Arizona Child Fatality Review Program

FOURTEENTH ANNUAL REPORT
NOVEMBER 2007

Arizona Department of Health Services
Public Health Prevention Services
Bureau of Women's and Children's Health

Arizona Department of Health Services

Arizona Department of Health Services

Office of the Director

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JANET NAPOLITANO, GOVERNOR
SUSAN GERARD, DIRECTOR

November 15, 2007

Dear Friends of Arizona's Children:

When a child dies, it is tragedy not only for the family involved, but for the community as a whole. Though we cannot prevent every child death, we can make sure that no child dies in Arizona without our concerted effort to understand how and why. The child fatality review process is an opportunity to learn about the causes and circumstances of child death in order to prevent deaths in the future. I am personally committed to the process – as a member of the State House of Representatives, I was the prime sponsor of the initial legislation that established the Arizona State Child Fatality Review Team.

Through the efforts of a dedicated team of volunteers who donated more than 5,000 hours, every one of the 1,161 child deaths that occurred in Arizona in 2006 was reviewed. This report provides data not only on the causes, but also the preventability of child deaths in our state.

Many child deaths involve environmental and/or behavioral factors that can be impacted by positive community action. For example, Child Protective Services developed a "Safe Sleep" brochure to distribute to families because of concerns regarding unsafe sleep environments. In addition, statewide concern for teen motor vehicle crashes resulted in graduated driving license requirements, which take effect in 2008. Concerns about child drowning led the fatality review program to recommend pool fencing and increased supervision of children around water. In 2006, drowning deaths of children younger than age 5 in Maricopa County dropped to the lowest rate since the state began tracking the problem.

Education and awareness are very powerful tools and I am hopeful these efforts, among others, will result in fewer child and adolescent deaths in future years.

Once again, I applaud the individuals who volunteer time from their demanding schedules to serve on the many committees associated with the Child Fatality Review Program. These individuals truly do make a difference in the lives of the children in our community.

Sincerely,

Susan Gerard
Director

ARIZONA CHILD FATALITY REVIEW TEAM

FOURTEENTH ANNUAL REPORT

NOVEMBER 2007

MISSION

To reduce preventable child fatalities through systematic, multidisciplinary, multi-agency, and multi-modality review of child fatalities in Arizona; through interdisciplinary training and community-based prevention education; and through data-driven recommendations for legislation and public policy

Submitted to:

The Honorable Janet Napolitano, Governor, State of Arizona
The Honorable Timothy S. Bee, President, Arizona State Senate
The Honorable James P. Weiers, Speaker, Arizona State House of Representatives

Leadership for a Healthy Arizona

Janet Napolitano, Governor
State of Arizona

Susan Gerard, Director
Arizona Department of Health Services

MISSION

Setting the standard for personal and community health through direct care delivery, science, public policy and leadership.

Arizona Department of Health Services
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Bureau of Women's and Children's Health
Child Fatality Review Program
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This publication can be made available in alternative formats. Please contact the Child Fatality Review Program at (602) 364-1400 (voice) or call 1-800-367-8939 (TDD).

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ACKNOWLEDGMENTS

We wish to acknowledge Susan Newberry, Manager of the Child Fatality Review Program, who has dedicated the last nine years of her career to the Child Fatality Review Program. Under her leadership, the program has continually improved, as evidenced by its ability to review all child deaths that occurred in the state during 2005 and 2006. On October 1, 2007 Susan retired after 30 years of work for the State of Arizona. She will be greatly missed by all of us.

We also wish to acknowledge the 250 volunteers who contributed more than 5,000 hours of their time to review child deaths during 2006. It is through their hard work that we are able to learn about the causes of child fatalities and what we--as individuals and as a society--can do to reduce preventable deaths of children.

EXECUTIVE SUMMARY

In 2006, 1,161 children died in Arizona. The Arizona Child Fatality Review Teams reviewed every one of these deaths and determined that 454 of them could have been prevented. The percentage of child deaths that were preventable increased from 34 percent in 2005 to 39 percent in 2006. The most common factors contributing to preventable child deaths were drugs and/or alcohol, followed by lack of supervision of children, and lack of vehicle restraints.

Twelve percent of all child deaths in 2006 were associated with the use of drugs and/or alcohol, and substance use contributed to 46 percent of homicides, 35 percent of suicides, and 22 percent of accidental deaths.

The percentage of deaths due to accidents increased in 2006. Twenty-three percent of child deaths in 2006 were due to accidents, and the teams concluded that 96 percent of these deaths were preventable. The most common cause of these accidental deaths was motor vehicle crashes, which claimed 164 children's lives. There was a seven percent increase in motor vehicle crash deaths among children ages one through four years during 2006. Children ages one through four years also had the highest number of pedestrian deaths (n=12), and 75 percent of the children in this age group were struck by trucks or sport utility vehicles. This raises concerns of reduced visibility with high profile vehicles.

Deaths due to suicide increased from 36 in 2005 to 48 in 2006, and the percentage of all Arizona child deaths due to suicide increased from three percent in 2005 to four percent in 2006. Access to firearms and lack of mental health treatment were the most commonly identified preventable factors in these deaths. Only three of the children who committed suicide in 2006 were known to have been on medication for mental illness at the time of death, and only eight children were known to have been receiving mental health services at the time of death.

The percentage of all child deaths that were due to maltreatment increased from four percent in 2005 to five percent in 2006. There were 60 maltreatment deaths identified by the teams in 2006 compared to 50 in 2005. In 50 percent of the maltreatment deaths in 2006, drugs and/or alcohol problems were identified, including 19 deaths that were associated with methamphetamines. Eighty-eight percent of the children who died due to maltreatment were living with their parents at the time of their deaths. For 65 percent of maltreatment deaths, there was no evidence of any reports to Arizona Child Protective Services prior to the fatal maltreatment. In 2006, nine infants died due to Shaken Baby Syndrome. This is the highest number of Shaken Baby Syndrome deaths ever reported by the teams and is three times higher than the number reported in 2005.

Access to firearms was an important factor contributing to child deaths in 2006. The firearm-related deaths increased from 43 in 2005 to 60 in 2006. Firearms accounted for five percent of all child deaths in 2006 and four percent of child deaths in 2005.

Another important factor contributing to child deaths was unsafe sleep environments. In 2006, 90 previously healthy infants died unexpectedly, and in 90 percent of these deaths, unsafe sleeping environment was identified as a contributing preventable factor.

Summary of Key Findings

- 39 percent of children's deaths could have been prevented.
- The percentages of deaths among African American, American Indian, and Hispanic children were higher than their proportions of the Arizona population.
- Drugs and/or alcohol contributed to 12 percent of all child deaths in Arizona during 2006 (n=140).
- Substance use was a contributing factor in 46 percent of homicides, 35 percent of suicides, and 22 percent of accidental deaths.
- 164 children died in motor vehicle crashes. Of these deaths, 96 percent could have been prevented (n=157). The most common contributing factors were lack of vehicle restraints and excessive driving speeds.
- 48 children committed suicide in Arizona during 2006. Twelve of these children were younger than 15 years old (25 percent).
- 60 children died as a result of firearm-related injuries, compared to 43 firearm-related deaths in 2005.
- 60 children died as the result of maltreatment. Seventy-seven percent of maltreatment deaths were of children younger than six years old (n=46).

Program Successes and Updates

Some of the past recommendations of the program have now become reality. For example, because of concerns regarding deaths associated with unsafe sleep environments, Child Protective Services developed a safe sleep brochure to disperse to families. Statewide concern for teen motor vehicle crashes resulted in graduated driving license requirements, which will become effective in 2008. The program has also recommended increased supervision of children around water and pool fencing. In

2006, Maricopa County drowning deaths among children younger than five years of age dropped to the lowest rate since the state started tracking the problem, and child deaths in Maricopa County swimming pools also dropped to the lowest rate on record.

During this reporting period, Arizona's Child Fatality Review Teams began participating in the Child Death Review Case Reporting System through the National Center for Child Death Review. In an effort to standardize reporting of child fatalities across states, the Arizona local review teams used a reporting tool developed by the National Center for the first time in 2006. This new reporting tool was developed in collaboration with child fatality review programs across the nation and enables comparison of Arizona fatality data with other states. In addition, this comprehensive information facilitates better understanding of the circumstances surrounding child deaths and can ultimately be used to develop strategies to reduce child deaths in Arizona.

Child Fatality Review Program staff members have also participated in efforts to improve the National Child Death Review Reporting System, including development of a program to interpret data coding.

Looking Forward

Funding for the Arizona Child Fatality Review Program has not increased since its inception in 1993, and because of this, the program will no longer be able to review all child deaths. The State Child Fatality Review Team has directed the local teams to continue to review deaths due to suicide, homicide, and accidents in 2007, but deaths due to natural causes, other than SIDS or undetermined causes, will generally not be reviewed.

Because not all deaths will be reviewed in 2007, we will no longer be able to report on the total number of maltreatment deaths. In addition, we will not be able to accurately compare 2007 deaths with prior years, determine the total number of deaths that are preventable, or identify all of the preventable risk factors. Deaths due to prematurity, which accounted for 25 percent of child deaths in 2006, will no longer be reviewed. Valuable information (e.g. maternal substance abuse, access to prenatal care) which could be used to prevent these deaths will not be available to the state or community members. The team hopes that the community and policy makers recognize the value of reviewing all child deaths annually and advocate for additional funding. This will enable the program to resume reviewing all deaths in 2008 and further improve the program.

Recommendations

This year, the major recommendation is to increase funding for the program. Since its inception 13 years ago, the Arizona Child Fatality Review Program has included recommendations to reduce child deaths in its annual report. If additional funding is identified, we may once again be able to review all child deaths in Arizona in 2008.

Additional recommendations are:

- Increase funding for substance abuse treatment programs for both adults and children.
- Increase public awareness of the dangers associated with underage consumption of alcohol and illegal drug use.
- Develop comprehensive educational campaigns designed to prevent pedestrian motor vehicle deaths.
- Encourage the use of motor vehicle restraints by education, enforcement, and enactment of legislation that supports primary enforcement for seatbelts and child booster seats.
- Improve access to mental health services for children and educate parents and teachers on the warning signs of suicide.
- Encourage hospitals, medical examiners, law enforcement agencies, and others to report to Child Protective Services all child deaths for which there are suspicions of maltreatment.
- Educate parents and other caregivers on safe sleep environments for infants.

INTRODUCTION

The Arizona Child Fatality Review Program was created in 1993 (A.R.S. § 36-342, 36-350-4) and data collection began in 1994. A statewide team was mandated by statute to provide oversight of the program, develop the data collection system, and produce an annual report summarizing the findings. The state team approves the development of each local team that is responsible for reviewing the child deaths in their own communities. The state team also provides necessary support and training for local team members. By statute, the state team includes representatives of the Arizona Chapter of the American Academy of Pediatrics, Indian Health Service, American Indian agencies, law enforcement, a prosecuting attorney's office, a county health department, a military advocacy program, child protective services, and a county medical examiner's office.

The statute also outlines the composition of each local team. These teams must include local representatives from child protective services, the county medical examiner's office, the county health department, law enforcement, and the county prosecuting attorney's office. Other team members include a pediatrician or family physician, a psychiatrist or psychologist, a domestic violence specialist, and a parent.

When a child dies in Arizona, a copy of the death certificate is sent to the local Child Fatality Review Team. The local team then requests the child's autopsy report, hospital records, child protective services records, law enforcement reports, and any other relevant documents that may provide insight in the child's death. If the child was younger than one year of age at the time of death, the birth certificate is also reviewed. Legislation requires that hospitals and state agencies release this information to the Arizona Child Fatality Review Program's local teams. Team members are required to maintain confidentiality and are prohibited from contacting the child's family.

After reviewing all the documents, the local team completes a standardized Child Death Review Case Report that includes extensive information regarding the circumstances surrounding the death. The Case Report was created by the National Maternal and Child Health Center for Child Death Review. Local Child Fatality Review Teams review deaths throughout the year and must submit all reviews to the state team by August 15th of the following year. This deadline is necessary so that the State Child Fatality Review Team can prepare the annual report, which is published each November. If a team has not completed a review by the August 15th deadline, the death will not be included in the published report. The Arizona Department of Health Services and Arizona State University provided professional and administrative support for the teams.

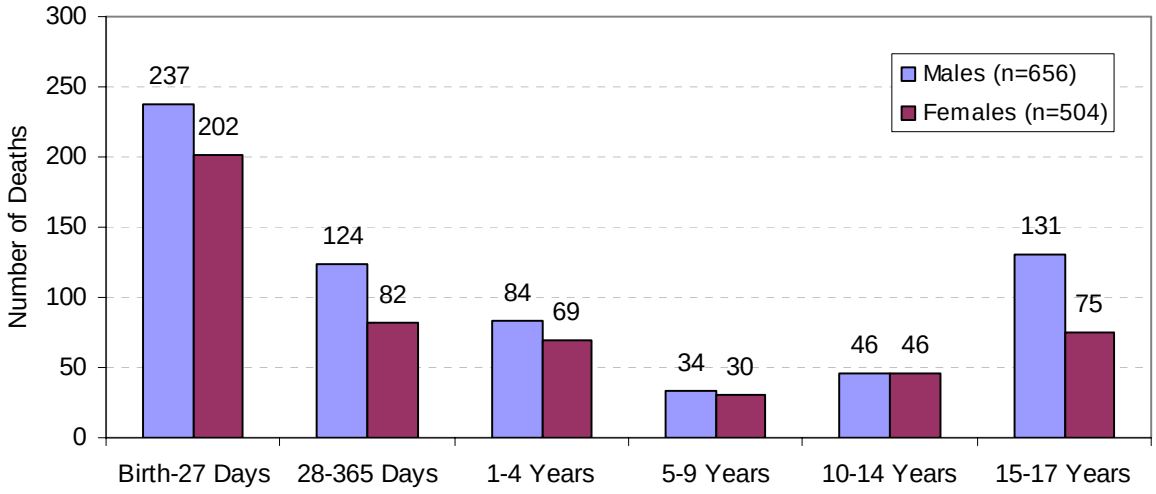
This is the fourteenth annual report issued by the Child Fatality Review Program. Each year the program has made recommendations regarding the prevention of child deaths. These recommendations are based on evidence and have been used to educate the

community, initiate legislative action, and develop prevention programs. Because these reviews are completed by a multidisciplinary team of well-respected professionals, the team's recommendations are often adopted. In addition, the program provides a unique opportunity to determine the success of prevention programs and legislative actions by measuring outcomes over time. The program is able to assess if money spent on prevention is achieving the desired results and whether or not interventions should continue.

DEMOGRAPHICS

During 2006, there were 1,161 fatalities among children younger than 18 years in Arizona. Child Fatality Review Teams located throughout Arizona reviewed all deaths that occurred in 2006. Males accounted for 57 percent of deaths (n=656) and females accounted for 43 percent (n=504). One death was of a neonate of unknown gender. More males died in each age group, except for 10 through 14 years, where an equal number of boys and girls died. Figure 1 shows deaths among children by age group and gender.

Figure 1. Deaths Among Children Birth Through 17 Years by Age Group and Gender, Arizona 2006 (n=1,161)

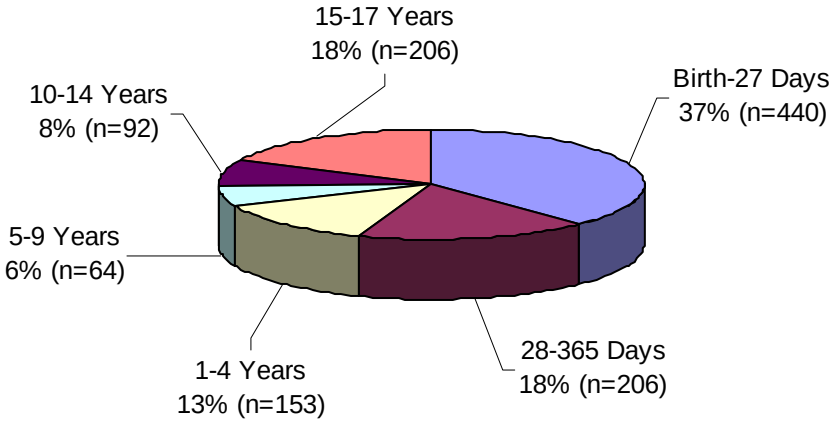


Does not include one neonate with unknown gender

The largest percentage of deaths was among children less than 28 days old (37 percent, n=440); 18 percent of deaths were among children 28 days through 365 days old (n=206); 13 percent were one through four years old (n=153); six percent were five

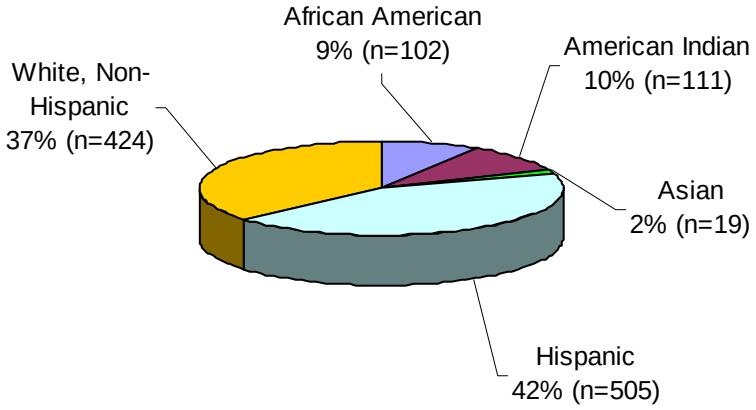
through nine years old (n=64); eight percent were 10 through 14 years old (n=92); and 18 percent were 15 through 17 years old (n=206). Figure 2 shows deaths among children by age group.

Figure 2. Deaths Among Children by Age Group, Arizona 2006 (n=1,161)



Forty-two percent of child deaths were among Hispanics (n=505); 37 percent were among Non-Hispanic Whites (n=424); ten percent were among American Indians (n=111); nine percent were among African Americans (n=102); and two percent were among Asians (n=19). Figure 3 shows deaths among children by race/ethnicity.

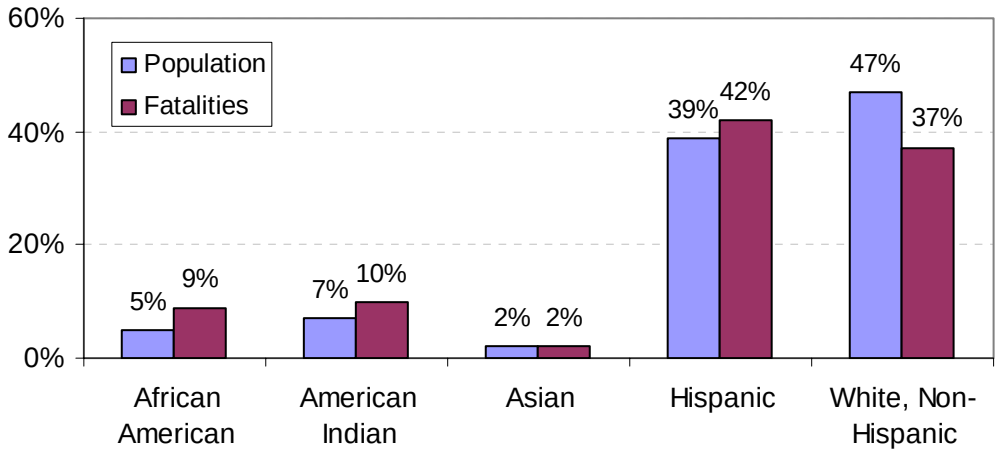
Figure 3. Deaths Among Children Birth Through 17 Years by Race/Ethnicity, Arizona 2006 (n=1,161)



Deaths were over-represented among African American children, who comprised five percent of the population in Arizona, but nine percent of the fatalities. American Indian children were also over-represented among child fatalities, comprising seven percent of the population and ten percent of deaths. Hispanic children accounted for 39 percent of

the population and 42 percent of child fatalities. Figure 4 shows deaths among children by race/ethnicity compared to population percentages.

Figure 4. Deaths Among Children by Race/Ethnicity Compared to Population, Arizona 2006



The percentage of deaths in each county was similar to the percentage of children residing in that county. Seventy-one of the children who died in Arizona were residents of other states or countries. Table 1 shows deaths among children by county of residence.

Table 1. Deaths Among Children by County of Residence, Arizona 2006 (n=1,161)

County of Residence	Number of Deaths	Percent of Deaths	Percent of Population
Apache	17	1%	2%
Cochise	28	2%	2%
Coconino	26	2%	2%
Gila	6	<1%	1%
Graham	8	<1%	1%
Greenlee	1	<1%	<1%
La Paz	3	<1%	<1%
Maricopa	664	57%	59%
Mohave	28	2%	2%
Navajo	25	2%	2%
Pima	147	13%	14%
Pinal	62	5%	4%
Santa Cruz	9	<1%	<1%
Yavapai	33	3%	3%
Yuma	33	3%	3%
Outside Arizona	71	6%	--
Total	**1,161**	**100%**	

CHILD FATALITY REVIEW FINDINGS

Cause and Manner of Child Fatalities

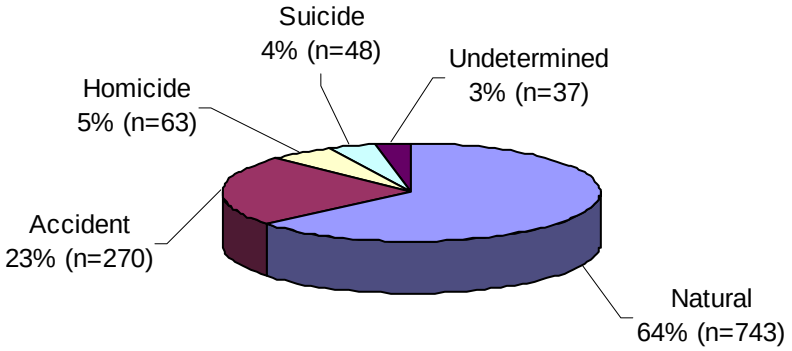
Cause of death refers to the injury or medical condition that resulted in death (e.g. firearm-related injury, pneumonia, cancer). Manner of death is not the same as cause of death, but specifically refers to the intentionality of the cause. For example, if the cause of death was a firearm-related injury, the manner of death may have been intentional or unintentional. If it was intentional, the manner of death was suicide or homicide. If it was unintentional, the manner of death was an accident. In some cases, there was insufficient information to determine the manner of death, even though the cause was known. It may not have been clear that a firearm death was due to an accident, suicide, or homicide, and in these cases, the manner of death was listed as undetermined. Manners of death include:

- natural (e.g. cancer)
- accident (e.g. unintentional injury)
- homicide (e.g. intentional firearm-injury during gang violence)
- suicide (e.g. self-inflicted fatal injuries)
- undetermined.

In addition to reviewing medical examiner reports, Child Fatality Review Teams also review records from hospitals, emergency departments, law enforcement, Child Protective Services, and other sources. As a result of this comprehensive, multidisciplinary approach, the team's determination of cause and manner sometimes differs from those recorded on the death certificate.

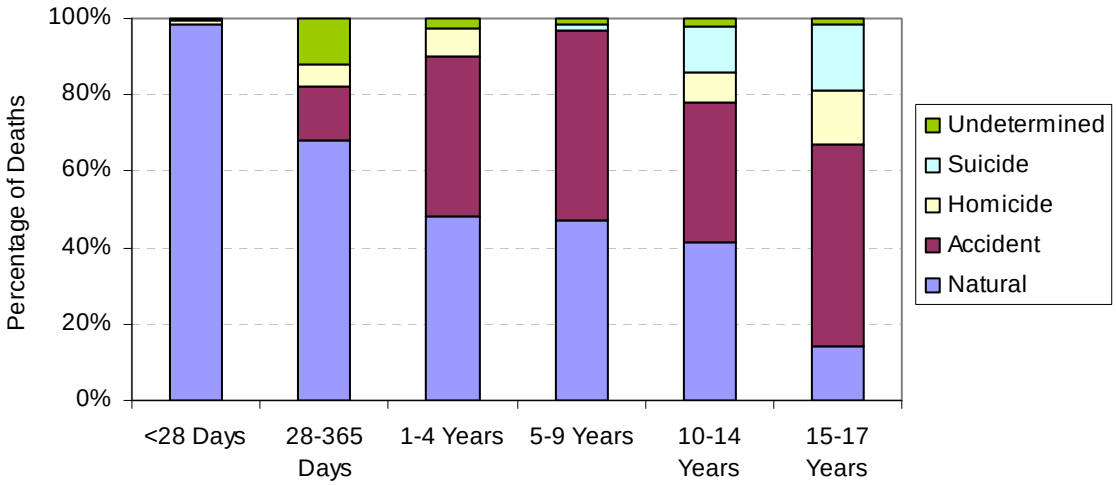
Natural deaths accounted for 64 percent of all child deaths during 2006 (n=743); 23 percent of child deaths were accidents (n=270); five percent were homicides (n=63); four percent were suicides (n=48); and three percent were of undetermined manner (n=37). Figure 5 shows deaths among children by manner.

Figure 5. Deaths Among Children Birth Through 17 Years by Manner, Arizona 2006 (n=1,161)



The distribution of manner of death varied by age group. Deaths among infants were primarily due to natural causes, while accidental deaths were more common for older children and adolescents. Homicide occurred in all age groups except for children ages five through nine years. Suicide primarily occurred in the 15 through 17 year age group, but occurred in children as young as nine years old. Figure 6 shows manner of child deaths by age group.

Figure 6. Manner of Childhood Fatalities by Age Group, Arizona 2006 (n=1,161)



There was an increase in the percentages of deaths due to accidents and suicides and a decline in natural deaths in 2006. Table 2 shows deaths among children by manner for 2005 and 2006.

Table 2. Deaths Among Children Birth Through 17 Years by Manner, Arizona 2005-2006				
Manner	**2005**		**2006**	
Natural	765	67%	743	64%
Accident	253	22%	270	23%
Homicide	58	5%	63	5%
Suicide	36	3%	48	4%
Undetermined	36	3%	37	3%
Total	**1,148**		**1,161**	

There were 294 deaths due to prematurity in 2006 and 29 deaths due to Sudden Infant Death Syndrome (SIDS). There were 164 motor vehicle-related deaths and 31 drownings. The leading cause of both homicides and suicides was firearms. Table 3 shows deaths among children by cause and manner.

Table 3. Deaths among Children Birth Through 17 Years by Cause and Manner, Arizona 2006 (n=1,161)						
Cause	**Accident**	**Homicide**	**Suicide**	**Natural**	**Undetermined**	**Total**
Medical*				422	4	426
Prematurity				294		294
Motor vehicle crash	164					164
Firearm injury	11	26	22		1	60
Suffocation	30	2			2	34
Drowning	31					31
SIDS				27	2	29
Blunt force trauma	2	23	1			26
Hanging			22		1	23
Undetermined		4			18	22
Other non-medical	3	6			5	14
Poisoning	4	2	3		2	11
Fire/burn	9					9
Exposure	9					9
Fall/crush	7				2	9
Total	**270**	**63**	**48**	**743**	**37**	**1,161**
*Excluding SIDS and prematurity						

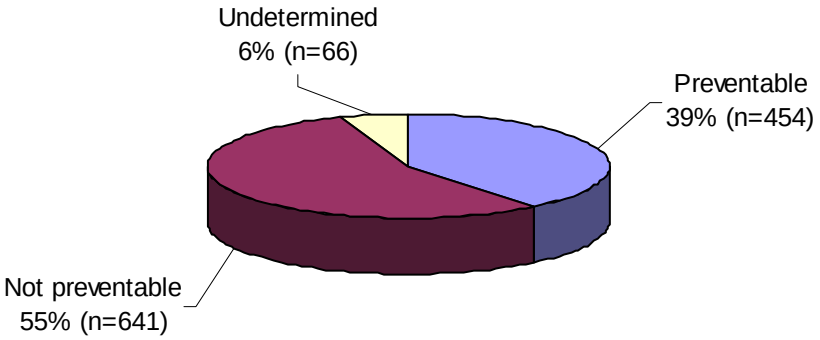
Motor vehicle crash deaths increased by two percent in 2006 compared to 2005. There were also slight increases in the percentages of deaths due to firearms and suffocation in 2006, and small declines in the percentages of child deaths due to SIDS, poisoning, fire/burns, and exposure. Table 4 shows deaths among children by cause for 2005 and 2006.

Table 4. Deaths Among Children Birth Through 17 Years by Cause, Arizona 2005-2006				
Cause	**2005**		**2006**	
Medical*	439	38%	426	37%
Prematurity	287	25%	294	25%
Motor vehicle crash	134	12%	164	14%
Firearm injury	43	4%	60	5%
Suffocation	28	2%	34	3%
Drowning	35	3%	31	3%
SIDS	37	3%	29	2%
Blunt force trauma	23	2%	26	2%
Other non-medical	19	2%	23	2%
Hanging	18	2%	23	2%
Undetermined	27	2%	22	2%
Poisoning	19	2%	11	1%
Fire/burn	20	2%	9	1%
Exposure	19	2%	9	1%
Total	**1,148**		**1,161**	
*Excluding SIDS and prematurity				

PREVENTABLE DEATHS

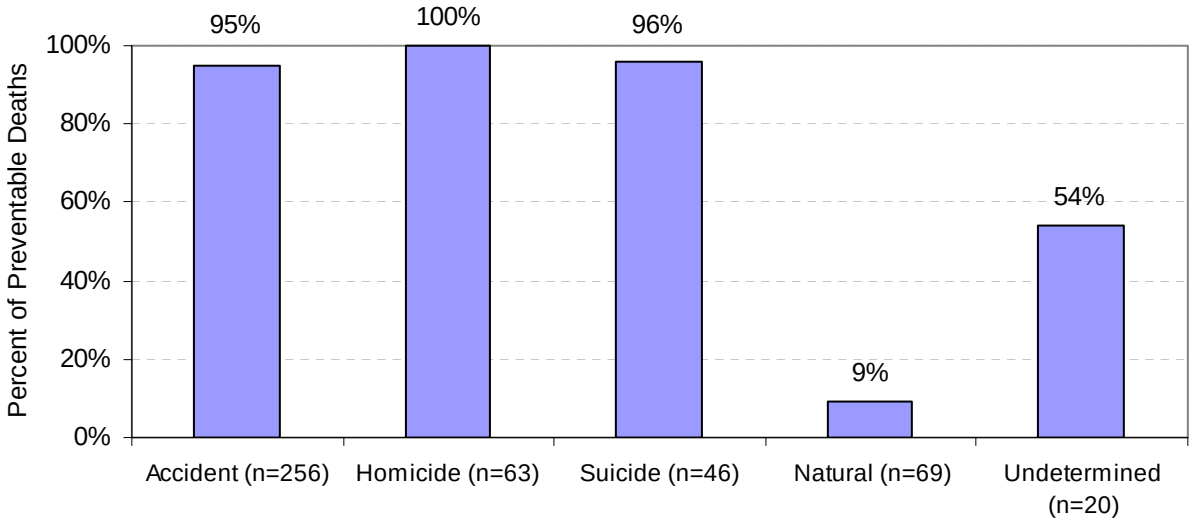
Child Fatality Review Teams consider a child's death preventable if something could have been done (by an individual such as the caretaker or supervisor, or by the community as a whole) that would have prevented the death. Child Fatality Review Teams determined that 454 of child deaths in 2006 were preventable (39 percent). This was an increase from 2005, when 34 percent of deaths were determined to have been preventable (n=388). Figure 7 shows deaths among children by preventability.

Figure 7. Deaths Among Children by Preventability, Arizona 2006 (n=1,161)



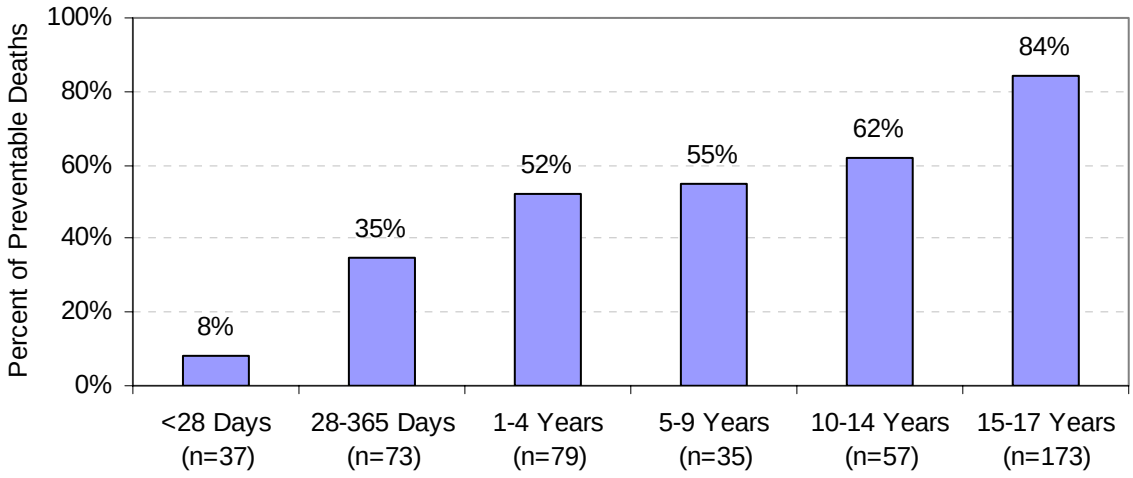
Ninety-five percent of accidental deaths were preventable (n=256); 100 percent of homicides were preventable (n=63); and 96 percent of suicides were preventable (n=46). Only nine percent of natural deaths were determined to have been preventable (n=69). Figure 8 shows preventable deaths by manner.

Figure 8. Preventable Deaths Among Children by Manner, Arizona 2006 (n=454)



Preventability also varied by age group. Children younger than one year had the lowest percentage of preventable deaths. For children older than one year, at least half of the deaths in each age group were determined to have been preventable. The highest percentage of preventable deaths was among children ages 15 through 17 years (84 percent, n=173). Figure 9 shows preventable deaths among children by age group.

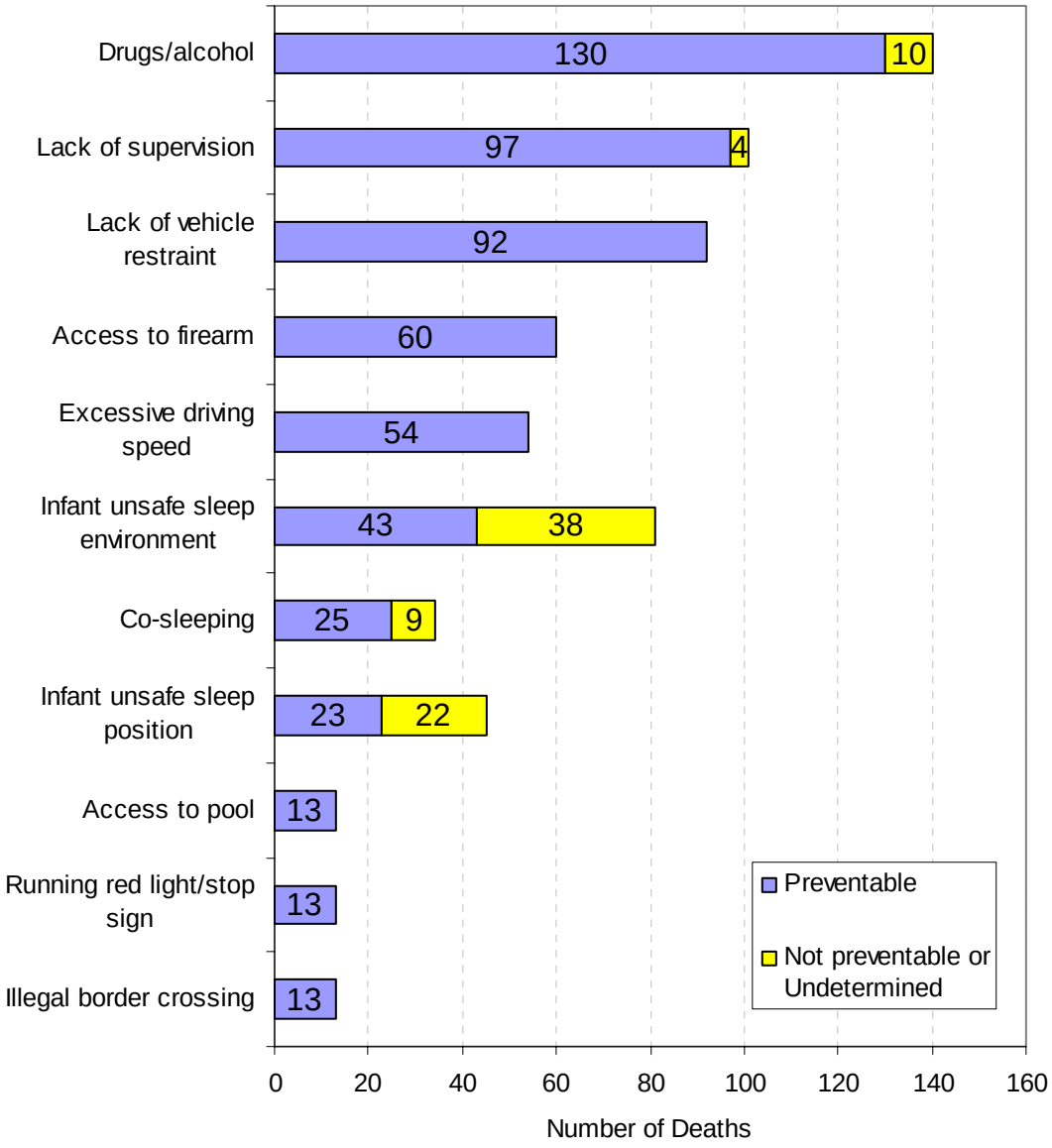
Figure 9. Preventable Deaths Among Children by Age Group, Arizona 2006 (n=454)



During the review of each child's death, teams identify factors believed to have contributed to the death. Although the presence of a contributing factor typically led to the determination that a death was preventable, this was not always the case. For example, the team might have concluded that an unsafe sleep environment (e.g. infant left sleeping on a couch) was a contributing factor in an unexpected infant death. However, the team may not have had sufficient information (e.g. autopsy report, adequate scene investigation) to determine if the death could have been prevented.

Among the 454 deaths determined to have been preventable, drugs and/or alcohol was identified as a contributing factor for 130 fatalities (29 percent). Lack of supervision was a contributing factor for 97 preventable child deaths (21 percent), and lack of vehicle restraints was a contributing factor for 92 preventable deaths (20 percent). More than one factor may have been identified for each death. Figure 10 shows contributing factors among child deaths. This figure also shows (in yellow) how many additional deaths were identified for each contributing factor, regardless of preventability. For example, drugs and/or alcohol contributed to ten deaths that were not determined to have been preventable. Lack of supervision contributed to 97 preventable deaths and 101 deaths total. Unsafe sleep environment was a factor in 81 infant deaths (43 deaths were preventable). Unsafe sleep position was a factor in 45 infant deaths (23 deaths were preventable), and co-sleeping was a factor in 34 deaths (25 deaths were preventable).

Figure 10. Contributing Factors Among Child Deaths, Arizona 2006

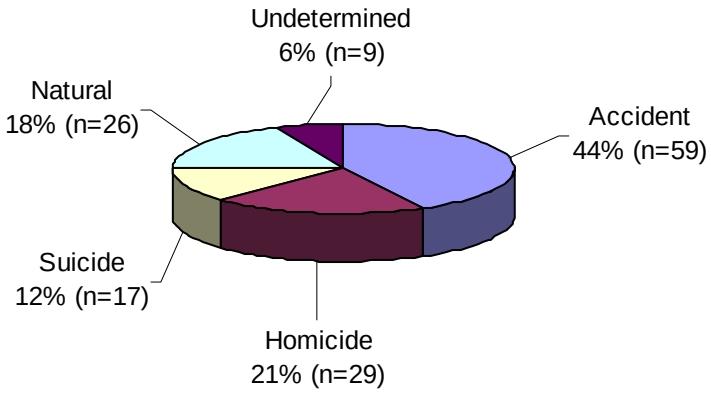


SUBSTANCE USE

Substance use (including illegal drugs, prescriptions drugs, and alcohol) was involved in 140 child deaths in Arizona during 2006, which accounted for 12 percent of all child deaths. Drugs and/or alcohol was identified as a contributing factor for 130 preventable fatalities. In 2005, drugs and/or alcohol was involved in 11 percent of child deaths (n=131).

In 2006, substance use contributed to 46 percent of homicides (n=29), 35 percent of suicides (n=17), 24 percent of deaths for which manner could not be determined (n=9), and 22 percent of accidents (n=59). Three percent of natural deaths were found to have substance use as a contributing factor (n=26). Examples of natural deaths affected by substance use include deaths for which prenatal drug abuse was identified, parents whose substance use negatively impacted the quality of care or supervision, and children whose health was harmed by exposure to drugs in the home. Figure 11 shows child deaths involving drugs and/or alcohol by manner.

Figure 11. Child Deaths Among Children Involving Drugs and/or Alcohol by Manner, Arizona 2006 (n=140)

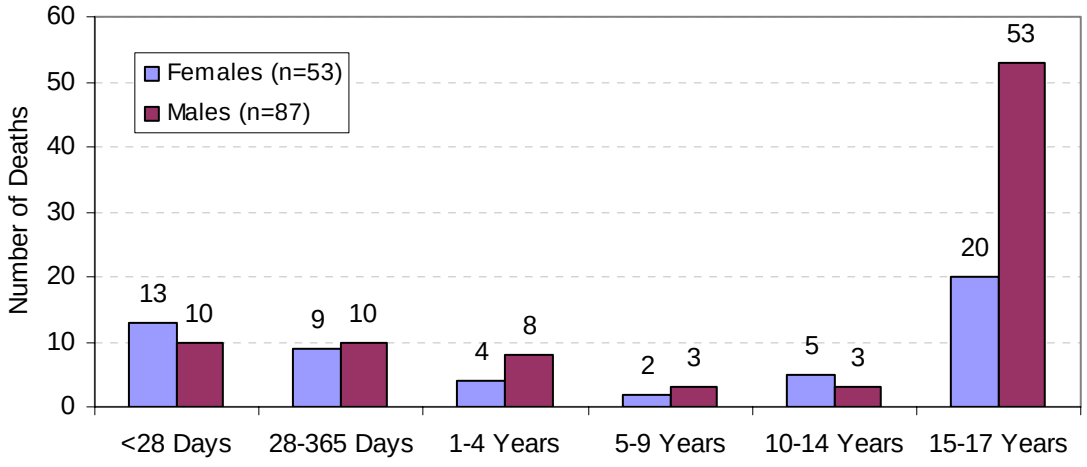


Motor vehicle crashes accounted for 27 percent of child deaths involving drugs and/or alcohol (n=38), and firearms accounted for 18 percent (n=25). Twenty deaths involving drugs and/or alcohol were due to prematurity (14 percent). Table 5 shows child deaths involving drugs and/or alcohol by cause and manner.

Table 5. Child Deaths Involving Drugs and/or Alcohol by Cause and Manner, Arizona 2006 (n=140)						
Cause	**Accident**	**Homicide**	**Suicide**	**Natural**	**Undetermined**	**Total**
Motor vehicle crash	38					38
Firearm injury	3	14	8			25
Prematurity				20		20
Blunt force trauma	1	9	1			11
Suffocation	7	2				9
Poisoning	4	1	2			7
Hanging	1		6			7
Other non-medical					5	5
Medical*				5		5
Undetermined					4	4
Stabbing		3				3
Drowning	3					3
Exposure	1					1
Fire/burn	1					1
SIDS				1		1
Total	**59**	**29**	**17**	**26**	**9**	**140**
*Excluding SIDS and prematurity						

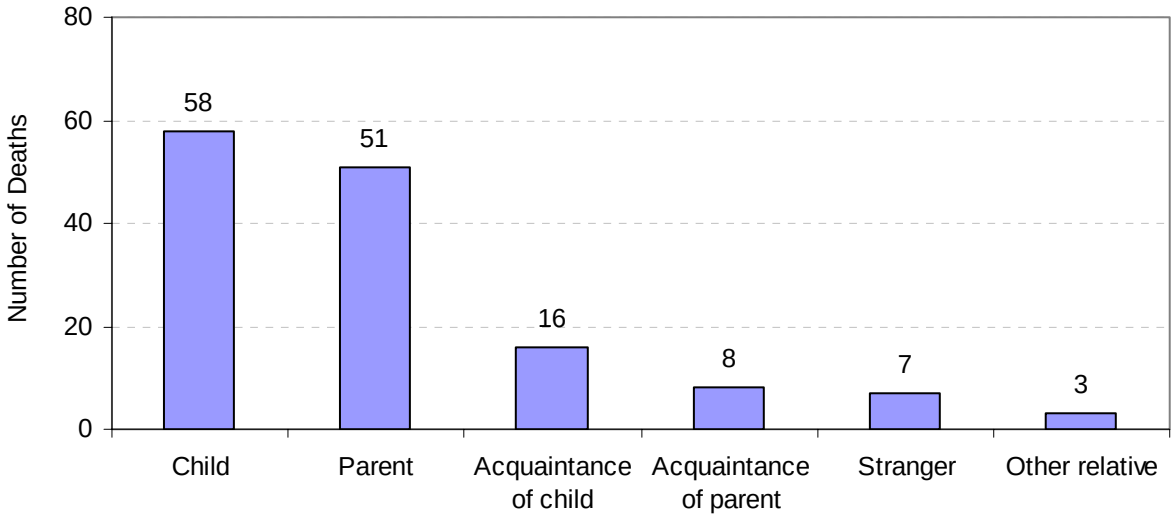
Although drugs and/or alcohol was determined to have been a contributing factor for child deaths of males and females in all age groups, adolescent males ages 15 through 17 years accounted for over one-third of substance use-related deaths (38 percent, n=53). Figure 12 shows child deaths involving substance use by gender and age group.

Figure 12. Child Deaths Involving Substance Use by Gender and Age Group, Arizona 2006 (n=140)



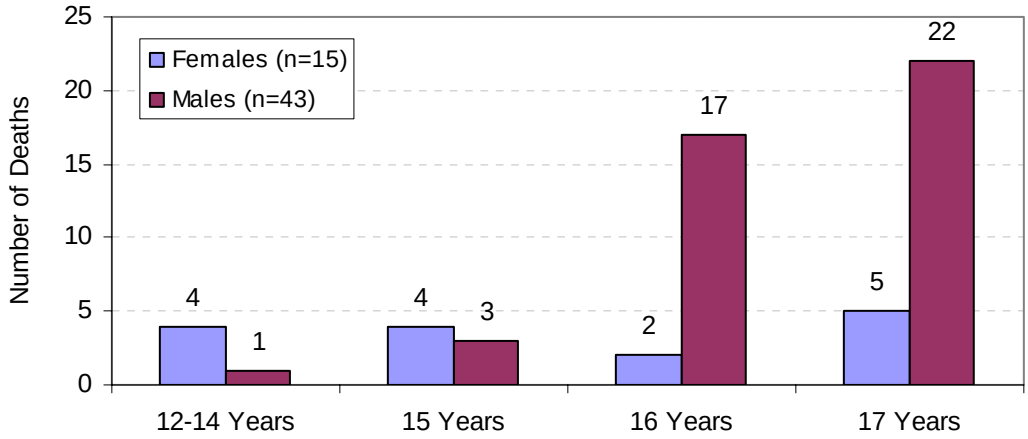
The individual who used the substance may have been the parent, child, an acquaintance of the child or family, a relative, or a stranger. For example, if the child was a passenger in a car hit by an intoxicated driver of another car, the individual who used the substance is classified as "stranger." In some deaths, more than one individual may have been using drugs and/or alcohol. Figure 13 shows child deaths involving drugs and/or alcohol by substance user.

Figure 13. Child Deaths Involving Drugs and/or Alcohol by Substance User, Arizona 2006



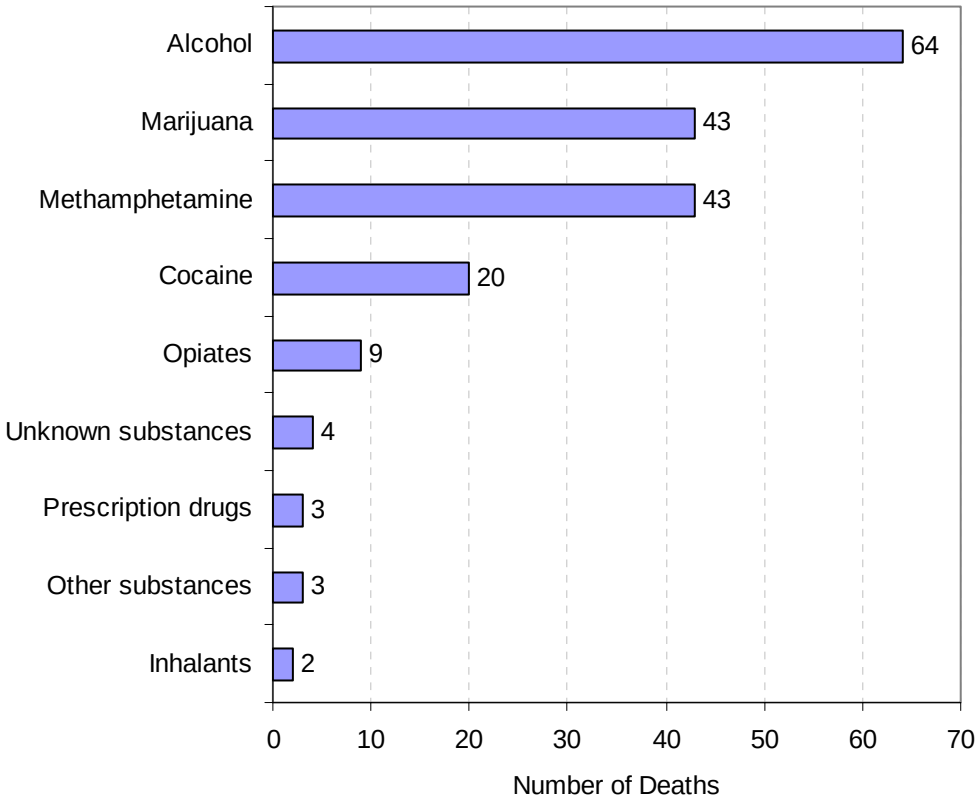
Of the 58 children whose own drug and/or alcohol use contributed to their deaths, 43 were males (74 percent). Among children ages 15 years and younger, there were more females whose substance use contributed to their deaths. There were higher numbers of males whose substance use contributed to their deaths among children ages 16 and 17 years. Figure 14 shows the age group and gender for children whose own substance use contributed to their deaths.

Figure 14. Age Group and Gender for Children Whose Own Substance Use Contributed to Their Deaths, Arizona 2006 (n=58)



Alcohol contributed to five percent of all child deaths during 2006 (n=64), and marijuana was involved in four percent of all child deaths (n=43). Methamphetamine was a factor in four percent of child deaths (n=43). Multiple substances may have contributed to a single death. Figure 15 shows the substances that contributed to child deaths in Arizona during 2006.

Figure 15. Substances That Contributed to Deaths Among Children, Arizona 2006



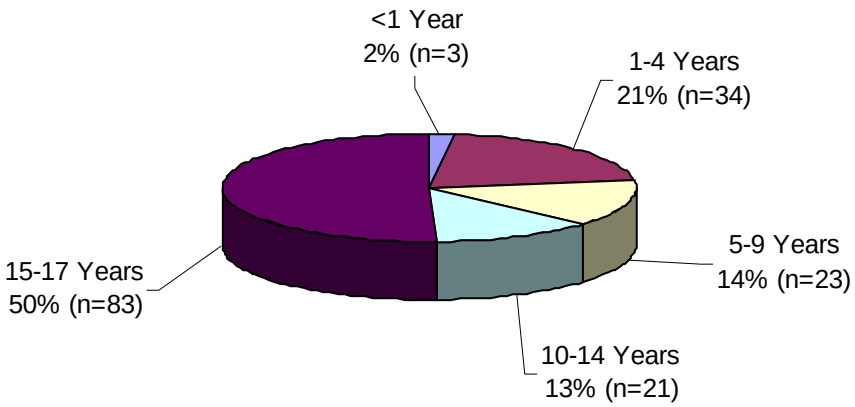
MOTOR VEHICLE FATALITIES

In 2006, 164 children died as the result of motor vehicle crashes in Arizona (14 percent of child fatalities) compared to 134 motor vehicle fatalities among children in 2005 (12 percent of child fatalities). As in previous years, motor vehicle crashes were the leading cause of preventable deaths. The majority of motor vehicle-related deaths in 2006 were among males (54 percent, n=85) and 48 percent were among females (n=79). Forty-two percent of deaths were among Hispanic children (n=69); 41 percent were among White Non-Hispanics (n=67); 12 percent of deaths were among American Indians (n=20); and five percent were among other races/ethnicities (n=9).

The number of children ages one through four years who died in motor vehicle crashes increased from 19 in 2005 to 34 in 2006. Adolescents, 15 through 17 years, accounted for half of child motor vehicle crash deaths (n=83). Two infants died as a result of *in*

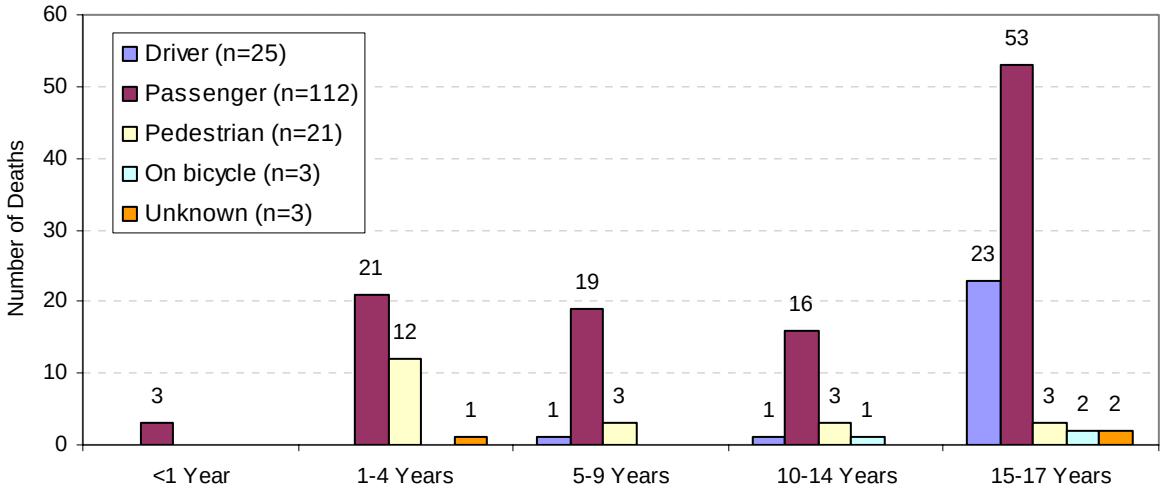
utero trauma during motor vehicle accidents. Figure 16 shows motor vehicle-related fatalities among children by age group.

Figure 16. Motor Vehicle-Related Fatalities Among Children by Age Group, Arizona 2006 (n=164)



There were 112 children who died as passengers of motor vehicles (68 percent); 25 children were driving motor vehicles (15 percent); 21 children were pedestrians (13 percent); and three children were on bicycles (two percent). For three children who died in motor vehicle crashes, their exact locations in the vehicles were unknown (two percent). Figure 17 shows motor vehicle-related fatalities among children by age group and location of the child.

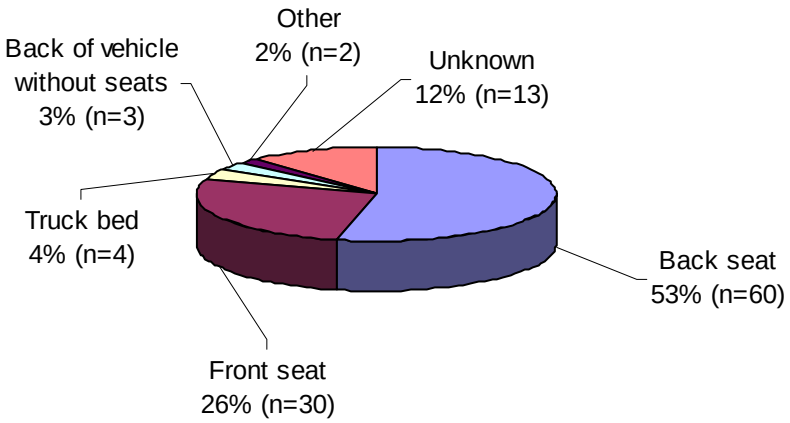
Figure 17. Motor Vehicle-Related Fatalities Among Children by Age Group and Location, Arizona 2006 (n=164)



Seven of the 21 pedestrians were in driveways when they were struck by motor vehicles, and five pedestrians were struck while in parking areas. Children ages one through four years had the highest number of pedestrian deaths (n=12). Nine children in this age group were struck by trucks or sport utility vehicles (75 percent). This raises concerns of reduced visibility with high profile vehicles.

Among the 112 passengers, 53 percent were located in the back seat (n=60); 26 percent were in the front seat (n=30); four percent were riding in truck beds (n=4); and three percent were in the back of a vehicle with removed seats (n=3). Figure 18 shows motor vehicle-related fatalities by child's location in the vehicle.

Figure 18. Child Passengers in Motor Vehicle-Related Fatalities by Location in Vehicle, Arizona 2006 (n=112)



There were 43 child deaths caused by motor vehicle rollovers. For eight of these rollovers, the child who died was the driver of the vehicle. Fifteen rollovers occurred on rural roads (35 percent). Thirty-nine percent of rollovers occurred in cars (n=17), and 23 percent occurred in sport utility vehicles (n=10). Table 6 shows vehicle types involved in fatal rollovers during 2006.

Table 6. Fatal Rollovers by Vehicle Type, Arizona 2006 (n=43)

Vehicle type	Number	Percent
Car	17	39%
Sport utility vehicle	10	23%
Truck	9	21%
All terrain vehicle	3	7%
Van	2	5%
Unknown	2	5%
Total	**43**	

Preventable Factors for Motor Vehicle Fatalities

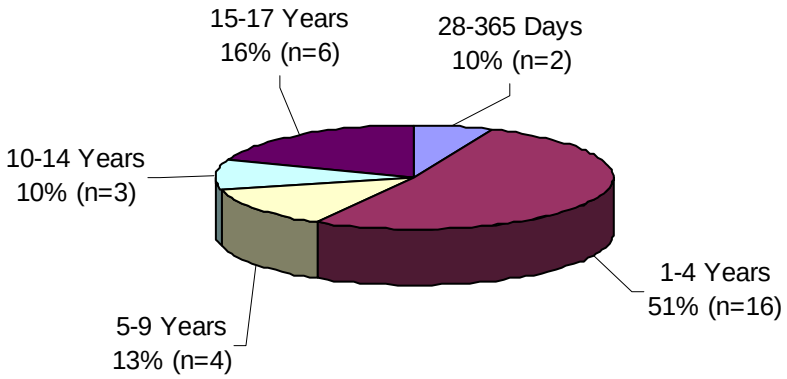
Ninety-six percent of motor vehicle fatalities were determined to have been preventable (n=157). Lack of vehicle restraints was identified as a preventable factor for more than half of motor vehicle crash fatalities among children (56 percent, n=92). For 54 deaths, excessive speed was a contributing factor (33 percent), and for 41 deaths, reckless driving was identified as a contributing factor (25 percent). Table 7 shows preventable factors for motor vehicle fatalities among children in Arizona during 2006.

Table 7. Preventable Factors for Motor Vehicle Fatalities Among Children, Arizona 2006		
Factor*	**Number**	**Percent**
Lack of vehicle restraint	92	56%
Excessive driving speed	54	33%
Reckless driving	41	25%
Drugs/alcohol	38	23%
Lack of supervision	33	20%
Driver distraction	28	17%
Driver inexperience	26	16%
Lack of helmet	11	7%
***More than one factor may have been identified for each death**		

DROWNINGS

In 2006, there were 31 deaths among children due to accidental drownings, which accounted for three percent of all child deaths during the year. In 2005, there were 32 accidental drowning fatalities among children (three percent). Forty-eight percent of the deaths in 2006 were among males (n=15), and 52 percent were among females (n=16). Forty-two percent of drowning deaths were among White, Non-Hispanic children (n=13); 39 percent were among Hispanics; and 19 percent were among other races/ethnicities (n=6). Slightly more than half of child drowning fatalities were among children ages one through four years (51 percent, n=16). Figure 19 shows accidental drowning fatalities among children by age group.

Figure 19. Accidental Drowning Fatalities Among Children by Age Group, Arizona 2006 (n=31)



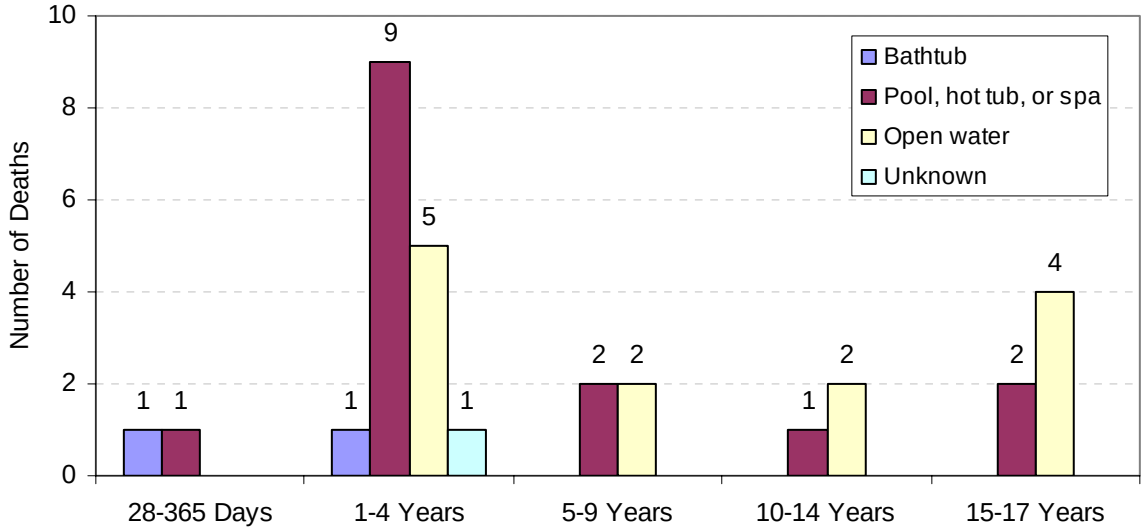
Fourteen drowning fatalities occurred in pools; 13 occurred in open water; and three occurred in bathtubs or hot tubs. Eleven children who died in open water locations were not wearing personal flotation devices (85 percent) even though 61 percent of the

children did not know how to swim (n=8). Nine children who drowned in pools, hot tubs, or spas were unable to swim. Table 8 shows the locations of drowning fatalities in Arizona during 2006.

Table 8. Location of Child Drowning Fatalities, Arizona 2006 (n=31)		
Location	**Number**	**Percent**
Pool	14	45%
▪ Above-ground	3	
▪ In-ground	10	
▪ Wading	1	
Open water	13	42%
▪ Lake	7	
▪ River	3	
▪ Canal	2	
▪ Wash	1	
Bathtub	2	7%
Hot tub	1	3%
Unknown	1	3%
Total	**31**	

Pool drownings occurred in each age group, with the highest number among children ages one through four years (n=9). This age group also had the highest number of open water drownings (n=5). Figure 20 shows the location of drowning fatalities by age group.

Figure 20. Accidental Drowning Fatalities Among Children by Age Group and Drowning Location, Arizona 2006 (n=31)



Preventable Factors for Child Drownings

Ninety-four percent of child drownings were identified as preventable (n=29). For the remaining three drownings, the preventability could not be determined. Lack of supervision was the most commonly identified preventable factor in child drowning fatalities (81 percent, n=25), followed by access to pools (42 percent, n=13). Lack of personal flotation devices contributed to 35 percent of drownings (n=11). Table 9 shows preventable factors for child drownings in Arizona during 2006.

Table 9. Preventable Factors for Child Drownings, Arizona 2006

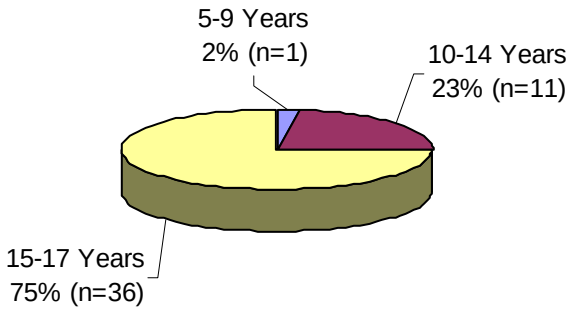
Factor*	Number	Percent
Lack of supervision	25	81%
Access to pool	13	42%
Lack of personal flotation device	11	35%
Drugs/alcohol	3	10%
***More than one factor may have been identified for each death**		

SUICIDES

In 2006, there were 48 suicides among children in Arizona, which accounted for four percent of all child deaths. In 2005, suicides accounted for three percent of all child deaths (n=36). Sixty percent of the suicides in 2006 were among males (n=29) and 40 percent were among females (n=19). Fifty percent of suicides were among White, Non-Hispanic children (n=24); 27 percent were among Hispanics (n=13); 19 percent were among American Indians (n=9); and four percent were among children of other races/ethnicities (n=2).

The majority of suicides were among adolescents ages 15 through 17 years (75 percent, n=36), but 25 percent were among children 14 years and younger (n=12). In 2005, 36 percent of the children who committed suicide were 14 years and younger (n=13). The youngest child who committed suicide was nine years old. Figure 21 shows suicide among Arizona children during 2006 by age group.

Figure 21. Suicides Among Children by Age Group, Arizona 2006 (n=48)



Identification of children at risk for suicide can be difficult, and warning signs are not always recognized or taken seriously. Sixteen children who took their own lives in 2006 were known to have talked about suicide to others (33 percent); 13 children were known to have made prior suicide threats (27 percent); and seven children had made prior suicide attempts (15 percent).

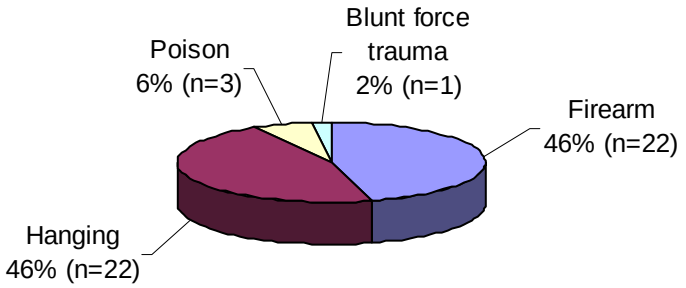
Only three children were known to have been on medication for mental illness at the time of their deaths (six percent). Eleven children who committed suicide were known to have had prior mental health services (23 percent), but only eight children were known to have been receiving mental health services at the time of their deaths (17 percent).

Several issues were identified as possibly contributing to the children's despondency. The most commonly identified issues were child's involvement with drugs and/or alcohol (31 percent, n=15), recent argument or breakup with boyfriend/girlfriend (27 percent, n=13), and family discord (21 percent, n=10). Table 10 summarizes issues identified in Arizona child suicide cases which may have affected the child's mental health prior to death.

Table 10. Issues that May Have Affected Child's Mental Health Prior to Suicide, Arizona 2006 (n=48)		
Issue*	**Number**	**Percent**
Child's involvement with drugs/alcohol	15	31%
Argument or breakup with boyfriend/girlfriend	13	27%
Family discord	10	21%
Argument with parents/caregivers	8	17%
School failure	6	13%
Physical/sexual abuse	5	10%
Death (except suicide) of friend or relative	5	10%
Parents' divorce/separation	4	8%
Problem with the law	4	8%
Suicide by friend or relative	3	6%
Victim of bullying	2	4%
***More than one issue may have been identified for each death**		

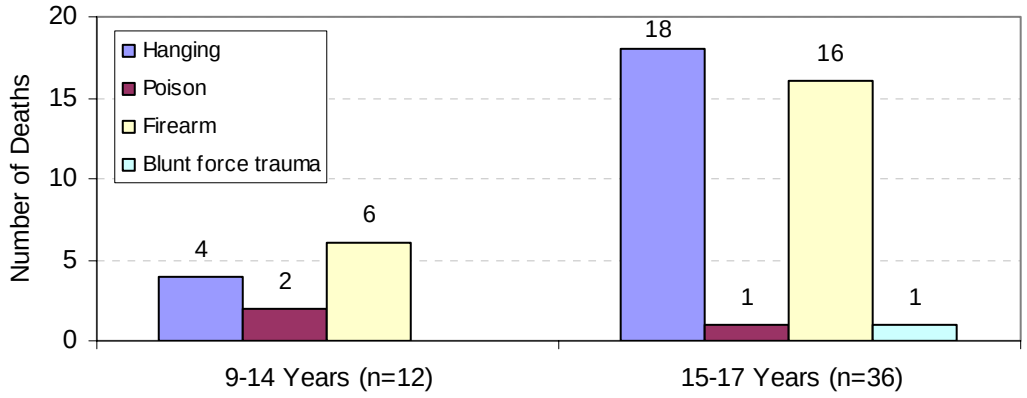
Firearms accounted for 46 percent of child suicides in Arizona during 2006 (n=22), and hanging accounted for an additional 46 percent (n=22). The most common objects used in hanging suicides were ropes (35 percent, n=7), electrical cords (30 percent, n=6), or belts (25 percent, n=5). Fifty-five percent of the strangulation/hanging suicides were among males (n=12) and 45 percent were among females (n=10). Six percent of suicides were due to poisoning (n=3) and two percent were due to self-inflicted blunt force trauma (n=1). Figure 22 shows suicides among children by cause of death.

Figure 22. Suicides Among Children by Cause of Death, Arizona 2006 (n=48)



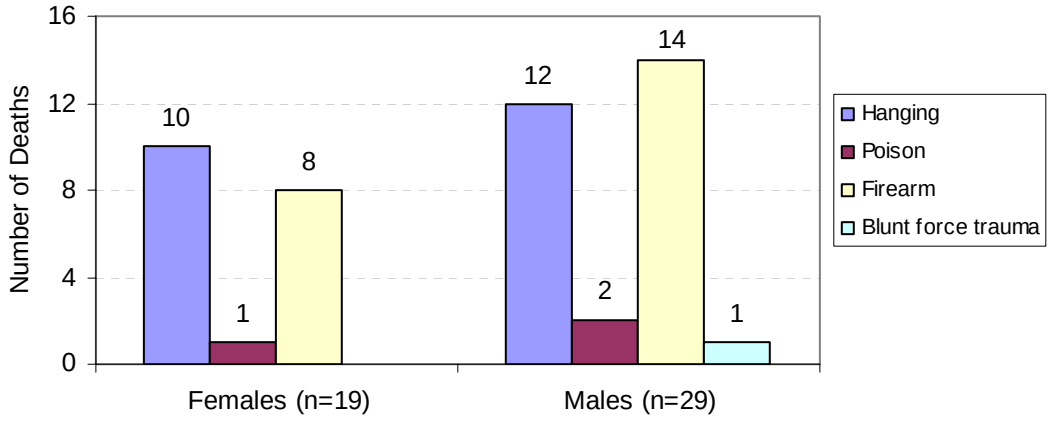
Cause of suicides varied by the age of the child. Fifty percent of suicides among children younger than 15 years were the result of firearm injuries (n=6), and firearms accounted for 44 percent of suicides among children 15 years and older (n=16). Hanging was the cause of 33 percent of suicides among children younger than 15 years (n=4), and comprised 50 percent of suicides among children 15 years and older (n=18). Figure 23 shows suicides among children by cause and age group.

Figure 23. Suicides Among Children by Cause and Age Group, Arizona 2006 (n=48)



Cause of suicide also varied by gender. Females were more likely to have committed suicide by hanging, whereas males were more likely to have used firearms. Among females, 53 percent of suicides were due to hanging (n=10), and among males, hanging accounted for 41 percent of suicides (n=12). Firearms were used in 42 percent of suicides among females (n=8) and 48 percent of suicides among males (n=14). Figure 24 shows suicides among children by cause and gender.

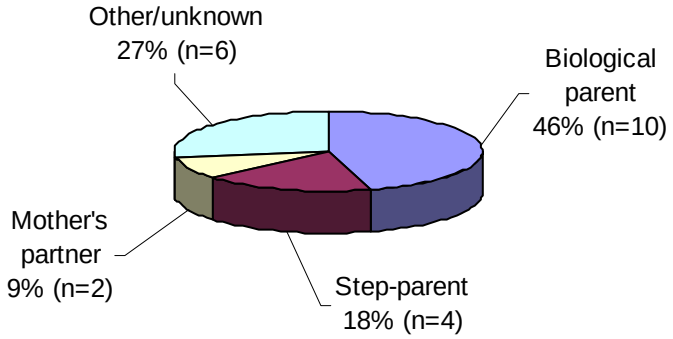
Figure 24. Suicides Among Children by Cause and Gender, Arizona 2006 (n=48)



Firearms were used in 22 child suicides during 2006. There were six firearm-related suicides among children ages 10 through 14 years (55 percent of the total suicides for this age group). There were 16 firearm-related suicides among children ages 15 through 17 years (44 percent of the total suicides for this age group).

Handguns accounted for the majority of firearm-related suicides among children in 2006 (64 percent, n=14), followed by hunting rifles (27 percent, n=6) and shotguns (nine percent, n=2). The majority of firearms belonged to parents, step-parents, or the mothers' partners (73 percent, n=16). Figure 25 shows the owners of the firearms used in child suicides.

Figure 25. Owners of Firearms Involved in Childhood Suicides, Arizona 2006 (n=22)



Among the 22 firearm-related suicides, ten firearms were stored with ammunition (45 percent), and six firearms were stored loaded (27 percent). Only four firearms used in child suicides were stored in locked cabinets (18 percent), and most of the firearms were stored in unsecured locations (55 percent, n=12). Table 11 summarizes the locations of the firearms used in child suicides during 2006.

Table 11. Locations of Firearms Used in Child Suicides, Arizona 2006 (n=22)

Location	Number	Percent
Unknown	6	27%
Locked cabinet	4	18%
Not stored	3	14%
Other unlocked location	3	14%
Under bed/mattress/pillow	2	9%
Unlocked cabinet	2	9%
Closet	2	9%
Total	**22**	**100%**

Preventable Factors for Child Suicides

Ninety-six percent of child suicides were determined to have been preventable (n=46). Access to firearms (n=22) and lack of mental health treatment (n=22) were the most commonly identified preventable factors (46 percent), followed by substance use (35 percent, n=17). Table 12 shows preventable factors for child suicides in Arizona during 2006.

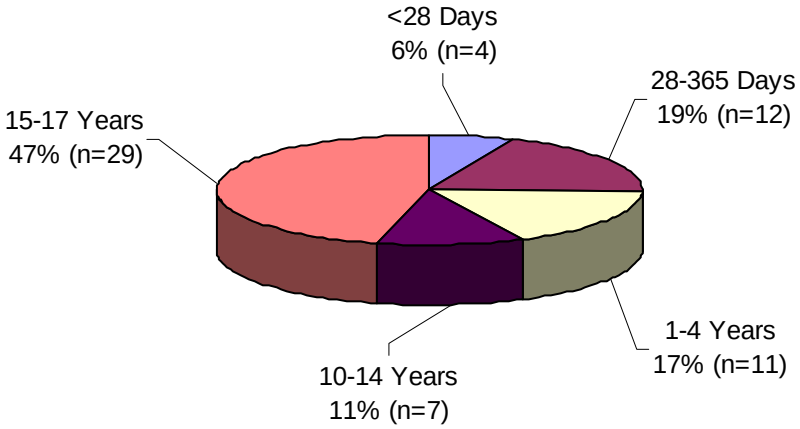
Table 12. Preventable Factors for Child Suicides, Arizona 2006		
Factor*	**Number**	**Percent**
Access to firearms	22	46%
Lack of mental health treatment	22	46%
Drugs/alcohol	17	35%
Lack of supervision	6	12%
***More than one factor may have been identified for each death**		

HOMICIDES

Sixty-three children were victims of homicide in Arizona during 2006 compared to 58 in 2005, which accounted for five percent of all child deaths in both years. Seventy-three percent of homicide victims in 2006 were males (n=46) and 27 percent were females (n=17). Almost half of child homicides were among Hispanics (49 percent, n=31); 24 percent were among White Non-Hispanics (n=15); 16 percent were among American Indians (n=10); and 11 percent were among other races/ethnicities (n=7).

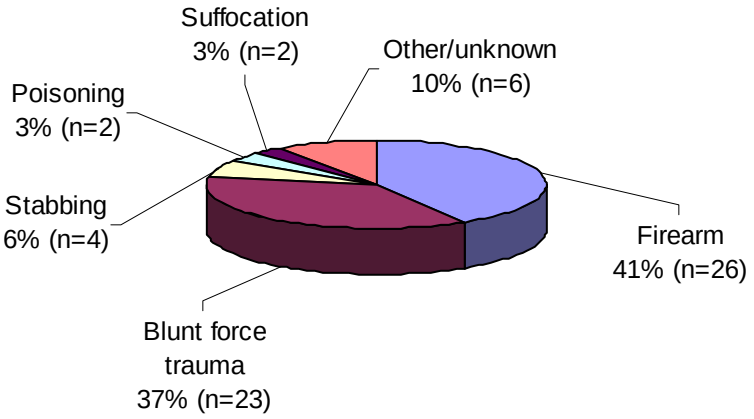
Adolescents ages 15 through 17 years accounted for 47 percent of homicides (n=29). Twenty-five percent of homicides were among children younger than one year (n=16). Figure 26 shows homicides among children by age group.

Figure 26. Homicides Among Children by Age Group, Arizona 2006 (n=63)



Firearms were the leading cause of child homicides (41 percent, n=26), followed by blunt force trauma (37 percent, n=23). Four children were stabbed (six percent). Figure 27 shows homicides among children by cause.

Figure 27. Homicides Among Children by Cause, Arizona 2006 (n=63)



Twenty-four percent of child homicides were committed by friends and acquaintances of the victims (n=15), and 24 percent of homicides were committed by the victims' parents (n=15). Strangers perpetrated 13 percent of child homicides in 2006. Table 13 shows homicides among children by perpetrator.

Table 13. Homicides Among Children by Perpetrator, Arizona 2006 (n=63)

Perpetrator	Number	Percent
Child's friend/acquaintance	15	24%
Biological parent	15	24%
Mother's partner	10	16%
Stranger	8	13%
Other/unknown	6	9%
Step-parent	5	8%
Other relative	2	3%
Foster parent	2	3%
Total	**63**	

Preventable Factors for Child Homicides

One hundred percent of child homicides were determined to have been preventable (n=63). Drugs and/or alcohol was the most commonly identified preventable factor in child homicides (46 percent, n=29), followed by access to firearms (41 percent, n=26). Table 14 shows preventable factors for child homicides in Arizona during 2006.

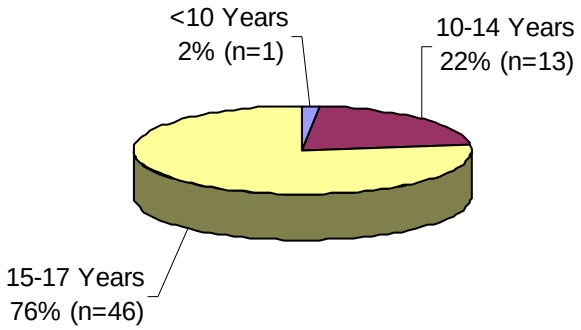
Table 14. Preventable Factors for Child Homicides, Arizona 2006		
Factor*	**Number**	**Percent**
Drugs/alcohol	29	46%
Access to firearms	26	41%
Lack of supervision	10	16%
Involvement in gang	6	9%
***More than one factor may have been identified for each death**		

FIREARM-RELATED FATALITIES

Seventeen more children died due to firearms in 2006 than in 2005. There were 60 firearm-related fatalities in 2006, compared to 43 in 2005. Firearms accounted for five percent of all child deaths in 2006 and four percent of child deaths in 2005. More than two-thirds of the firearm-related deaths in 2006 were among males (77 percent, n=46), and 23 percent were among females (n=14). Fifty-five percent of deaths were among Hispanics (n=33); 30 percent were among Non-Hispanic Whites (n=18); eight percent were among American Indians (n=5); and seven percent were among other races/ethnicities (n=4).

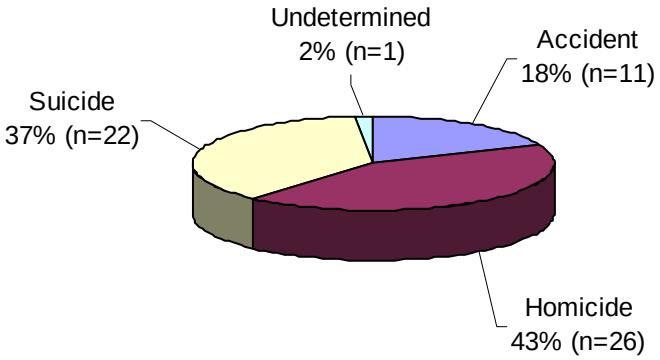
The highest percentage of fatalities was among children ages 15 through 17 years (76 percent, n=46). There were 14 deaths due to firearms among children 14 years and younger. Figure 28 shows 2006 firearm-related fatalities among children by age group.

Figure 28. Firearm-Related Fatalities Among Children by Age Group, Arizona 2006 (n=60)



The most common manner of firearm-related deaths in 2006 was homicide (43 percent, n=26), followed by suicides (37 percent, n=22) and accidents (18 percent, n=11). Two percent of fatalities were of undetermined manner (n=1). Figure 29 shows firearm-related fatalities among children by manner.

Figure 29. Firearm-Related Fatalities Among Children by Manner, Arizona 2006 (n=60)



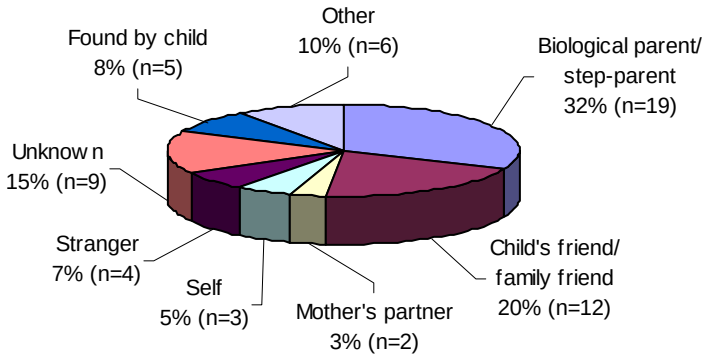
Handguns accounted for the majority of firearm-related fatalities among children in 2006 (70 percent, n=42), followed by hunting rifles (ten percent, n=6) and shotguns (eight percent, n=5). Table 15 shows types of firearms involved in child deaths during 2006.

Table 15. Types of Firearms Involved in Child Deaths, Arizona 2006 (n=60)

Type	Number	Percent
Handgun	42	70%
Hunting rifle	6	10%
Shotgun	5	8%
Assault rifle	4	7%
Unknown	3	5%
Total	**60**	

Among the 60 firearm-related deaths, 27 firearms were stored with ammunition (45 percent), and 24 firearms were stored loaded (40 percent). The largest percentage of firearms belonged to parents or step-parents (32 percent, n=19). Figure 30 shows the owners of the firearms used in child fatalities.

Figure 30. Owners of Firearms Involved in Child Deaths, Arizona 2006 (n=60)



For a large percentage of firearms, the storage location was unknown to the review teams (47 percent, n=28). Four firearms involved in child deaths were stored in locked cabinets (seven percent), but the rest of the firearms were either not stored or kept in unsecured locations (47 percent, n=28). Table 16 summarizes the locations of the firearms involved in child deaths during 2006.

Table 16. Locations of Firearms Involved in Child Deaths, Arizona 2006 (n=60)

Location	Number	Percent
Unknown	28	47%
Not stored	16	27%
Other unlocked location	6	10%
Locked cabinet	4	7%
Under bed/mattress/pillow	2	3%
Unlocked cabinet	2	3%
Closet	2	3%
Total	**60**	**100%**

Preventable Factors for Child Firearm-Related Fatalities

Access to firearms was identified as a preventable factor for 100 percent of firearm-related fatalities among children (n=60). Drugs and/or alcohol was involved in 26 firearm-related deaths (43 percent). Table 17 shows preventable factors for firearm-related fatalities in Arizona during 2006.

Table 17. Preventable Factors for Child Firearm-Related Fatalities, Arizona 2006		
Factor*	**Number**	**Percent**
Access to firearm	60	100%
Drugs/alcohol	26	43%
Lack of supervision	15	25%
Involvement in gang	6	10%
***More than one factor may have been identified for each death**		

MALTREATMENT FATALITIES

To gain greater understanding of the contribution of neglect and abuse to child mortality, the Arizona Child Fatality Review Teams answered several questions regarding maltreatment. In order for a death to be classified as a result of maltreatment, the following three conditions must be met:

1. The U.S. Department of Health and Human Services definition of maltreatment: "An act or failure to act by a parent, caregiver, or other person as defined under State law which results in physical abuse, neglect, medical neglect, sexual abuse, emotional abuse, or an act of failure to act which presents an imminent risk of serious harm to a child" applied to the circumstances surrounding the death.
2. The relationship of the individual accused of committing the maltreatment to the child must be the child's parent, guardian, or caretaker.
3. A team member, who is a mandated reporter, would be obligated to report a similar incident to Child Protective Services.

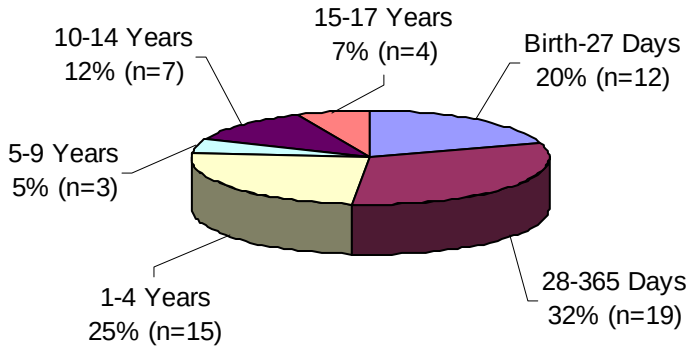
Deaths classified as maltreatment are also reported in other categories by manner and cause. For example, a death due to Shaken Baby Syndrome would be classified as a manner of homicide, cause of shaken infant (person's body part used as a weapon), and a maltreatment death. An accidental or natural death might also be classified as a maltreatment death if, in the opinion of the team, a caretaker's negligence or actions contributed to or caused the death. For example, it would be maltreatment if a child dies in a motor vehicle crash due to the parent driving while intoxicated with the child in the car.

The number of child maltreatment deaths presented in this report is not comparable to child maltreatment deaths reported by the Arizona Department of Economic Security (AzDES) for the National Child Abuse and Neglect Data System (NCANDS). NCANDS includes maltreatment deaths identified through Child Protective Services investigations, and because some maltreatment deaths identified by Child Fatality Review Teams may not have been reported to Child Protective Services, these deaths

would not be included in AzDES's annual report to NCANDS. However, when a Child Fatality Review team identifies a death due to maltreatment that has not been previously reported to Child Protective Services, the Child Fatality Review Program promptly notifies Child Protective Services of the team's assessment so that an investigation can be initiated.

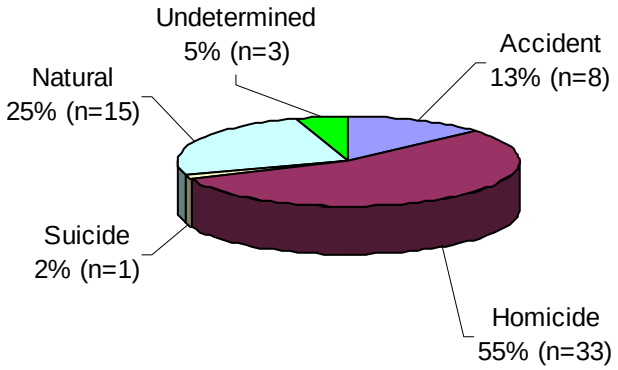
In 2006, there were 60 child deaths classified as maltreatment, which was five percent of all child deaths during the year. This was an increase from 50 child maltreatment deaths in 2005 (four percent of all child deaths). Fifty-seven percent of child maltreatment deaths were among males (n=34) and 43 percent were among females (n=26). Seventy-seven percent of these deaths were among children five years and younger (n=46). Figure 31 shows maltreatment deaths among children by age group.

Figure 31. Maltreatment Deaths Among Children by Age Group, Arizona 2006 (n=60)



Homicides comprised more than half of the child maltreatment deaths in Arizona (55 percent, n=33). Twenty-five percent of child maltreatment deaths were due to natural causes (n=15). Examples of maltreatment deaths due to natural causes included prenatal substance exposure resulting in premature birth, neglect which resulted in an illness, or failure to obtain medical care. Thirteen percent of maltreatment deaths were due to accidents (n=8). Examples of maltreatment-related accidental deaths included motor vehicle crashes resulting from parental substance use. Five percent of maltreatment deaths were of undetermined manner (n=3); and two percent were due to suicides (n=1). A suicide death might be classified as maltreatment if a child who was a victim of abuse committed suicide, or if a depressed child's parents failed to obtain mental health care for the child, despite advice to do so. Figure 32 shows maltreatment deaths among children by manner.

Figure 32. Maltreatment Deaths Among Children by Manner, Arizona 2006 (n=60)



The leading causes of child maltreatment deaths were blunt force trauma (35 percent, n=21) and medical causes (23 percent, n=14). Table 18 shows maltreatment deaths among children by cause and manner.

Table 18. Maltreatment Deaths Among Children by Cause and Manner, Arizona 2006 (n=60)

Cause	Accident	Homicide	Suicide	Natural	Undetermined	Total
Blunt force trauma		21				21
Medical				14		14
Unknown		4			3	7
Poisoning		2	1			3
Firearm injury	1	2				3
Suffocation/strangulation	1	2				3
Drowning	2					2
Fire/burn	2					2
Motor vehicle crash	2					2
Starvation		1		1		2
Stabbing		1				1
Total	**8**	**33**	**1**	**15**	**3**	**60**

Children with disabilities are known to be at greater risk for maltreatment. Twelve percent of the maltreated children in Arizona during 2006 were known to have had physical, mental, and/or sensory disabilities (n=7). The majority of maltreatment deaths occurred among children who were residing in parental homes (88 percent, n=53). Five percent of maltreated children were living with relatives at the time of their deaths (n=3); three percent were living in licensed foster/group homes (n=2); and three percent were living in shelters or motel rooms (n=2).

Shaken Baby Syndrome

There were nine fatalities among children two years and younger due to Shaken Baby Syndrome during 2006. This is an increase from 2005, when three children two years and younger died as a result of Shaken Baby Syndrome. Seven of the children who were fatally shaken had retinal hemorrhages, and five of the children who were shaken also exhibited injuries consistent with traumatic impact.

Known risk factors for Shaken Baby Syndrome include substance abuse and parental inexperience in coping with the stresses of caring for an infant. Young males were most often identified as the individuals who caused Shaken Baby Syndrome injuries during 2006. Eighty-nine percent of the deaths were caused by males (n=8). Six of the people responsible for the death were younger than 25 years (67 percent). Biological parents were most commonly identified as responsible for Shaken Baby Syndrome deaths (56 percent, n=5). The person who caused the injuries was known to have been impaired by drugs and/or alcohol for three of the deaths (33 percent). For five of the deaths, crying was the event that triggered the physical abuse (56 percent).

Child Protective Services Involvement with Families of Children Who Died

Child Fatality Review Teams attempt to obtain records from child protective services agencies, including the Arizona Child Protective Services and child protective agencies in other jurisdictions, such as tribal authorities and other states. For 39 maltreatment deaths there was no evidence of any reports to Arizona Child Protective Services prior to the fatal maltreatment. For 21 of these maltreatment deaths, Child Protective Services was not notified even after the child's death.

If a child protective agency investigated a report of maltreatment for any child in the family prior to the incident leading to the child's death, then the family was considered to have had previous involvement with a child protective agency. This includes reports in which the maltreatment was substantiated and reports in which the maltreatment was not substantiated. In 2006, 21 maltreated children were from families with prior child protective services involvement (34 percent). Among these 21 children, nine came from families who had open cases with a child protective agency at the time of the child's death (43 percent).

Preventable Factors for Child Maltreatment Deaths

Ninety-eight percent of child maltreatment deaths were determined to have been preventable (n=59). Drugs and/or alcohol was the most commonly identified preventable factor in child maltreatment deaths (50 percent, n=30). Of the deaths involving drugs and/or alcohol, the majority were methamphetamines (n=19), followed by alcohol (n=9) and marijuana (n=9). Table 19 shows preventable factors for child maltreatment deaths in Arizona during 2006.

Table 19. Preventable Factors for Child Maltreatment Deaths, Arizona 2006		
Factor*	**Number**	**Percent**
Drugs/alcohol	30	50%
Lack of supervision	10	17%
Lack of mental health treatment	4	7%
Infant unsafe sleeping environment	3	5%
Access to firearm	3	5%
***More than one factor may have been identified for each death**		

UNEXPECTED INFANT DEATHS

The Child Fatality Review Program categorizes an infant's death as unexpected when a previously healthy child dies suddenly. In 2006, there were 90 unexpected infant (birth to one year) deaths in Arizona, which accounted for eight percent of all child deaths. This was identical to the number of unexpected infant deaths in 2005 (also eight percent of deaths that year). Suffocation was the cause of 23 of these unexpected infant deaths and 28 deaths were identified as SIDS. Table 20 shows causes of unexpected infant deaths during 2006.

Table 20. Causes of Unexpected Infant Deaths, Arizona 2006 (n=90)		
Cause	**Number**	**Percent**
SIDS	28	31%
Suffocation	23	25%
Undetermined injury	19	21%
Pneumonia	11	12%
Infection	3	3%
Unknown	3	3%
Cardiovascular	2	2%
Other medical condition	1	1%
Total	**90**	

In 90 percent of unexpected infant deaths, unsafe sleeping environment was identified as a contributing preventable factor (n=81), and unsafe sleeping position was a contributing preventable factor in 50 percent of unexpected infant deaths (n=45). Prevention of these deaths can be accomplished by consistently placing infants to sleep in cribs with firm mattresses and without toys, pillows, or other soft objects. All infants should be placed to sleep on their backs. Table 21 shows preventable factors for unexpected infant deaths in Arizona during 2006.

Table 21. Preventable Factors for Unexpected Infant Deaths, Arizona 2006		
Factor*	**Number**	**Percent**
Unsafe sleeping environment	81	90%
Unsafe sleep position	45	50%
Co-sleeping	32	35%
Drugs/alcohol	13	14%
***More than one factor may have been identified for each death**		

APPENDIX A: CHILD DEATHS BY AGE GROUP

The following section of the report provides information on the causes, manners, and contributing factors of child deaths by age group. The information provided in each age group section can be used to guide prevention efforts within each stage of development.

The Neonatal Period, Birth through 27 Days

As has been observed in previous years, the neonatal period was the age group with the largest number of deaths. In 2006, 38 percent of child deaths in Arizona were of children younger than 28 days (n=440). Ninety-eight percent of neonatal deaths were due to natural causes (n=432). More than half of the deaths were due to prematurity (60 percent, n=263). Table 22 shows causes of death among infants younger than 28 days.

Table 22. Deaths Among Children Ages Birth Through 27 Days by Cause and Manner, Arizona 2006 (n=440)

Cause	Accident	Homicide	Suicide	Natural	Undetermined	Total
Prematurity				263		263
Medical*				169		169
Undetermined		2			2	4
Blunt force trauma		2				2
Motor vehicle crash	1					1
Suffocation	1					1
Total	**2**	**4**	**0**	**432**	**2**	**440**

*Excluding SIDS and prematurity

Cause of death distributions among neonates were similar in 2005 and 2006. There was a two percent increase in medical deaths (excluding SIDS and prematurity). Table 23 shows deaths among neonates by cause for 2005 and 2006.

Table 23. Deaths Among Children Ages Birth Through 27 Days by Cause, Arizona 2005-2006				
Cause	**2005**		**2006**	
Prematurity	263	61%	263	60%
Medical*	155	36%	168	38%
Other non-medical	1	0%	4	1%
Undetermined	3	1%	2	0%
SIDS	3	1%	1	0%
Motor vehicle crash	4	1%	1	0%
Suffocation	3	1%	1	0%
Exposure	1	0%	0	0%
Drowning	1	0%	0	0%
Total	**434**		**440**	
*Excluding SIDS and prematurity				

Manner of death distributions among neonates were similar in 2005 and 2006, although there were fewer deaths due to accidents among neonates in 2006. Table 24 shows deaths among children younger than 28 days by manner for 2005 and 2006.

Table 24. Deaths Among Children Ages Birth Through 27 Days by Manner, Arizona 2005-2006				
Manner	**2005**		**2006**	
Natural	421	97%	432	98%
Homicide	3	1%	4	1%
Accident	7	2%	2	0%
Undetermined	3	1%	2	0%
Suicide	0	0%	0	0%
Total	**434**		**440**	

Although the neonatal period was the age group with the largest number of deaths, it was also the age group with the fewest number of preventable deaths (eight percent, n=37). For 23 deaths, drugs and/or alcohol was identified as a preventable factor. Table 25 shows factors that contributed to neonatal fatalities in Arizona during 2006.

Table 25. Preventable Factors Among Neonate Fatalities, Arizona 2006		
Factor*	**Number**	**Percent**
Drugs/alcohol	23	5%
Unsafe sleeping environment	6	1%
Co-sleeping	3	1%
***More than one factor may have been identified for each death**		

The Post-Neonatal Period, 28 Days Through 365 Days

During 2006, 206 children died who were between their 28th day of life and their first birthday. The majority of these deaths were due to natural causes (68 percent, n=140). Thirteen percent of the deaths among this age group were due to SIDS (n=27). Six percent of deaths were due to homicide (n=12). Fourteen percent of deaths were accidental (n=29), and suffocation was the most common cause of accidental deaths (n=22). Table 26 shows deaths among children ages 28 days through 365 days by cause and manner.

Table 26. Deaths Among Children Ages 28 Days Through 365 Days by Cause and Manner, Arizona 2006 (n=206)

Cause	Accident	Homicide	Suicide	Natural	Undetermined	Total
Medical*				84	5	89
Prematurity				29		29
SIDS				25	2	27
Suffocation	22	1			1	24
Undetermined	1	1		2	10	14
Blunt force trauma		8				8
Other non-medical					6	6
Motor vehicle crash	2					2
Drowning	2					2
Poisoning		1			1	2
Fall/crush	1					1
Fire/burn	1					1
Stabbing		1				1
Total	**29**	**12**	**0**	**140**	**25**	**206**

*Excluding SIDS and prematurity

Compared to 2005, there were increases in the percentages of prematurity deaths and suffocation deaths among this age group in 2006. Table 27 shows deaths among children ages 28 days through 365 days by cause and manner during 2005 and 2006.

Table 27. Deaths Among Children Ages 28 Days Through 365 Days by Cause, Arizona 2005-2006				
Cause	**2005**		**2006**	
Medical*	122	52%	89	43%
Prematurity	21	9%	29	14%
SIDS	34	15%	27	13%
Suffocation	19	8%	24	12%
Undetermined	17	7%	14	7%
Blunt force trauma	7	3%	8	4%
Other non-medical	5	2%	8	4%
Motor vehicle crash	1	0%	2	1%
Drowning	1	0%	2	1%
Poisoning	1	0%	2	1%
Fire/burn	3	1%	1	0%
Exposure	1	0%	0	0%
Hanging	1	0%	0	0%
Total	**233**		**206**	
*Excluding SIDS and prematurity				

The number of accidental deaths increased by two percent in 2006. A similar increase was observed for homicides. There was an eight percent reduction in natural deaths. Table 28 shows deaths among children ages 28 days through 365 days by manner for 2005 and 2006.

Table 28. Deaths Among Children Ages 28 Days Through 365 Days by Manner, Arizona 2005-2006				
Manner	**2005**		**2006**	
Natural	178	76%	140	68%
Accident	27	12%	29	14%
Undetermined	19	8%	25	12%
Homicide	9	4%	12	6%
Suicide	0	0%	0	0%
Total	**233**		**206**	

Thirty-five percent of deaths among children ages 28 days through 365 days were determined to have been preventable (n=73). The most commonly identified contributing factor among post-neonatal deaths was unsafe sleeping environment (35 percent, n=21). Unsafe sleeping positions were identified for 44 deaths (21 percent) and co-sleeping was a factor in 29 deaths in this age group (14 percent). Table 29 shows factors contributing to deaths among children ages 28 days through 365 days.

Table 29. Preventable Factors for Deaths Among Children Ages 28 Days Through 365 Days, Arizona 2006		
Factor*	**Number**	**Percent**
Unsafe sleeping environment	72	35%
Unsafe sleeping position	44	21%
Co-sleeping	29	14%
Drugs/alcohol	19	9%
Lack of supervision	11	5%
***More than one factor may have been identified for each death**		

Children, One Through Four Years Old

During 2006, 153 children died between their first and fifth birthdays. Forty-six percent of deaths were due to medical causes (n=71). There were 34 deaths due to motor vehicle crashes (22 percent) and 16 deaths due to drownings (ten percent). Forty-two percent of deaths were due to accidents (n=64). Table 30 shows deaths among children ages one through four years by cause and manner.

Table 30. Deaths Among Children Ages One Through Four Years by Cause and Manner, Arizona 2006 (n=153)						
Cause	**Accident**	**Homicide**	**Suicide**	**Natural**	**Undetermined**	**Total**
Medical*				71		71
Motor vehicle crash	34					34
Drowning	16					16
Undetermined		3			4	7
Blunt force trauma		6				6
Suffocation	4	1				5
Fire/burn	4					4
Fall/crush	3					3
Prematurity				2		2
SIDS				1		1
Poisoning		1				1
Firearm injury	1					1
Animal attack	1					1
Exposure	1					1
Total	**64**	**11**	**0**	**74**	**4**	**153**
*Excluding SIDS and prematurity						

Compared to 2005, there was a seven percent increase in motor vehicle-related deaths among children ages one through four years during 2006, while drownings declined by five percent. There was a four percent decline in blunt force trauma deaths among this age group. Table 31 shows deaths among children ages one through four years by cause and manner for 2005 and 2006.

Table 31. Deaths Among Children Ages One Through Four Years by Cause, Arizona 2005-2006

Cause	2005		2006	
Medical	56	43%	74	48%
Motor vehicle crash	19	15%	34	22%
Drowning	20	15%	16	10%
Undetermined	5	4%	7	4%
Blunt force trauma	10	8%	6	4%
Suffocation	2	2%	5	3%
Fire/burn	5	4%	4	3%
Other non-medical	5	4%	4	3%
Exposure	3	2%	1	1%
Poisoning	4	3%	1	1%
Firearm injury	0	0%	1	1%
Total	**130**		**153**	

Homicides declined by three percent among children ages one through four years during 2006, and there was a five percent increase in natural deaths. Table 32 shows deaths by manner during 2005 and 2006.

Table 32. Deaths Among Children Ages One Through Four Years by Manner, Arizona 2005-2006

Manner	2005		2006	
Natural	56	43%	74	48%
Accident	54	42%	64	42%
Homicide	13	10%	11	7%
Undetermined	7	5%	4	3%
Suicide	0	0%	0	0%
Total	**130**		**153**	

Fifty-two percent of deaths among children ages one through four years were determined to have been preventable (n=79). Lack of supervision was identified as a contributing factor for 36 deaths in this age group (23 percent). Eight percent of children who died were not properly restrained in motor vehicles (n=13). Table 33 shows preventable factors for deaths among children ages one through four years.

Table 33. Preventable Factors for Deaths Among Children Ages One Through Four Years, Arizona 2006		
Factor*	**Number**	**Percent**
Lack of supervision	38	25%
Lack of vehicle restraint	13	8%
Drugs/alcohol	12	8%
Access to pool	9	6%
Lack of working smoke alarm	3	2%
***More than one factor may have been identified for each death**		

Children, Five Through Nine Years Old

During 2006, 64 children died in Arizona between their fifth and tenth birthdays. Forty-seven percent of deaths were due to medical causes (n=30), and 34 percent of deaths were due to motor vehicle-related injuries (n=23). There were four accidental drownings in this age group. Table 34 shows deaths among children ages five through nine years by cause and manner.

Table 34. Deaths Among Children Ages Five Through Nine Years by Cause and Manner, Arizona 2006 (n=64)						
Cause	**Accident**	**Homicide**	**Suicide**	**Natural**	**Undetermined**	**Total**
Medical				30		30
Motor vehicle crash	23					23
Drowning	4					4
Fall/crush	2					2
Fire/burn	2					2
Hanging			1			1
Poisoning					1	1
Blunt force trauma	1					1
Total	**32**	**0**	**1**	**30**	**1**	**64**

Between 2005 and 2006, there was a nine percent increase in motor vehicle crash deaths among children ages five through nine years. Declines were observed in drownings and fire-related deaths. Table 35 shows deaths among children ages five through nine years by manner for 2005 and 2006.

Table 35. Deaths Among Children Ages Five Through Nine Years by Cause, Arizona 2005-2006				
Cause	**2005**		**2006**	
Medical	43	51%	30	47%
Motor vehicle crash	23	27%	23	36%
Drowning	6	7%	4	6%
Fire/burn	6	7%	2	3%
Other non-medical	2	2%	2	3%
Hanging	0	0%	1	1%
Poisoning	1	1%	1	1%
Blunt force trauma	2	2%	1	1%
Suffocation	1	1%	0	0%
Total	**85**		**64**	

There were no homicides among children ages five through nine years in Arizona during 2006, but there were three homicides in this age group during 2005. There was a four percent decline in natural deaths and a four percent increase in accidental deaths. Table 36 shows deaths among children ages five through nine years by manner for 2005 and 2006.

Table 36. Deaths Among Children Ages Five Through Nine Years by Manner, Arizona 2005-2006				
Manner	**2005**		**2006**	
Accident	39	46%	32	50%
Natural	43	51%	30	47%
Suicide	0	0%	1	1%
Undetermined	0	0%	1	1%
Homicide	3	4%	0	0%
Total	**85**		**64**	

Fifty-five percent of deaths among children ages five through nine years were determined to have been preventable (n=35). For 20 percent of deaths in this age group, lack of vehicle restraints was a contributing factor (n=13). Lack of supervision was a factor in 11 deaths (17 percent), and substance use was involved in five deaths (eight percent). Table 37 shows preventable factors for deaths among children ages five through nine years.

Table 37. Preventable Factors for Deaths Among Children Ages Five Through Nine Years, Arizona 2006		
Factor*	**Number**	**Percent**
Lack of vehicle restraint	13	20%
Lack of supervision	11	17%
Drugs/alcohol	5	8%
***More than one factor may have been identified for each death**		

Children, 10 Through 14 Years Old

Ninety-two children who were between their tenth and fifteenth birthdays died in Arizona during 2006. Forty-one percent of deaths were due to medical causes (n=38) and 23 percent were due to motor vehicle traffic crashes (n=21). Table 38 shows deaths among children ages 10 through 14 years by cause and manner.

Table 38. Deaths Among Children Ages 10 Through 14 Years by Cause and Manner, Arizona 2006 (n=92)						
Cause	**Accident**	**Homicide**	**Suicide**	**Natural**	**Undetermined**	**Total**
Medical				38		38
Motor vehicle crash	21					21
Firearm injury	3	4	6			13
Exposure	4					4
Suffocation	2				2	4
Blunt force trauma		3				3
Hanging			3			3
Drowning	3					3
Poisoning			2			2
Fall/crush	1					1
Total	**34**	**7**	**11**	**38**	**2**	**92**

Medical deaths increased by four percent from 2005, and firearm fatalities increased by six percent. There were declines in hangings and poisonings. Table 39 shows deaths among children ages 10 through 14 years by cause for 2005 and 2006.

Table 39. Deaths Among Children Ages 10 Through 14 Years by Cause, Arizona 2005-2006				
Cause	**2005**		**2006**	
Medical	32	37%	38	41%
Motor vehicle crash	21	24%	21	23%
Firearm injury	7	8%	13	14%
Suffocation	3	3%	4	4%
Exposure	4	5%	4	4%
Hanging	7	8%	3	3%
Drowning	1	1%	3	3%
Blunt force trauma	1	1%	3	3%
Poisoning	4	5%	2	2%
Fall/crush	0	0%	1	3%
Other non-medical	1	1%	0	0%
Total	**86**		**92**	

There was a two percent increase in homicides among children ages 10 through 14 years in 2006 and a four percent increase in natural deaths. Suicides declined by three percent. Table 40 shows deaths among children ages 10 through 14 years by manner for 2005 and 2006.

Table 40. Deaths Among Children Ages 10 Through 14 Years by Manner, Arizona 2005-2006				
Manner	**2005**		**2006**	
Natural	32	37%	38	41%
Accident	34	40%	34	37%
Suicide	13	15%	11	12%
Homicide	5	6%	7	8%
Undetermined	2	2%	2	2%
Total	**86**		**92**	

Sixty-two percent of deaths among children ages 10 through 14 years were determined to have been preventable (n=57). For 14 percent of deaths in this age group, access to firearms was a contributing factor (n=13). Lack of vehicle restraints was a factor for ten deaths (11 percent), and lack of supervision contributed to ten deaths (11 percent). Table 41 shows preventable factors for deaths among children ages 10 through 14 years.

Table 41. Preventable Factors for Deaths Among Children Ages 10 Through 14 Years, Arizona 2006		
Factor*	**Number**	**Percent**
Access to firearm	13	14%
Lack of vehicle restraint	10	11%
Lack of supervision	10	11%
Drugs/alcohol	8	9%
Illegal border crossing	5	5%
***More than one factor may have been identified for each death**		

Adolescents, 15 Through 17 Years

Two hundred and six children ages 15 through 17 years died in Arizona during 2006. Forty percent of deaths in this age group were due to motor vehicle crashes (n=83). There were 29 deaths due to natural causes (14 percent). Twenty-two percent of deaths were due to firearms (n=46). Table 42 shows deaths among children ages 15 through 17 years by cause and manner.

Table 42. Deaths Among Children Ages 15 Through 17 Years by Cause and Manner, Arizona 2006 (n=206)						
Cause	**Accident**	**Homicide**	**Suicide**	**Natural**	**Undetermined**	**Total**
Motor vehicle crash	83					83
Firearm injury	7	22	16		1	46
Medical				29		29
Hanging	1		18			19
Drowning	6					6
Blunt force trauma	1	4	1			6
Poisoning	4		1			5
Exposure	4					4
Stabbing		3				3
Fire/burn	2					2
Fall/crush					1	1
Other non-medical	1					1
Undetermined					1	1
Total	**109**	**29**	**36**	**29**	**3**	**206**

Compared to 2005, medical deaths declined by five percent in 2006. Hanging deaths increased by three percent. Table 43 shows deaths among children ages 15 through 17 years by cause for 2005 and 2006.

Table 43. Deaths Among Children Ages 15 Through 17 Years by Cause, Arizona 2005-2006				
Cause	**2005**		**2006**	
Motor vehicle crash	66	37%	83	40%
Firearm injury	34	19%	46	22%
Medical	34	19%	29	14%
Hanging	10	6%	19	9%
Drowning	6	3%	6	3%
Blunt force trauma	2	1%	6	3%
Poisoning	9	5%	5	2%
Exposure	10	6%	4	2%
Other non-medical	2	1%	4	2%
Fire/burn	1	1%	2	1%
Fall/crush	4	2%	1	0%
Undetermined	2	1%	1	0%
Total	**180**		**206**	

The distributions of accidental deaths and homicides among children ages 15 to 17 years were similar in 2005 and 2006. There was a five percent decline in natural deaths in 2006 and a five percent increase in suicides. Table 44 shows deaths among children ages 15 through 17 years by manner for 2005 and 2006.

Table 44. Deaths Among Children Ages 15 Through 17 Years by Manner, Arizona 2005-2006				
Manner	**2005**		**2006**	
Accident	92	51%	109	53%
Suicide	23	13%	36	18%
Homicide	25	14%	29	14%
Natural	35	19%	29	14%
Undetermined	5	3%	3	1%
Total	**180**		**206**	

Eighty-four percent of deaths among children ages 15 through 17years were determined to have been preventable (n=173). Substance use was identified as a contributing factor for 69 deaths in this age group (33 percent). Twenty-six percent of children who died were not properly restrained in motor vehicles (n=53). For 46 deaths, access to firearms was a contributing factor (22 percent). Table 45 shows preventable factors for deaths among children ages 15 through 17 years.

Table 45. Preventable Factors for Deaths Among Children Ages 15 Through 17 Years, Arizona 2006		
Factor*	**Number**	**Percent**
Drugs/alcohol	73	35%
Lack of vehicle restraint	54	26%
Access to firearm	46	22%
Excessive driving speed	33	16%
Lack of supervision	31	15%
Reckless driving	28	14%
Driver inexperience	20	10%
Driver distracted	14	7%
***More than one factor may have been identified for each death**		

APPENDIX B: ARIZONA CHILD FATALITY REVIEW TEAMS

STATE CHILD FATALITY REVIEW TEAM

Chair

Mary Ellen Rimsza, M.D. FAAP
American Academy of Pediatrics
University of Arizona College of Medicine

Members

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Kathryn Bowen, M.D.
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Kipp Charlton, M.D.
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Bureau of Health Statistics

Randy Force
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Wade Kartchner, M.D.
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Administration for Children, Youth, and Families

Gaylene Morgan
Office of the Attorney General

Frank Pavone
Luke Air Force Base

Beth Rosenberg
Children's Action Alliance

Shannon Shivers
Department of Health Services
Division of Behavioral Health Services

Kim Simmons
Department of Economic Security
Division of Developmental Disabilities

Sheila Sjolander
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Bureau of Women's and Children's Health

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Roy Teramoto, M.D.
Indian Health Services

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Bureau of Women's and Children's Health

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Phoenix Children's Hospital

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Therese Neal, Citizen Review Panel Program Manager

Teresa Garlington, Administrative Secretary

Terri Baxter, Administrative Assistant III (Data Quality)

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Carolyn Cox, Data Manager

Tia Davis, Data Manager

Ebonee Rivers, Administrative Assistant I

Marilyn Seiler, Data Manager

Jamie K. Smith, Injury Epidemiologist

LaTonya VanDenburgh, Data Manager

Terry Williamson, Data Manager

APACHE COUNTY CHILD FATALITY REVIEW TEAM

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Navajo Nation Division of Social Services

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Apache County Sheriff's Office

Criss Candelaria
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Little Colorado Behavioral Health Centers

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Eagar Police Department

Peggy Hart
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Eagar Police Department

Sergeant Donny Jones
St. Johns Police Department

Detective Mike Nuttall
Springerville Police Department

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Yavapai-Prescott Indian Tribe

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Criminal Investigator
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Children's Health Center of Northern Arizona Children's Rehabilitation Services

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Tuba City Medical Center
Indian Health Service

Roberta J. McVickers
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Terry Wade
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Lawrence Czarnecki, D.O.
Coconino County Medical Examiner

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Parenting Arizona

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Retired Nurse

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Thatcher Police Department

Neil Karnes
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Robert Coons, D.O.

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Coordinator

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Parent Representative

Sergeant Rusty Cooper
Kingman Police Department

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Arizona Children's Association

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Lake Havasu Interagency

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Lake Havasu Police Department

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Mohave County Medical Examiner

Lieutenant Larry Kubacki
La Paz County Sheriff's Office

Rick Lambert
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Patty Mead
Mohave County Health Department

Jennifer McNally
Mohave County Health Department

Betty Munyon
Mohave County Attorney's Office

Detective Steve Parker
Mohave County Sheriff's Office

Detective Rick Paterson
La Paz County Sheriff's Office

S. Kosha Long
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NAVAJO COUNTY CHILD FATALITY REVIEW TEAM

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Whiteriver Community

Norine Ashley, Psy.D.
Apache Behavioral Health Services

Gail Buonviri
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Winslow Police Department

Detective Sergeant Tim Dixon
Holbrook Police Department

Detective Sergeant Toni Garver
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PIMA COUNTY AND GREENLEE COUNTY REVIEW TEAM CONTINUED

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Santa Cruz County Sheriff Department

Chief John Kissenger
Nogales Police Department

Bruce Parks, M.D.
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Denise Pierson
Domestic Violence Specialist

Maria Pina, M.D.
Pediatrician

Mark Seeger
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Court Appointed Special Advocate

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Dennis McGrane
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LaRayne Ness
Yavapai Regional Medical Center

Sally Ohanesian
Prescott Unified School District

Nancy Russotti
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Regional Medical Center

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Alice Nelson
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To obtain further information, contact:

Arizona Department of Health Services
Public Health Prevention Services
Bureau of Women's and Children's Health
Office of Assessment and Evaluation
Child Fatality Review Program
150 North 18th Avenue, Suite 320
Phoenix, AZ 85007
Phone: (602) 364-1400
Fax: (602) 164-1496

Information about the Arizona Child Fatality Review Program may be found on the Internet through the Arizona Department of Health Services at:
http://www.azdhs.gov/phs/owch/cfr.htm

ARIZONA DEPARTMENT OF HEALTH SERVICES
PUBLIC HEALTH PREVENTION SERVICES
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