

New Mexico Child Fatality Review

Annual Report 2014

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Epidemiology and Response Division
Injury and Behavioral Epidemiology Bureau
Office of Injury Prevention



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Executive Summary

The 2014 Child Fatality Review Annual Report summarizes and analyzes information about circumstances surrounding the deaths of New Mexico residents < 18 years whose deaths from 2011 through 2013 were reviewed. It also presents recommendations from the comprehensive and confidential reviews of certain child deaths resulting from injury by a multi-disciplinary group of professionals. Additionally, the report provides data from the New Mexico Bureau of Vital Records and Health Statistics (NMBVRHS) about child death in New Mexico.

The New Mexico Child Fatality Review (NMCFR) was established in 1998 to examine the circumstances that contribute to the death of infants, children, and youth in New Mexico. The purpose of the NMCFR is to identify risk reduction, prevention, and systems improvement identified by investigating the circumstances of these deaths and to recommend strategies that can prevent future injury and death. The NMCFR provides a forum to review agency actions as they relate to child protection and death reduction. The review process results in increased understanding of risk factors for child death that help protective service, school, medical, public health and law enforcement personnel identify children at risk, and alert the community to emerging patterns of death.

Key Recommendations

The Child Death Review Team in New Mexico is comprised of four panels that review deaths and make recommendations in the areas of child abuse and neglect, transportation, suicide and the broader spectrum of unintentional injury. Sudden unexpected infant deaths are also reviewed by the broader spectrum panel. With information garnered from the reviews, the panels determined that many of these deaths could have been prevented and have made recommendations for preventive measures. Highlights of evidence-based recommendations include the following:

1. The Office of Injury Prevention, the Family Health Bureau and the New Mexico Pediatric Society should conduct outreach to both hospitals and neonatal providers to educate them about safe infant sleep, and provide technical assistance for the implementation of hospital safe sleep programs.
2. The New Mexico Department of Transportation should expand the use of evidence-based prevention programs that educate youth about the dangers of distracted driving, driving under the influence of alcohol or drugs, or being the passenger in a vehicle driven by a driver under the influence of alcohol or drugs.
3. The Drug Enforcement Administration, New Mexico State Police, local law enforcement agencies, the New Mexico Board of Pharmacy and the New Mexico Department of Health should increase both public awareness of the need to safely dispose of unused or

expired prescription medication and opportunities for safe disposal of prescription drugs to reduce risk of poisoning or diversion.

4. The Children, Youth, and Families Department should conduct a public education effort, such as “Whom Are You Leaving Your Child With?”, to encourage parents to be as selective as reasonably possible in choosing child care providers and babysitters.
5. The Children, Youth, and Families Department should evaluate home visiting program processes and outcomes.

Data Collection and Review Process

In New Mexico, child death review begins when the NMCFR Coordinator receives Office of the Medical Investigator (OMI) reports of death for children < 18 years. The NMCFR staff supplements OMI mortality data with reports from other sources (law enforcement, child protective services, schools, etc.). Individual case files are assigned to the appropriate panel for review. The panel discusses each case, determines if and how the death might have been prevented through appropriate prevention or intervention measures, and then makes program, system and/or policy recommendations for prevention of future injuries or deaths.

All relevant case information is documented on a standard national Child Death Review case form and entered into the confidential National Center for Child Death Review database. Upon completion of child death reviews for a given period, review panels compile and evaluate individual case recommendations, and propose formal recommendations that are ultimately prioritized.

The CFR review teams use the OMI as the main source for information about specific deaths because the OMI files contain information surrounding the circumstances of the deaths. However, the OMI is only authorized to investigate child deaths that are of unknown cause or are sudden, violent, suspicious or unattended and are not on federal or tribal land. Therefore, this report also uses data from death certificates provided by the New Mexico Bureau of Vital Records and Health Statistics to further analyze child mortality.

Population Characteristics

Children < 18 years made up a quarter of New Mexico’s population in 2013. There were slightly more male children (51%) than female children (49%).

96% of New Mexico’s population of children < 18 years were classified as Hispanic, White, or American Indian in 2013. Hispanics made up the largest percentage of children (56%), followed by Whites (29%), and American Indians (11%). Blacks and Asians comprised 4% of children¹.

¹ University of New Mexico, Geospatial and Population Studies <http://bber.unm.edu/>

Total Deaths

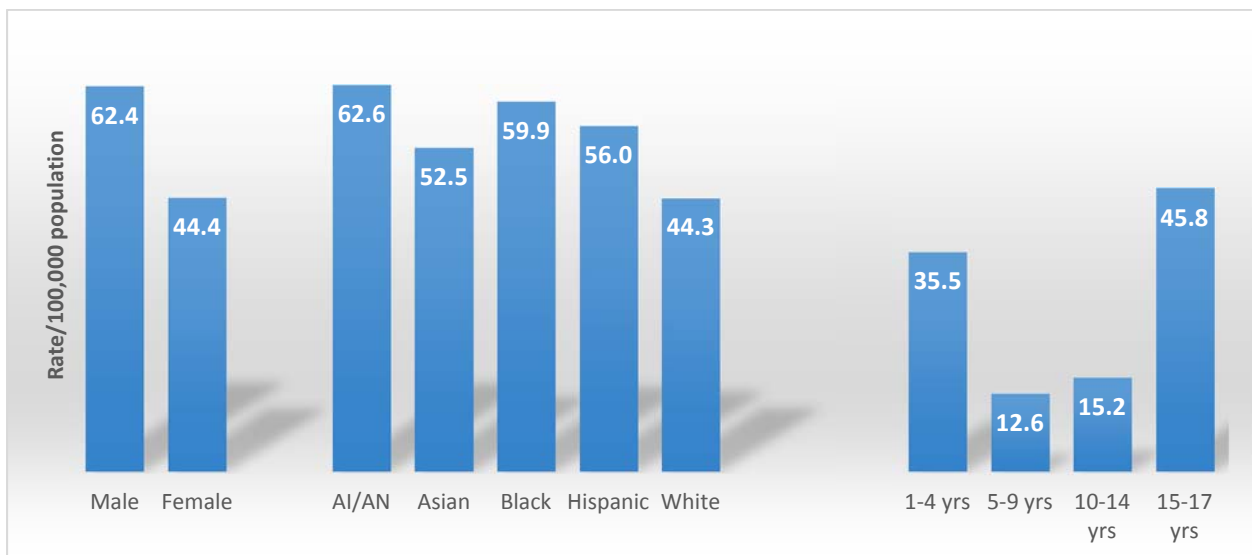
There were 839 deaths of New Mexico children during 2011-2013 according to death data from the New Mexico Bureau of Vital Records and Health Statistics. Approximately 65% of these deaths (n=545) were due to natural disease processes, 28% were due to intentional and unintentional injuries and the manner of the remaining 7% of deaths were either unknown, undetermined or the death was still being investigated. Children died from a variety of causes, the most common of which was certain conditions originating from the perinatal period.

Child deaths occurred disproportionately among demographic groups. Males, non-Whites, and infants suffer from higher rates of mortality than females, Whites, and children of other ages, respectively (Figure 1). Infant deaths accounted for the majority (56%) of all child deaths. The 472 infant deaths during 2011-2013 resulted in a mortality rate of 540.6 per 100,000 population, nearly 12 times the rate of teens aged 15-17 years, the age-group with the next highest rate (45.8 per 100,000).

Males accounted for 59% of child deaths and had a higher overall death rate (62.4 deaths per 100,000 population) than females (44.4 deaths per 100,000 population). The male death rate was higher than the female death rate among children of each age group (<1, 0-4 years, 5-14 years and 15-17 years) with a rate ratio range of 1.1 among children aged 1-4 years and 2.5 among children aged 15-17 years.

American Indians/Alaska Natives and Blacks had the highest child fatality rates at (62.6 and 59.9 per 100,000 population, respectively) during 2011-2013. However, they represent fewer than 20% of New Mexico child deaths. Nearly 500 Hispanic children, 59% of the total, died during 2011-2013, resulting in a death rate of 56.0 per 100,000. The deaths rate among White children was the lowest of all racial/ethnic groups (44.3/100,000).

**Figure 1. Child Deaths* by Sex, Race/Ethnicity, and Age Group
New Mexico, 2011-2013**



*Infant rates not presented due to scale

During 2011-2013, 84% of infant deaths and 40% of the deaths of children aged 1-17 years were classified as “natural” in manner of death (due to natural disease processes) and generally were not reviewed by the New Mexico CFR. Natural deaths constituted a smaller proportion of deaths as children aged. During 2011-2013, 20% of deaths among New Mexico children aged 15 to 17 years were classified as natural deaths.

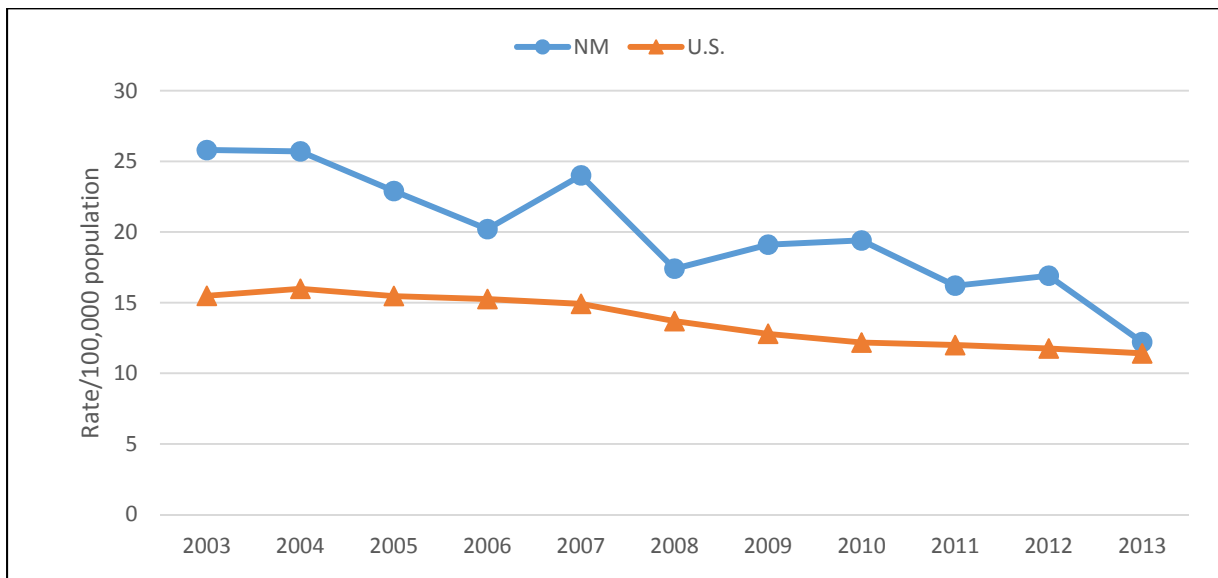
Injury Deaths

There were 236 injury deaths among New Mexico children during 2011-2013 according to death data from the New Mexico Bureau of Vital Records and Health Statistics. The vast majority of child injury deaths are preventable. Injury caused 28% of all deaths to children during 2011-2013. Children aged 15-17 years accounted for 40% of all injury deaths to children. Their rate (34.7/100,000) was 2.1 times higher than the rate among children aged 1-4 years and 5.9 times higher than the rate among children aged 5-14 years. The injury death rate among children aged <1 year (36.6/100,000) was 10% higher than the rate for those aged 15-17 years.

In New Mexico, the number of injury deaths among American Indian children (N=41) was disproportionate to the number of American Indian children in the population. In 2011-2013, the injury death rate for American Indian children (23.5/100,000) was 1.5 times the rate for Hispanics (N=136, 15.4/100,000) and 2.0 times the rate for White children (N=54, 12.0/100,000). Males accounted for 69% of the child injury deaths.

The child injury death rate in New Mexico has consistently been higher than the national rate (Figure 2) during 2003-2013, but the disparity appears to be decreasing. The child injury death rate in New Mexico was 10% higher than the U.S. rate in 2013.

Figure 2. Child Injury Death Rates, New Mexico and United States, 1999-2013



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The New Mexico child injury death rate for all age groups has fluctuated since 1999 but there was an overall declining trend in the child injury death rate for all age groups except for New Mexico children aged 1-4 years. The trend among New Mexico children aged 1-4 years was flat. The greatest reduction in child injury death rates from 2009 through 2013 was found among infants (decrease of 54%), followed by children aged 15-17 years (decrease of 43%).

American Indians, Hispanics and Whites have experienced a decline in child injury death rates since 1999. The rate for American Indians declined 58% from a high of 45.1 per 100,000 in 2004 to 18.9 per 100,000 in 2013, yet the child injury death rate among American Indians remained double that of Whites and 40% higher than the Hispanic rate. Hispanics accounted for 52% of all child injury deaths in New Mexico with about 56 child injury deaths annually. Approximately 2% of children who died from injuries were African American or Asian, but the annual number of child injury deaths for these groups has fluctuated between 0 and 6 since 1999.

During 2004-2013, motor vehicle traffic-related injury was the leading cause of injury death among children aged 1 to 17 years and the 3rd leading cause of injury death for infants. Suffocation was the leading cause of injury death among infants (See Table 1). Unintentional injury accounted for 61% of the injury deaths among children. Suicide accounted for 32% of injury deaths among children aged 10-17 years. Homicide accounted for 13% of the injury deaths among children aged 1-17 years but 25% of deaths among infants.

Table 1. Leading Causes of Child Injury Death by Age Group, New Mexico, 2004-2013

Rank	Age Group				
	<1	1-4	5-9	10-14	15-17
1	Unintentional Suffocation (42)	Unintentional MV Traffic (77)	Unintentional MV Traffic (40)	Unintentional MV Traffic (57)	Unintentional MV Traffic (146)
2	Homicide Other Specified & Unspecified (30)	Unintentional Drowning (30)	Homicide Firearm (6) <i>(10 Total Homicides)</i>	Suicide Suffocation (36) <i>(46 Total Suicides)</i>	Suicide Suffocation (68) <i>(141 Total Suicides)</i>
3	Unintentional MV Traffic (13)	Homicide Other Specified & Unspecified (28)	Unintentional Fire/burn (6)	Homicide Firearm (12) <i>(17 Total Homicides)</i>	Suicide Firearm (56) <i>(141 Total Suicides)</i>
4	Unintentional Drowning (10)	Unintentional Suffocation (12)	Unintentional MV non-Traffic (6)	Unintentional Drowning (8)	Homicide Firearm (35) <i>(49 Total Homicides)</i>
5	Two Tied 1 Each	Two Tied 9 Each	Unintentional Suffocation (5)	Unintentional Poisoning (7)	Unintentional Poisoning (35)

Intentional Injury Deaths

During 2011-2013, an average of 26 New Mexico children died annually from an intentional injury (homicide or suicide). The intentional injury death rate in New Mexico was 40% higher than the United States rate (5.0 and 3.7 per 100,000 respectively) during 2011-2013. Older teens aged 15-17 years had the highest violence-related death rate (18.1 per 100,000), followed by infants (3.4 per 100,000) during 2011-2013.

Three out of four violent deaths to children occurred among males. The violent death rates among both male and female children fluctuated from 2004 to 2013, but there was an overall declining trend in the child violent death rate for both males and females. The rate for both sexes declined 39% from 2004 through 2013.

The violent death rate for American Indian children has declined sharply (75%) since 2010. However, the rate for this group (5.2/100,000) was still double the rate for White children (2.6/100,000) in 2013. The violent death rate among Hispanic children was 6.8/100,000 in 2013. While there has been some fluctuation in the rate, violent death rates among White and Hispanic children decreased 53% and 23% respectively from 2004 through 2013.

New Mexico children had the fifth highest violence-related death rate in the nation, behind District of Columbia, South Dakota, Louisiana and Wyoming, during 2011-2013.

Homicide

Key Findings

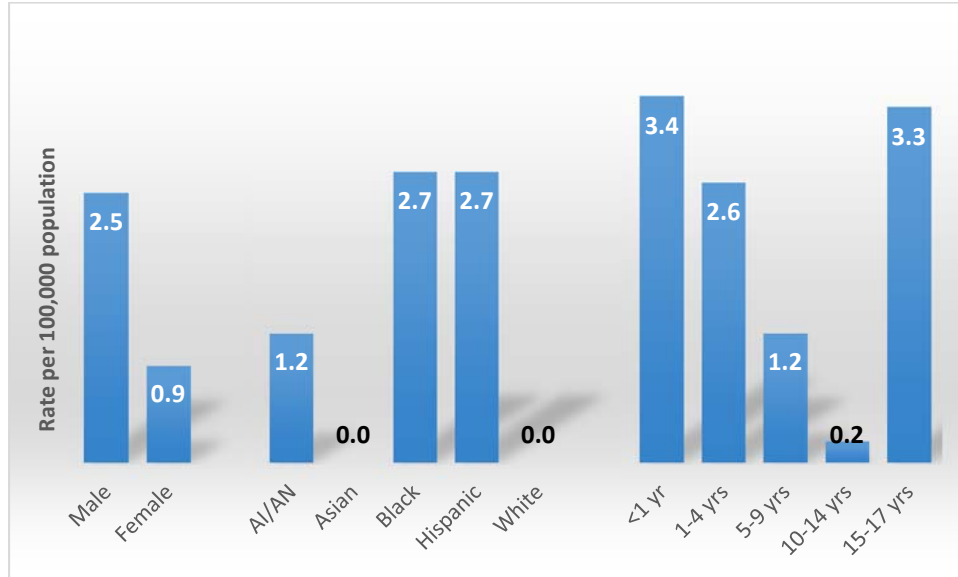
1. There were 27 child homicides in 2011-2013 and 74% of the victims were male.
 2. Infants and teens aged 15-17 years had higher homicide rates than children of other ages.
 3. 89% of child homicide victims were Hispanic.
 4. A firearm was used in 44% of child homicides.
 5. The Child Abuse and Neglect (CAN) Panel reviewed 15 homicides of children and found that 93% of them were committed by their primary caregiver.
 6. Eleven children whose deaths were reviewed by the CAN Panel were found to have abusive head trauma that caused or contributed to the death.
-

Vital Records Data on Homicide

On average, 9 New Mexico children died from homicide each year from 2011-2013. This was a decline in the number of New Mexico child homicide deaths from the previous 3 years. The majority of homicide victims were male, and their homicide rate was 2.8 times higher than the female rate (Figure 3). Black and Hispanic children had the highest rates of homicide (2.7/100,000 each), and 89% of the homicide victims were Hispanic. Infants and teens had the highest homicide rates (3.4/100,000 and 3.3/100,000 respectively). The New Mexico child

homicide rate (1.7/100,000) was 19% less than the national rate (2.1/100,000) during 2011-2013. The New Mexico child homicide rate fluctuated from 2004 through 2013, but there was an overall decline in the rate. The rate dramatically decreased (61%) from 2010 to 2011 but increased 27% from 2011 to 2013.

Figure 3. Homicide by Sex, Race/Ethnicity and Age, New Mexico, 2011-2013



Firearm was the mechanism for 44% of the homicides during 2011-2013. Firearms were used in 45% of the male child homicides and 43% of the female child homicides. Firearms (78%) were the cause of 7 of the 9 homicides among teens aged 15-17 years and cut/pierce was the mechanism in the 2 remaining homicides among teens. Firearms accounted for 50% of the homicides among Hispanics.

Child Abuse and Neglect Panel Review Summary

The Child Abuse and Neglect (CAN) Panel reviewed 17 homicides. About 27% of the child homicides reviewed in 2011-2013 were committed by their parent and 47% of the child homicides were committed by the mother’s partner, who was not a parent (Table 2). One-fifth of these homicides were among children <1 year of age, one-third were among children one year of age and 60% (n=9) of the victims were Hispanic. The panel determined that all of the deaths were preventable (i.e. an individual or the community could reasonably have done something that would have changed the circumstances that led to the child’s death). Based on reviews conducted by the child abuse and neglect panel, it is believed that fatal child maltreatment may be underreported by some health care providers, schools and day care providers.

The reviews showed that a primary caregiver was responsible for 93% of the homicides that were reviewed by the CAN panel. Fifteen of the caregivers responsible for the death were male and five people were known to have had a history of substance abuse.

Table 2. Primary Caregiver Responsible for Death, NM, 2011-2013

Caregiver	# deaths	Percent
Biological parent	4	26.7
Step parent	1	6.7
Mother's partner	7	46.7
Grandparent	1	6.7
Other relative	1	6.7
Other	3	6.7
<i>Total</i>	<i>17</i>	<i>100</i>

Six children had a history of being a victim of child maltreatment. Three of these had previously been identified through the Protective Services Division of the New Mexico Children, Youth, and Families Department. Eleven of the children (73%) were found to have had abusive head trauma and in 4 of these deaths there were retinal hemorrhages, a characteristic of being shaken. The panel found that the failure of caregivers to deal appropriately with a crying child, child disobedience or domestic arguments often triggered the abusive behavior.

Child Abuse and Neglect Panel Review Recommendations

1. The NM legislature should amend the current child abuse and reporting statute to clarify that anyone who suspects child abuse and neglect is required to report it.
2. The Office of Injury Prevention should send the annual Child Fatality Review and Recommendations report to the New Mexico Child Abuse and Neglect Citizen Review Board.
3. The Children, Youth, and Families Department should improve funding for more accessible, affordable child care, subject to appropriately stringent regulations, to prevent children from being left with adults who are incapable of supervising them adequately.
4. The Children, Youth, and Families Department should conduct a public education effort, such as “Whom Are You Leaving Your Child With?” to encourage parents to be as selective as reasonably possible in choosing child care providers.

Suicide

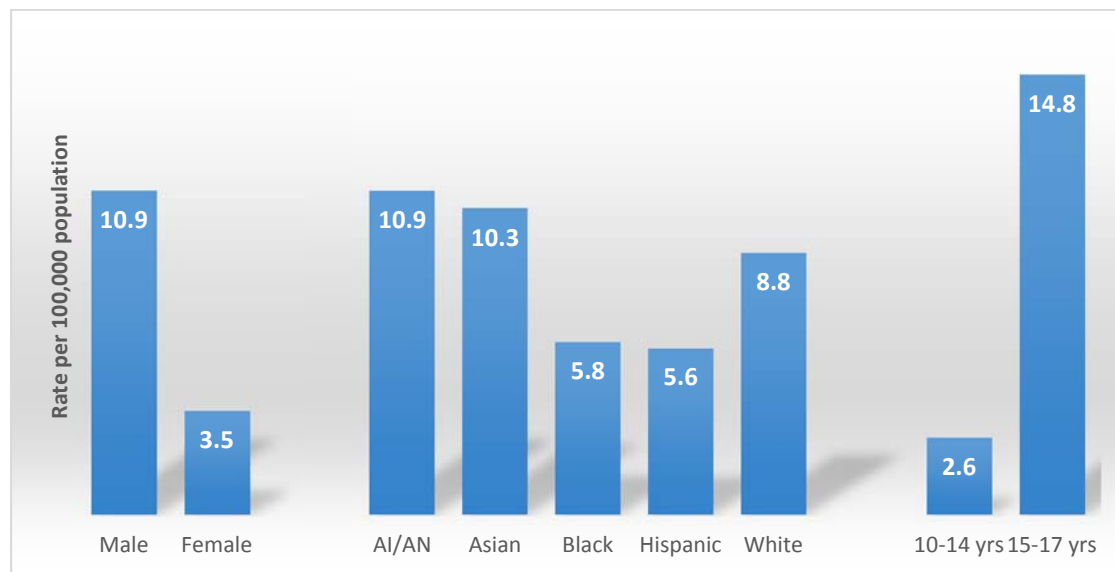
Key Findings

1. There were 51 suicides of New Mexico children in 2011-2013.
2. The suicide rate was highest among American Indian children and among males.
3. Suffocation was the leading mechanism of suicide among American Indian children and accounted for 56% of suicides in this population.
4. Suffocation (67%) and firearms (29%) were the leading mechanisms of suicide among Hispanic children. Together they accounted for 96% of the suicides in this group.
5. Of the 40 suicides reviewed, 20% (n=8) had previously discussed suicide or threatened to commit suicide.

Vital Records Data on Suicide*

Suicide was the second leading cause of death in New Mexico for children aged 10-17 years. During 2011-2013, 51 children died of suicide. Three out of 4 child suicides were among males, resulting in a mortality rate three times the rate for female children (Figure 4). American Indians accounted for 18% of child suicides occurring during 2011-2013, but had the highest child suicide rate of any racial/ethnic group (10.9 per 100,000). The rate among Asian children was also high but since it was based on fewer than 3 deaths, caution must be used when trying to interpret this result. Hispanic children accounted for 41% of suicides among New Mexico children during 2011-2013.

Figure 4. Suicide by Sex, Race/Ethnicity and Age among Children Aged 10-17 Years New Mexico, 2011-2013



*Note: In this report, child suicide rates are calculated using population data only for children aged 10-17 years.

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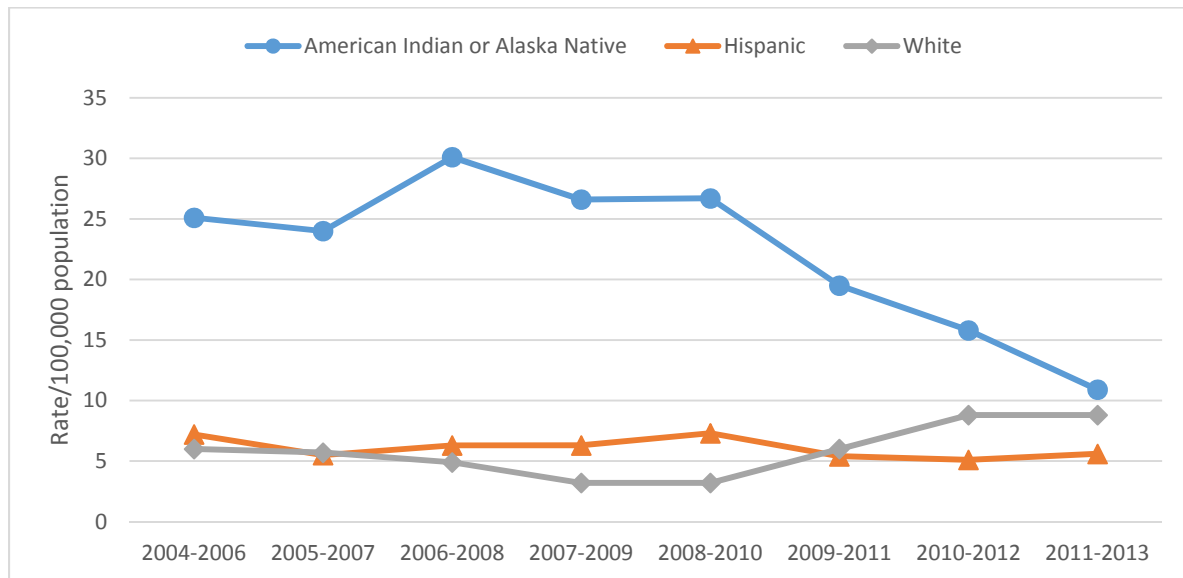
The vast majority of child suicides occurred among teens aged 15 to 17 years (78%), resulting in a death rate 5.7 times higher than the rate for children aged 10 to 14 years. Children aged 10-14 years accounted for 22% percent of the children who died from suicide. Suicide is rare among children aged <10 years. Since 1999, there have been two suicides of New Mexico children younger than 10 years of age.

Analyses of child suicide rates since 2004 revealed that the suicide rate among New Mexico children during the ten year period was 2 to 3 times higher than the national rate. The New Mexico child suicide rate and the male suicide rate fluctuated from 2004 through 2013, but there was an overall declining trend in the child suicide rate. The suicide rate decreased 29% during the 10 year period. Rates for male children showed a decline of 41% during this time period. The lowest male suicide rate occurred in 2009 (5.9/100,000). The suicide rate among female children was 94% higher in 2013 than in 2004. The female suicide rate remained unchanged from 2011 through 2013 (3.5/100,000).

Suicide rates for children aged 15-17 years were consistently higher than for the younger children aged 10 to 14 years. The suicide rate among children aged 15 to 17 years declined each year from 2010 to 2013.

Rates of suicide among American Indian children from 2004 through 2011 were substantially higher than rates for Hispanic or White children (Figure 5). The suicide rate for American Indian children declined 71% from 2004 through 2013. Their suicide rate in 2013 was 30% higher than the White rate and 20% lower than the Hispanic rate. In contrast, suicide rates for White and Hispanic children showed some fluctuation from 2004 through 2013. The trend in the suicide rate for Hispanics showed a slight decrease and the trend for Whites showed a slight increase in the suicide rate from 2004 through 2013.

Figure 5. Suicide Rate Trends by Race/Ethnicity, NM, 2004-2013



The leading mechanism of suicide from 2011-2013 was hanging/suffocation (54.9%), followed by firearm (37.3%), but this order varied by sex, age and race/ethnicity. Firearm was the leading mechanism of suicide among male children, accounting for 46.2% of suicides. Suffocation accounted for 43.6% of the male suicides. In contrast, one of the suicide deaths among girls involved a firearm; 11 of the 12 suicides among girls were due to suffocation. Suffocation was the leading mechanism of suicide among American Indian children and accounted for 55.6% of suicides among this group. Suffocation (66.7%) was the leading mechanism of suicide for Hispanic children followed by firearms (28.6%). Firearm (63.2%) was the leading mechanism of suicide for White children followed by suffocation (36.8%).

Suicide Panel Review Summary

The Suicide Panel reviewed 40 child suicides that occurred in 2011-2013. The panel determined that 29 (72.5%) of these child deaths could have been prevented. In 8 suicides (20%), the child had talked about suicide and/or made prior threats. The child left a suicide note in 30% of the suicides (n = 12). The panel found that 57.5% of the children had a disability or chronic illness. The panel also reviewed evidence that indicated a history of acute or cumulative personal crises that may have contributed to the child's despondency. About 15% (n=6) of deaths reviewed noted arguments with parents as a precipitating factor for suicide. Eight decedents had a recent argument with a girlfriend/boyfriend. One child had a friend or relative who had recently committed suicide. Two children were reported to have been victims of bullying.

Suicide Panel Recommendations

1. The NM Public Education Department should promulgate a regulation requiring a standardized orientation day for all mid-high and high school students to include information and sources of help and support at each school, to help prevent suicide, and develop a teacher refresher module on school-based resources for student counseling and assistance. In addition, School Safety Plans should include information on how to appropriately respond to the suicide of a student or staff member.
2. The Human Services Department, the Behavioral Health Collaborative, and private insurance companies should increase the availability of behavioral health screening and treatment services for adolescents² by increasing compensation to providers offering these services.
3. The NM Board of Social Worker Examiners should require completion of two hours of education in suicide prevention for NM licensure.

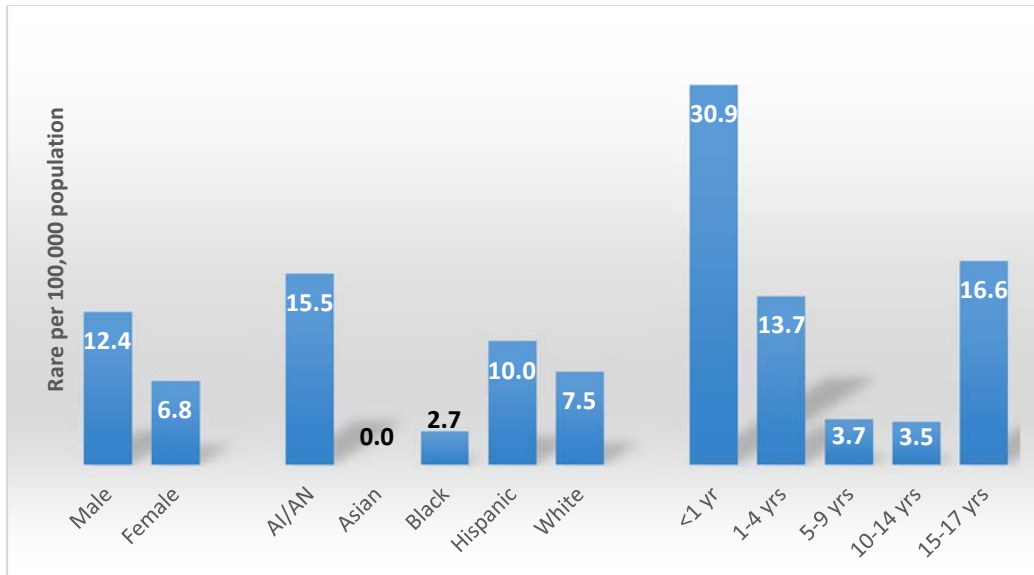
² National Research Council and Institute of Medicine. (2009). Preventing Mental, Emotional and Behavioral Disorders among Young People: Progress and Possibilities. Committee on Prevention of Mental Disorders and Substance Abuse among Children, Youth and Young Adults.

Unintentional Injury

Commonly referred to as “accidents”, unintentional injuries are the leading cause of death for children after their first birthday. Motor vehicle crashes, suffocation, drowning and poisoning were the leading causes of unintentional injury death among New Mexico children during 2011-2013. There were 151 unintentional injury deaths among children during this period. The unintentional injury death rate in New Mexico was 9.6/ 100,000 population during 2011-2013, and the rate was 25% higher than the U.S. rate (7.7/100,000).

Male children accounted for 65.6% of the 151 child unintentional injury deaths, resulting in a rate that was 1.8 times higher than the rate for females during 2011-2013 (Figure 6). The majority of the children who died from an unintentional injury were Hispanic (58%), but the highest rate of unintentional injury death was among American Indian children (15.5/100,000), twice the rate of any other racial/ethnic group. Child unintentional injury deaths were highest among infants (30.9/100,000). Children aged 15-17 years had the second highest unintentional injury death rate (16.6/100,000).

**Figure 6. Unintentional Injury Deaths by Sex, Race/Ethnicity and Age
New Mexico, 2011-2013**



Motor vehicle traffic injury (56%) was the leading cause of unintentional injury death for children aged >1 year. Motor vehicle non-traffic injury, drowning and poisoning were other leading causes of unintentional injury death among children aged >1 year. Suffocation (89%) was the leading cause of unintentional injury death among infants.

Rates of child unintentional injury deaths fell from a high of 15.4 per 100,000 in 2004 to 6.7 per 100,000 in 2013, a 57% decline. Changes in unintentional injury death rates over time were not uniform across child age groups. Rates for children aged <5 years remained flat from 2006

through 2010, then increased in 2011 before declining 44% from 2011 through 2013, whereas rates of unintentional injury death for children aged 5-14 years decreased 70% from 2004 through 2013. Appendix 1 contains a table of safety standards for prevention of child deaths and examples of violations of these standards.

Transportation

Key Findings

1. Motor vehicle traffic deaths were the leading cause of unintentional injury death among children aged 1-17 years.
 2. Children who died in motor vehicle traffic deaths were most commonly occupants in passenger cars, trucks, or vans (70%) or pedestrians (17%).
 3. Motor vehicle traffic deaths among children have decreased nationally and in New Mexico, with the state rate decreasing at a steeper rate. In New Mexico the sharpest decline was among children aged 15-17 years.
 4. The motor vehicle traffic death rate was highest among American Indian children.
 5. Reckless driving, speeding over the legal limit, and drug and alcohol use were most frequently reported as contributing causes of child motor vehicle traffic deaths.
 6. In the 44 reviewed deaths of children who were killed as occupants in cars/trucks/vans, 22 (50.0%) were not using safety restraints, i.e. seatbelt, shoulder belt or child car seat.
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Vital Records Data on Motor Vehicle Traffic Deaths

Motor vehicle traffic deaths accounted for 46% of all unintentional injury deaths among children. From 2011-2013, 70 children died as a result of motor vehicle traffic injuries (Table 3). Nine of the 38 car occupant deaths were teen drivers aged 15 to 17 years and one truck or van occupant death was a teen driver.

Table 3. Motor Vehicle Traffic Deaths, NM, 2011-2013

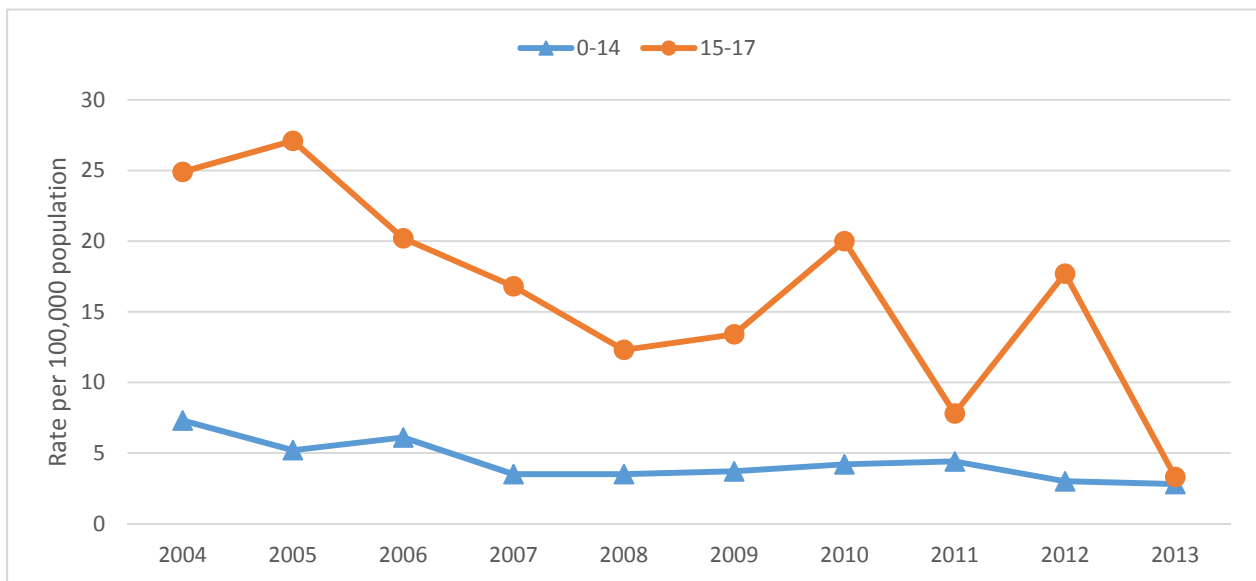
Motor vehicle traffic	Deaths	Percent	Rate
Occupant injured - car	38	54%	2.4
Occupant injured - truck/van	11	16%	0.7
Pedestrian injured	12	17%	0.8
Motorcyclist injured	1	1%	0.1
Other land transport	3	4%	0.2
Other and unspecified	5	7%	0.3
<i>Total</i>	<i>70</i>	<i>100%</i>	<i>4.5</i>

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Children who died were most commonly occupants in passenger cars (54%). Pedestrian deaths accounted for 17% of all motor vehicle-traffic related deaths among children. Children aged 1-4 years accounted for 67% of the pedestrian deaths and 67% of the pedestrian deaths were male. Demographic analyses of child deaths due to a motor vehicle traffic (MVT) injury revealed that, as in other causes of unintentional injury deaths, more boys than girls died in MVT crashes. For deaths occurring from 2011-2013, the MVT injury death rate for boys (5.0 per 100,000) was 30% higher than the rate for girls (3.9 per 100,000). During 2011-2013, American Indians had the highest MVT injury death rate (7.5 per 100,000) in New Mexico. Hispanics had the second highest MVT injury death rate (5.2/100,000) and Whites had a MVT injury death rate of 2.4/100,000. Hispanic children comprised 66% of the MVT fatalities, a disproportionate burden given the proportion of Hispanic children in the population (56%). Teens aged 15-17 years had the highest MVT death rate (9.6/100,000) and children aged 1-4 years had the second highest rate (7.2/100,000).

The rate of child MVT deaths in New Mexico declined 72% to 2.9 deaths per 100,000 in 2013 from a high of 10.3 per 100,000 in 2004. As seen in Figure 7, this decline was particularly noticeable among children aged 15-17 years. The rate of motor vehicle traffic deaths for this age group dropped 87%, from 24.9 per 100,000 in 2004 to 3.3 per 100,000 in 2013.

Figure 7. Motor Vehicle Traffic Deaths by Age Group, NM, 2004-2013



Transportation Panel Review Summary

The Transportation Panel reviewed 54 deaths of children who died of a motor vehicle related incident that occurred in 2011-2013. These included motor vehicle traffic as well as motor vehicle non-traffic deaths (motor-vehicle-related crash deaths that occur entirely at any place

other than a public highway). The panel determined that 53 (98.2%) of these deaths could have been prevented.

**Table 4. Risk Factors Contributing to Motor Vehicle Traffic and Non-Traffic Deaths
New Mexico, 2011-2013**

Risk Factors*	# Deaths	Percent	# Child Driver Deaths (n=7)	Percent
Reckless Driving	20	37.0	4	57.1
Speeding	20	37.0	1	14.3
Drug or Alcohol Use	14	25.9	0	0.0
Driver Inexperience	7	13.0	1	14.3
Driver Distraction	4	7.4	0	0.0
Driver Fatigue	4	7.4	0	0.0

*Risk factor categories are not mutually exclusive; a death may be represented in more than 1 category.

The panel found that certain risk factors contributed to these transportation deaths. Speeding, recklessness, drug and alcohol use were most frequently reported as the contributing causes in the transportation incidents resulting in child deaths. Recklessness was the most often cited factor in those deaths in which the child was the driver (Table 4).

The panel found that the failure to use safety restraints may have contributed to the severity of injuries that resulted in death. According to the 2013 New Mexico Occupant Seat Belt Observation Study Report, the state's seatbelt usage rate was 92% (92% for drivers and 91% for passengers). While the state's seat belt usage rate (91%) in 2012 was above the U.S. rate of 86%, over 44.4% of children who were killed as drivers or passengers in cars/trucks/vans were not using a shoulder belt (Table 5).

Table 5. Shoulder Belt Usage in Motor Vehicle Traffic Deaths, 2011-2013

Protective measures – <i>Shoulder belt</i>	# Deaths	Percent
Needed, but none present	2	3.7
Present, used correctly	3	5.6
Present, used incorrectly	0	0.0
Present, not used	22	40.7
Not needed (e.g. infant/child car seat)	13	24.1
Data Missing	14	25.9
<i>Total</i>	<i>54</i>	<i>100</i>

Transportation Panel Recommendations

1. New Mexico law enforcement agencies should increase enforcement of traffic laws, especially laws requiring use of adult and child occupant restraints.
2. The New Mexico Department of Transportation should expand the use of evidence-based prevention programs that educate youth about the dangers of distracted driving, driving under the influence of alcohol or drugs, or being the passenger in a vehicle driven by a driver under the influence of alcohol or drugs.

Drowning

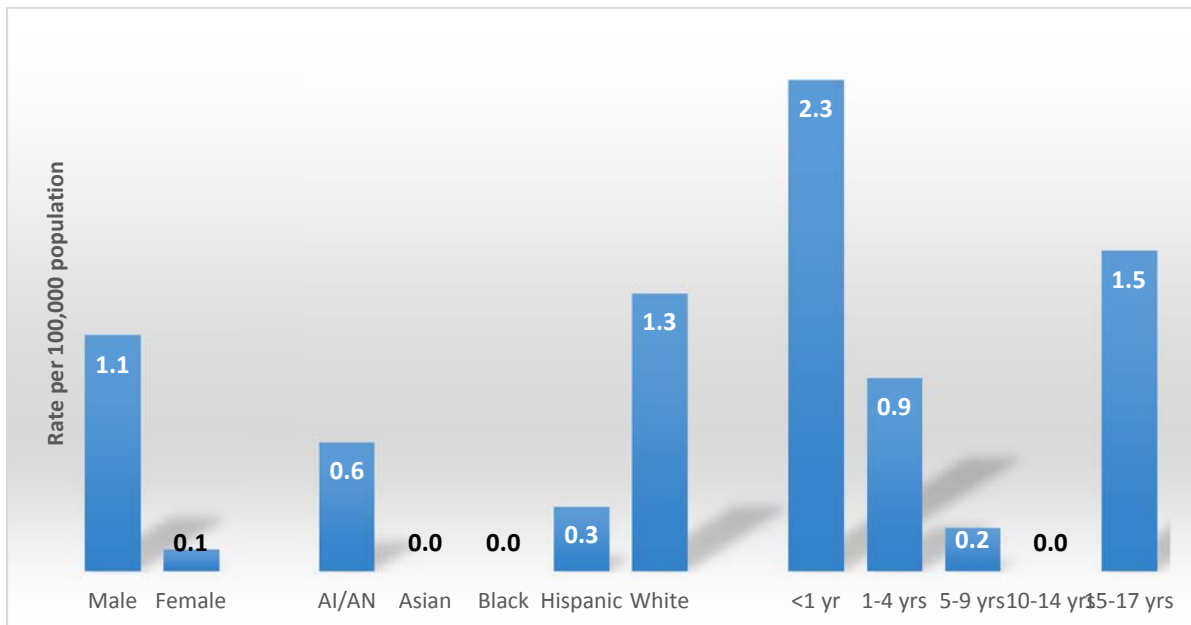
Key Findings

- Ten New Mexico children died from unintentional drowning during 2011-2013.
- Rates of drowning were highest among males and among infants.

Vital Records Data on Drowning Deaths

From 2011-2013 ten children died from unintentional drowning in New Mexico. Nine of the child drowning deaths occurred among boys, resulting in a drowning rate 11 times higher than that of females (Figure 8). White children comprised 60% of the drowning victims, and their rate was higher than the rate among American Indians and Hispanics.

Figure 8. Drowning Death by Sex, Race/Ethnicity and Age Group, NM, 2011-2013



Half of the drowning deaths during 2011-2013 were among children aged < 5 years. The highest rate of drowning death occurred among infants (2.3/100,000). Teenagers aged 15-17 years had the second highest drowning death rate (1.5/100,000).

The child drowning rate in NM was below the U.S. rate during 2011-2013, while the U.S. rate has remained relatively stable at 1.2 per 100,000 from 2007 through 2012.

Table 6. Drowning Death by Place of Occurrence, NM, 2011-2013

Place of Occurrence	# deaths	Percent
Bathtub	3	30
Swimming Pool	1	10
Natural water	4	40
Other	2	20
<i>Total</i>	<i>10</i>	<i>100</i>

During 2011-2013, 40% of New Mexico child drowning deaths occurred in natural bodies of water (Table 6). The drowning locations varied by age. Younger children were more likely to drown in bathtubs and swimming pools while older children were more likely to drown in natural bodies of water (lakes, rivers, etc.).

Poisoning

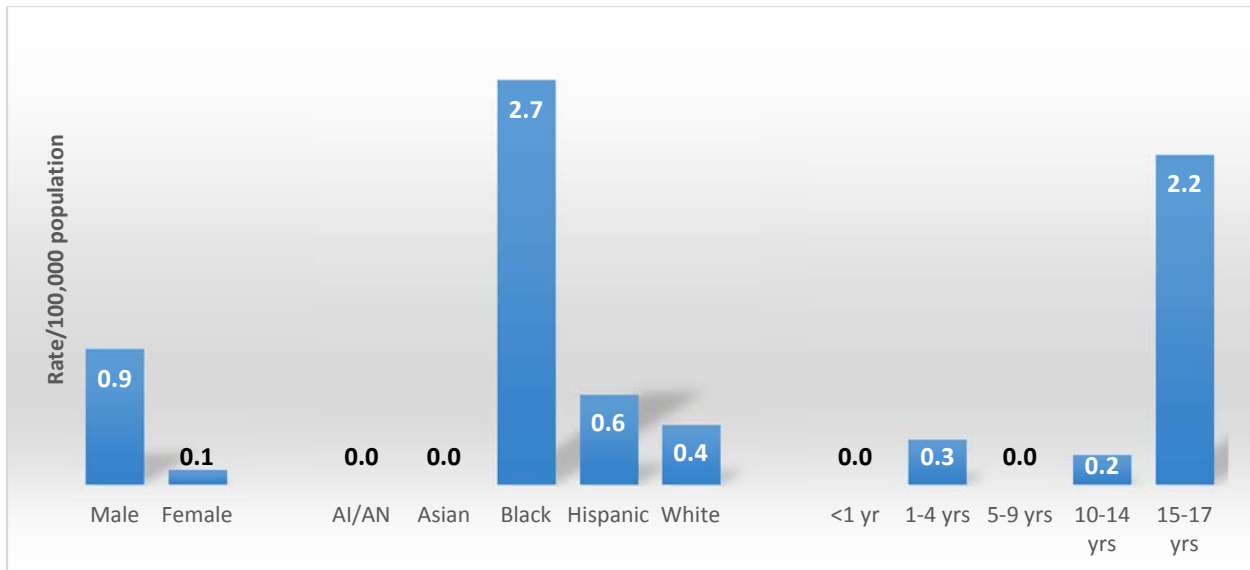
Key Findings

- Eight children, aged 0-17 years, died from unintentional poisoning.
 - The majority of unintentional poisoning deaths among children aged 15-17 years were due to prescription, over-the-counter, or illegal drugs.
 - Four of the children overdosed using prescription opioids.
-

Vital Records Data on Poisoning Deaths

From 2011-2013 eight children died from unintentional poisoning in New Mexico, resulting in a death rate of 0.5 per 100,000. The poisoning death rate among males was 9 times higher than the rate among females (Figure 9). Boys accounted for 88% of the unintentional poisoning deaths. The majority of the children who died during 2011-2013 from unintentional poisoning were Hispanic (63%), but the highest rate of death was found among African-American children (2.7 per 100,000). All but two of the child unintentional poisoning deaths during 2011-2013 occurred among children aged 15-17 years.

Figure 9. Poisoning Death by Sex, Race/Ethnicity and Age Group, NM, 2011-2013



Child poisoning death trends show that the peak years occurred during 2009 and 2010, with 11 and 9 deaths respectively. The poisoning death rate was 2.1/10,000 in 2009 and 0.4/100,000 in 2013. The New Mexico child poisoning death rate was over 4 times the U.S. rate in 2009, 2 times the U.S. rate in 2012 and 15% less than the U.S. rate in 2013.

The Unintentional Injury Panel reviewed 9 poisoning deaths among children who died during 2011-2013. Prescription opioid pain killers accounted for 4 (44%) of the deaths, other cleaning agents (not bleach, drain cleaner, alkaline-based cleaner, or solvent) accounted for one death and multiple substance types (combination of substances, e.g., alcohol and opioids) accounted for 4 of the deaths. The panel determined that all nine of the child poisoning deaths reviewed could have been prevented.

Suffocation

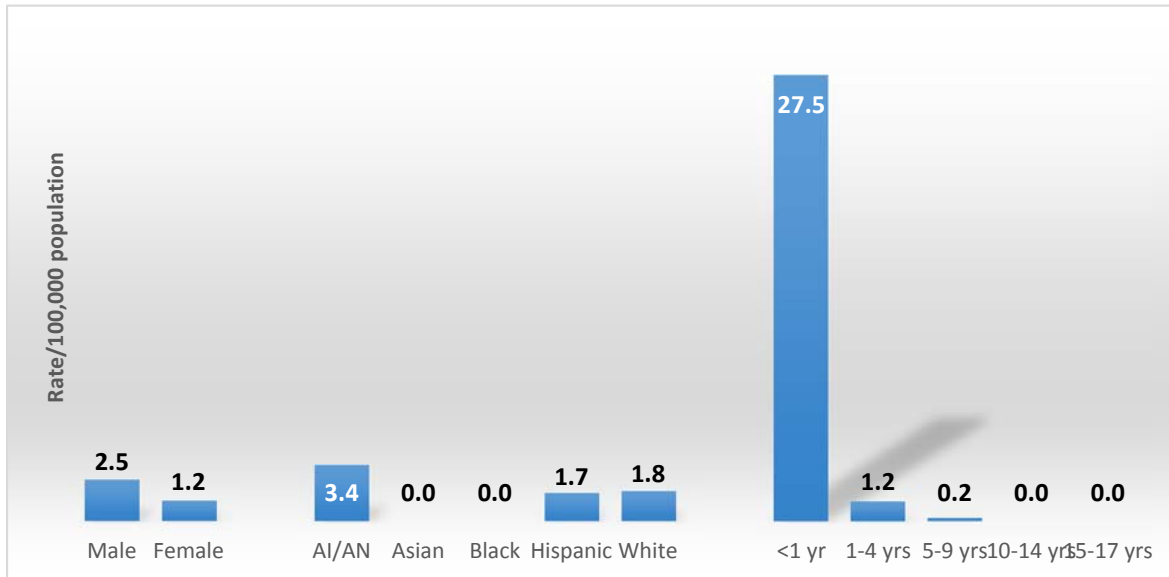
Key Findings

- 29 children, aged 0-17 years, died from unintentional suffocation.
- The majority of unintentional suffocation deaths occurred among infants.
- Two-thirds of the suffocation deaths among infants were accidental suffocation and strangulation in bed.

Vital Records Data on Suffocation Deaths

From 2011-2013, 29 children died from unintentional suffocation in New Mexico, resulting in a death rate of 1.8 per 100,000. Infants accounted for 83% of the suffocation deaths. The suffocation death rate among males was 2.1 times higher than the rate among females (Figure 10). Boys accounted for 69% of the unintentional suffocation deaths. The majority of the children who died during 2011-2013 from unintentional suffocation were Hispanic (52%), but the highest rate of death was found among American Indian children (3.4 per 100,000).

Figure 10. Suffocation Death by Sex, Race/Ethnicity and Age Group, NM, 2011-2013



Accidental suffocation and strangulation (ASSB) in bed accounted for two-thirds of the 24 infant suffocation deaths. ASSB is one component of sudden unexpected infant death (SUID), which is addressed in the next section. The remaining 8 infant suffocation deaths were “unspecified threat to breathing”.

Unintentional Injury Panel Recommendations

1. The Drug Enforcement Administration, New Mexico State Police, local law enforcement agencies, the New Mexico Board of Pharmacy and the New Mexico Department of Health should increase both public awareness of the need to safely dispose of unused or expired prescription medication and opportunities for safe disposal of prescription drugs to reduce risks of accidental poisoning or diversion³.

³ Lubick, N. (2010) Drugs in the Environment: Do Pharmaceutical Take-Back Programs Make a Difference? Environmental Health Perspectives. 118.5, A210-A214.

2. The Human Services Department, the Behavioral Health Collaborative, and private insurance companies should increase the availability of behavioral health and addiction treatment services for adolescent substance users⁴.

Sudden Unexpected Infant Death

Key Findings

- The Broader Spectrum/Sudden Unexpected Infant Death Panel (SUID) reviewed 66 deaths.
 - Approximately 5% of these deaths were labeled as natural in manner, 53% as undetermined and 42% as unintentional injury.
 - A significant percentage of the deaths (85%) were infants aged < 6 months. Males accounted for 67% of the deaths reviewed.
 - 53% of the infants were found lying on their backs.
 - 58% of the sleep-related deaths occurred when the infant was sleeping on an adult bed; 23% of the infants were sleeping in a crib or bassinette.
-

Sudden Unexpected Infant Deaths (SUID) Panel

The Broader Spectrum Panel reviewed 66 Sudden Unexpected Infant Deaths (SUID) of children who died during 2011-2013. SUID is defined as those infant deaths whose cause and manner of death are not immediately obvious before investigation and are referred to the medical examiner for investigation. All but one of these deaths were related to sleeping or the sleep environment.

Approximately 5% (n=3) of these deaths were classified as natural in manner, 53% (n=35) as undetermined, and 42% (n=28) as unintentional by the New Mexico Office of the Medical Investigator (OMI). Approximately 42% (n=28) of the SUID deaths were labeled as accidental asphyxia. Five percent (n=3) of the infant deaths reviewed were classified as Sudden Infant Death Syndrome (SIDS), which is defined as the “sudden death of an infant that cannot be explained after a thorough investigation is conducted, including a complete autopsy, examination of the death scene and review of clinical history”. Nationally and in New Mexico, there has been a decline in deaths classified as SIDS over the past ten years. This decline does not necessarily mean fewer infant deaths. As more is now understood about infant deaths, this decline may simply represent a shift in classification.

A high percentage of the deaths (85%) were infants aged < 6 months. Males accounted for 67% (n=44) of the deaths reviewed. Approximately 41% (n=27) of the reviewed deaths were

⁴ National Research Council and Institute of Medicine. (2009). Preventing Mental, Emotional and Behavioral Disorders among Young People: Progress and Possibilities. Committee on Prevention of Mental Disorders and Substance Abuse among Children, Youth and Young Adults. 197-232.

Hispanic, 33% (n=22) were White, 20% (n=13) were American Indian/Alaskan Native and 5% (n=3) were Black. One was of multiple race.

Approximately 53% (n=35) of the infants were found lying on their backs, one of the principal safe sleep strategies recommended by the American Academy of Pediatrics (AAP). However, there were major risk factors for suffocation and sleep-related deaths present, including blankets, pillows, objects and/or other people in the sleeping area; 58% (n=38) were sleeping in an adult bed at the time of the death or the incident that resulted in the death (Table 7).

Table 7. SUID- Incident Sleep Location, NM, 2011-2013

Incident Sleep Place	# deaths	Percent
Crib	9	13.9
Bassinette	6	9.2
Adult bed	38	58.4
Couch	7	10.8
Other	5	7.7
<i>Total</i>	<i>65</i>	<i>100</i>

Sudden, Unexpected Infant Deaths (SUID) Panel Recommendations:

1. The Department of Health should inventory New Mexico birthing hospitals to identify those with and without safe sleep policies for newborns, both those in the same room with mothers and those in newborn nurseries.
2. The Office of Injury Prevention should produce an Epidemiology Report on the number of SUID deaths and include data on birthing hospital safe sleep policies.
3. The Office of Injury Prevention, the Family Health Bureau and the New Mexico Pediatric Society should conduct outreach to both hospitals and neonatal providers to educate them about safe infant sleep, to distribute sample hospital safe sleep policies, and to provide technical assistance for the implementation of hospital safe sleep programs.
4. The Office of Injury Prevention should partner with the New Mexico Chapter of the March of Dimes to increase public awareness of infant safe sleep recommendations by providing printed materials or short educational sessions at WIC clinics, car seat clinics, daycare centers, schools, senior centers, and community centers.

Conclusion

The goal of the child death review process is to understand how children are dying in New Mexico and to make recommendations for program, system and policy improvements to prevent future child injuries and deaths. With information garnered from the reviews, the panels

determined that many of these deaths could have been prevented and made recommendations for preventive measures.

The Epidemiology and Response Division of the New Mexico Department of Health will continue to collect, analyze and disseminate information about child deaths and injuries in various publications and studies. The Child Death Review program will monitor progress on implementation of recommendations and other initiatives to reduce child deaths. It will also continue to collaborate with various state agencies and other organizations to help reduce the number of child deaths through prevention, risk reduction, identification of protective factors, and system improvements.

Acknowledgments

The New Mexico Department of Health wishes to acknowledge and express appreciation to the members of the Broader Spectrum/SUID Panel, Child Abuse and Neglect Panel, Suicide Panel, and the Transportation Panel who contributed their time and expertise to reduce the incidence and severity of child injury in New Mexico. Appreciation is also extended to the New Mexico Office of Medical Investigator, the New Mexico Bureau of Vital Records and Health Statistics, and the New Mexico's Indicator-Based Information System (NM-IBIS) for death data used in the CFR reviews and in this report.

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2014 New Mexico Child Fatality Review

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Safety Standards for Prevention of Child Deaths

Child Safety Standards	Examples of Violations
Children should be provided with appropriate food, shelter, and medical care	Discarding a newborn in the garbage; 1-year-old choking on 1-inch piece of hot dog
Children should be free from physical abuse	Death caused by shaking or blunt trauma to head or abdomen
Children should be supervised by a responsible care provider	Leaving a child unattended near a pool or street, or alone at home
Children should be supervised by persons unimpaired by alcohol or drugs	Bathing a child while under the influence of drugs or alcohol
Children should not be subjected to unlawful behavior	Riding in a motor vehicle driven by an unlicensed person; a drive-by shooting
Children should be appropriately restrained or protected when riding in or on a vehicle	Riding on a bicycle without a helmet or in a boat without a flotation device
Firearms, poisons, and other hazardous materials should be kept away from children	Unintentionally shooting oneself or being shot by another child using an accessible firearm
Children should be protected by a working smoke detector	Death as a result of smoke inhalation from a fire in a home that lacks a working smoke detector
Toys, play equipment, home appliances, and municipal sites should meet accepted safety standards	Death involving a bike without brakes; carbon monoxide poisoning as a result of faulty heater
Children should have a safe sleeping environment	Suffocation by overlying of an adult, being placed on soft bedding, or as a result of being caught between mattress and wall

Landen, M. G., Bauer, U., & Kohn, M. (2003). Inadequate supervision as a cause of injury deaths among young children in Alaska and Louisiana. *Pediatrics*, *111*(2), 328-331.