

NEBRASKA

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DEPT. OF HEALTH AND HUMAN SERVICES



Jim Pillen, Governor

December 31, 2024

The Honorable Jim Pillen
Governor of Nebraska
P.O. Box 94848
Lincoln, NE 68509

Mr. Brandon Metzler
Clerk of the Legislature
P.O. Box 94604
Lincoln, NE 68509

Subject: State Child Death Review Team Annual Report

Dear Governor Pillen and Mr. Metzler:

In accordance with Neb. Rev. Stat. § 71-3407, the Division of Public Health submits this report for the Nebraska Child Death Review Team.

This Child Death Review Team Report presents an overview of the manner and cause of infant and child deaths in the State of Nebraska in 2022 as well as recommendations from the Child Death Review Team.

Sincerely,

A handwritten signature in blue ink that reads "Charity Menefee".

Charity Menefee
Director, Division of Public Health

Attachment

Division of Public Health

State Child Death Review Team Annual Report

December 2024

Neb. Rev. Stat. § 71-3407

Introduction

The Child Death Review Team (CDRT) was established by the Nebraska Legislature in 1993 and charged with undertaking a comprehensive, integrated review of existing records and other information regarding each child death.

The purpose of the CDRT includes developing an understanding of the number and causes of child deaths and advising the Governor, Legislature, other policymakers, and the public on the changes that might prevent them in the future. All deaths are reviewed, not just “suspicious” or violent ones. The team uses information in written records from state and local agencies, hospitals, private medical providers, and others, along with the expertise of its members to identify situations where, in retrospect, reasonable intervention might have prevented a death. The specific goals of these reviews are to 1) identify patterns of preventable deaths; 2) recommend changes in system responses to deaths; 3) refer to law enforcement newly suspected cases of abuse, malpractice, or homicide; and 4) compile findings into reports designed to educate the public and state policymakers about child deaths. Neb. Rev. Stat. § 71-3407 requires the CDRT to provide an annual report which includes the team’s findings and recommendations.

Child Mortality

Child Mortality Rates

In 2022, 87 child deaths (ages 1-17) were recorded; Nebraska had a child mortality rate (CMR) of 19.2 per 100,000 children (Figure 1, Table 1). In 2022, the United States had a CMR of 23.7 per 100,000 children (Centers for Disease Control and Prevention, National Center for Health Statistics). There has not been a statistically significant change in Nebraska’s CMR over the past decade.

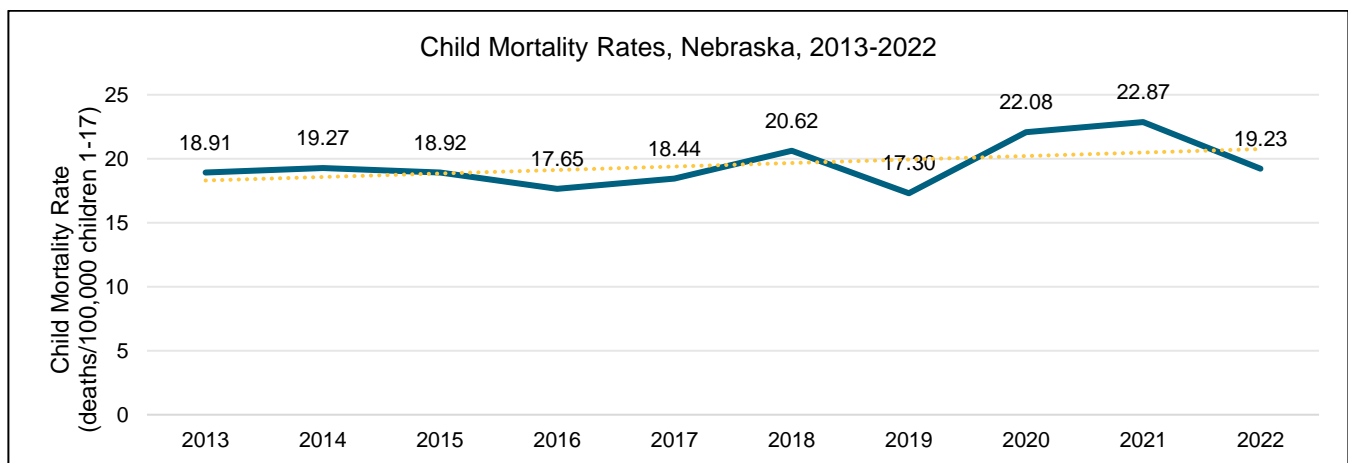


Figure 1. Child Mortality Rates, Nebraska, 2013-2022. Nebraska DHHS Vital Records Office.

Table 1. Trends in Child Deaths, Nebraska, 2013-2022. Nebraska DHHS Vital Records Office.

Year	Total Child Population* (ages 1-17)	Number of Child Deaths (ages 1-17)	Child Mortality Rate (deaths/100,000)
2013	438,826	83	18.91
2014	441,191	85	19.27
2015	444,088	84	18.92
2016	447,594	79	17.65
2017	450,003	83	18.44
2018	451,074	93	20.62
2019	450,800	78	17.30
2020**	457,349	101	22.08
2021**	454,813	104	22.87
2022**	452,330	87	19.23

*Child population estimates for 2013-2019 are from CDC Single-Race Population Estimates 2010-2020

**Child population estimates for 2020-2022 are from CDC Single-Race Population Estimates 2020-2022

Causes of Child Deaths

Table 2. Causes of Child Deaths, Nebraska, 2022. Nebraska DHHS Vital Records Office.

Manner and Cause of Death	Number of Deaths*	Child Mortality Rate (deaths/100,000)*
Accident	28	6.19
Transportation-Related	9	1.99
Unintentional Injury: Fire/Burn	6	1.33
Other Unintentional Injury	13	2.87
Natural	45	9.95
Infectious & Parasitic Diseases	8	1.77
Cancer/Neoplasms	8	1.77
Nervous System Disease	10	2.21
Circulatory Disease	6	1.33
Other Natural Cause	13	2.87
Suicide	11	2.87
Homicide	--	--
Undetermined	--	--
Total	87	19.23

*Numbers and rates are not shown (suppressed) if there are between 1 and 5 deaths for that category. Rates based on counts fewer than 20 should be interpreted with caution.

Race and Ethnicity of Child Mortality

In 2022, CMR was not statistically significantly different by race/ethnicity (Figure 2). No racial or ethnic group has experienced a statistically significant change in CMR over the past decade (2013-2022).

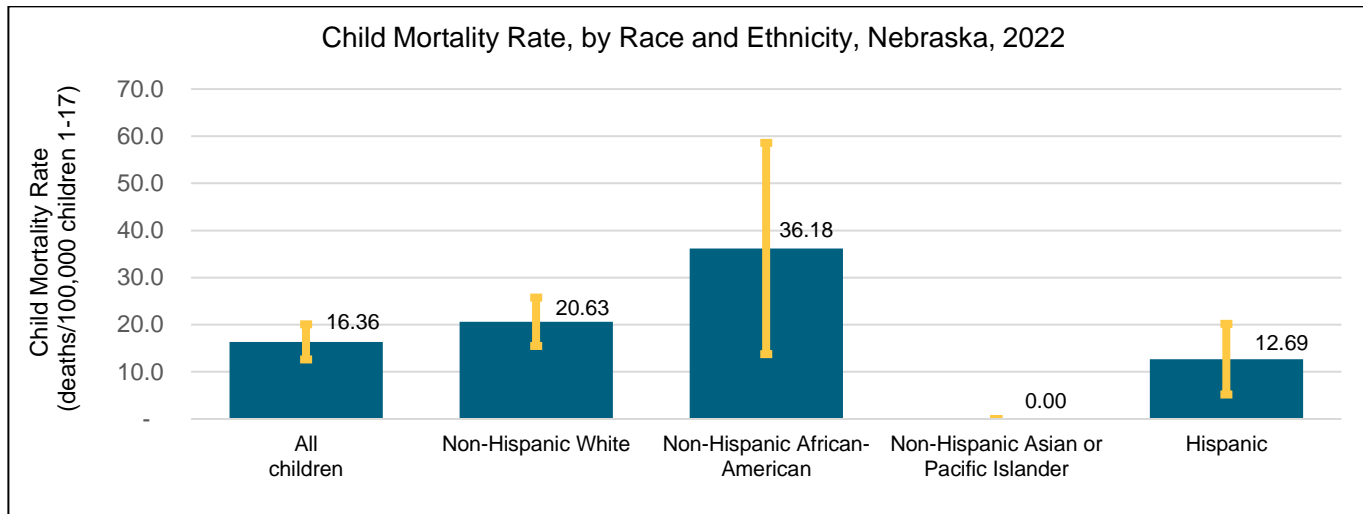


Figure 2. Child Mortality Rate, by Race and Ethnicity, Nebraska, 2022. Source: Nebraska DHHS Vital Records Office. Rates for non-Hispanic American Indian or Alaska Native and non-Hispanic more than one race infants were suppressed as counts were between 1 and 5.

Infant Mortality

Infant Mortality Rates

In 2022, 135 children died before turning one, producing an infant mortality rate (IMR) of 5.8 deaths per 1,000 live births (Figure 3, Table 3); the 2022 United States IMR was 5.6 per 1,000 live births according to the National Center for Health Statistics at the Centers for Disease Control and Prevention. There has been no statistically significant change in Nebraska's overall IMR over the past decade.

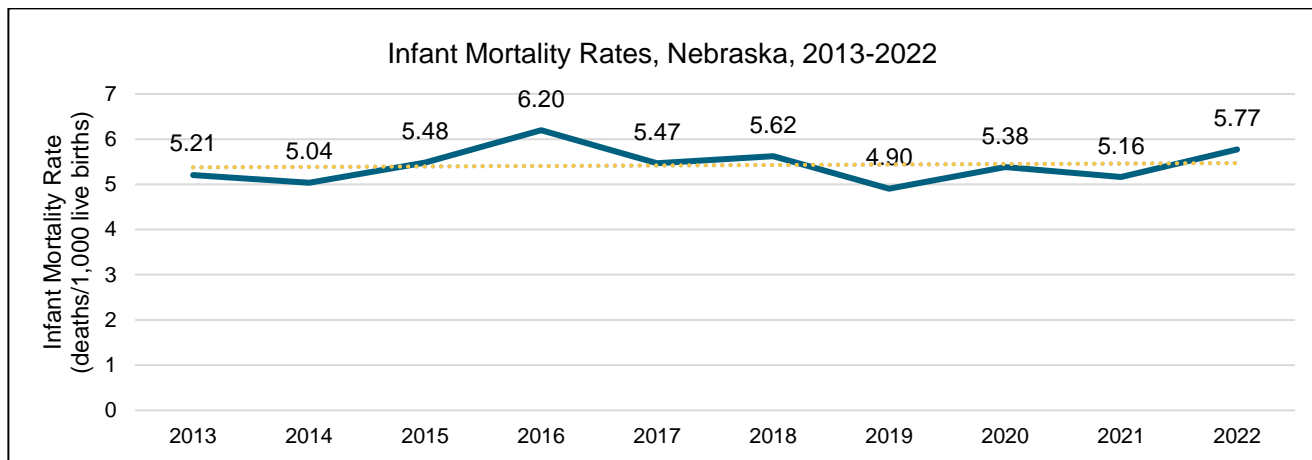


Figure 3. Infant Mortality Rates, Nebraska, 2013-2022. Source: Nebraska DHHS Vital Records Office.

Year	Number of Live Births	Number of Infant Deaths (age <1)	Infant Mortality Rate (deaths/1,000)
2013	25,159	131	5.21
2014	25,819	130	5.04
2015	25,728	141	5.48
2016	25,656	159	6.20
2017	24,885	136	5.47
2018	24,538	138	5.62
2019	23,860	117	4.90
2020	23,419	126	5.38
2021	23,646	122	5.16
2022	23,385	135	5.77

Causes of Infant Deaths

Manner and Cause of Death	Number of Deaths*	Infant Mortality Rate (deaths/1,000)
Accident	--	--
Natural	111	4.75
Perinatal Conditions	63	2.69
Congenital Anomalies	35	1.50
Other Natural Causes	13	0.56
Homicide	--	--
SUID**	22	0.94
Abnormal Signs & Symptoms, Including SIDS	13	0.56
Accidental Strangulation or Suffocation in Bed	9	0.38
Undetermined	--	--
Total	135	5.77

*Numbers and rates are not shown (suppressed) if there are between 1 and 5 deaths for that category. Rates based on counts fewer than 20 should be interpreted with caution.

**SUID (Sudden Unexplained Infant Death) is a death that occurs in a baby under 1 year of age where the cause of death is not obvious; these usually occur in the baby's sleep area. Manner of death varies.

Race and Ethnicity of Infant Deaths

The IMR for non-Hispanic African American infants (17.57, 95% confidence interval (CI) 10.87, 24.26) is statistically higher than that of non-Hispanic White infants (5.39, 95% CI 4.24, 6.54), and Hispanic infants (3.56, 95% CI 1.82, 5.31) in 2022 (Figure 4). Additionally, the IMR for non-Hispanic African American infants is statistically higher than the IMR for the state overall (5.77, 95% CI 4.80, 6.74), and the IMR for Hispanic infants is statistically significantly lower than the IMR for the state as a whole (Figure 4).

The IMR for non-Hispanic African American infants has statistically significantly increased from 8.72 deaths per 1,000 live births in 2013 to 17.57 deaths per 1,000 live births in 2022 ($p < 0.05$) (Figure 5). The IMR for Hispanic infants has statistically significantly decreased from 4.91 deaths per 1,000 live births in 2013 to 3.56 deaths per 1,000 live births in 2022 ($p < 0.05$) (Figure 5).

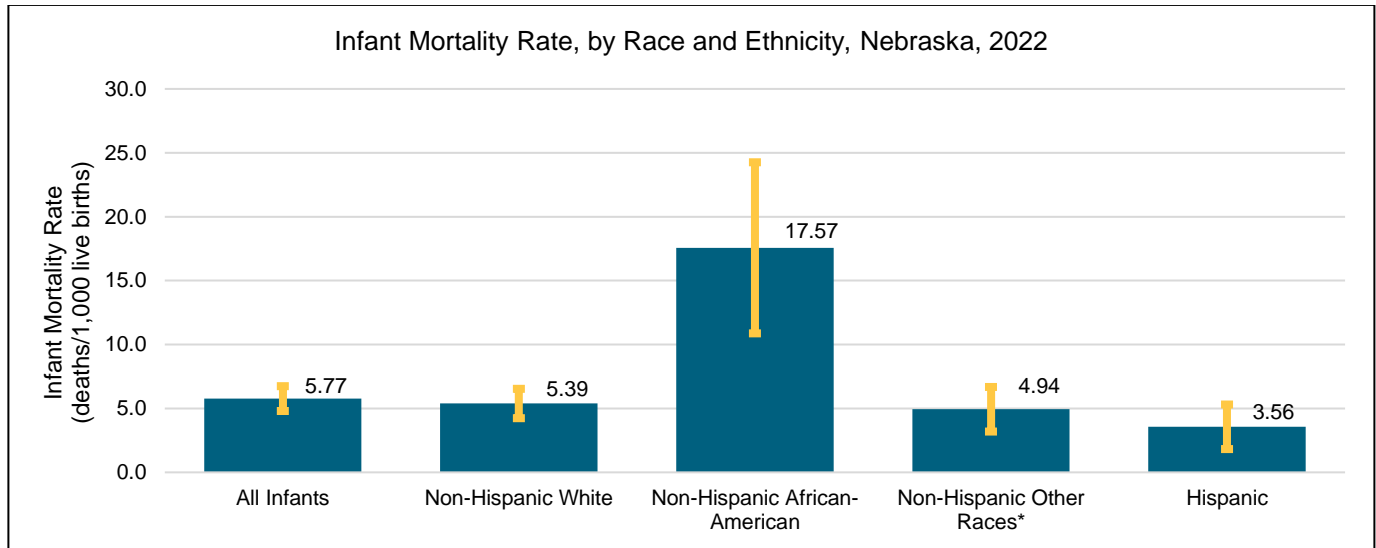


Figure 4. Infant Mortality Rate, by Race and Ethnicity, Nebraska, 2022. Source: Nebraska DHHS Vital Records Office. *Includes rates for non-Hispanic American Indian or Alaska Native, non-Hispanic Asian or Pacific Islander, and non-Hispanic more than one race infants. These rates were not able to be reported individually as counts fell between 1 and 5 and would require suppression.

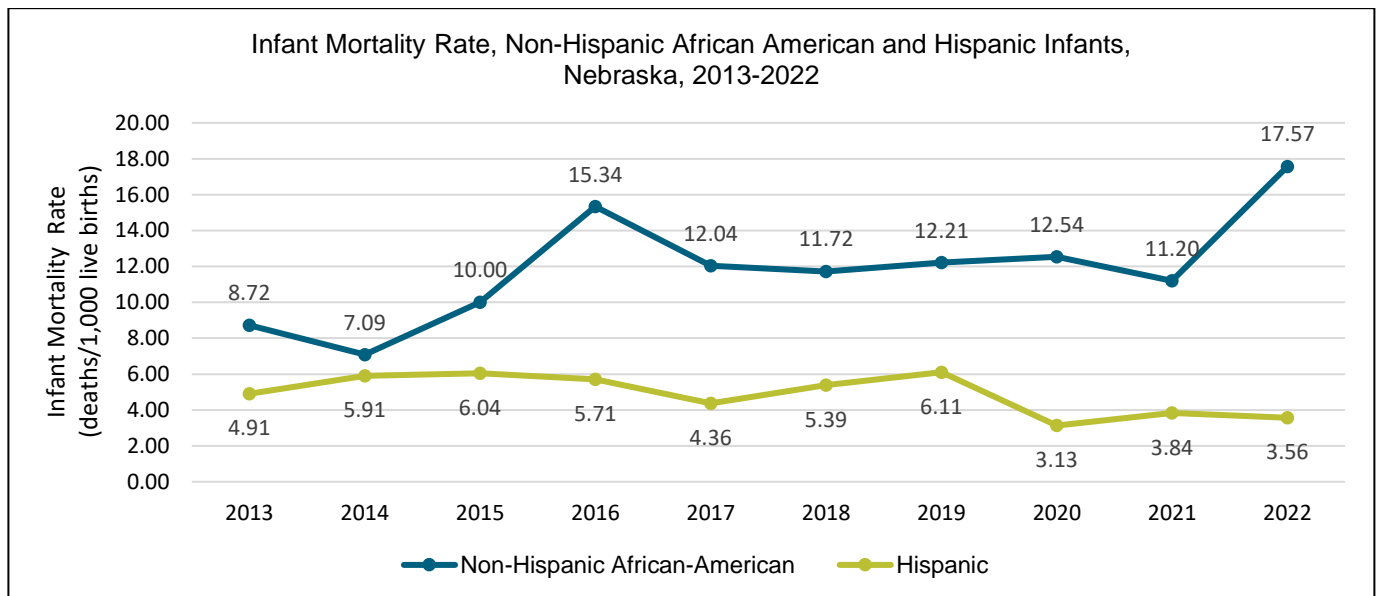


Figure 5. Infant Mortality Rate, Non-Hispanic African American and Hispanic Infants, Nebraska, 2013-2022. Source: Nebraska DHHS Vital Records Office.

Sudden Unexpected Infant Deaths

Sudden unexpected infant death (SUID) is a broad category of infant death that includes sudden infant death syndrome (SIDS), accidental strangulation or suffocation in bed (ASSB), and unknown causes. The SUID IMR for the United States was 1.01 per 1,000 live births in 2022 (Centers for Disease Control and Prevention, National Center for Health Statistics).

In Nebraska, although there have been fluctuations year-to-year in the SUID IMR, there has not been significant change over the past decade (2013-2022) (Figure 6). The ASSB IMR has statistically significantly increased over the past decade (2013-2022) from less than 0.25 deaths per 1,000 live births in 2013 (exact rate not given as count is between 1 and 5 deaths) to 0.39 deaths per 1,000 live births in 2022 ($p < 0.05$) (three-year rolling averages presented in Figure 7). The SIDS IMR has statistically significantly decreased from 0.56 deaths per 1,000 live births in 2013 to 0.38 deaths per 1,000 live births in 2022 ($p < 0.05$) (three-year rolling averages presented in Figure 7).

The concurrent changes in IMR of SUID sub-groups and stable rate of SUID IMR overall reflects changes in how SUID deaths are classified on death certificates rather than changes in the overall occurrence of these deaths. Recent statewide efforts have been implemented to gather information specifically related to sleep environment on the death scene when SUID deaths occur. Environmental factors taken into consideration when completing the cause of death on the death certificate may partially explain the changes in sub-group categorization. Figure 8 shows the change in composition of SUID in Nebraska from 2013 to 2022.

The 10-year average SUID IMR for Hispanic infants (0.59, 95% CI 0.36, 0.83) is statistically significantly lower than the non-Hispanic African American SUID IMR (2.60, 95% CI 1.79, 3.40) and the non-Hispanic American Indian or Alaska Native SUID IMR (4.62, 95% CI 1.42, 7.81) (Figure 9). The 10-year average SUID IMR for non-Hispanic African American infants is statistically significantly higher than the SUID IMR for the whole state (0.88, 95% CI 0.76, 0.99) and the non-Hispanic White SUID IMR (0.76, 95% CI 0.63, 0.89). The 10-year average SUID IMR for non-Hispanic American Indian or Alaska Native infants is statistically significantly higher than the SUID IMR for the whole state and the non-Hispanic White SUID IMR (Figure 9).

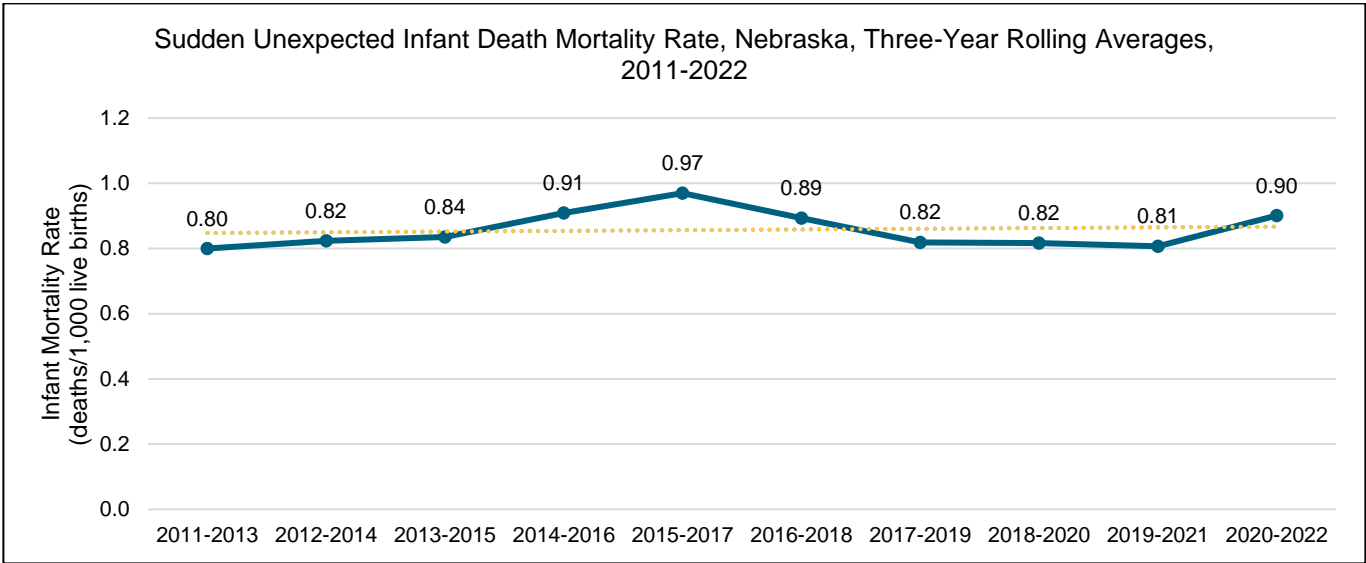


Figure 6. Sudden Unexpected Infant Death Mortality Rate, Nebraska Three-Year Rolling Averages, 2011-2022. Source: Nebraska DHHS Vital Records Office.

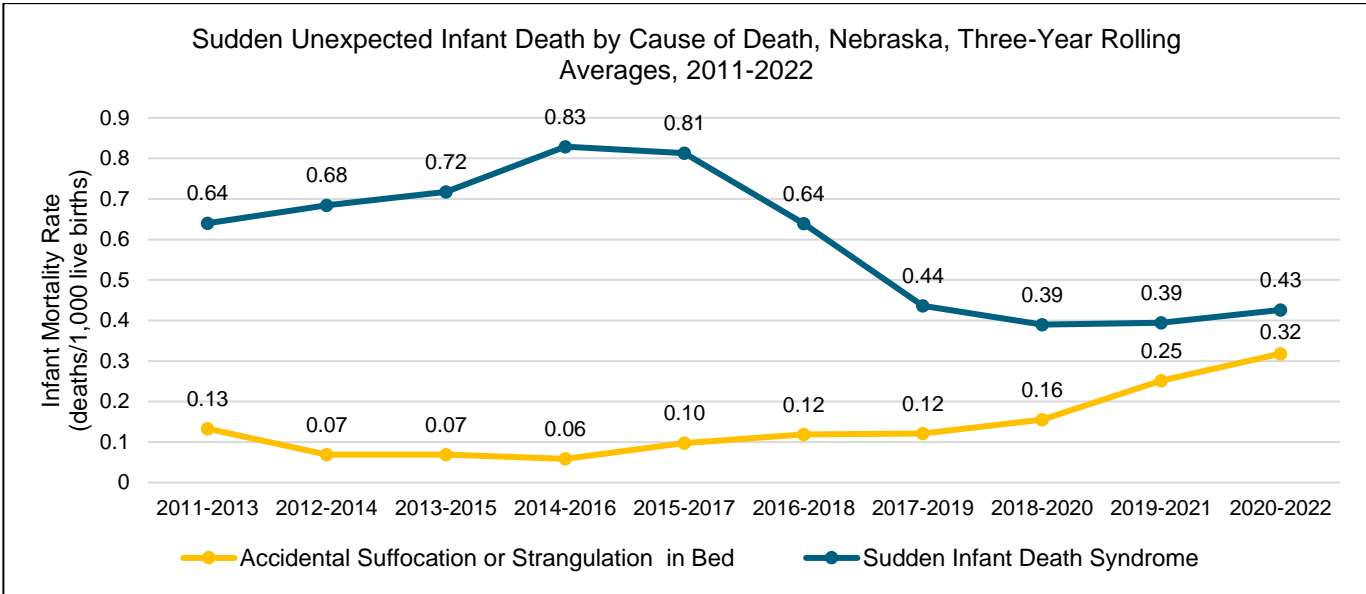


Figure 7. Sudden Unexpected Infant Death by Cause of Death, Nebraska, Three-Year Rolling Averages, 2011-2022. Source: Nebraska DHHS Vital Records Office.

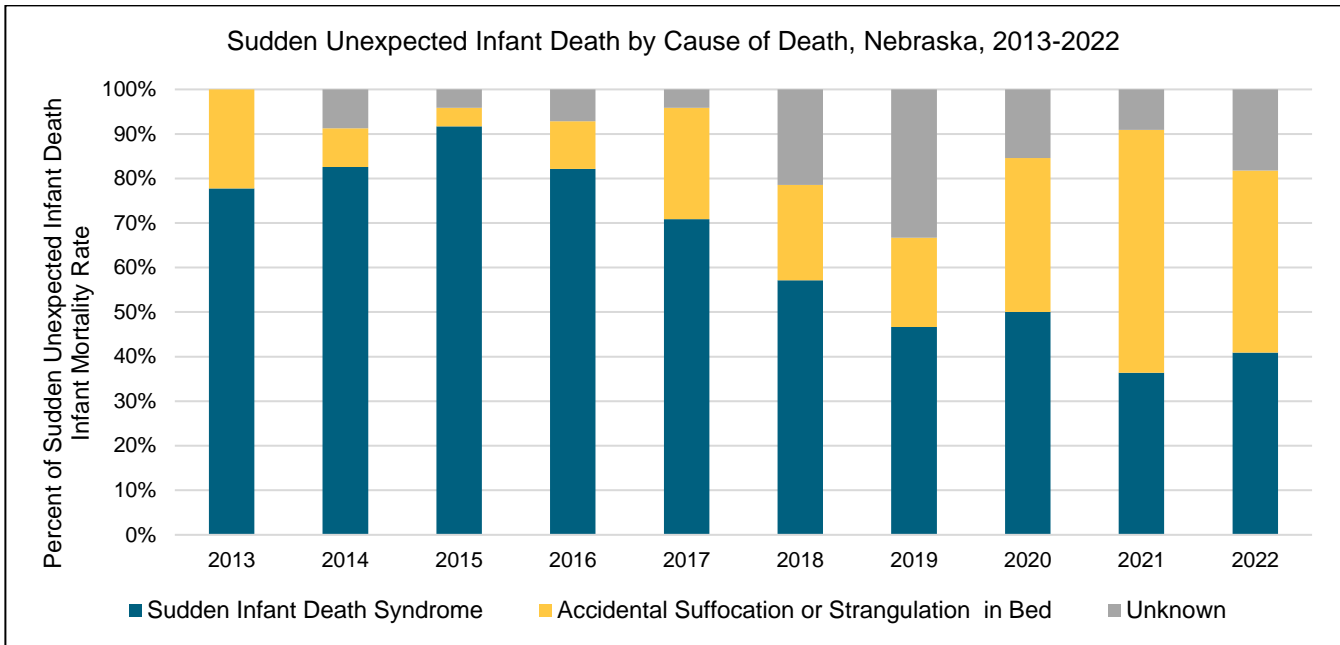


Figure 8. Sudden Unexpected Infant Death by Cause of Death, Nebraska, 2013-2022. Source: Nebraska DHHS Vital Records Office.

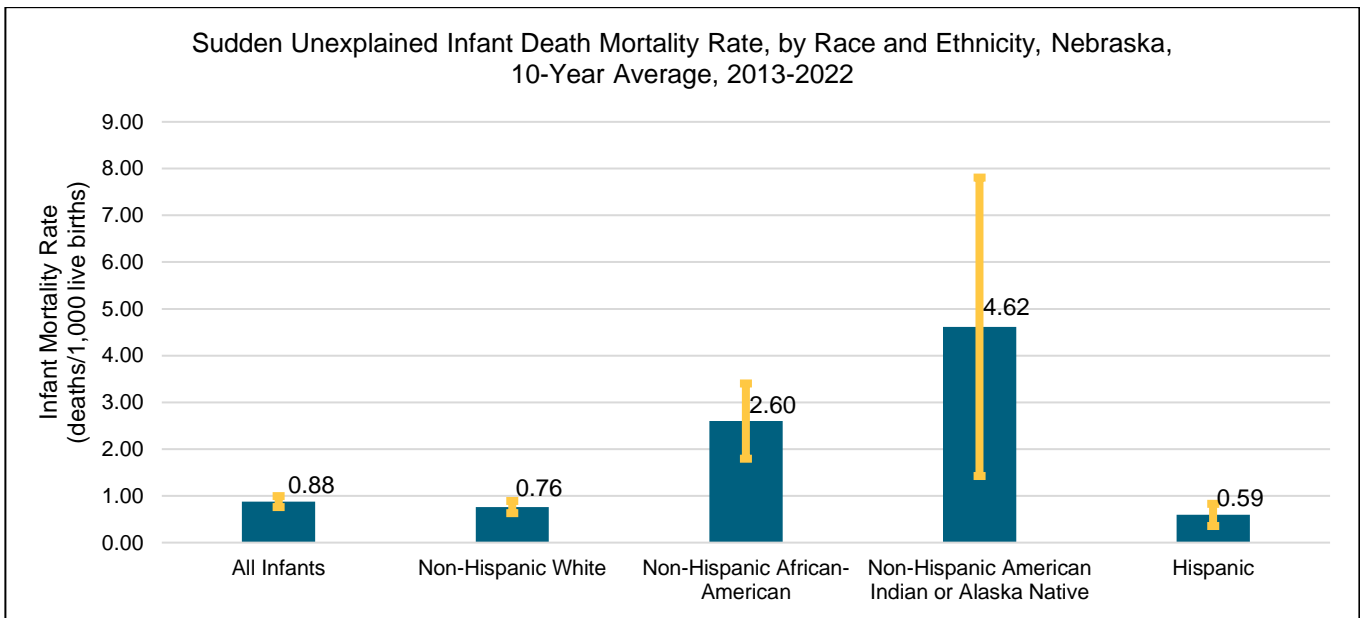


Figure 9. Sudden Unexpected Infant Death Mortality Rate, by Race and Ethnicity, Nebraska, 10-Year Average, 2013-2022. Source: Nebraska DHHS Vital Records Office. Rates for non-Hispanic Asian/Pacific Islander and non-Hispanic more than one race are suppressed as counts fell between 1 and 5.

Child Death Review Team Sudden Unexpected Infant Death Related Recommendations

- Update and expand family, community, and provider-level promotion of infant safe sleep practices in all birthing hospitals through Safe Sleep Champions Campaign. Include pediatric and Women, Infants, and Children (WIC) clinics in this promotion.
- Train visiting nurses and social service personnel in culturally sensitive, in-home interventions to promote safer sleep environments.
- Provide infant death investigation training for investigators, law enforcement and coroners and encourage investigators to adopt and routinely complete Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF).
<https://dhhs.ne.gov/Documents/SUID%20form%20fillable%2011-2021.pdf>
- Counsel caregivers on the risk of SUID for infants cared for by caregivers impaired by alcohol, illicit substances, and certain medications whenever safe sleep education is provided.

Justifications

The Nebraska Child Death Review Team (CDRT) is charged with identifying trends in child deaths as well as developing recommendations to reduce child mortality. While there has not been an increase in SUID in Nebraska over the last decade and the Nebraska SUID IMR is comparable to the United States SUID IMR, disparities exist in the state by race and ethnicity.

The Safe Sleep Champions Hospital Campaign began in 2017 through the Nebraska DHHS following a survey completed in 2015 that revealed inconsistent safe sleep education for employees and patients at Nebraska birthing hospitals (Nebraska Department of Health and Human Services n.d. *Safe Sleep Hospital Campaign*). The CDRT recommends expanding this campaign outside of hospitals to include WIC clinics and pediatrician offices. This expansion would increase the frequency with which caregivers receive consistent and clear safe sleep education.

CDRT members recognize the barriers to safe sleep extend beyond lack of education. Through the review process, in-home services were identified as an appropriate place for these barriers to be effectively addressed. In-home service providers should receive training on providing culturally sensitive safe sleep education, including safe sleep practices in conjunction with breastfeeding. These service providers are on site to see the potential sleep environment and have follow-up conversations about safe sleep.

The Sudden Unexplained Infant Death Investigation Reporting Form (SUIDIRF) was developed by expert partners with the intention of providing context that is often missing for deaths recorded as SUID. The SUIDIRF collects demographic, clinical, and death scene information (Nebraska Department of Health and Human Services n.d. *Child Death Review*). Regular training is necessary for consistent use of the SUIDIRF throughout the state. The form and its training can be found on the CDRT web page (<https://dhhs.ne.gov/Pages/Child-Death-Review.aspx>).

There is a risk for SUID among infants whose caregiver is impaired by alcohol, illicit substances, or certain medications when infants are sleeping or being put to sleep. Counseling on these risks may reduce the incidence of these situations. When it is safe to do so, safe sleep education providers may work with caregivers to create safe sleep plans that include ensuring that a caregiver is available and unimpaired for each infant sleep time.

Other Child Death Review Team Recommendations

Unintentional Injury

Motor Vehicle Crashes

- Strengthen the Graduated Driver's License provisions
- Uniformly enforce enhanced sentencing for Driving Under the Influence with a child in the vehicle

Drowning and Fire

- Strengthen and promote local ordinances on pool fencing and barriers
- Develop and distribute family-oriented, multilingual drowning prevention materials during pool inspections
- Distribute home smoke detectors to low-income residents

Intentional Injury

Suicide

- Ensure access to confidential, professional mental health services and crisis care for all young people across the state
- Train all clinical and non-clinical staff to identify individuals at risk and to respond
- Encourage medical mental health providers to develop a safety plan for children and parents if the child has expressed suicide ideation/thoughts
- Reduce access to lethal means

Perinatal, Infant, and Early Childhood Health and Education

Prenatal and Infant Care

- Increase access to affordable, quality prenatal education and care for vulnerable and at-risk women
- Promote birth doulas
- Extend postpartum Medicaid coverage
- Increase public funding for evidence-based perinatal, infant, and early childhood home visiting services

The recommendations in this report are those of the CDRT membership, and do not necessarily reflect those of the Nebraska Department of Health and Human Services.

References

Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Linked Birth / Infant Deaths on CDC WONDER Online Database. Data are from the Linked Birth / Infant Deaths Records 2017-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/lbd-current-expanded.html> on Nov 6, 2024 1:36:13 PM

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