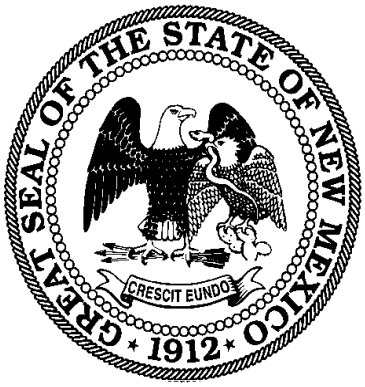
New Mexico Child Death Review

Annual Report 2012

December 2012

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



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Executive Summary

The 2012 Child Fatality Report Annual Report depicts the deaths of New Mexico residents under 18 years of age who died between 2009 and 2011. It presents information and recommendations from the comprehensive and confidential reviews of child deaths by a multi-disciplinary group of professionals. The report also provides data from the New Mexico Bureau of Vital Records and Health Statistics (NMBVRHS) to child death in New Mexico.

The New Mexico Child Fatality 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.

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. Highlights of evidence based recommendations include the following:

1) Increase evidence-based early childhood home visiting and include more at-risk families, not just those of first-born infants.

2) Increase education to parents and potential parents on safety principles including the risks of shaking a baby, safe sleep, and supervision needs of small children.

3) Decrease binge drinking, which is a recognized factor in a substantial number of injuries, including child injuries and deaths, whether the child was a driver, a passenger in a vehicle being driven by someone who was under the influence of alcohol, in another vehicle, or in an injury incident not associated with transportation.

4) Include suicide prevention, treatment, and safety planning in behavioral health professional licensing continuing education requirements.

5) Base early childhood home visiting programs on models that have been shown to be effective, and conduct outcome evaluation of those programs. Ensure that these programs include comprehensive injury prevention.

6) Promote gun safety to prevent accidental and intentional child deaths involving firearms by promoting use of and training about trigger locks and gun safes, and encourage providers who care for individuals who are at risk of suicide to consistently assess for access to guns.

7) Increase the use of vehicle crash and injury data to improve the targeting of work of police officers in enforcing traffic laws.

Data Collection and Review Process

In New Mexico, child death review begins when the NMCFR Coordinator receives the 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 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 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

Children under 18 years of age made up a quarter of New Mexico's population in 2011. There were slightly more male children (51%) than female children (49%).

Approximately 94% of New Mexico's population of children younger than 18 years of age was classified as Hispanic, White, or American Indian in 2011. Hispanics made up the largest percentage of children (52%), followed by Whites (28%), and American Indians (14%). Blacks, Asians, and others comprised 6% of children.

Total Deaths

During 2009-2011, there were 855 deaths of New Mexico children aged 0-17 years. Males had a higher overall death rate (61.4 deaths per 100,000 population) than females (48.5 deaths per 100,000 population). The largest percentage of deaths, (52%) was among children younger than one year of age with a mortality rate of 528.4 per 100,000 population. American Indians and Blacks had the highest child fatality rates at (75.7 and 72.2 per 100,000 population, respectively), followed by Hispanic children (55.8) and Asian children (49.0). Whites had the lowest rate at 41.8 child deaths per 100,000 population.

Injury, whether intentional or unintentional, caused a third of all child deaths. Among children 1-17 years of age, injury caused 69% of all deaths. Unintentional injury was the leading cause of death among children in all age groups over one year and the fourth leading cause of death for infants under one year (Figure 1). 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.

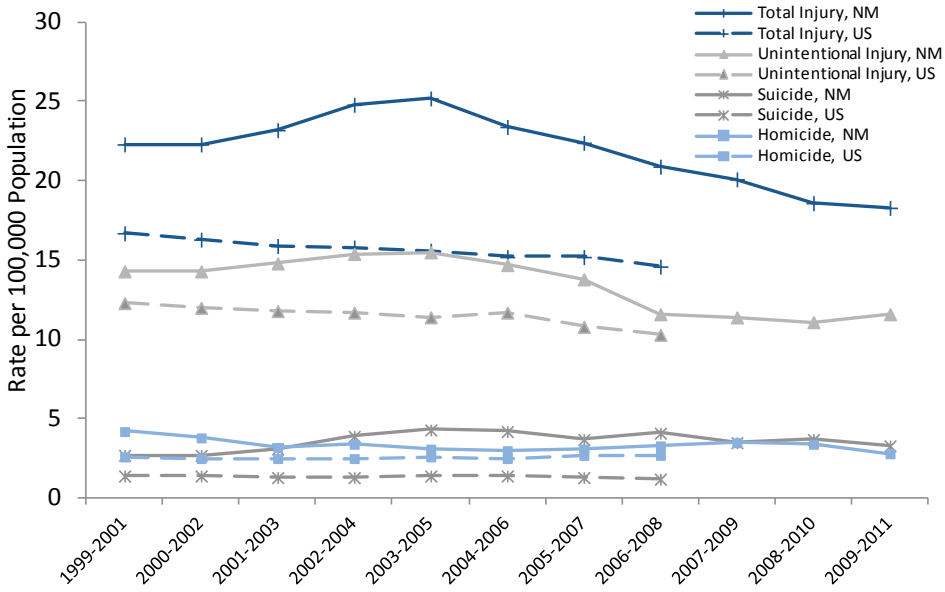
Figure 1. Leading Causes of Child Death by Age Group, NM, 2009-2011

Rank	Age Group				
	0 (N=443, 52%)	1-4 (N=132, 15%)	5-9 (N=51, 6%)	10-14 (N=71, 9%)	15-17 (N=158, 18%)
1	Conditions originating in the perinatal period (N=189, 43%)	Unintentional injuries (N=52, 39%)	Unintentional injuries (N=18, 35%)	Unintentional injuries (N=23, 32%)	Unintentional injuries (N=64, 40%)
2	Congenital malformation, deformation, and chromosomal abnormalities (N=112, 25%)	Homicide (N=12, 9%)	Neoplasm, malignant (N=7, 14%)	Suicide (N=9, 15%)	Suicide (N=42, 26%)
3	Undetermined/Other (N=76, 17%)	Congenital malformation, deformation, and chromosomal abnormalities (N=12, 9%)	Respiratory, Influenza and pneumonia (N=4, 8%)	Congenital malformation, deformation, and chromosomal abnormalities (N=8, 11%)	Homicide (N=16, 13%)
4	Unintentional injuries (N=23, 10%)	Circulatory, Heart disease (N=6, 5%)	Congenital malformation, deformation, and chromosomal abnormalities (N=3, 6%)	Homicide/Neoplast, malignant (N=6, 9%)	Neoplasm, malignant (N=5, 5%)
5	Homicide/Influenza (N=10 each, 2%)	Respiratory, Influenza and pneumonia (N=5, 4%)	Circulatory, Heart disease (N=2, 4%)	Congenital malformation, deformation, and chromosomal abnormalities (N=6, 9%)	Respiratory, Influenza and pneumonia (N=3, 2%)

Injury Deaths

Trend data for 1999-2011 indicate that the child injury death rate in New Mexico has consistently remained higher than the national rate (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.

Figure 2. Child Injury Death Rates by Manner, NM and US, 1999-2011



In 2009-2011, 284 New Mexico children died of injury. Approximately 15% of these deaths were homicides, 18% were suicides, and the rest were unintentional injuries. Motor vehicle traffic was the leading cause of unintentional injury deaths and accounted for 90 child deaths. Suffocation, drowning and poisonings were also common causes for child deaths and accounted for around 20 deaths each.

In New Mexico, the burden of child injury has consistently and disproportionately fallen on American Indian and Hispanic children. In 2009-2011, injury death rates among children were three times higher among American Indians and one and a half times higher among Hispanics than among Whites.

Homicide

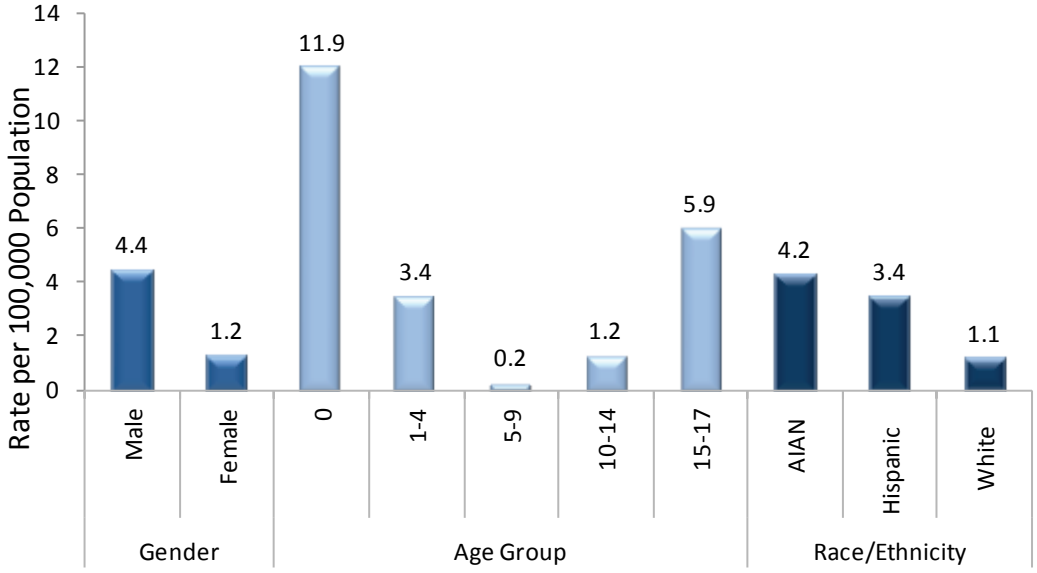
Key Findings

1) There were 44 child homicides in 2009-2011and the majority of victims were male.
2) Infants had a higher death rate than did older children, and American Indians had a slightly higher death rate than children of other racial/ethnic groups.
3) A firearm was used in 36% of child homicides.
4) The Child Abuse and Neglect Panel reviewed 24 homicides of children and found that 92% of them were committed by their primary caregiver.
5) Twelve children whose cases were reviewed by the CAN Panel were found to have abusive head trauma that caused or contributed to the death.

Overall Summary of Vital Records Data on Homicide

During 2009-2011, 44 children died from homicide. Approximately 80% of the victims were male. At 11.9 deaths per 100,000 population, infants had a significantly higher homicide rate than older children (Figure 3). Among infants, males had a higher homicide mortality rate than females. American Indians had a slightly higher rate of homicide than children of other racial/ethnic groups. Firearm was the mechanism for homicide in 36% of the cases.

Figure 3. Homicide by Gender, Age, and Race/Ethnicity, NM, 2009-2011



Child Abuse and Neglect Panel Review Summary

The Child Abuse and Neglect (CAN) Panel reviewed 24 homicides that were committed by their parent, family member or supervisor. Approximately 33% (n=8) of these deaths were among children under one year of age and 58% (n=14) were Hispanic. The panel determined that 88% (n=21) of the cases 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, some health care providers, schools and day care providers have failed to identify and/or report abuse and neglect

The reviews showed that a primary caregiver was responsible for 92% of the deaths that were reviewed by the CAN panel. Fourteen of the caregivers responsible were male and six were known to have had a history of substance abuse. Fourteen of the caregivers were biological parents, seven of whom were males.

Figure 4. Primary Caregiver Responsible for Death, NM, 2009-2011

Primary caregiver responsible for death	Deaths	Percent
Biological parent	14	64%
Stepparent	2	9%
Mother's partner	4	18%
Grandparent	1	5%
Other caregiver	1	5%
Total	22	100%

Twenty three children were victims of physical abuse and one of neglect. Nine children had a history of being a victim of child maltreatment, four of whom were identified through Child Protective Services (CPS). Half of the children (n=12) were found to have abusive head trauma and in eight cases 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 and domestic arguments were events that triggered the abusive behavior.

Child Abuse and Neglect Panel Review Recommendations

1) Increase education to parents and potential parents on safety principles including the risks of shaking a baby, safe sleep, and supervision needs of small children.

2) Continue to support/expand home visiting for families identified as high risk for child abuse and neglect based on social service involvement, without limiting such programs to families of first-born children.
    a) Early childhood home visiting programs, based on model utilizing nurse visits to young mothers in their homes, have been demonstrated to improve health and social outcomes of infants.

3) Increase education of the public and key professionals (healthcare, education, child care, etc.) about the duty to report suspicion of child abuse/neglect and the process by which to report.
    a) Section 32A-4-3 NMSA 1978 provides that “Every person, including…who knows or has a reasonable suspicion that a child is an abused or a neglect child shall report the matter immediately to:

i. a local law enforcement agency
ii. the department; or
iii. a tribal law enforcement or social services agency for any Indian child residing in Indian country."

4) Increase mental health care and drug/alcohol rehabilitation services in New Mexico.

5) Expand the use of Judicial Family Dependency Treatment Courts in New Mexico.
   a) The purpose of Judicial Family Dependency Treatment Courts is to closely monitor parental compliance with a substance abuse treatment plan, drug and alcohol testing and any other court mandates such as AA/NA attendance, parenting classes, and job preparedness. They provide increased oversight and support in the recovery process and facilitate family re-unification, when feasible. Like models have shown:
      i. Parents in this kind of program are twice as likely to go to treatment and complete it.
      ii. Children of participants spend significantly less time in out-of-home placements such as foster care.
      iii. Family re-unification raters are 50% higher for participants' families.

6) Expand state child protective services agency databases so that information can be shared between states and other appropriate jurisdictions either regionally or nationally. Encourage other states/organizations to make data available likewise in a confidential manner. This would allow family history of protective services involvement to be forwarded if the family relocates to another state.
   a) Families move from some states and to others, leaving jurisdictions in which they may have been seen by child protective services. This often is not learned by new jurisdictions in a timely manner. Learning about such cases earlier, and having more information available sooner would help provide continuity in Child Protective Services management of such cases.

Suicide

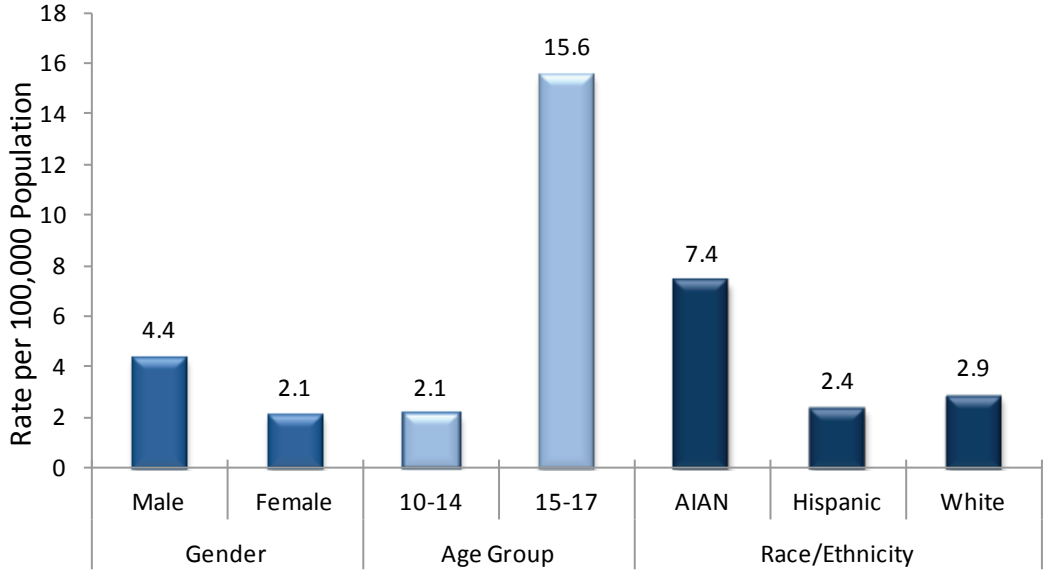
Key Findings

1) There were 51 suicides of children in 2009-2011.
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 88% of suicides in this population. Most suffocations were the result of strangulations by ligatures of various kinds, including ropes, belts, or other devices.
4) Firearm was the leading mechanism of suicide among Hispanic children and accounted for 53% of the suicides in this group.
5) The Suicide Panel found documentation of a chronic mental condition that interfered with the child's daily functioning in seventeen of the forty three cases that they reviewed.
6) Of the cases reviewed, 22% (n=10) had previously discussed suicide or threatened to commit suicide.
7) 56% (n=24) had documented behavior problems in school settings.

Overall Summary of Vital Records Data on Suicide

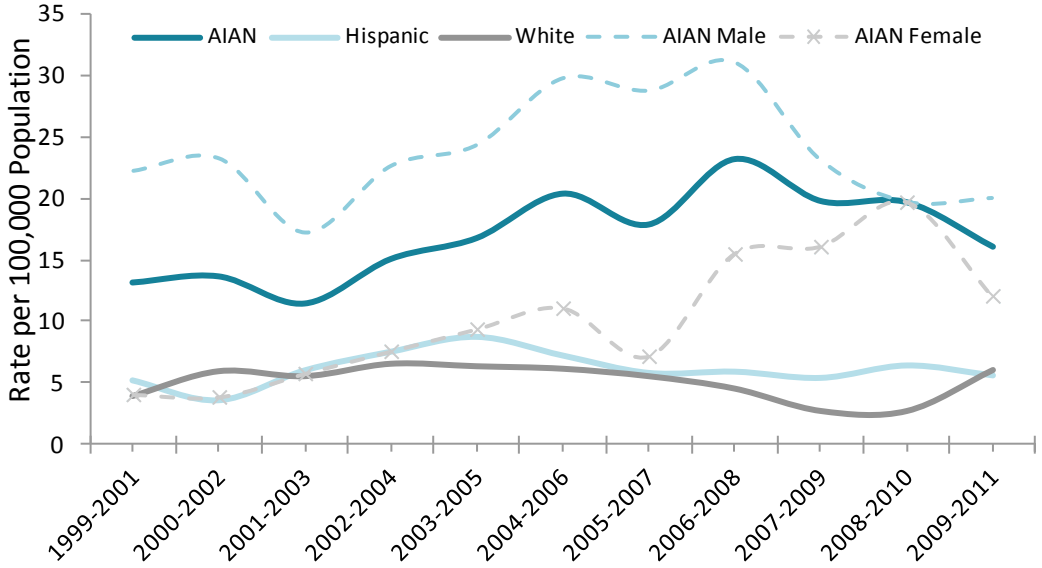
Suicide is the second leading cause of death in New Mexico for children 10-17 years of age. For the period of 2009-2011, 51 children died of suicide. The rate of 4.4 per 100,000 population for male children is twice the rate of 2.1 for female children (Figure 5). Youth 15 through 17 years of age accounted for 82% of child suicides. Suicide rates among American Indian children (7.4 per 100,000) were more than two times higher than those among Hispanic children and White children.

Figure 5. Suicide by Gender, Age, and Race/Ethnicity, NM, 2009-2011



Suicide rates have been consistently higher among American Indian children than among Hispanic and White children in New Mexico (Figure 6). 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.

Figure 6. Suicide by Race/Ethnicity, NM, 1999-2010



The leading mechanism of suicide was suffocation (57%), followed by firearm (33%), 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 88% of suicides among this group. Firearm was the leading mechanism of suicide among Hispanic children, accounting for 53% of the deaths.

Suicide Panel Review Summary

The Suicide Panel reviewed 43 of the 51 child deaths that occurred in 2009-2011. The panel determined that three-quarters of these suicide deaths could have been prevented.

The panel found that 43% (n=17) were found to have a prior disability or chronic illness. Of these cases, fourteen children 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 seventeen cases, eight were receiving mental health services, and of these, seven were on medication for mental illness. In three cases, the panel found that the victim had a documented history of self-mutilation.

Ten decedents (22%) had talked about suicide and/or made prior threats to commit suicide. Five children had made prior suicide attempts. In eight cases, the child left a suicide note.

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 12% (n=5) of deaths reviewed noted arguments with parents as a precipitating factor for suicide. Eight decedents had

a recent argument with a girlfriend/boyfriend or a breakup of a romantic relationship. Five children who committed suicide had a friend or relative who had recently committed suicide.

Approximately 56% (n=24) of the cases reviewed had documented problems in school; of these 66% had poor or declining academic performance. Behavioral problems, truancy and/ or suspension were also evident. Two children were reported to have been victims of bullying. Fifteen children had documented history of delinquent and criminal actions, and of these, two had spent time in juvenile detention.

Suicide Panel Recommendations

1) Mandate behavioral health professional licensing continuing education requirements to include suicide prevention, treatment, and safety planning.

2) Improve law enforcement and Office of the Medical Investigator investigations of child deaths by consistently collecting background information on the circumstances of child deaths to assist in the recognition of risk factors in order to improve prevention recommendations and efforts.
    a) Prevention of circumstances associated with suicide attempts may result in reduction in suicide attempts and completions.

3) Improve gun safety
    a) Promote gun safety to prevent accidental child deaths involving firearms.
        i. Promote use of trigger locks and provide associated training.
        ii. Promote use of gun safes and provide associated training.
        iii. Several studies found that keeping a gun locked, unloaded, storing ammunition locked and in a separate location, each had a protective effect. (JAMA, 2005, Feb9; 293(6):707-14)
    b) Encourage providers who routinely interact with individuals who are at risk of suicide to consistently assess for access to lethal means, and that they add appropriate documentation into their medical records.

4) Conduct ongoing and sustained initiatives to raise awareness that suicide is a public health issue and is preventable.
    a) Causal and modifiable risk factors can be addressed. Evidence-based and promising strategies include:
        i. Screening students for mental health problems in clinical settings and referring them to mental health professionals.
        ii. Conducting gatekeeper training to recognize depression and other mental health orders.
        iii. Having peer helper programs, especially in school settings.

iv. Performing post-vention activities following suicides.

b) Conduct a statewide public awareness campaign incorporating messages targeted at for special at-risk populations as determined by race, ethnicity, and sexual orientation.

c) Provide information about resources to community groups for promoting awareness through existing channels of communications and for local awareness campaigns.

5) Increase awareness of the signs of suicide risk among teachers and youth-serving adults for recognizing, interviewing, and referring youth who are at heightened risk of suicide attempts.

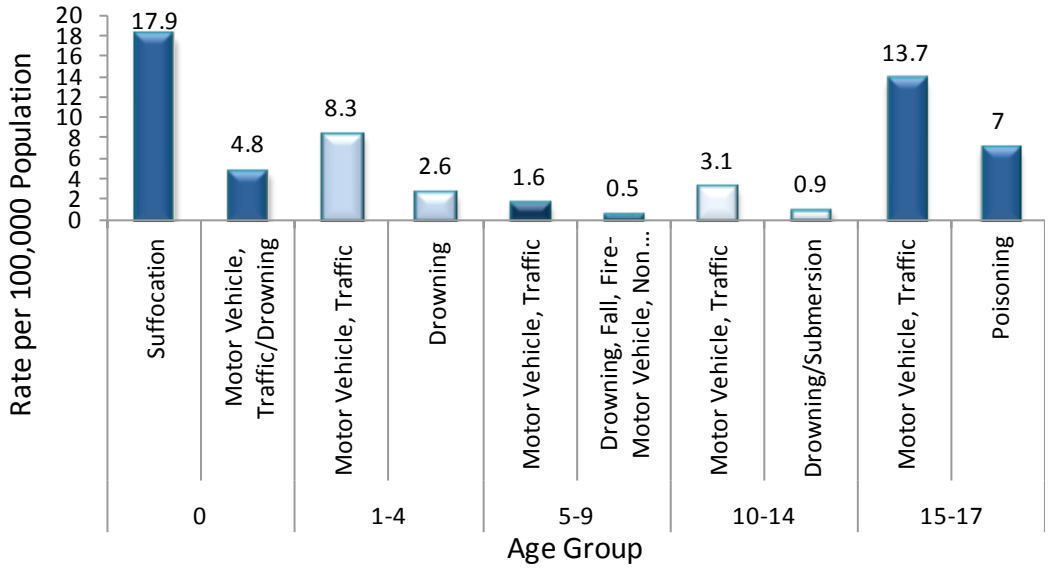
6) Provide skills training to primary care providers in assessing students for suicide risk and referring them to appropriate mental health care providers.

Unintentional Injury

Unintentional injury was the leading cause of death among children 1-17 years of age in New Mexico in 2009-2011. It accounted for 180 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 at 27.4 and 23.7 deaths per 100,000 population, respectively. The leading cause of unintentional injury mortality differed between infants and older children. Suffocation was the leading cause of unintentional infant mortality while motor vehicle traffic injury was the principal cause of death among children 1 year of age and older (Figure 7). Adolescents 15-17 years of age, however, had a much higher motor vehicle traffic death rate than children in other age groups.

Figure 7. Leading Causes of Unintentional Injury Death by Age Group, NM, 2009-2011



Transportation

Key Findings

1) Motor vehicle traffic 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, trucks, or vans (65%) or pedestrians (22%).
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 death rates were highest among American Indian children.
5) Reckless driving, speeding over the legal limit, and drug and alcohol use were most frequently reported as the contributing causes of child motor vehicle traffic deaths.
6) Approximately 64% (n=25) of the thirty-five children who were killed as occupants in cars/trucks/vans were not wearing seatbelts.

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 2009-2011 they accounted for approximately 50% of all unintentional injury deaths among children. From 2009-2011, 90 children died as a result of motor vehicle traffic injuries (Figure 8). Children who died were most commonly occupants in passenger cars (54%). Pedestrian deaths accounted for nearly a quarter of all motor vehicle traffic related deaths among children. Approximately 50% of the pedestrians deaths were among children 1-4 years of age and 70% were males.

Figure 8. Motor Vehicle Traffic Deaths, 0-17 years, NM, 2009-2011

Motor vehicle traffic	Deaths	Percent	Rate
Occupant injured - car	49	54%	3.2
Occupant injured - truck/van	10	11%	0.6
Pedestrian injured	20	22%	1.3
Motorcyclist injured	1	1%	0.4
Other and unspecified	10	11%	0.7
Total	90	100%	6.1

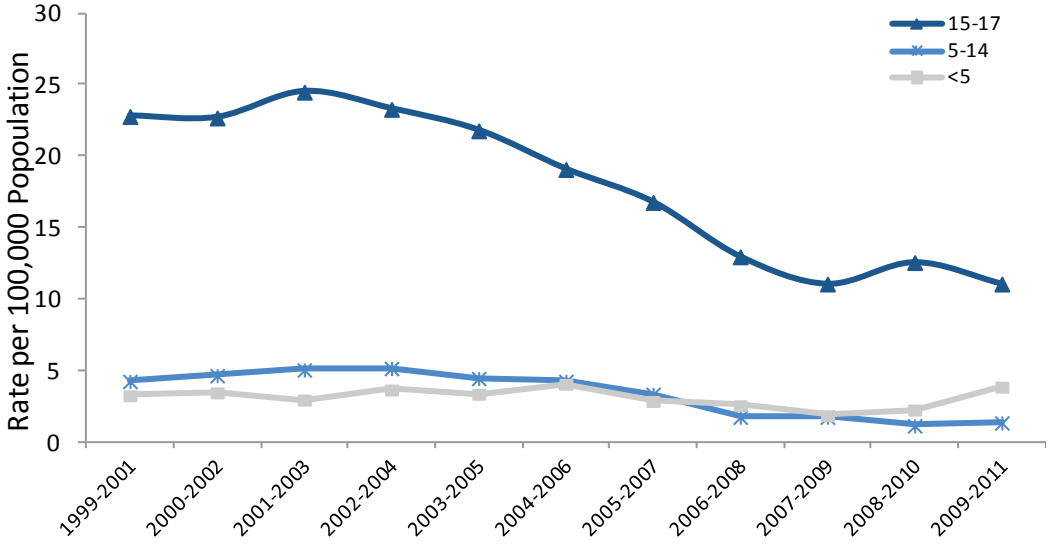
Motor Vehicle Traffic and Pedestrian Deaths

National motor vehicle traffic 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 1999-2011 also indicate that the disparity between the state and national rates is becoming smaller.

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 (Figure 9). The death rate for this age

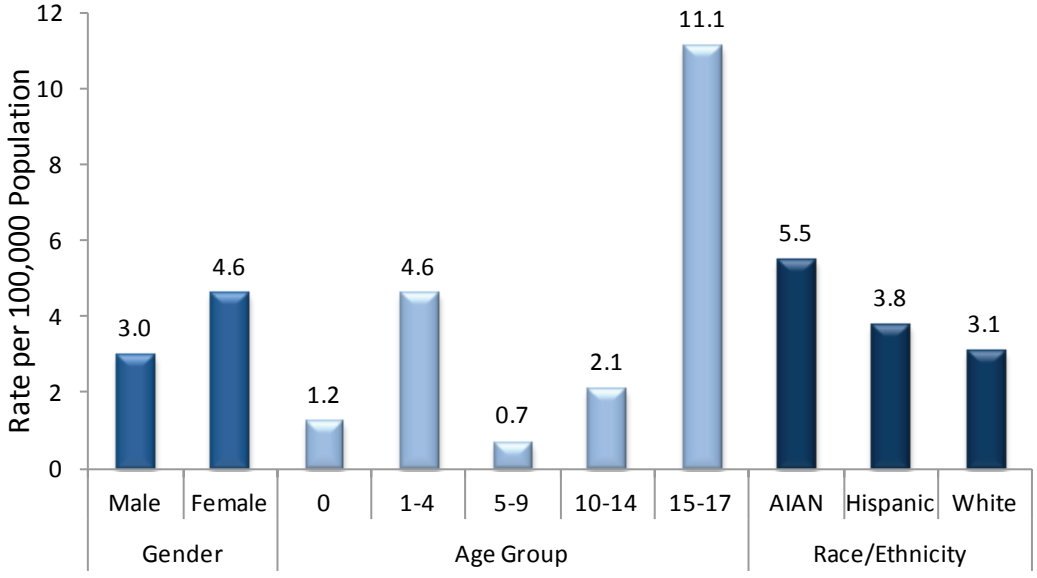
group decreased from 52% at the peak of 29.4 per 100,000 (2001-2003) to 13.7 per 100,000 (2009-2011). The rate decline for 15-17 year olds started around 2001, a few years before the observed rate decline among other age groups, suggesting that this reduction in teen deaths may be partly attributable to New Mexico's graduated driver licensing law, which took effect in the year 2000.

Figure 9. Motor Vehicle Traffic Deaths by Age Group, NM, 1999-2011



Although there was a significant decline in the motor vehicle traffic death rate for 15-17 year olds over the past twelve years, the 2009-2011 data indicate that the death rate among 15-17 year olds was still almost five times higher than among children 0-14 years (Figure 10). The motor vehicle traffic death rate was higher for American Indian children at 7.8 per 100,000 and Hispanic children at 6.0 per 100,000 than for White children at 4.6 per 100,000. Female children had a higher rate than male children at (4.6 vs. 3.0, respectively).

Figure 10. Motor Vehicle Traffic Deaths by Gender, Age Group, and Race/Ethnicity, NM, 2009-2011



Transportation Panel Review Summary

The Transportation Panel reviewed 82 deaths of children who died of a transportation related incident that occurred in 2009-2011. These included motor vehicle traffic as well as motor vehicle non-traffic deaths (motor-vehicle-related crash deaths that occur entirely in any place other than a public highway). The panel determined that approximately 92% of these deaths could have been prevented.

The panel found that certain risk factors contributed to these transportation deaths. Drug and alcohol use, speeding over the limit, and recklessness were most frequently reported as the contributing causes of the transportation incidents resulting in child deaths and in those deaths in which the child was the driver (Figure 11). Driver error was also found to be a factor in many of the deaths.

Figure 11. Risk Factors Contributing to Motor Vehicle Traffic and Non-Traffic Deaths, 0-17 years, NM, 2009-2011

Risk Factors	All Child Deaths	Percent	Child Driver Deaths	Percent
Reckless	34	41%	8	73%
Speeding over limit	23	28%	2	18%
Drug or alcohol use	18	22%	2	18%
Other driver error	14	17%	1	9%
Driver inexperience	12	15%	3	27%
Driver distraction/inattentions	11	13%	4	36%

*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. 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 64% of children who were killed as drivers or passengers in cars/trucks/vans were not wearing seatbelts (Figure 12). Among young children, a car seat or booster seat was needed but not present in half of the fourteen cases. It was present but not used, or used incorrectly in four cases.

Figure12. Seatbelt Usage in Motor Vehicle Traffic Deaths, 0-17 years, NM, 2009-2011

Protective measures - Shoulder belt	Deaths	Percent
Needed, but none present	1	3%
Present, used correctly	12	31%
Present, used incorrectly	1	3%
Present, not used	25	64%
Total	39	100%

Transportation Panel Review Recommendations

1) Reduce binge drinking to reduce child deaths by reducing driving while under the influence of alcohol.
    a) According to the latest available estimates (Community Guide), a 10% increase in price results in a 7% decrease in consumption; and there is evidence that such price increases disproportionately impact young drinkers. Reducing binge drinking by youth can be expected to reduce not only alcohol-related motor vehicle crash injury and death, but a range of other negative outcomes of binge drinking, including suicide, homicide, assaults, and fighting, and high-risk sexual activity.
    b) Expand the use of evidence-based underage drinking prevention programs that educate youth about the dangers of riding with a driver who is drinking or under the influence of alcohol.
    c) Implement and enforce local social host ordinances to reduce social availability of alcohol to youth. This emerging and promising strategy can reduce social provision of alcohol to minors, particularly in the context of underage drinking parties. In 2009, almost 60% of underage drinkers in New Mexico reported usually receiving their alcohol from a social source and 60% reported 'another person's home' as their usual drinking location (YRRS).
    d) Of the 49,318 crashes in New Mexico in 2006, 2,698 (5.5%) involved alcohol. However, among fatal crashes, alcohol was involved 42% of the time. Among fatalities involving child drivers in the 2006-2008 cases studies, 36% were impaired by alcohol or other drugs, 50% did not use shoulder belts or used them incorrectly, and 22% were violating graduated drivers licensing laws.

2) Increase enforcement of traffic laws, including speeding laws, reckless driving laws, driving while intoxicated laws and laws requiring use of adult and child occupant restraints.

3) Improve data systems to redirect resources toward improved targeting of police efforts.

4) Data are collected and used in various ways. However, police efforts at the enforcement officer level are apparently often not targeted by the use of these data. These data might be used to better target police efforts.

5) Amend state law to include inappropriate failure to restrain or failure to use helmets as child abuse, making these infractions misdemeanors and not felonies.

6) Enact a statewide law prohibiting use of hand-held cell phone use and texting while driving.
    a) Crash deaths due to distractions have increased with the increase in the use of cell phones. Legislation enacting texting bans should be paired with effective enforcement to deter drivers from the use of handheld devices while driving. (American Journal of Public Health, Vol. 100, No.11, 2010)
    b) Inexperienced drivers are especially vulnerable to distraction such as use of cell phones for talking and texting.
    c) A study conducted in 2006 concluded that "…the impairments associated with using a cell phone while driving can be as profound as those associated with driving drunk." (Human Factors, Vol. 48,No.2, 2006)
    d) The use of hand-held phones by drivers is illegal in most European Union countries, all Australian states and the Canadian province of Newfoundland. In the US, use of hand-held phones while driving is prohibited in nine states, the District of Columbia, and the Virgin Islands. Thirty four states have banned text messaging by all drivers. The National Safety Council estimated in January, 2010 that at least 1.6 million crashes are caused each year by drivers using cell phones and texting. In addition, it found that 28% of crashes are caused by drivers using their cell phones. (National Safety Council)

7) Increase/improve/broaden media efforts regarding various safer transportation issues, including driving in inclement weather, especially snow.

Sudden Unexpected Infant Death/Sleep-Related Deaths

Key Findings

1) The Broader Spectrum/Sudden Unexpected Infant Death Panel (SUID) reviewed 71 SUID - related deaths of infants.
2) A significant percentage of the cases (92%) were infants younger than 6 months of age. Males accounted for 65% of the cases reviewed. However, other risk factors tied to suffocation and sleep-related deaths, including blankets, pillows, objects and/or other people, were present in many of the deaths.
3) 69% of the infants were reported to have been put to sleep on their backs.
4) 59% of sleep-related cases occurred when the infants were sleeping on the same surface with a person or animal at the time of the incident.
5) 54% were sleeping in an adult bed at the time of incident.

Broader Spectrum/Sudden Unexpected Infant Deaths (SUID) Panel

The Broader Spectrum Panel reviewed 71 deaths of children under Sudden Unexpected Infant Deaths (SUID) which are 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 of these deaths were related to sleeping or the sleep environment.

Approximately 42% (n=26) of these deaths were labeled as natural in manner, 38% (n=27) as undetermined, and 20% (n=14) as accidental by the New Mexico Office of the Medical Investigator (OMI). The majority (58%) of these infant deaths were either diagnosed as Sudden Infant Death Syndrome (SIDS) (n=18), 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 as undetermined in cause (n=23). Approximately 20% (n=14) were labeled as accidental asphyxia. The remaining deaths were categorized as being due to pneumonia, influenza, other infections or medical conditions.

A high percentage of the cases (92%) were infants younger than 6 months of age. Males accounted for 65% (n=46) of the cases reviewed. Approximately 40% (n=28) of the reviewed cases were Hispanic, 27% (n=19) were White and 25% (n=18). The rest were either other or unknown race/ethnicity.

Approximately 69% (n=49) of 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. Approximately 59% (n=42) of sleep-related cases occurred when the infants were sleeping on the same surface with a person or animal at the time of the incident and 54% (n=38) were sleeping in an adult bed at the time of incident (Figure 13).

Figure 13. SUID- Incident Sleep Location, NM, 2009-2011

Incident sleep place	Deaths	Percent
Crib	9	13%
Bassinette	7	10%
Adult bed	38	54%
Playpen/Other play structure (not portable crib)	3	4%
Couch	7	10%
Other	6	8%
Unknown	1	1%
Total	71	100%

The infant's airway was partially or fully obstructed by a person or an object in 32% (n=23) of the SUID deaths. Half of the infants, whose deaths occurred while they were sleeping on appropriate sleep surfaces (i.e. cribs and bassinettes), had partial or full obstruction of their airways.

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

1) Evaluate current efforts in teaching Safe Sleep practices.
    a) Ways in which to ensure safe sleep are taught in many venues. Some or many may be effective; others may not be. Establishing a database of efforts and approaches being used, including but not limited to the Women, Infants', and Children nutrition program, prenatal care settings, hospitals, pediatric clinics, and early childhood home visiting programs may ultimately result in improving existing efforts and establishing additional initiatives (evidence in such efforts as back to sleep; promising in others).

2) Require that NM insurers (including Medicaid) include a crib give-away program with safe sleep education in their policies that include insurance to cover births.
    a) Crib-give-away programs that are conducted according to the "Cribs for Kids" model are a promising way to prevent infant suffocations while co-sleeping with adults and due to incorrect use of cribs.

3) Increase evidence-based early childhood home visiting to include at-risk families with other children (do not limit to only first-born).
    a) Home visiting programs, especially models based on nurse visits to homes of young mothers, have been demonstrated to improve health

and social outcomes of infants. However, preventable child deaths are still occurring among infants and children whose mothers had not received Home Visiting services associated with their first-borns.

4) Put co-sleeping warning labels on both sides of all mattresses sold in NM.
    a) Placing large warning labels warning about the dangers of co-sleeping with infants and toddlers is a promising way to prevent such deaths.

5) Base early childhood home visiting on models that have been shown to be effective; ensure that they adhere to evidence-based models, and conduct outcome evaluation of those programs. Ensure that these programs include comprehensive injury prevention.
    a) Home visiting programs, especially models based on nurse visits to homes of young mothers, have been demonstrated to improve health and social outcomes of infants.

Drowning

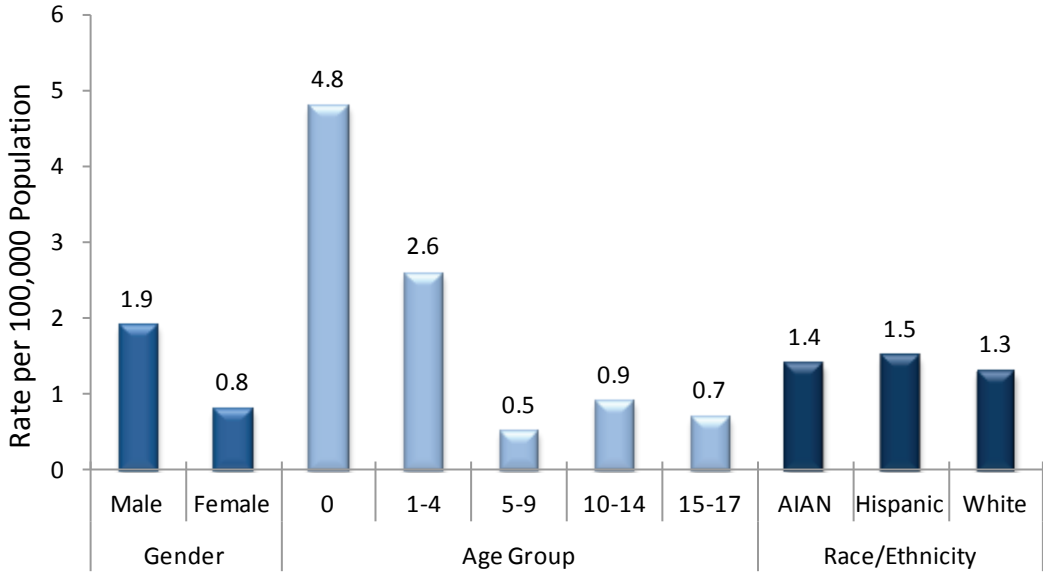
Key Findings

1) Twenty-one children, 0-17 years of age, died from unintentional drowning.
2) Drowning occurred most frequently among male and young children.

Overall Summary of Vital Records Data on Drowning Deaths

From 2009-2011 twenty-one children died from unintentional drowning in New Mexico. Approximately 62% (n=13) of the deaths were among children 5 years of age and younger. There was no significant difference in death rate between American Indian, Hispanic, and White children (Figure 14). Male children were more than twice as likely to drown as girls.

Figure 14. Drowning Death by Gender, Age Group, and Race/Ethnicity, NM, 2009-2011



Approximately 42% of the drowning occurred in swimming pools, bathtubs and natural waters. 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.).

Figure 15. Drowning Death by Place of Occurrence, NM, 2009-2011

Place of Occurrence	Deaths	Percent
Bathtub	4	19%
Swimming pool	6	29%
Natural water	3	14%
Other specified	1	5%
Other unspecified	7	33%
Total	21	100%

Poisoning

Key Findings

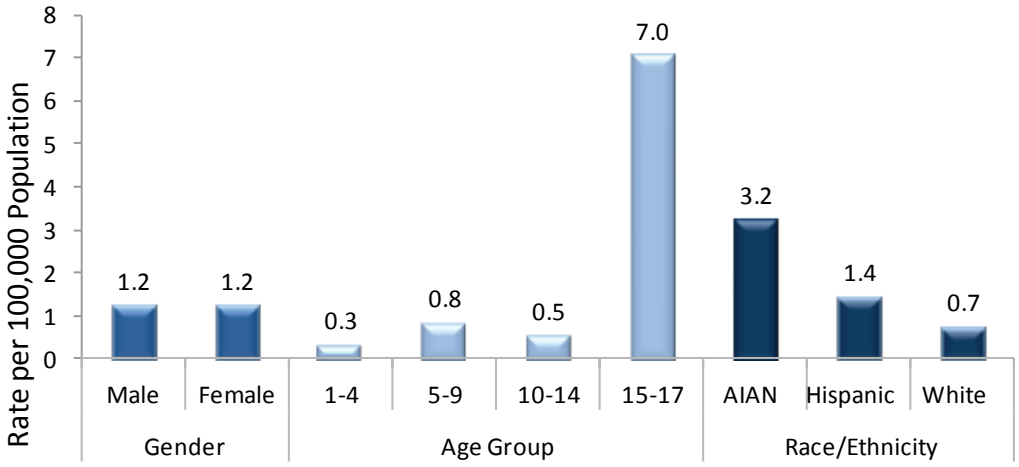
1) Twenty-two children, 0-17 years of age, died from unintentional poisoning.
2) The majority of unintentional poisoning deaths among children 15-17 years of age were due to prescription, over-the-counter, or illegal drugs.
3) Six of the children overdosed using prescription pain killers.

Overall Summary of Vital Records Data on Poisoning Deaths

From 2009-2011 twenty-two children, including eleven males and eight females, died from unintentional poisoning in New Mexico. Approximately 86% of the deaths were among 15-17 year olds. American Indian children had a higher rate of unintentional poisoning at 3.2 per 100,000 population than did Hispanic children (1.4) and White children (0.7) (Figure 16).

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

Figure 16. Poisoning Death by Gender, Age Group, and Race/Ethnicity, NM, 2009-2011



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

1) Expand substance abuse prevention efforts. Increase efforts to reduce supply and provide for rescue including the use of naloxone.
   a) Educate students and their parents about the dangers of misuse of illicit drugs and medications, the importance of safe medication use, secure storage, and proper disposal of leftover medicine.

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 2009-2011. With information garnered from the reviews, the panels determined that most 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

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