



Missouri Title V Facts: Infant Death and Injury

BACKGROUND

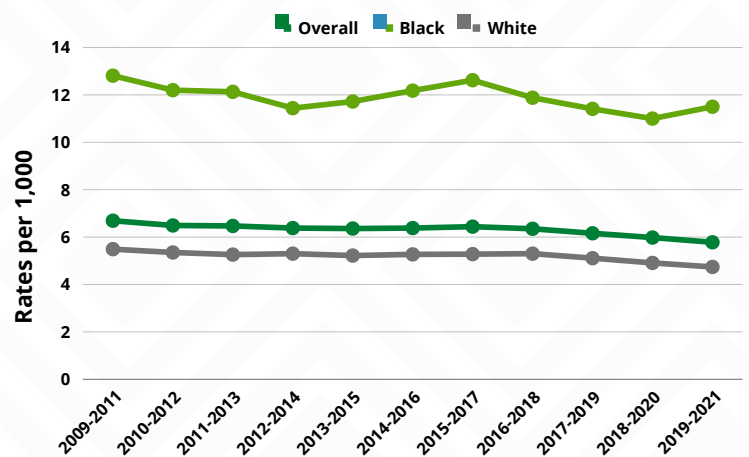
Infant mortality is an internationally-regarded measure of a population’s health, providing insight about a country or state’s ability to care for the health and well-being of its citizens and ensure the safety of future generations. The United States continues to experience higher infant mortality than other developed countries. In the United States, about 20,000 infants die every year, including 393 in Missouri in 2021. Missouri’s 2021 infant mortality rate of 5.7 per 1,000 live births was slightly higher than the national rate of 5.4.^{1 2} The leading causes of death among infants are complications from low birth weight & prematurity and congenital anomalies. Preterm birth and the associated care and treatment costs the United States more than \$25 billion annually.³

INFANT MORTALITY IN MISSOURI

Infant mortality refers to the death of an infant before his or her first birthday. The infant mortality rate is the number of infant deaths per 1,000 live births. In Missouri, rates of infant deaths have been decreasing slightly since 2008 for Black and White infants.⁴ Even with the decline in infant deaths, Black infants had a significantly higher three year moving average rate for 2019-2021 than White infants (11.5 vs 4.74 per 1,000 live births, respectively).⁴ There is evidence that the persistent disparity in infant mortality rates between Black and white babies in the United States is driven primarily by the frequency of prematurity-related adverse outcomes in the Black population.⁵ Babies born between 34 to 36 weeks gestation have an infant mortality rate three times as high as babies born full term.³

Special health care needs (SHCN) in very young children may be identified before birth (for example, chromosomal disorders such as Down Syndrome), or after birth through surveillance and detection systems such as newborn bloodspot or hearing screening, or developmental assessments done by caregivers or pediatricians. In the United States, 16% of children with a special health care need were born premature (more than 3 weeks before their due date), and 13.5% were born with a low birth weight (less than 2500 grams or 5 pounds, 8 ounces), compared to 10% and 8%, respectively, of non-SHCN children.⁶

Figure 1. Three Year Moving Averages Infant Mortality by Race, Missouri 2009-2021⁴

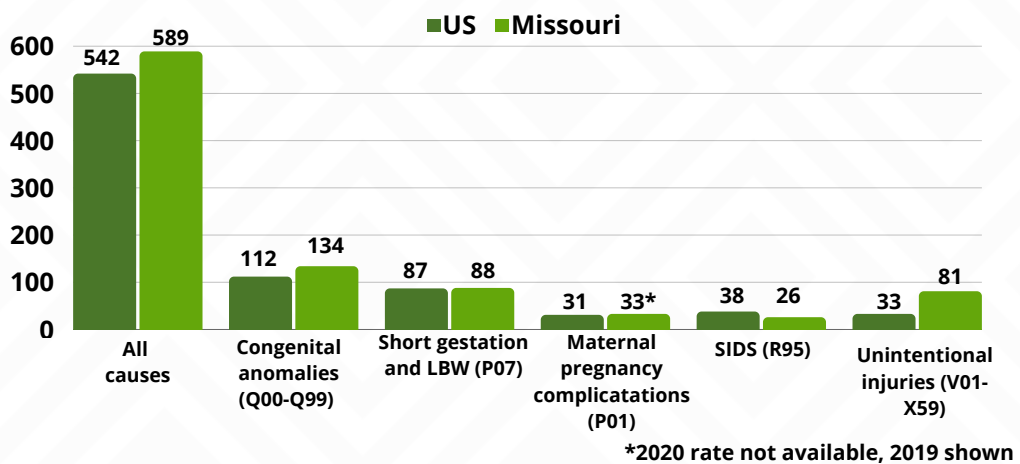


Many of the leading causes of infant mortality can be prevented by taking good care of the mother’s health before and during pregnancy. One of the biggest ways to reduce infant mortality is to ensure that the mother receives adequate prenatal care.⁷ Other ways to reduce risk include eliminating the use of alcohol and drugs during pregnancy, quitting smoking or tobacco use before or during pregnancy, taking folic acid, maintaining a healthy weight, controlling other chronic conditions like hypertension and diabetes, reducing exposures to infections, completing newborn screenings, and creating a safe sleep environment for the infant.⁷



The five leading causes of infant deaths in Missouri in 2020 were 1) birth defects, 2) preterm birth and low birth weight, 3) unintentional injuries, 4) maternal pregnancy complications, and 5) Sudden Infant Death Syndrome (SIDS).⁸ The top three leading causes account for 51% of infant deaths. Congenital malformations and chromosomal abnormalities contribute 23% of all infant deaths. Prematurity and low birth weight comprise another 15%, and unintentional injuries, which include accidental suffocation and strangulation in bed, contribute 14%.⁸ SIDS comprise 4% and maternal pregnancy complications contribute 5%. All other causes make up the remaining 40%.⁸ Some causes of death are preventable, while others are more difficult to address.

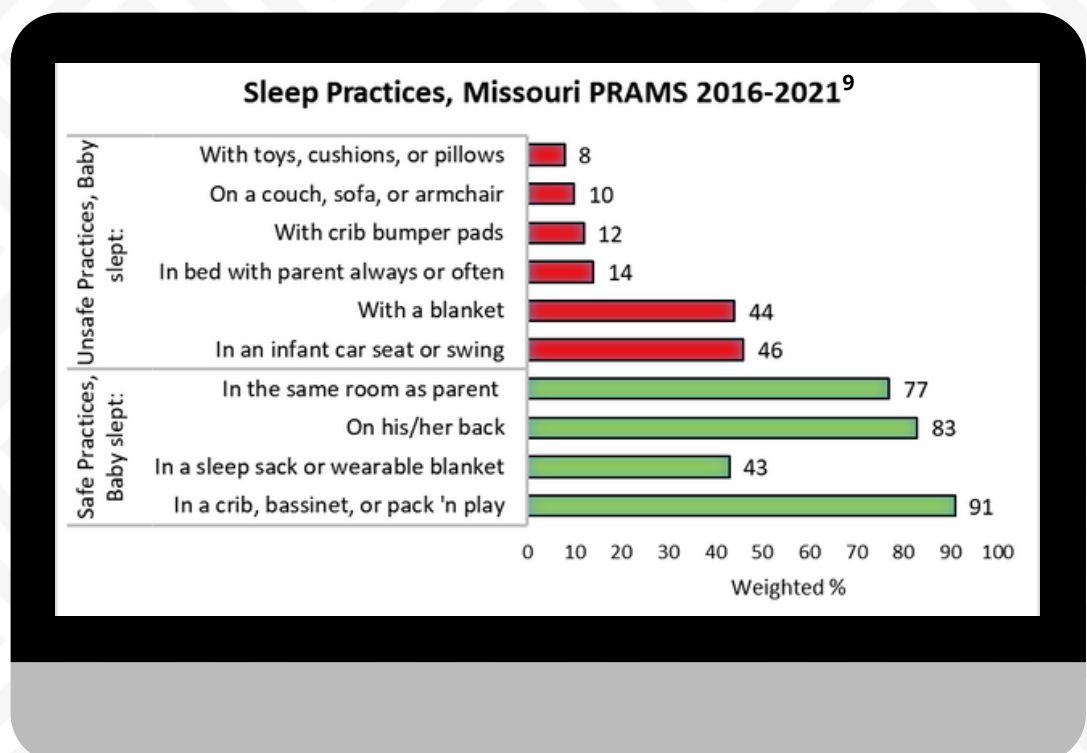
Figure 2. Leading causes of infant deaths per 100,000 live births, Missouri and U.S., 2020 ⁸



Infant mortality is divided into neonatal and post-neonatal periods with different leading causes of death associated with each period. Neonatal deaths occur before 28 days of life, while post-neonatal deaths occur between 28 and 365 days. Prematurity (birth before 37 completed weeks of gestation), congenital anomalies (birth defects) and maternal complications of pregnancy are important contributors to neonatal death. Deaths due to suffocation, congenital anomalies and SIDS are the most significant single causes of post-neonatal death.

INJURY PREVENTION AND SAFE SLEEP

There are many ways that parents and caregivers of infants and young children can reduce the risk of injury and injury-related death among their children. Missouri's rate of injury-related death is nearly 2.5 times higher than the national rate.⁸ The American Academy of Pediatrics recommends that all infants younger than one year of age be placed to sleep on their back, alone, on a firm surface with no pillows, toys, or soft bedding, to reduce the risk of suffocation-related sleep deaths and SIDS. Missouri mothers less than 20 years of age, with a lower household income, or who are Black are less likely to place their babies to sleep on their backs.⁹ It is also recommended that infants share a room, not a bed, with their parents for at least six months to reduce the risk of SIDS and suffocation-related infant death.¹⁰ Data from the 2016-2021 Pregnancy Risk Assessment System (PRAMS) survey indicates that 77% of Missouri mothers sleep in the same room as their infant. Nearly a quarter of Missouri mothers reported bed-sharing regularly (13%) or occasionally (10%).⁹



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