



# **Nebraska Child Death Review Report**

**For Child Deaths Occurring in 2012 and 2013**

**THE 10<sup>TH</sup> CHILD DEATH REVIEW REPORT OF THE  
NEBRASKA CHILD AND MATERNAL DEATH REVIEW TEAM**

**September, 2017**

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The Honorable Pete Ricketts, Governor  
Honorable Members of the Nebraska State Legislature

This tenth report on child deaths in Nebraska is submitted to you in accordance with Nebraska Revised Statute §71-3404. The report presents the Child and Maternal Death Review Team's findings on the 449 deaths to Nebraska resident children ages 0 to 17 years during 2012 and 2013.

The top five causes of death for the state's children during 2012 and 2013 were:

- Pregnancy-Related Causes (133 deaths)
- Birth Defects (96 deaths)
- Motor Vehicle-Related Incidents (51 deaths)
- Sudden Unexpected Infant Death (41 deaths)
- Medical Conditions (Non-cancer; 35 deaths)

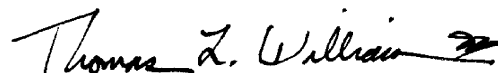
Since child death reviews began in 1993, child deaths have decreased by over one-third. While this represents many saved lives, there is still much work to be done. For this review of deaths occurring during 2012 and 2013, CMDRT members either **somewhat or strongly agreed that nearly one-third (31.4%) were preventable.**

In addition, the decrease in deaths is uneven among racial, ethnic, geographic and other groups, indicating that improved education, prevention and resources have not reached all families. This report includes recommendations around key actions designed to reduce unnecessary deaths of the state's children.

Please note that the views and recommendations in this report are those of the CMDRT, and do not necessarily reflect those of the Nebraska Department of Health and Human Services.

We welcome any thoughts or comments you may have on this report, and look forward to working with you to continue to enhance the safety and well-being of Nebraska's children.

Sincerely,



Thomas L. Williams, MD  
Chair, Nebraska Child and Maternal Death Review Team  
Chief Medical Officer  
Director, Division of Public Health  
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The Child Death and Maternal Review Team would like to thank the County Attorneys and their staff, hospital medical records departments, Tribal Authorities, sheriff and police departments, state agencies, DHHS staff, medical providers and other individuals who graciously provided the information that made this report possible.

The following individuals also provided invaluable assistance in interpreting the information:

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Ms. Jeanne Bietz, DHHS Injury Prevention Program

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This report was designed to provide useful information for evaluation, planning and prevention purposes. Any questions or comments regarding the report or the Nebraska Child and Maternal Death Review Team should be directed to:

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Cover photo: flowers-background-butterflies-beautiful-87452. Santillan Team 2016.

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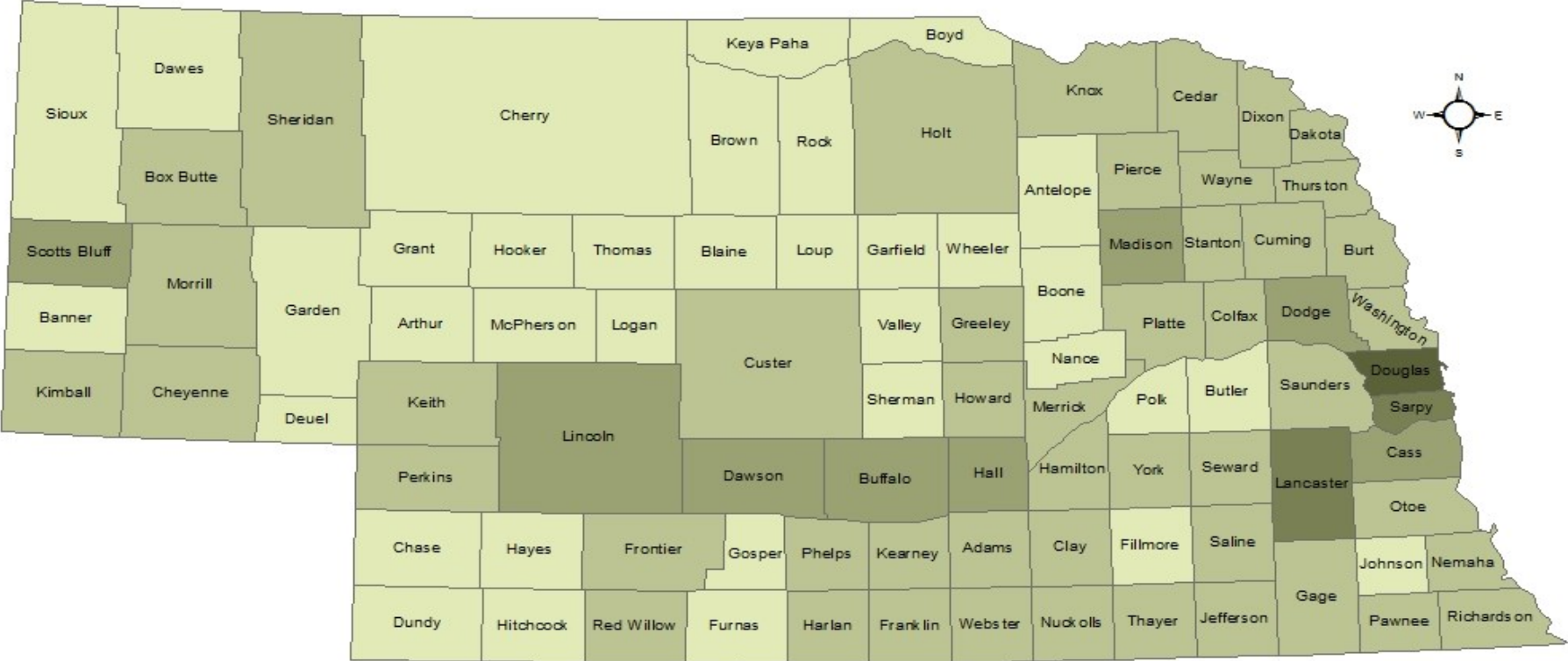
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# Infant and Child Deaths (0-17) by County of Residence (N=449) Nebraska 2012-2013



**Legend**

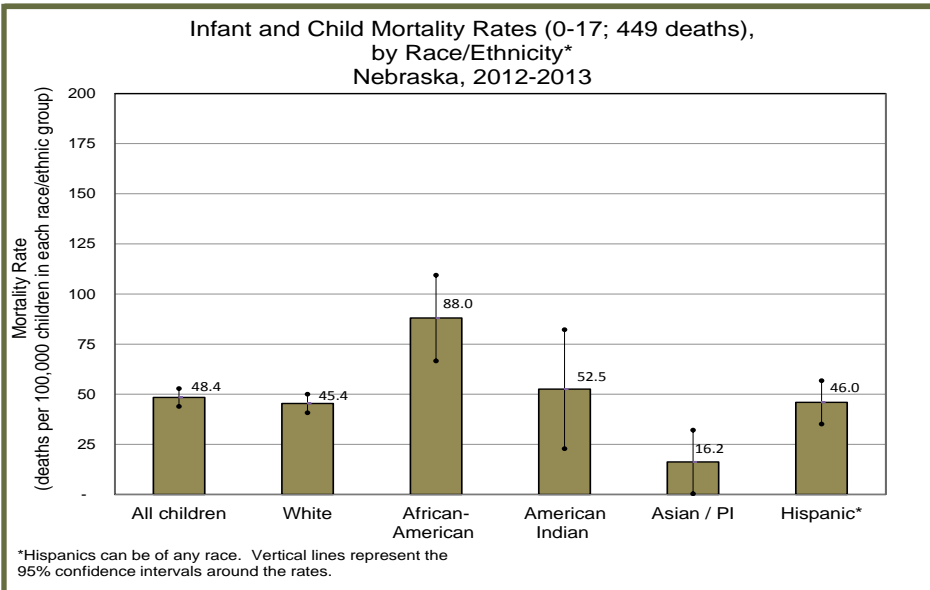
**Infant and Child Deaths By County** 0 1-7 8-16 17-61 62-149

## Executive Summary

The Nebraska Child and Maternal Death Review team performs a comprehensive, integrated review of existing records on all child deaths in Nebraska. A total of 449 Nebraska children ages 0 to 17 died during 2012 and 2013, significant decreases in both the number and rate of deaths since child death reviews began in 1993.

CMDRT reviewers **strongly or somewhat agreed** that approximately one-third (31.4%) of all child deaths in 2012 and 2013 were **preventable**.

**Key Findings:** Racial and ethnic inequities in child deaths are persistent in Nebraska. Although mortality rates for all groups are showing long-term declines, African-American children consistently die at higher rates than other children. Additionally, deaths of American Indian children have been trending upward.



## Top Cause of Death Categories

1. Pregnancy-Related - 133 deaths
2. Birth Defects - 96 deaths
3. Motor Vehicle-Related - 51 deaths
4. Sudden Unexpected Infant Death - 41 deaths
5. Infectious, Chronic and Other Medical Conditions - 35 deaths

## Priority Recommendations to Prevent Child Deaths\*

### Problem

### Recommendation

- |   |   |
|---|---|
| 1. Women most at risk of poor pregnancy outcomes tend to be the least likely to have access to high quality prenatal care.  | Promote routine assessment of prenatal care services for accessibility by diverse clients.                    |
| 2. Infants born to women who used narcotics or other drugs during pregnancy do not always receive needed, specialized care. | Encourage widespread adoption of comprehensive guidelines for the delivery of substance-affected pregnancies. |
| 3. Unsafe driving and lack of restraint use account for the majority of crash-related child deaths.                         | Strengthen graduated licensing requirements, and the use of child safety seats and seatbelts.                 |
| 4. High rates of adolescent suicide reflect under-recognized problems of children's mental health.                          | Increase access to professional and confidential mental health services for all young people.                 |
| 5. Many child deaths are not adequately investigated, hampering initiatives to prevent future deaths.                       | Promote adoption and use of the state's protocol on child death scene investigations.                         |

\*Detailed descriptions of priority recommendations are on page 25.



## Review of 2012-2013 Nebraska Child Deaths

*The Legislature finds and declares that it is in the best interests of the state, its citizens and especially the children of this state that the number and causes of death of children in this state be examined. There is a need for a comprehensive integrated review of all child deaths in Nebraska and a system for statewide retrospective review of existing records relating to each child death. §71-3404 Neb. Rev. Stat.*

This report presents the findings and recommendations of the Nebraska Child and Maternal Death Review Team, based on the review and tabulation of the 449 deaths of Nebraska resident children (newborns through age 17) known to have occurred during 2012 and 2013. The traditional belief that “things will happen” ignores the reality that many of these deaths could have been prevented.

### BACKGROUND

The Nebraska Child and Maternal Death Review Team (CMDRT) 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. At that time, the Nebraska Commission for the Protection of Children had found that about 300 children died each year in the state, but that there was no systematic process in place for consistent review of those deaths to determine contributing circumstances.

The purpose of the CMDRT includes developing an understanding of the number and causes of child deaths, and advising the Governor, Legislature, other policymakers and the public on changes that might prevent them in the future. All child deaths

are reviewed, not just “suspicious” or violent ones. The team uses information in written records and the expertise of its members to identify situations where, in retrospect, reasonable intervention might have prevented a death. Members of the original team determined that the specific goals of these reviews would be to:

- Identify patterns of preventable child deaths;
- Recommend changes in system responses to child deaths;
- Refer to law enforcement newly-suspected cases of abuse, malpractice, or homicide; and,
- Compile findings into reports designed to educate the public and state policymakers about child deaths.

In 2013, the Nebraska Legislature expanded the team’s responsibilities to include the review of maternal deaths. Results of these reviews will begin in the report for deaths occurring in 2014.

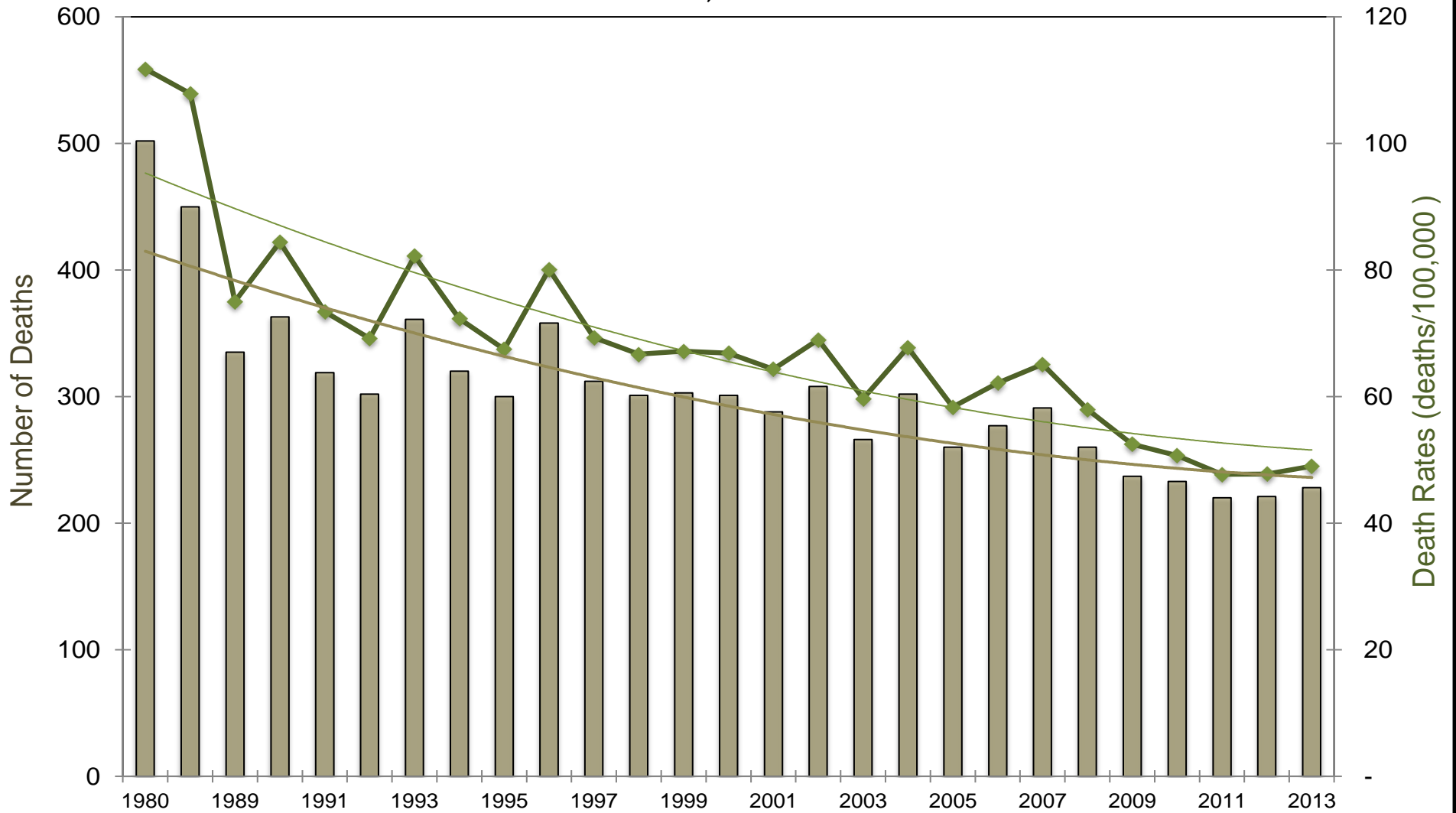
### FINDINGS

A total of 449 Nebraska children ages 0 to 17 died during 2012 and 2013, continuing a decline observed since 2007 (Figure 1). Although the overall historical trend has been towards fewer deaths, the rate has been largely stagnant since 2009.

The average annual number of deaths for 2012 and 2013 (225 deaths) represents a 38% decrease since child death reviews began in 1993 (361 deaths).

Figure 1.

## Infant and Child Deaths (0-17) and Death Rates Nebraska, 1980-2013



Curved lines represent 2nd degree polynomial trends over time. Prediction values = 89.1% (rates) and 89.0% (numbers of deaths).

Deaths
  Death Rates

## Preventability

All child deaths were individually assessed as to the degree to which they were preventable. For each case, members assessed whether or not they:

<b>Strongly Disagreed</b>	<b>Somewhat Disagreed</b>	<b>Were Neutral / Undecided</b>	<b>Somewhat Agreed</b>	<b>Strongly Agreed</b>
---------------------------	---------------------------	---------------------------------	------------------------	------------------------

with the statement:

This death was preventable - standard-of-care medical management would have changed the circumstances that led to death. (Medical cases)

OR

This death was preventable - an individual or community could reasonably have done something that would have changed the circumstances that led to death. (Non-medical cases)

Preventable deaths (“strongly agree” or “somewhat agree”) made up nearly one-third (31.4%) of all cases, and ranged from 100% for Motor Vehicle-related incidents (35 deaths) and Child Abuse (9 deaths) to 0% for Birth Defects (96 deaths; Figures 2a and 2b. No clearly preventable factors were identified for cancer deaths. Over the two-year period, 21 cases (4.7%) did not have sufficient information to determine preventability; the majority of these had pregnancy-related causes.

Figure 2a.

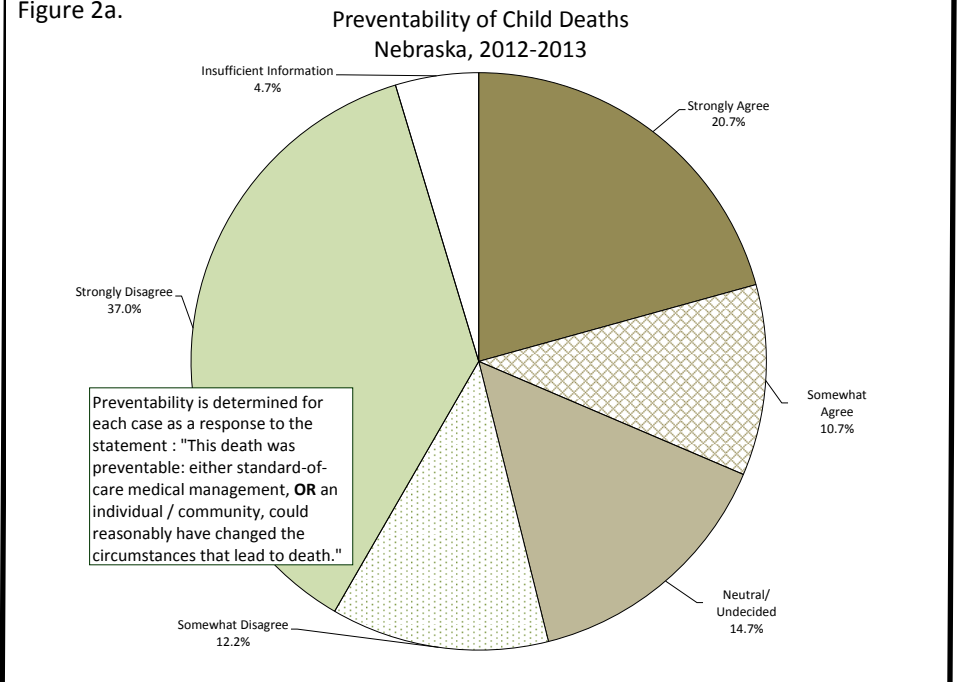
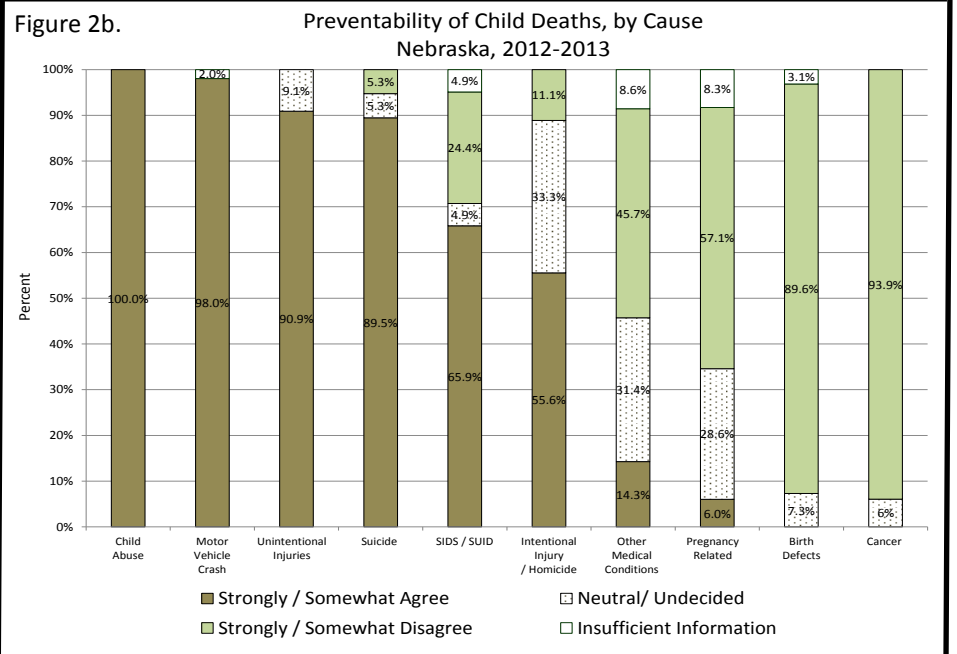
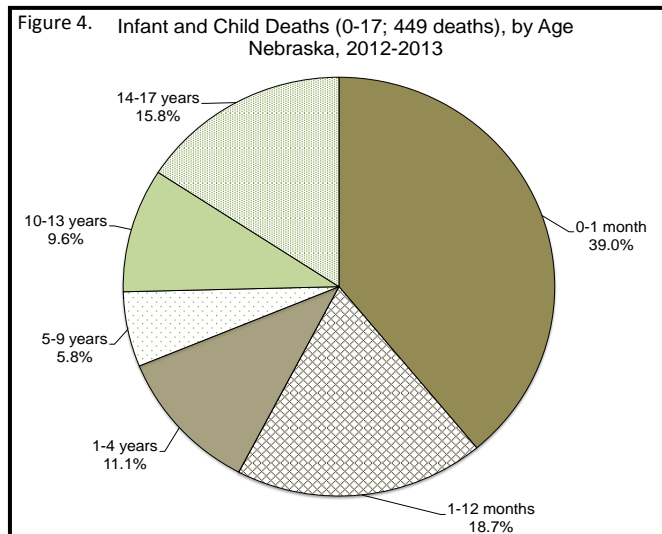
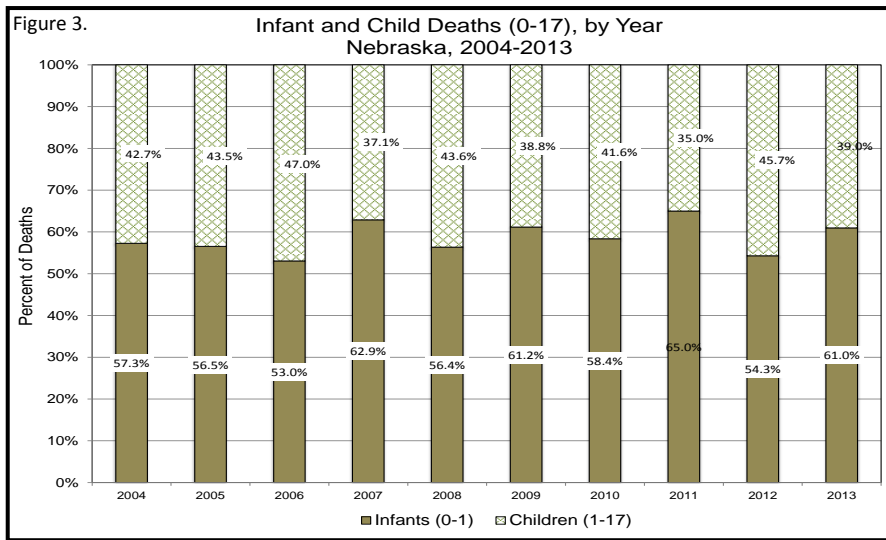


Figure 2b.

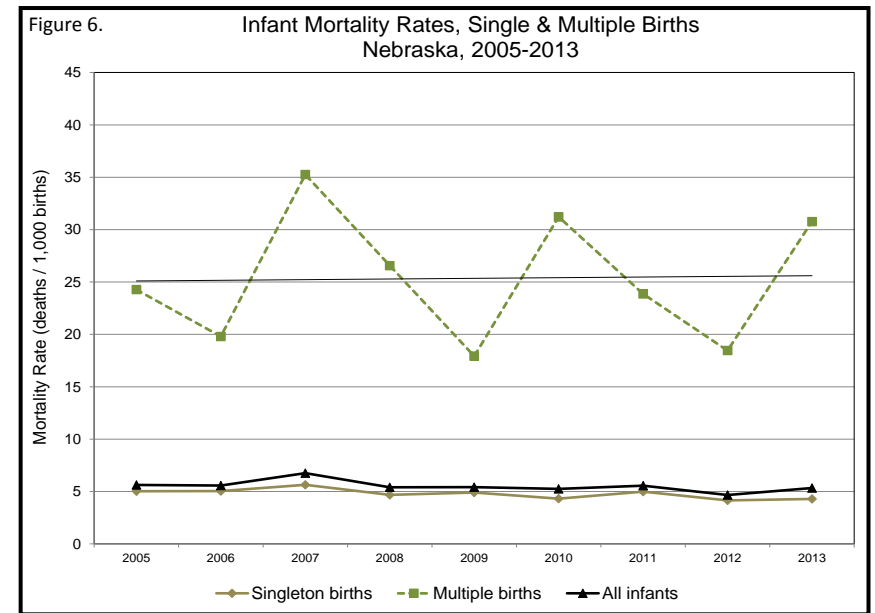
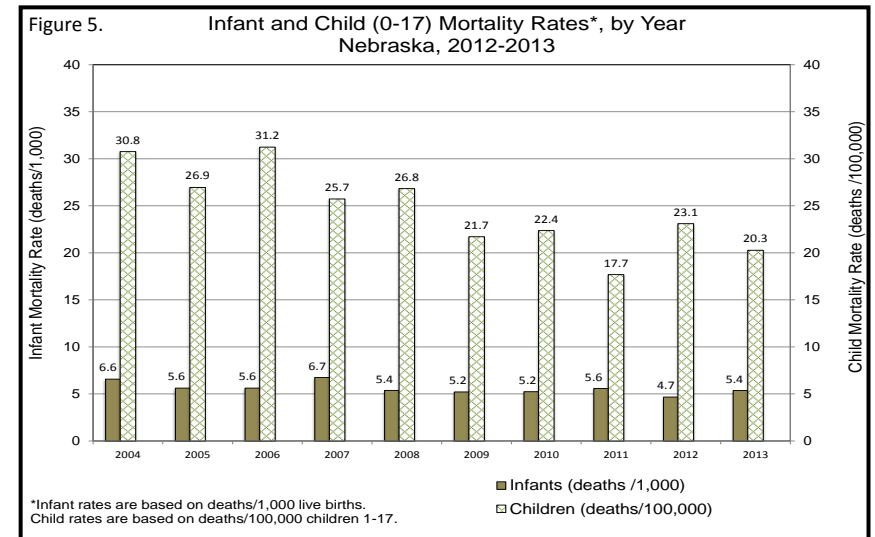


## Demographics

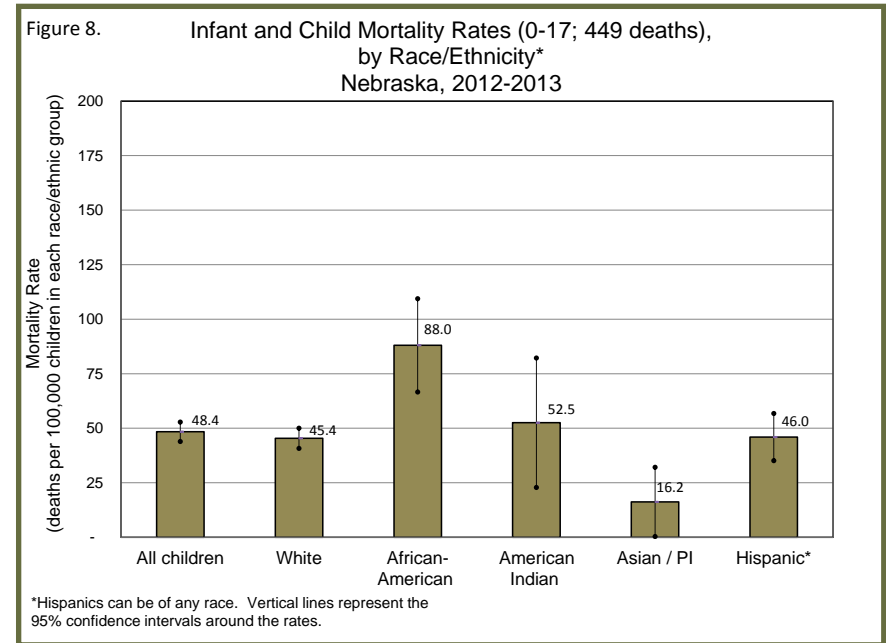
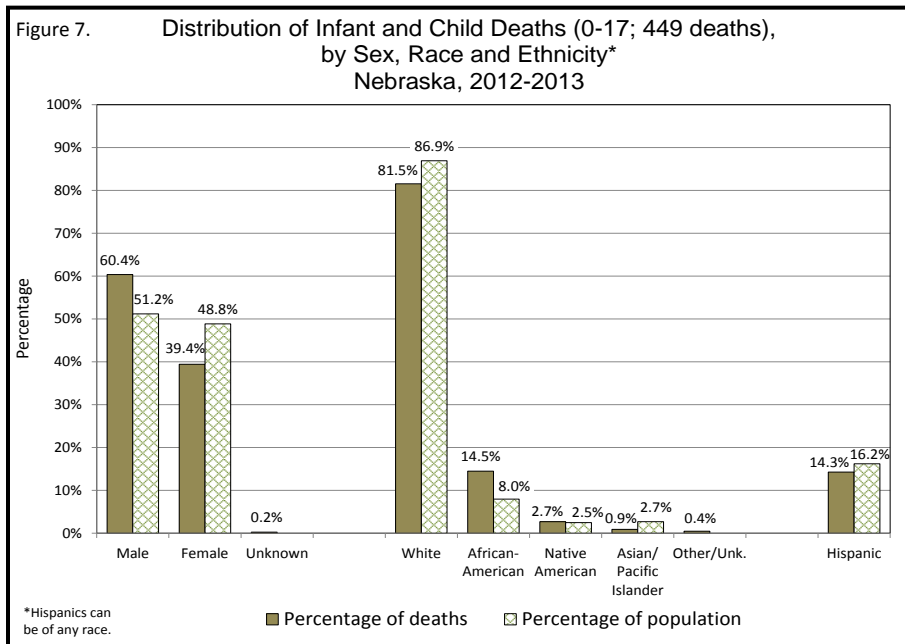
Infants (less than 12 months old) accounted for 60% of all child deaths (Figure 3); over half of infant deaths occurred within their first month (Figure 4). Among children at least 1 year old, the largest proportion of deaths was for ages 14 to 17.



Overall, mortality rates for both infants and children are declining over time (Figure 5). Mortality remains considerably higher for multiple gestation infants than for single births (Figure 6).



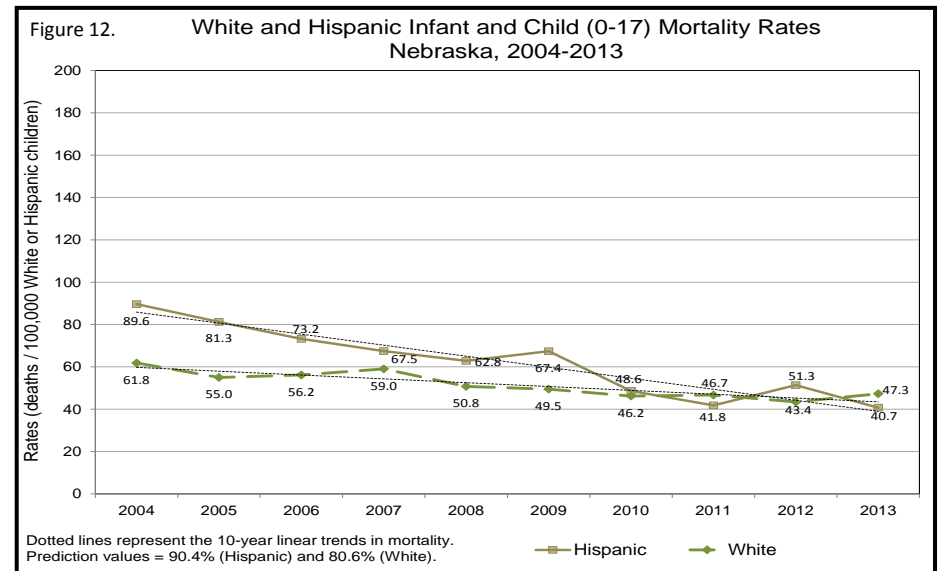
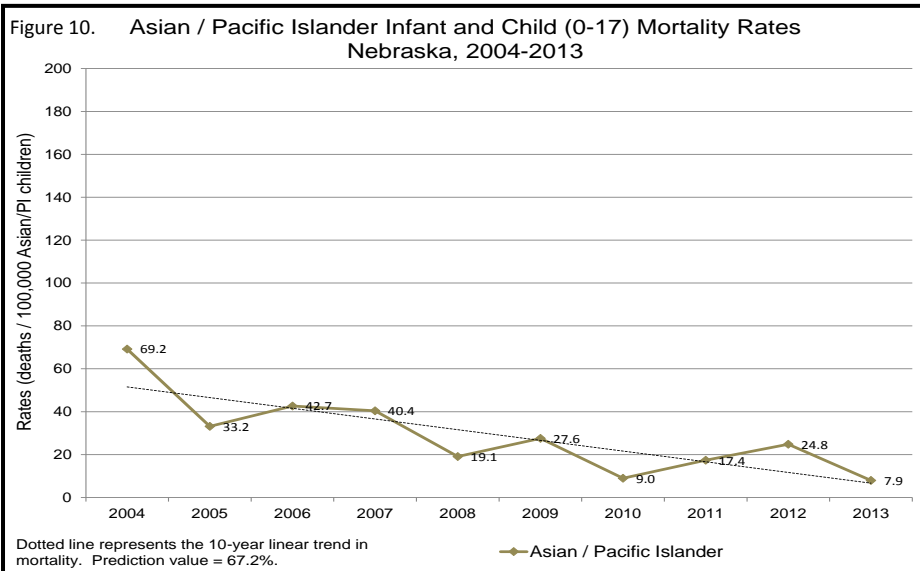
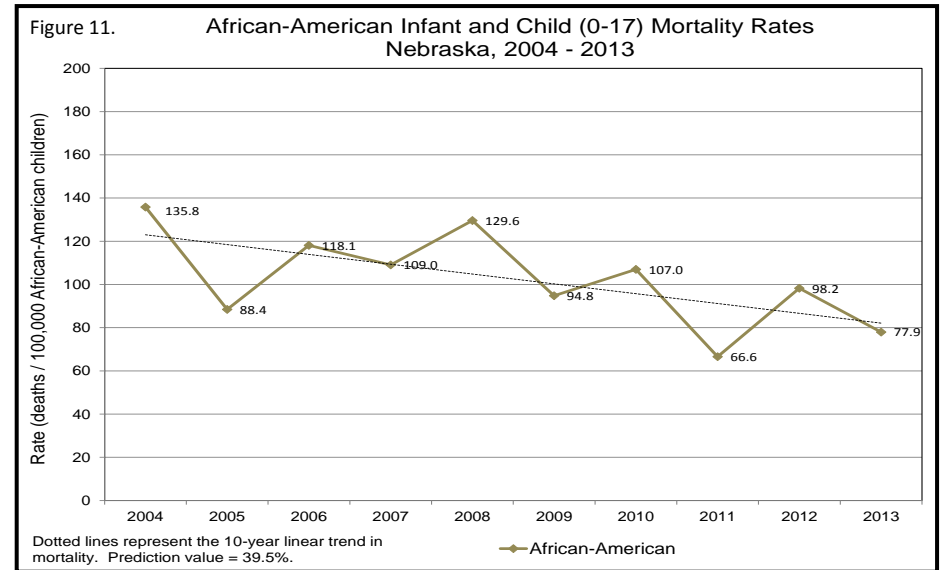
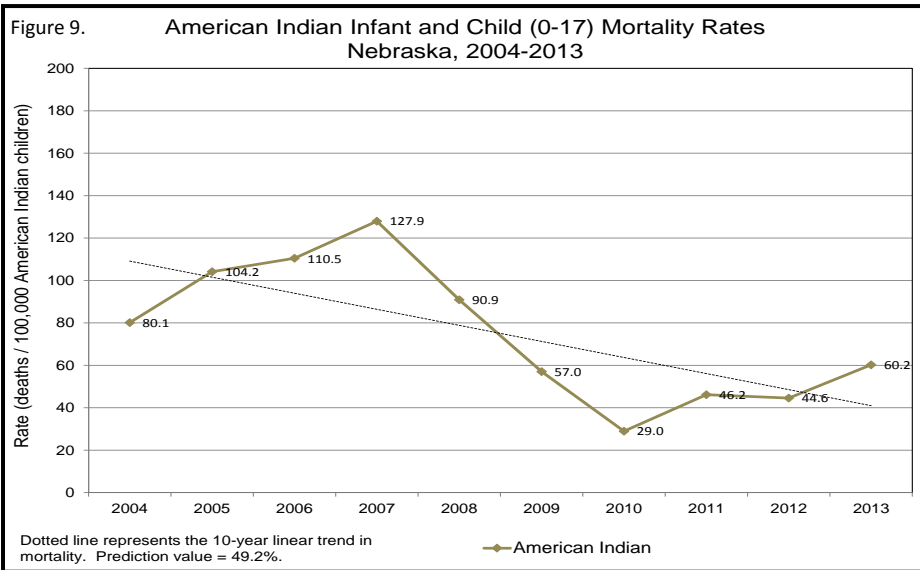
White children made up the vast majority (86.9%) of deaths in 2012 and 2013. However, compared to their percentage of the population, child deaths were disproportionately male (60.4% of deaths, 51.2% of children) and African-American (14.5% of deaths, 8.0% of children; Figure 7). While the percentage of deaths that are of Hispanic children has increased over time, in recent years this percentage has been stable.



When calculated as rates of death per 100,000 children, the death rate for African-American children was significantly higher than that of all others except for American Indians (Figure 8). The lower death rate of Asian / Pacific Islander children, although based on small numbers, has been consistent over time.

The 10-year trends in child mortality rates show some level of decline for all racial/ethnic groups (Figures 9–12). These declines are statistically significant for all groups other than African-American children. Unfortunately, the significant drop in

mortality of African-American children that occurred in 2011 was not sustained, although the long-term decline was nearly significant. Rates for Asian / Pacific Islander children continue to be near zero.



## Primary Causes of Death

### Overview

Approximately one-third (29.6%) of all child deaths during 2012 and 2013 were attributed to perinatal conditions, which combines maternal complications during pregnancy, complications of labor and/or delivery, preterm birth, and other conditions specific to pregnancy and the neonatal period (Table 1, Figure 13). Some of these children survived into their teen years, yet the underlying problem originated during pregnancy or soon after birth. Deaths were attributed to preterm birth *only* if no specific cause or indication for preterm delivery could be identified.

Birth defects were the second most common underlying cause of death category (21.4%). The lethal defects were detected anywhere from prenatally through the teen years.

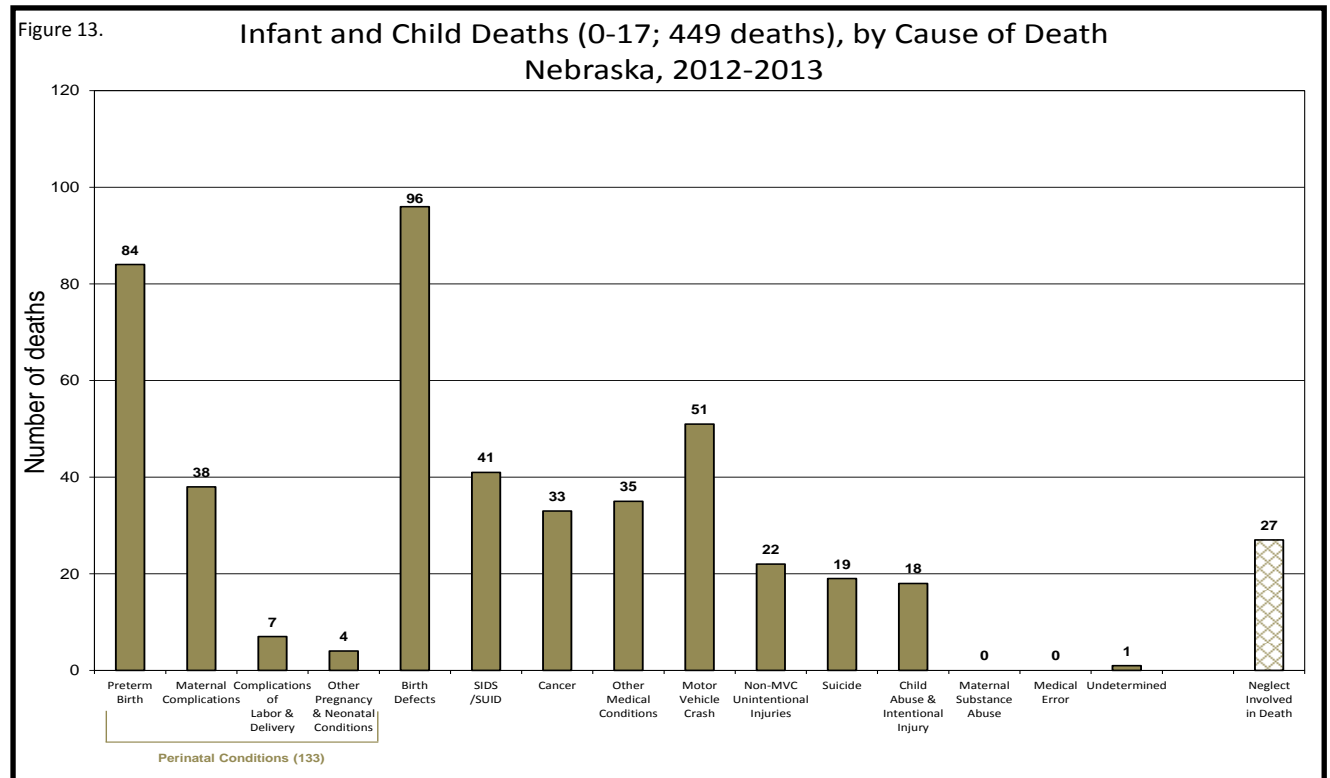
Motor vehicle-related incidents made up the third largest group of deaths (11.4%), compared to being fourth largest during the 2010-2011 period.

Sudden unexpected infant deaths (SUID) were the fourth most common category (9.1% of deaths). These deaths encompassed a variety of circumstances, however, all involved the infant being in

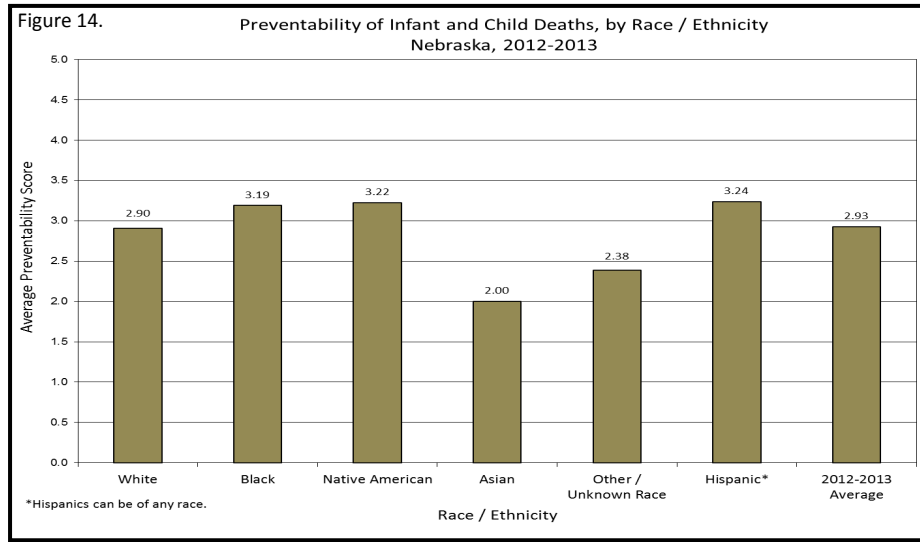
a sleep environment.

No deaths were attributed to maternal substance abuse during this period. However, this is likely an effect of maternal drug abuse not being consistently documented in the medical and legal reports the team receives.

This report changes the method used to assess the impact of parental or caretaker neglect. Deaths involving abuse or intended injury are included in those cause of death categories, with a separate section discussing deaths where neglect was a significant contributing factor. Individual cause of death categories are discussed in greater detail in the following sections.



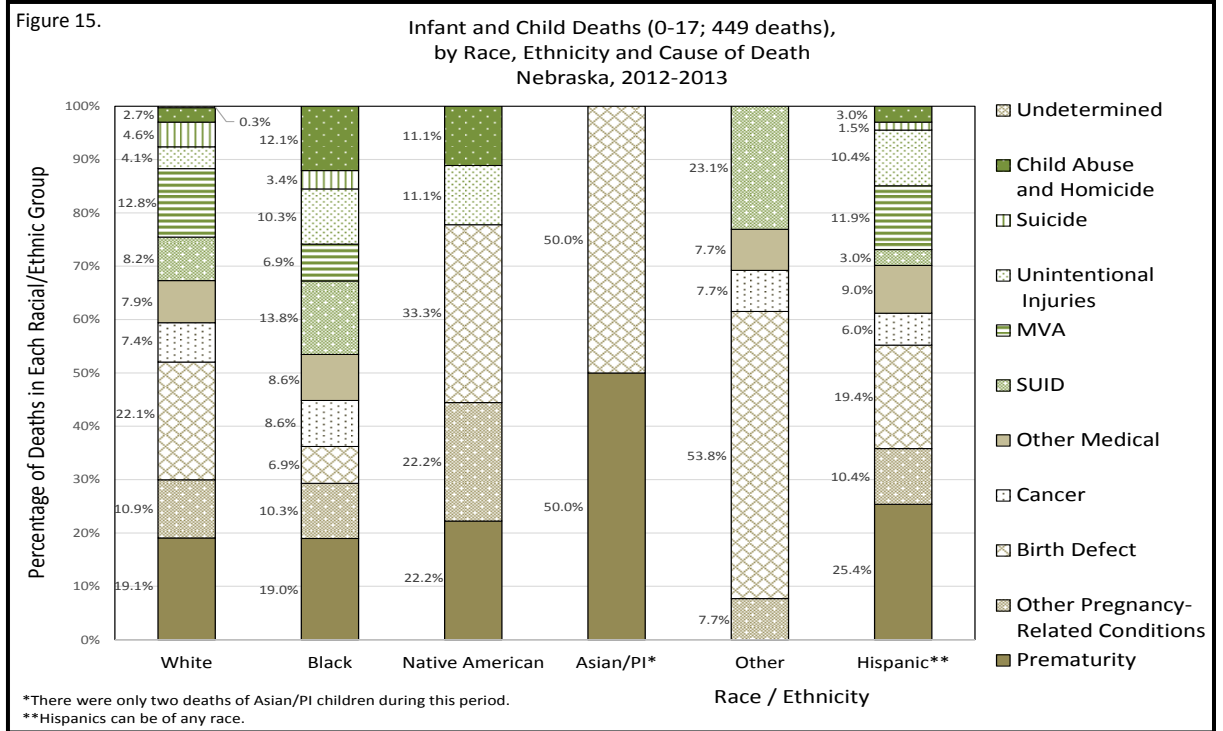
## Racial and Ethnic Differences



The average preventability score for all deaths was 2.9, indicating slightly less than “Neutral/ Undecided” as to their preventability (Figure 14). However, the lowest scores (indicating less preventable) were for Asian and other/unknown race children, of which there were very few. Preventability scores were higher (indicating more preventable) for African-American, Native American and Hispanic children than for White children. The actual differences across most racial and ethnic groups, however, were relatively small.

Figure 15. shows the distribution of cause of death categories across the separate racial and ethnicity groups. Results for Asian/ Pacific Islander children should be interpreted with caution because of their small number of deaths.

The dominant cause of death category varied across the groups. Birth defects were the single largest category for White children (22.1%), while prematurity was largest for African-American and Hispanic children (19.0% and 25.4%, respectively). However, when considering prematurity together with other pregnancy-related conditions, the combined category dominated for all but children of other or unknown race.





## Pregnancy-Related Deaths— Key findings

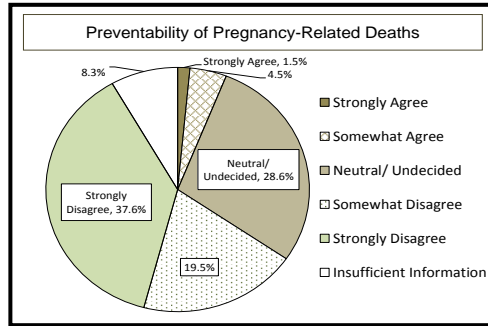
Perinatal and pregnancy-related issues continue to be the leading cause of death category for Nebraska children.

Members **somewhat or strongly agreed** that few of these deaths (6.0%) had clear **preventable** aspects.

Nearly all children (93.2%) who died from perinatal or pregnancy-related causes were born prematurely (Table 2). However, one-third (32.3%) of these children had a documented cause or indication for their preterm birth, most commonly insufficient cervix or placental abruption (Table 2).

Multiple gestation infants (twins, triplets, etc.) account for only 3.3% of births, but nearly half (46.4%) of deaths to premature infants with no known cause for their preterm birth (Table 2).

Nebraska’s multiple birth rate appears to be decreasing slightly (Figure 16).

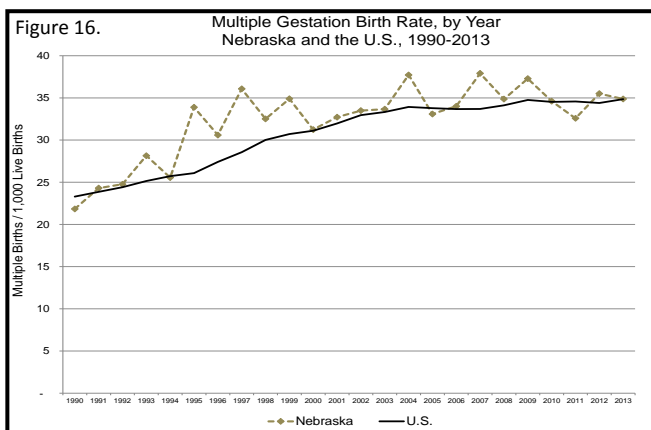
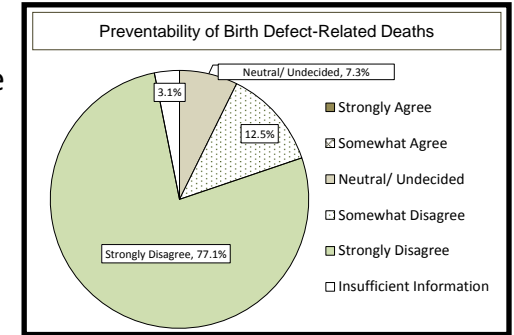


## Birth Defects —Key findings

Birth defects continue to be the second largest cause of death category for children in Nebraska. However, few of these deaths had clearly preventable aspects beyond improved maternal health and nutritional status.

The most common types of fatal birth defects in 2012 and 2013 were heart defects, often labeled only as “congenital heart disease” on death certificates, and accounting for 22 deaths (Table 3).

Anomalies of the central nervous system (CNS; 18 deaths) and chromosomal abnormalities (15 deaths), most notably Trisomy 18 (Edwards Syndrome), were the next most common defects (Table 3). Neural tube defects made up over 10% of all lethal defects and half (55.6%) of the CNS-related deaths, and accounted for the majority of potentially preventable birth defect-related deaths.



## ***Sudden Infant Death Syndrome (SIDS) / Sudden Unexpected Infant Death (SUID) – Key findings***

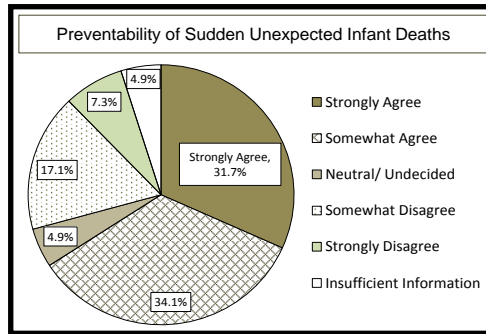
The variety of terms used for Sudden Unexpected Infant Deaths (SUID), combined with inconsistent diagnoses,

creates considerable confusion in understanding and reporting sleep-related deaths. The Centers for Disease Control and Prevention (CDC) uses the following definitions:

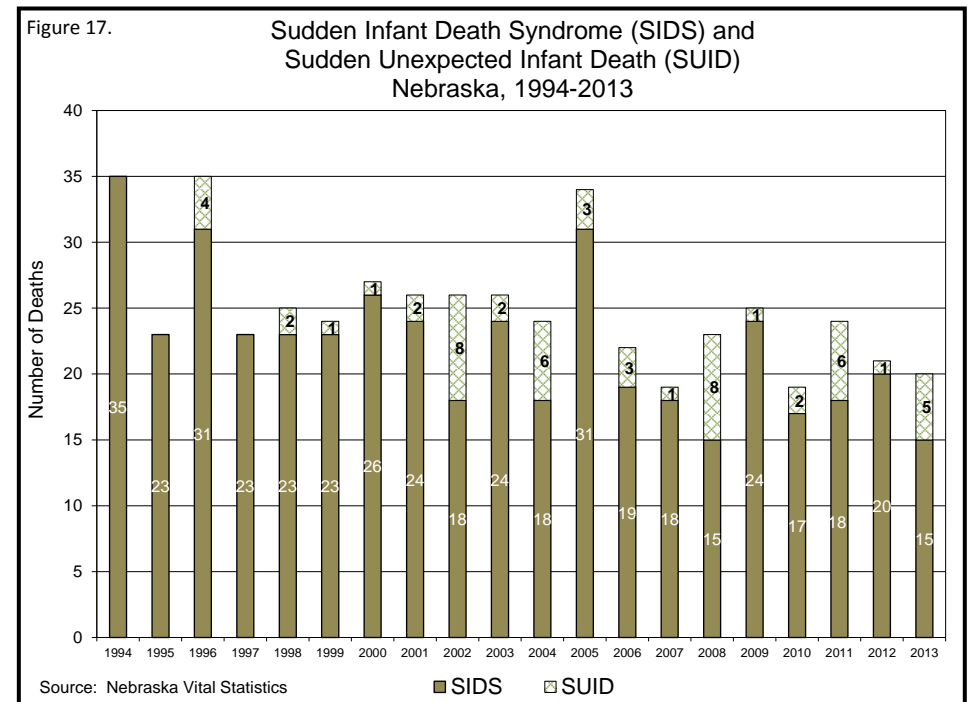
- **SUID** – sudden, unexpected infant deaths from unknown causes that occurred in a sleep environment;
- **SIDS (Sudden Infant Death Syndrome)** – the subset of SUID cases where a thorough medical and legal investigation was conducted and the death occurred in a safe sleep environment.

The larger group of SUID cases includes infants whose cause of death was officially labelled as “accidental suffocation or strangulation in bed,” or “death from unknown cause.” However, SUID cases also include infants with an official medical cause of death that may not actually have contributed to the death.

The number of official SIDS cases recorded in Nebraska Vital Records has been highly variable over the past decade. CMDRT reviewers continue to find significant inconsistencies in whether deaths occurring in similar circumstances were diagnosed as from



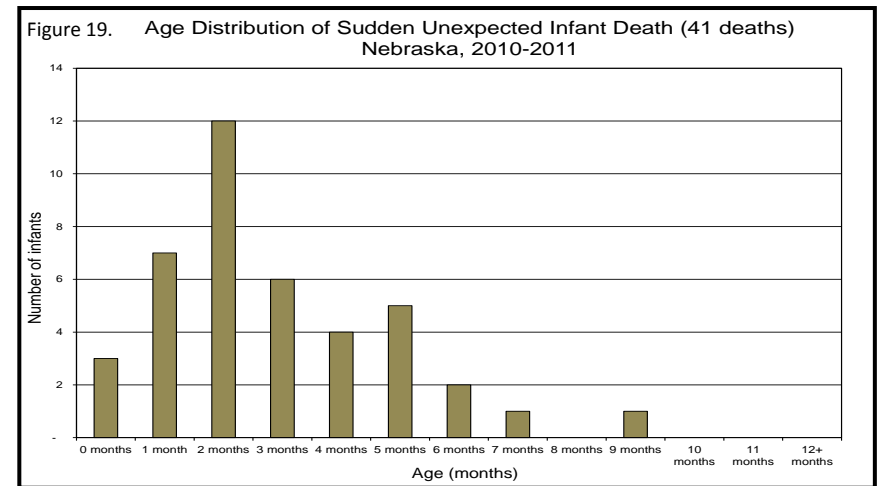
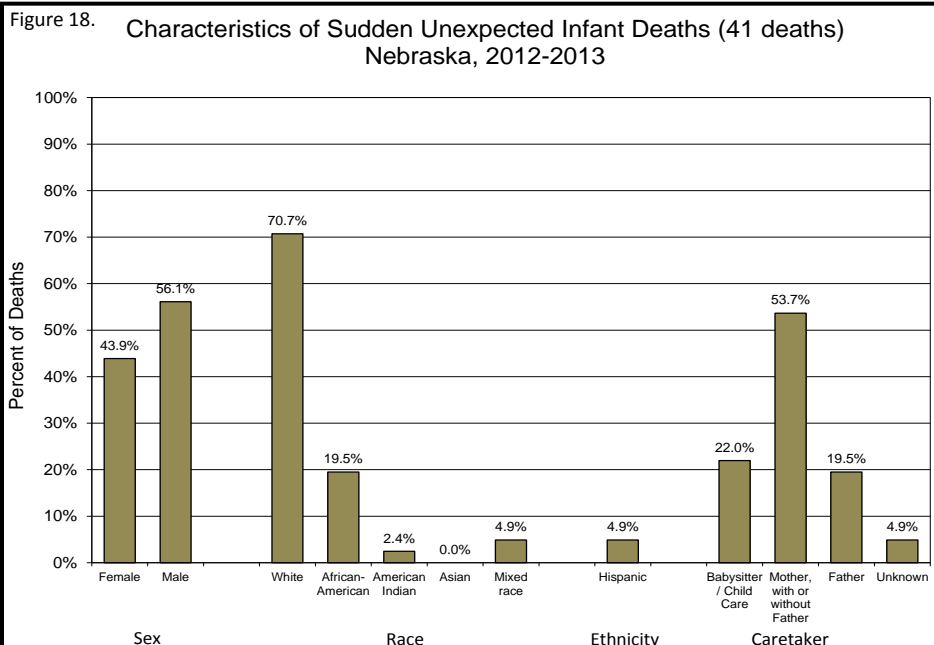
SIDS, accidental suffocation, unknown cause, or various medical conditions. Including the additional group of infants who died while sleeping, but whose cause of death was not labelled “SIDS,” shows a fairly flat trend (Figure 17). Understanding this category thus requires understanding the circumstances of *all* infants who died in a sleep-related environment, rather than relying on their official cause of death.



For 2012 and 2013, 43 infant deaths were reported to Nebraska Vital Records from SIDS (38 deaths) or unsafe sleep practices (5 deaths; Table 4). Of these 43 deaths, however, CMDRT reviewers considered four to have other causes: birth defects, child abuse, and medical causes. A fifth death was to a child older than the

formal SIDS age range (less than 1 year old). However, three deaths which were reported as resulting from medical conditions, including a diagnosis of “cardiac arrest,” were determined to have been sleep-associated. As a result, reviewers classified a total of 41 sleep-associated infant deaths (SUID) for this two year period. Members **somewhat or strongly** agreed that nearly two-thirds (65.8%) of these deaths were **preventable**.

Over half (56.1%) of SUID cases were male (Table 5; Figure 18). As in past reviews, African-American infants were disproportionately represented among SUID cases, accounting for 7.6% of all births but 19.5% of sleep-associated deaths (Table 6). Nine (22.0%) deaths occurred while the infant was in the care of a babysitter or child care provider (Table 7; Figure 18). Deaths peaked at 2 months of age; the oldest infant was 9 months (Figure 19).



Nebraska CMDRT tracks nine specific environmental risk factors that have been associated with sudden infant death:

- prenatal drug exposure
- prenatal or postnatal tobacco smoke exposure
- infant sleeping on a non-age-appropriate surface
- infant sharing a sleep surface with an adult or other child(ren)
- infant was put to sleep on side or stomach
- deceased infant was found on side or stomach
- current or recent respiratory infection
- excessive bedding or other objects in sleep environment
- issues related to defective furniture

A common aspect of most of these risk factors is their effect on the infant’s ability to breathe clearly. All but two infants had one or more risks documented in their medical or legal records; three-quarters (73.2%) had two or more documented risks (Table 8). At least 38 (88.4%) of the infants were not sleeping in safe environments - either age-inappropriate surfaces such as adult beds or sofas, or bed-sharing /co-sleeping with siblings or adults.

Since 2006, Nebraska law (§71-2101; 2006) has required that the SIDS diagnosis only be used when:

- an autopsy,
- examination of the death scene, and
- review of the infant’s medical history

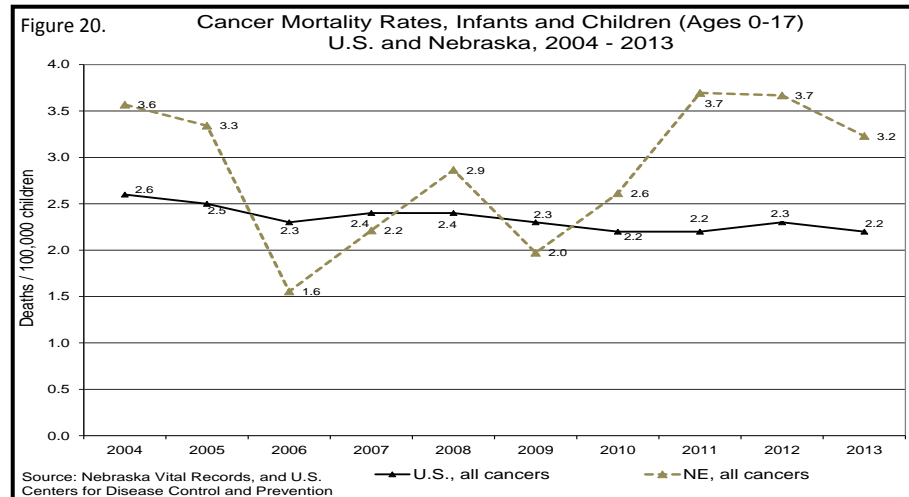
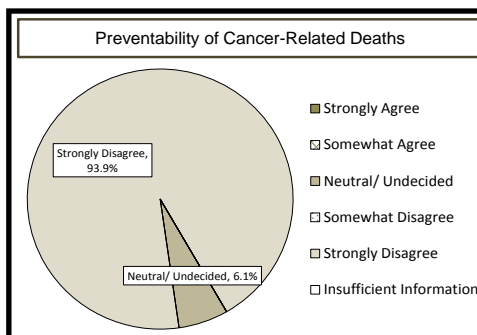
fail to determine a cause of death. During 2012-2013, all deaths reported as SIDS had an autopsy. However, only six had a law enforcement report that included a formal death scene investigation, and four had minimal or no law enforcement investigation. The true number of infants whose death was linked to unsafe sleeping conditions is thus likely to be higher.

### **Cancer / Malignant Neoplasms – Key findings**

Although the 34 childhood cancer deaths in 2012-2013 were more than the 30 deaths recorded in 2010-2011, the cancer death *rate*, which takes

into account a growing child population size, declined in both 2012 and 2013 (Figure 20). Similar to previous years, the most common individual cancers were brain cancers, specifically astrocytomas/gliomas (7 deaths), and leukemia (4 deaths; Table 9). Understanding of environmental and non-genetic causes of childhood cancer has been elusive, although maternal vitamin intake during pregnancy has been linked to lower risk.

The varying ages at death of the children make it difficult to

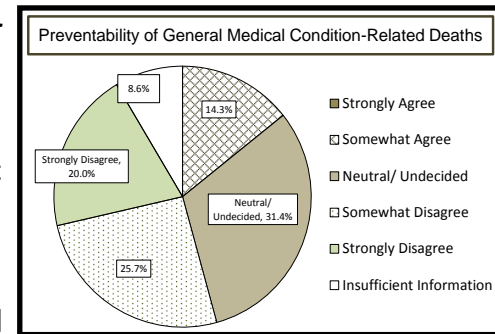


determine similarities among the cases. All were documented as having received treatment at specialized cancer facilities. Members **strongly disagreed** that **preventable** aspects existed for most (93.9%) of deaths, with only one child having documented, non-clinical issues which may have affected the quality of medical care received.

### **General Medical Conditions – Key findings**

General Medical Conditions include infectious and chronic diseases, and other assorted conditions. Members either **somewhat or strongly agreed** that **preventable** aspects existed for one-quarter (22.9%) of these cases.

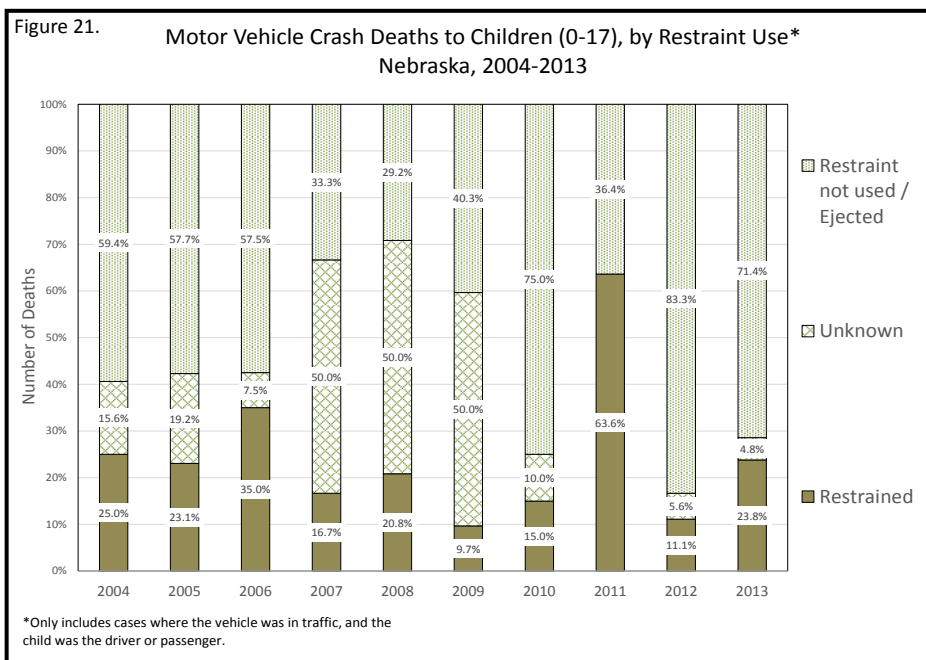
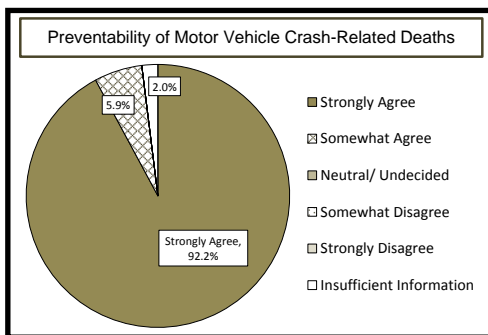
Nearly one-half (45.7%) of deaths were from respiratory diseases, of which the most frequent were pneumonia and



bronchopneumonia (5 cases; Table 10). Four children died from seizure disorders, more than has been observed in recent years. Two children died from asthma, despite having been under medical care.

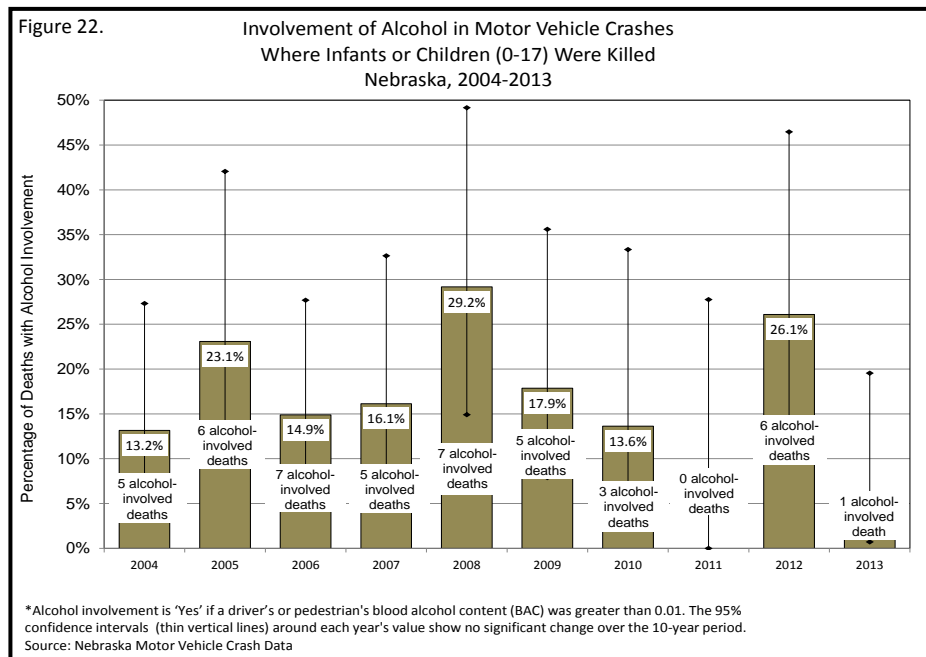
### Motor Vehicle-Related Deaths – Key findings

The 51 motor vehicle-related deaths during 2012 and 2013 represented a 45.7% increase over the number of deaths in 2010-2011 (Table 1). Members either **somewhat or strongly agreed** that nearly all (98.1%) of these deaths were **preventable**. One-half of



the deaths (23 deaths; 48.9%) were to older teens (ages 15 to 17; data not shown). One death resulted from a school bus crash (Table 11).

Following an increase in 2011, the proportion of deaths where the child was properly restrained with either a seatbelt or car seat returned to traditionally low values (20.5%; Figure 21). As documented by the Nebraska Department of Transportation, at

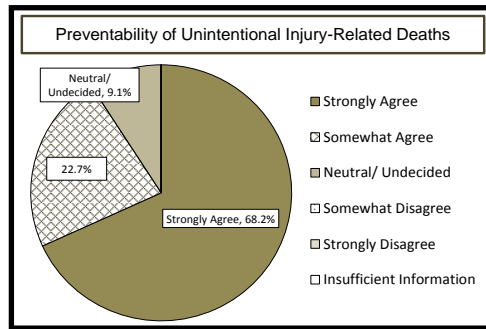


least seven (14.6%) of the fatal crashes involved alcohol use by a driver (2012-2013 average; Figure 22).

## Unintentional Injuries – Key findings

During 2012 and 2013, 22 children died from fatal, unintentional injuries. Members **somewhat or strongly agreed** that the

nearly all (90.9%) of these were **preventable**. The largest single cause of death was drowning (5 deaths; Table 12; Figure 23). Four deaths (18.2%) were related to risky behaviors by teenagers, specifically abuse of alcohol and prescription drugs, and playing with firearms. Three deaths occurred when poorly supervised toddlers were hit by a



vehicle backing out of a driveway. While remaining unintentional injury deaths were largely isolated events, members felt most were preventable with proper supervision by caretakers. Five of these deaths are also included in the overlapping category of Supervisory Neglect.

## Suicide – Key findings

Nebraska's teen suicide rate (3-year averages) continued to increase during 2012 and 2013 (Figure 24; Table 13). However, the national suicide rate has been gradually increasing since 2007.

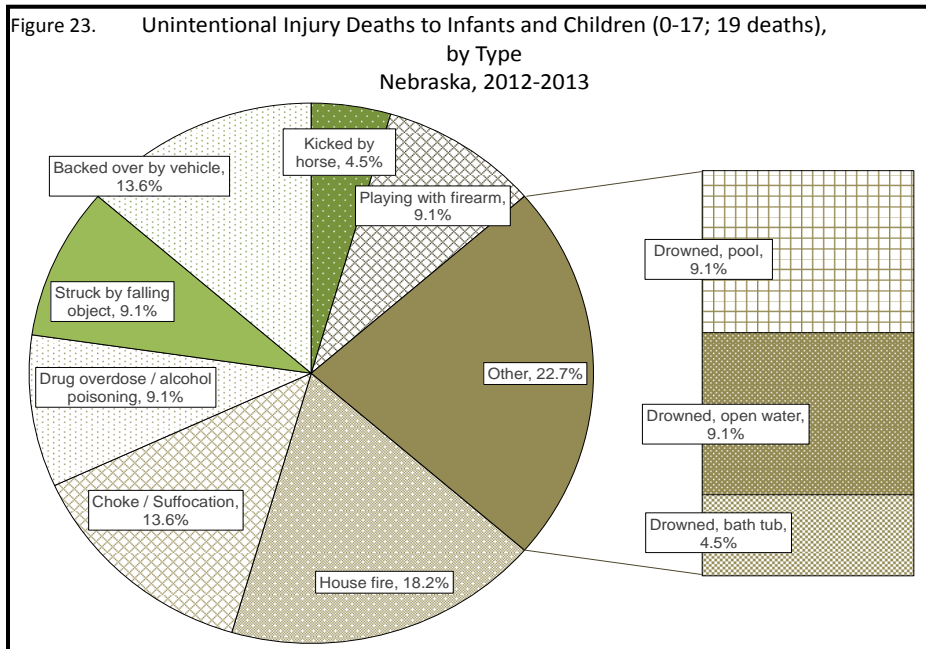
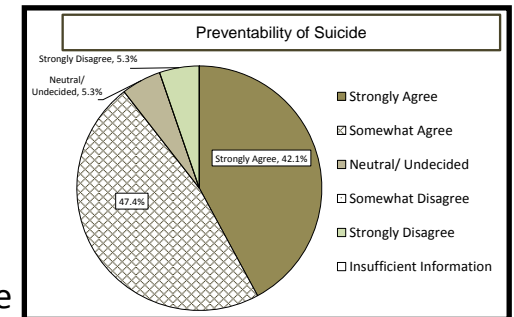


Figure 23. Unintentional Injury Deaths to Infants and Children (0-17; 19 deaths), by Type, Nebraska, 2012-2013

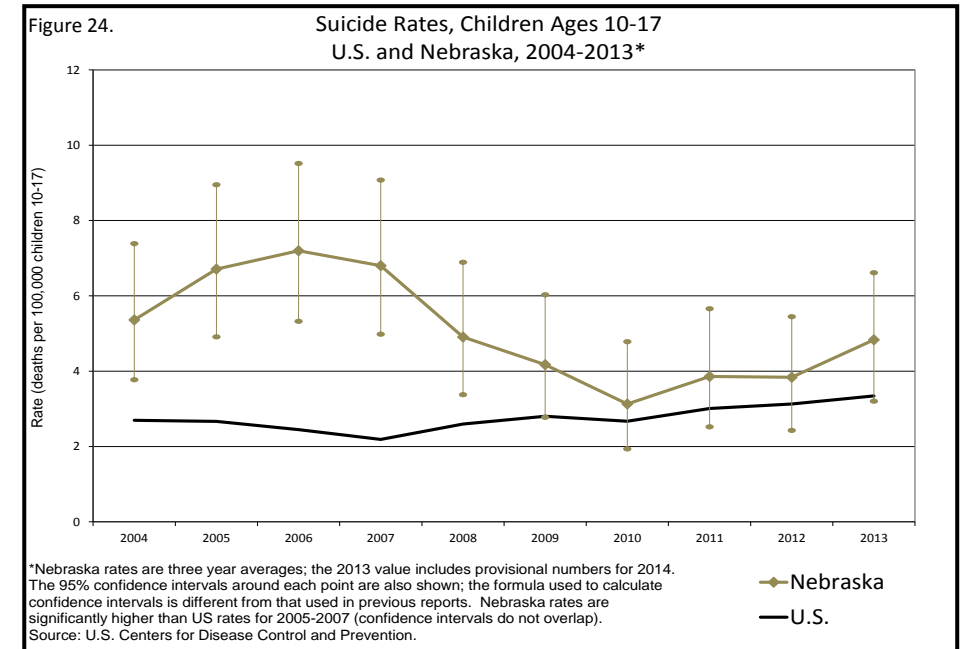
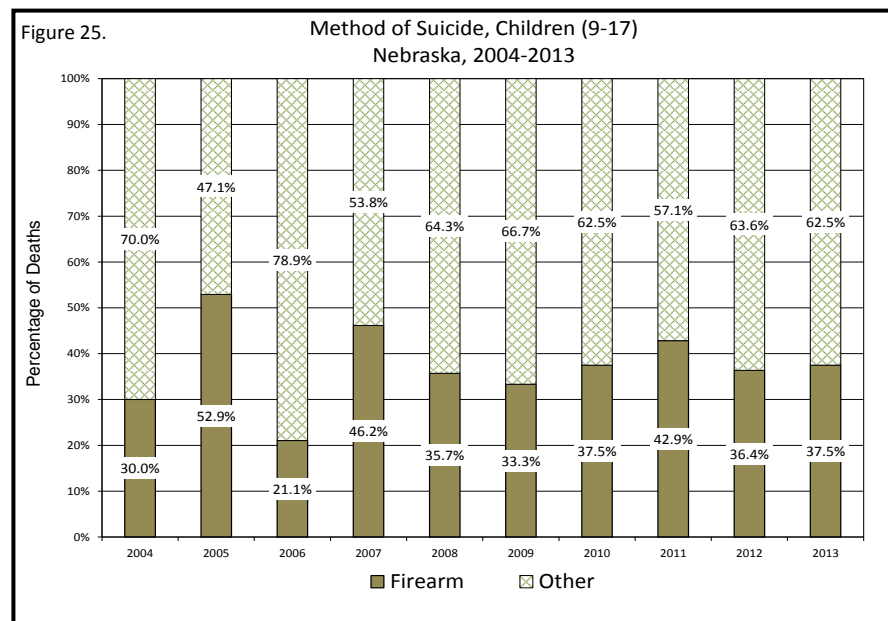


Figure 24. Suicide Rates, Children Ages 10-17, U.S. and Nebraska, 2004-2013\*

\*Nebraska rates are three year averages; the 2013 value includes provisional numbers for 2014. The 95% confidence intervals around each point are also shown; the formula used to calculate confidence intervals is different from that used in previous reports. Nebraska rates are significantly higher than US rates for 2005-2007 (confidence intervals do not overlap). Source: U.S. Centers for Disease Control and Prevention.

Members **somewhat or strongly agreed** that the majority (89.5%) of Nebraska’s teen suicides during 2012 and 2013 were **preventable**.

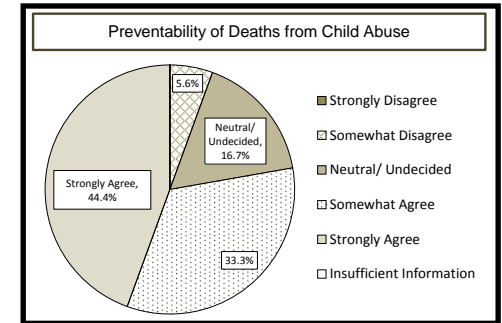
Victims came from 13 Nebraska counties and were predominantly male; the youngest child was 10 years old (Table 13; county data not shown). After decreasing between 2005 and 2009, the use of firearms as a method appears to be slowly increasing (Figure 25, Table 13).



### Child Abuse and Intentional Injuries – Key findings

Nebraska Revised Statute §28-707 defines child abuse as “knowingly, intentionally, or negligently” causing or allowing a child to be in a situation that:

- endangers physical or mental health,
- involves cruel confinement or cruel punishment,
- withholds access to food, clothing, shelter, or care, or
- allows, encourages or forces sexual abuse or exploitation.



Beginning with this report, the Child Abuse and Intentional Injury classification covers children who died from intentional actions or intentionally inflicted injuries, whether or not the *death* was intended, or whether the perpetrator was a parent or caretaker.

Eighteen Nebraska children died as a result of the intentional actions of others during 2012 and 2013 (Table 14). Reviewers **somewhat or strongly agreed** that three-quarters (77.7%) of these deaths were **preventable**. One child died from illegal drugs provided by an adult; 8 children under 3 years old died from injuries inflicted by a parent or caregiver (Table 14). One intentional death was committed by a parent, while 8 teenagers were killed by peers (Table 14).

### **Substance Abuse During Pregnancy – Key findings**

While no deaths were clearly identified as resulting from maternal substance use, many cases had indications of such an effect. The lack of consistent documentation by medical and social service providers of substance use before or during pregnancy strongly hampers the ability to understand the impact of such use.

### **Medical Error – Key findings**

No deaths appeared to be related to medical error.

### **Undetermined – Key findings**

Cause of death was unable to be determined for one child. Although the death was officially recorded as from Sudden Infant Death Syndrome, the child was above the eligible age range. Because neither a primary nor contributing cause of death was identified, it was not possible to assess preventability for this case.

### **No information available**

There were no deaths during 2012 and 2013 for which the team was unable to obtain at least minimal information.

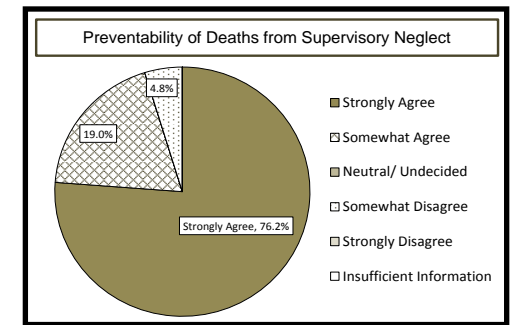
## **Contributing Cause of Death**

### **Supervisory Neglect**

Caretaker neglect was considered a contributing cause of death when a caretaker knowingly did something that placed the child's life in danger or did not remove the child from a dangerous situation, but did not clearly intend to injure the child. The National Center for Child Death Review recognizes 5 types of supervisory neglect:

- Failure to protect from hazard
- Failure to provide necessities (food, shelter, other)
- Failure to seek medical care / follow treatment
- Emotional neglect
- Abandonment

CMDRT child protection specialists individually reviewed all injury-related deaths for supervisory neglect. Twenty-seven cases with a separate primary classification (Child Abuse, Motor Vehicle Crash, SUID, Unintentional Injury) fit the criteria; all were related to a failure to protect the child from hazards. Members **somewhat or strongly agreed** that most (95.2%) of these deaths were **preventable**. The majority involved parents or caregivers placing infants in unsafe sleep conditions (15 deaths; Table 15). However, there were also 3 deaths (11.1%) where caregivers failed to protect young children from a known abuser. Deaths in this section are also counted under their primary cause of death.





## ***Priority Recommendations to Prevent Future Deaths***

**Priority Issue 1:** Women abusing illicit substances or misusing prescription drugs are inconsistently identified during pregnancy and delivery, losing the opportunity to provide prompt interventions to the infant, and long-term support to the mother and family. Comprehensive guidelines are available to assist providers in the identification of women who abuse substances during their pregnancy, and on treatment procedures for affected newborns.

### **Recommendations (Medical facilities; professional organizations; women’s health and service providers)**

1. Encourage widespread adoption and implementation by health care facilities of clinical guidelines for the management of substance abuse in pregnancy.
2. Develop and provide educational materials to women of reproductive age on how drug use during pregnancy affects newborns, and on the non-punitive services available to assist women and families struggling with substance use.

**Priority Issue 2:** Women most at risk of poor pregnancy outcomes are often the ones least likely to have access to culturally appropriate, high-quality prenatal care. Making such care available to all women requires additional and sustained effort by prenatal care providers. Excellent resource materials are available to assist this process, including the national Enhanced CLAS Standards (<https://www.thinkculturalhealth.hhs.gov>) and

“Improving Quality and Achieving Equity—A Guide for Hospital Leaders” (<http://www.rwjf.org/en/library/research/2008/01/improving-quality-and-achieving-equity.html>).

### **Recommendations (Prenatal care providers and medical facilities)**

3. Promote routine assessments of pregnant clients by demographic factors such as race, ethnicity and income to identify areas where results do not reflect the intended target population.
4. Promote routine assessments of pregnancy-related services for accessibility and cultural appropriateness by diverse populations.

**Priority Issue 3:** Unsafe driving and lack of restraint use account for too many young drivers losing their lives, or taking the lives of others. Teen drivers have higher rates of motor vehicle crash-related deaths and injuries compared to more experienced drivers. Factors that contribute to high crash rates are driving inexperience, brain development, exposure to high-risk driving situations, distractions, speeding and alcohol use. There are many evidence-based strategies that can impact and reduce teen-related crashes. Younger children are also at risk due to incorrect or non-use of child safety seats, and being moved from a car seat/booster seat to a seat belt too soon. An often overlooked danger is the risk of head and neck injury to toddlers in front-facing seats.

**Recommendations (Child safety advocates and general public)**

5. Support the upgrade of Nebraska’s Graduated Driver Licensing and child passenger safety laws from secondary to primary enforcement.
6. Support an increase in the age requirement for booster seats to age 8, and to age 2 for children to ride rear-facing.
7. Emphasize the importance of parental involvement in their children’s driver education process, and their enforcement of provisional license restrictions.

**Priority Issue 4:** Young people may resort to suicide as an escape from what they perceive as overwhelming problems. Some suicides are a hasty reaction to a temporary problem, while others may be the culmination of many years of difficulty. Common triggering events include disciplinary problems at school or home, relationship breakups, family violence, confusion and/or stigma related to sexual orientation, physical and/or sexual abuse, and being bullied. These situations can overwhelm teens already having difficulty coping with the challenges of adolescence. The Bright Futures initiative of the American Academy of Pediatrics outlines theory-based and evidence-driven guidance for annual depression screening in adolescents ([https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Documents/MH\\_ScreeningChart.pdf](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Documents/MH_ScreeningChart.pdf)). The National Action Alliance for Suicide Prevention promotes the goal of reducing suicides by 20 percent.

**Recommendations (Local governments, communities and families)**

8. Ensure access, including financial access, for all young people to confidential, professional mental health services and crisis care.
9. Prioritize community-level awareness and acceptance of the need for age-specific restrictions on access to firearms.

**Priority Issue 5:** Thorough understanding of the contributing factors to child deaths is hampered by uneven quality of law enforcement investigations into child deaths, particularly timely and comprehensive scene investigations. The Nebraska Attorney General’s Office sponsored the development and promotion of Infant and Young Child Death Investigation Guidelines ([http://nletc.nebraska.gov/pdfs/child\\_death\\_checklist.pdf](http://nletc.nebraska.gov/pdfs/child_death_checklist.pdf)) in 2009, however, they are not used consistently during law enforcement investigations.

**Recommendations (State and local law enforcement)**

10. Barriers to consistent use of the Nebraska Infant and Young Child Death Scene Investigation Guidelines should be investigated and resolved.
11. Continuing education requirements and credits should be available for the Nebraska Infant and Young Child Death Scene Investigation Guidelines.

APPENDIX 1 – Detailed Data Tables

Table 1. Underlying Cause of Death	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2012 - 2013 TOTAL
	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(N)
Preterm Birth	45	31	32	45	42	38	45	36	34	50	84
Maternal Complications	37	37	30	18	30	24	18	24	19	19	38
Complications of Labor & Delivery	2	1	0	2	1	3	2	5	2	5	7
Other Pregnancy & Neonatal-Related Conditions	3	0	3	3	2	1	3	2	4	0	4
Total, Pregnancy-Related	87	69	65	68	75	66	68	67	59	74	133
Pregnancy Related	87	69	65	68	75	66	68	67	59	74	133
Birth Defects / Inherited & Chromosomal Disorders	74	42	60	60	56	56	60	68	40	56	96
SIDS / SUID	18	33	20	0	13	23	19	24	21	20	41
Cancer / Neoplasms	19	18	7	10	13	9	12	18	18	15	33
Infectious, Chronic & Other Medical Conditions	17	19	18	16	15	18	9	8	19	16	35
Motor Vehicle-Related	40	33	44	35	24	32	23	12	26	25	51
Non-MVC Unintentional Injuries	22	13	21	21	32	14	18	3	13	9	22
Suicide	10	17	19	8	14	6	8	7	11	8	19
Child Abuse and Intentional Injury*	13	13	21	12	15	9	12	9	13	5	18
Maternal Substance Use	0	2	0	1	0	0	1	0	0	0	0
Medical Error	1	0	1	1	1	0	1	1	0	0	0
Undetermined	1	1	2	1	2	4	2	3	1	0	1
<b>Total (N)</b>	<b>302</b>	<b>260</b>	<b>278</b>	<b>233</b>	<b>260</b>	<b>237</b>	<b>233</b>	<b>220</b>	<b>221</b>	<b>228</b>	<b>449</b>
Supervisory neglect as a contributing factor**	-	-	-	-	-	-	-	-	15	12	27
Preterm Birth	51.7%	44.9%	49.2%	66.2%	56.0%	57.6%	66.2%	53.7%	57.6%	67.6%	63.2%
Maternal Complications	42.5%	53.6%	46.2%	26.5%	40.0%	36.4%	26.5%	35.8%	32.2%	25.7%	28.6%
Complications of Labor & Delivery	2.3%	1.4%	0.0%	2.9%	1.3%	4.5%	2.9%	7.5%	3.4%	6.8%	5.3%
Other Pregnancy & Neonatal-Related Conditions	3.4%	0.0%	4.6%	4.4%	2.7%	1.5%	4.4%	3.0%	6.8%	0.0%	3.0%
Total, Pregnancy-Related	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Pregnancy Related	28.8%	26.5%	23.4%	29.2%	28.8%	27.8%	29.2%	30.5%	26.7%	32.5%	29.6%
Birth Defects / Inherited & Chromosomal Disorders	24.5%	16.2%	21.6%	25.8%	21.5%	23.6%	25.8%	30.9%	18.1%	24.6%	21.4%
SIDS / SUID	6.0%	12.7%	7.2%	0.0%	5.0%	9.7%	8.2%	10.9%	9.5%	8.8%	9.1%
Cancer / Neoplasms	6.3%	6.9%	2.5%	4.3%	5.0%	3.8%	5.2%	8.2%	8.1%	6.6%	7.3%
Infectious, Chronic & Other Medical Conditions	5.6%	7.3%	6.5%	6.9%	5.8%	7.6%	3.9%	3.6%	8.6%	7.0%	7.8%
Motor Vehicle Crash	13.2%	12.7%	15.8%	15.0%	9.2%	13.5%	9.9%	5.5%	11.8%	11.0%	11.4%
Non-MVC Unintentional Injuries	7.3%	5.0%	7.6%	9.0%	12.3%	5.9%	7.7%	1.4%	5.9%	3.9%	4.9%
Suicide	3.3%	6.5%	6.8%	3.4%	5.4%	2.5%	3.4%	3.2%	5.0%	3.5%	4.2%
Child Abuse and Intentional Injury*	4.3%	5.0%	7.5%	5.1%	5.7%	3.8%	5.1%	4.1%	5.9%	2.2%	4.0%
Maternal Substance Use	0.0%	0.8%	0.0%	0.4%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
Medical Error	0.0%	0.0%	0.4%	0.4%	0.4%	0.0%	0.4%	0.5%	0.0%	0.0%	0.0%
Undetermined	0.3%	0.4%	0.7%	0.4%	0.8%	1.7%	0.9%	1.4%	0.5%	0.0%	0.2%
<b>Total (N)</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
Supervisory neglect as a contributing factor**	-	-	-	-	-	-	-	-	6.8%	5.3%	6.0%

\*Definitions and criteria changed from previous reports \*\*Neglect overlaps with Underlying Cause of Death categories

Table 2. Perinatal Causes of Death	2012-2013									
	Preterm (< 37 wks)		Term (37+ wks)		Not an infant		Subtotal		Total	
	(N)	(%)	(N)	(row %)	(N)	(row %)	(N)	(row %)	(N)	(row %)
Maternal Complications	37	29.8%	0	0.0%	1	2.6%	38	100%	38	28.6%
Eclampsia	1	0.8%	0	-	1	50.0%	2	5.3%		
Pre-eclampsia	5	4.0%	0	-	0	-	5	13.2%		
HELLP syndrome	3	2.4%	0	-	0	-	3	7.9%		
Infection, Chlamydia	1	0.8%	0	-	0	-	1	2.6%		
Infection, CMV	2	1.6%	0	-	0	-	2	5.3%		
Insufficient cervix	16	12.9%	0	-	0	-	16	42.1%		
Placenta previa	0	0.0%	0	-	0	-	0	-		
Placental abruption	8	6.5%	0	-	0	-	8	21.1%		
Uterine rupture	0	0.0%	0	-	0	-	0	-		
Oligohydramnios	0	0.0%	0	-	0	-	0	-		
Other**	1	0.8%	0	-	0	-	1	2.6%		
Complications of Labor and Delivery***	1	0.8%	6	85.7%	0	-	7	100%	7	5.3%
Other Pregnancy and Perinatal Complications****	2	1.6%	2	50.0%	0	-	4	100%	4	3.0%
Prematurity (no cause identified)	84	67.7%			0	0.0%	84	100%	84	63.2%
Singletons	45	36.3%			0	0.0%	45	53.6%		
Multiples	39	31.5%			0	0.0%	39	46.4%		
<b>Total (N)</b>	124	93.2%	8	6.0%	1	0.8%			<b>133</b>	100.0%

Table 3. Birth Defects / Inherited and Chromosomal Disorders		2012-2013			Total	
		Preterm (<37 wks)	Not Preterm (37+ wks)	Not an infant	(N)	(%)
<b>Chromosomal anomalies</b>		<b>10</b>	<b>5</b>	<b>0</b>	<b>15</b>	<b>15.6%</b>
	Trisomy 13 (Patau syndrome)	3	1	0	4	4.2%
	Trisomy 18 (Edwards syndrome)	2	3	0	5	5.2%
	Trisomy 21 (Down syndrome)	1	0	0	1	1.0%
	Other / unspecified chromosomal anomaly	4	1	0	5	5.2%
<b>Central Nervous System</b>		<b>3</b>	<b>8</b>	<b>4</b>	<b>18</b>	<b>18.8%</b>
	Holoprosencephaly	0	1	1	2	2.1%
	Hydrocephaly	0	1	2	3	3.1%
	Neural tube defect, anencephaly	2	3	0	5	5.2%
	Neural tube defect, encephalocele	1	0	0	1	1.0%
	Neural tube defect, myelomeningocele / spina bifida	0	3	1	4	4.2%
	CNS anomalies, other	0	1	2	3	3.1%
<b>Circulatory System</b>		<b>5</b>	<b>12</b>	<b>5</b>	<b>22</b>	<b>22.9%</b>
	Heart disease, hypoplastic left	0	3	1	4	4.2%
	Heart disease, other	5	9	4	18	18.8%
<b>Respiratory System</b>		<b>1</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2.1%</b>
	Pulmonary anomalies*	1	1	0	2	2.1%
<b>Gastrointestinal System</b>		<b>3</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>4.2%</b>
	Diaphragmatic hernia	2	0	0	2	2.1%
	Other **	1	0	1	2	2.1%
<b>Genitourinary System</b>		<b>4</b>	<b>2</b>	<b>0</b>	<b>6</b>	<b>6.3%</b>
	Kidney defect / anomaly	4	2	0	6	6.3%
<b>Musculoskeletal System</b>		<b>6</b>	<b>3</b>	<b>1</b>	<b>10</b>	<b>10.4%</b>
	Omphalocele	2	0	0	2	2.1%
	Caudal regression syndrome	1	0	0	1	1.0%
	Skeletal dysplasia	3	2	0	5	5.2%
	Campomelic dysplasia	0	1	1	2	2.1%
<b>Metabolic and Blood systems</b>		<b>2</b>	<b>3</b>	<b>3</b>	<b>8</b>	<b>8.3%</b>
<b>Syndromes and Multiple Anomalies****</b>		<b>2</b>	<b>3</b>	<b>2</b>	<b>7</b>	<b>7.3%</b>
<b>Other*****</b>		<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>3.1%</b>
<b>Total (N)</b>		<b>40</b>	<b>38</b>	<b>18</b>	<b>96</b>	<b>100.0%</b>

\*Pulmonary hypoplasia; pulmonary lymphangiectasis

\*\*Bladder agenesis; midgut malrotation

\*\*\*Carnitine deficiency; sickle cell anemia

\*\*\*\*Syndromes: Dandy-Walker; Pierre Robin; Smith-Lemli-Opitz; Walker-Warburg; Zellweger

\*\*\*\*\*Hemangioma; Ebstein anomaly; metachromatic leukodystrophy

Table 4. Sleep-Associated Death – Diagnoses	Total	
	Vital Records	CDRT
SIDS	38	0
Unsafe sleep practice	5	41
Bronchopneumonia /pneumonia	2	0
Birth defect	0	1
Cardiac arrest	1	0
Child abuse	0	1
Other medical	0	2
Not an infant	0	1
<b>Total (N)</b>	<b>46</b>	<b>46</b>

Table 6. Sleep-Associated Death – Sex	Total	(%)
Male	23	56.1%
Female	18	43.9%
<b>Total (N)</b>	<b>41</b>	<b>100.0%</b>

Table 5. Sleep-Associated Death – Race / Ethnicity	Total	(%)
White	29	70.7%
African-American	8	19.5%
American Indian	1	2.4%
Asian	0	0.0%
Mixed race	3	7.3%
<b>Total (N)</b>	<b>41</b>	<b>100.0%</b>
Hispanic Ethnicity	<b>2</b>	<b>4.9%</b>

Table 7. Sleep-Associated Death – Caretaker	Total	(%)
Babysitter / Child Care	9	22.0%
Mother, with or without Father	22	53.7%
Father	8	19.5%
Unknown	2	4.9%
<b>Total (N)</b>	<b>41</b>	<b>100.0%</b>

Table 8. Sleep-Associated Death – Risk Factors	Total	(%)
Pre- or post-natal smoke exposure	20	48.8%
Age-inappropriate sleep surface	19	46.3%
Found on side or stomach	17	41.5%
Current / recent respiratory infection	13	31.7%
Bed-sharing	11	26.8%
Bedding-related issues	9	22.0%
Put to sleep on side or stomach	9	22.0%
Sleeping in car seat	4	9.8%
Found wedged between or beneath objects	5	12.2%
No known risk factors, or 1+ unknown risk factor values	2	4.9%

Table 9. Cancer / Neoplasms	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total (2012-2013)	
	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	Age (yrs)	(N)	%
Adrenal gland											0	0.0%
Bone, all sites	13, 17		17		15				13, 16	8m, 17	4	11.8%
<b>Brain (total)</b>	10 (total)	4 (total)	2 (total)	3 (total)	3 (total)	2 (total)	6 (total)	6 (total)	6 (total)	6 (total)	12	35.3%
Astrocytoma / glioma	10, 13, 13	4, 11, 15, 15	9, 14	11	6, 7, 8	1	2, 5, 6, 8, 17	5, 6, 11, 12	2, 7, 10, 12	5, 7, 16	7	20.6%
Brain stem, unspecified	3, 6					1					0	0.0%
Choroid plexus		8								2	1	2.9%
Ependymoma	6						2		3		1	2.9%
Leptomeningeal									6		1	2.9%
Medulloblastoma	13	4, 8						5, 5			0	0.0%
Pineal							6			17	1	2.9%
Rhabdoid	1			3 wks, 9							0	0.0%
Unspecified	2, 10, 12, 14, 16									14	1	2.9%
Ewing's sarcoma		2	NB, 14	8				14		15	1	2.9%
Hepatic carcinoma / hepatoblastoma		7, 7, 15								4	1	2.9%
Leukemia, acute or chronic	2, 4, 17	13		3, 10, 13	3, 3, 4, 8, 14, 16	2, 7, 16	11, 15	4, 4, 4, 6, 10	9, 12	3, 15	4	11.8%
Lung, squamous cell carcinoma				14							0	0.0%
Lymphoma, Hodgkin's											0	0.0%
Lymphoma, non-Hodgkin's						5		8, 17	14	13	2	5.9%
Medulloblastoma						4			7		1	2.9%
Neuroblastoma		3, 8, 17	5	2	7, 10	15	3		3, 6		2	5.9%
Neuroendocrine									15		1	2.9%
Palate tumor										17	1	2.9%
Rhabdomyosarcoma		4	15	7		3		10, 16	1, 12, 15	14	4	11.8%
Rhabdoid tumor, extra-renal							2m	3			0	0.0%
Wilms' tumor	4	7, 12			8		6	6			0	0.0%
Unspecified type										17	1	2.9%
<b>Total (N)</b>	16	15	7	10	13	9	12	18	18	15	34	100.0%



Table 10. Infectious, Chronic and Other Medical Conditions	2012-2013	
	N	%
<b>Respiratory Diseases</b>	<b>16</b>	<b>45.7%</b>
Asthma, no known treatment	1	6.3%
Asthma, treated	2	12.5%
Influenza A; "Influenza-like illness"	2	12.5%
Pneumonia; Bronchopneumonia	5	31.3%
Respiratory Syncytial Virus	3	18.8%
Laryngotracheitis	1	6.3%
Pulmonary thromboembolism	2	12.5%
<b>Other</b>	<b>19</b>	<b>54.3%</b>
Diabetes insipidus	1	5.3%
Glomerulonephritis	1	5.3%
Heart disease	2	10.5%
Intracranial hemorrhage (aneurysm)	1	5.3%
Seizure disorder	4	21.1%
Sudden Unexpected Death in Childhood / of an Athlete	3	15.8%
Group B Streptococcal meningitis	1	5.3%
Hemophagocytic lymphohistiocytosis	1	5.3%
Staphylococcus aureus	1	5.3%
Enteroviral sepsis	0	0.0%
Unspecified viral infection	1	5.3%
Unknown medical cause	3	15.8%
<b>TOTAL</b>	<b>35</b>	<b>100.0%</b>

Table 11. Motor Vehicle-Related Incidents <sup>1</sup>	2012-2013	
	(N)	(%)
<b>Motor Vehicle Crash - Restraint status<sup>2</sup></b>		<b>76.5%</b>
Restrained	7	17.9%
Not restrained <sup>3</sup>	8	20.5%
Ejected	22	56.4%
Unknown	2	5.1%
<b>MVC Subtotal</b>	<b>39</b>	<b>100.0%</b>
<b>Other Motor Vehicle-Related Incident</b>		<b>23.5%</b>
All-Terrain Vehicle	3	25.0%
Pedestrian	7	58.3%
Pedestrian and train	1	8.3%
School bus	1	8.3%
<b>Other Subtotal</b>	<b>12</b>	<b>100.0%</b>
<b>TOTAL</b>	<b>51</b>	<b>100.0%</b>

<sup>1</sup>Only includes motor vehicles engaged in traffic.

<sup>2</sup>Age-appropriate restraints: car seat or booster seat for children through age 8; seatbelt and/or shoulder harness for older ages.

<sup>3</sup>Includes one newborn delivered after a motor vehicle crash.

Table 12. Unintentional Injury <sup>1</sup>	2012-2013	Total	
	(Age)		
Backed/run over by vehicle in driveway	2y, 2y, 3y	3	13.6%
Choke / Suffocation	1y, 2y, 12y	3	13.6%
Drowned, bath tub	1y	1	4.5%
Drowned, home or commercial pool	1y, 6y	2	9.1%
Drowned, open water (boating / swimming / wading)	11y, 11y	2	9.1%
Fire, house <sup>2</sup>	3m & 3y, 8y, 9y	4	18.2%
Kicked by horse	2y	1	4.5%
Drug overdose / alcohol poisoning	13y, 17y	2	9.1%
Playing with firearm	6y, 15y	2	9.1%
Struck by falling object (furniture)	3m, 2y	2	9.1%
<b>TOTAL (N)</b>		<b>22</b>	<b>100.0%</b>

<sup>1</sup>Sleep-associated deaths are in the Sudden Unexplained Infant Death section.

<sup>2</sup>Deaths connected with "&" are from the same incident.

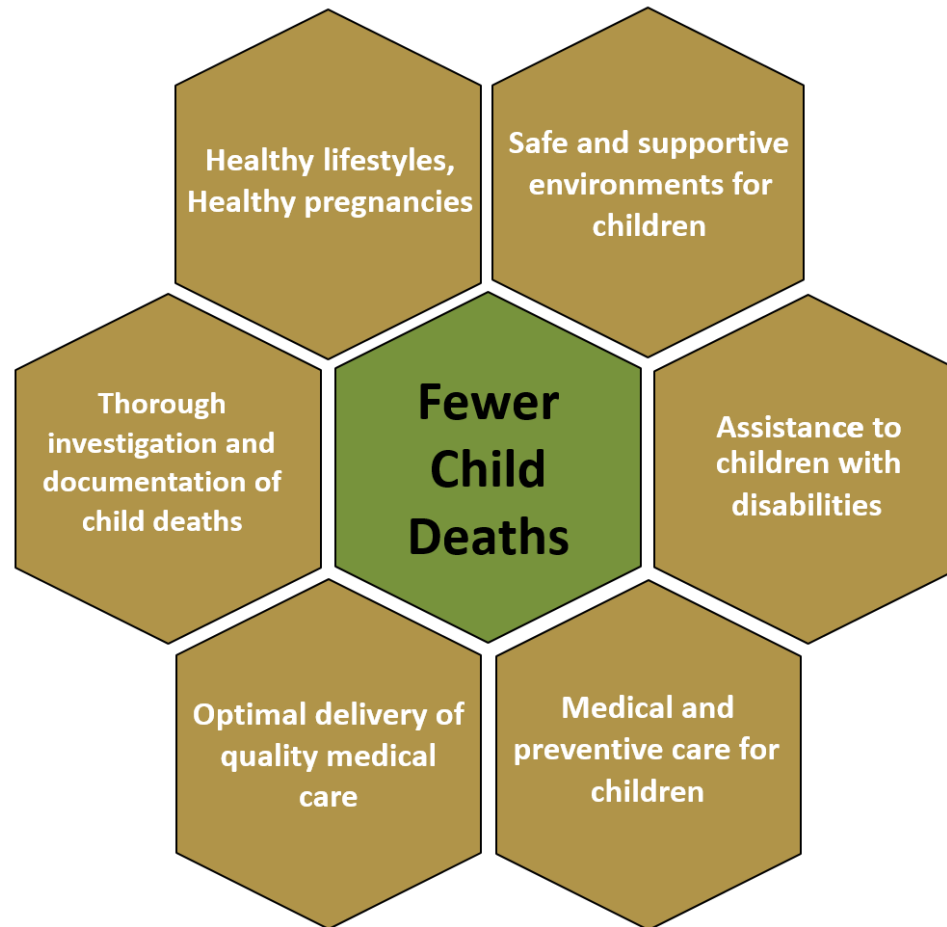
Table 13. Suicide		Firearms (Age)		Hanging (Age)		Overdose (Age)		Other (Age)		Subtotal (N) %		Total (N) %	
2004	Male	13, 17		13, 14, 16, 17		-		15		7	70.0%	10	8.8%
	Female	16		15		-		16		3	30.0%		
2005	Male	14, 14, 15, 15, 16, 16, 16, 17, 17		11,14,14,17		-		-		13	76.5%	17	15.0%
	Female	-		14, 15		-		14,16		4	23.5%		
2006	Male	15, 15, 16, 17		13, 13, 13, 14, 14, 15, 15, 15, 15, 16, 17, 17		-		-		16	84.2%	19	16.8%
	Female	-		16, 17		17		-		3	15.8%		
2007	Male	13, 15, 16, 16, 17, 17		15, 15,17		-		-		9	69.2%	13	11.5%
	Female	-		13, 14, 14, 17		-		-		4	30.8%		
2008	Male	16, 16, 16, 17		9, 16, 16, 17		-		16		9	64.3%	14	12.4%
	Female	16		14, 15, 16		17		-		5	35.7%		
2009	Male	13, 16		12, 15, 16, 16		-		-		6	100.0%	6	5.3%
	Female	-		-		-		-		0	0.0%		
2010	Male	16,16,17		11,16,17		9		-		7	87.5%	8	7.1%
	Female	-		-		-		17		1	12.5%		
2011	Male	15,16,17		9,15,17		-		-		6	85.7%	7	6.2%
	Female	-		13		-		-		1	14.3%		
2012	Male	13, 13, 16, 17		13, 16, 17		10, 16		-		9	81.8%	11	9.7%
	Female	-		13, 15		-		-		2	18.2%		
2013	Male	13, 17, 17		16, 17, 17		-		-		6	75.0%	8	7.1%
	Female	-		-		-		17, 17		2	25.0%		
Subtotal (N)	Male	40	95.2%	43	74.1%	3	60.0%	2	25.0%	88	77.9%	113	100%
	Female	2	4.8%	15	25.9%	2	40.0%	6	75.0%	25	22.1%		
Total (N)		42		58		5		8		113			
		37.2%		51.3%		4.4%		7.1%		100%			

Table 14. Child Abuse and Intentional Injury	2012-2013	Total	
	(Age)*	(N)	(%)
<b>Child abuse: by caregiver</b>		<b>8</b>	<b>44.4%</b>
Blunt force trauma / Abusive head trauma	2m, 8m, 1y, 1y, 1y, 1y	6	33.3%
Repeated physical abuse	1m, 2y	2	11.1%
<b>Child abuse: by non-caregiver</b>		<b>1</b>	<b>5.6%</b>
Provision of drugs	12y	1	5.6%
Subtotal (N)	9	9	50.0%
<b>Homicide: Intended death by caregiver</b>		<b>1</b>	<b>5.6%</b>
Strangled	10y	1	5.6%
<b>Homicide: Intended death by non-caregiver</b>		<b>8</b>	<b>44.4%</b>
Firearm	15y, 16y, 16y, 16y, 16y, 17y, 17y	7	38.9%
Smothered / Strangled	16y	1	5.6%
Subtotal (N)	9	9	50.0%
<b>Total (N)</b>	<b>18</b>	<b>18</b>	<b>100.0%</b>

Table 15. Supervisory Neglect	2012-2013 (Age)*	Total	
		(N)	(%)
<b>Failure to protect from hazard</b>			<b>100.0%</b>
Co-sleeping / overlay	4d, 2wk, 3wk, 1m, 2m, 2m, 2m, 3m, 3m, 3m, 5m, 6m	12	44.4%
Unsafe sleep surface (wedged or suffocated)	5m, 1y	2	7.4%
Stomach sleeping	3m	1	3.7%
Not protected from abusive household member	1m, 2m, 8m	3	11.1%
Unlocked pool gate	1y	1	3.7%
Unrestrained /ejected in motor vehicle	4y, 4y, 5y	3	11.1%
Poor supervision	1y, 2y, 2y, 2y, 12y	5	18.5%
<b>Failure to provide necessities</b>	-	-	-
<b>Failure to seek medical care / treatment</b>	-	-	-
<b>Emotional neglect</b>	-	-	-
<b>Abandonment</b>	-	-	-
<b>Total</b>		<b>27</b>	<b>100.0%</b>

\*Ages are given in years (y), months (m) and weeks (wks).

## APPENDIX 2 – Comprehensive List of CMDRT Recommendations



## Nebraska Child and Maternal Death Review Team— Comprehensive List of Recommendations\*

### Healthy Lifestyles, Healthy Pregnancies

#### Preconception care

- Incorporate preconception health into routine care for reproductive-age women
- Increase tobacco cessation and substance abuse prevention and treatment services for women
- Promote comprehensive women’s health messages

#### Preterm birth prevention

- Increase community education on signs and risks of preterm labor, and the importance of babies being born at term
- Expand research on prevention of preterm labor and delivery

#### Prenatal care - access

- \* **Promote routine assessments of pregnant clients by demographic factors such as race, ethnicity and income to identify areas where results do not reflect the intended target population**
- \* **Promote routine assessment of prenatal care services for accessibility by diverse clients**
  - Increase access to affordable, quality prenatal education and care for vulnerable and at-risk women

#### Prenatal and obstetric care – content and guidelines

- \* **Encourage widespread adoption and implementation by health care facilities of clinical guidelines for the**

management of substance abuse in pregnancy

- \* **Develop and provide educational materials to women of reproductive age on how drug use during pregnancy affects newborns, and on the non-punitive services available to assist women and families struggling with substance use**

Reinforce the need for medical records to accurately document prematurity education occurring during prenatal care visits

Update and standardize transfer protocols for at-risk pregnant women, neonates and children

Include the recognition and treatment of Fetal Alcohol Syndrome and other substance-related disorders in continuing education requirements for delivery personnel

Include HIV testing as standard of care for all pregnant women unless specifically declined (“opt-out” approach)

### Safe and Supportive Environments for Children

#### Child safety – parental support and education

Increase funding for and expand the state’s “Step Up to Quality” program for child care providers

Increase public funding for post-partum home visiting services

Establish comprehensive, affordable and accessible parenting classes in all of the state’s communities

Update and expand family, community and provider-level promotion of infant safe sleep practices in all of the state’s communities

\*Stars indicate priority recommendations.

Develop and implement statewide parenting education for young adults previously in foster care

#### Child safety – specific injury prevention

##### Motor vehicles

- \* **Support the upgrade of Nebraska’s Graduated Driver Licensing and child passenger safety laws from secondary to primary enforcement**
- \* **Support an increase in the age requirement for booster seats to age 8, and to age 2 for children to ride rear-facing**
- \* **Emphasize the importance of parental involvement in their children’s driver education process, and the enforcement of provisional license restrictions**

Disseminate information on proper child safety seat and seat belt usage in pediatric practices as standard of care

Implement special sanctions for drivers convicted of DUI with a child in the vehicle

Enhance and expand dissemination of materials specifically targeted to children and parents on the safety and proper use of off-road vehicles (ATV)

##### 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

Develop and provide comprehensive, multilingual fire

prevention education and home fire escape plans through community settings

#### Child safety – suicide prevention

- \* **Ensure access, including financial access, to confidential, professional mental health services and crisis care for all young people**
- \* **Prioritize community-level awareness and acceptance of the need for age-specific restrictions on access to firearms**

Promote safe storage of household medications, and the secure and locked storage of home firearms

Provide suicide prevention specialists to all schools and ESUs

Provide funding and other support to the Nebraska State Suicide Prevention Coalition

Monitor the effect of mood stabilizing medications prescribed to teens

Expand suicide risk assessment protocols and staff training to include assessment and documentation of depression and suicide ideation, postings on social networking sites, and existing or needed mental health referrals and contacts

##### General

Publish all suicide prevention materials in multiple languages

Implement regular safety inspections of municipal buildings

Expand local Drug Courts which incorporate treatment in their programs

Expand and finance community violence prevention programs

\*Stars indicate priority recommendations.

## Assistance to Children with Disabilities

- Increase the availability of prenatal diagnoses of modifiable birth defects
- Increase availability and prioritization of home visiting services to families of children with severe disabilities
- Expand specialized training requirements for DHHS Children and Family Services staff
- Increase the accuracy, timeliness and analytic use of data from the Nebraska Birth Defect Registry

## Medical and Preventive Care for Children

- Promote childhood vaccinations
- Carefully monitor the effectiveness of clinical- and family-based control of asthma
- Strengthen partnerships and improved communication strategies between medical providers and families of asthmatic children
- Assure children's access to appropriate health care services, including specialized cancer treatment

## Optimal Delivery of Quality Medical Care

- Promote and monitor the adoption of CLAS (Culturally and Linguistically Appropriate Services in Health and Health Care) standards by health care facilities to advance health equity and help eliminate health disparities
- Enhance quality control committees and peer review processes at medical facilities
- Promote continuing education for health care providers on risk

factors for, causes of, and treatments for childhood cancers

Ensure that all children diagnosed with cancer have the opportunity to be enrolled in clinical trials

## Thorough Investigation and Documentation of Child Deaths

- \* **Barriers to consistent use of the Nebraska Infant and Young Child Death Scene Investigation Guidelines should be investigated and resolved.**
- \* **Continuing education requirements and credits should be available for the Nebraska Infant and Young Child Death Scene Investigation Guidelines.**

Promote “doll reenactments” by a trained investigator in all investigations of sleep-related deaths

Require training and continuing education for law enforcement on accurate determination and documentation of cause of death

Conduct full laboratory analyses (toxicological, microbiologic, radiologic and vitreous chemistry) and autopsy on all unexpected infant deaths

Caretakers should be immediately tested for illegal substance use when such use is suspected to have contributed to the death of a child

\*Stars indicate priority recommendations.



# **Nebraska Child Death Review Report**

**For Child Deaths Occurring in 2012 and 2013**

September, 2017  
Revised