STATE OF KANSAS

STATE CHILD DEATH REVIEW BOARD

Annual Report
1999 Data

Carla J. Stovall
Attorney General

OFFICE OF THE ATTORNEY GENERAL

PUBLISHED FEBRUARY 2002

Kansas State Child Death Review Board

The State Child Death Review Board (SCDRB) comprehensively reviewed 514 child deaths that occurred during calendar year 1999. 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.

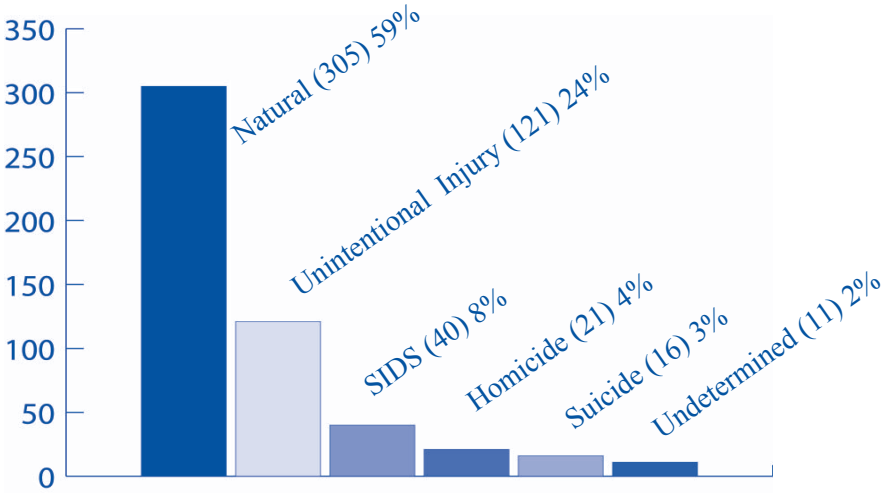
Of the 514 deaths, natural and unintentional injury deaths continue to be the two largest categories of death of Kansas children. The largest group of children, 59 percent, died of natural causes, not including SIDS, in 1999.

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 24 percent of the children who died in 1999. 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 40 children in 1999, 21 children were victims of homicide, and 16 children committed suicide. Lastly, after a comprehensive review of all available records, the manner of death for 11 children could not be determined by the SCDRB.

Figure 1:
All Manners of Death
in 1999.
N=514



Kansas has higher average rates of death from unintentional injuries - non-vehicular , unintentional injury - vehicular, SIDS, suicide, and homicide than do other states. By learning from the information gathered in the SCDRB's review of child fatalites, we can make strides to reduce our child death rates.

EXECUTIVE SUMMARY 1999 DATA

Kansas State Child Death Review Board

According to the U.S. Census Bureau's 1999 population estimates, Kansas had 698,637 children under age 18 in 1999. Females accounted for 48.6 percent of this population, and males accounted for 51.4 percent. However, of the 514 child deaths reviewed by SCDRB, 39 percent were female and 61 percent of the children were male.

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

Carolyn Ward,
Executive Director
State Child Death
Review Board

Office of Attorney
General Carla J. Stovall
120 SW Tenth Avenue
Topeka, KS 66612-1597

Phone: (785) 296-2215
Fax: (785) 296-6296
E-mail:
SCDRB@ksag.org

This annual report, including all forms used and recommended by the SCDRB, can be viewed or downloaded from the Internet at: http://www.ink.org/public/ksag/contents/scdrb/main.htm

In 1999, whites composed 89.5 percent of the Kansas population less than age 18, with the remaining 10.5 percent of the population consisting of blacks, Asian/Pacific Islanders, and American Indian/Alaskan Natives. The SCDRB's data from 1999 revealed that 83 percent of the children who died were white, 14 percent were black, two percent were Asian/Pacific Islander, and one percent were American Indian/Alaskan Native.

The 514 deaths reviewed by the SCDRB in 1999 included 202 neonates (less than 29 days of age); 88 postneonates (infants ranging from 30 days to one year old); 62 children from one to four years old; 30 children from five to nine years old; 55 children from 10 to 14 years old; and 77 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 135 of the unintentional injury deaths, homicides, and suicides occurring in 1999 alone 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 here.

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.

Every Kansan can help improve the safety, health, and welfare of children by understanding and following the recommendations contained in this report.

EXECUTIVE SUMMARY 1999 DATA

CARLA J. STOVALL
ATTORNEY GENERAL

State of Kansas
Office of the Attorney General
120 SW 10TH AVENUE, TOPEKA 66612-1597

MAIN PHONE: (785) 296-2215
FAX: (785) 296-6296

February 2002

Dear Friends:

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 highlights the Board's findings for the six-year period from 1994 through 1999, and provides recommendations for caregivers and professionals.

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

Carla J. Stovall
Attorney General

Table of Contents

SCDRB Annual Report

State Child Death Review Board

State Child Death Review Board
Office of Attorney General Carla J. Stovall
120 SW 10th Avenue
Topeka, Kansas 66612-1597
(785) 296-2215
Fax: (785) 296-6296
E-mail: SCDRB@ksag.org

The costs of this publication were financially assisted through the Federal Children's Justice Act grant administered by the Kansas Department of Social and Rehabilitation Services.

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 (SCDRB) remains grateful for the significant contributions of county coroners, law enforcement agencies, the Department of Social and Rehabilitation Services (SRS), the Kansas Department of Health and Environment (KDHE), physicians, hospitals, child advocates, 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 Don Winsor and Dr. Herbert Doubek. Mr. Winsor, a former Senior Special Agent for the Kansas Bureau of Investigation (KBI), has served since the Board's inception as the appointee of the KBI. He left the board when he retired from the agency. Dr. Doubek served for six years on the SCDRB as the district coroner appointee of the Kansas Board of Healing Arts. The SCDRB is grateful for their commitment of time, energy, and talent. The SCDRB also extends a special thank you to board member Dr. Sarah Johnston. She has committed extra time and effort researching Kansas motor vehicle fatalities. Portions of her preliminary data analysis are included in this report. In addition, the SCDRB expresses appreciation to staff member Marsha Madl for her assistance in preparing this report.

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 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.

SCDRB Members

Attorney General appointee

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

Director of Kansas Bureau of Investigation appointee

Terry Morgan
KBI Senior Special Agent, Overland Park

Secretary of Social and Rehabilitation Services appointee

Paula Ellis
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. (Child Advocate)
Wichita City Prosecutor's Office, Wichita

Kansas County and District Attorneys Association appointee

Keith Schroeder, J.D.
Reno County District Attorney, Hutchinson

Staff

Carolyn Ward
Executive Director, Topeka

Saya Scott
Research Analyst, Topeka

General Counsel

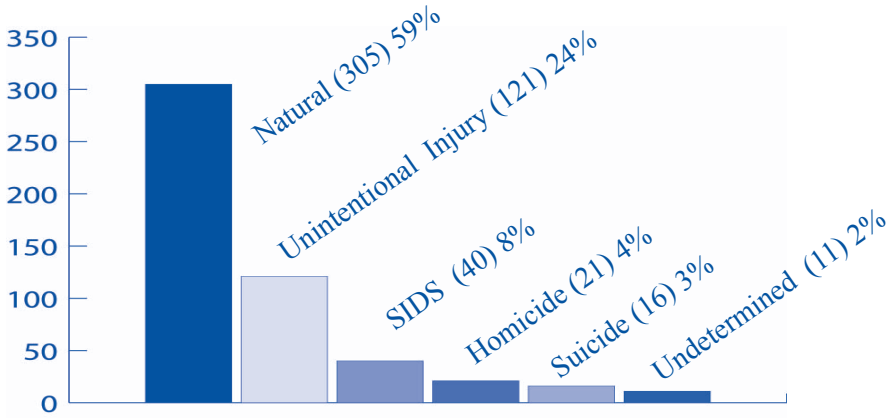
Kevin Graham, J.D.
Assistant Attorney General, Topeka

1999 Overview

The SCDRB comprehensively reviewed 514 child deaths that occurred during calendar year 1999. 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 1999. The undetermined category is used when, after a thorough review of all available information, the manner of death cannot be conclusively determined.

Figure 1:
All Manners of Death
in 1999.
N=514



Natural and unintentional injury deaths continue to make up the two largest categories of death of Kansas children. The largest group of children, 59 percent, died of natural causes, not including SIDS.

The second largest manner of death, unintentional injuries, claimed the lives of 24 percent of the children who died in 1999. 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 40 children in 1999, 21 children were victims of homicide, and 16 children committed suicide. Lastly, after a comprehensive review of all available records, the manner of death for 11 children could not be determined by the SCDRB.

1999 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 1999 population estimates, Kansas had 698,637 children under age 18. Females accounted for 48.6 percent of this population, and males accounted for 51.4 percent. However, of the 514 child deaths reviewed by SCDRB, 39 percent of the children were female, and 61 percent were male.

Figure 2:
Kansas Population by Sex. Ages Birth Through 17. Based on 1999 Census Estimate.
N=698,637

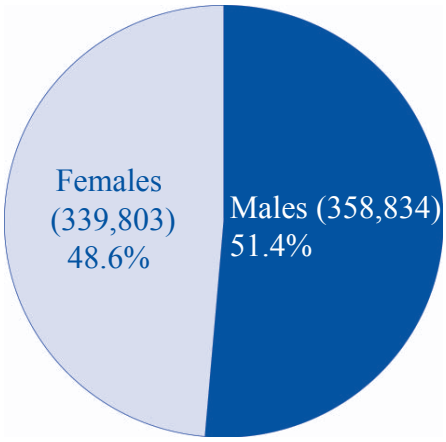
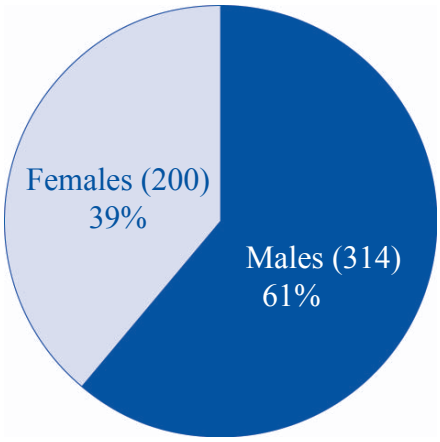


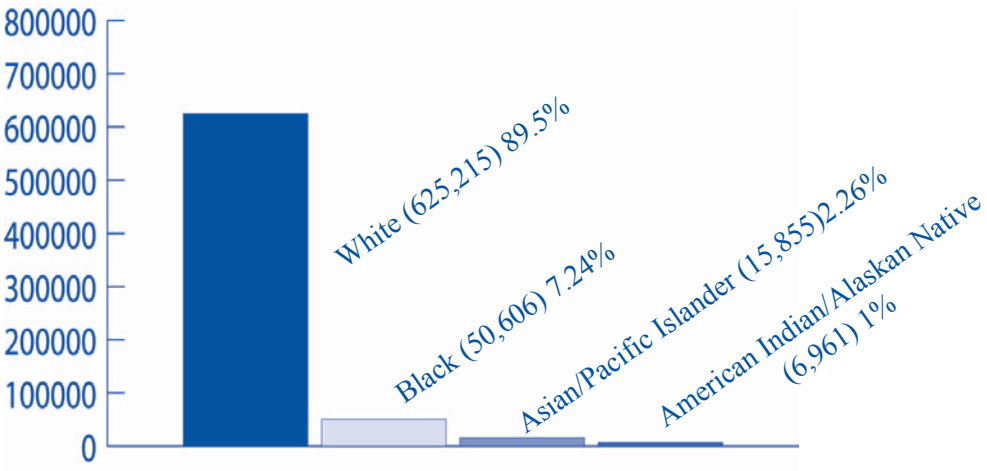
Figure 3:
Child Deaths in 1999 by Sex. Ages Birth Through 17.
N=514



1999 Overview

In 1999, whites composed 89.5 percent of the Kansas population under the age of 18. The remaining 10.5 percent of the population consisted of blacks, Asian/Pacific Islanders, and American Indian/Alaskan Natives.

Figure 4:
Kansas Population by Race. Ages Birth Through 17. Based on 1999 Census Estimate. N=698,637



The SCDRB's data from 1999 revealed that 83 percent of children who died were white, 14 percent were black, two percent were Asian/Pacific Islander, and one percent were American Indian/Alaskan Native. Figure 6 illustrates child deaths by race and manner.

Figure 5:
Child Deaths in 1999 by Race. Ages Birth Through 17.
N=514

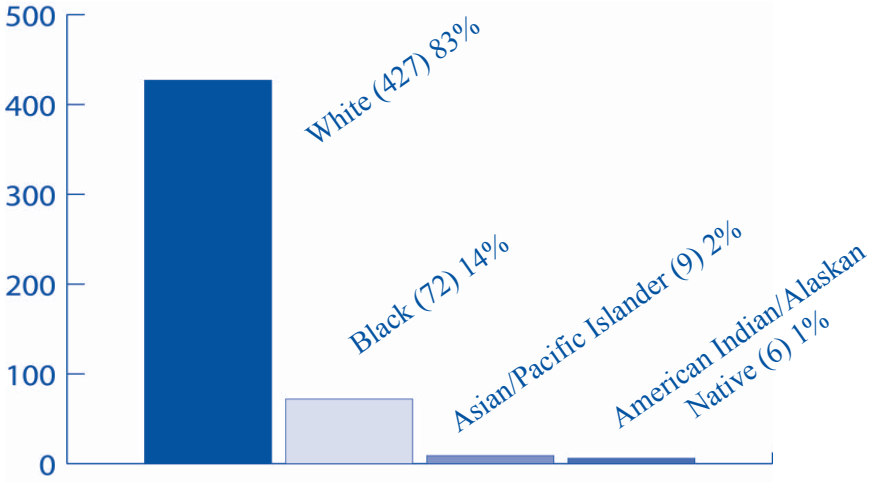


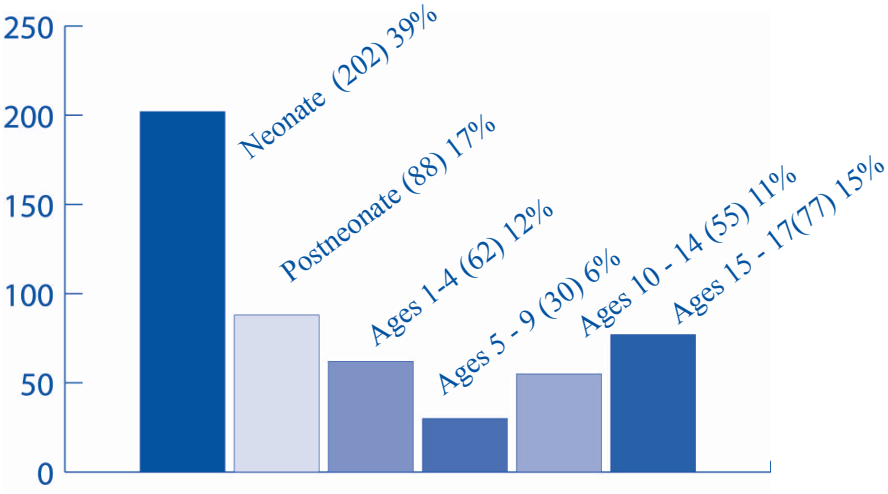
Figure 6:
Child Deaths in 1999 by Race and Manner. Ages Birth Through 17.
N=514

	White	Black	American Indian/Alaskan Native	Asian/Pacific Islander	TOTAL
Natural	253	41	4	7	305
Unintentional Injury - Vehicular	80	7	1	0	88
Unintentional Injury - Non-vehiclar	30	3	0	0	33
Natural-SIDS	29	11	0	0	40
Homicide	14	6	0	1	21
Suicide	12	3	0	1	16
Undetermined	9	1	1	0	11
TOTAL	427	72	6	9	514

1999 Overview

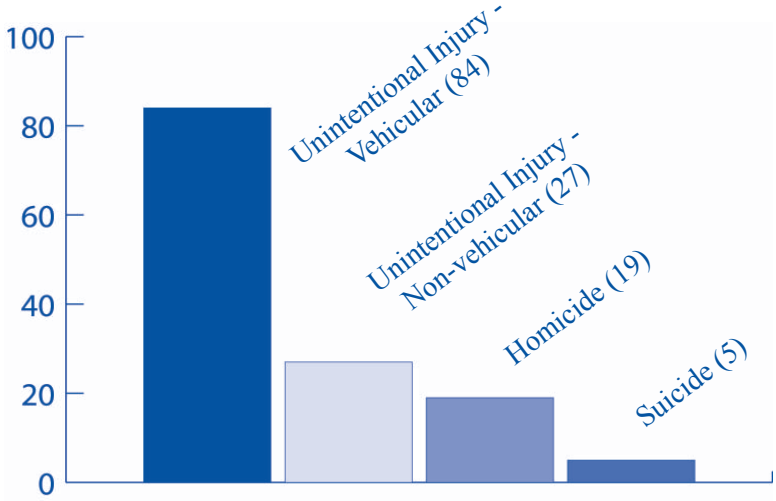
The figure below shows the 514 child deaths in 1999 by age group. Neonates (less than 29 days of age) accounted for 202 deaths. Eighty-eight postneonates (30 days up to one year old) died. The deaths reviewed also included 62 children from one to four years of age; 30 children between five and nine years old; 55 children between 10 and 14 years old; and 77 adolescents from 15 to 17 years of age.

Figure 7:
Child Deaths by Age Group in 1999. Ages Birth Through 17.
N=514



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 135 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 1999. Ages Birth Through 17.
N=135



Cumulative Data 1994-1999

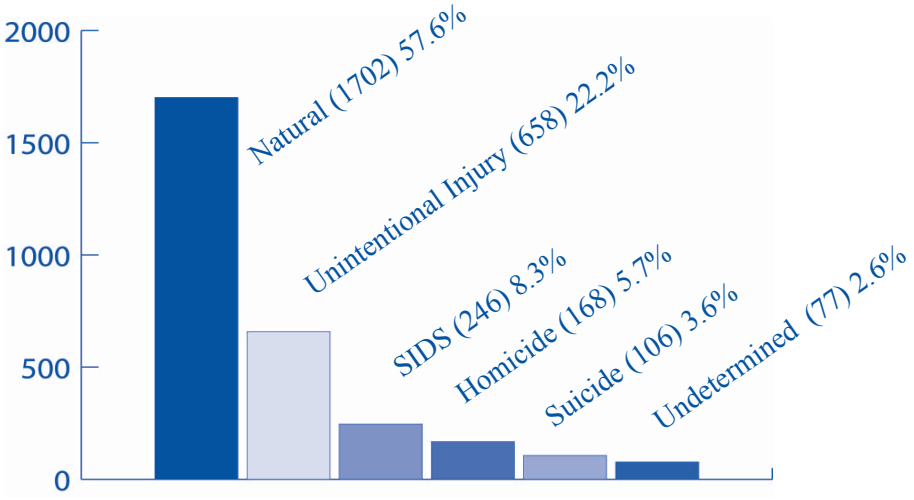
This section contains a cumulative study of calendar years 1994 through 1999. The number of children who died each year, by manner of death, are as follows:

Figure 9:
Child Deaths by Manner and Year from 1994-1999. Ages Birth Through 17.
N=2,957

	1994	1995	1996	1997	1998	1999	TOTAL
Natural	264	226	328	281	298	305	1,702
Unitentional Injury	98	84	125	107	123	121	658
Natural - SIDS	49	44	35	46	32	40	246
Homicide	33	25	31	22	36	21	168
Suicide	15	12	16	21	26	16	106
Undetermined	5	13	20	17	11	11	77
TOTAL	464	404	555	494	526	514	2,957

In total, 2,957 child fatalities were reviewed by the SCDRB in this six-year period. Natural causes claimed the lives of 1702 (57.6 percent) children. Unintentional injuries claimed the lives of 658 (22.2 percent) children (422 vehicular and 236 non-vehicular deaths); 246 (8.3 percent) infants died of SIDS; 168 (5.7 percent) deaths were homicides; 106 (3.6 percent) deaths were suicides; and 77 (2.6 percent) deaths were classified as undetermined.

Figure 10:
Child Deaths by Manner from 1994-1999. Ages Birth Through 17.
N=2,957



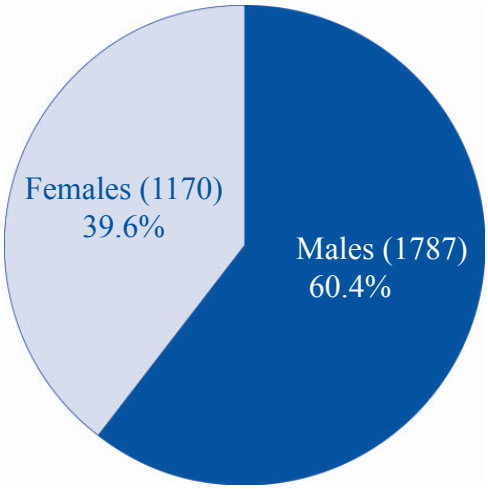
Cumulative Data 1994-1999

During the period from 1994 through 1999, 1,787 males and 1,170 females younger than age 18 died.

Figure 11:
Child Deaths by Sex and Year from 1994-1999. Ages Birth Through 17.
N=2,957

	1994	1995	1996	1997	1998	1999	TOTAL
Males	274	246	334	304	315	314	1,787
Females	190	158	221	190	211	200	1,170
TOTAL	464	404	555	494	526	514	2,957

Figure 12:
Child Deaths by Sex from 1994-1999. Ages Birth Through 17.
N=2,957



The figure below illustrates child deaths by age group during the six-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 1999, 345 one to four year olds died, along with 204 five to nine year olds, 292 10 to 14 year olds, and 488 15 to 17 year olds.

Figure 13:
Child Deaths by Age Group and Year from 1994-1999. Ages Birth Through 17.
N=2,957

	1994	1995	1996	1997	1998	1999	TOTAL
Neonate	153	136	205	178	181	202	1,055
Postneonate	108	83	96	101	97	88	573
Ages 1-4	47	51	63	60	62	62	345
Ages 5-9	31	31	40	34	38	30	204
Ages 10-14	40	40	61	42	54	55	292
Ages 15-17	85	63	90	79	94	77	488
TOTAL	464	404	555	494	526	514	2,957

Cumulative Data 1994-1999

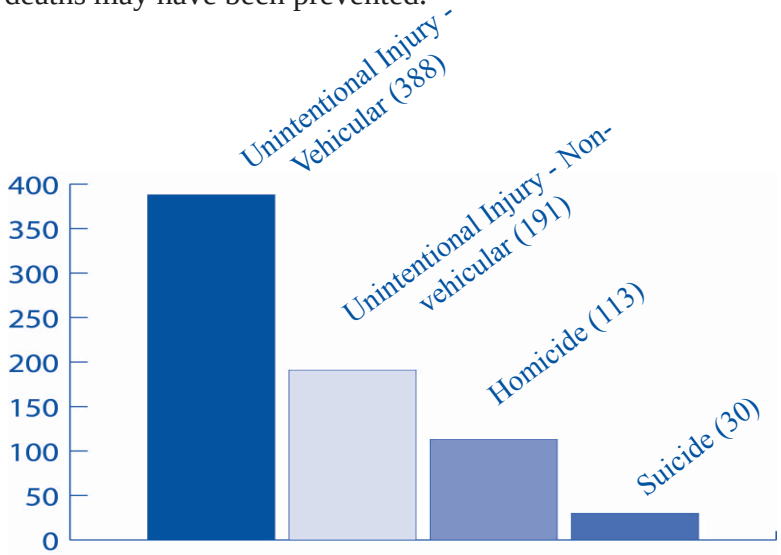
The figure below compares the death rates of Kansas children to the population by manner and year. The six year average rate per 100,000 for natural deaths, except for SIDS, was 40.96; unintentional injuries - non-vehicular 5.66; unintentional injuries - vehicular 10.19; SIDS 1.31 (per 1,000 live births); homicide 1.12; suicide 5.05; and undetermined 1.9. The chart also includes national rates for selected manners of death from 1994 through 1998 and the five year average. Kansas averages higher death rates for each selected manner of death than the nation. At the time of this publication, 1999 national data was not available.

Figure 14:
Child Death Rates by Manner and Year from 1994-1999. Ages Birth Through 17.

	1994	1995	1996	1997	1998	1999	**6 YEAR KS AVERAGE** 5 YEAR US AVERAGE
Natural *per 100,000 (Birth-17)*	38.40	32.92	47.54	40.54	42.72	43.66	40.96
Unintentional Injury - Non-vehicular *per 100,000 (Birth-17)*	**5.38**	**4.08**	**5.97**	**6.78**	**7.02**	**4.72**	**5.66**
NATIONAL RATE	5.36	5.21	4.90	4.62	4.50		4.92
Unintentional Injury - Vehicular *per 100,000 (Birth-17)*	**8.87**	**8.16**	**12.22**	**8.66**	**10.61**	**12.60**	**10.19**
NATIONAL RATE	8.60	8.35	8.31	8.07	7.58		8.18
Natural - SIDS *per 1,000 live births (Ages <1)*	**1.31**	**1.19**	**0.96**	**1.24**	**0.83**	**1.03**	**1.31**
NATIONAL RATE	1.03	0.87	0.78	0.77	0.72		0.83
Homicide *per 100,000 (Birth-17)*	**4.80**	**3.64**	**4.51**	**3.17**	**5.16**	**3.0**	**4.05**
NATIONAL RATE	3.97	3.77	3.26	2.81	2.55		3.27
Suicide *per 100,000 (Ages 9-17)*	**4.26**	**4.32**	**4.46**	**5.78**	**7.10**	**4.36**	**5.05**
NATIONAL RATE	3.93	3.78	3.52	3.45	3.32		3.60
Undetermined *per 100,000 (Birth-17)*	0.73	1.89	2.91	2.45	1.58	1.57	1.9

During the six-year period from 1994 through 1999, the SCDRB concluded that 722 unintentional injuries and violence-related deaths may have been prevented.

Figure 15:
Preventable Child Deaths by Selected Manners from 1994-1999. Ages Birth Through 17.
N=722

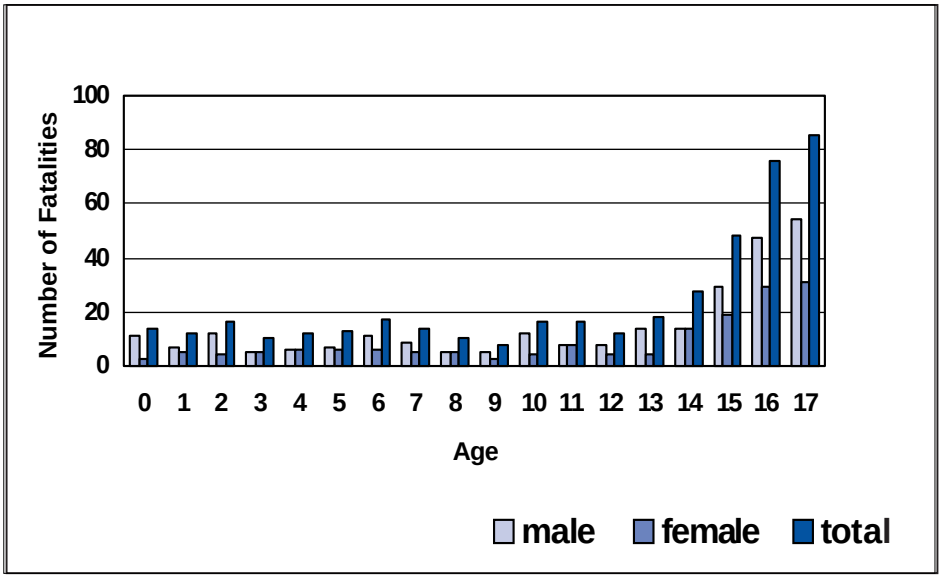


Motor Vehicle Crashes 1994-1999

This section of the report focuses on unintentional injury vehicular fatalities. Board member DrSarah Johnston provided this preliminary in-depth analysis of the 422 vehicular fatalities reviewed from 1994 through 1999. The photographs in this section depict fatality crashes in which the vehicle occupants were unrestrained and ejected. In each of these crashes damage to the passenger compartment of the car was minimal. Survivability in each of these incidents would have been probable had safety restraints been used.

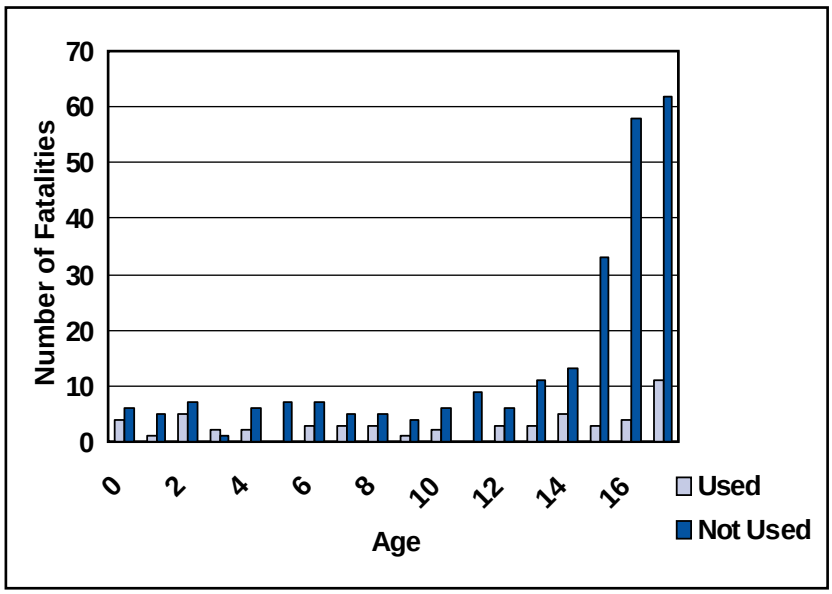
Figure 16 depicts the number of crash victims by age and sex. A disproportionate 62 percent of males died in motor vehicle crashes. Females accounted for 38 percent of motor vehicle fatalitiesTeenagers in the 15 through 17 age group accounted for 50 percent of all motor vehicle fatalites.

Figure 16:
Motor Vehicle Crashes by Age and Sex from 1994-1999. Ages Birth Through 17. N=422



The figure below illustrates safety restraint use in motor vehicle crashes by age. Among children less than 14 years of age, 46 percent were not using safety restraints. Among 15 through 17 year olds, 74 percent were not using safety restraints.

Figure 17:
Restraint Use in Motor Vehicle Crashes by Age from 1994-1999. Ages Birth Through 17.



Motor Vehicle Crashes 1994-1999

Figures 18 and 19 depict the time of fatal vehicle crashes 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 15-17 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 10:00 p.m. and 2:00 a.m.

Figure 18:
Motor Vehicle Crashes by Time of Crash and Age Group from 1994-1999. Ages Birth Through 14.

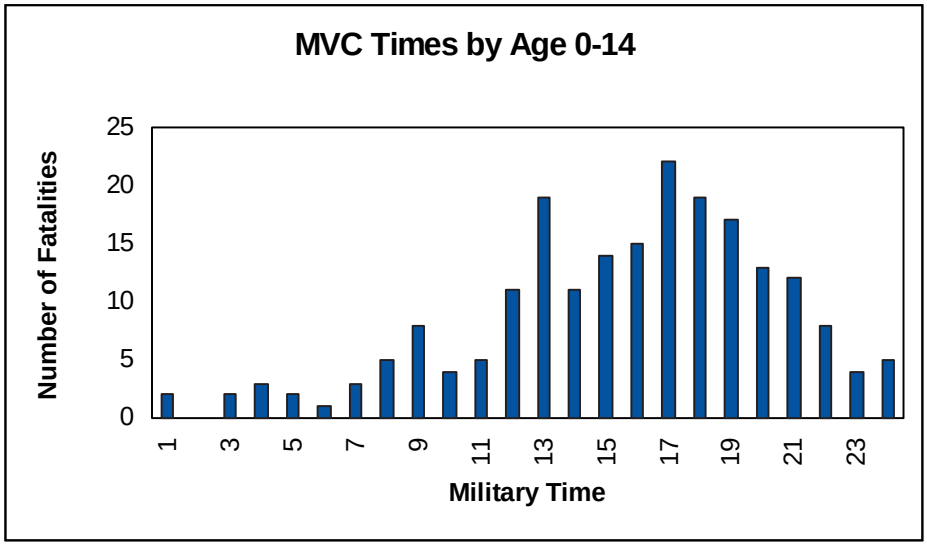
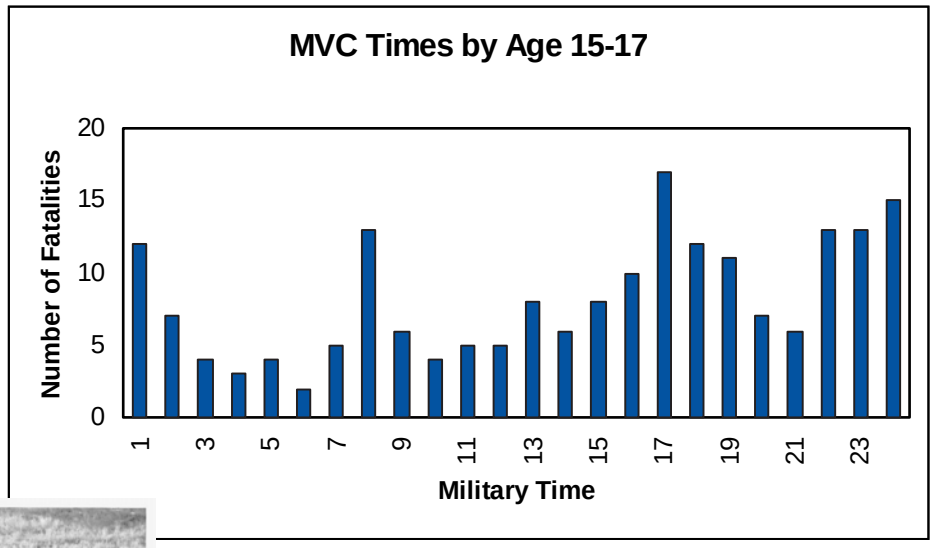


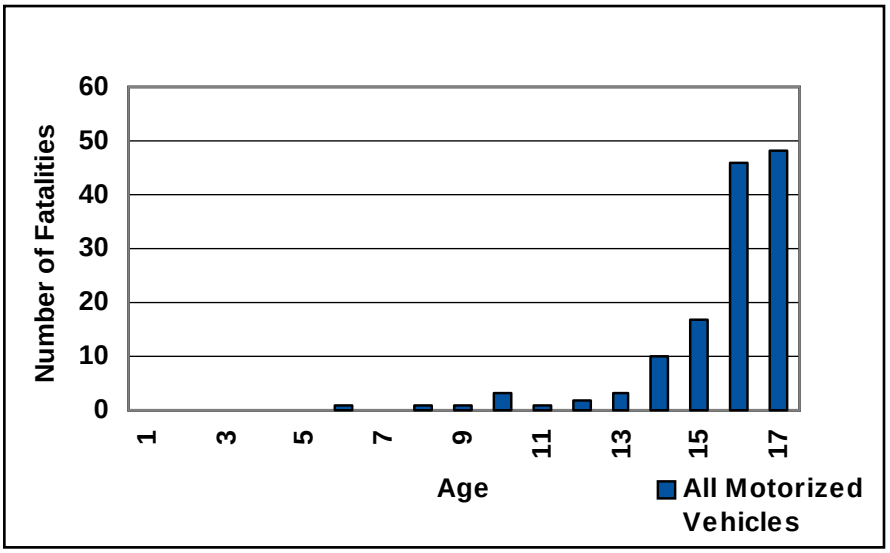
Figure 19:
Motor Vehicle Crashes by Time of Crash and Age Group from 1994-1999. Ages 15 Through 17.



Motor Vehicle Crashes 1994-1999

Figure 20 shows the age of drivers killed in motor vehicle crashes. This chart includes drivers of all motorized vehicles including go-carts, farm implements, and all-terrain vehicles (A TV's).

Figure 20:
Motor Vehicle Crashes by Age of Driver from 1994-1999.
N=133



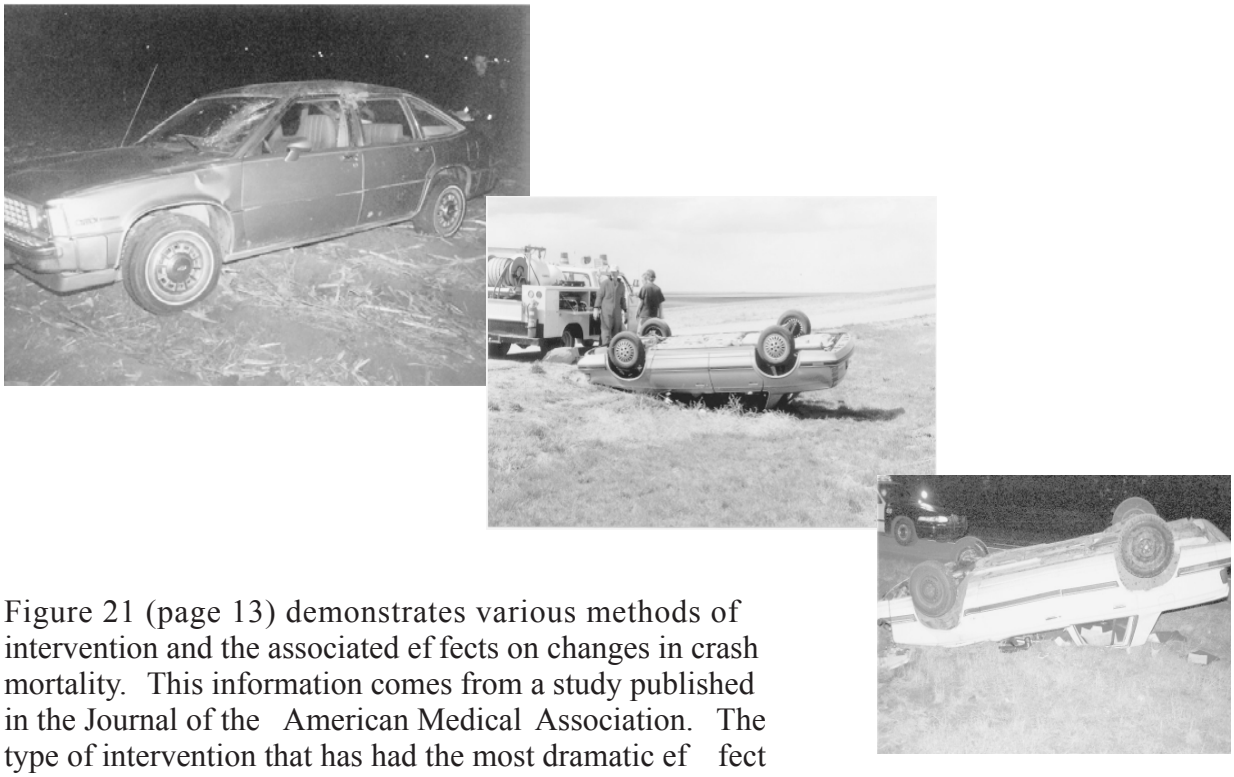


Figure 21 (page 13) demonstrates various methods of intervention and the associated ef fects on changes in crash mortality. This information comes from a study published in the Journal of the American Medical Association. The type of intervention that has had the most dramatic ef fect on the reduction of motor vehicle fatalities is legislation that provides for primary seat belt enforcement.

Motor Vehicle Crashes 1994-1999

According to the National Highway Traffic Safety Administration, as of December 2000, 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 to a driver who is 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 more than 14 years old. 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.

Figure 21: Changes in crash mortality by intervention.

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

As of January 2001, 31 states, not including Kansas, plus the District of Columbia have matched or exceeded all component parts of the model Graduated Driver Licensing (GDL) law adopted by the National Highway Safety Administration (NHTSA), the Insurance Institute for Highway Safety (IIHS) the National Transportation Safety Board (NTSB), 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 1994-1999, 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.

Public Policy Recommendation

ENHANCE CHILD PASSENGER SAFETY LAWS AND ENFORCEMENT:

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. This 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 1999, the SCDRB reported that 64 percent of unintentional injury deaths were the result of motor vehicle crashes. Among children ages 14 and under who were killed as occupants in car crashes, 46 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 less 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.

However, from 1994 to 1999, 59 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 15-17 year olds. An alarming 74 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 not required by law to use seatbelts. The SCDRB recommends expanding 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.

During the 2000 legislative session, the SCDRB endorsed Senate Bill 172, important 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 less than four are required to be restrained in a child safety seat, children who are between the ages of four and eight, or 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 and, if they are made to do so, are put at great risk for injury and death 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 do not realize they need to alter the type of safety restraints they use as children grow.

Public Policy Recommendation

Legislators were presented with compelling testimony in support of SB 172 by physicians, coroners, nurses, parents, child advocates, and representatives from the SAFE KIDS Coalition and the Kansas Highway Patrol. The bill remains in the House Transportation Committee. In addition, similar language to that in SB 172 was amended into HB 2145. This bill remains in the Conference Committee. The SCDRB will continue to endorse Senate Bill 172 and House Bill 2145, and any other measures which will make improvements in child safety restraint use.

There are so many dangers we cannot escape, so many risks we cannot shelter our children from. But children in car crashes suffer from injuries and deaths that are preventable with the proper use of seat belts and safety seats. As members of the SCDRB, we review the cases of hundreds of children whose deaths are even more tragic because they could have been prevented. Not every cancer can be cured, nor every disease diverted, but we can lessen the risk of injury and death if every child is buckled up.

Finally, a graduated licensing system would likely reduce the death rate from motor vehicle crashes for Kansas teenagers and for all Kansans. According to the Insurance Institute for Highway Safety , the ideal GDL law 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 driving privileges should not occur before age 18. The SCDRB will continue to study the fatalities of young drivers in the coming year. At the conclusion of our study , we will make specific recommendations about this high risk group.

Prevention Points

The most critical lesson learned from the SCDRB's review of child fatalities is that hundreds of deaths can be prevented with reasonable community or individual action. Our guiding principle is to reduce the number of preventable child fatalities by promoting public and professional education and recommending policy changes. This report contains information that all Kansans can use to help improve the safety, health, and welfare of children.

SUPERVISION: Supervision of young children is critical in helping prevent many unintentional injury fatalities. Small children are capable of unwittingly entering dangerous situations, but most often incapable of getting themselves out of those situations.

FIRE AND BURN SAFETY: Installing working smoke detectors, planning escape routes, and preventing child access to lighters, matches, and candles are critical to reducing fire deaths. Properly supervising children while cooking or bathing, and reducing the water heater temperature to 120 degrees, can significantly reduce the incidence of burn injuries.

WATER SAFETY: When in pools, or open bodies of water, children should always wear personal flotation devices. Children should never be left alone when playing in or near water.

LIMITING ACCESS TO FIREARMS: Firearms must be kept from unsupervised children. All firearms and ammunition should be stored separately, unloaded, and locked in a secure place. If a child is at risk for suicide, all firearms should be removed from the home.

PROPER SLEEPING ARRANGEMENTS: Infants should be placed on their backs to sleep. Infants should not be placed to sleep on soft surfaces, waterbeds, adult beds, or couches. The safest place for an infant to sleep is in a crib with a proper fitting mattress.

SAFETY RESTRAINT USE: Safety belts or child safety seats should be used correctly when children ride in a car. Children age 12 and under should be properly restrained in the back seat of the car. The risk of motor vehicle fatalities among teenagers is great because of unsafe driving behaviors. These behaviors are compounded by the following: limited driving experience; poor attitudes; differing perceptions of the risk of various traffic situations, such as high speed driving; and a significant lack of good judgment in critical driving situations.

A Call for Investigations and Autopsies

CONDUCT THOROUGH SCENE INVESTIGATIONS AND COMPLETE AUTOPSIES:

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, SRS 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 1,255 child deaths that occurred between 1994 and 1999 resulting from homicide, SIDS, suicide, unintentional injury, or an undetermined cause, only 814 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.

Using a standard infant death scene investigation protocol also is 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 KBI recommend that this form be used by law enforcement agencies and coroners when investigating SUIDs.The form can be downloaded from http://www.cdc.gov/mmwr/PDF/rr/rr4510.pdf. 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."

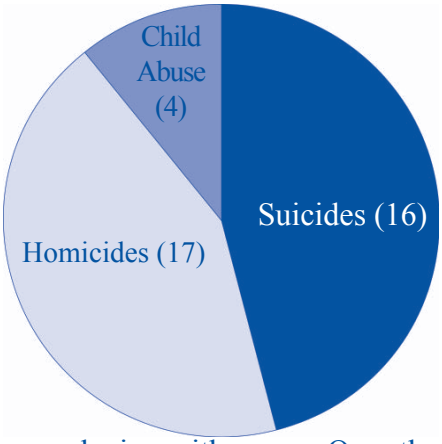
I. Violence-Related Deaths

A three-year-old male was left in the care of his mother 's boyfriend. The child was fussy and the boyfriend, who admitted to having been intoxicated, struck the child in anger. The child had 47 external injuries and multiple internal injuries, which caused his death. The perpetrator pleaded guilty to second-degree murder.

A one-year-old male was left in the care of his stepfather . His stepfather reportedly found him unresponsive. The scene investigation and an autopsy revealed that the child died of asphyxiation due to suf focation. The stepfather was char ged with first-degree murder . He was found guilty of involuntary manslaughter and sentenced to 31 to 34 months.

In 1999, 37 children were victims of violence-related deaths. A total of 21 children were victims of homicide. Four of these homicide deaths were the result of child abuse as identified by the SCDRB. Sixteen children committed suicide.

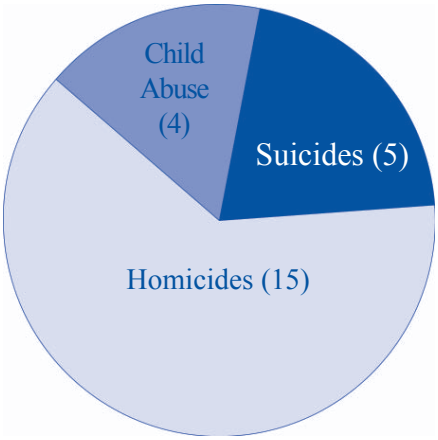
Figure 22:: Violence-Related Deaths by in 1999. N=37



A 15-year-old male and his friend were playing with a gun. Over the course of time, the gun was loaded and unloaded several times. The friend pointed the gun at the victim's head and pulled the trigger. The victim died of a gunshot wound to head. The friend took the gun and fled the scene. He was later found, charged with and convicted of involuntary manslaughter, and sentenced to 38 months in prison.

It is particularly challenging to determine preventability in most child deaths. However, at least in the short-term, 24 (65 percent) violence-related deaths may have been prevented.

Figure 23: Preventable Violence-related Deaths by Manner in 1999. N=24



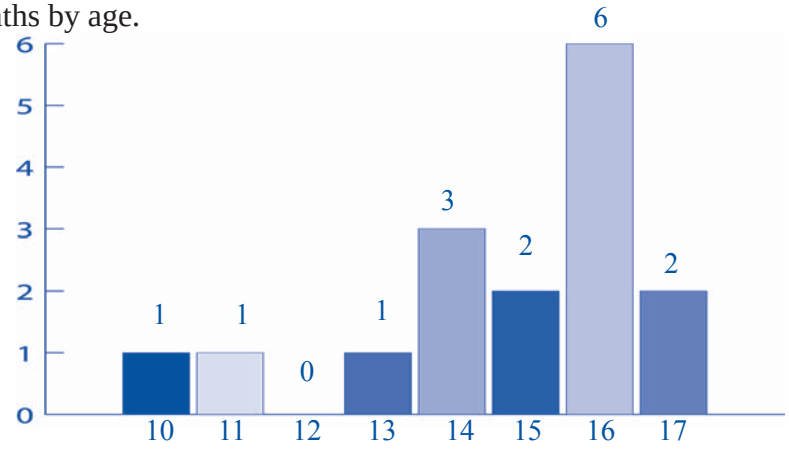
I. Violence-Related Deaths

A 14-year-old female with a history of depression, prior suicidal thoughts, and a previous suicide attempt, shot herself in the head. She shot herself with a revolver that was stored in a locked gun cabinet in her home. Two other long guns were also in the home unsecured. It was believed by the family that neither she, nor two young siblings in the home, knew how to unlock the gun case.

A 13-year-old-male had recently been distraught over failing school grades. He had no diagnosed history of depression, was not on any medications, and had no prior suicidal thoughts. He took a shotgun out of his parents'closet, where all the family's firearms and ammunition were stored, and shot himself in the head. He left no suicide note.

Sixteen year olds made up the largest number of teenage suicide deaths in 1999. The chart below illustrates the 16 suicide deaths by age.

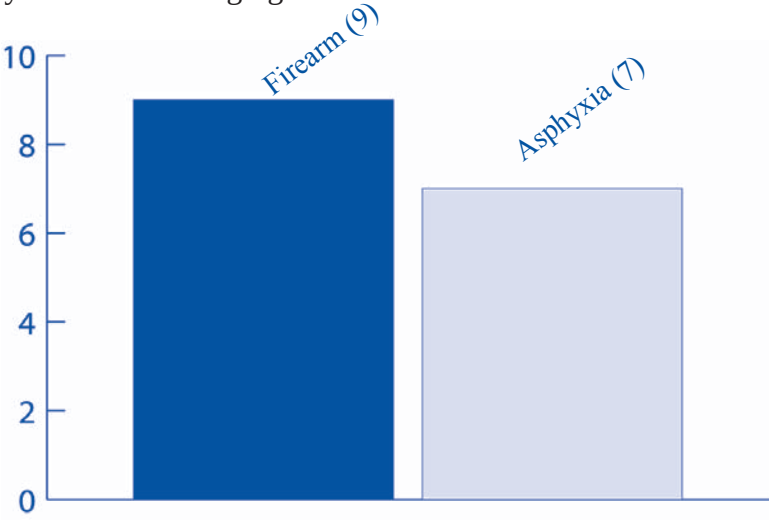
Figure 24:
Suicide Deaths by Age in 1999.
N=16



A 17-year-old female shot herself in the chest with a small caliber handgun. She obtained the gun from a locked gun case. The keys to the gun case were left nearby . She reportedly was having difficulty adjusting to her parents' recent divorce. Three days prior to killing herself, she told friends about her intent to commit suicide.

In 1999, the SCDRB reviewed 16 child suicide deaths. Seven white males, five white females, two black males, one black female, and one Asian/Pacific Islander male took their lives. Seven suicide deaths were due to asphyxia by adolescents hanging themselves. Nine adolescents took their lives with firearms.

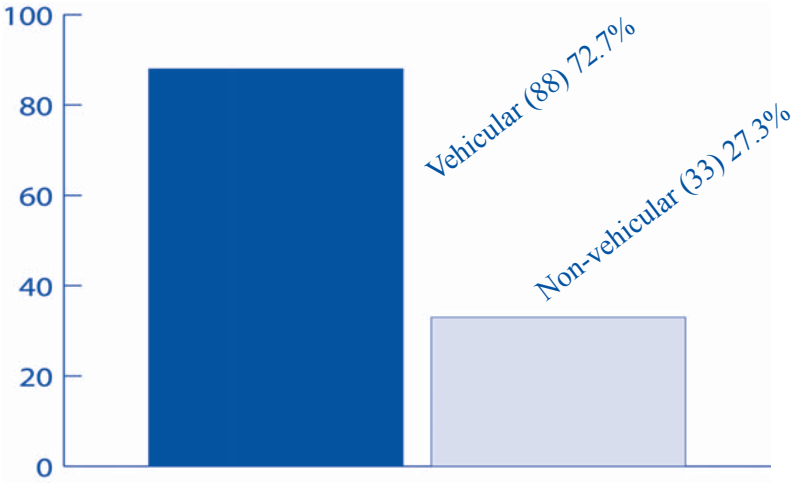
Figure 25:
Suicide Deaths by Method in 1999.
N=16



II. Unintentional Injuries

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.

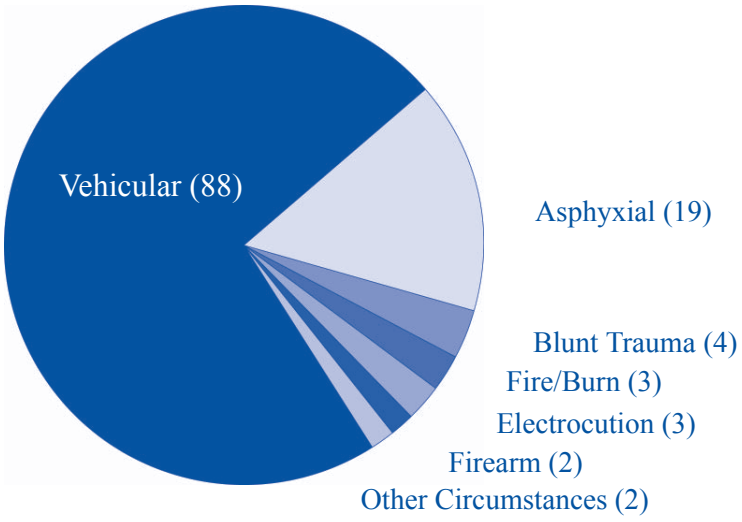
Figure 26: Unintentional Injuries - Vehicular and Non-vehicular in 1999. N=121



Unintentional injuries caused a total of 121 child deaths in 1999. Eighty-eight deaths were vehicular and 33 were non-vehicular. The breakdown of non-vehicular deaths was: 19 asphyxial deaths (11 drownings and eight deaths due to suffocation/strangulation); three fire/burn deaths; four blunt trauma deaths; two firearm deaths; three deaths from electrocution; and two deaths from other circumstances. No deaths due to chemical/drugs were reported in 1999.

Of the 121 unintentional injury deaths, 111 (92 percent) had at least one issue of preventability noted by the SCDRB. Among the 88 vehicular deaths, 84 (95 percent) were identified as preventable. In the 33 non-vehicular unintentional injury deaths, 27 (82 percent) were identified as preventable. The prevention issues noted by the SCDRB in vehicular-related deaths were: non-use of seat belts; 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.

Figurue 27: Unintentional Injuries by Cause in 1999. N=121



II. Unintentional Injuries

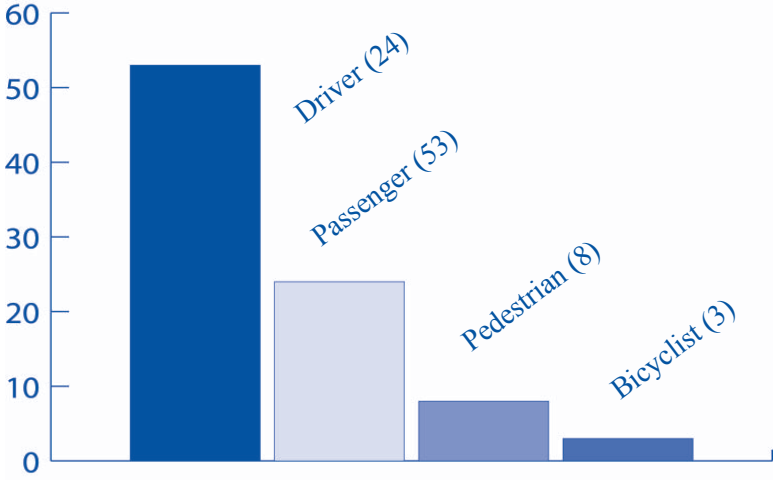
Unintentional Injuries
A. Motor Vehicle Deaths

A 16-year-old male was the unrestrained driver and sole occupant of a car traveling at a high rate of speed when he lost control of the car and it left the road and collided with a tree. His blood alcohol level was 0.12 percent.

A seven-year-old female was the passenger in a car driven by her mother. The mother lost control of the car on a gravel road. The car rolled and ejected both mother and daughter. Neither were wearing seatbelts. The child died of massive head trauma.

Motor vehicle fatalities continue to be the cause of the largest number of unintentional injuries and claimed the lives of 88 children in 1999. Twenty-four teenagers were the drivers of vehicles; 53 children were passengers; eight were pedestrians; and three were bicyclists, none of whom were wearing helmets. In 13 of the motor vehicle fatalities, alcohol was known to be involved.

Figure 28: Victim Status in Vehicular Unintentional Injuries in 1999.
N=88



An 11-year-old boy was an unrestrained backseat passenger of a van driven by a 16- year-old male. The driver fell asleep at the wheel and drove into a utility pole. The driver and the boy tested positive for marijuana and alcohol. A total of six youth were in the van, all of whom were unrestrained. All the kids were injured, and the 11-year-old died.

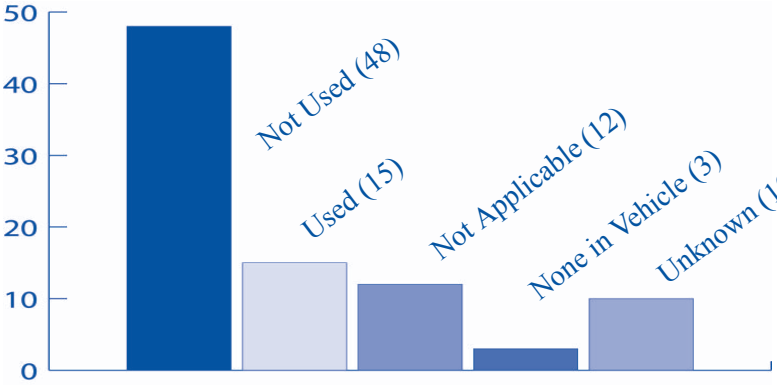
A 10-year-old boy was driving a pickup truck on a rural gravel road. He lost control of the truck for an unknown reason. The truck overturned and the unrestrained boy was ejected from the vehicle and died of massive head trauma.

II. Unintentional Injuries

A six-year-old boy was riding an all-terrain vehicle (ATV) near his rural residence. The boy ran into a tree and struck his head. The boy was unsupervised, he was not wearing a helmet, and he died of a head injury.

In a crash, seat belts are the primary device that protects the occupants of a vehicle. In 1999, 48 children, who were not wearing seat belts or restrained in child safety seats, were killed in car crashes. Safety restraints were used in 15 cases; in 12 cases safety restraints were not applicable (deaths involving pedestrians or children riding bicycles); in three cases no safety restraints were in the vehicle; and in 10 cases safety restraint information was not known.

Figure 29:
Safety Restraint Use in Vehicular Unintentional Injuries in 1999.
N=88

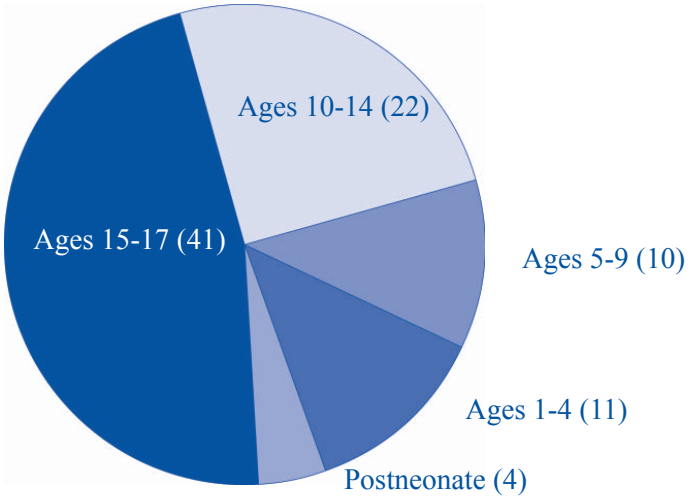


A 17-year-old male was riding an ATV with friends. Earlier in the day , all of the teenagers were wearing helmets. Later, the teens removed their helmets and continued riding and jumping a dirt ramp. The victim lost control of his ATV, which flipped end-over-end. The victim died of head trauma.

A six-year-old boy was an unrestrained passenger in a car driven by his father who was also unrestrained. The father lost control of the car The car rolled and the father and son were ejected from the vehicle. Both were killed. The mother, a restrained passenger, survived the crash.

The age group which had the largest number of vehicular deaths in 1999 was 15-17 year olds. The chart below illustrates the number of children who died in vehicular crashes by age group.

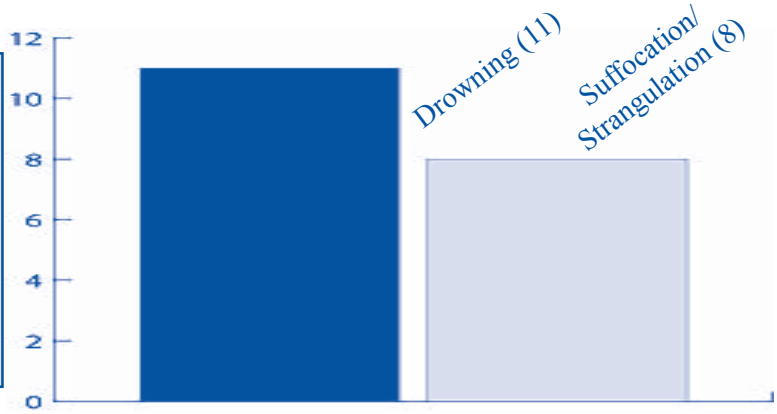
Figure 30:
Vehicular Unintentional Injuries by Age Group in 1999.
N=88



Unintentional Injuries
B. Asphyxial Deaths

In 1999, 19 children lost their lives to unintentional asphyxial injuries. Accidental drownings claimed the lives of 11 children. Suffocation or strangulation claimed the lives of eight children. The SCDRB concluded that many of these deaths may have been prevented had there been proper supervision.

Figure 31: Unintentional Asphyxial Deaths in 1999. N=19

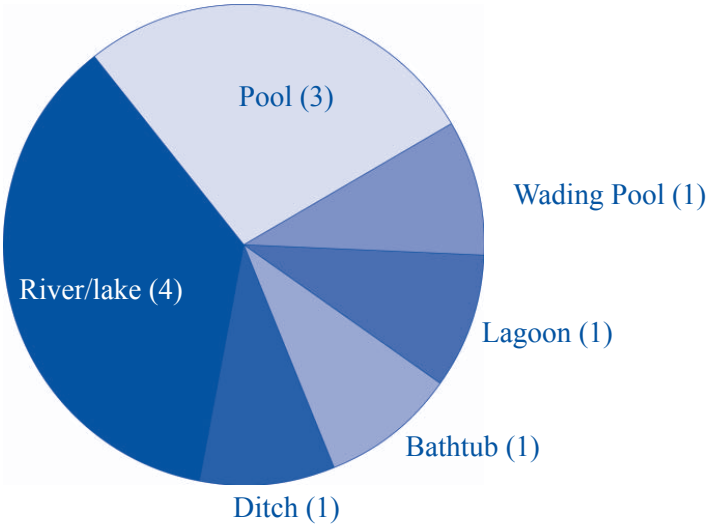


According to the National SAFE KIDS Coalition, "for every child who drowns, four more are hospitalized for near-drownings and for every hospital admission, four children are treated in emergency rooms." Of the 11 drowning fatalities reviewed by the SCDRB in 1999, four children drowned in creeks, rivers, ponds, or lakes; three children drowned in swimming pools; one child drowned in a bathtub; one in a lagoon; one in a water-filled ditch; and one in a wading pool.

A one-year-old male was playing outside with an older sibling. The caretaker left the children outside unsupervised. When she returned, the one year old was discovered in the above ground pool, which was covered with a tarp. Rain water had collected on top of the tarp and the child drowned in it. The child was believed to have been retrieving a ball when he drowned.

A two-year-old male was playing with other children in his family's backyard. The other children returned to the house without the boy . The boy's body was discovered in the family pool. The ladder to the aboveground pool had been accidentally left in place, allowing the child access to the pool.

Figure 32: Unintentional Drowning Deaths by Location in 1999. N=11



Children also are at risk of asphyxial deaths due to 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."

A five-month-old female was placed to sleep on a couch with two older siblings. The infant was later found unresponsive, wedged between the seat and the back cushion of the couchThe child's death was attributed to accidental asphyxiation.

A one-month-old female was placed to sleep on a sofa with her mother . The infant was later discovered unresponsive between the mother and the back cushion of the couch. The infant's death was attributed to accidental asphyxiation.

Unintentional Injuries
C. Fire/Burn Deaths

Three children lost their lives due to fire/burn incidents in 1999. All three deaths were identified as preventable by the SCDRB. The prevention issues identified in these cases were related to supervising small children, lowering water heater temperature, planning an escape route, and maintaining or installing working smoke detectors.

A six-year-old boy had a history of starting fires. He was playing with matches, which were kept in the kitchen, when he started a fire. The house was engulfed with flames and he and his mother were killed in the fire.

A three-year-old boy and his brother were playing with a cigarette lighterThey were left in the care of a teenager who was asleep at the time. When the house caught fire, the teenager was awakened and removed the children from the home. The three-year-old boy later died of smoke inhalation and thermal burns.

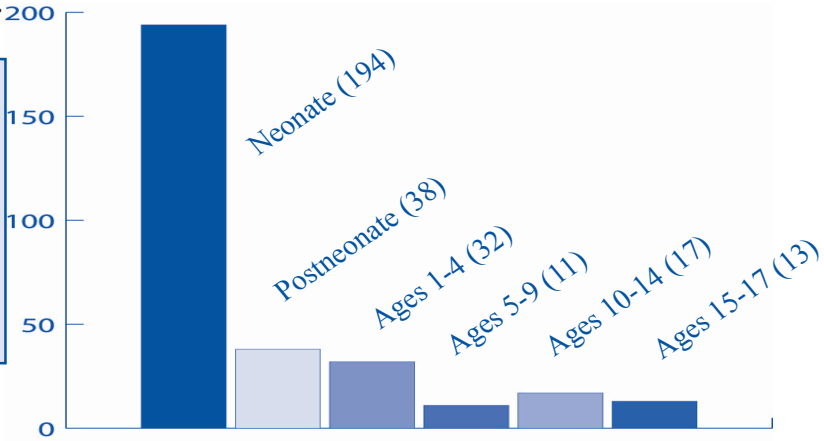
Unintentional Injuries
D. Firearm Deaths and Other Unintentional Injuries

Eleven children died of other unintentional injuries in 1999. Two deaths were caused by unintentional firearm use; four children died from falls, crush injuries or other blunt trauma; one child died from a sharp trauma injury; one child died from exposure; and three children died in electrocution incidents.

III. Natural Deaths

Fifty-nine percent or 305 of the 1999 deaths were attributed to natural causes. Prematurity was identified as a contributing factor in 140 (60 percent) children less than one year old who died from natural causes, excluding SIDS. Neonates, children less than 29 days old, accounted for 194 (64 percent) of the natural deaths in 1999.

Figure 33:
Natural Deaths by Age Group in 1999.
N=305



In 1999, 182 males and 123 females died of natural causes. The breakdown by cause of the 305 natural deaths in 1999 was as follows: 114 deaths due to prematurity; 80 deaths due to congenital malformations; 31 deaths due to infections; 24 deaths due to metabolic/genetic disorders; 19 deaths due to neoplasms (cancer); 11 deaths due to maternal medical condition; and 26 deaths due to other medical conditions.

A 12-year-old male with a history of asthma became short of breath at home. The child was out of his regularly prescribed asthma medication. Emergency medical care was summoned after a period of time, but the child could not be resuscitated. He died of status asthmaticus.

A 14-year-old male with a history of asthma was running at a school track event when he became short of breath. He was seen using his inhaler while running, but was not pulled from the race. He collapsed on the track and could not be resuscitated. He died of status asthmaticus.

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 34 mothers smoked tobacco products during their pregnancies; 29 mothers were non-compliant with their prenatal care; 12 mothers used alcohol; and 10 used illicit drugs.

A 25-week gestational age female had multiple complications of prematurity, including infections and seizures, ultimately leading to death at the age of four months. The infant's mother had recurrent episodes of bleeding from placental abruption during pregnancy . She also had history of cocaine, marijuana, and tobacco use. Cocaine use has been linked to abruption and preterm labor.

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, and males are more likely to be victims of SIDS than females.

In 1999, the SCDRB reviewed 40 SIDS deaths. It is of critical importance to identify all possible risk factors in SIDS deaths. As stated in every previous report from the SCDRB, 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 40 SIDS deaths in 1999, risk factors identified during the review revealed that 13 children were known to have been sleeping on their stomach or side; six children were sleeping on a soft surface; 18 children where sharing a sleeping surface with adults or other children; and 20 children each had a recent history of mild upper respiratory infection or other illness. 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.

Figure 34:
SIDS Deaths by Age in Months in 1999.
N=40

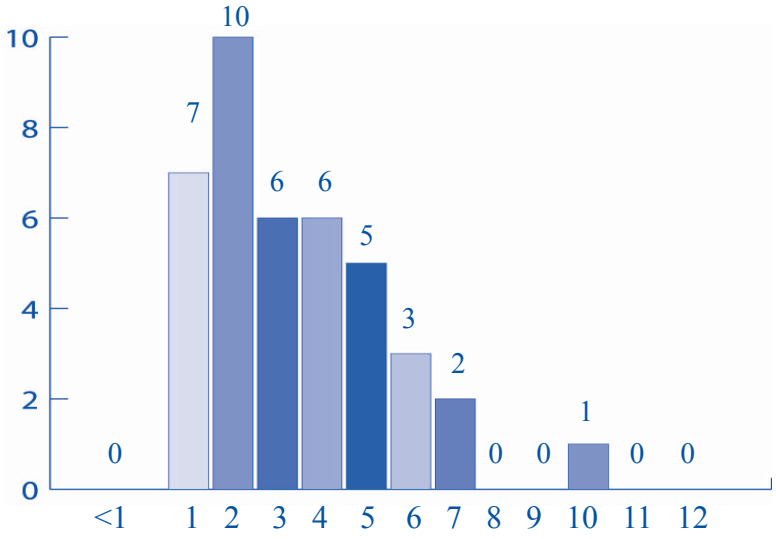
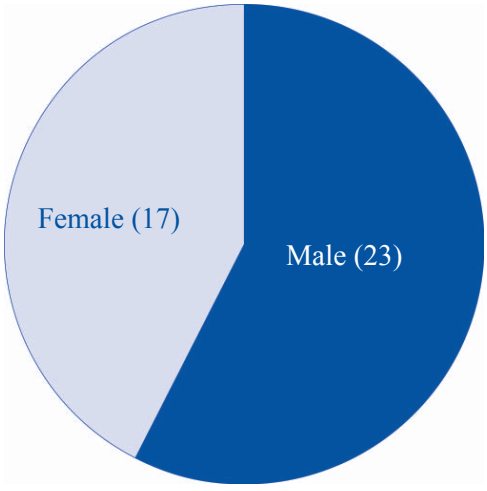


Figure 35:
SIDS Deaths by Sex in 1999.
N=40



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 1999, the SCDRB categorized 11 deaths to be of an undetermined manner.

A one-month-old male was found unresponsive. The infant had no external signs of trauma and the autopsy examination and ancillary tests failed to identify a cause of death. There had been numerous reports of abuse and neglect concerning this child and other siblings in his family. In addition an 11-week-old infant in this same family died and the death was attributed to SIDS. Due to the family social history and the sibling's death, this child's death was ruled undetermined. Subsequent to these deaths, the parents relinquished their rights to their other children.

A 16-year-old female said she was not feeling well and was in low spirits the day of her death. She went to bed and was later found unresponsive. She suffered from insulin dependent diabetes and asthma, but had had no recent medical complaints. There was no autopsy, no toxicology, and no law enforcement nor scene investigation. The death certificate was certified as a natural death due to asthma. However, because of the lack of investigation, the SCDRB determined this death to be of an undetermined manner and cause.

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 four-month-old female was sleeping in bed with both parents and possibly two other siblings. The infant was found unresponsive at the foot of the bed. The death certificate was certified as a natural death due to SIDS. However , because of the lack of scene investigation by the coroner and law enforcement, and the questionable sleeping arrangement, the SCDRB determined this death to be of an undetermined manner and cause.

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.

Appendices

Appendix A

Child Deaths By County of Residence

1999 Data
N = 514

County of Residence	County Population 17& under	Total	Natural	Unintent'l Injury	Uninten'l Injury-MVA	SIDS	Suicide	Homicide	Undetermined
Allen	3,873	2	1		1				
Anderson	2,147	3	2	1					
Atchison	4,601	3	3						
Barber	1,365	0							
Barton	7,483	1	1						
Bourbon	3,827	4		1	1	1	1		
Brown	3,000	1	1	1					
Butler	17,545	10	5		3				2
Chase	724	0							
Chautauqua	997	2	2						
Cherokee	5,914	3	2			1			
Cheyenne	773	1			1				
Clark	590	0							
Clay	2,295	1				1			
Cloud	2,231	1							1
Coffey	2,416	0							
Comanche	461	1	0		1				
Cowley	9,609	9	4		5				
Crawford	8,483	6	4		2				
Decatur	825	0							
Dickinson	5,051	3	1	1	1				
Doniphan	2,004	2		2					
Douglas	20,163	8	6			1	1		
Edwards	815	1			1				
Elk	748	0							
Ellis	6,539	5	4	1					
Ellsworth	1,399	1	1						
Finney	13,020	8	4		3		1		
Ford	8,813	8	6		1		1		
Franklin	7,041	4	2	1	1				
Geary	6,911	15	13		1			1	
Gove	770	0							
Graham	771	0							
Grant	2,731	2	2						
Gray	1,775	0							
Greeley	488	0							
Greenwood	1,928	1	1						
Hamilton	601	0							
Harper	1,539	1					1		
Harvey	8,788	2	1	1					
Haskell	1,296	0							
Hodgeman	614	1	1						
Jackson	3,368	7	6			1			
Jefferson	4,868	3	1		1			1	
Jewell	868	0							
Johnson	114,526	49	38	1	3	4	1	1	1
Kearny	1,364	1			1				
Kingman	2,340	2			2				
Kiowa	839	0							
Labette	6,016	3	1		1	1			
Lane	563	0							
Leavenworth	19,041	10	5		2	1			2
Lincoln	796	2	1		1				
Linn	2,406	3	2		1				

Appendix A
Child Deaths By County of Residence

1999 Data
N = 514

County of Residence	County Population 17& under	Total	Natural	Unintent'l Injury	Uninten'l Injury-MVA	SIDS	Suicide	Homicide	Undetermined
Logan	752	2			2				
Lyon	9,145	4	1	1	2				
Marion	3,132	3	1		2				
Marshall	2,850	1			1				
McPherson	7,350	6	3					3	
Meade	1,202	0							
Miami	7,464	3		1	1	1			
Mitchell	1,824	1	1						
Montgomery	9,279	13	6	2	3			2	
Morris	1,546	1	1						
Morton	1,048	0							
Nemaha	2,854	2		2					
Neosho	4,229	4	1		1	1		1	
Ness	894	0							
Norton	1,219	2	1	1					
Osage	4,651	2	1		1				
Osborne	1,094	0							
Ottawa	1,525	1	1						
Pawnee	1,781	3			1		1		1
Phillips	1,451	0							
Pottawatomie	5,566	4	2	1	1				
Pratt	2,410	1			1				
Rawlins	744	1	1						
Reno	15,818	11	4	1	4	2			
Republic	1,359	2	1		1				
Rice	2,618	1				1			
Riley	13,731	11	6	2	3				
Rooks	1,471	1	1						
Rush	728	0							
Russell	1,649	1			1				
Saline	13,243	9	3	1	2	3			
Scott	1,524	0							
Sedgwick	123,957	102	76	3	11	4	4	3	1
Seward	6,467	5	4			1			
Shawnee	43,289	46	28	4	5	4	1	2	2
Sheridan	732	0							
Sherman	1,684	2	2						
Smith	1,001	0							
Stafford	1,302	0							
Stanton	694	0							
Stevens	1,681	2	1			1			
Sumner	7,848	3		1	1		1		
Thomas	2,207	3	2			1			
Trego	824	0							
Wabaunsee	1,749	1		1					
Wallace	507	1			1				
Washington	1,597	0							
Wichita	799	0							
Wilson	2,642	3	2		1				
Woodson	939	0							
Wyandotte	42,608	47	25	2	2	10	2	6	
Out of State*		19	9	1	6		1	1	1
Grand Total	698,637	**514**	**305**	**33**	**88**	**40**	**16**	**21**	**11**

*Out of State is included for those children who were not Kansas residents, but who died in Kansas.
1999 data on county population comes from the United State's Census Bureau 1999 population estimates.

Appendix B
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 any other attached documents 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 then 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 C
Goals

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.

Appendix D
History

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, the Kansas Bureau of Investigation (KBI), the Department of Social and Rehabilitation Services (SRS), the Kansas Department of Health and Environment (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 Association of County and District Attorneys. No term limit is set on appointments. In 1994, the Legislature amended the statute to enable the Attorney General 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, 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.

State of Kansas

State Child Death Review Board
Office Of Attorney General Carla J. Stovall
120 S.W. 10th Avenue, 2nd Floor
Topeka, Kansas 66612-1597
(785) 296-2215
Fax: (785) 296-6296
E-mail: SCDRB@ksag.org

PRSRT STD
US POSTAGE
PAID
TOPEKA, KS 66612
PERMIT No. 157

The costs of this publication were paid for through the Federal Children's Justice Act administered by the Kansas Department of Social and Rehabilitation Services.

Office of the Attorney General