NEBRASKA CHILD AND MATERNAL DEATHS IN 2013—INTERIM REPORT

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. Authority to conduct a similar process with maternal deaths was added in 2013, and will begin with 2014 deaths.

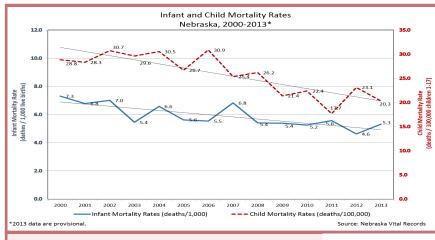
The purpose of the CMDRT includes developing an understanding of the number and causes of child and maternal deaths, and advising the Governor, Legislature, other policymakers and the public no changes that might prevent them in the future. All deaths are reviewed, not just "suspicious" or violent ones. 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:

- Identify patterns of preventable deaths;
- Recommend changes in system responses to 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 and maternal deaths.

TRENDS IN INFANT AND CHILD DEATHS, NEBRASKA, 2004-2013*												
Year	Number of Live Births	Number of Infant Deaths (age <1)	Infant Mortality Rate (deaths / 1,000)	Total Child Population** (ages 1-17)	Number of Child Deaths (ages 1-17)	Child Mortality Rate (deaths / 100,000)						
2004	26,324	173	6.57	422,510	129	30.5						
2005	26,142	147	5.62	423,393	113	26.7						
2006	26,723	148	5.54	424,274	131	30.9						
2007	26,906	183	6.80	425,608	108	25.4						
2008	26,992	146	5.41	427,389	112	26.2						
2009	26,931	145	5.38	430,332	92	21.4						
2010	25,916	136	5.25	433,652	97	22.4						
2011	25,629	143	5.58	435,182	77	17.7						
2012	25,939	120	4.63	436,880	101	23.1						
2013	26,094	139	5.33	438,671	89	20.3						

*2013 data are provisional and subject to change.

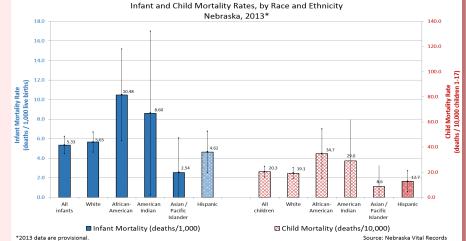
**Child population estimates from U.S. Census Bureau, Vintage 2013.



- Following a significant increase between 2011 and 2012, Nebraska's child (ages 1-17) mortality rate resumed its longterm decline. The provisional 2013 rate of 20.3 deaths /100,000 children represents a 12% drop from the 2012 rate of 23.1 deaths /100,000 children. However, the 2013 rate was still higher than the 2011 low of 17.7 deaths /100,000 children.
- The decrease in Nebraska's infant mortality rate (IMR) observed between 2011 and 2012 was not sustained. The provisional 2013 rate of 5.3 deaths /1,000 live births represented a 15% increase from the 2012 rate of 4.6 deaths /1,000 live births.

Racial and ethnic disparities in infant and child mortality improved only slightly in 2013.

- Infants: Mortality rates for non-White infants have large confidence intervals as they are based on relatively small numbers of deaths, and none of the rates in 2013 were significantly different. However, the persistently higher rates for African-American and American Indian infants should not be disregarded.
- <u>Children</u>: Deaths of African-American children declined markedly from the high number in 2012 (61.4 deaths /100,000 children). Mortality rates for American Indian and Asian /Pacific Islander children were higher than in 2012, but are based on very small numbers.



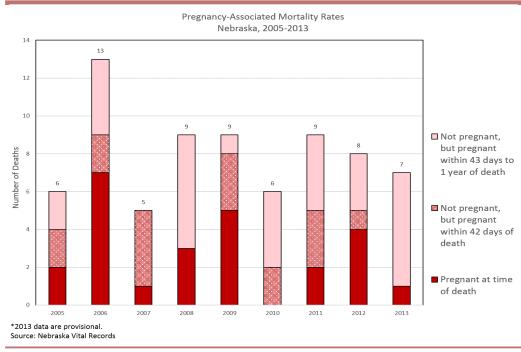
INTERIM REPORT FOR 2013

Acquiring records for a calendar year of deaths, reviewing and analyzing the information and developing recommendations typically requires about 18-24 months. The team is currently processing infant and child cases from 2011, and accumulating maternal cases for 2014. However, in accordance with Nebraska Revised Statute §71-3407 (2012), this Interim Report presents an overview of deaths from calendar year 2013. These preliminary data are based solely on Nebraska death certificate records. Causes of death, other factors, or even total number of deaths may change after in-depth review. 2013 data are provisional and subject to change.

SELECTED CAUSES OF DEATH, INFANTS (<1) AND CHILDREN (1-17), NEBRASKA, 2013

	Infants (< 1 year)		Children (1-17 years)			TOTAL			
Cause of Death	Number of Deaths (%)		Infant Mortality Rate (deaths / 1,000)			Child Mortality Rate (deaths / 100,000)	Number of Deaths (%)		Child (0-17) Mortality Rate (deaths / 100,000)
Medical	125	(73.5%)	4.79	45	(26.5%)	10.26	170	(74.6%)	36.61
Cancer	1	0.80%	0.04	12	26.67%	2.74	13	7.65%	2.80
Respiratory Disease	3	2.40%	0.11	6	13.33%	1.37	9	5.29%	1.94
Prematurity	18	14.40%	0.69	0	0.00%	0.00	18	10.59%	3.88
Perinatal Conditions	48	38.40%	1.84	0	0.00%	0.00	48	28.24%	10.34
Congenital Anomalies	36	28.80%	1.38	6	13.33%	1.37	42	24.71%	9.04
SIDS; Abnormal Signs & Symptoms	8	6.40%	0.31	0	0.00%	0.00	8	4.71%	1.72
Other Medical Causes	11	8.80%	0.42	21	46.67%	4.79	32	18.82%	6.89
Unintentional Injury	5	(13.9%)	0.19	31	(86.1%)	7.07	36	(15.8%)	7.75
Motor Vehicle-Related	0	0.00%	0.00	25	80.65%	5.70	25	69.44%	5.38
Drowning	0	0.00%	0.00	1	3.23%	0.23	1	2.78%	0.22
Suffocation/Strangulation	4	80.00%	0.15	0	0.00%	0.00	4	11.11%	0.86
Other Unintentional Injury	1	20.00%	0.04	5	16.13%	1.14	6	16.67%	1.29
Homicide	2	(33.3%)	0.08	4	(66.7%)	0.91	6	(2.6%)	1.29
Homicide, Firearm	0	0.00%	0.00	1	25.00%	0.23	1	16.67%	0.22
Other Homicide	2	100.00%	0.08	3	75.00%	0.68	5	83.33%	1.08
Suicide	0	(0.0%)	0.00	7	(100.0%)	1.60	7	(3.1%)	1.51
Suicide, Suffocation / Strangulation	0	-	0.00	3	42.86%	0.68	3	42.86%	0.65
Suicide, Firearm	0	-	0.00	3	42.86%	0.68	3	42.86%	0.65
Suicide, Other	0	-	0.00	1	14.29%	0.23	1	14.29%	0.22
Could Not Be Determined	7	(87.5%)	0.27	1	(12.5%)	0.23	8	(3.5%)	1.72
SIDS; Abnormal Signs & Symptoms	7	100.00%	0.27	0	0.00%	0.00	7	87.50%	1.51
Other Medical Causes	0	0.00%	0.00	0	0.00%	0.00	0	0.00%	0.00
Other / Undetermined	0	0.00%	0.00	1	100.00%	0.23	1	12.50%	0.22
Pending	0	(0.0%)	0	1	(100.0%)	0.23	1	(0.4%)	0.23
Total	139	(61.0%)	5.33	89	(39.0%)	20.29	228	(100.0%)	49.11

PREGNANCY-ASSOCIATED DEATHS, NEBRASKA, 2005-2013



The CMDRT will begin in-depth review of maternal deaths beginning in 2015. Since 2005, pregnancy-associated deaths have been identified through a "check box" on the Nebraska death certificate, indicating whether a woman had been pregnant at or around the time of death. There were 72 such cases so identified since 2005; of these, 25 (34.7%) were pregnant at the time of death, 17 (23.6%) were pregnant within 42 days of death, and 30 (41.7%) were pregnant between 43 days and 1 year before death. The most frequent causes of pregnancyassociated death included:

- Complications of pregnancy (20 deaths)
- Motor Vehicle Crashes (18 deaths)
- Diseases or conditions complicating pregnancy (12 deaths)
- Heart disease (4 deaths)
- Suicide (4 deaths)

The Nebraska Child and Maternal Death Review Team is mandated by Nebraska Revised Statutes §71-3404 - 71-3409 For more information, contact Debora Barnes-Josiah, PhD, CMDRT Coordinator (402/471-9048; debora.barnesjosiah@nebraska.gov) CMDRT reports are available at http://dhhs.ne.gov/publichealth/Pages/lifespanhealth_cdrteam_index.aspx