New Mexico Child Death Review

Annual Report 2011

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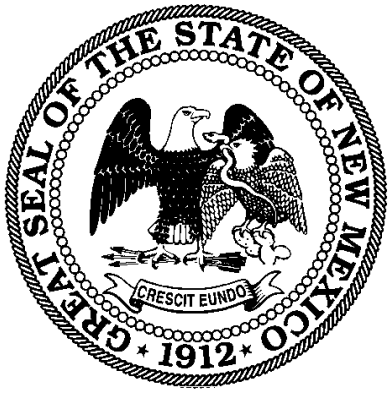
New Mexico Department of Health
Epidemiology and Response Division
Office of Injury Prevention



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Executive Summary

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

This report presents information and recommendations from the comprehensive and confidential reviews of child deaths by a multi-disciplinary group of professionals. Death certificate data, provided by the New Mexico Bureau of Vital Records and Health Statistics (NMBVRHS), were used to complete the epidemiologic analysis of child death in New Mexico. The report focuses on deaths of New Mexico residents under 18 years of age who died between 2008 and 2010.

Key Recommendations

The Child Death Review team in New Mexico is comprised of four panels that review cases and make recommendations in the areas of child abuse and neglect, transportation, suicide and the broader spectrum of unintentional injury. With information garnered in the reviews, the panels determined that many of these deaths could have been prevented and have made recommendations for preventive measures. The prevention recommendations, which were either evidence based or considered promising, were presented to the NMCFR Advisory Board in October, 2011. Highlights of evidence based recommendations include the following:

- Increase funding for home visiting program models that have been demonstrated to be effective, to serve more families and provide education about Safe Sleep, Never Shake a Baby, and child abuse.
- Support restricting children's access to firearms by use of safe gun storage practices.
- Increase the cost of alcohol, which is a recognized factor in a substantial number of injuries.
- Strengthen New Mexico's Graduated Driver License law by starting nighttime driving restrictions earlier.

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 less than 18 years of age. The NMCFR staff supplements OMI mortality data with reports from other appropriate 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 develop formal recommendations for presentation to the NMCFR Advisory Board. The Board, which is comprised of chairs of the CFR panels, agency leaders, policymakers, and representatives from various organizations and professions, reviews the recommendations and adopts some or all for use by policymakers and agencies.

Note: The CFR review teams use 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 that 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 Statistics to complete the analysis of child mortality.

Population Characteristics

In New Mexico, children under 18 years of age made up a quarter of the state's population in 2010. There were slightly more male children (51%) than female children (49%). The 10-14 year age group made up 31% of the population of children. The 1-4 and 15-17 year age groups each constituted 20% and infants made up 5%.

According to the Bureau of Business and Economic Research, 95% of New Mexico's population of children younger than 18 years of age, were classified as Hispanic, White, or American Indian in 2010. Hispanics made up the largest percentage of children (49%), followed by Whites (31%), and American Indians (15%). Blacks, Asians, and others comprised 5% of children.

Note: The New Mexico Department of Health combines race and ethnicity for reporting purposes. 'Hispanic' refers to Hispanic Whites and does not include Hispanics of Black, American Indian or Asian populations and 'White' refers to Non-Hispanic Whites. 'American Indian' refers to the American Indian/Alaska Native population.

Total Deaths

During 2008-2010, there were 874 deaths of New Mexico children aged 0-17 years. Males had a higher overall death rate (63.7 deaths per 100,000 population) than females (48.9 deaths per 100,000 population). The largest percentage of deaths, (52%) was among children younger than one year of age with an infant mortality rate of 562.2 per 100,000 population. American Indians had the highest child fatality rate at 74.6 per 100,000 population, followed by Hispanic children (60.3) and White children (40.8). There were 32 child deaths among Blacks and 10 child deaths among Asians.

Injury, whether intentional or unintentional, caused a third of all child deaths in New Mexico. Natural deaths accounted for 67% of the child deaths, with most being among children under one year of age. Among children 1-17 years of age, injury caused 61% of all deaths.

The following chart shows the five most common causes of death among children. (Figure 1) Unintentional injury was the leading cause of death of children older than one and the third leading cause of death for infants. Suicide was the second leading cause of death for children 10-17 years of age. Homicide was the second leading cause of death for children 1-4 years of age and the third leading cause for children 15-17 years of age.

Figure 1. Leading Causes of Child Death by Age Group, NM, 2008-2010

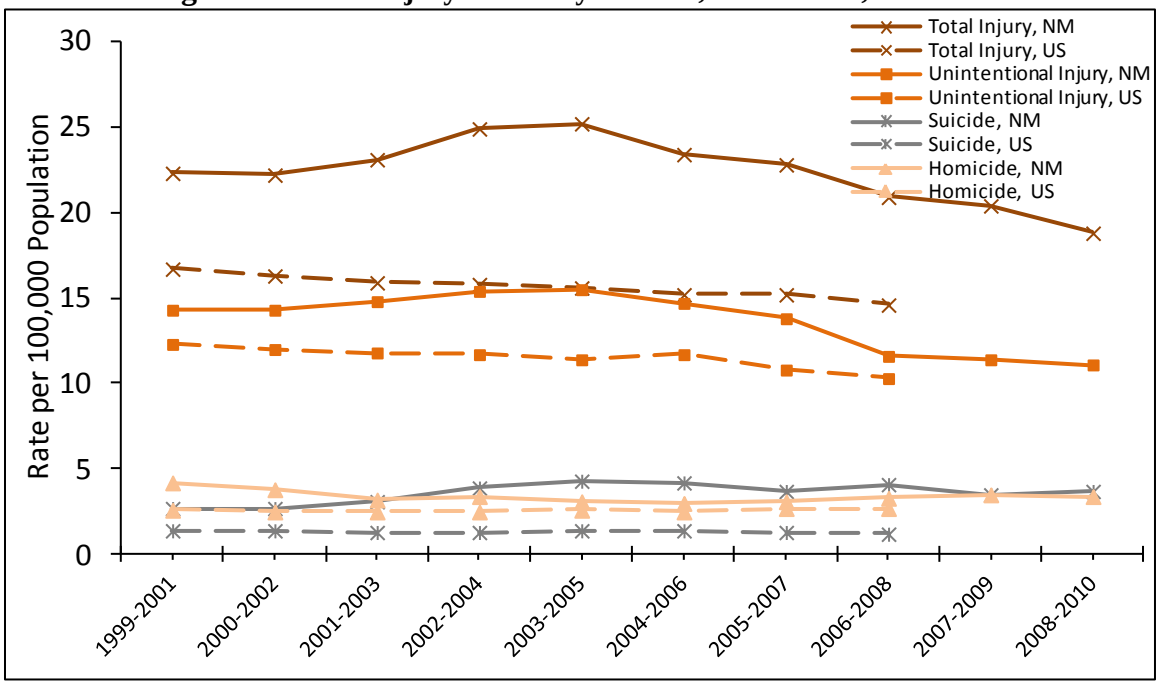
Rank	Age Group				
	0 (N=454, 52%)	**1-4 (N=118, 14%)**	**5-9 (N=50, 6%)**	**10-14 (N=80, 9%)**	**15-17 (N=172, 20%)**
1	Conditions originating in the perinatal period (N=187, 41%)	Unintentional injuries (N=46, 39%)	Unintentional injuries (N=14, 28%)	Unintentional injuries (N=24, 30%)	Unintentional injuries (N=68, 40%)
2	Congenital malformation, deformation, and chromosomal abnormalities (N=112, 25%)	Homicide (N=12, 18%)	Neoplasm, malignant (N=8, 16%)	Suicide (N=12, 15%)	Suicide (N=44, 26%)
3	Undetermined/Other (N=96, 21%)	Congenital malformation, deformation, and chromosomal abnormalities (N=12,10%)	Respiratory, Influenza and pneumonia (N=4, 8%)	Neoplasm, malignant (N=9, 11%)	Homicide (N=22, 13%)
4	Homicide (N=10, 2%)	Neoplasm, malignant (N=7, 7%)	Homicide (N=3, 6%)	Homicide (N=6, 9%)	Neoplasm, malignant (N=8, 5%)
5	Respiratory, influenza and pneumonia (N=8, 1%)	Respiratory, Influenza and pneumonia (N=5, 4%)	Congenital malformation, deformation, and chromosomal abnormalities (N=3, 6%)	Congenital malformation, deformation, and chromosomal abnormalities (N=6, 9%)	Respiratory, Influenza and pneumonia (N=3, 2%)

Injury Deaths

Trend data for 1999-2010 indicate that the child injury death rate in New Mexico has remained consistently higher than the national rate over the past twelve years. (Figure 2) In 2006-2008, the injury death rate for the state was 22.8 per 100,000 population, approximately 1.5 times higher than the national rate of 15.2 per 100,000 population during the same time period. Differences between state and national rates were due to the higher rates of unintentional injury and suicide among children in New Mexico.

In New Mexico, the burden of child injury has consistently and disproportionately fallen on American Indian and Hispanic children. In 2008-2010, injury death rates among children were three times higher among American Indians and one and a half times higher among Hispanics than among Whites.

Figure 2. Child Injury Deaths by Manner, NM and US, 1999-2010



Homicide

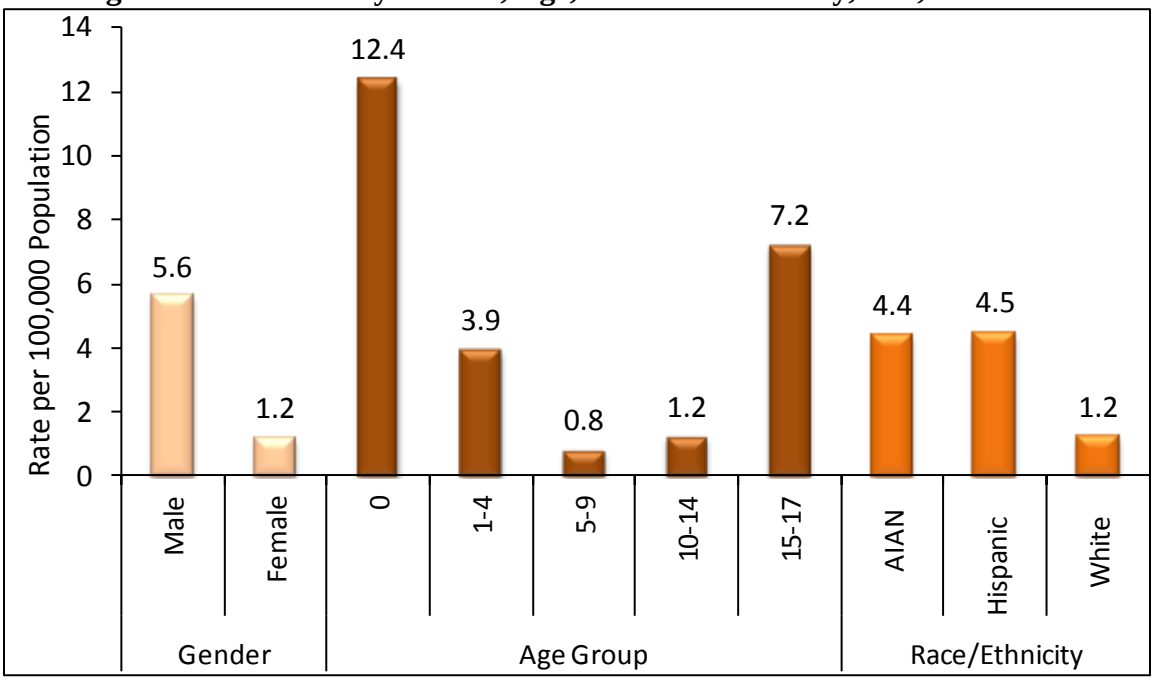
Key Findings

1. There were 53 child homicides and the majority of victims were male.
2. Infants had a significantly higher rate than did older children, and American Indian and Hispanic children had a higher rate than White children.
3. A firearm was used in 43% of child homicides.
4. Biological parents caused the majority of the child abuse deaths among the 20 homicides of children under six years of age that were reviewed.
5. Biological parents who were identified as perpetrators ranged in age from 18-28 years and the majority were female.
6. Seven of the thirteen infants who died had a retinal hemorrhage, a characteristic sign of shaken baby syndrome.

Overall Summary of Vital Records Data on Homicide

During 2008-2010, 53 children died from homicide. (Figure 3) Approximately 83% of the victims were male. At 12.4 deaths per 100,000 population, infants (children under one year old) had a significantly higher homicide rate than children in other age groups. Among infants, males had a slightly higher rate than females. American Indian and Hispanic children had higher rates of homicide than White children. Firearm was the mechanism for 43% of the homicides.

Figure 3. Homicide by Gender, Age, and Race/Ethnicity, NM, 2008-2010



Child Abuse and Neglect Panel Review Summary

The Child Abuse and Neglect (CAN) Panel reviewed 20 homicides of children five years of age and younger that were committed by their parent, family member or supervisor. Approximately 65% (N=13) of these deaths were among infants and 50% were Hispanic. The panel determined that 75% (N=15) of these infant 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).

The reviews showed that a primary caregiver was responsible for 55% (N=11) of the deaths and 90% of these caregivers were biological parents who ranged in age from 18-28 years of age. Six of the eleven parents were females and three were known to have had a history of substance abuse.

Eight of the deaths that were reviewed were found to have had a history of being a victim of maltreatment, either physical abuse or neglect. Seven of the thirteen infants had a retinal hemorrhage on autopsy, a characteristic of being shaken. The panel found that the inability of inexperienced caregivers to deal appropriately with a crying child and lack of knowledge of normal child development may have contributed to the caregivers' abusive behavior.

Child Abuse and Neglect Panel Review Recommendations

- ❖ Increase funding for home visiting program models that have been demonstrated to be effective in order to serve more families and provide education about Safe Sleep and Never Shake a Baby.
- Increase the knowledge of medical providers on recognition and reporting of child abuse and neglect yearly with enhanced education and training.
- Provide education about Safe Sleep and Never Shake a Baby during prenatal visits.
- Include educational information on child abuse and neglect for use in clinical settings in reports.
- Ensure that child abuse prevention campaigns are culturally competent and broad-based and that they are distributed at locations such as local markets, churches, healthcare facilities and schools.
- Include youth education on the basics of early childhood development, "Safe Sleep", "Never Shake a Baby" and domestic violence prevention as part of health education classes in schools and other venues such as GED classes and juvenile justice facilities.
- Conduct a campaign using media, announcements at movies, local church bulletins, public service announcements, etc. to remind parents of the dangers of leaving a child in a vehicle during warm weather.

❖ Indicates an evidence-based recommendation.

Suicide

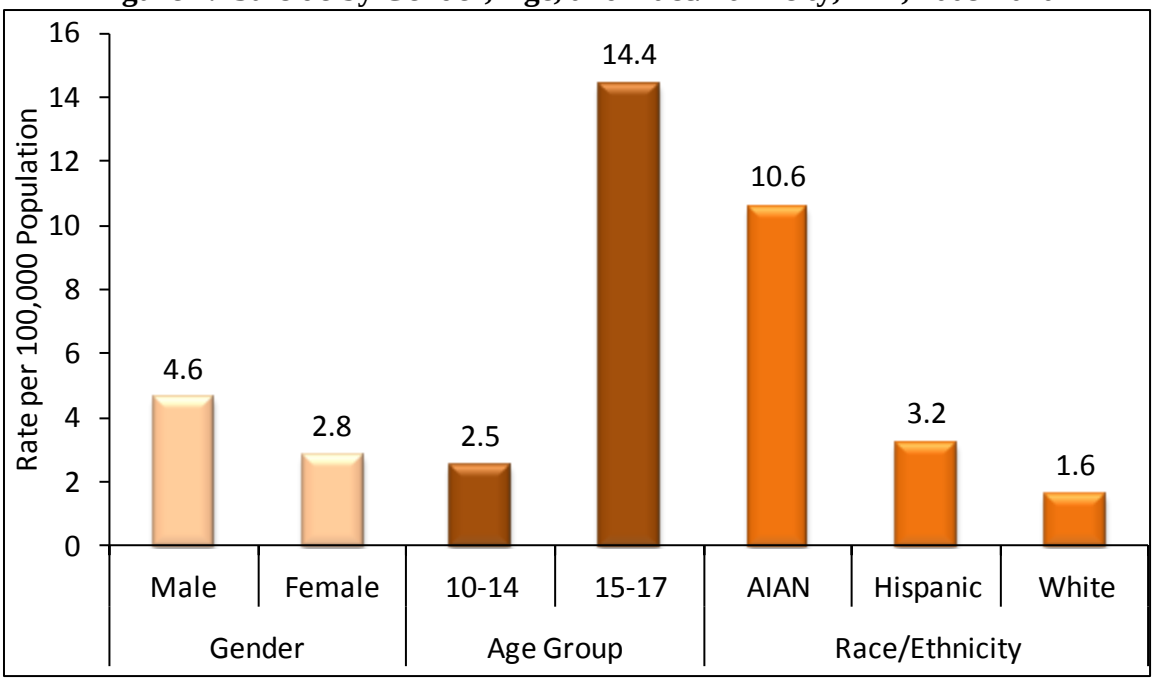
Key Findings

1. Suicide rates among American Indian females increased almost five fold from 4.1 per 100,000 population in 1999-2001 to 19.7 per 100,000 population in 2008-2010.
2. Suffocation was the leading mechanism of suicide among American Indian children and accounted for 83% of suicides in this population.
3. Firearms were not used in any of the American Indian suicides, yet they were the leading mechanism of suicide among Hispanic children and accounted for 58% of the suicides in this group.
4. Over 50% of the 25 suicide cases that were reviewed by the Suicide Panel had documented behavior problems in school settings.
5. Over 30% of the cases reviewed had previously discussed suicide or threatened to commit suicide.
6. In eight cases there was documentation of a chronic mental condition that interfered with the child's daily functioning. These included depression, personality disorder and attention-deficit hyperactivity disorder (ADHD).

Overall Summary of Vital Records Data on Suicide

Suicide is the second leading cause of death in New Mexico for children 10-17 years of age. For the period of 2008-2010, 57 children died of suicide. The rate of 4.6 per 100,000 population for male children is almost twice the rate of 2.4 per 100,000 population for female children. Youth 15 through 17 years of age accounted for 69% of child suicides.

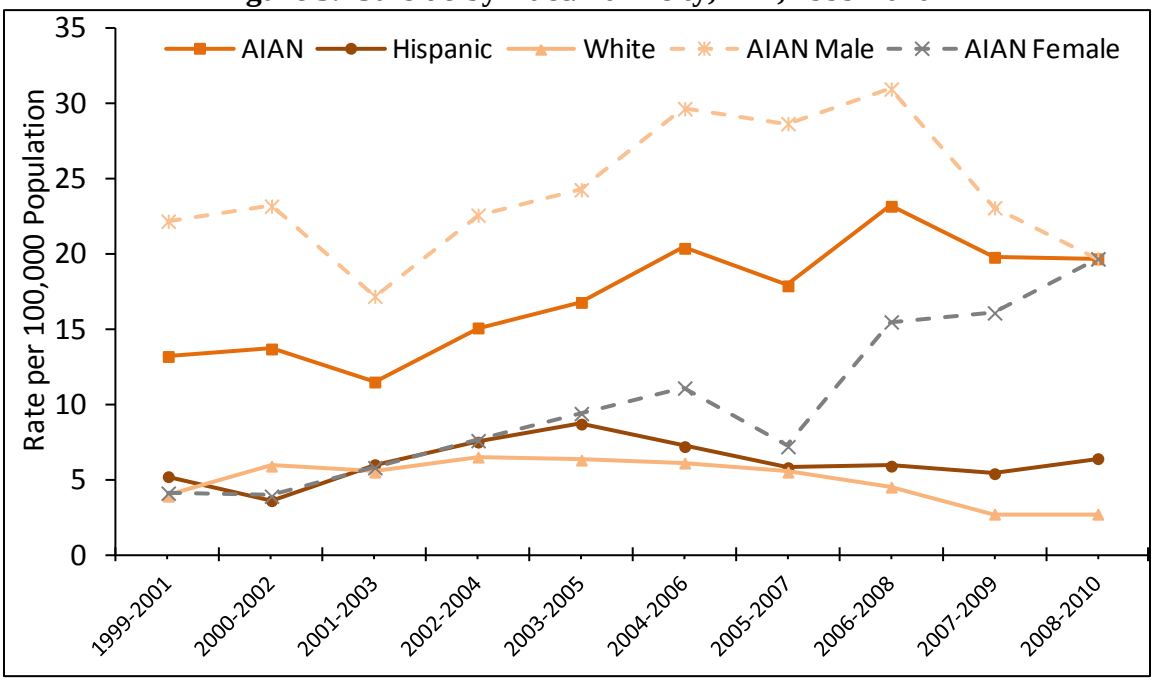
Figure 4. Suicide by Gender, Age, and Race/Ethnicity, NM, 2008-2010



Suicide rates have been consistently higher among American Indian children than among Hispanic and White children in New Mexico (Figure 5). Trend data reveal that there has been an increasing disparity in the child suicide rates between the American Indian population and other racial/ethnic groups in the past twelve years. In 1999-2001 American Indian suicide rates were two times higher than those for White children and three times higher than those for Hispanic children. In 2008-2010, suicide rates among American Indian children were almost three times higher than those among Hispanic children and five times higher than those among White children.

Equally concerning has been the rise in suicide rates among American Indian females over the past twelve years. Suicide rates for American Indian females have increased almost five times from 4.1 per 100,000 population in 1999-2001 to 19.7 per 100,000 population in 2008-2010. Unlike for other racial/ethnic groups, there was no statistically significant difference between male and female suicide rates among the American Indian population in 2008-2010.

Figure 5. Suicide by Race/Ethnicity, NM, 1999-2010



The leading mechanism of suicide was suffocation (61%), followed by firearm (24%), and then poisoning (6%), but this order varied by race/ethnicity. Suffocation was the leading mechanism of suicide among American Indian children and accounted for 83% of suicides among this group. Firearms were not used in any American Indian suicides, yet were the leading mechanism of suicide among Hispanic children, accounting for 58% of the deaths.

Suicide Panel Review Summary

The Suicide Panel reviewed 25 of the 57 child deaths that occurred in 2008-2010. Approximately 32% of the reviewed cases involved American Indians, 44% were Hispanic, 16%

were White and 8% were of unknown race/ethnicity. Approximately 56% were males and 80% were in the 15-17 age group. The youngest case reviewed was nine years old.

The panel found that eight cases had documentation of a chronic mental condition that interfered with the child's daily functioning. These problems included depression, personality disorder and attention-deficit hyperactivity disorder (ADHD). Of these deaths, four had a current prescription for a psychiatric medication or saw a mental health provider within two months of the incident. In four cases, the panel found that the victim had a documented history of self-mutilation. Seven decedents had talked about suicide and/or made prior threats to commit suicide.

The panel also reviewed evidence that indicated a history of acute or cumulative personal crises that may have contributed to the child's despondency. Approximately 20% (N=5) of cases reviewed noted arguments with parents as a precipitating factor for suicide. Another 20% had had a recent argument or breakup of a romantic relationship. Three children who committed suicide had a friend or relative who had recently committed suicide.

Approximately 64% (N=16) of the cases reviewed had documented problems in school; of these 70% had poor or declining academic performance. Behavioral problems, truancy and/ or suspension were also evident. Eight of the reviewed cases had documented history of delinquent and criminal actions, with time in juvenile detention.

Suicide Panel Recommendations

- ❖ Support restricting children's access to firearms, by use of safe gun storage practices.
- Establish a new middle school health education requirement separately from the current high school graduation requirement for health education.
- Investigate the possibility of requiring that injury prevention health education be made a part of the preparation of elementary school teachers.
- Provide Safe and Drug-Free School Program funding to compensate for the elimination of federal funding for this program in public schools.

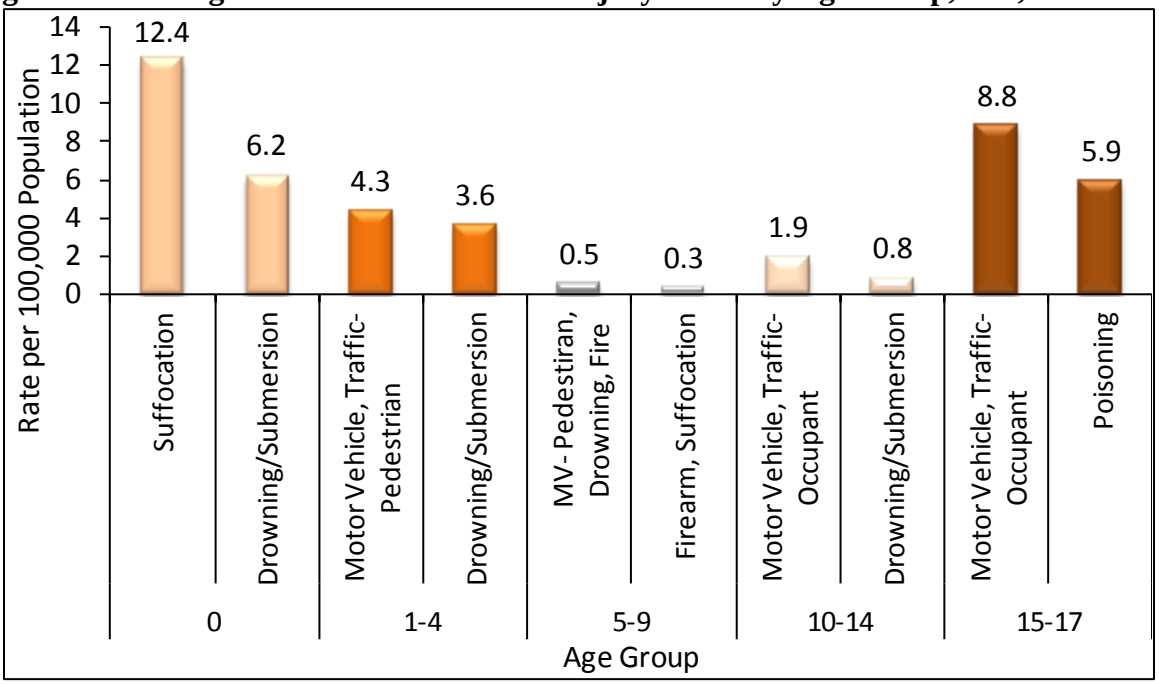
❖ Indicates an evidence-based recommendation.

Unintentional Injury

Unintentional injury was the leading cause of death among children 1-17 years of age in New Mexico in 2008-2010. It accounted for 172 child deaths in the three year period. The following charts show the top five leading causes of unintentional injury deaths among children in the three year period. Motor vehicle occupant injuries were the most common cause of child unintentional injury deaths in New Mexico and accounted for 31% of the deaths. Drowning, motor vehicle pedestrian, poisoning and suffocation deaths were other major causes of unintentional injury deaths.

Infants under one year of age and 15-17 year olds had the highest rates of unintentional injury. The leading cause of unintentional injury mortality differed by age group. Suffocation was the leading cause of unintentional infant mortality while motor-vehicle/pedestrian was the principal cause of death among children 1-4 years of age. Motor vehicle occupant deaths were the leading cause of death for children 5-17 years of age. However, adolescents 15-17 years had a much higher motor vehicle occupant death rate than children in other age groups.

Figure 6. Leading Causes of Unintentional Injury Death by Age Group, NM, 2008-2010



Transportation

Key Findings

1. Motor vehicle deaths were the leading cause of death among 10-17 year olds.
2. Children who died in motor vehicle traffic deaths were most commonly occupants in passenger cars (48%), followed by pedestrians (24%) and occupants in trucks or vans (10%).
3. Motor vehicle traffic deaths involving cars/trucks/vans have decreased nationally and in New Mexico with the state rate decreasing at a steeper rate. In New Mexico the sharpest decline has been among 15-17 year olds.
4. Motor vehicle occupant and pedestrian death rates were highest among American Indian children.
5. After the 85 years and older population, children 1-4 years of age had the highest pedestrian death rate in the state.
6. Drug and alcohol use, speeding over the legal limit, and recklessness were most frequently reported as the contributing causes of child motor vehicle deaths.
7. 50% of the children who were killed as passengers in cars/trucks/vans were not wearing seatbelts or other safety restraints.

Summary of Vital Records Data on Motor Vehicle Traffic Death Data

Motor vehicle traffic deaths are a serious public health problem in New Mexico. During 2008-2010 they accounted for approximately 54% of all unintentional deaths among children. From 2008-10, 93 children died as a result of motor vehicle traffic injuries. (Figure 7) Children who died were most commonly occupants in passenger cars (48%). Pedestrian deaths accounted for nearly a quarter of all motor vehicle-traffic related deaths among children.

Figure 7. Motor Vehicle Traffic Deaths, 0-17 years, NM, 2008-2010

Motor Vehicle Traffic	Deaths	Percent	Rate
Occupant injured- car	45	48%	2.9
Occupant injured- truck/van	9	10%	0.6
Pedestrian injured	22	24%	1.4
Other	11	12%	0.6
Motorcyclist injured	6	6%	0.4
Total deaths	93	100%	6.0

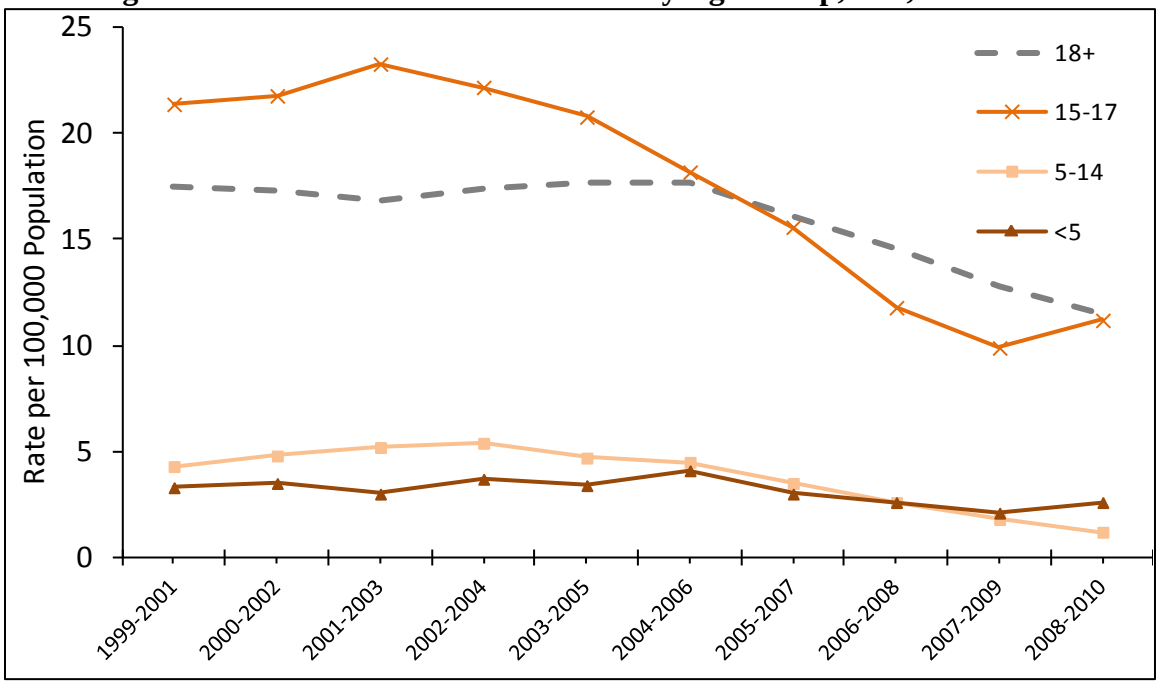
Motor Vehicle Traffic and Pedestrian Deaths

National motor vehicle death rates have decreased in the past ten years according to the National Highway Safety Council. These declines have been attributed to increased safety belt use, changes to drunk driving laws, and improvements in car and road safety. There has been a decrease in death rates in New Mexico as well, and trend data from 1999-2010 also indicate that the disparity between the state and national rates is becoming smaller. (Figure 8)

While New Mexico has seen a decline in motor vehicle occupant death rates for all age groups, the steepest decline was observed among 15-17 year olds. The death rate for this age group decreased from 52% at the peak of 23.8 per 100,000 (2001-2003) to 11.2 per 100,000 (2008-2010). The rate decline for 15-17 year olds started around 2001, a few years before the observed rate decline among other age groups, suggesting that this reduction in teen deaths may be partly attributable to New Mexico's graduated driver licensing law, which took effect in the year 2000.

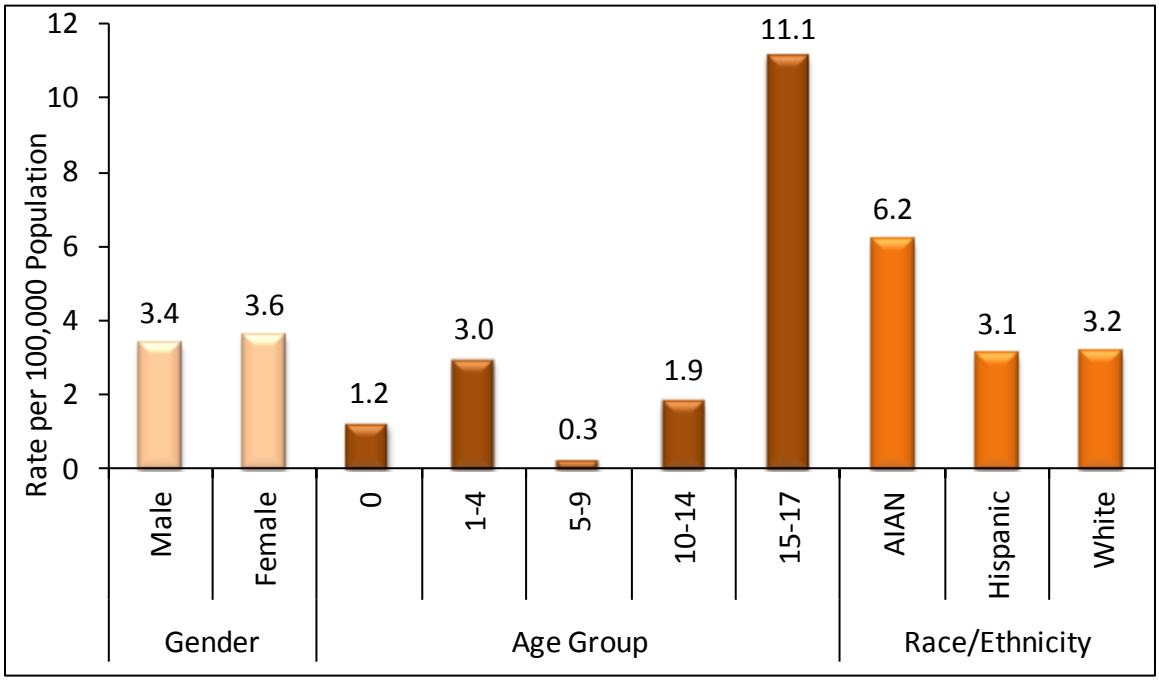
Although there was a significant decline in the motor vehicle traffic death rate for 15-17 year olds over the past twelve years, the 2008-2010 data indicate that the death rate among 15-17 year olds was still five times higher than among children 0-14 years. There were no significant gender differences in death rates among passengers and drivers. The motor vehicle traffic death rate was almost twice as high for American Indian children at 6.2 per 100,000 than those among Hispanic and White children (3.1 and 3.2, respectively).

Figure 8. Motor Vehicle Traffic Deaths by Age Group, NM, 1999-2010



American Indian children also had approximately double the rate of pedestrian deaths at 2.6 per 100,000 population than those of Hispanic (1.4) and White children (1.2). The highest pedestrian death rate was among people 85 years of age or older, followed by children 1-4 years of age. Approximately 32% (N=7) of the child pedestrian deaths were one year of age and 77% (N=17) were males.

Figure 9. Motor Vehicle Traffic Deaths by Gender, Age Group, and Race/Ethnicity, NM, 2008-2010



Transportation Panel Review Summary

The Transportation Panel reviewed 78 deaths of children who died of a transportation related incident that occurred in 2008-2010. These included motor vehicle traffic as well as motor vehicle non-traffic deaths (any motor-vehicle crash that occurs entirely in any place other than a public highway). Approximately 52% of the deaths reviewed were among 15-17 year olds, 62% were males, and around 32% were Hispanics, 32% were Whites and 17% were American Indians.

The panel found that these transportation deaths were associated with certain risk factors. (Figure 10) Drug and alcohol use, speeding over the limit, and recklessness were most frequently reported as the contributing causes of all of the transportation incidents and in those deaths in which the child was the driver. Driver error was also found to be a factor in many of the deaths.

Figure 10. Risk Factors Associated with Motor Vehicle Traffic and Non-Traffic Deaths, 0-17 years, NM, 2008-2010

Risk Factors	All Child Deaths	Percent	Child Driver Deaths	Percent
Drug or alcohol use	25	32%	6	46%
Speeding over limit	24	31%	7	54%
Recklessness	21	27%	3	23%
Rollover	16	21%	5	38%
Driver distraction/inattentions	9	12%	1	8%
Driver inexperience	8	10%	1	8%

* Contributing risk factors are not mutually exclusive.

The panel found that several risk factors may have contributed to the severity of injuries that resulted in death. (Figure 11) According to the 2011 New Mexico Safety Belt Report, the state's seatbelt usage rate was 90.5% (91% for drivers and 87% for passengers). While the state's adult seat belt usage rate is above the national rate of 85%, panel reviews show that 50% of children who were killed as passengers in cars/trucks/vans were not wearing seatbelts or other safety restraints. Among three of the seven passengers who were under six years of age, a booster or car seat was present and needed but was not used or was used incorrectly.

Figure 11. Seatbelt Usage in Motor Vehicle Traffic Deaths, 0-17 years, NM, 2008-2010

	Child Drivers Deaths	Percent	Child Passengers Deaths	Percent
Seatbelt needed, but none present	1	8%		
Seatbelt present, used correctly	4	31%	9	28%
Seatbelt present, used incorrectly	1	8%	1	3%
Seatbelt present, not used	5	38%	16	50%
Unknown	2	15%	6	19%
Total driver and passenger deaths	13	100%	32	100%

Transportation Panel Review Recommendations

- ❖ Strengthen New Mexico's Graduated Driver License law by starting nighttime driving restrictions earlier.
- Increase the cost of alcohol, which is a recognized factor in a substantial number of automobile crash deaths and crash injuries.
- Prohibit use of cell phones for voice and text communications while driving and enforce the law.
- Improve driver education programs in New Mexico, as there is little evidence to suggest that formal driver instruction, as currently conducted, is an effective safety measure.

❖ Indicates an evidence-based recommendation.

Sudden Unexpected Infant Death/Sleep-Related Deaths

Key Findings

- The Broader Spectrum/Sudden Unexpected Infant Death Panel (SUID) reviewed 80 unintentional or SUID - related deaths of infants; approximately 52% (42) of these deaths were labeled as natural in manner, 35% (N=28) as undetermined and 13% (N=10) as unintentional injury.
- Approximately 38% (N=30) of the deaths reviewed were diagnosed as Sudden Infant Death Syndrome (SIDS) and 32% (N=26) were found to be undetermined in cause.
- For SIDS deaths, 76% occurred between one and four months of age.
- Approximately 81% (N=65) of the 80 deaths reviewed by the panel were found to be sleep-related. Approximately 46% (N=30) of sleep-related deaths occurred while the infant was sleeping in an adult bed, and in all but two of these cases, one or more adults were sharing the bed with the infant at the time of the incident.

Broader Spectrum/Sudden Unexpected Infant Deaths (SUID) Panel

The Broader Spectrum Panel reviewed 80 deaths of children under one year of age. Approximately 52% (N=42) of these deaths were labeled as natural in manner, 35% (N=28) as undetermined and 13% (N=10) as unintentional.

The vast majority (70%) of these infant deaths were either diagnosed as Sudden Infant Death Syndrome (SIDS) (N=30), 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" or undetermined in cause (N=26). The remaining deaths were categorized as due to unintentional asphyxiation, pneumonia, influenza, other infections or medical conditions.

Approximately 81% (N=65) of the infant deaths reviewed by the panel were found to be sleep-related. Males were two to three more times more likely than females to die of sleep-related causes. The significant majority (83%) of the sleep-related deaths were among infants younger than 6 months of age, with the highest numbers in the second and third months of age.

Of the SIDS deaths, 76% of the deaths occurred between 1 and 4 months of age. The age range for undetermined infant deaths was similar to SIDS but also included infants who died within the first few days after birth. Other risk factors were also similar for both the SIDS and undetermined death classifications, suggesting that they may both fall under the broader category of Sudden Unexpected Infant Deaths (SUID).

For 46% of SIDS cases and 75% of undetermined cases, the infants were reported to have been put to sleep on their backs, one of the principal safe sleep strategies recommended by the American Academy of Pediatrics (AAP). However, there were other major risk factors for suffocation and sleep-related deaths present, including blankets, pillows, objects and/or other

people in the sleeping area. (Figure 13) Approximately 46% (N=30) of sleep-related cases occurred when the infants were sleeping on the same surface with an adult or adults at the time of the incident.

Figure 13. Sleeping Arrangement in Sleep-Related Deaths, NM, 2008-2010

	Deaths	Percent
Sleeping on same surface with an adult or adults	30	46%
Sleeping alone	34	52%
Unreported	1	2%
Total sleep-related deaths	65	100%

The infant's airway was partially or fully obstructed by a person or an object in 22% (N=14) of the sleep-related deaths. Approximately 50% (N=3) of infants whose deaths occurred in bassinettes, 27% (N=3) of those that occurred in cribs, and 20% (N=6) of those that occurred in adult beds had airway obstructions.

Broader Spectrum/Sudden Unexpected Infant Deaths (SUID) Panel Recommendations

- ❖ Work cooperatively with CYFD and others to expand NM's early childhood home visiting programs.
- Improve training of staff in licensed child day care centers, licensed day care homes and unlicensed child care homes.
- Promote injury prevention in middle school and high school health education classes, Juvenile Justice education facilities, and GED education classes to prevent risk of harm to infants and young children.
- Educate youth on pregnancy prevention as part of health education in middle and high school health education classes.
- Educate future mothers of the dangers of exposure to potentially dangerous chemicals during their pregnancy.
- Encourage good physical health and weight prior to pregnancy.
- Teach young mothers about the availability of safe havens for infants pursuant to the New Mexico Safe Haven for Infants Act.
- Increase school-based education about providing safe sleeping environments for infants.

❖ Indicates an evidence-based recommendation.

Poisonings

Key Findings

- Nineteen children, 0-17 years of age, died from unintentional poisoning.
- The majority of unintentional poisoning deaths among children 15-17 years of age were due to prescription, over- the-counter, or illegal drugs.
- Six of the decedents overdosed using prescription pain killers.
- At the time of the incident nine were found to be alcohol or drug impaired.
- Seven of the children had a history of substance abuse.

Overall Summary of Vital Records Data on Poisoning Deaths

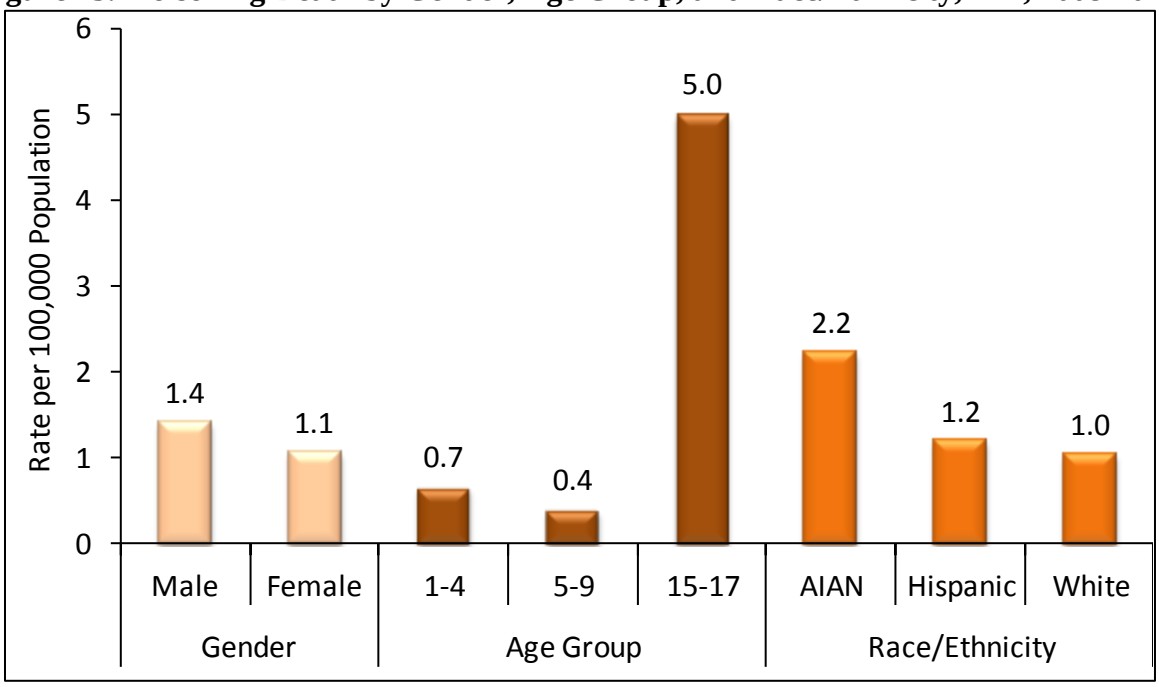
From 2008-2010 nineteen children, including eleven males and eight females, died from unintentional poisoning in New Mexico. Approximately 80% of the deaths were among 15-17 year olds. American Indian children had a higher rate of unintentional poisoning at 3.1 per 100,000 population than Hispanic children (1.6) and White children (0.3).

The majority of unintentional poisoning deaths among children were due to prescription, over-the-counter, or illegal drugs. (Figure 14) Narcotics and psychodysleptics including heroin, methadone, and cocaine accounted for almost half of the poisoning deaths among 15-17 year olds.

Figure 14. Poisoning Death by Drug Type, Age Group, and Race/Ethnicity, NM, 2008-2010

	Ages 1-9	Ages 15-17	Total	Percent
Antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs	1	1	2	11%
Narcotics and psychodysleptics		7	7	37%
Other and unspecified drugs, medicaments and biological substances	1	4	5	26%
Alcohol		3	3	16%
Organic solvent and hydrocarbons	1		1	5%
Other gases and vapors	1		1	5%
Total poisoing deaths	4	15	19	100%

Figure 15. Poisoning Death by Gender, Age Group, and Race/Ethnicity, NM, 2008-2010



Broader Spectrum/SUIDS Panel Review Summary of Poisoning Deaths

The Broader Spectrum Panel reviewed 11 child deaths due to poisoning. Eight cases were Hispanic or White children and three cases were American Indian children. Ten of the deaths were 15-17 years of age and six were females.

Toxicology screens were performed by the OMI in all of the poisoning deaths. Six of the cases tested positive for opiates and three were found to be positive for alcohol. In reviewing the circumstances surrounding the death, the panel found that eight of these deaths involved prescription drugs: six overdoses were caused by prescription pain killers, and one by methadone. One child died of overdose due to antidepressants. The panel found that seven of the children had a history of substance abuse and two were receiving mental health services at time of death.

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 this goal in mind, in 2011 the CFR panels (Broader Spectrum/Sudden Unexpected Infant Deaths, Child Abuse and Neglect, Suicide, and Transportation) reviewed 230 deaths of children and young people between 0 through 17 years of age that occurred in New Mexico in 2008-2010. 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 prevention recommendations were presented to the NM Child Death Review Advisory Board in October, 2011.

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 the Advisory Board's 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, and 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/SIDS Panel, Child Abuse and Neglect Panel, Suicide Panel, Transportation Panel, and the CFR Advisory Board who have volunteered 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 investigations and in this report.

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