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Dear Friends:

In an effort to better understand why and how our Kansas children die, the State Child Death Review Board was established by the Kansas Legislature in 1992. Since that time, this multiagency, multi-disciplinary volunteer board has reviewed the deaths of thousands of children. Only by understanding the circumstances, risk factors, and prevention issues that surround child deaths can we make an effort to reduce child mortality.

On behalf of the State Child Death Review Board, I present to you the following report. A priority for the Board is to use its findings to develop prevention issues and recommendations. This report hightlights the Board's findings for the seven-year period from 1994 through 2000.

My hope is that we can all learn from this important information and work together to implement the Board's recommendations for preventing future child deaths.

Please take time to review this report and continue to take an active role in promoting health and safety for our Kansas children.

Sincerely yours,

Carla J. Stovall Kansas Attorney General

#### **EXECUTIVE SUMMARY**

The State Child Death Review Board (SCDRB) comprehensively reviewed 521 child deaths that occurred during calendar year 2000. The manner of death, as determined by the SCDRB, is placed in one of six main categories: natural; unintentional injury; homicide; Sudden Infant Death Syndrome (SIDS); suicide; or undetermined.

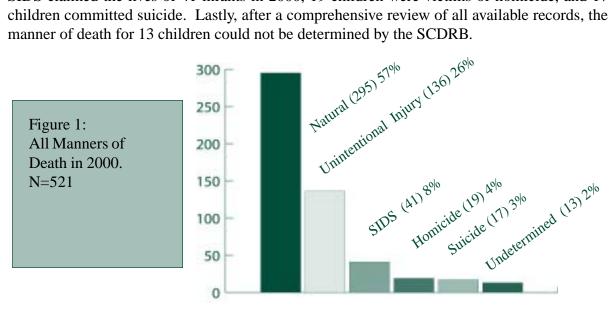
Of the 521 deaths, natural and unintentional injury deaths continue to be the two largest categories of death of Kansas children. The largest group of children, 57 percent, died of natural causes, not including SIDS, in 2000.

The SCDRB is a multi-disciplinary, multi-agency board that examines the circumstances surrounding the deaths of all Kansas children (birth through 17 years of age) and children who are not Kansas residents, but who die in the state. The goals of the SCDRB are to describe trends and patterns of child deaths in Kansas, develop prevention strategies, and improve sources of data and communication among agencies so that recommendations can be made.

The second largest manner of death, unintentional

injuries, claimed the lives of 26 percent of the children who died in 2000. Unintentional injuries are divided into two categories; vehicular and non-vehicular. The non-vehicular deaths consist of injury fatalities such as asphyxia (suffocation or drowning), fire/burn, firearm, chemical/ drug, fall or blunt trauma, crush injuries, and deaths by electrocution.

SIDS claimed the lives of 41 infants in 2000, 19 children were victims of homicide, and 17 children committed suicide. Lastly, after a comprehensive review of all available records, the manner of death for 13 children could not be determined by the SCDRB.



Kansas averages higher rates of death from non-vehicular and vehicular unintentional injuries, SIDS, suicide, and homicide than the nation. By learning from the information gathered in the SCDRB's review of child fatalities, we can make strides to reduce our child death rates.

#### **EXECUTIVE SUMMARY**

According to the U.S. Census Bureau's 2000 census, Kansas had 712,993 children under age 18 in 2000. Females accounted for 49 percent of this population, and males accounted for 51 percent. However, of the 521 child deaths reviewed by SCDRB, 42 percent were female and 58 percent of the children were male.

Any questions about this report, or about the work of the SCDRB should be directed to:

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This annual report, including all forms used and recommended by the SCDRB, can be viewed or downloaded from the Internet at: www.ksag.org/contents/scdrb In 2000, whites composed 81.3 percent of the Kansas population under the age of 18. Eleven percent of the population consisted of blacks, and the remaining 7.7 percent were Asian/Pacific Islanders, American Indian/ Alaskan Natives, and other races. The SCDRB's data from 2000 revealed that 84 percent of the children who died were white, 13 percent were black, two percent were Asian/Pacific Islander, and one percent were American Indian/Alaskan Native.

The 521 deaths reviewed by the SCDRB in 2000 included 187 neonates (less than 29 days of age); 98 postneonatal infants (ranging from 30 days to one year old); 66 children from one to four years old; 28 children from five to nine years old; 53 children from 10 to 14 years old; and 89 adolescents from 15 to 17 years of age.

Since 1994, an important objective of the SCDRB has been to use the data collected on child deaths to educate the general public and professionals on risk factors and prevention issues for children. The most critical lesson learned by the SCDRB's review of child fatalities is that hundreds of child deaths can be prevented with reasonable individual or community action. The SCDRB has determined that 156 of the unintentional injury deaths, homicides, and suicides occurring in 2000 may have been prevented.

The SCDRB has chosen to focus its public policy recommendations on prevention of motor vehicle fatalities, the leading cause of unintentional injury deaths for Kansas children. The public policy recommendations are highlighted below.

#### ENHANCE CHILD PASSENGER SAFETY LAWS AND ENFORCEMENT

- Expand primary enforcement of the child safety restraint law to require youth 18 and younger, seated anywhere in the vehicle, to use age-appropriate safety restraint systems.
- Increase fines for non-compliance with child passenger safety laws.
- Enhance graduated driver licensing requirements.

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#### **Child Death Investigations**

Any death that occurs from other than expected natural disease processes in a child younger than 18 years requires a thorough scene investigation and a complete autopsy. Lack of adequate investigations of infant and child deaths impedes the effort to prevent illness, injury, and the deaths of other children who are at risk.

Coroners, public health officials, physicians, state agency personnel, educators, law enforcement officials, the judicial system, and mental health providers must collaborate on child death investigations. This cooperation increases the ability to accurately identify the causes and circumstances of child fatalities. Information about the death of one child may lead to prevention strategies to protect the lives of many more children.

The American Academy of Pediatrics (AAP) describes an adequate death investigation as including "a complete autopsy, investigation of the circumstances of death, review of the child's medical and family history, and review of information from relevant agencies and health care professionals. A complete autopsy consists of an external and internal examination of the body; removal and examination of the eyes; microscopic examination; and toxicological, microbiologic, and other appropriate studies. When possible the autopsy should be performed by a forensic or other knowledgeable pathologist using a standard infant and child death autopsy protocol."

Of the 1,521 child deaths that occurred between 1994 and 2000 resulting from homicide, SIDS, suicide, unintentional injury, or an undetermined cause, only 983 (65 percent) autopsies were performed. An autopsy is essential in order to determine the cause and manner of death, and toxicology samples are necessary to reveal any presence of alcohol or drugs. All investigations must be thorough in order to establish that events leading to the death are consistent with the manner of death. It is impossible to fully investigate childhood deaths unless autopsies are performed because underlying causes cannot be discovered. When autopsies are not performed, the SCDRB is limited in its ability to learn enough to prevent future deaths.

To help offset the costs to counties for child autopsies that are required under K.S.A. 22a-242, the costs can be reimbursed by the State. The Kansas Department of Health and Environment (KDHE), the Kansas Association of Counties, the Kansas Coroner's Association, and the SCDRB worked together during the 2002 legislative session to help ensure that the State could provide reimbursements for child autopsies. As of July 1, 2002, this is made possible through a \$1 increase in the surcharge for death certificates to be deposited in the District Coroners Fund. The money is available to reimburse counties for the usual and reasonable fees of child autopsies and travel allowance.

While an autopsy is one important component of a child death investigation, it does not take the place of a thorough death investigation by law enforcement, in cooperation with the Department of Social and Rehabilitation Services (SRS), if applicable. Using a standard infant death scene investigation protocol is also vital to accurately determine the cause and manner of fatalities. The Centers for Disease Control and Prevention has developed a sudden, unexplained infant death (SUID) scene investigation form. The SCDRB and the Kansas Bureau of Investigation (KBI)

#### **Child Death Investigations**

recommend that this form be used by law enforcement agencies and coroners when investigating SUIDs. The form can be downloaded from <u>http://www.cdc.gov/mmwr/PDF/rr/r4510.pdf.</u> If investigative agencies do not have in place a standard and complete infant death scene protocol, this form is recommended as a guideline.

Most frequently, SIDS is the determined cause of SUIDs. As defined by the AAP, SIDS is the "sudden death of an infant under one year of age which remains unexplained after a thorough case investigation including performance of a complete autopsy, examination of the death scene, and a review of the clinical history. SIDS should not be diagnosed if these criteria are not met."

#### **Public Policy Recommendations**

### ENHANCE CHILD PASSENGER SAFETY LAWS AND REQUIREMENTS FOR DRIVER LICENSING:

Traditionally, the SCDRB has included recommendations for preventing child fatalities as the core of its annual report. In the past, these recommendations have addressed every manner of death with suggestions targeted at each. For a second year the Board has decided to focus on motor vehicle crashes, the leading cause of unintentional injury deaths for Kansas children.

During the period from 1994 to 2000, the SCDRB reported that the leading cause of unintentional injury deaths was motor vehicle crashes. Among children ages 14 and under killed as occupants in car crashes, 70 percent were not using safety restraints at the time of the collision. It is clear that the lives of hundreds of children could be saved by requiring that adults care for kids by buckling them into seatbelts and/or properly installed safety seats.

Currently, Kansas law requires children younger than 14 years old to be properly restrained when riding in motor vehicles, regardless of where they are seated. Children under the age of four must ride in a child safety seat. Violations of this law result in a \$20 fine. Additionally, front seat passengers are required to be properly restrained, regardless of age. A violation of this law results in a \$10 fine. Consequences for non-compliance by caregivers of young children and by adolescents should be severe enough to change unsafe behaviors. The SCDRB recommends that the fines for non-compliance with child passenger safety laws be increased.

Furthermore, from 1994 to 2000, 79.2 percent of children of all ages who died in motor vehicle crashes were not properly restrained. During those years, there was a dramatic decrease in safety restraint use among 15 through 17 year olds. An alarming 86.2 percent of teenagers who died in motor vehicle crashes were not restrained.

The SCDRB has reviewed the deaths of children who were older than 14, but who were back seat passengers and thus, not required by law to use seatbelts. The SCDRB recommends expanding primary enforcement of the child safety restraint law to require youth younger than 18, seated anywhere in the vehicle, to use age-appropriate safety restraint systems.

The SCDRB will continue to support efforts by the Kansas SafeKids Coalition to effect legislation that tightens gaps in current state law and provides increased protection for Kansas children. Because parents look to the law to provide them with guidance on how to best protect their children, the SCDRB is particularly concerned about the current lack of safety protection required for children older than age four. While children under four are required to be restrained in a child safety seat, children who are between the ages of four and eight, or weigh less than 80 pounds, are at risk because they are often graduated into adult seat belts too soon. Small children do not fit into adult seat belts where they are put at great risk for injury and fatality in the event of a crash. Because our current laws do not address the need for this age group of children to be adequately protected in seat belt positioning booster seats, parents often don't realize they need to alter the type of safety restraints they use as children grow.

#### **Public Policy Recommendations**

P	Public Policy a	nd	l Safety Restraint Use
M Y T H	Public education campaigns alone can do a good job of teaching the younger generation about seat belt safety.	F A C T	The facts show that education alone does not convince most young people to buckle up. Seat belt use declines from age five to about 25. Young people,especially young men ages 16-25, simply do not think about being injured or killed. Yet they are the nation's highest risk drivers, with more impaired driving, more speeding, and more crashes. For this tough-to-reach group, stronger belt laws, enforcement, and the fear of losing their driver licenses work when neither education nor fear of death or injury does the job.
M Y T H	The State has more important things to do than to devote attention and resources to increasing seat belt use.	F A C T	Traffic crashes are a leading threat to public health. Increasing seat belt use is the single most effective and immediate way we can save lives and reduce injuries on Kansas roadways. Seat belt usage is estimated to save more than 11,000 lives in America each year. And those who don't buckle up are costing all of us in lost productivity and money.
M Y T H	Vehicular injuries and fatalities only affect the individuals involved there is no impact on the public or the State.	F A C T	Everyone pays for traffic crashes, and the economic costs are significant. In 2000, crashes cost Americans 230.60 billion. Each fatality resulted in lifetime economic costs to society of more than \$977,000. The average cost for each critically injured survivor was \$1.1 million.

Finally, the SCDRB supports a graduated licensing system that would likely reduce the death rate from motor vehicle crashes for not only Kansas teenagers, but for all Kansans. According to the Insurance Institute for Highway Safety, the ideal graduated licensing law (GDL) would have the beginning stage of driving start at age 16, a minimum mandatory holding period of six months, and certification of 30 to 50 hours of supervised driving. In the intermediate stage there should be restrictions on nighttime driving and transporting teenage passengers. Full unrestricted driving privileges should not occur before age 18.

Public Policy and GDL								
M Y T H	GDL would punish everybody for mistakes that only some young drivers make.	F A C T	GDL is designed to support and protect new drivers, not to punish them. It allows new drivers to demonstrate their competence and responsibility. Loosley restricted licensing systems put inexperienced, emotionally immature beginners into the complex, risky driving environment - with all too frequent tragic consequences.					
M Y T H	GDL is just another government attempt to protect people from themselves.	F A C T	In fact, young drivers commonly cause crashes in which both their passengers and occupants of other vehicles are hurt or killed. GDL is designed to protect everyone who uses the roadways, not just young drivers.					
M Y T H	Simply improving driver education programs would solve the problem of young driver crashes. It isn't necessary to change the licensing system.	F A C T	Although they can help teach beginners how to drive, there is no research evidence to suggest that driver education programs reduce crashes. A drastically revised approach might have some benefit, but such a program would be far more costly than the public seems willing to pay for at present.					

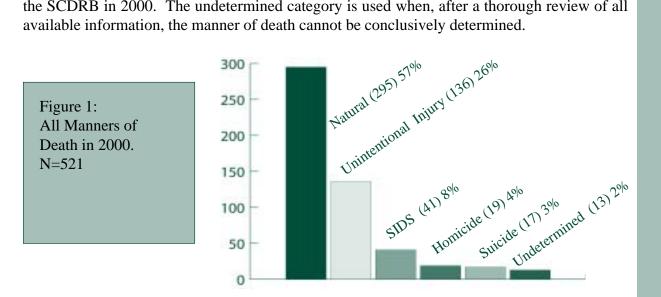
Kansas Child Death Review Board 2000 Data

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#### **2000 Overview**

The SCDRB comprehensively reviewed 521 child deaths that occurred during calendar year 2000. The manner of death, as determined by the SCDRB, is placed in one of six main categories: natural - excluding Sudden Infant Death Syndrome (SIDS); natural - SIDS; unintentional injury; homicide; suicide; or undetermined.

The chart below illustrates the number of deaths in each of the six manners of death reviewed by the SCDRB in 2000. The undetermined category is used when, after a thorough review of all available information, the manner of death cannot be conclusively determined.



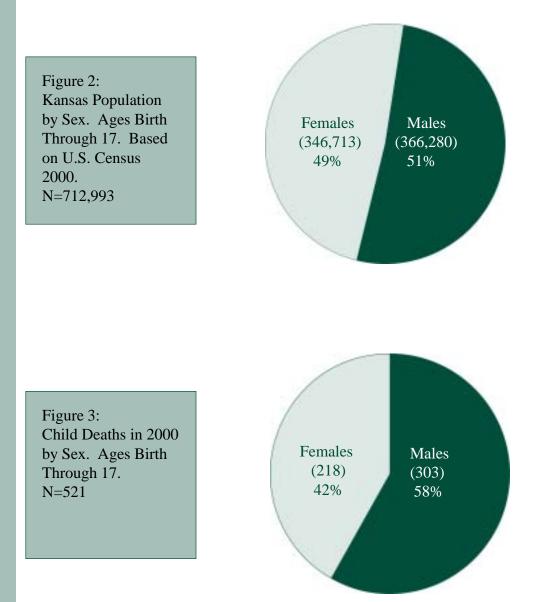
Natural and unintentional injury deaths continue to make up the two largest categories of death of Kansas children. The largest group of children, 57 percent, died of natural causes, not including SIDS.

The second largest manner of death, unintentional injuries, claimed the lives of 26 percent of the children who died in 2000. Unintentional injuries are divided into two categories - vehicular and non-vehicular. The non-vehicular deaths consist of injury fatalities such as asphyxia (suffocation or drowning), fire/burn, firearm, chemical/drug, fall or blunt trauma, crush injuries, and deaths by electrocution.

SIDS claimed the lives of 41 children in 2000, 19 children were victims of homicide, and 17 children committed suicide. Lastly, after a comprehensive review of all available records, the manner of death for 13 children could not be determined by the SCDRB.

#### 2000 Overview

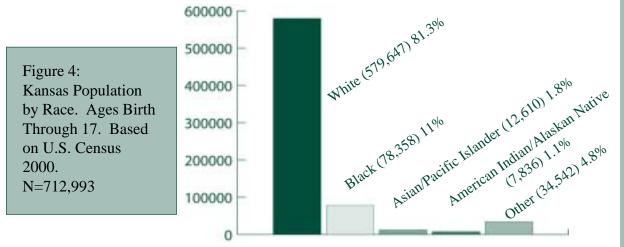
The following figures compare the demographics of deaths of Kansas children with the Kansas population who are less than 18 years of age. According to the U.S. Census Bureau's 2000 census, Kansas had 712,993 children under age 18. Females accounted for 49 percent of this population, and males accounted for 51 percent. However, of the 521 child deaths reviewed by SCDRB, 42 percent of the children were female, and 58 percent were male.



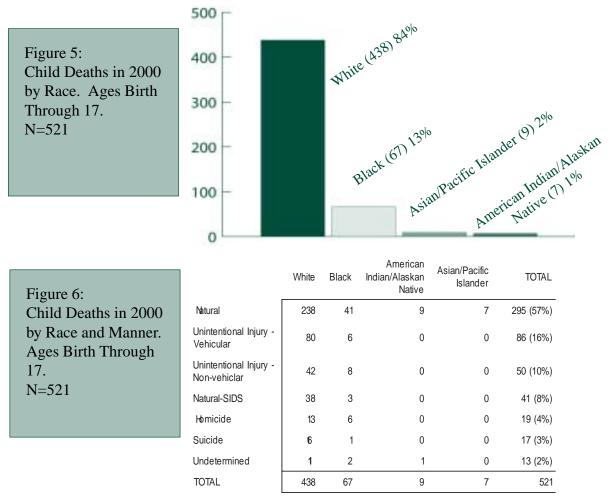
# Kansas Child Death Review Board 2000 Data

#### 2000 Overview

In 2000, whites composed 81.3 percent of the Kansas population under the age of 18. Eleven percent of the population consisted of blacks, and the remaining 7.7 percent were Asian/Pacific Islanders, American Indian/Alaskan Natives and other races.



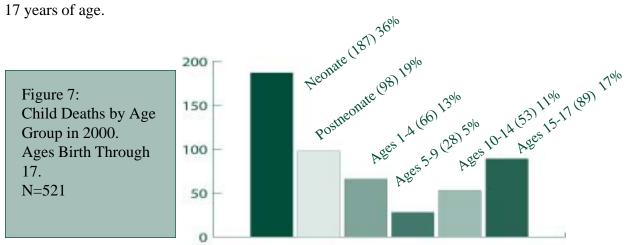
The SCDRB's data from 2000 revealed that 84 percent of children who died were white, 13 percent were black, two percent were Asian/Pacific Islander, and one percent were American Indian/Alaskan Native. Twelve percent of the children who died in 2000 were Hispanic. The remaining 88 percent were non-Hispanic. Figure 6 illustrates child deaths by race and manner.



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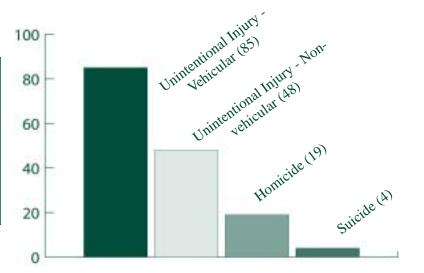
#### 2000 Overview

The figure below shows the 521 child deaths in 2000 by age group. Neonates (less than 29 days of age) accounted for 187 deaths. Ninety-eight postneonates (30 days up to one year old) died. The deaths reviewed also included 66 children from one to four years of age; 28 children between five and nine years old; 53 children between 10 and 14 years old; and 89 adolescents from 15 to 17 years of age.



The SCDRB's priority is to use the data collected on child deaths to educate the general public and professionals on risk factors and prevention issues for children. The chart below illustrates that 156 of the unintentional injury deaths, homicides, and suicides may have been prevented with reasonable individual or community action.

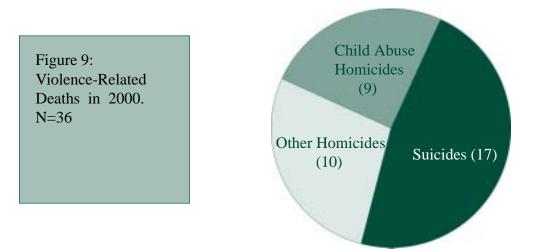
Figure 8: Preventable Child Deaths by Selected Manners in 2000. Ages Birth Through 17. N=156



#### I. Violence Related Deaths

A two-year-old girl died from a gunshot wound to her abdomen. Her eight-year-old brother was mad at her for hitting him with a toy. He retrieved a loaded shotgun, made her lie down on the floor and shot her in the abdomen. The shotgun was stored in the master bedroom closet. The gun had a trigger lock, but it was unlocked. Because of the boy's age there was no prosecution.

In 2000, 36 children were victims of violence-related deaths. A total of 19 children were victims of homicide. Nine of these homicide deaths were the result of child abuse as identified by the SCDRB. Seventeen children committed suicide.



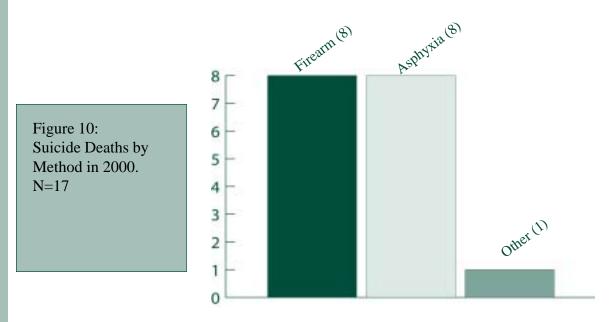
	FIREARMS								
M Y T H	Young children don't use guns.	F A C T	Young children may not know the difference between toy guns and real guns. Their curiosity is stronger than their awareness of danger; they need protection from guns. Even young children are strong enough to pull the trigger.						
M Y T H	My home will be safer if I have a firearm in it.	F A C T	A home is safer for children if there are no guns. The risk of homicide in the home is three times greater in households with guns. The risk of suicide is five times greater in households with guns. If a gun is in the home, it should be kept unloaded and locked with the ammunition stored and locked separately.						
M Y T H	I don't have a firearm in my home, so I don't have to worry about my children accessing guns.	F A C T	Chances are good that your neighbor, or your friend's home does have a firearm. An estimated 40 percent of households with children have guns.						

A 13-year-old boy was shot by his friend. The victim's mother and her live-in boyfriend allowed the boy and three of his friends to party without supervision in the boy's bedroom in which there were 11 guns. The mother's boyfriend provided marijuana to the boys. A 15-year-old friend pointed one of the guns at the victim's head and pulled the trigger. The boy died as the result of a gunshot to the right side of the head. In connection with this incident, the mother and her boyfriend faced drug charges. The 15-year-old was charged with second degree murder.

#### I. Violence Related Deaths

A 17-year-old male died from a self-inflicted shotgun wound to the head. The teenager had a history of depression and suicidal ideation, was known to use alcohol and drugs, and was taking anti-depressants under the care of a psychiatrist. He had recently been expelled from school, but was reported to have been "getting better." He accessed the shotgun he used to kill himself from a gun rack in his family's home.

In 2000, the SCDRB reviewed 17 child suicide deaths. Thirteen white males, three white females, and one black male took their lives. Eight suicide deaths were due to asphyxia by adolescents hanging themselves. Eight adolescents took their lives with firearms, and one adolescent died in a vehicular crash.



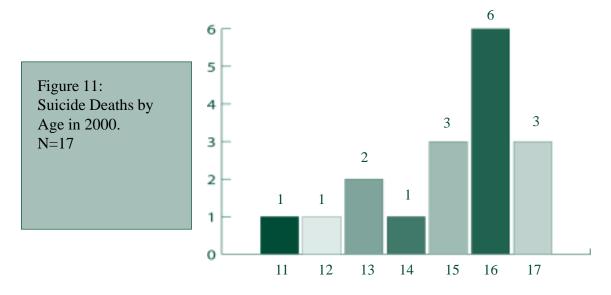
A 16-year-old male died from a self-inflicted gunshot wound to the head. The teenager had previously expressed a desire to die. On the day of his death he was drinking and crying, but would not talk about why he was crying. He asked a friend to retrieve a semi-automatic handgun that the friend had been holding for him. He then killed himself with the gun.

Suicidal behaviors are complex and usually the result of ongoing processes that involve multiple risk factors such as mood disorders, drug and alcohol abuse, family discord, and lack of resources including access to services. The following recommendations were made in the U.S. Surgeon General's "Call to Action to Prevent Suicide 1999":

- Add more scientifically evaluated suicide prevention programs in schools.
- Increase the number of health insurance plans that are required to cover mental health and substance abuse on the same level that physical illnesses are covered.
- Encourage doctors and nurses to ask at-risk patients about the presence of firearms, drugs, and other lethal agents in their homes.

#### I. Violence Related Deaths

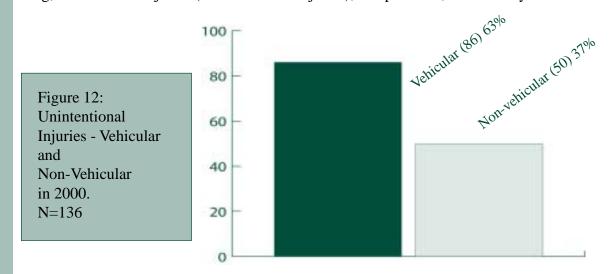
Sixteen year olds made up the largest number of teenage suicide deaths in 2000. The chart below illustrates the 17 suicide deaths by age.



	SUICIDE								
M Y T H	Young people don't kill themselves.	F A C T	Nationally, and in Kansas, suicide is the number three cause of death for young people between the ages of 15 - 24.						
M Y T H	Talking about suicide may give someone the idea.	F A C T	Actually, the opposite is true. Asking someone directly will often lower the anxiety level and act as a deterrent to suicidal behavior. Discussing suicide openly and honestly is one of the most helpful things you can do.						
M Y T H	Improvement following a suicidal crisis means the risk is over.	F A C T	The greatest danger of suicide exists during the first three months following an attempt or deep depression. A "miraculous, overnight recovery" could be a significant danger signal. It may take months to feel consistently better and in control.						
M Y T H	Teens who talk about suicide rarely commit suicide.	F A C T	Most of the teens who attempt or commit suicide give clues or warnings of their intentions. Do not ignore statements like, "You'll be sorry when I'm dead," or "I can't see my way out." No matter how casually or jokingly said, these may really indicate suicidal feelings.						
M Y T H	The suicidal person wants to die and feels there is no turning back.	F A C T	Suicidal people are usually ambivalent, wavering until the last moment between wanting to live and wanting to die. Most suicidal people do not want death. They want the pain to stop.						

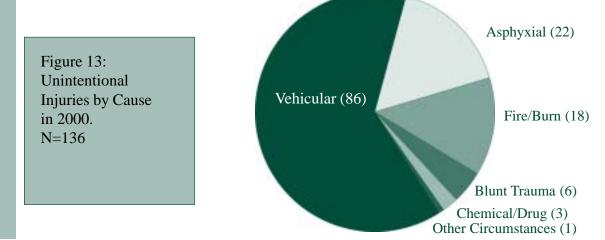
#### **II. Unintentional Injuries**

More children, ages one through 17, die from unintentional injuries than from all childhood diseases combined. Unintentional injuries are divided into two categories: vehicular and non-vehicular. Non-vehicular deaths include asphyxial (suffocation or drowning), fire/burn, chemical/drug, blunt trauma injuries (falls and crush injuries), sharp trauma, or deaths by electrocution.



Unintentional injuries caused a total of 136 child deaths in 2000. Eighty-six deaths were vehicular and 50 were non-vehicular. The breakdown of non-vehicular deaths was: 22 asphyxial deaths (13 drownings and nine deaths due to suffocation/strangulation); 18 fire/burn deaths; six blunt trauma deaths; three chemical/drug deaths; and one death from other circumstances. No deaths were due to electrocution or unintentional firearm injury in 2000.

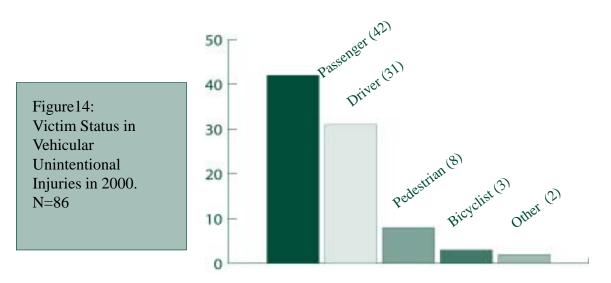
Of the 136 unintentional injury deaths, 133 (98 percent) had at least one issue of preventability noted by the SCDRB. Among the 86 vehicular deaths, 85 (99 percent) were identified as preventable. In the 50 non-vehicular unintentional injury deaths, 48 (96 percent) were identified as preventable. The prevention issues noted by the SCDRB in vehicular-related deaths were: non-use of safety restraints; excessive speed; alcohol/drug use while driving; inexperienced drivers; failure to obey traffic laws; and inattentive driving. Some of the prevention issues noted in the non-vehicular deaths were: inadequate supervision; absent or non-working smoke detectors; and non-use of personal flotation devices.



#### **II. Unintentional Injuries** A. Motor Vehicle Deaths

A 16-year-old male was the single occupant of a car that left the roadway for an unknown reason. His car apparently hit a wall and overturned. The victim was not autopsied and no toxicology was conducted. It is not known if the teenager was wearing a seat belt. Without a complete death investigation, autopsy, and toxicology, it is unknown what circumstances led to the death of this teenager. Also, because of the limited investigation, conclusions about the preventability of his death cannot be determined.

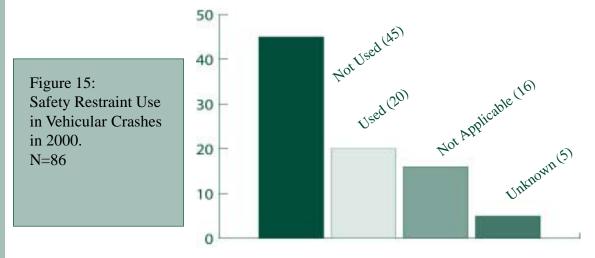
Motor vehicle fatalities continue to be the cause of the largest number of unintentional injuries, claiming the lives of 86 children in 2000. Motor vehicle fatalities include drivers and passengers of motor vehicles, pedestrians who are struck by motor vehicles, bicyclists and occupants of any other form of transportation. The chart below depicts the victim status, or position at the time of injury. Forty-two children were passengers in vehicles; 31 adolescents were drivers of vehicles; eight were pedestrians; three were bicyclists, two of whom were not wearing helmets; and two children were involved in other circumstances. In 26 of the motor vehicle crashes, alcohol was known to be involved.



A victim was one of four 14 year olds in a car driven by a 16 year old who lost control while trying to "jump" the car over a railroad crossing at 60 mph. The car became airborne and rolled several times before landing on its roof. None of the occupants were wearing seatbelts and the victim and driver were ejected. All of the other teenagers in the vehicle were injured. No citations were issued. There was limited damage to the passenger compartment of the car. If seatbelts had been worn, it is likely there would have been survivable injuries.

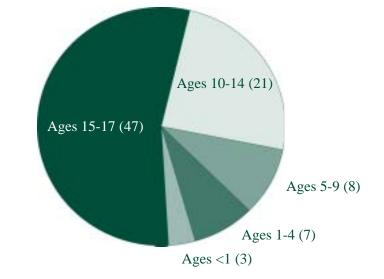
#### **II. Unintentional Injuries**

In a crash, a seat belt is the primary device that protects the occupants of a vehicle. In 2000, 45 children who were not wearing seat belts or not restrained in child safety seats were killed in vehicular crashes. Safety restraints were used in 20 cases; in 16 cases safety restraints were not applicable (deaths involving pedestrians or children riding bicycles); and in five cases safety restraint information was not known.



Teenagers are three to four times more likely to be involved in a crash than the rest of the driving population. The age group that had the highest number of vehicular deaths in 2000 was 15 through 17 year olds. The chart below illustrates the number of children who died in vehicular crashes by age group.

Figure 16: Vehicular Fatalities by Age Group in 2000. N=86



Kansas Child Death Review Board 2000 Data

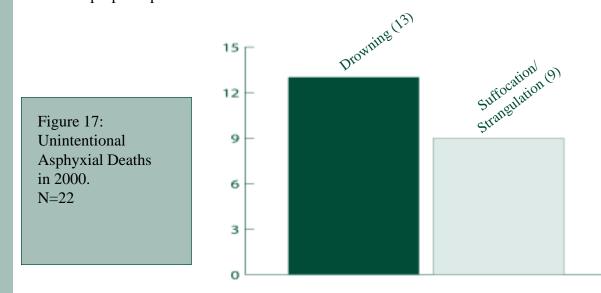
A 15-year-old male was a restrained passenger in a single vehicle rollover crash. The teenager died of head injuries sustained after a 15-year-old driver lost control of the car for an unknown reason. The car hit a tree and then overturned. Both teens tested positive for alcohol and marijuana. The crash occurred at 11:30 p.m. The driver was not in compliance with license restrictions requiring that 15 year olds be accompanied by an adult when driving unless they are driving to and from school. The driver was injured, but survived the crash.

-	MOTOR VEHICLE CRASHES									
M Y T H	Seat belts are as likely to harm you as help you.	F A C T	Wearing a seat belt reduces the chances of being killed or injured in a crash by 45 to 60 percent. Seat belts keep occupants from being thrown out of the car or from slamming into the window, dashboard, or other people.							
M Y T H	Child safety seats or seat belts aren't important on short, low-speed trips around town.	F A C T	In a crash, a 10-pound child riding in a car traveling 30 mph is thrown forward at a force of 300 pounds. It's equivalent to dropping a child from a third-story window. More than 80 percent of all crashes occur at speeds less than 40 mph. Three out of four crashes causing death occur within 25 miles of home.							
M Y T H	It's better to be thrown clear of the crash.	F A C T	Individuals are four times more likely to die if they are thrown from the vehicle during a crash. They are 14 times more likely to receive a spinal injury. Three quarters of people who are thrown from the car in crashes are killed.							
M Y T H	I don't need a seat belt. The air bag will save me.	F A C T	Air bags are designed to work with seat belts, not by themselves. An air bag, by itself, reduces the risk of dying in a crash by only 12 percent. A seat belt will reduce the risk by 45- 60 percent. Seat belts help prevent air bag injuries by keeping occupants the proper distance away from deploying air bags.							
M Y T H	If I wear a safety belt, I might be trapped in a burning or submerged car.	F A C T	Less than one-half of one percent of all injury-producing collisions involve fire or submersion. Individuals are better off wearing a safety belt at all times in a car. With safety belts, occupants are more likely to be unhurt, alert, and capable of escaping quickly.							

### II. Unintentional Injuries

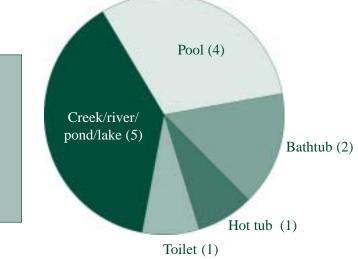
**B.** Asphyxial Deaths

In 2000, 22 children lost their lives to unintentional asphyxial injuries. Unintentional drownings claimed the lives of 13 children. Unintentional suffocation or strangulation claimed the lives of nine children. The SCDRB concluded that many of these deaths may have been prevented had there been proper supervision.



According to the National SAFE KIDS Coalition, "for every child who drowns, four more are hospitalized for near-drownings and for every hospital admission, four children are treated in emergency rooms." Of the 13 drowning fatalities reviewed by the SCDRB in 2000, five children drowned in creeks, rivers, ponds, or lakes; four children drowned in swimming pools; two children drowned in bathtubs; one in a toilet; and one in a hot tub.

Figure 18: Unintentional Drowning Deaths by Location in 2000. N=13



Kansas Child Death Review Board 2000 Data

A four-year-old girl fell into a backyard pool and drowned. Several adults and other children were in the area, but no adults were directly supervising the children. The girl, who had been wearing a life jacket, took it off and jumped into the pool. The pool did not have four-sided fencing, or limited access. It was estimated that the girl was submerged for one to five minutes. She did not respond to CPR.

	DROWNING									
M Y T H	Drowning is noisy. I'll hear my child splashing and struggling in time to help.	F A C T	Young children don't have the developmental ability to figure out what to do, such as right themselves or stand up, even in a few inches of water. As a result, they just quietly "slip away."							
M Y T H	I've taken life-saving and CPR, so I can rescue my child.	F A C T	CPR and life-saving don't replace life vests and supervision. It only takes five minutes under water to have brain damage, a cardiac arrest, or even to die.							
M Y T H	Kids won't wear life vests.	F A C T	They'll wear them if the expectation is clear and consistent. It helps to start young. Make life vests part of all water activities. Most drownings happen during momentary lapses in supervision. A life vest is no substitute for supervision, but it can buy time.							
M Y T H	I don't live or vacation near the water, so I don't have to worry.	F A C T	Water hazards exist in and around every home. Toddlers have drowned in five-gallon buckets, rain-filled garbage cans, and toilet bowls. Keep young children out of the bathroom except when directly supervised, and don't leave buckets or barrels where they can accumulate water. Children can drown in just a few inches of liquid.							

A 15-year-old male was trying to swim across a river when the current pulled him under. The teenager screamed for help, but friends thought he was joking. By the time they realized he was serious and a friend tried to rescue him, he had been underwater for three to four minutes. No autopsy and no toxicology were conducted. Because of the lack of information provided, it is unknown if there were any other circumstances, such as a medical condition or drug/alcohol impairment that may have contributed to his death.

A five-year-old boy died when he waded into a state lake without a flotation device and drowned in four to five feet of water. During resuscitation, a piece of hotdog was found in the child's throat. The boy's parents were under the influence of drugs and alcohol and did not notice him missing for approximately 10 minutes. The child was not wearing a life jacket. No autopsy was performed, so it is unknown whether any other circumstances, such as choking, contributed to this child's death.

#### **II. Unintentional Injuries**

Many infant deaths due to suffocation are associated with unsafe sleeping arrangements. According to the AAP, "...bedsharing may lead to increased risk for death because babies get trapped in the beds or beneath their bedmates, or buried in the bedding." An infant's inability to lift his or her head or remove him or herself from dangerous situations increases the chance of injury or death. In 2000, the SCDRB reviewed the deaths of nine children who died from unintentional suffocation, stangulation, or choking. Risk factors identified by the SCDRB included proper supervision, appropriate sleeping arrangements, and proper bedding materials.

#### C. Fire/Burn Deaths

Eighteen children lost their lives due to fire/burn incidents in 2000. All 18 deaths were identified as preventable by the SCDRB. The prevention issues identified in these cases were related to supervising small children; limiting access to lighters, matches or candles; properly maintaining a chimney or furnace; planning an escape route; and maintaining or installing working smoke detectors.

A one-year-old girl and a three-year-old boy died in a house fire started by the boy. The boy was playing with a lighter and caught a piece of paper on fire which ignited the house. The boy had a known history of firestarting. He accessed the lighter from on top of his parents' nightstand.

A three-year-old boy died in a house fire started by his five-year-old brother who was playing With a lighter at their babysitter's house. The bed caught fire and two older children ran away, but the three year old was trapped when the room became consumed by fire. No smoke detectors were in the home.

	FIRE	
M Smoke alarms last a lifetime. Y T H	<ul> <li>F Like other electronic devices, smoke alarms won't last forever.</li> <li>A Replace them every 10 years. A smoke alarm reduces the risk of dying in a fire by almost 50 percent, but nearly 1,200 children of each year in homes without working alarms. Keep smoke alarm connected and working. Replace low batteries immediately and batteries annually. Hit the "test" button each month to check the alarm. A chirp signals a low battery.</li> </ul>	of die ns d all
M The smoke from fire isn't the rea Y danger. H	F A C TSmoke kills more people than do burns. In a matter of minutes fire robs the air of oxygen and fills it with carbon monoxide an other deadly gases.	
M Portable heaters can safely keep Y warm through the night. H	F A C TPortable heaters are meant to provide extra heat for a short tim but not while sleeping. Keep portable heaters three feet away from bedding, furniture and other combustible materials. Never leave a heater unattended.	

#### **II. Unintentional Injuries**

#### **D.** Other Unintentional Injuries

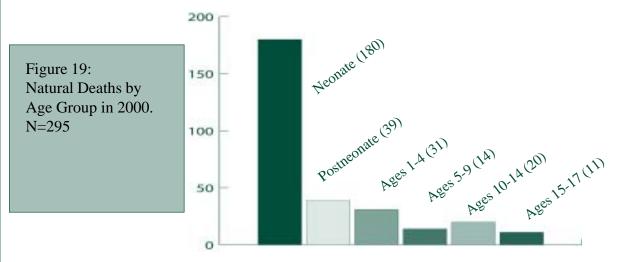
Ten children died of other unintentional injuries in 2000. Three deaths were caused by poisons/ chemicals; six children died from falls, crush injuries or other blunt trauma; and one child died from exposure.

A 16-year-old male died of acute alcohol poisoning. He was attending a party with several friends. He was bragging about being able to consume large amounts of alcohol. He proceeded to drink an entire bottle of liquor. Shortly thereafter, he passed out. His friends debated about whether or not to take him to the hospital. They decided to wait until the morning to give him time to sleep it off. In the morning, his friends discovered he was dead.

In 27 (54 percent) of the 50 non-vehicular unintentional injury deaths, lack of supervision was noted as a risk factor. While no one can watch their children every second of the day, the fact is that most preventable injuries happen while caregivers are called away or distracted, even for a moment. If a child is in a potentially dangerous area and you must leave, always take him or her with you. Pay special attention when doing something out of the normal routine. Childproofing is not enough. Always keep a close eye on children.

#### **III. Natural Deaths**

Natural deaths include causes related to prematurity, congenital anomalies, infections, and other diseases. Most child deaths are due to natural causes, and the majority of natural deaths occur in the first year of life. Fifty-seven percent, or 295 of the deaths reviewed for 2000, were attributed to natural causes. Neonates, children less than 29 days old, accounted for 180 (61 percent) of the natural deaths in 2000.



In 2000, 168 males and 127 females died of natural causes. The breakdown by cause of the 295 natural deaths in 2000 was as follows: 121 deaths due to prematurity; 96 deaths due to congenital malformations; 22 deaths due to infections; eight deaths due to metabolic/genetic disorders; 25 deaths due to neoplasms (cancer); and 23 deaths due to other medical conditions.

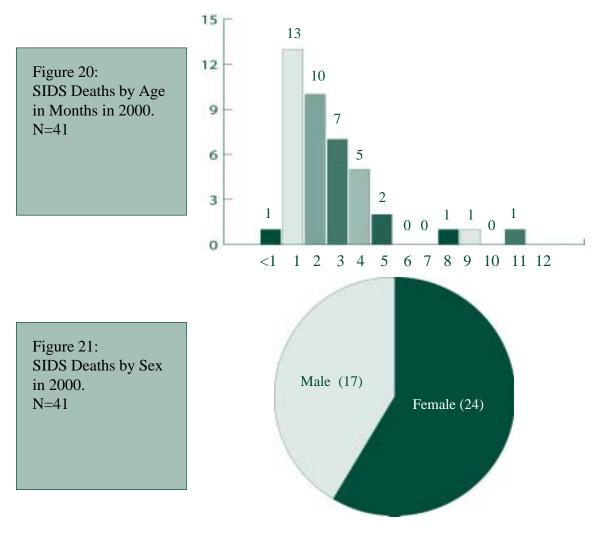
Asthma deaths are of particular concern. While asthma is a chronic disease, it is manageable and attacks are treatable. Caregivers and children with asthma need to be aware of asthma triggers and how to avoid them, take appropriate medication for asthma management, and know how to appropriately respond in the event of an asthma attack. Because many children are not at home for a significant number of hours each day, other adults such as school nurses, coaches, and child care providers must be familiar with a physician-prescribed asthma action plan. This can help prevent severe asthma attacks and increase recognition of medical emergencies.

In reviewing the deaths of children under one year of age, the information provided indicates that 52 mothers smoked tobacco products during their pregnancies; 35 mothers were non-compliant with their prenatal care; nine mothers were known to use alcohol; and 10 used illicit drugs.

#### **IV. Sudden Infant Death Syndrome**

After more than 30 years of research, scientists still have not found a specific cause for SIDS. Although there are factors that may reduce the risk of SIDS, there is no certain way to predict or prevent it. National statistics indicate that most SIDS deaths occur when infants are between one and four months of age. Fall, winter, and early spring tend to be the times when most SIDS deaths occur.

In 2000, the SCDRB reviewed 41 SIDS deaths. It is of critical importance to identify all possible risk factors in SIDS deaths. As stated in every previous SCDRB report, placing a baby on his or her back to sleep lowers the incidence of SIDS. According to the information provided to the SCDRB on the 41 SIDS deaths in 2000, risk factors identified during the review revealed that 26 infants were known to have been sleeping on their stomachs or sides; 19 were sleeping on soft surfaces; 12 were sharing a sleeping surface with adults or other children; and 23 had a recent history of mild upper respiratory infection or other illness. Only 12 children were known to have been sleeping in a crib as recommended by the AAP. In an overwhelming number of cases, risk factors could not be identified due to a lack of information which should have been provided from scene documentation and interviews.



#### **IV. Sudden Infant Death Syndrome**

The single most significant factor in reducing the risk of SIDS is sleep position. Infants should be placed on their backs to sleep. In addition, infants should not be placed to sleep on soft bedding products, even if those products are marketed for use by infants. The Consumer Product Safety Commission (CPSC) indicates that some infants placed on fluffy, plush products such as sheepskins, quilts, comforters, and pillows have been found on their stomachs with their faces, noses, and mouths covered by the soft bedding.

According to the National Institute of Child Health and Human Development (NICHD), the Centers for Disease Control and Prevention (CDC), and the AAP, a number of factors seem to place a baby at higher risk of dying from SIDS. In addition to sleep position, these risk factors include: improper sleeping arrangements; mothers who smoke during pregnancy; babies who are exposed to second-hand smoke; late or no prenatal care; lack of breast feeding; young maternal age; and premature or low birth weight babies.

In addition, the NICHD warns parents that the incidence of SIDS increases during cold weather. The increase in SIDS during winter months may, in part, be attributed to babies being overbundled and/or overheated. Parents and caregivers should be reminded to keep the temperature in the baby's room so that it feels comfortable for an adult.

	ŝ	5	IDS
M Y T H	Babies can "catch" SIDS.	F A C T	SIDS cannot be caught. It is not contagious and there are no symptoms before death.
M Y T H	Cribs cause "crib death," or SIDS.	F A C T	Cribs do not cause SIDS.
M Y T H	Babies who sleep on their backs can choke on spit-up or vomit.	F A C T	Babies swallow or cough up fluid that enters their airway. Doctors have found no increase in choking or other problems in babies who sleep on their backs.
M Y T H	A SIDS death can be prevented.	F A C T	Although there is no way to make sure a baby will not die of SIDS, the chance of a baby dying of SIDS can be greatly reduced by placing babies on their backs to sleep.
M Y T H	SIDS can occur at any age.	F A C T	SIDS is the unexplained death of a baby under one year of age. Most SIDS deaths happen between one and four months of age. The number of babies dying of SIDS dramatically drops after six months of age.
M Y T H	Shots or medicines cause SIDS.	F A C T	Vaccines or medicines do not cause SIDS. All babies should be seen for well-baby check-ups. Babies should also receive their vaccines on time.

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#### V. Undetermined Deaths

The "undetermined" category is used when the manner of death cannot be conclusively determined after a comprehensive review of all available information. In 2000, the SCDRB categorized 13 deaths to be of an undetermined manner.

Three infants were in the age range for SIDS, but the SCDRB had to declare their deaths undetermined due to a lack of information or inconsistent histories. It is vital that all agencies cooperate and review all relevant information necessary to complete a proper death investigation.

A seven-month-old infant was sleeping on a couch between his mother and father, face down on a soft pillow. The parents fell asleep and woke up 1 ½ hours later to find the baby dead, still face down. The cause of death could not be determined due to inadequate investigation and an incomplete autopsy. Indications of asphyxia were noted, as the child was on a couch between two sleeping adults and was found face down on a soft pillow. Asphyxia could not be ruled out at the autopsy, and yet SIDS was listed as the cause of death on the death certificate.

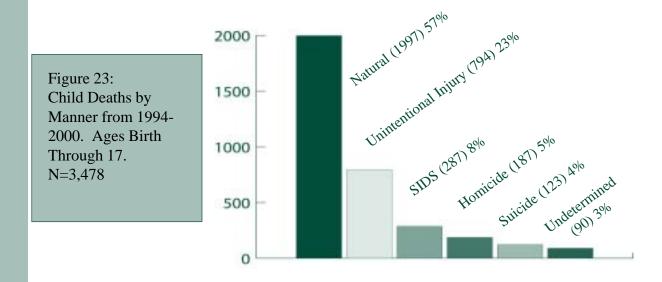
A 20-day-old infant had been sleeping with his father in an adult-sized bed. The father woke up two hours after checking the baby and found him not breathing and unresponsive. There were no obvious signs of trauma, but an incomplete investigation led to the manner of death being undetermined, although the death certificate was classified as a natural death due to SIDS. This finding is unacceptable due to an incomplete autopsy and investigation. The autopsy was incomplete because the child's body had already been embalmed. The law enforcement agency provided a very limited description of the death scene, no X-rays were taken at autopsy, and there was no retention of soft tissue for laboratory work.

The SCDRB strives to avoid categorizing any child death as undetermined. Consistent, comprehensive law enforcement records, complete scene investigations, and autopsies (including cultures, total body x-rays, and toxicology) are absolutely critical in accurately determining the cause and manner of deaths.

#### Cumulative Data 1994-2000

Figure 22:thChild Deaths byofManner and Yearoffrom 1994-2000.Ages Birth Through				00. The 1	number		•		•	ears 1994 by manner
17. N=3,478		_	1994	1995	1996	1997	1998	1999	2000	TOTAL
	Natural		264	226	328	281	298	305	295	1,997
	Unintentiona Injury	I	98	84	125	107	123	121	136	794
	Natural - SID	s	49	44	35	46	32	40	41	287
	Homicide		33	25	31	22	36	21	19	187
	Suicide		15	12	16	21	26	16	17	123
	Undetermine	d	5	13	20	17	11	11	13	90
	TOTAL	Î	464	404	555	494	526	514	521	3,478

In total, 3,478 child fatalities were reviewed by the SCDRB in this seven-year period. Natural causes claimed the lives of 1997 (57 percent) children. Unintentional injuries claimed the lives of 794 (23 percent) children (508 vehicular and 286 non-vehicular deaths); 287 (8 percent) infants died of SIDS; 187 (5 percent) deaths were homicides; 123 (4 percent) deaths were suicides; and 90 (3 percent) deaths were classified as undetermined.



Kansas Child Death Review Board 2000 Data

#### Cumulative Data 1994-2000

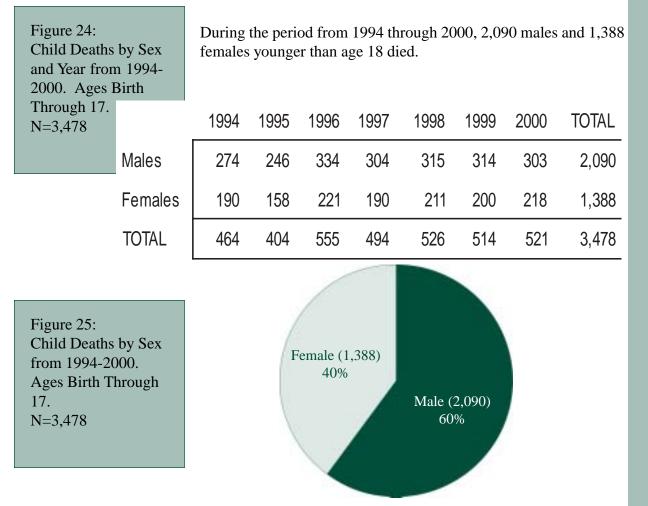


Figure 26:	
Child Deaths by Ag	je
Group and Year from	m
1994-2000. Ages	
Birth Through 17.	
N=3,478	

The figure below illustrates child deaths by age group during the seven-year period. Children less than one year of age accounted for 55 percent of the deaths reviewed by the SCDRB. In the period from 1994 through 2000, 411 one to four year olds died, along with 232 five to nine year olds, 345 10 to 14 year olds, and 577 15 to 17 year olds.

,11 1 / .	_	1994	1995	1996	1997	1998	1999	2000	TOTAL
	Neonate	153	136	205	178	181	202	187	1,242
	Postneonate	108	83	96	101	97	88	98	671
	Ages 1-4	47	51	63	60	62	62	66	411
	Ages 5-9	31	31	40	34	38	30	28	232
	Ages 10-14	40	40	61	42	54	55	53	345
	Ages 15-17	85	63	90	79	94	77	89	577
	TOTAL	464	404	555	494	526	514	521	3,478

Kansas Child Death Review Board 2000 Data

#### Cumulative Data 1994-2000

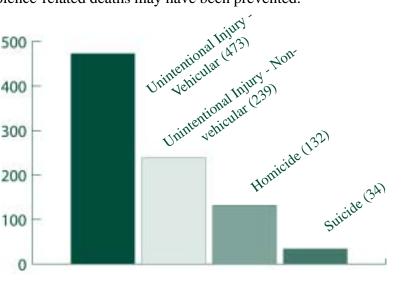
The figure below compares the death rates of Kansas children to the population by manner and year. Kansas' seven-year average rate per 100,000 for non-SIDS natural deaths was 41.02;

Figure 27: Child Death Rates by Manner and Year from 1994-2000. Ages Birth Through 17. unintentional injuries - non-vehicular 5.85; unintentional injuries - vehicular 10.45; SIDS 1.08 (per 1,000 live births); homicide 3.85; suicide 4.98; and undetermined 1.85. The chart also includes national rates for selected manners of death from 1994 through 1999 and the six-year average. Kansas averages higher rates of death from non-vehicular and vehicular unintentional injuries, SIDS, suicide, and homicide than the nation. At the time of this publication, 2000 national data was not available.

	1994	1995	1996	1997	1998	1999	2000	7 YEAR KS AVERAGE 6 YEAR US AVERAGE
Natural per 100,000 (Birth-17)	38.40	32.92	47.54	40.54	42.72	43.66	41.37	41.02
Unintentional Injury - Non-vehicular per 100,000 (Birth-17)	5.38	4.08	5.97	6.78	7.02	4.72	7.01	5.85
NATIONAL RATE	5.36	5.21	4.90	4.62	4.50	4.14		4.79
Unintentional Injury - Vehicular per 100,000 (Birth-17)	8.87	8.16	12.22	8.66	10.61	12.60	12.06	10.45
NATIONAL RATE	8.60	8.35	8.31	8.07	7.58	7.64		8.09
Natural - SIDS per 1,000 live births (Ages <1)	1.31	1.19	0.96	1.24	0.83	1.03	1.03	1.08
NATIONAL RATE	1.03	0.87	0.78	0.77	0.72	0.66		0.81
Homicide per 100,000 (Birth-17)	4.80	3.64	4.51	3.17	5.16	3.0	2.66	3.85
NATIONAL RATE	3.97	3.77	3.26	2.81	2.55	2.39		3.13
Suicide per 100,000 (Ages 9-17)	4.26	4.32	4.46	5.78	7.10	4.36	4.61	4.98
NATIONAL RATE	3.93	3.78	3.52	3.45	3.32	2.55		3.43
Undetermined per 100,000 (Birth-17)	0.73	1.89	2.91	2.45	1.58	1.57	1.82	1.85

During the seven-year period from 1994 through 2000, the SCDRB concluded that 878 unintentional injuries and violence-related deaths may have been prevented.

Figure 28: Preventable Child Deaths by Selected Manners from 1994-2000. Ages Birth Through 17. N=878



This section of the report focuses on unintentional injury vehicular fatalities. Board member Dr. Sarah Johnston provided this preliminary in-depth analysis of the 508 vehicular fatalities reviewed from 1994 through 2000. Her work on this project was made possible through a research grant provided by the University of Kansas School of Madicine.

provided by the University of Kansas School of Medicine.

Figure 29: Motor Vehicle Crashes by Age and Sex from 1994-2000. Ages Birth Through 17. N=508 Figure 29 depicts the number of crash victims by age and sex. A disproportionate 62 percent of males died in motor vehicle crashes. Females accounted for 38 percent of motor vehicle fatalities. Teenagers in the 15 through 17 age group accounted for 50 percent of all motor vehicle fatalities.

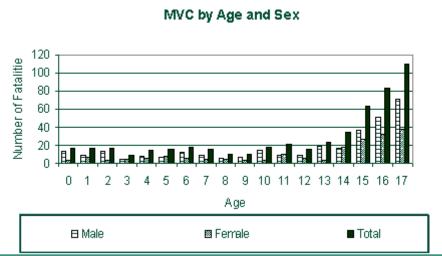
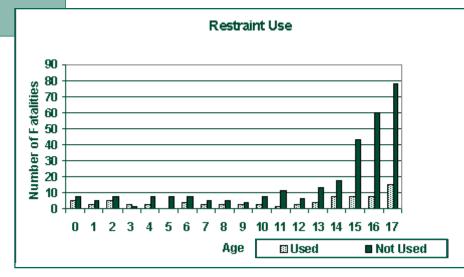


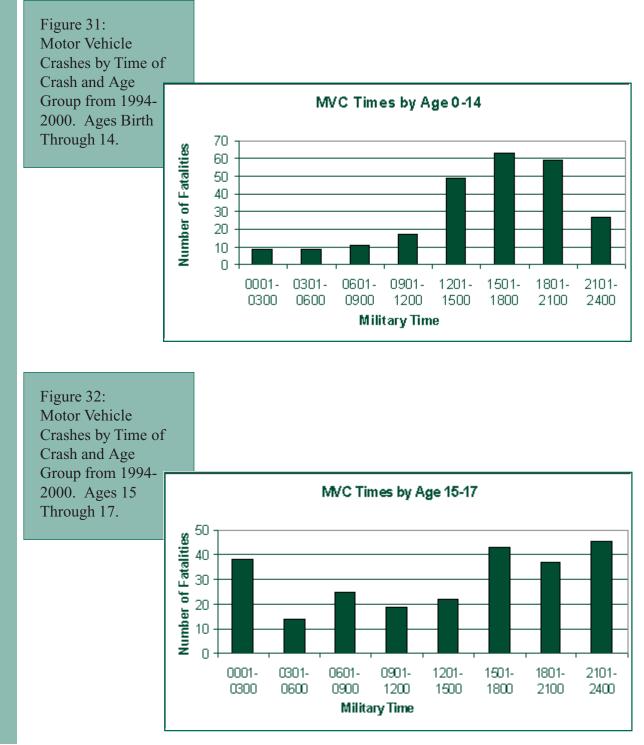
Figure 30: Restraint Use in Motor Vehicle Crashes by Age from 1994-2000. Ages Birth Through 17.

The figure below illustrates safety restraint use in motor vehicle crashes by age. Among children less than 15 years of age, 70 percent were not using safety restraints. Among 15 through 17 year olds, 86 percent were not using safety restraints.



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Figures 31 and 32 depict the time fatal vehicle crashes occurred by age. Among children less than 14 years of age, there were increases in the number of crashes during hours of the day commonly associated with going to school, returning from school, and evening commute. Among 15 through 17 year olds, there were similar increases in the number of crashes during these times. In addition, in the older age group, there was an increase in fatal motor vehicle crashes between the hours of 9:00 p.m. and 3:00 a.m.



Kansas Child Death Review Board 2000 Data

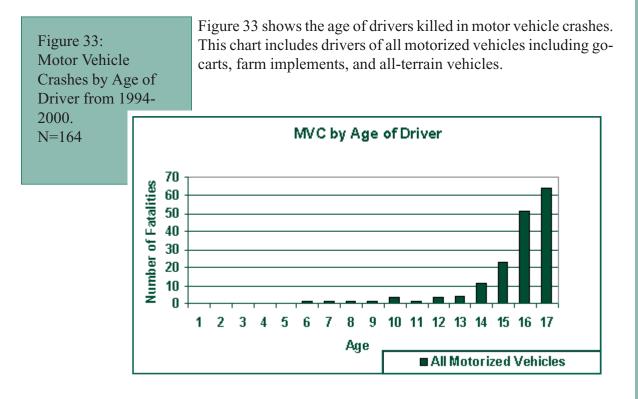


Figure 34 demonstrates various methods of intervention and the associated effects on changes in crash mortality. This information comes from a study published in the Journal of the American Medical Association. The type of intervention that has had the most dramatic effect on the reduction of motor vehicle fatalities are laws that provide for primary seat belt enforcement.

	Intervention	Change in crash mortality (%)		
Figure 34: Changes in Crash	Primary seatbelt law	-13%		
Mortality by	Organized trauma system	-8%		
Intervention.	Laws deterring drunk driving	-5%		
	Secondary seat belt law	-3%		
	Relaxation of speed limits	+7%		
	Graduated Driver Licensing	Between -7 and -32 %		

According to the National Highway Traffic Safety Administration (NHTSA), as of December 31, 2001, 17 states, the District of Columbia, and Puerto Rico have primary enforcement laws in effect. Thirty-two states have secondary enforcement laws, and one state has no seat belt use law. Primary (standard) enforcement laws allow law enforcement officers to make a stop and issue a citation for a driver not wearing a seat belt. Secondary enforcement laws allow a driver to be cited for not wearing a seat belt only when stopped for another offense. Kansas currently has secondary enforcement laws for unrestrained youth who are older than 14 years. For drivers and passengers older than 14, the fine for not wearing a seatbelt is \$10. Child occupant protection and safety belt use laws have proven effective in increasing restraint use. According to the National SAFE KIDS Campaign, states with primary enforcement laws average a 15 percent increase in restraint usage rates, as well as lower fatality and injury rates, when compared to states with secondary enforcement laws.

As of January 2001, Kansas was not included among the 31 states plus the District of Columbia, that have matched or exceeded all component parts of the model Graduated Driver Licensing (GDL) law adopted by NHTSA, the Insurance Institute for Highway Safety (IIHS), the National Transportation Safety Board (NTSDB), and the National Safety Council (NSC). Graduated licensing is a system in which driving privileges are phased in, allowing initial experience to be gained in situations of lesser risk. Features of this system include three levels of licensure. In the first stage, the young driver must always be supervised by an experienced, licensed driver. In the intermediate phase, the young driver is prohibited from unsupervised high-risk driving, such as nighttime driving. In the third phase, some states place restrictions on carrying teenage passengers. Depending upon the severity of the restrictions imposed by each state, crash mortality rates have been reduced by seven percent to 32 percent for teenage drivers.

In summary, for the years 1994-2000, motor vehicle crashes were the leading cause of unintentional injury deaths for Kansas children. Kansas has a significantly higher mortality rate for child deaths from motor vehicle crashes than does the rest of the nation. Statistically significant risk factors for these deaths are failure to use safety restraints and being in the 15-17 year old age group.

#### Appendices

- Appendix A: 2000 Child Deaths by County of Residence
- Appendix B. Acknowledgments
- Appendix C. SCDRB Members
- Appendix D. Methodology
- Appendix E. Goals
- Appendix F. History
- Appendix G. Resources

#### Appendix A Child Deaths by County of Residence

2000 Data N = 521									
County of Residence	County Population 17& under	Total	Natural	Unintent'l Injury	Uninten'l Injury-MVA	SIDS	Suicide	Homicide	Undetermined
Allen	3,630	3	0	1	0	0	0	2	0
Anderson	2,123	3	1	0	1	0	0	1	0
Atchison	4,473	7	5	0	1	1	0	0	0
Barber	1,326	0	0	0	0	0	0	0	0
Barton	7,330	0	0	0	0	0	0	0	0
Bourbon	3,961	4	1	2	0	1	0	0	0
Brown	2,828	2	1	0	0	0	0	0	1
Butler	17,037	8	4	0	2	1	1	0	0
Chase	731	0	0	0	0	0	0	0	0
Chautauqua	1,019	1	0	0	1	0	0	0	0
Cherokee	5,991	5	2	1	1	1	0	0	0
Cheyenne	752	0	0	0	0	0	0	0	0
Clark	635	0	0	0	0	0	0	0	0
Clay	2,200	0	0	0	0	0	0	0	0
Cloud	2,296	2	1	0	1	0	0	0	0
Coffey	2,378	3	3	0	0	0	0	0	0
Comanche	435	0	0	0	0	0	0	0	0
Cowley	9,444	1	1	0	0	0	0	0	0
Crawford	8,775	10	5	1	4	0	0	0	0
Decatur	821	0	0	0	0	0	0	0	0
Dickinson	4,976	3	3	0	0	0	0	0	0
Doniphan	2,088	0	0	0	0	0	0	0	0
Douglas	20,401	13	11	1	1	0	0	0	0
Edwards	849	3	0	1	0	2	0	0	0
Elk	733	3	3	0	0	0	0	0	0
Ellis	6,164	2	1	0	0	0	0	0	1
Ellsworth	1,396	3	2	0	1	0	0	0	0
Finney	13,881	12	8	0	1	3	0	0	0
Ford	10,094	11	7	0	0	2	0	2	0
Franklin	6,820	2	1	0	1	0	0	0	0
Geary	8,281	7	4	0	1	1	1	0	0
Gove	803	0	0	0	0	0	0	0	0
Graham	664	1	0	0	1	0	0	0	0
Grant	2,591	2	2	0	0	0	0	0	0
Gray	1,863	1	1	0	0	0	0	0	0
Greeley	433	0	0	0	0	0	0	0	0
Greenwood	1,820	1	0	0	1	0	0	0	0
Hamilton	757	0	0	0	0	0	0	0	0
Harper	1,612	1	0	0	1	0	0	0	0
Harvey	8,555	3	3	0	0	0	0	0	0
Haskell	1,418	0	0	0	0	0	0	0	0
Hodgeman	604	0	0	0	0	0	0	0	0
Jackson	3,576	2	2	0	0	0	0	0	0
Jefferson	5,046	3	1	0	0	1	0	1	0
Jewell	832	2	0	0	0	1	0	0	1
Johnson	122,168	64	47	4	6	5	1	0	1
Kearny	1,554	4	1	0	3	0	0	0	0
Kingman	2,378	2	1	0	0	0	1	0	0
Kiowa	787	0	0	0	0	0	0	0	0
Labette	5,876	5	3	0	0	1	0	0	1
Lane	548	0	0	0	0	0	0	0	0
Leavenworth	18,334	12	5	2	2	1	1	1	0
Lincoln	840	2	1	0	1	0	0	0	0
Linn	2,397	5	1	0	2	1	1	0	0

## Appendix A Child Deaths by County of Residence 2000 Data N = 521

				19 -	521				
County of Residence	County Population 17& under	Total	Natural	Unintent'l Injury	Unintent'l Injury-MVA	SIDS	Suicide	Homicide	Undetermined
Logan	774	0	0	0	0	0	0	0	0
Lyon	9,250	6	4	0	0	0	0	1	1
Marion	3,307	7	2	5	0	0	0	0	0
Marshall	2,738	3	1	0	2	0	0	0	0
McPherson	7,503	5	2	1	1	1	0	0	0
Meade	1,367	0	0	0	0	0	0	0	0
Miami	7,920	8	4	1	1	1	1	0	0
Mitchell	1,697	0	0	0	0	0	0	0	0
Montgomery	9,079	6	2	3	0	0	0	0	1
Morris	1,541	3	1	0	1	0	0	1	0
Morton	1,026	0	0	0	0	0	0	0	0
Nemaha	3,057	1	0	0	1	0	0	0	0
Neosho	4,361	3	3	0	0	0	0	0	0
Ness	791	0	0	0	0	0	0	0	0
		1	0	0	1	0	0	0	0
Norton Osage	1,312 4,519	3	2	0	0	0	1	0	0
Osage				-	-	-	1		
Osborne Ottawa	1,060 1,584	0 2	0	0	0 0	0	0	0	0
					1	-			•
Pawnee Dhilling	1,748	1	0	0	1	0	0	0	0
Phillips	1,471	1	-	0	0	0	0	0	0
Pottawatomie	5,366	4	4	0	0	0	0	0	0
Pratt	2,364	3	0	0	3	0	0	0	0
Rawlins	713	0	0	0	0	0	0	0	0
Reno	15,852	5	5	0	0	0	0	0	0
Republic	1,302	1	0	0	1	0	0	0	0
Rice	2,655	2	1	0	1	0	0	0	0
Riley	11,840	1	0	0	0	0	0	0	1
Rooks	1,433	1	0	0	1	0	0	0	0
Rush	786	0	0	0	0	0	0	0	0
Russell	1,651	2	1	0	1	0	0	0	0
Saline	14,046	10	4	3	2	1	0	0	0
Scott	1,390	2	1	0	1	0	0	0	0
Sedgwick	127,535	100	60	10	10	7	4	6	3
Seward	7,208	8	5	1	1	0	0	1	0
Shawnee	42,973	39	26	2	3	5	2	1	0
Sheridan	741	1	0	0	1	0	0	0	0
Sherman	1,660	1	1	0	0	0	0	0	0
Smith	985	0	0	0	0	0	0	0	0
Stafford	1,260	2	0	0	2	0	0	0	0
Stanton	742	2	1	1	0	0	0	0	0
Stevens	1,704	0	0	0	0	0	0	0	0
Sumner	7,403	9	3	3	2	1	0	0	0
Thomas	2,150	4	0	0	4	0	0	0	0
Trego	792	0	0	0	0	0	0	0	0
Wabaunsee	1,841	1	0	0	1	0	0	0	0
Wallace	509	1	0	0	1	0	0	0	0
Washington	1,535	0	0	0	0	0	0	0	0
Wichita	726	0	0	0	0	0	0	0	0
Wilson	2,625	2	0	1	0	0	1	0	0
Woodson	821	1	0	1	0	0	0	0	0
Wyandotte	44,956	30	19	2	2	3	2	1	1
Out of State*	N/A	21	9	3	8	0	0	1	0
Grand Total	712,993	521	295	50	86	41	17	19	13

\*Out of State is included for those children who were not Kansas residents, but who died in Kansas. 2000 data on county population comes from the United States Census Bureau's 2000 Census.

#### Appendix B Acknowledgments

The review of each child's death in Kansas could not be accomplished without the enormous commitment of many people across the state. The State Child Death Review Board remains grateful for the significant contributions of county coroners, law enforcement agencies, SRS, KDHE, physicians, hospitals, child advocates, county and district attorneys, the Office of the Kansas Attorney General, and all others who offer their assistance in supplying the information necessary for our review.

As a multi-disciplinary, multi-agency board we enjoy the support of those by whom we are employed, as they allow us the time necessary to fulfill our responsibilities as board members.

Each board member plays a vital role in the collection and review of sensitive data. The function the SCDRB performs is unique as it is not duplicated by any other agency in Kansas.

The SCDRB would like to acknowledge the significant contributions of former board members Terry Morgan and Keith Schroeder. Mr. Morgan, a Special Agent for the KBI, served this past year as the appointee of the KBI. Mr. Schroeder also served this past year on the SCDRB as the district attorney appointee of the Kansas County and District Attorneys Association. The SCDRB is grateful for their commitment of time, energy, and talent.

Finally, the SCDRB would like to recognize and express its gratitude to the agencies providing the grants that help us continue this important mission. This publication is funded by the Children's Justice Act Grant through SRS. Additional funding for staff was provided by the Kansas Health Foundation, Wichita, Kansas. The Kansas Health Foundation is a philanthropic organization whose mission is to improve the health of all Kansans.

#### Appendix C SCDRB Members

#### **Attorney General appointee**

Nancy J. Lindberg, Chairperson Assistant to the Attorney General, Topeka

#### Director of Kansas Bureau of Investigation appointee

David Klamm KBI Senior Special Agent, Wichita

#### Secretary of Social and Rehabilitation Services appointee

Paula Ellis, MSW Department of Social and Rehabilitation Services, Topeka

#### Secretary of Health and Environment appointee

Lorne A. Phillips, Ph.D. State Registrar, Topeka

#### **Commissioner of Education appointee**

Sarah Johnston, M.D. USD 490 Board of Education Member, El Dorado University of Kansas School of Medicine, Wichita

#### **State Board of Healing Arts appointees**

Erik K. Mitchell, M.D. (Coroner member) District Coroner, Topeka

Jaime Oeberst, M.D. (Pathologist member) Deputy Coroner, Wichita

Katherine J. Melhorn, M.D. (Pediatrician member) University of Kansas School of Medicine, Wichita

#### Attorney General appointee to represent advocacy groups

Mary A. McDonald, J.D. Wichita City Prosecutor's Office, Wichita

#### Kansas County and District Attorneys Association appointee

Julie Richey, J.D. Crawford County District Attorney, Pittsburg

#### Staff

Carolyn Ward Executive Director Saya Scott Research Analyst **General Counsel** Kevin Graham, J.D. Assistant Attorney General

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#### Appendix D Methodology

Each month, the KDHE Vital Statistics Office provides the SCDRB with a listing of children whose deaths have been reported in Kansas for the previous month. The SCDRB reviews the deaths of all children (birth through 17 years of age) who are residents of Kansas and die in Kansas, children who are residents of Kansas and die in another state, and nonresident children who die in Kansas. Attached to the listing is a death certificate for each child and a birth certificate, if available.

The SCDRB's executive director must receive a Coroner Report Form before a case can be opened for investigation. The death certificate and coroner's report contain the information necessary to begin a case review. To ensure that each child death in Kansas is being reviewed, these documents serve as a check and balance system.

Once a case is opened, the death and birth certificates, the coroner's report, and the report of death are assessed to identify additional information necessary for a comprehensive review. Any additional information that is needed is then requested from the appropriate agency. Additional information may consist of autopsy reports, law enforcement reports, medical records, SRS records, and records from the State Fire Marshal. In some cases, it is necessary to obtain mental health, school, and other protected records. All information obtained by the SCDRB is confidential.

After all records have been collected, cases are assigned to board members for initial review and assessment. Each member reviews his or her assigned cases and completes the Board Report Form outside of the SCDRB's meetings.

During the SCDRB's monthly meetings, members present their cases orally, and circumstances leading to the deaths are discussed. If additional records are needed, or specific questions are raised, a case may be continued to the next meeting. Otherwise, upon full agreement of the cause and manner of death, cases are closed. In some instances the SCDRB may determine that it is appropriate to refer a case back to the county or district attorney in the county where the death occurred with a recommendation that a follow-up investigation be done based on the SCDRB's findings. Completed data is entered into the SCDRB's database system. It is from this database system that the annual report is produced.

Any questions about this report or about the work of the SCDRB should be directed to Carolyn Ward, Executive Director, at (785) 296-2215.

#### Appendix E Goals and History

The SCDRB has developed the following three goals to direct its work:

- 1. To describe trends and patterns of child deaths (birth through 17 years of age) in Kansas and to identify risk factors in the population.
- 2. To improve sources of data and communication among agencies so that recommendations can be made regarding recording of the actual cause of death, investigation of suspicious deaths, and system responses to child deaths. This interagency communication should occur at the individual case level and at the local and state levels.
- 3. To develop prevention strategies including community education and mobilization; professional training; and needed changes in legislation, public policy, and/or agency practices.

The SCDRB was created by the 1992 Kansas Legislature and is administered by the Office of the Kansas Attorney General. SCDRB membership is appointed according to K.S.A. 22a-241 et. seq. Membership includes: one member each from the Office of the Attorney General, KBI, SRS, KDHE, and the Department of Education; three members appointed by the Board of Healing Arts: a district coroner, a pathologist, and a pediatrician; one representative of a child advocacy group appointed by the Attorney General; and one county or district attorney appointed by the Kansas County and District Attorneys Association. No term limit is set on appointments. In 1994, the Legislature amended the statute to enable the SCDRB to appoint an executive director.

This multi-agency, multi-disciplinary volunteer board meets monthly, with no travel or expense reimbursement, to examine circumstances surrounding the deaths of Kansas children (birth through 17 years of age). Members bring a wide variety of experience and perspective on children's health, safety, and maltreatment issues. Because of this combination of expertise, the effectiveness of intervention and prevention is greatly increased.

With assistance from law enforcement agencies, county and district attorneys, SRS, physicians, coroners, and other medical professionals, the SCDRB is given the comprehensive information needed to thoroughly examine circumstances which lead to the deaths of children. By understanding how children are dying, the SCDRB is able to propose ways of reducing the number of preventable deaths.

When the SCDRB began its work, data was compiled on a fiscal year (July 1993 - June 1994) basis. In 1997 the SCDRB changed its review to a calendar year format, beginning with the 1995 study year, to bring its data into conformity with fatality review boards in other states so that future trends and patterns can be compared.

In 1999, the SCDRB added a research analyst to its staff. This position is funded through a grant from the Kansas Health Foundation. The research analyst compiles, analyzes, and reports the statistics accumulated from the work of the SCDRB.

Appendix G Resources
National SAFEKIDS Campaign http://www.safekids.org
Kansas SAFEKIDS Coalition http://www.kdhe.state.ks.us/safekids
American Academy of Pediatrics (AAP) http://www.aap.org
National Highway Transportation Safety Administration (NHTSA) http://www.nhtsa.dot.gov
National Institute of Child Health and Human Development (NICHD) http://www.nih.gov
Kansas Center for Health and Environmental Statistics http://www.kdhe.state.ks.us/ches
Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control (NCIPC) www.cdc.gov/ncipc/ncipchm.htm
U.S. Consumer Product Safety Commission (CPSC) http://www.cpsc.gov/
National Suicide Prevention Strategy www.sg.gov/library/calltoaction/strategymain.htm
Suicide Prevention Advocacy Network (SPAN) www.spanusa.org
American Association of Suicidology www.suicidology.org or call 1-202-237-2280
National Institute of Mental Health (NIMH) www.nimh.nih.gov
Substance Abuse and Mental Health Administration (SAMHSA) www.samhsa.gov
United States Census Bureau www.census.gov
American Academy of Child and Adolescent Psychiatry http://www.aacap.org/web/aacap
Nathens AB, Jurkovich GJ, Cummings P, Rivara FP, and Maier RV. The Effect of Organized Systems of Trauma Care on Motor Vehicle Crash Mortality. JAMA. 2000;283:1990-1994.

# Kansas Child Death Review Board 2000 Data

#### Appendix G Resources

Insurance Institute for Highway Safety, Highway Loss Data Institute. U.S. Licensing Systems for Young Drivers. 2001.

The Economic Impact of Motor Vehicle Crashes 2000, U.S. Department of Transportation.

Peter Hart Research Associates, "Americans' Attitudes on Children's Access to Guns: A National Poll for *Common Sense about Kids and Guns*," July 1999.

Kellermann AL, Rivara FP, Rushforth NB et al. Gun ownership as a risk factor for homicide in the home. *New England Journal of Medicine*. 1993;329:1084-1091.

Kellermann AL, Rivara FP, Somes G et al. Suicide in the home in relation to gun ownership. *New England Journal of Medicine*. 1992;327:467-472.

NCHS National Vital Statistics System for numbers of deaths, U.S. Bureau of Census for population estimates. Statistics compiled using <u>WISQARS</u><sup>™</sup> produced by the Office of Statistics and Programming, NCIPC, CDC.