty-seven per year died due to injury.[2]

The Louisiana injury-related mortality rate from 2020 to 2022 for children ages one to four was **20.7 deaths per 100,000 children**. The U.S. rate was **11 per 100,000 children** for the same time period. If Louisiana had the same mortality rate as the U.S., **22 fewer** children in this age group would have died per year.

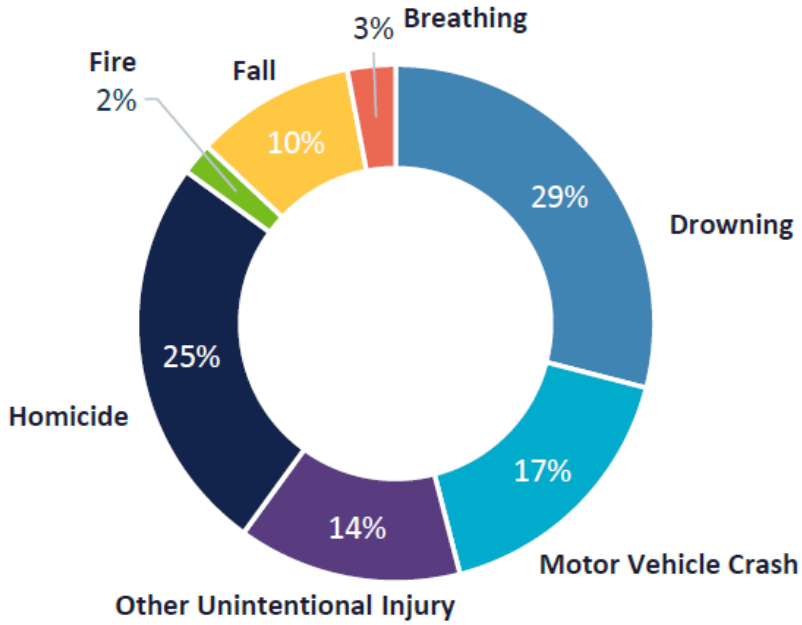
Louisiana Rate[2]	U.S. Rate[3]	LA Ranking[3]
20.7	11.0	Second highest in the U.S.

Causes of Injury-Related Fatalities

About half of all deaths among children ages one to four were injury-related.

Each year, an average of…[2]

- **14** children **drowned**.
- **12** died **by homicide**.
- **8** children died **in a motor vehicle crash**.
- **7** children died **due to other unintentional injury-related causes**.
- **1** died due to **fire exposure**.



Key Points

- Children between ages one and four had the highest injury-related mortality rate among all children in Louisiana.
- The majority of these deaths were due to drowning.
- Homicide is the second 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 14% of deaths, but this category is a grouping of causes that do not fall within the standard U.S. Centers for Disease Control and Prevention categories for injury fatalities.
- 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.
    - Attentive supervision by caregivers.

Injury-Related Fatalities: Five to Nine Years

From 2020 to 2022 in Louisiana, an average of 44 children between ages five to nine years died each year. Twenty-three children per year died due to an injury.[2]

The Louisiana injury-related mortality rate from 2020 to 2022 for children aged five to nine was **7.8 deaths per 100,000 children.** The U.S. rate was **4.8 deaths per 100,000 children** for the same time period. If Louisiana had the same mortality rate as the U.S., **nine fewer** children in this age group would have died per year.

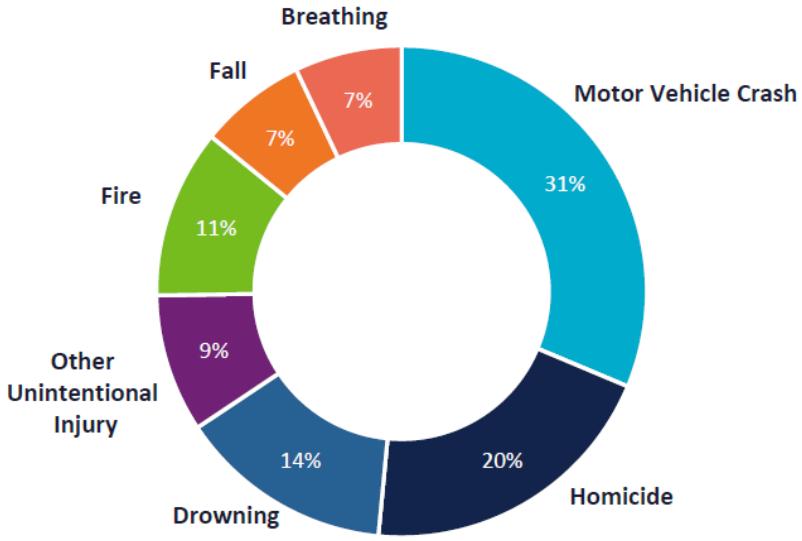
Louisiana Rate[2]	U.S. Rate[3]	LA Ranking[3]
7.8	**4.8**	**Fourth highest in the U.S.**

Causes of Injury-Related Fatalities

Fifty-one percent of deaths among children aged five to nine were injury-related.

Each year, an average of…[2]

- **7** children died **in a motor vehicle crash**.
- **5** children died **from homicide**.
- **3** children **drowned**.
- **3** children died **due to fire exposure**.
- **2** children died **due to other unintentional injury-related causes**.



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 (50%) 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 misuse or nonuse of proper safety gear (shoulder belts, lap belts, child seats, etc.) [4]
- Among five- to nine-year-olds, 79% of homicides were due to firearms.[2]

Injury-Related Fatalities: 10 – 14 Years

From 2020 to 2022 in Louisiana, an average of 79 children between ages 10 and 14 died each year. Forty-two per year died from injuries.[2]

The Louisiana injury-related mortality rate from 2020 to 2022 for children between the ages of 10 to 14 was **13.7 deaths per 100,000 children.**
The U.S. rate was 8.2 deaths per 100,000 children for the same period.
If Louisiana had the same mortality rate as the U.S., **15 fewer** children in this age group would have died per year.

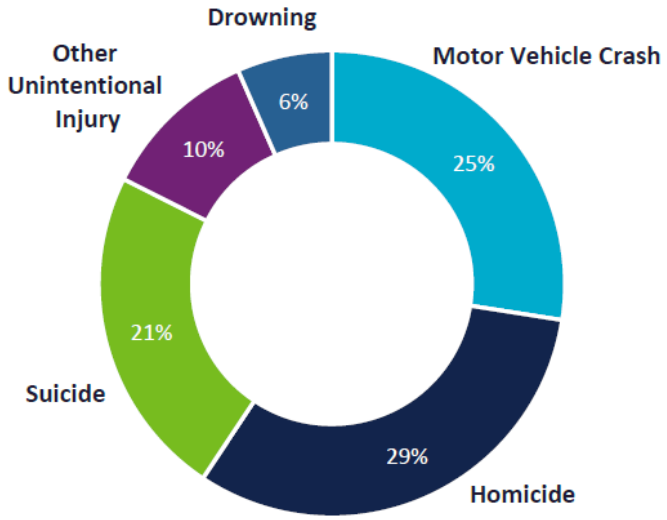
Louisiana Rate[2]	U.S. Rate[3]	LA Ranking[3]
13.7	**8.7**	**Fifth highest in the U.S.**

Causes of Injury-Related Fatalities

Fifty-three percent of deaths among children ages 10 to 14 were injury-related.

Each year, an average of…[2]

- **12** children died **from homicide**.
- **10** children died **in motor vehicle crashes**.
- **9** children died **from suicide**.
- **4** children died **due to other unintentional injury-related causes**.
- **3** children **drowned**.



Key Points

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

Recommendations for Preventing Infant and Child Mortality

Each year, the Louisiana Child Death Review Panel releases recommendations to prevent infant and child deaths based on in-depth reviews of infant and child death cases and overall data and findings. State and local child death review panels developed the following recommendations after reviewing data from 2020 to 2022 that span across injury topic areas. These overarching recommendations have the potential to prevent injuries from a range of causes and are organized by point of intervention. Recommendations to prevent deaths by specific injury type are included in other sections of the report.

1. Increase access to and utilization of home visiting programs. Home visiting programs can help pregnant women and parents of young children improve health and well-being for themselves and their families, as well as decrease risk of child injuries and neglect.

- **Hospital Systems and Birthing Centers**: Implement streamlined postpartum discharge processes for all families that include referrals to family support or coaching programs for qualifying families. To ensure continuity of care, these referrals should be documented in an integrated electronic medical record checklist. Referral to home visiting programs will allow for adequate assessments and targeted education on injury prevention topics such as safe sleep, water safety, car seat safety, etc.
- **Insurance Payors and Health Plans**: Provide universal home visiting to all pregnant women and families in Louisiana, regardless of insurance payor. Home visiting resources should focus on perinatal and infant/child health and safety education for first-time and multiple-child parents.

2. Encourage health plans to reimburse and offer incentives for child injury prevention devices and services. Reducing financial burdens and providing incentives for families in need of devices, such as child safety seats or portable cribs, can help increase use of these life-saving devices.

- **Policymakers**: Promote legislation to include essential injury prevention devices and services in Medicaid coverage, such as swimming lessons, child safety seats, GPS location tracking devices for elopement response and safe sleep environments (i.e. portable crib or pack-n-plays).
- **Insurance Payors and Health Plans**: Utilize discounts or gift cards for the purchase of child safety equipment. For example, some health plans offer members a 15 % discount on their

purchase of safety equipment with a special member discount code for safety websites. Coverage should include GPS location tracking devices for elopement response in children with autism and developmental disabilities.[8]

3. Increase funding for and accessibility to high quality, affordable child care centers. A lack of affordable child care options with nontraditional hours create barriers that can lead to children being at risk for injury and/or death when suitable, age-appropriate caregivers are not available or present.

- **Policymakers**: Federal, state, and local governments should develop a range of policies that support equitable and affordable child care options.
- **Employers and Businesses**: Establish family-friendly policies and provide paid parental leave for a minimum of 12 weeks or more for all working parents.

4. Establish comprehensive bereavement resources and services to Louisiana families. The grief and trauma of losing a child can have profound effects on parents and family members, impacting their mental and physical health in significant ways.

- **Direct Service Providers (clinical and non-clinical):** Bereavement resources and services that are trauma-informed and culturally sensitive should be available and accessible through hospitals, EMS, coroner's offices, and funeral homes.
- **Pediatricians**: Follow the American Academy of Pediatricians recommendations for suggestions and resources that pediatricians can utilize to support family members following the death of a child or adolescent.
- **Policymakers and Insurance Payors**: Increase support and utilization of bereavement and counseling services for caregivers and siblings that are covered by Medicaid and private insurance.

5. Implement screenings for social determinants of health and mental health, as well as safety screenings for caregivers and children before and during well-child or primary care visits. Consistent screenings at routine healthcare visits can ensure that both children and their caregivers receive the support they need to maintain optimal health and address any issues before they become more serious.

- **Healthcare Systems:** Support pediatric providers in joining the Louisiana Perinatal Quality Collaborative's Caregiver Perinatal Depression Screening Initiative to improve screening and referrals for perinatal depression in pediatric practices. Participation in the collaborative includes support with expert coaching and quality improvement tools.
- **Healthcare Systems and Healthcare Providers:** Implement protocols to ensure that at the time of scheduling pediatric appointments, patients undergo screening for social determinants of health to identify and address barriers to care, such as transportation, especially for patients who frequently miss appointments. In order to improve attendance at well-visits, healthcare systems and providers should employ various methods for participating in the visit, including telehealth, home visiting, or community health workers.
- **Pediatricians and Healthcare Providers:** Assess elopement or wandering risk for children with autism and developmental disabilities. Provide education and resource information to parents. "Nearly half of children with autism spectrum disorder attempt to wander or bolt from a safe, supervised place. More than half of these wandering children go missing—often into dangerous situations." This can lead to drowning, traffic-related accidents, and other tragedies.

6. Implement routine toxicology screening for child fatalities and children in the emergency room. Timely toxicology testing upon arrival is crucial for appropriate diagnosis and treatment for children that present unresponsive to the emergency room. If positive findings are noted, the toxicology results could then be used to aid in the incident and scene investigation.

- **Healthcare Systems**: Create and implement protocol for routine toxicology screening for all unresponsive children who present to the emergency room, including testing for illicit substances like fentanyl.
- **Policymakers**: Create legislation to grant standing warrants for toxicology testing of caregivers and supervisors in cases of unexpected child fatalities. Timely performance of toxicology testing allows for the preservation of evidence for case investigation.
- **Law Enforcement and Coroners**: Establish a detailed interagency protocol for law enforcement and coroners to ensure thorough investigations of unexpected child deaths. Develop a standardized interagency notification network for child fatalities, particularly when foul play is suspected.

7. Implement first responder protocol for responding to and reporting child fatality cases. Utilize the existing Department of Children and Family Services (DCFS) notification system to provide further support and training to law enforcement and coroners to incorporate a more streamlined, consistent process on responding to and reporting child fatalities.

- **Law Enforcement and Coroners**: Train first responders and scene investigators with clear protocols on how to report fatality cases to DCFS, including follow-through to ensure cases are reported to the intake center. Do not close cases until autopsies are complete.

8. Assess and provide additional resources and supports for infants and children with special healthcare needs. Evidence shows that infants and children with special healthcare needs can be at higher risk of injury-related death and often require additional supports and resources.[1,2,3]

Recommendations for Infants and Children with Special Healthcare Needs

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

Preventing Suicide and Homicide

Homicide includes deaths due to child abuse and neglect.

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

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 payor authorizations.
    - Educate caregivers and families on wheelchair transportation safety protocols, including the need for secure locking systems and appropriate head and neck supports.
    - Contact the **Community Injury Prevention Program**, which offers child car seat assessments and education at fitting stations in each region of Louisiana by nationally certified child passenger safety technicians. A fitting station is a place where parents and caregivers can learn how to safely transport children by using the appropriate child safety seat or vehicle safety belt correctly from a certified passenger safety technician.

View the **Special Needs Resources Card** for a list of regional technicians certified in transportation needs of children with special healthcare needs.

- Providers and public health agencies should work with families to provide letters of medical necessity when appropriate. Louisiana Medicaid Managed Care Organizations are required to pay for transportation accommodations, including specialized car seats, for families that can demonstrate medical necessity. More transportation safety resources, including those focused on accommodations for children with special health needs, can be found at: **chop.edu/resources/water-safety-your-special-needs-child**
- Place identifiers that convey personal health information or medical diagnoses on or inside cars to quickly alert emergency responders to passengers' special health needs in the event of a crash. Examples of identifiers include seat belt clips or notification stickers that indicate a condition such as deafness, autism, paralysis, rare protocol needs, inability to speak, etc. Providers and agencies serving children with special healthcare needs should consider partnering with community organizations to provide personal health identifiers to families for use in their cars.
- Expand awareness for vehicle heat safety by promoting the National Highway Traffic Safety Administration's ***Stop. Look. Lock.*** Campaign. This is important for all caregivers and families, but children with special healthcare needs can be particularly vulnerable. Children with chronic medical conditions may be at higher risk in extreme heat situations, as they can be more sensitive to heat and less likely to sense or respond to changes in temperature, or take medications that compound the effects of extreme heat.[11]
- 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. There is also a parent-friendly Frequently Asked Questions page.

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 payor authorizations.
- Providers should familiarize themselves with and refer families to community organizations that offer swimming lessons, specifically for children and youth with special healthcare needs, such as **JoJo's Hope**.[29]
- Search for certified trainers trained to help children with autism, sensory and motor coordination, anxiety, trauma, or simple discomfort in the water. **Swim Angelfish** is a leader in adaptive swim instruction that provides a certified training program for swim instructors to teach adaptive swim lessons.
- The following resources offer water safety tips for families of children with special needs:

- chop.edu/resources/water-safety-your-special-needs-child
- safekids.org/video/water-safety-families-children-special-needs

Specialized Equipment

- When families need special medical or safety devices:
  - Pediatricians should provide prescriptions, referrals, and letters of medical necessity to durable medical equipment 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:
  - Oxygen concentrators.
  - Ventilators.
  - Bi-level Positive Airway Pressure (BiPAP) machines.
  - Suction machines.
  - Hospital beds.
  - Wheelchairs.
  - Standers and standing aids.
  - Enteral feeding pumps.
  - Generators for a backup power source (may be provided through insurance or community organizations).
  - GPS locating devices for elopement response.

Elopement Prevention and Response

"Nearly half of children with autism spectrum disorder (ASD) attempt to wander or bolt from a safe, supervised place. More than half of these wandering children go missing – often into dangerous situations." This can lead to drowning, traffic-related accidents, and other tragedies.

- Pediatricians, case managers, educators, and direct service providers should assess elopement or wandering risk for children with autism and developmental disabilities and provide education and resource information to parents.
- Medicaid and private insurance providers should provide coverage GPS location tracking devices for elopement response for children with autism and developmental disabilities.
- Resources for elopement prevention and response plans are available for families through Autism Speaks, for pediatricians through the American Academy of Pediatrics, and for educators through The Autism Project and Teachers Pay Teachers.
- Autism Safety Kit includes free tools to develop a comprehensive safety plan.
- Basic elopement prevention tips include:

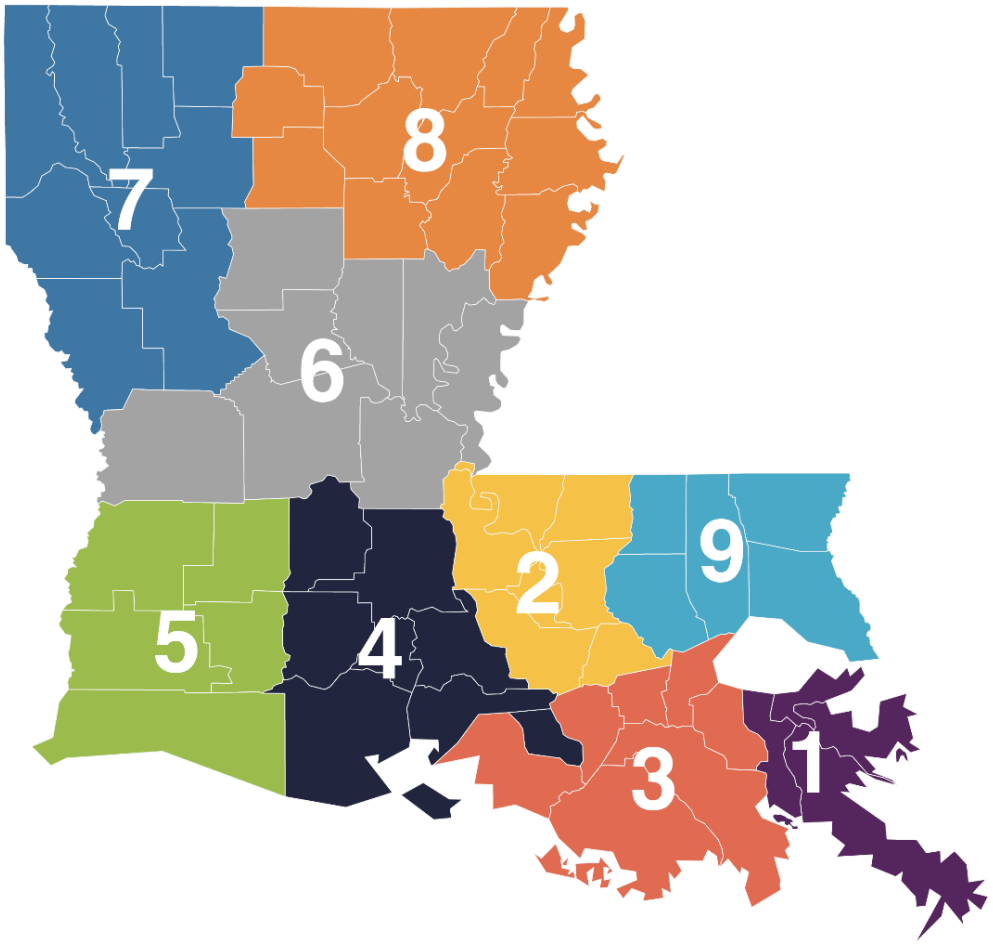
- Secure the home or school environment.
- Use a GPS location tracking device.
- Use an ID bracelet.
- Alert neighbors and first responders.
- Take adaptive swimming lessons.

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, 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**.

Appendix

Appendix A: Regional Map of Louisiana



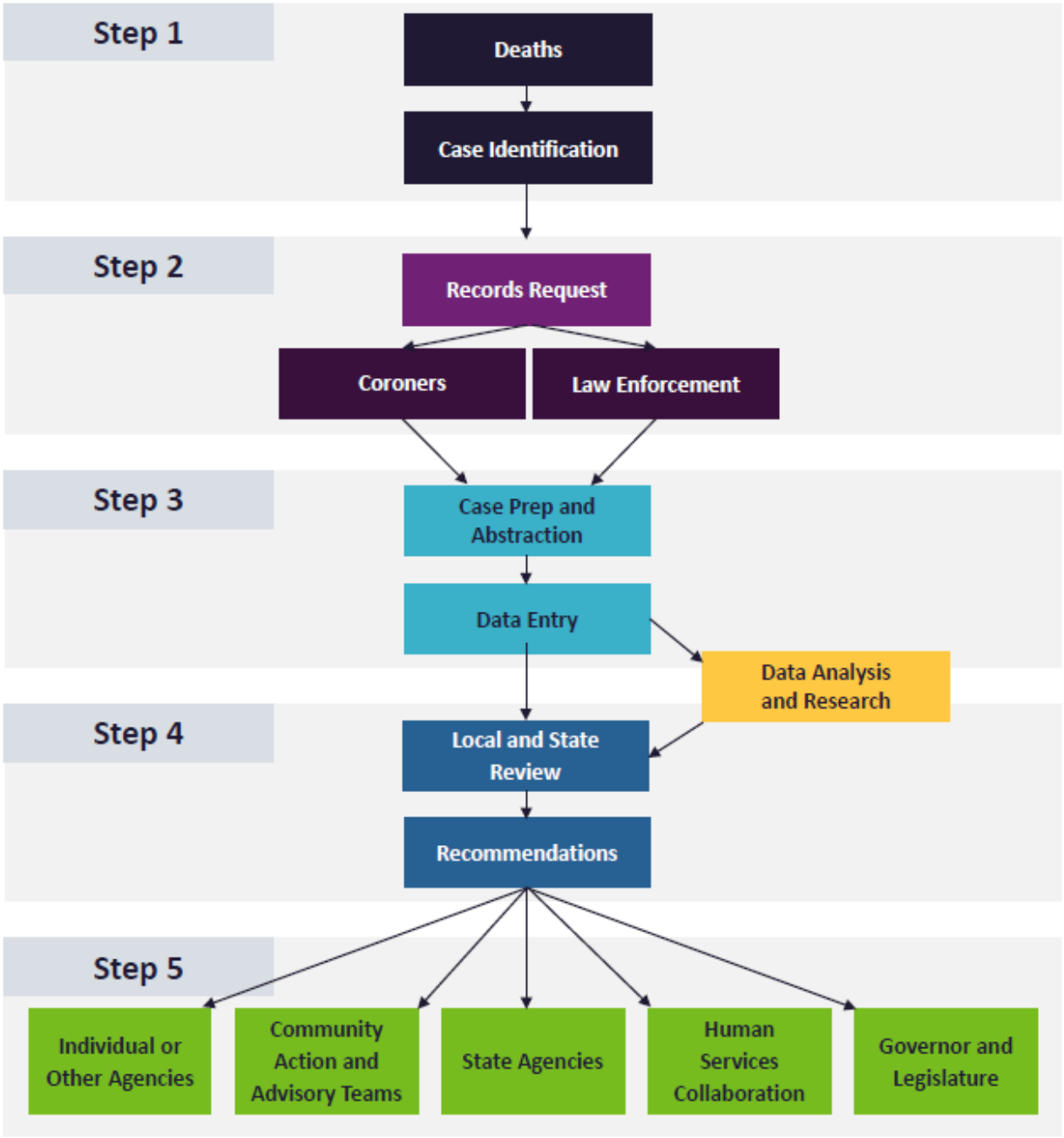
Region	Area	Parishes within Region
1	New Orleans	Jefferson, Orleans, Plaquemines, St. Bernard
2	Baton Rouge	Ascension, East Baton Rouge, East Feliciana, Iberville, Pointe Coupee, West Baton Rouge, West Feliciana
3	Houma	Assumption, Lafourche, St. Charles, St. James, St. John the Baptist, St. Mary, Terrebonne
4	Lafayette	Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, Vermilion
5	Lake Charles	Allen, Beauregard, 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

Appendix B: 2020 to 2022 State CDR Members

Position	Current Incumbent
State Health Officer, or designee	Gina Lagarde, M.D.
Secretary of the Louisiana Department of Health, or designee	Sara Dickerson
Secretary of the Department of Children and Family Services, or designee	Etrena Gerard
Superintendent of the Office of the State Police, or designee	Sergeant Benjamin Friedmann
State Registrar of the Office of Vital Records, or designee	Nadine Smith
Attorney General, or their designee	Madeline Carbonette
Member of the Senate, appointed by the President of the Senate	Honorable Regina Barrow
Member of the House of Representatives, appointed by the Speaker of the House of Representatives	Honorable Jessica Domangue
Commissioner of the Department of Insurance, or designee	Rebecca DeLaSalle, J.D.
The state child ombudsman or his designee	Kathleen Richey
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	Zachary Popovich, J.D.
Sheriff appointed by the Louisiana Sheriffs Association	Sherriff Lauren Meher
State Fire Marshal, or designee	Captain Ricky Roubique
Assistant Secretary of Behavioral Health, or designee	Robyn Thomas
Police Chief, appointed by the Louisiana Association of Chiefs of Police	Chief Frank Edwards
Coroner, appointed by the president of the Louisiana Coroner's Association	Deborah St. Germain
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.

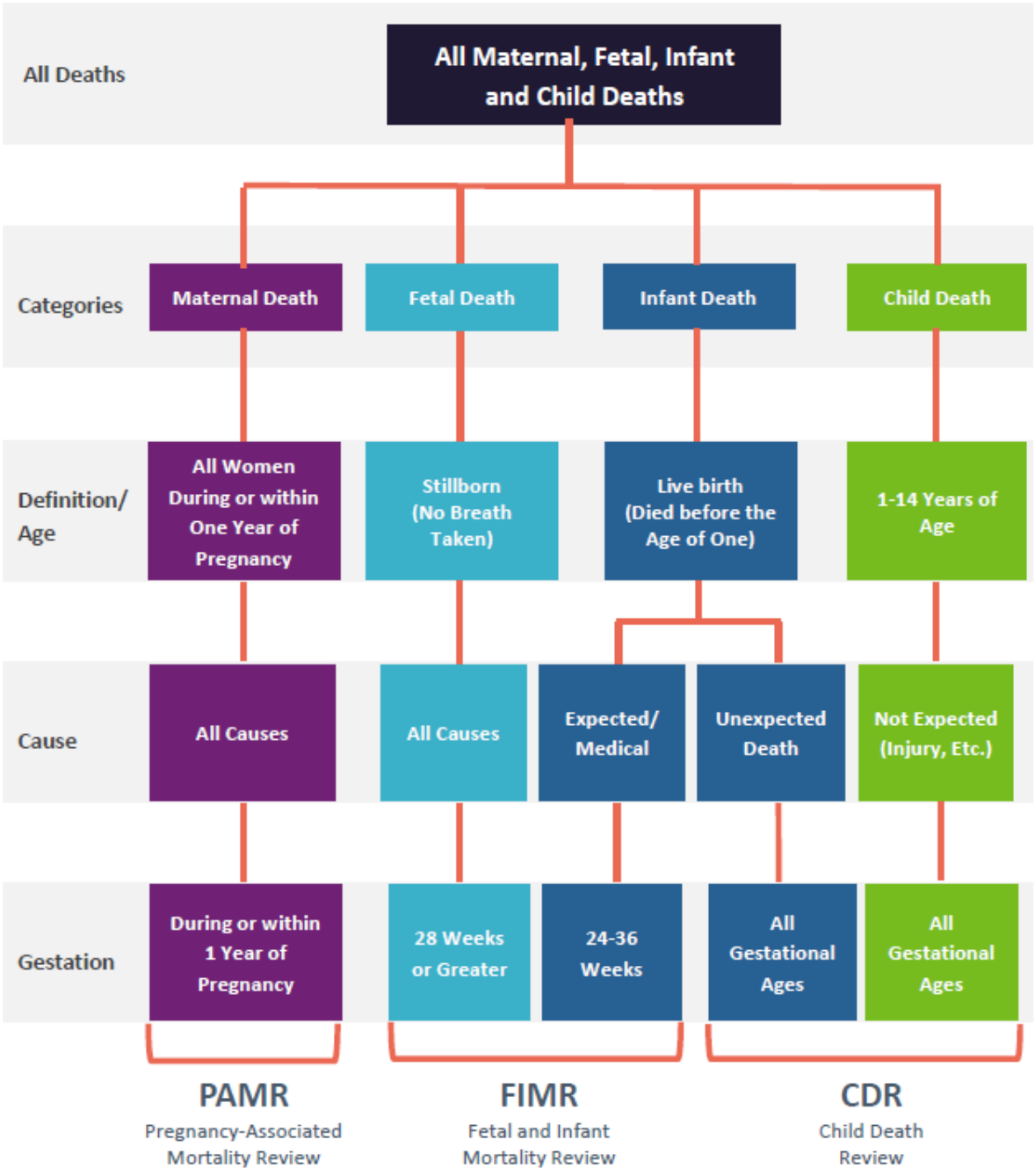
Pathologist experienced in pediatrics appointed by the Louisiana Pathology Society	Estelle Oertling, M.D.
State Superintendent of Education, or designee	Levillia Moore
Director of the Bureau of Emergency Medical Services, or designee	Cindy Duplessis
Family Representative, Louisiana Birth Defects Monitoring Network & Pregnancy Risk Assessment Monitoring System Program Manager	Julie Johnston
2/4 citizens from the state at large who represent different geographic areas of the state	Pam Cart Laurel Kitto

Appendix C: Child Death Review Process Map



For more detailed information on the Louisiana Child Death Review process, please visit partnersforfamilyhealth.org/childdeathreview.

Appendix D: Death Review Algorithm: Bureau of Family Health Case Review Determination



Appendix E: Regional Maternal and Child Health Coordinators and Mortality Surveillance Team

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

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

Appendix F: 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 (unknown cause)][1]

Key Term	Definition
Child	A child is defined as a child from age one through the age of 14.
Fetal death	Stillborn with gestation greater than 20 weeks or birth weight greater than 350 grams
Infant death	Deaths of infants under one 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
Preventability	A death is considered preventable if there was at least some chance of the death being prevented by one or more reasonable changes to family, community, provider, facility, system, organization or policy-level factors.
Unexpected death	A death which is a result of undiagnosed disease, or trauma in which the surrounding circumstances are suspicious, obscure or otherwise unexplained, or other death the circumstances of which are suspicious, obscure or otherwise unexplained. A clinical diagnosis of death due to Sudden Infant Death Syndrome (SIDS) shall also be deemed an unexpected death.

Appendix G: Cause of Death Explanations

Cause of Death	Explanation
Congenital malformations, deformations and chromosomal abnormalities (CMDCA)	Referred to as "Congenital anomalies" throughout report for ease of reading. This category includes anencephaly and similar malformations, congenital hydrocephalus, spina bifida, other congenital malformations of the nervous system, congenital malformations of the heart, other congenital malformations of the circulatory system, congenital malformations of genitourinary system, congenital malformations and deformations of musculoskeletal system, limbs and integument, Downs syndrome, Edward syndrome, Patau syndrome, other congenital malformations and deformations, and other chromosomal abnormalities not elsewhere classified.
Conditions originating in the perinatal period	Also referred to as "Perinatal Period Conditions" throughout report for ease of reading. This category includes disorders related to the length of gestational age and fetal growth (prematurity and low birth weight), effects from maternal factors and complications, infections specific to the perinatal period, hemorrhage and hematological disorders, and other perinatal conditions.
Diseases of the nervous system	This category includes inflammatory diseases of the central nervous system, systemic atrophies primarily affecting the central nervous system, degenerative diseases of the nervous system and cerebral palsy, and other paralytic syndromes.
Diseases of the circulatory system	This category includes rheumatic fever; hypertensive diseases; ischemic heart disease; pulmonary heart disease and diseases of pulmonary circulation; cerebrovascular diseases; diseases of arteries, arterioles and capillaries; and diseases of veins, lymphatic vessels, and lymph nodes.
Diseases of the respiratory system	This category includes respiratory infections, influenza, pneumonia, lung diseases due to external agents, and diseases of the pleura.
External causes of mortality (injuries)	This category includes deaths from injuries (unintentional and intentional) and causes not related to a medical condition, including motor vehicle accidents, other and unspecified transport accidents, cuts, falls, accidental discharge of firearms, homicide, suicide, drowning and submersion, accidental suffocation and strangulation in bed, and other suffocation and strangulation.
Infectious and parasitic diseases	This category includes transmissible diseases, including intestinal infectious diseases, tuberculosis, zoonotic bacterial diseases, spirochetal diseases, rickettsioses, and viral diseases.

Sudden infant death syndrome (SIDS)	This category includes deaths among infants less than one year of age that occur suddenly and for which the causes of death are not able to be determined even after a full investigation and autopsy.
Sudden unexpected infant death (SUID)	SUID is a term used to describe any sudden and unexpected death, whether explained or unexplained (including Sudden Infant Death Syndrome [SIDS], Accidental Suffocation or Strangulation in Bed [ASSB], and ill-defined deaths), occurring during infancy.

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For Additional Information:

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