

Office of the Kansas Attorney General 120 SW 10th Avenue, 2nd Floor Topeka, KS 66612-1597 (785) 296-2215 FAX (785) 296-6296 www.KSAG.org

### Kansas Child Death Review Board



2008 Annual Report (2006 Data)

WWW.KSAG.ORG

## **Attorney General Steve Six**



October 2008

#### Dear Friends:

There are few things more tragic than the death of a child. It affects families, as well as communities. To learn more about these tragedies and to try to prevent them, the Kansas Legislature established the Child Death Review Board in 1992.

The state of Kansas is fortunate to have a dedicated, volunteer board of professionals that reviews child fatalities and identifies risk factors and trends. Through additional research and information collected annually by the board, Kansas can develop strategies to help reduce instances of child death.

This year's report comprehensively evaluates the data collected during 2006 and highlights the board's findings for the twelve year period the board has been functioning. This report presents the board's recommendations and recognizes the most important issues and risks facing our children's health and safety.

Through the board's work, I believe we can learn more about protecting our children and reducing the dangers they face.

Sincerely,

Steve Six

Kansas Attorney General

tah a S

### **Board Members**

#### **Attorney General appointee**

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

#### Director of Kansas Bureau of Investigation appointee

David Klamm, SSA Kansas Bureau of Investigation, Wichita

#### Secretary of Social and Rehabilitation Services appointee

Brian Dempsey, J.D. SRS Assistant Director of Child Welfare, Topeka

#### Secretary of Health and Environment appointee

Gail Hansen, D.V.M., M.P.H. Kansas Department of Health and Environment, Topeka

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

Sarah Johnston, M.D. 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) Department of Pediatrics University of Kansas School of Medicine, Wichita

#### Attorney General appointee to represent advocacy groups

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

#### Kansas County and District Attorneys Association appointee

Kim Parker, J.D. Sedgwick County District Attorney's Office, Wichita

Staff	Staff	<b>General Counsel</b>
Angela Nordhus	Paula Lunnon	Rebecca Rand, JD
Executive Director	Administrative Specialist	Assistant Attorney General

# Acknowledgments

The review of each child death in Kansas could not be accomplished without the invaluable commitment of many people across the State. The Kansas State Child Death Review Board (SCDRB) remains grateful for the significant contributions of the Office of Attorney General, 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, county and district attorneys, and all others who offer their assistance in supplying the information necessary for our review.

As a multi-disciplinary, multi-agency volunteer board we enjoy the support of our employers who allow us the time necessary to fulfill our responsibilities as board members.

Finally, the SCDRB would like to recognize and express its gratitude to the Department of Social and Rehabilitative Services for providing us with the Children's Justice Act Grant, which funds the board, as well as the publication of this report.

#### SCDRB SERVES AS A CITIZEN REVIEW PANEL

The Kansas Child Death Review Board serves in the capacity as one of three Citizen Review Panels in the State. Each state is required by the Federal Child Abuse Prevention and Treatment Act (CAPTA) to establish citizen review panels in order to receive federal funding for child abuse prevention services. The purpose of the citizen review panels is to determine whether state and local agencies are effectively discharging their child protection responsibilities.

Citizen review panels are required by CAPTA to do the following:

- Measure agency performance by determining whether the state agency complies with the state CAPTA plan, including the state's assurances of compliance with federal requirements contained in the plan.
- Determine the extent of the agencies' coordination with the Title IV-E foster care and adoption systems and the review process for child fatalities and near fatalities.
- Prepare and make available to the public an annual report summarizing the panels' activities.
- Review policies and procedures of state and local agencies to evaluate the extent to which the agencies are effectively discharging their child protection responsibilities.
- Provide for public outreach and comments in order to assess the impact of current policies, procedures, and practices upon children and families in the community.
- Provide recommendations to the State and public on improving the child protective services system at the state and local levels.

# **Table of Contents**

I.	Executive Summary	6
II.	2006 Overview	7
III.	Analysis By Manner of Death	
	A. Violence-Related Deaths  1. Suicide  2. Homicide	11 12 15
	B. Unintentional Injury  1. Motor Vehicle  2. Drowning  3. Suffocation/Strangulation  4. Fire	18 20 24 27 30
	C. Natural Deaths - Except SIDS	33
	D. Natural Deaths - SIDS	35
	E. Undetermined	41
IV.	Public Policy Recommendations	43
V.	Appendix	47

# I. Executive Summary

The State Child Death Review Board (SCDRB) was created in 1992 as a multi-disciplinary agency panel to review child deaths in Kansas. The SCDRB has the statutory obligation to review the death of every child that is a Kansas resident or dies in the State of Kansas. This review process is not duplicated by any other state entity.

The Board has reviewed 6,468 child deaths since inception, and categorizes the deaths into six categories: Natural-Except Sudden Infant Death Syndrome (SIDS); Unintentional Injury; Natural-SIDS; Homicide; Suicide; and Undetermined. As in the past, Natural death is the largest category, with children under one-year-of-age making up the majority of those deaths. The enclosed report contains data from calendar year 2006.

Kansas lost 485 children in 2006, a slight decrease from previous years. As expected, 2006 trends were consistent with previous year data, particularly in relation to the Unintentional Injury - Motor Vehicle Crash (MVC) category. Cumulative data collected from 1994 through 2006, show a uniform pattern of risk factors and trends, specifically with regard to inexperience and inattentive teen drivers. The most represented age group in MVC deaths is the 15 to 17-year-olds. As in every year since the inception of the SCDRB, the majority of children dying in motor vehicle crashes were not properly restrained.

The child homicide rate increased by three in 2006; however, interestingly the number of child abuse-related homicide decreased, while firearm-related homicides increased.

In 2006, there were 19 Undetermined deaths. Often the Undetermined classification is the result of a lack of thorough, comprehensive investigations and/or autopsies, leaving the Board with inadequate information upon which to make a determination of cause or manner of death. This highlights the Board's recommendation for all entities involved in child deaths to perform thorough and complete death investigations.

The Board is again focusing on MVC related incidents in the Public Policy Recommendations this year. Motor vehicle crash fatalities encompass some of the most readily implemented prevention policies. The Board strongly encourages the members of the State Legislature to consider the safety of their young constituents and implement a more restrictive graduated driver licensing system, in addition to placing restrictions on leaving children unattended in vehicles and ATV use by children and teens.

### II. 2006 Overview

Kansas' 2006 population estimate is 2,688,418 with 25% of the population being under the age of 18.5 In 2006, Kansas experienced a loss of 485 children; equivalent to 1.3 Kansas children losing their lives daily.

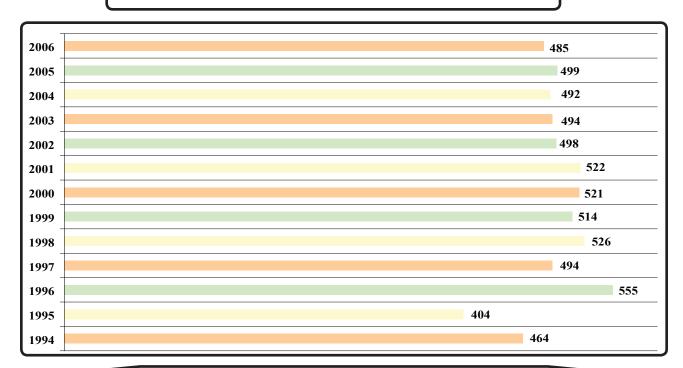
Every child death is classified in one of the six categories listed below. The most prevalent category for child death is Natural Deaths, followed by the second largest category, Unintentional Injury. Despite the SCDRB receiving improved and more complete information, associated prevention policies and strategies have not been adequately implemented to create a significant drop in the number of yearly fatalities. Unlike Natural and SIDS deaths, which generally rely on medical advances more than policy change for prevention, Unintentional Injury deaths have some easily identifiable and simple prevention points. These will be addressed in the Board's recommendations at the end of the report.

The Board classifies the manner of death into 6 categories:

- Natural-Except Sudden Infant Death Syndrome (SIDS) death brought about by natural causes such as disease, congenital conditions and prematurity.
- **Unintentional Injury** death caused by incidents such as motor vehicle crashes, drowning, or fire, which were not intentionally caused.
- Natural-SIDS children who die prior to age one, and display no discoverable cause of death. Kansas statute requires that an investigation and an autopsy be performed before this classification can be applied.
- **Undetermined** cases in which the manner of death could not be positively identified from the evidence collected.
- **Homicide** death due to the intentional or unintentional injury or criminally negligent killing of another human being; including Child Abuse Homicide and Gang-Related Homicide.

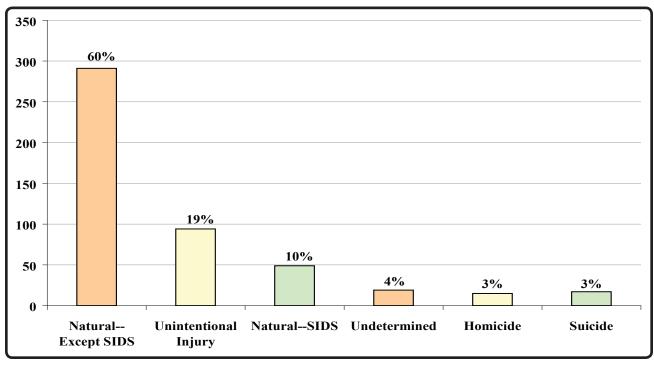
The following graphs compare 2006 with the total number of deaths, 1994 through 2006.

#### Total Deaths in Kansas, 1994 to 2006, N = 6,468



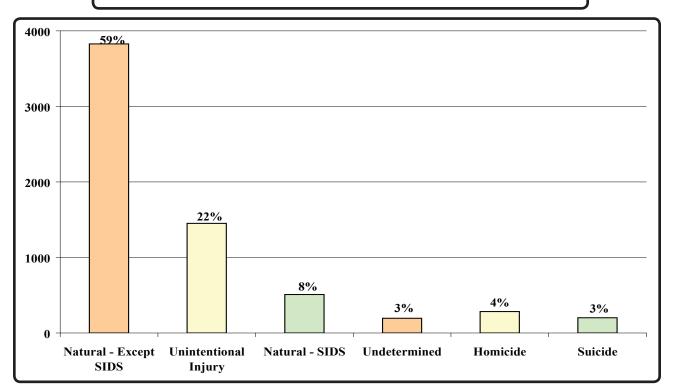
## II. 2006 Overview

Analysis by Manner of Death in 2006, N = 485



The manner of death has remained consistent since the Board began reviewing cases. The majority of child deaths fall into the Natural category, followed by the Unintentional Injury category. There was, however, an increase in both the number of Homicide and Suicide cases in 2006.

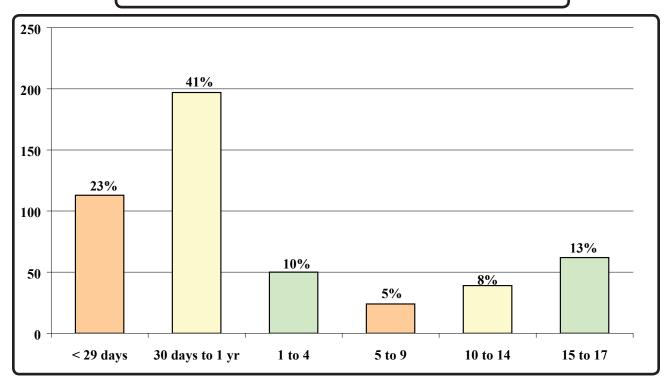
Analysis by Manner of Death, 1994 to 2006, N = 6,468



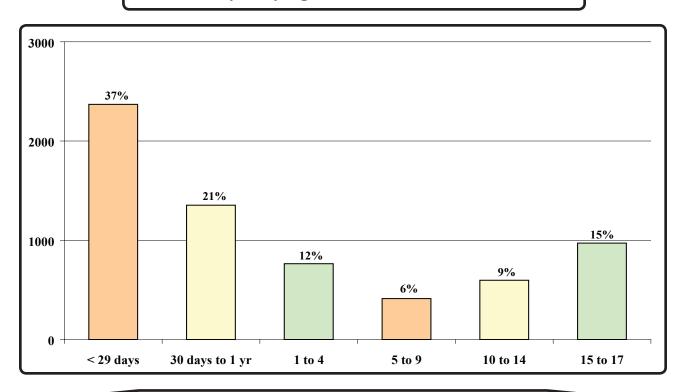
## II. 2006 Overview

The pattern of the total deaths by age in 2006 follows the same general distribution of the cumulative data with children under 1-year-of-age making up the majority of child deaths.

Analysis by 
$$\underline{Age}$$
 in 2006,  $N = 485$ 

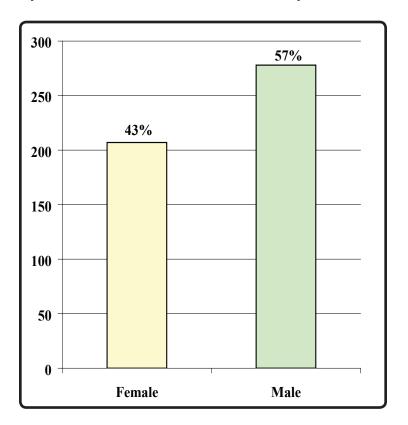


Analysis by Age, 1994 to 2006, N = 6,468



## II. 2005 Overview

Despite the fact that there are approximately 1% more females living in Kansas than males, as reported by the U.S. Census Bureau, males have always accounted for the majority of the deaths in Kansas.



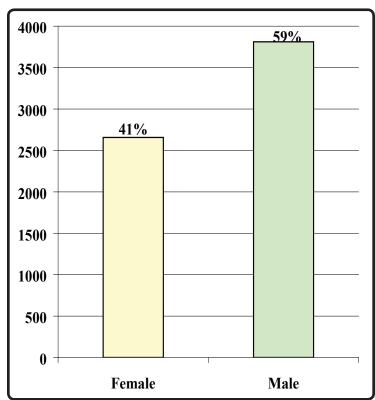
Analysis by

<u>Gender</u>
in 2006,
N = 485

In 2006, 278 males and 207 females passed away.

Analysis by <u>Gender</u>, 1994 to 2006, N = 6,468

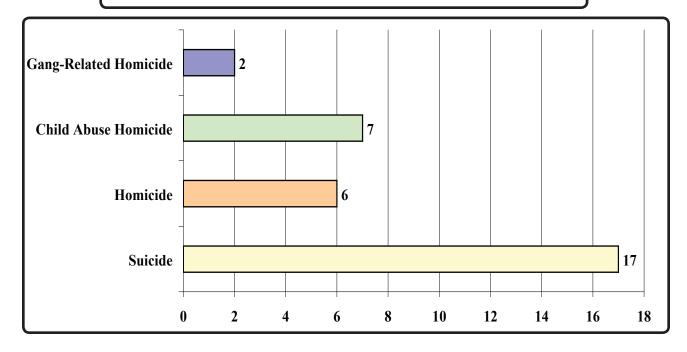
From 1994 to 2006, males have consistently made up the majority of the deaths in Kansas, 59%. The total number of males who have died between 1994 and 2006 is 3,812. There have been 2,656 female deaths.



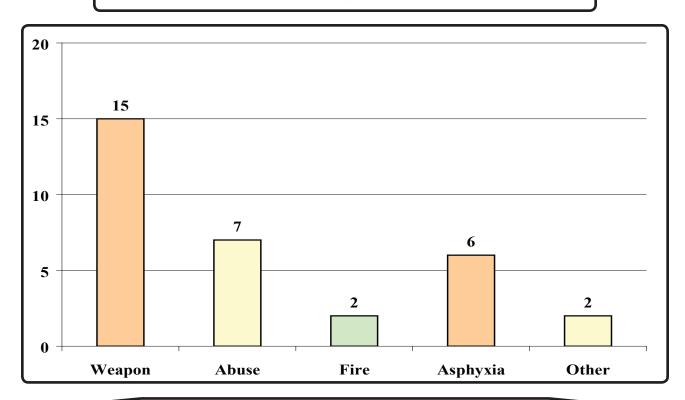
## A. Violence-Related Deaths

Violence-related deaths include Homicide, Child Abuse Homicide, Gang-Related Homicide, and Suicide. Kansas experienced 32 Violence-Related Deaths in 2006. Although they represent a small number of the total deaths, they are the most alarming, and usually contain elements of preventability.





### Violence-Related Deaths by Method in 2006, N = 32

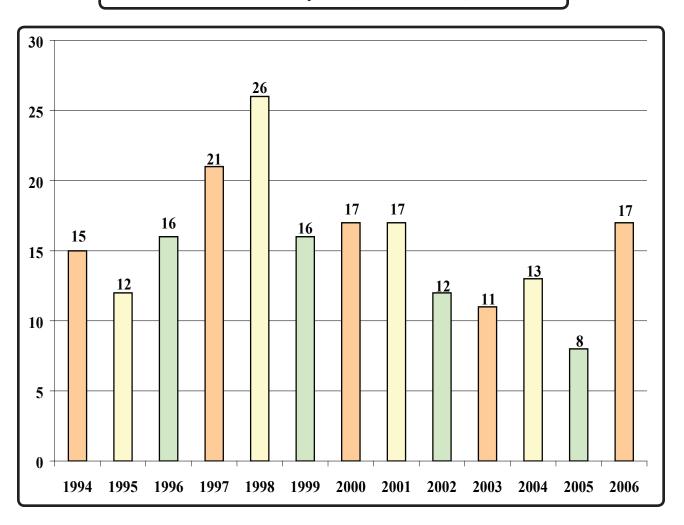


## 1. Suicide

Suicide is a sensitive issue that is devastating and confusing to the family and community. Nationally, it is the third leading cause of death for individuals ages 15 through 24.1 While some suicide deaths are unpredictable, the Board often finds evidence that the child revealed suicidal ideation by subtle but detectable means.

While it can be a painful process, thorough investigations of suicides are necessary to obtain as much information as possible in hopes of developing effective prevention strategies. Often the Board reviews suicide deaths and discovers the family has not been thoroughly interviewed, or autopsies have not been performed in a manner which would provide a complete evaluation of the youth's situation and health at the time of death. The desire of families and communities to put such tragedies behind them is understandable. Unfortunately, improper investigation and lack of thorough autopsy exams can hinder efforts to prevent further deaths of Kansas children.

### Total Suicide Deaths by Year, 1994 to 2006, N = 201



In 2006, there were 17 suicides, which is a significant increase in the number of cases from the preceding year. However, the number of deaths falls into the typical range of 12 to 17 suicides per year.

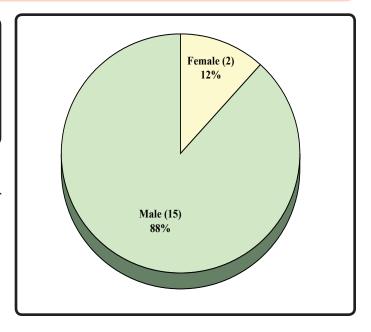
## 1. Suicide

Suicide Deaths by

Gender
in 2006,
N = 17

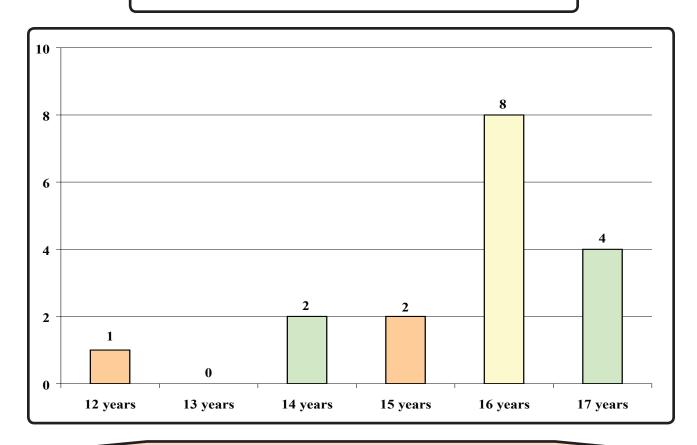
As seen in 2006, Kansas usually sees 15 to 17-year-old males representing the majority of suicide deaths.

Males comprised 88% of the total 17 suicide cases. Fourteen of those children were in the 15 to 17-year-old age group.



A 16-year-old depressed male had a history of attempted suicide and had made comments to several people that he wished to commit suicide. No discernible prevention efforts were made.

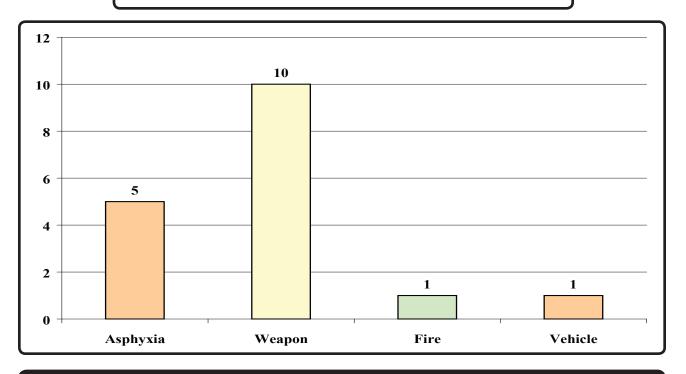
#### Suicide Deaths by Age in 2006, N = 17



## 1. Suicide

A 14-year-old female with a history of depression, self-inflicted wounds, and drug abuse committed suicide with a firearm she had obtained from a schoolmate. She had made previous suicide attempts.

#### Suicide Deaths by Method in 2006, N = 17

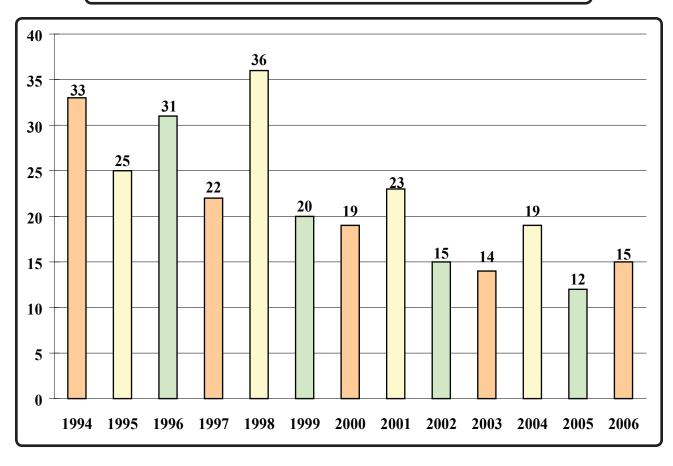


### **PREVENTION POINTS**

- Early Diagnosis and Treatment of Mental Conditions Early involvement of mental health professionals may prevent suicide attempts.
- Observation of Behaviors Watch for changes in one's psychological state (increase in rage, anxiety, depression, or hopelessness); withdrawal; acting recklessly; or engaging in substance abuse.
- Evaluation of Suicidal Thinking Do not ignore statements about suicide, even if they seem casual or joking. The months following a suicide attempt or severe depression can be a time of increased risk, no matter how well the child seems to be doing. This is a critical time for family interaction.
- Limit Access to Lethal Agents Easily obtained or improperly secured firearms or medications are often used in suicides. The harder it is for children to put their hands on these items, the more likely they are to rethink their intentions, allowing time for someone to intervene.
- Talk About the Issue Bringing up suicide does not "give kids the idea", but rather gives them the opportunity to discuss their thoughts and concerns. This communication can act as a significant deterrent.

## 2. Homicide

Total Homicide Deaths by Year, 1994 to 2006, N = 284



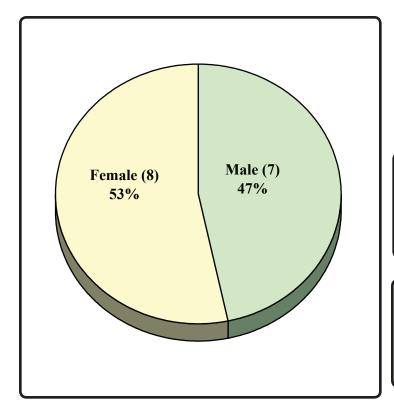
Homicide is defined as the death of one person resulting from the intentional or unintentional actions of another person. In 2006, the Board reviewed 15 homicides, which included Child Abuse Homicides and Gang-Related Homicides. All 15 homicides were considered preventable.

A 16-year-old male with an extensive criminal history shot and killed a 14-year-old male. Both children were truant from school.

The Board defines Child Abuse Homicide as children killed as the result of abuse from caretakers (inflicting injury with malicious intent, usually as a form of discipline or punishment) or neglect (failing to provide shelter, safety, supervision, and nutritional needs). Board member Dr. Sarah Johnston identifies several child abuse risk factors and prevention points: "Maternal risk factors include young age, fewer than 12 years of education, late or no prenatal care, and being unmarried. Child risk factors include male gender and low birth weight. Household risk factors include prior substantiation of child abuse and neglect, substance abuse, low socioeconomic status, and presence in the household of an adult male not related to the child. The most effective methods for preventing child abuse involve programs which enhance parenting skills for at-risk parents. Examples of successful programs include home visits by nurses who provide coaching in parenting skills as well as quality early childhood programs which include parent training."

## 2. Homicide

As a general rule, males have made up the majority of homicide deaths. In 2006, however, there were more female homicide deaths than male deaths. The most represented age group was the 15 to 17-year-olds.

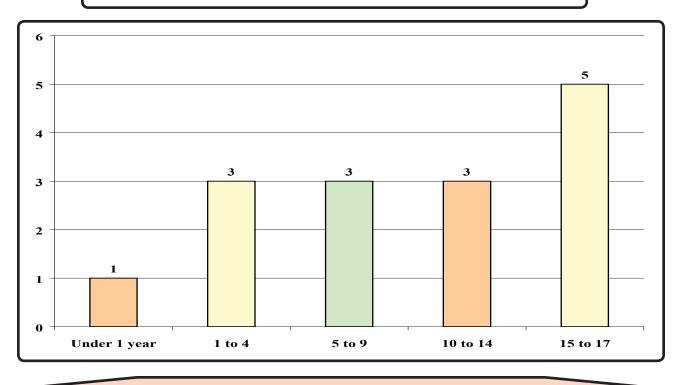


Analysis by
<u>Gender</u>
in 2006, N = 15

A 17-year-old female was shot to death when she was struck by stray bullets in a gang-related incident.

A trusted acquaintance who was babysitting caused the death of an infant by shaking the baby when it would not stop crying.

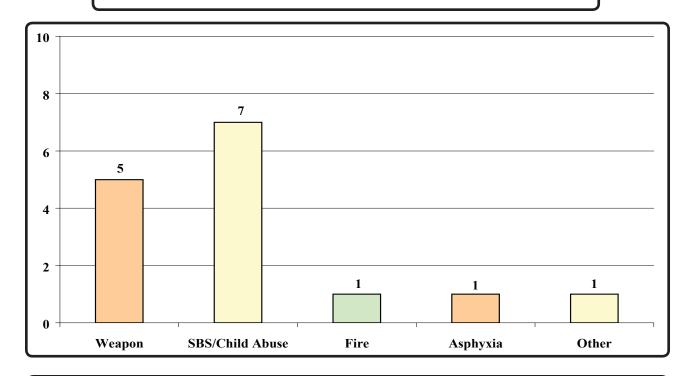
### Total Homicide Deaths by Age in 2006, N = 15



## 2. Homicide

The method of child abuse homicide can vary. In general, most occur as a result of blunt force trauma. The second most prevalent form is Shaken Baby Syndrome (SBS). SBS takes place when an infant or toddler is severely or violently shaken resulting in serious injury and/or death. Infants have relatively weak neck muscles and do not yet have full support for their heavy heads. When they are shaken, their brains move back and forth within their skulls. The blood vessels cannot tolerate the sheering force caused by the violent shaking. The vessels break, causing internal bleeding. This leads to serious injuries such as blindness or eye damage, delay in normal development, seizures, damage to the spinal cord (paralysis), brain damage or death. It is important to note that it is common for children who have been shaken to have evidence of impact injuries at autopsy, but no external evidence of trauma.

#### Total Homicide Deaths by Method in 2006, N = 15



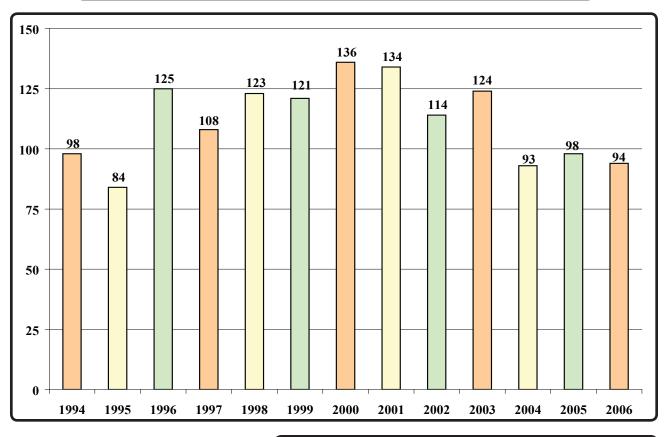
### **PREVENTION POINTS**

- **Family Violence** Most homicides occur between family members, friends, and neighbors. Many of the incidents the Board encounters are not cold, calculated acts. More often, they are emotionally driven acts that could be avoided if restraint of uncontrolled emotions was exercised.
- Take Extra Care with Young Children Young children are often the victims of child abuse homicide. Frustrated caregivers, often without any parental training, combine unrealistic expectations for children's behavior with a lack of appreciation for their vulnerability. Abusive head trauma is an example of how an impact or violently shaking a baby can cause serious or fatal trauma to the child's brain. Caregivers should be mindful of a child's capabilities and susceptibility.

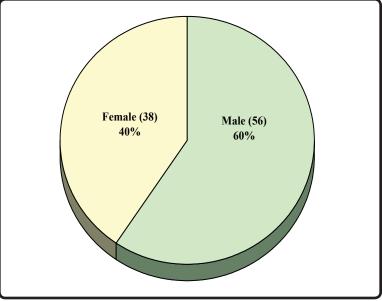
# **B.** Unintentional Injury

Unintentional Injury deaths are consistently the second largest category of death and are often the most preventable. Corresponding with national trends, motor vehicle crashes (MVC) continue to account for a significant number of unintentional injury deaths in Kansas, with 15 to 17-year-olds being the most represented age group.

Total Unintentional Deaths by <u>Year</u>, 1994 to 2006, N = 1,452

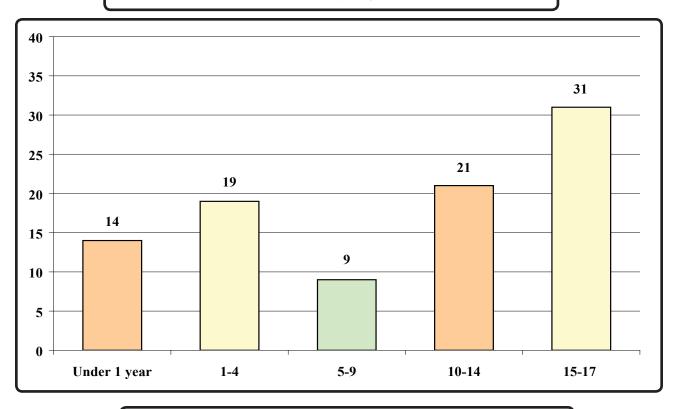


Unintentional Deaths
by <u>Gender</u>
in 2006,
N = 94

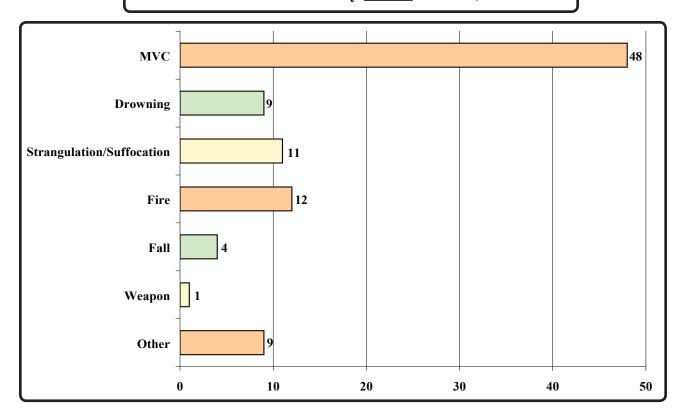


# **B.** Unintentional Injury

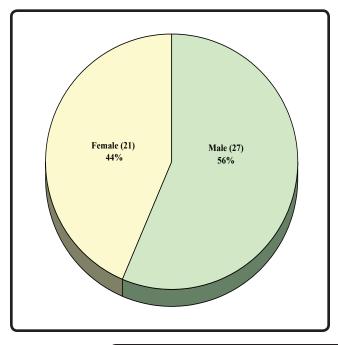
Unintentional Deaths by  $\underline{\mathbf{Age}}$  in 2006,  $\mathbf{N} = 94$ 



Unintentional Deaths by <u>Cause</u> in 2006, N = 94



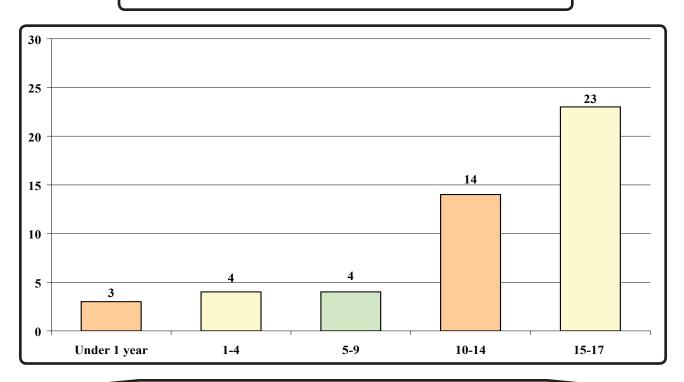
According to the National Highway Traffic Safety Administration, MVC's are the leading cause of death for 15 to 20-year-olds. Nationwide in 2006, 7,460 drivers in this age group were in a vehicle crash in which there was a fatality. Of those, 3,467 were killed and another 281,000 injured. Kansas lost 48 children in 2006 to MVC's. Males were the majority of those killed, with most of the deaths falling into the 15 to 17-year-old age group. The Board notes that almost all of the motor vehicle deaths involved risk factors which were preventable. For example, 60% of the MVC victim's were a driver or passenger who was improperly restrained or was not restrained at all.



### MVC Deaths by <u>Gender</u> in 2006, N = 48

Teenagers who are either the driver or a passenger riding with other teen drivers account for the greatest number of MVC deaths. Currently, Kansas children may receive a learner's permit and begin driving at age 14. The SCDRB supports a graduated driver licensing (GDL) system, which would prohibit driving until age 16, and would put specific restrictions on the driver for the next two years. The following graphs emphasize the data leading to the recommendation for implementation of a stronger GDL system, outlined in the Public Policy Recommendations at the end of this report.

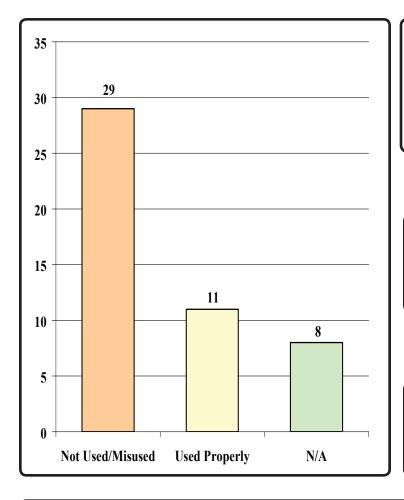




An unlicensed and unrestrained 14-year-old was driving too fast on a rural road. He lost control and was ejected from the vehicle. He was pronounced at the scene.

In the majority of the MVC cases reviewed "unrestrained and ejected", "inattentive driving", or "excessive speed" are included in the descriptive narrative. These factors could be drastically reduced with the implementation of a stronger graduated driver licensing system.

Despite the proven benefit of seat belt use in preventing deaths, the percentage of Kansans who are unrestrained in fatal crashes remains high. The majority of child victims not using any form of restraint are ages 15-17. In 2006, 61% of children in this age group were not using a restraint at the time of the crash. In the 10 to 14-year-age group, 64% of children were unrestrained or restrained improperly, and in the 9-and-under age group, 55% were not restrained or were restrained improperly. This supports the change in legislation for stronger seat belt laws for all passengers, in addition to more stringent enforcement and judicial adherence to the law.



MVC Deaths by
Restraint Use
in 2006,
N = 48

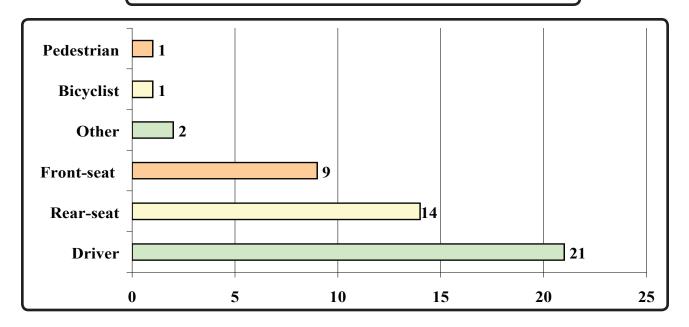
A 15-year-old male, who was driving on a learner's permit, died when he improperly passed another vehicle on a bridge and hit the rail.

Several of the MVC deaths in 2006 involved teens who were driving too fast and/or disobeyed traffic signals.

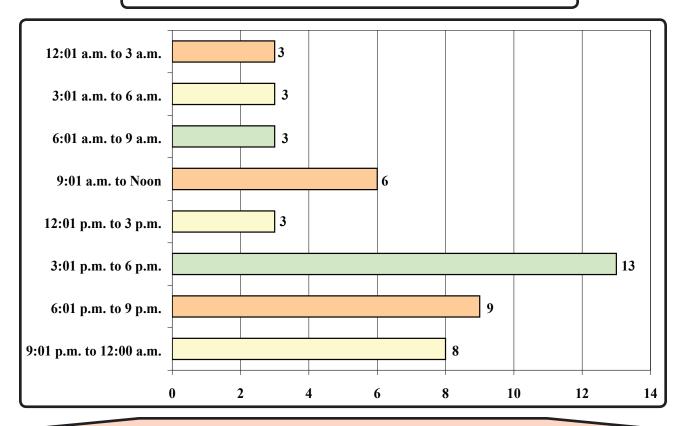
A 14-year-old rear-seat unrestrained female died when she was involved in a motor vehicle crash. The intoxicated driver was witnessed to be driving recklessly moments prior to the crash.

A 14-year-old driving on a learner's permit lost control of his vehicle. A 9-year-old rear-seat restrained passenger died from injuries sustained in the crash.

### MVC Deaths by <u>Seating Position</u> in 2006, N = 48



### MVC Deaths by $\underline{\text{Time of Crash}}$ in 2006, N = 48



All-terrain vehicle use has become popular in both recreation and work. Their size, maneuverability, and durability make them extremely handy and fun to ride. Unfortunately, the thrills can quickly turn to tragedy. Each year, in the United States, more than 100 children ages 16-and-under are killed and approximately 45,000 are injured on All-Terrain Vehicles (ATV's). Young riders lack the size and strength to safely control an ATV. Other riders travel on roadways which are not designed for ATV travel and drive at speeds that are unsafe. In 2006, Kansas had 2 ATV-related fatalities. The Board makes suggestions to Kansas law regarding the use of ATV's at the end of this report.

A 16-year-old who was wearing a helmet and chest protection died when the ATV he was driving flipped over. Speed and lack of control were factors in the death.

ATV and motorcycle/motorbike operators need to use caution when riding near roadways. These vehicles are small and low to the ground; they are not as visible as larger vehicles. Following traffic signals, including those on rural roads, is critical. The use of lights, reflectors, or highly visible flags are recommended to make ATVs and motorcycles/motorbikes more visible. Also, terrain features can greatly affect the operating capability of such vehicles. Features such as gravel roads, slopes, ditches, blind intersections, trees, and shrubs continue to be factors in ATV and motorcycle/motorbike-related accidents.

A 14-year-old male who was driving on a learner's permit died when he accidently drove his motor bike onto a roadway and was struck by a vehicle. The young man was not wearing a helmet.

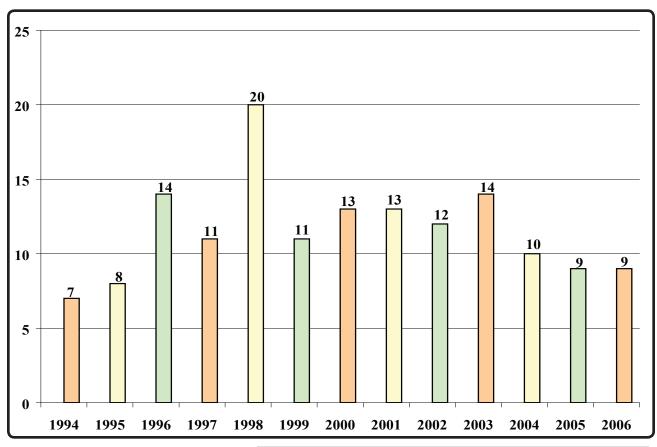
### PREVENTION POINTS

- Use of Proper Safety Restraints Wear seat belts. Seat belts and appropriate child safety restraints consistently prevent serious injury and death. The importance of parental seat belt use as an example is invaluable. According to the National Highway Traffic Safety Administration, parents who buckle up are more likely to use safety restraints for their children than those who do not.4 Children under 4-years-of-age should be placed in a child safety seat firmly secured in the backseat. Children between the ages of 4 and 8 should be in belt-positioning booster seats.
- **Attentive Driving** Avoid distractions such as cell phones and other electronic devices. Novice drivers should have limits placed on the number of passengers, a known risk factor.
- **Avoiding Alcohol or Drug Use** It is never safe to drive after drinking alcohol or using narcotics or other mood-altering drugs. Avoid riding with anyone who is suspected of being under the influence of drugs and/or alcohol.
- **Driving Experience** Driving is not a quickly learned skill and requires focus and good judgment. Young drivers should be accompanied by an experienced adult and avoid complex driving situations until more practiced. The graduated driver's license system recommended by the Board does not confer full driving privileges until age 18, and after significant, supervised driving time.
- **ATV Usage** No child under age 12 should be permitted to operate an ATV of any size. All riders should wear a helmet and travel in permitted areas at safe speeds.

# 2. Drowning

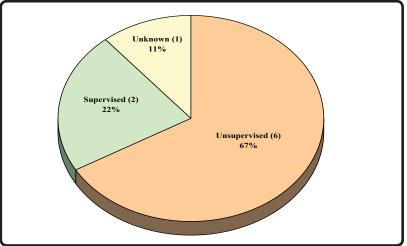
In Kansas, drowning is the 2nd leading cause of death in the Unintentional Injury category; however, many parents do not consider drowning a major hazard. Safe Kids USA reports that "drowning can happen in as little as one inch of water and is usually quick and silent. A child will lose consciousness within two minutes after submersion, with irreversible brain damage occurring within four to six minutes." Kansas lost 9 children to drowning in the year 2006. In 67% of the cases, the children had been left alone or were unsupervised when they drowned.

Total Drowning Deaths by Year, 1994 to 2006, N = 151



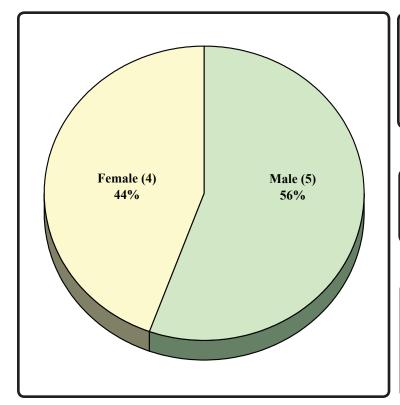
Drowning Deaths
by Supervision
in 2006,
N = 9

A distracted parent of a 3-year-old found the child unresponsive in the swimming pool. It was unknown how long the child had been submerged.



# 2. Drowning

Males continue to made up the majority of drowning deaths in Kansas. The most represented age group is the 1 to 4-year-olds.

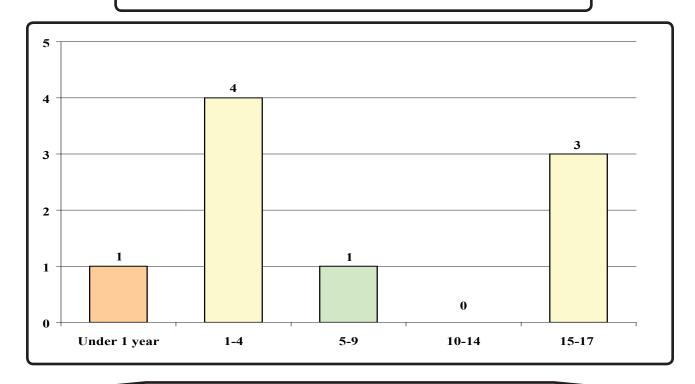


Drowning Deaths
by Gender
in 2006,
N = 9

While on vacation, a 3-year-old lost her life after she slipped off a boat dock and fell into the water.

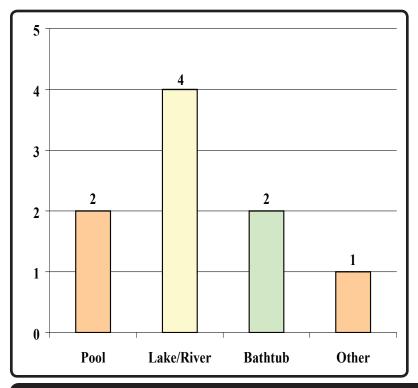
A 2-year-old was left unsupervised while playing outside. He was found unresponsive in the swimming pool. The pool was not protected with a fence that had a locking gate.

### Drowning Deaths by Age in 2006, N = 9



# 2. Drowning

Drowning Deaths by <u>Location</u> in 2006, N = 9



In 2006, lakes and rivers were the most represented location for drowning deaths. Lack of supervision was noted as a contributing factor in 6 of the 9 cases. Caregivers must be diligent in supervising children around water, and should not rely solely on marketed products to keep youngsters safe. In addition, all pools should be surrounded by a 5 foot fence that has a locking gate.

While swimming with his peers, a 15-year-old boy died when he became physically tired.

A 12-month-old was not being closely supervised during bath time. She slipped under the water and died from drowning.

### PREVENTION POINTS

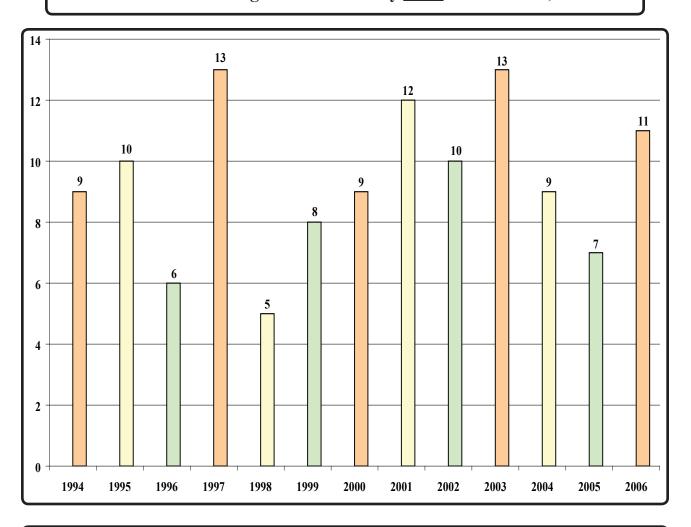
- **Proper Supervision** There should always be an adult who is capable of responding to an emergency, observing children around water. The adult should be actively watching and avoid distractions. Assigning swimming "buddies" is a good idea, especially if there are many swimmers. Supervision also applies to bathtubs, where children should never be left alone even for short periods of time.
- Pool/Environment Safety Pools should have safety equipment available and be inaccessible
  to small children. Five foot fencing with safety latched gates completely encircling a pool
  or hot tub is recommended. Specifically related to bathtubs, seats designed to hold a baby's
  head above water are no substitution for adult supervision. Also, there are cases where small
  children drown after falling into buckets, toilets, washing machines or other such water
  holding basins. Caregivers must be vigilant about less obvious dangers.
- **Use of Safety Equipment** Children should always wear Personal Flotation Devices (PFDs) when participating in water activities that are Coast Guard Approved and suited for the proper weight of the child. "Water wings" and other inflatable items are not adequate substitutes.
- Water Safety Education Children should have swimming lessons and water safety education. The American Academy of Pediatrics recommends waiting until 4-years-of-age to begin lessons. While this is vital, swimming ability alone does not relieve the need for adult supervision or PFDs.

# 3. Suffocation/Strangulation

Unintentional Suffocation/Strangulation deaths most often affect very young children who have not yet developed the strength or motor skills to remove themselves from dangerous situations. Reviews from Kansas and across the nation show that there are several common practices that increase the risk for asphyxial death. These include: sleeping somewhere other than a crib; being placed on the abdomen to sleep; sleeping in a cluttered area; being placed on a soft surface such as a pillow or quilt; and co-sleeping with parents or siblings. There are also instances where a child becomes entrapped and suffocates. Since 1994, Kansas has reviewed 122 child deaths due to suffocation or strangulation, 11 of which occurred in 2006. Most of the deceased were of the male gender.

Two separate incidents involved infants who were asphyxiated while they were being nursed by mothers who were laying down and fell asleep. Nursing mothers should consider nursing in a sitting position rather than laying down with the baby to reduce the possibility of falling asleep.

#### Total Suffocation/Strangulation Deaths by Year, 1994 to 2006, N = 122

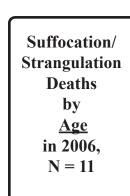


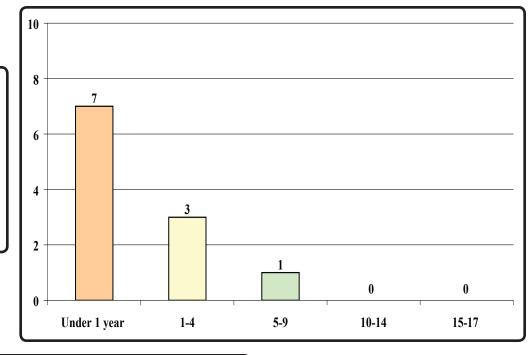
A 4-month-old child was placed in an adult bed for a nap. After a short period of time, the infant was found wedged between the bed rails and the wall.

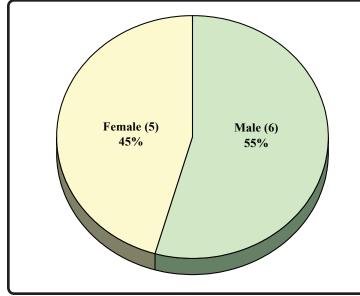
# 3. Suffocation/Strangulation

A 2-month-old infant was placed in bed with her parents. When the parents awoke 10 hours later, the child was cold and blue and was not breathing.

One of the most common and concerning causes of suffocation/strangulation is improper sleeping arrangements for infants. In 2006, 45% of the suffocation/strangulation deaths were attributed to improper sleeping arrangements. The Board reviews multiple cases each year in which a parent places an infant to sleep in soft bedding or on soft pillows, only to find the infant face down in the bedding and not breathing. Most of the 2006 suffocation/strangulation deaths were preventable had infants been sleeping in appropriate settings with proper supervision.







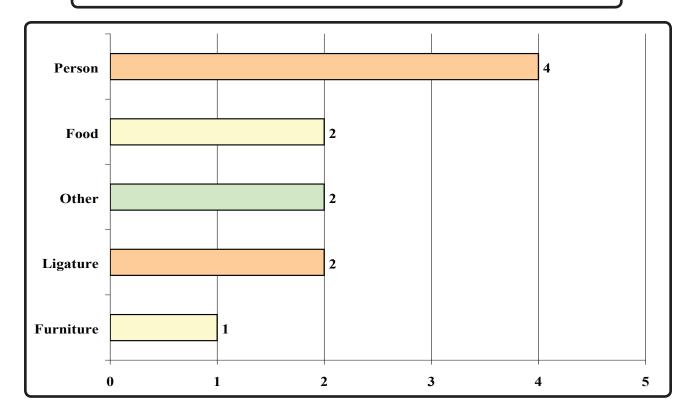
Suffocation/Strangulation
Deaths by
Gender
in 2006,
N = 11

A mother placed her 8-month-old infant in an adult bed for a nap. Even though she checked on the child regularly, she found the infant wedged between the mattress and the foot-board of the bed.

# 3. Suffocation/Strangulation

Parents and caregivers should thoroughly research baby furniture before purchasing a product to ensure no recalls have been issued on the product. Some cribs, bassinets, and playpens have been known to strangle infants and toddlers. Adults should also make certain all tables, cabinets, entertainment stands, and other furniture are solid and will not tip over on top of a child.

Suffocation/Strangulation Deaths by <u>Cause</u> in 2006, N = 11



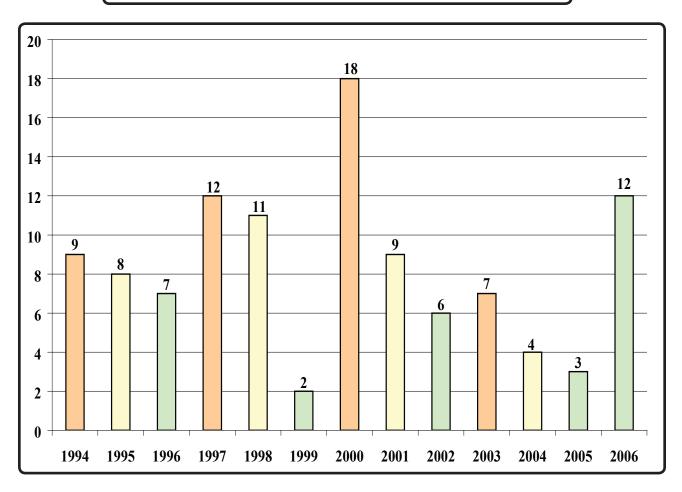
### PREVENTION POINTS

- **Proper Supervision** Young children should be watched attentively. Leaving them alone for even a few minutes, allows opportunities for accidents. Child-specific training in CPR and other emergency responses can help prevent death.
- **Safe Environments** Be vigilant about potential dangers to children. Consideration must be given to their size, curiosity, and motor ability. Many things that are not threats to adults (e.g. chests or coolers with latches, hanging cords, and plastic bags) can be deadly to small children.
- **Infant Sleeping Arrangements** The safest sleeping arrangement for an infant is in an approved crib, on his or her back. Babies should not sleep in adult beds and should not be placed in bed with parents or siblings. The crib mattress should be firm and fitted so the child cannot be trapped between the mattress and side of the crib. Soft items such as blankets, pillows, and stuffed animals provide opportunities for asphyxia and should not be in the crib.

### 4. Fire

Deaths from fires and burns are the fifth most common cause of unintentional injury deaths in the United States (CDC 2006) and the third leading cause of fatal home injury. According to the National Fire Protection Association, in 2006 there were 3,245 reported civilian fire deaths in the United States and 16,400 fire-related injuries. 12 of the 3,245 deaths were Kansas children under the age of 18.6 Since 1994, Kansas has lost 108 children to fires.

#### Total Fire Deaths by Year, 1994 to 2006, N= 108



71% of the cases between the years of 1994 to 2006, showed reports of non-working smoke detectors or it was unknown if there was a smoke detector in the home.

A mother was awakened by another child to find her 8-year-old son's bedroom on fire. She informed the fire department that smoke detectors were in the home, but she did not know if they were working.

Smoke detectors can save lives. Parents and caregivers should be diligent about having functional smoke detectors in various locations in the home. Between 1994 and 2006, only 29% of the fires had working smoke detectors. In 2006, 4 of the total 12 fires had functional smoke detectors. In 7 fires it was unknown if there was a working smoke detector, and 1 fire report showed there was no smoke detector at all.

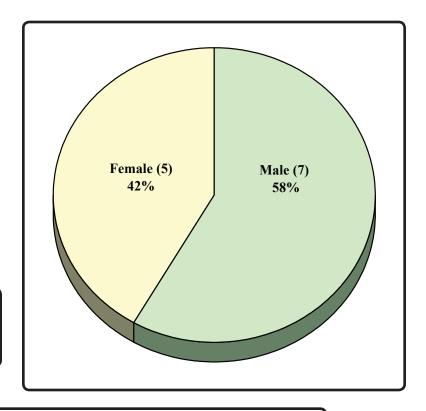
## 4. Fire

The 12 fire deaths were the result of 9 separate fires. 7 of the children were male and 5 were female. Ironically, the majority of the fires in 2006 were not started by children, but rather by faulty electrical wiring. In the fires that were started by children, all of the children were under the age of 10.

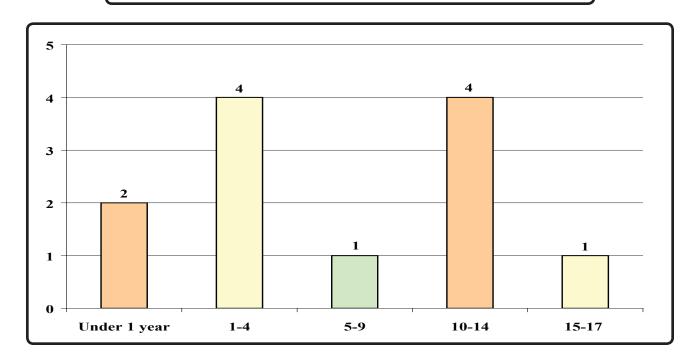
Fire Deaths by <u>Gender</u> in 2006, N = 12

A 4-year-old died when he and another young boy were playing with fireworks close to gas cans.

A fire was accidently set by a 5 and 3-year-old resulting in the death of an infant who was in the home.



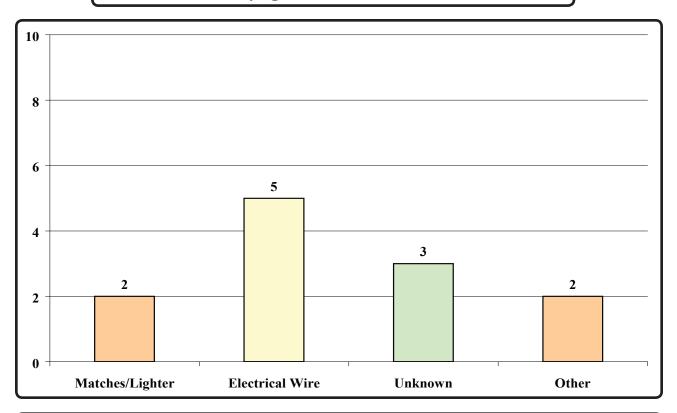
Fire Deaths by  $\underline{Age}$  in 2006, N = 12



### 4. Fire

Typically, the majority of fires are started by children playing with matches or lighters; however, in 2006, only 2 of the fires were a result of a child playing. It is vital for parents and caregivers to keep all lighters, matches, and other igniting sources out of reach of children. They also need to educate children on the dangers of fire. Close supervision of children, safe storage of matches and lighters, and working smoke detectors in the home are critical.

#### Fire Deaths by <u>Ignition Source</u> in 2006, N= 12



A child who started a fire in his bedroom had been caught playing with lighters on 3 previous occasions.

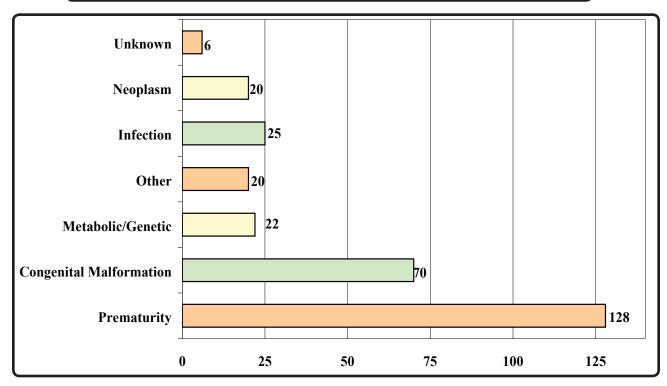
### PREVENTION POINTS

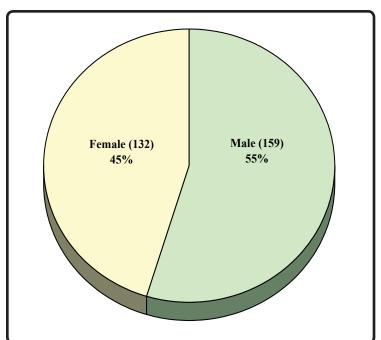
- **Proper Supervision** Young children must be watched closely. Leaving them unsupervised, especially if there are objects like candles or matches within their reach, could result in a serious injury or death.
- **Prevent Access to Fire-starting Material -** Matches, lighters, candles, etc. should be kept away from children. **Do not assume a young child cannot operate a lighter or match**.
- Working Smoke Detectors Smoke detectors should be placed in several locations throughout the house and tested once a month to ensure they are working.
- **Emergency Fire Plan** Everyone in the house, including the children, should know all exits from the house in case of a fire. Designate a central meeting location outside of the home and practice fire drills.

# C. Natural Deaths-Except SIDS

Kansas continued its trend in 2006 with Natural Deaths making up the majority of all child deaths; 60% of the total 485 cases. Unlike other categories, prevention efforts are harder to define in natural deaths. These deaths are most prevalent in the first 28 days of life, correlating with prematurity and congenital disorders found during the neonatal period.



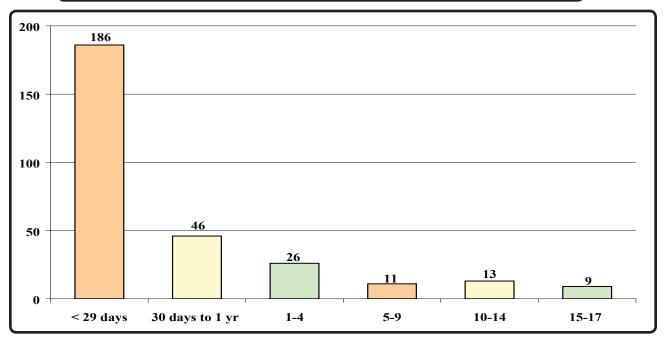




Natural Deaths-Except SIDS
by Gender
in 2006,
N = 291

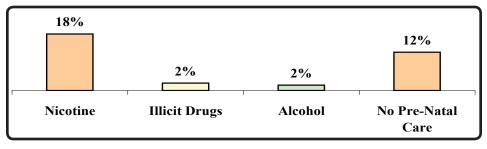
# C. Natural Deaths-Except SIDS

Natural Deaths-Except SIDS by Age in 2006, N= 291



While the degree to which prematurity can be prevented is unknown, there are risk factors for prematurity and poor health that can be addressed. The graph below indicates cases in which mothers used alcohol, illicit drugs, or cigarettes during their pregnancy. In 38% of the cases, it was unknown if the mother used nicotine, drugs, or alcohol due to the lack of documentation or testing.

Natural Deaths-Except SIDS by <u>Risk Factor</u> in 2006, N= 291



The mother's medical condition can also play a role in a neonate's demise, as was seen in 5 of the cases in 2006. In 25 cases, the mother's medical condition was unknown; thus, a determination as a contributing factor could not be established.

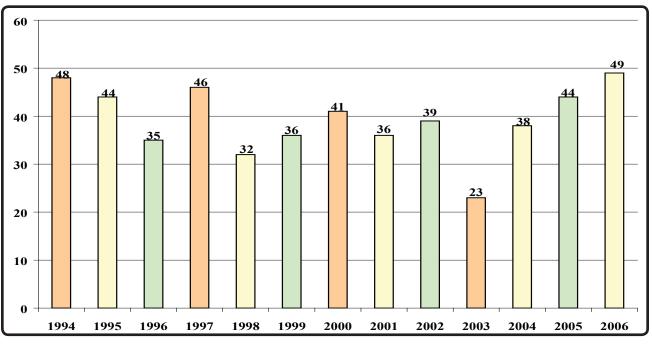
### PREVENTION POINTS

- **Prenatal Care** Medical care during a pregnancy is invaluable. Risk factors and problems addressed early can minimize poor outcomes. Proper nutrition is vital to a pregnancy. Iron and folic acid supplements, along with other physician prescribed regimens can help ensure a healthy pregnancy and newborn.
- **Avoid Drugs, Alcohol, and Nicotine** The use of illicit substances, alcohol, and nicotine should be avoided while pregnant. These elements all have the ability to cause serious health issues and even death for newborns and infants.

## **D. Natural Deaths - SIDS**

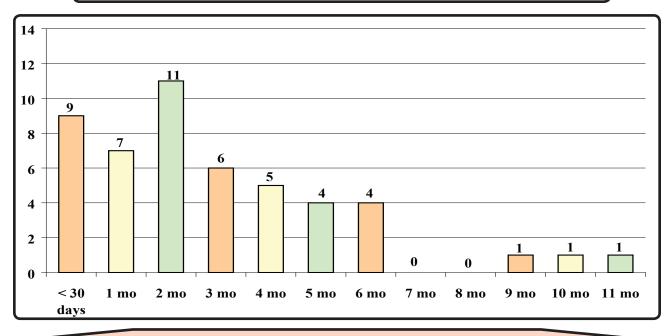
Sudden Infant Death Syndrome (SIDS) is a very narrow classification specifically addressing the unexpected death of an infant when investigation fails to demonstrate a definite cause of death. Kansas coroners can classify a death as SIDS only when the child is under 1-year-of-age and both investigation and autopsy have revealed no known cause of death.

### Total Natural Deaths-SIDS by Year, 1994 to 2006, N = 511



The majority (86%) of the 49 SIDS deaths in 2006 occurred in the first five months of life, which is consistent with national findings.

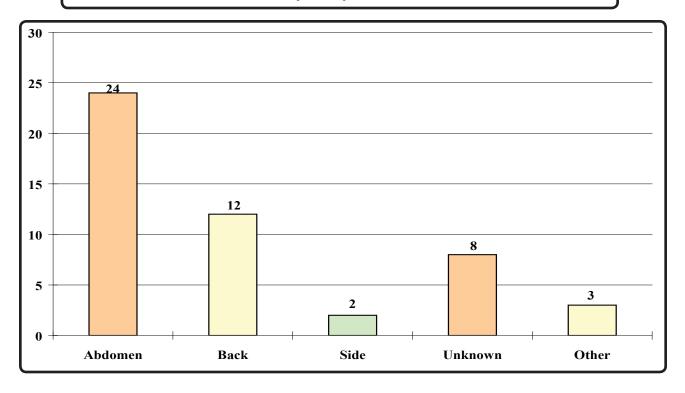
### Natural Deaths - SIDS by Age in Months in 2006, N= 49



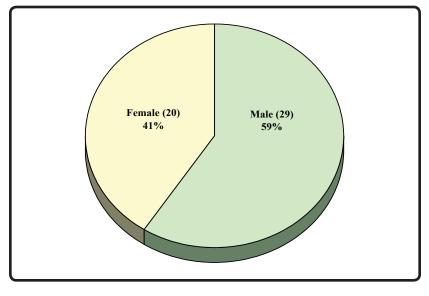
## **D. Natural Deaths - SIDS**

Since the cause of SIDS is unknown, by definition these deaths would not be preventable. However, the following risk factors have consistently been identified as independently related to SIDS: prone (stomach) sleeping position, being placed on a soft surface for sleep, overheating the sleep environment, maternal smoking during pregnancy, late or no prenatal care, young maternal age, pre-term or low-birth weight and male gender. Black and American Indian/Alaska Native populations have a 2-3 times increased incidence of SIDS than the general population. Although SIDS can occur when babies sleep on their backs, the American Academy of Pediatrics notes that the likelihood of SIDS is more than 2 times greater for children who are placed on their stomachs to sleep.

#### Natural Deaths-SIDS by <u>Baby's Position</u> in 2006, N= 49

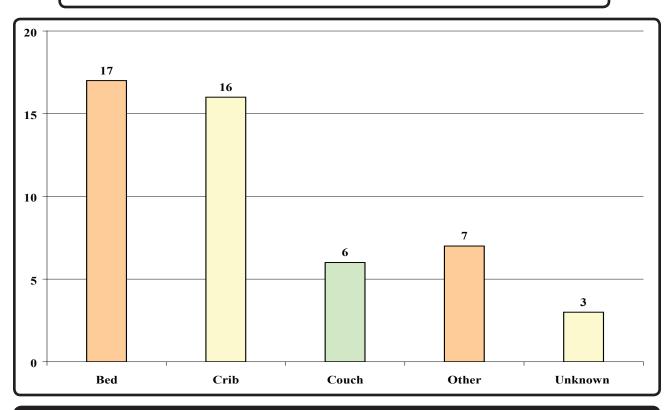


Natural Deaths-SIDS
by <u>Gender</u>
in 2006,
N = 49



Since 2000, the American Academy of Pediatrics has placed an increased emphasis on additional issues related to SIDS deaths. The sleeping environment, co-sleeping with adults or older children, sleeping on waterbeds or couches, and having excess bedding, pillows, stuffed animals, etc., in the same bed with an infant - can be hazardous. The side-sleeping position is no longer recognized as an acceptable alternative to the prone position due to the infant's potential to roll from the side position into the prone position.

#### Natural Deaths-SIDS by <u>Sleeping Place</u> in 2006, N= 49

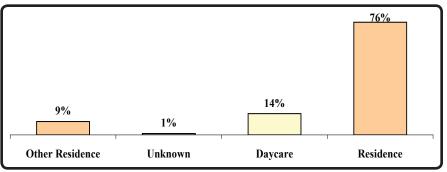


### PREVENTION POINTS

- Infants should be placed to sleep in a supine position (on the back). Side sleeping is not as safe as supine sleeping and is not advised.
- A firm sleep surface should be used. Soft materials such as pillows, quilts, comforters, or sheepskins should not be placed with the infant.
- Use sleep clothing, such as sleep sacks designed to keep the infant warm instead of bedding, which could overheat the infant or cover the baby's head. Avoid overheating the infant's room.
- Smoking during pregnancy is a major risk factor and should be avoided.
- A separate, but proximate sleeping environment is recommended. Bed sharing with adults or other siblings should be avoided.
- Devices promoted to reduce SIDS have not been proven to reduce the incidence of SIDS. Obtain an evaluation/recommendation from a medical professional before use of such products.

Since many infants spend a significant portion of their time in day care and other child care arrangements, the importance of assuring that safe sleeping arrangements are maintained in other places where care is provided for children is emphasized. Many SIDS deaths in child care have been associated with the child being prone, especially when the baby is used to sleeping on his/her back. Babysitters and family members who provide only periodic care for babies may not be aware of the importance of supine sleeping and other safe sleeping arrangements.

Total Natural Deaths-SIDS by <u>Location</u>, 1994 to 2006, N = 511



# PREVENTION POINTS FOR PARENTS WHEN SELECTING CHILD CARE HOMES AND CENTERS

- Child care homes and centers must be licensed or registered by the Kansas Department of Health and Environment. Ask to see the license or certificate it will tell you the type of license held and the maximum number of children that may be enrolled.
- Check the compliance history of a regulated child care facility in Kansas by calling the Kansas Department of Health and Environment at 785-296-1270 and requesting a provider check.
- Child care providers should develop a safe sleep policy and discuss it with parents when enrolling infants.
- Child care providers and parents should communicate frequently to assure that they understand safe sleep practices and that these practices are followed at home and at the child care location.
- Babies must always be placed on their backs (supine) to sleep during every sleep period, including
  naps. Sleep position should be consistent each time and at every location. When babies
  who usually sleep on their backs are placed to sleep on their stomachs, they are at a markedly
  increased risk of sudden death.
- Place baby on a firm tight-fitting mattress, covered by a fitted sheet, in a crib that meets current safety standards. Never allow a gap larger than two fingers at any point between the sides of the crib and the mattress. The same guidelines apply to portable cribs and bassinets.
- Do not use old, broken or modified cribs; regularly tighten hardware to keep the sides firm.
- Use sleep clothing, such as a one-piece sleeper, instead of a blanket or heavy quilt. The safest sleepwear is a comfortable fitting garment made of fabric labeled as flame resistant.
- Do not let baby overheat. Babies are comfortable with the same layers of clothing and bedding as the adults in the same environment.
- Remove all blankets, pillows, quilts, comforters, stuffed animals, toys, bumper pads and other baby products out of the baby's sleep area.
- Do not use sleep-positioning devices and assure yourself that your child care provider is not positioning the baby in any manner that you have not approved.
- Do not allow smoking in your home, car, or around your baby.

Reviews of SIDS deaths has led to the recognition that not all SIDS deaths appropriately fit the 1989 National Institute of Child Health and Human Development definition: "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 review of the clinical history."

In 2004, the CJ Foundation sponsored a meeting of experts in SIDS research, which was held in San Diego, California. The panel agreed that the existing definition of SIDS was in some cases being applied too generally and in others, too restrictively. By more clearly defining subsets of infant deaths that occur suddenly and unexpectedly, uniformity of diagnosis, accuracy of information, and accumulated data for research and assessment of recommendations could be enhanced. The recommendations include the following definition and subclassifications:

#### Definition:

"SIDS is defined as the sudden unexpected death of an infant less than one-year-of-age, with onset of the fatal episode apparently occurring during sleep, which remains unexplained after a thorough investigation, including performance of a complete autopsy and review of the circumstances of death and the clinical history."

Category IA: Classic Features of SIDS Present and Completely Documented

- Age more than 21 days and less than 9 months.
- Normal clinical history, growth and development.
- No similar deaths in the family or in the custody of the same caregiver.
- Found in a safe sleeping environment with no evidence of accidental death.
- No evidence of unexplained trauma, abuse, neglect or unintentional injury.
- No evidence of substantial thymic stress effect.
- Negative results of toxicologic, microbiologic, radiologic, vitreous chemistry and metabolic screening studies.

#### Category IB: Classic Features of SIDS Present, but Incompletely Documented

Investigation of the various scenes where incidents leading to death might have occurred was not performed and/or one or more of the analyses listed above was not performed.

Category II: Infant Deaths That Meet Category I Criteria Except for One or More of the Following:

- Age range outside Category I.
- Similar deaths among family members or in the custody of the same caregiver.
- Neonatal or perinatal conditions that have resolved by the time of death.
- Mechanical asphyxia, or suffocation caused by overlay, cannot be ruled out with certainty.
- Presence of abnormal growth and development not thought to have contributed to the death.
- Marked inflammatory changes or abnormalities not sufficient to be unequivocal causes of death.

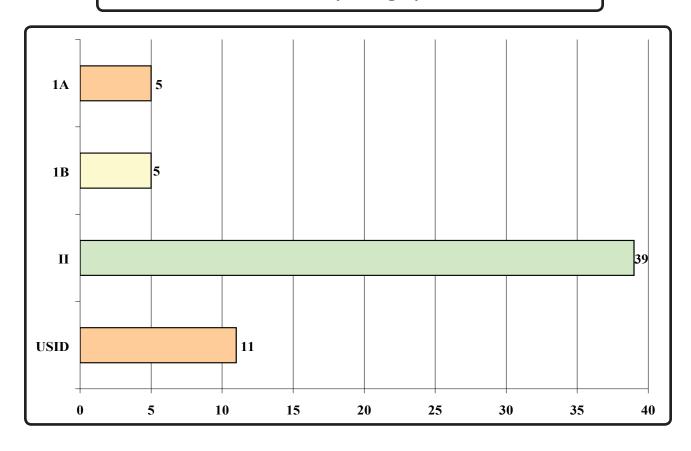
#### Unclassified Sudden Infant Death:

Includes deaths that do not meet the criteria for Category I or II SIDS but for which alternative diagnoses of natural or unnatural conditions are equivocal, including cases for which autopsies were not performed. The Board most generally classifies these cases as Undetermined.

In 2006, the SCDRB categorized the 60 SIDS deaths and unclassified SIDS as follows:

- 5 = SIDS IA -- 4 of the 5 infants were found in the prone position.
- 5 = SIDS IB -- 4 scene investigations did not provide adequate scene information/description, and one death had no investigation conducted at all.
- 39 = SIDS II -- The possibility of an overlay or mechanical asphyxia could not be ruled out.
- 11 = USID -- The Board generally classifies these cases as Undetermined.

#### Natural Deaths-SIDS by <u>Category</u> in 2006, N= 49

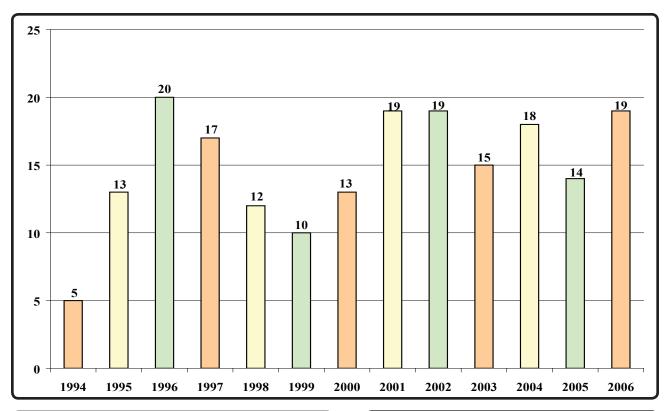


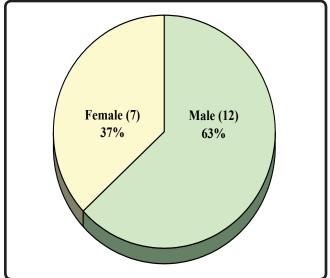
The Board has significant concern about the number of SIDS deaths classified as Category II. Most Category II deaths are classified as such due to the inability to definitively eliminate the possibility of overlay or mechanical asphyxia as a cause of death. These are babies sleeping with parents or siblings, or placed to sleep on inappropriately soft surfaces, or with excessive bedding or pillows in the sleep environment. Although these cases are appropriate to classify as SIDS, the possibility exists that some of the deaths are due to overlay by a parent, or mechanical asphyxia from getting caught in bedding or under pillows. The large number of infants who sleep in less than ideal circumstances, leads the Board to recommend a vigorous state-wide educational program to address safe sleep for babies. This could occur through the hospitals, physicians' offices, child care centers, WIC offices, SRS and other family service agencies.

### E. Undetermined

Periodically, the Board encounters cases where questions remain as to what could have contributed to the child's death. Contributing factors could include: the mother taking medication while breast feeding, a child not being properly supervised, illicit drugs in the environment, or concerns about social history. When there are multiple circumstances that could have contributed to the child's death and no identifiable cause is established, the Board may classify the death as Undetermined. The Board has reviewed 194 Undetermined deaths since 1994.

#### Total Undetermined Deaths by <u>Year</u>, 1994 to 2006, N= 194





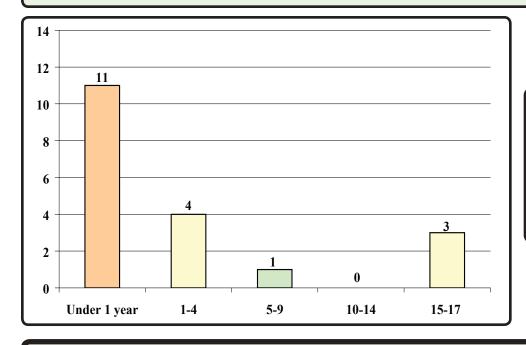
Undetermined Deaths
by <u>Gender</u>
in 2006,
N = 19

A 3-year-old under the care of a teenager was found unresponsive. An autopsy was performed; however, no discernible cause of death could be established. The SCDRB classified the manner of death as Undetermined.

### E. Undetermined

There were 19 Undetermined deaths in 2006, which cover a broad spectrum of investigative thoroughness. In some cases, although every effort was made to determine why a death occurred, there was no way to ascertain a cause of death. Other cases revealed incomplete investigations or law enforcement agencies not being informed of the death. In some instances, autopsies were not performed or were incomplete, or toxicology reports on the victim were not requested. This issue is important enough that the SCDRB has once again included in its public policy recommendations a call for thorough investigations.

An ambulance was called to a residence for an unresponsive infant. Law enforcement responded to the call with medical personnel. The child was taken to the local hospital where he was pronounced. Law enforcement asked no questions while on scene with EMS, and did not go back to the home to conduct their investigation until the following day. The investigation consisted of obtaining basic identifying information. No scene photos were taken and no interviews were conducted. Due to a lack of investigative information, the Board declared the manner of death Undetermined.



Undetermined
Deaths
by Age
in 2006,
N = 19

#### PREVENTION POINTS

- Thorough Investigations All non-natural child deaths should be exhaustively investigated.
   The circumstances and family situation should not affect the detail of the inquiry.
   Hospitals should have protocols in place to ensure law enforcement is notified when a child dies from other than expected natural causes.
- **Complete Autopsies** Combined with excellent law enforcement investigations, complete autopsies often provide a better understanding of child deaths. However, there are situations in which an autopsy should have been performed and was not, or the autopsy did not include all aspects of a standard forensic investigation such as full-body x-rays, cultures, and metabolic/toxicologic studies. Coroners must be mindful of their statutory duties and should be aware of the reimbursement program through the Kansas Department of Health & Environment. Visit the SCDRB's website at <a href="http://www.ksag.org/content/page/id/49">http://www.ksag.org/content/page/id/49</a>.

# IV. Public Policy Recommendations

The Child Death Review Board has chosen to provide policy recommendations in areas that could significantly affect child deaths in Kansas. The information gathered and analyzed by the Board provides compelling support for the recommendations made below.

#### INSTITUTE A GRADUATED DRIVERS LICENSE LAW

The State Child Death Review Board firmly agrees with published data that a graduated licensing system will reduce the number of motor vehicle crash (MVC) injuries and fatalities and should be instituted in Kansas.

MVC incidents take the lives of many Kansas children every year. Kansas has lost a total of 932 children under the age of 18 from 1994 through 2006 to MVC's. Almost all of the motor vehicle deaths involved risk factors such as inexperience or inattentive driving, lack of safety restraints, and/or excessive speed. The majority of cases reviewed involve passengers being ejected from the vehicle and inexperienced drivers. Motor vehicle deaths are nearly always preventable. A significant portion of MVC preventability comes with the proper use of safety restraints and suitable driving skills, which can be achieved through a graduated licensing system. According to a study from the Johns Hopkins Bloomberg School of Public Health's Center for Injury Research and Policy and the Johns Hopkins School of Medicine3, a graduated licensing system on average reduces 20% of the fatal crashes involving teen drivers. Graduated licensing laws allow adolescents to become more proficient and experienced in their driving before having full driving privileges. A U.S. Department of Transportation report lists 38 states that have instituted a graduated licensing system. Kansas is not among them.<sup>4</sup> An effective graduated licensing system would encompass the following:

To receive a *Level One Limited Learner Permit* an applicant must be at least 15 years of age, have completed an approved driver education course, and successfully pass a written exam and vision test.

Provisions/Restrictions for Level One Limited Learner Permit holders:

- All occupants must be properly restrained.
- Only driver and supervising driver allowed in front seat.
- Driving hours are restricted from 5 am to 9 pm with supervising driver for first 6 months.
- The driver may not operate wireless devices while driving.

To receive a *Level Two Limited Provisional License* an applicant must be at least 16 years of age, have had a Level One permit for 12 months, and have had no moving violations, seat belt infractions, improper wireless use infractions, or Minor In Possession (MIP) violations within the preceding 6 months.

Provisions/Restrictions for Level Two Limited Provisional License holders:

- All occupants must be properly restrained.
- Supervising driver must be seated beside driver.
- The driver may not operate any wireless devices while driving.
- Driver may drive without supervision between 5 am and 9 pm, and anytime when driving directly to or from work.
- When driving without a supervisor, there can be no more than 1 passenger under 21-years-of-age unless they are members of the immediate family.
- No other passengers under 21-years-of-age are allowed when driving without a supervisor if a family member under 21-years-of-age is a passenger.

To be issued a *Level Three Full Provisional License* an applicant must have had a *Level Two Limited Learner License* for at least 6 months with no convictions of moving violations, seat belt infractions, improper wireless use, or MIP violations within the preceding 6 months.

Provisions/Restrictions for Level Three Full Provisional License holders:

• All occupants must be properly restrained.

# IV. Public Policy Recommendations

#### COMPREHENSIVE AND THOROUGH INVESTIGATION OF CHILD DEATHS

According to Dr. Erik Mitchell, District Coroner and Board member, "Thorough investigation of child deaths is a mandate of the State Child Death Review Board. Such an investigation should include more than the cause of death and manner of death. An understanding of the mechanisms of death is of critical importance if we are to develop strategies for the prevention of future deaths. For example, in a single car crash the investigation should include sufficient examination of the vehicle and environment to exclude or to describe mechanical and physical factors that caused or increased the probability of the crash. Also, the examination should include investigation of potential medical factors - toxicology and previously undiagnosed physical infirmities or illnesses - that could play a role in causing the crash. While a single car crash looks deceptively simple on superficial examination, there can be factors that affect the crash, or the outcome of injuries, where only a detailed examination of the event and of the decedent will permit a complete understanding of how and why this death occurred."

"The State Child Death Review Board has long recognized the limitations of resources that inhibit the extent of death investigations. Consequently, in 2002, the SCDRB sought and obtained a change in statute. Counties can now obtain a refund of reasonable expenses for child autopsies from the District Coroner Fund in cases that fall under guidelines set by the SCDRB. In other words, if an autopsy is performed for a child where there is reason to believe that unnatural mechanisms are at play (accident, suicide, homicide), the County can request and receive reimbursement for reasonable autopsy costs from the District Coroner's Fund. It is hoped that the availability of funds will encourage the inclusion of autopsies in all potentially unnatural child deaths."

The State Child Death Review Board would be incapable of performing its function without the dedicated efforts of law enforcement officers and county and district coroners. While the investigation of child deaths is a difficult task, only thorough examinations of these incidents allow the Board to gather accurate information. Without that foundation, the Board cannot make recommendations for ways to prevent the deaths of Kansas children.

#### ENHANCE ATV USAGE LAWS

ATV use in Kansas has increased, and with it, the ATV fatality rate. Since 1994, Kansas has lost 36 children in ATV-related crashes. Speed, inexperience, size, and lack of strength to safely control an ATV are major risk factors. In 2006, two separate ATV-related incidents involved Kansas youth's who died when the ATV they were navigating rolled over, throwing them to the ground.

Each year, in the United States, more than 100 children ages 17-and-under are killed and approximately 45,000 are injured on ATV's, which can reach speeds of 75 mph. Nationwide, children under the age of 16 account for 1/3 of both deaths and accidents. Compared to a bicycle crash, an ATV crash is six times as likely to send a child to the hospital, and 12 times as likely to kill a child. In addition, a child under age 16 riding an ATV is four times as likely to be seriously injured as a rider over age 16.

To prevent such incidents, the Board makes the following recommendations:

- No child under the age of 12 be permitted to operate an ATV of any size.
- All riders are required to wear a helmet.
- ATV use on highways, byways, city and county roadways, or right-of-ways be prohibited; except for stipulations as stated in K.S.A. 8-15, 100 (b).
- Passengers may not be carried except for agricultural purposes and except for ATV's designed to carry more than one person.
- All ATV's shall be registered and titled.

# IV. Public Policy Recommendations

#### ENACT LAWS PROHIBITING CHILDREN LEFT UNATTENDED IN VEHICLES

The Board firmly holds the position that there is no substitute for supervision, especially when it involves children and vehicles. Board finds itself reviewing cases of children who were left unattended in a vehicle, which resulted in their untimely death. Most often the deaths take place within minutes of the child being left alone, and usually occur from one of following:

- Hypothermia.
- Hyperthermia.
- Strangulation from a car seat belt.
- Strangulation from an automatic power window.
- A motor vehicle crash from the child putting the vehicle in gear.

Another significant risk to the child's health and safety when left unattended in a vehicle is a car-jacking or theft. Unlocked and running vehicles are at a high risk of being stolen for joy rides or for use in the commission of a crime. If a child is in the vehicle when the thief takes control, the outcome could be tragic. Unattended children could also become locked in the trunk compartment and suffocate, while a frantic parent searches the surrounding area for the missing child. Kids and Cars reports that between the years of 2001 and 2006, 1,065 children have died as a result of being left alone in a vehicle.

It is the Board's belief that the Legislature should enact a law that encompasses the following:

- No child under the age of 5 may be left in a motor vehicle unless they are accompanied by another person 13-years-of-age or older.
- No child under the age of 5 shall be left unsupervised or unattended in a vehicle, unless the vehicle is being loaded or unloaded and an adult is in the immediate vicinity.
- A fine of \$25 should be imposed for the first conviction, and subsequent convictions that occur
  within three years of the first violation should result in a minimum fine of \$250, not to exceed
  \$500.

#### **FARM-RELATED ISSUES**

Kansas has a rich farming history, and Kansas farmers are dependent on their farm help, which are often young teens. The Board recognizes this invaluable relationship while also recognizing the dangers related to farming. It is with this understanding that the Board proposes changes to Kansas law, which will reduce the number of farm-related child fatalities.

To obtain a Farm Permit for driving purposes in Kansas an applicant must be at least 14-years-of-age, have formal government issued proof that the person either lives on or works for a farm, have a signed affidavit by either a parent or guardian stating that the applicant has completed at least 50 hours of adult supervised driving with at least 10 of those hours being at night, and have passed a written and vision test. When using a farm permit a person is restricted to driving to or from, or in connection with, any farm-related work and may not transport non-sibling minor passengers. Unfortunately, the Board has reviewed several cases since its inception that indicate the farm permit requirements were not followed and contributed to a fatality.

The Board would like to see the following changes made to the Kansas Farm Permit law:

- All drivers are required to pass a formal driver's education course.
- In lieu of the signed affidavit of employment, a farm permit holder is required to provide a government issued 1099 or W2 form.
- Driving to and from school be prohibited.
- Strict adherence to, and enforcement of, Kansas law by law enforcement officials.

#### **METHODOLOGY**

#### Kansas Child Death Review Board 2006 Data

The SCDRB meets monthly to examine the circumstances surrounding the deaths of all Kansas children aged birth through 17 years, as well as children who are not residents but pass away in the State. As a rule, the SCDRB is alerted of a death when they receive birth/death certificates from the Kansas Department of Health and Environment (KDHE) Vital Statistics Department. On a monthly basis, KDHE provides the SCDRB with a listing of children whose deaths have been reported for the previous month. The Vital Statistics Department also has a close working relationship with other state vital statistics departments and receives death certificates from those departments when a Kansas child passes away in another state.

When a death certificate is received, the SCDRB staff creates a file. Death and birth certificates, as well as the coroner information, are used to identify additional information necessary for a comprehensive review. Before a case can be reviewed, all coroner information, e.g. coroner report form, autopsy report, and the report of death, must be in the file. In addition, all pertinent records which could provide a complete picture of the circumstances that led to the child's demise must accompany the file. Such records may include: medical reports, law enforcement reports, scene photographs, social history notes, SRS records, obituaries, etc. 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 enters case information into a secured web-based database. The on-line database provides a relatively easy way to maintain information. However, transfers of information between outdated software to the new system in 2000 have created the possibility for slight number adjustments when reviewing data from past years.

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. This would include recommendations for follow-up investigation.

Any questions about this report or about the work of the SCDRB should be directed to Angela Nordhus, Executive Director, at (785) 296-7970 or by e-mail at angela.nordhus@ksag.org.

#### **GOALS & 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, 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 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. As a result 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, KDHE, 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 in to conformity with fatality review boards in other states, so that future trends and patterns can be compared.

### **Child Deaths By County of Residence in 2006**

County	Total Population	Total Deaths	Natural - Except SIDS	Unintentional Injury - MVC	Unintentional Injury	Natural - SIDS	Undetermined	Homicide	Suicide
Allen	14,385	3	1	1	0	0	1	0	0
Anderson	8,110	2	2	0	0	0	0	0	0
Atchison	16,774 4 2		1	0	0 1		0	0	
Barber	5,307	0	0	0	0	0	0	0	0
Barton	28,205	6	5	0	1	0	0	0	0
Bourbon	15,379	5	3	1	1	0	0	0	0
Brown	10,724	3	1	1	0	1	0	0	0
Butler	59,482	6	3	2	1	0	0	0	0
Chase	3,030	1	1	0	0	0	0	0	0
Chautaugua	4,359	1	1	0	0	0	0	0	0
Cherokee	22,605	1	1	0	0	0	0	0	0
Cheyenne	3,165	0	0	0	0	0	0	0	0
Clark	2,390	0	0	0	0	0	0	0	0
Clay	8,822	1	1	0	0	0	0	0	0
Cloud	10,268	0	0	0	0	0	0	0	0
Coffey	8,865	0	0	0	0	0	0	0	0
Comanche	1,967	0	0	0	0	0	0	0	0
Cowley	36,291	5	2	0	0	2	1	0	0
Crawford	38,242	11	5	2	1	2	1	0	0
Decatur	3,472	0	0	0	0	0	0	0	0
Dickinson	19,344	3	1	1	0	0	1	0	0
Doniphan	8,249	0	0	0	0	0	0	0	0
Douglas	99,962	15	6	1	5	1	0	0	2
Edwards	3,449	0	0	0	0	0	0	0	0
Elk	3,261	0	0	0	0	0	0	0	0
Ellis	27,507	4	3	0	0	0	1	0	0
Ellsworth	6,525	0	0	0	0	0	0	0	0
Finney	40,523	6	3	1	2	0	0	0	0
Ford	32,458	7	5	2	0	0	0	0	0
Franklin	24,784	7	5	1	0	1	0	0	0
Geary	27,947	8	6	0	0	0	2	0	0
Gove	3,068	0	0	0	0	0	0	0	0
Graham	2,946	0	0	0	0	0	0	0	0
Grant	7,909	3	2	0	1	0	0	0	0
Gray	5,904	1	0	0	0	1	0	0	0
Greeley	1,534	0	0	0	0	0	0	0	0
Greenwood	7,673	0	0	0	0	0	0	0	0
Hamilton	2,670	1	1	0	0	0	0	0	0
Harper	6,536	1	1	0	0	0	0	0	0
Harvey	32,869	7	2	1	1	3	0	0	0
Haskell	4,307	1	1	0	0	0	0	0	0
Hodgeman	2,085	0	0	0	0	0	0	0	0
Jackson	12,657	1	1	0	0	0	0	0	0
Jefferson	18,426	3	1	1	0	0	0	0	1
Jewell	3,791	1	1	0	0	0	0	0	0
Johnson	451,086	64	48	4	7	3	1	0	1

### Child Deaths by County of Residence in 2006, Continued

								1		
County	Total Population	Total Deaths	Natural - Except SIDS	Unintentional Injury - MVC	Unintentional Injury	Natural - SIDS	Undetermined	Homicide	Suicide	
Kearny	4,531	0	0	0	0	0	0	0	0	
Kingman	8,673	1	0	1	0	0	0	0	0	
Kiowa	3,278 0		0	0	0	0	0	0	0	
Labette	22,835	4	1	0	2	1	0	0	0	
Lane	2,155	0	0	0	0	0	0			
Leavenworth	68,691	8	5	0	0	2	1	0	0	
Lincoln	3,578	0	0	0	0	0	0	0	0	
Linn	9,570	2	2	0	0	0	0	0	0	
Logan	3,046	0	0	0	0	0	0	0	0	
Lyon	35,935	3	2	0	0	0	1	0	0	
Marion	29,554	2	2	0	0	0	0	0	0	
Marshall	13,361	3	1	0	2	0	0	0	0	
McPherson	10,965	7	3	0	1	2	0	0	1	
Meade	4,631	1	0	1	0	0	0	0	0	
Miami	28,351	2	0	0	0	1	0	1	0	
Mitchell	6,932	0	0	0	0	0	0	0	0	
Montgomery	36,252	8	4	2	1	1	0	0	0	
Morris	6,104	2	1	0	1	0	0	0	0	
Morton	3,496	0	0	0	0	0	0	0	0	
Nemaha	10,717	2	2	0	0	0	0	0	0	
Neosho	16,997	3	3	0	0	0	0	0	0	
Ness	3,454	0	0	0	0	0	0	0	0	
Norton	5,953	0	0	0	0	0	0	0	0	
Osage	16,712	0	0	0	0	0	0	0	0	
Osborne	4,452	0	0	0	0	0	0	0	0	
Ottawa	6,163	1	1	0	0	0	0	0	0	
Pawnee	7,233	1	1	0	0	0	0	0	0	
Phillips	6,001	0	0	0	0	0	0	0	0	
Pottawatomie	18,209	0	0	0	0	0	0	0	0	
Pratt	9,647	0	0	0	0	0	0	0	0	
Rawlins	2,966	0	0	0	0	0	0	0	0	
Reno	64,790	11	6	0	1	4	0	0	0	
Republic	5,835	1	1	0	0	0	0	0	0	
Rice	10,761	0	0	0	0	0	0	0	0	
Riley	62,843	4	2	0	0	2	0	0	0	
Rooks	5,685	5	1	2	1	0	1	0	0	
Rush	3,551	0	0	0	0	0	0	0	0	
Russell	7,370	0	0	0	0	0	0	0	0	
Saline	53,597	11	5	1	1	2	1	0	1	
Scott	5,120	0	0	0	0	0	0	0	0	
Sedgwick	452,869	94	63	8	7	6	2	4	4	
Seward	22,510	11	7	2	0	1	0	0	1	
Shawnee	169,871	32	14	4	2	5	2	3	2	
Sheridan	2,813	2	2	0	0	0	0	0	0	
Sherman	6,760	1	1	0	0	0	0	0	0	
SHETHIAN	0,/00	1	1	U	U	U	U		U	

### Child Deaths by County of Residence in 2006, Continued

County	Total Population	Total Deaths	Natural - Except SIDS	Unintentional Injury - MVC	Unintentional Injury	Natural - SIDS	Undetermined	Homicide	Suicide
Smith	4,536	1	0	1	0	0	0	0	0
Stafford	4,789	1	1	0	0	0	0	0	0
Stanton	2,406	1	0	0	0	0	0	0	1
Stevens	5,463	2	1	1	0	0	0	0	0
Sumner	25,946	6	3	1	0	0	2	0	0
Thomas	8,180	2	2	0	0	0	0	0	0
Trego	3,319	1	0	0	0	0	0	0	1
Wabaunsee	6,885	0	0	0	0	0	0	0	0
Wallace	1,749	0	0	0	0	0	0	0	0
Washington	6,483	1	1	0	0	0	0	0	0
Wichita	2,531	0	0	0	0	0	0	0	0
Wilson	10,332	2	1	0	0	1	0	0	0
Woodson	3,788	0	0	0	0	0	0	0	0
Wyandotte	157,882	36	19	1	5	5	0	5	1
Out of State		28	18	3	2	1	1	2	1
Total	2,688,418	485	291	48	46	49	19	15	17

### **Kansas Counties**

Chey er	.   ```	awlins RA	Decatur DC	Norton NT	Phillips PL	Smith SM	Jewell JW	Republic	Washingto WS	Marsh		BR	n Doniph DP chison	See See	
Sherm SH	"	nomas TH	Sheridan SD	Graham	Rooks RO	Osborne OB	Mitchell MC	Cloud CD Ottawa	Clay F	Υ	watomie PT	ckson	AT Le	akenwort	th yandotte
Wallace WA	Log	gan G	Gove GO	Trego TR	Ellis EL	Russell <b>RS</b>	Lincoln  LC  Ellsworth	OT Saline	Dickinson	Car I	abaunsee		Douglæ	′ \~ <u>-</u>	andotte
Greeley GL	Wichita WH	Scott SC	Lane	Ness NS	Rush RH	Barton BT	<b>EW</b> Rice	SA McPherson	Warion	MR	Lyon LY	OS	Franklin FR Andersor	Miami MI Linn	
Hamilton	Kearny KE	Finne,	, Gray	Hodgeman HG Ford	Pawnee PN Edwards ED	St aff ord	RC Reno RIN	Han Hy	v´ l	CS utler	reenwood	CF Woodsor WO	AN Allen AL	LN_Bourbon	
Stanton ST	Grant GT	Haskell HS	GY	FO	Kiowa KW	Pratt PR	Kingmar KM	Sed gr		BU	Elk EK	Wilson WL	Nanaha	Crawford	
Morton MT	Stevens SV	Sew and SW	Meade ME	Clark CA	Comanche CM	Barber <b>BA</b>	Harper <b>HP</b>	Surrr		OL.		ntgom MG	Labette ary LB	Cherokee CK	

### **RESOURCES**

- 1) "Suicide Trends Among Youths and Young Adults Aged 10--24 Years --- United States, 1990—2004." Morbidity and Mortality Weekly Report, Sept. 2007. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5635a2.htm
- Traffic Safety Facts, 2005 Data. National Highway Traffic Safety Administration. <a href="http://www-nrd.nhtsa.dot.gov/Pubs/810628.PDF">http://www-nrd.nhtsa.dot.gov/Pubs/810628.PDF</a>

   http://www-nrd.nhtsa.dot.gov/Pubs/810623.PDF
- 3) "Graduated Driver Licensing Reduces Fatal Crashes by 11 Percent". Johns Hopkins Bloomberg School of Public Health's Center for Injury Research and Policy and the Johns Hopkins School of Medicine. <a href="http://www.jhsph.edu/InjuryCenter/">http://www.jhsph.edu/InjuryCenter/</a>
- 4) Traffic Safety Facts, Laws. U.S. Department of Transportation. http://www.nhtsa.dot.gov/people/injury/TSFLaws/PDFs/810727W.pdf
- 5) State and County Quickfacts. U.S. Census Bureau. http://quickfacts.census.gov/qfd/states/20000.html
- 6) The U.S. Fire Problem. "U.S. Home Structure Fires." National Fire Protection Association. <a href="http://www.nfpa.org">http://www.nfpa.org</a>.
- "SIDS Prevention Points." American Academy of Pediatrics Policy Statement, Nov. 2005. http://www.aap.org/
- "Safe Sleep for Your Baby Around the Clock: Birth to 12 Months." National Sudden Infant Death Resource Center. <a href="http://www.sidscenter.org/SafeSleep/AroundtheClock.html">http://www.sidscenter.org/SafeSleep/AroundtheClock.html</a>
- Child Passenger Safety: Fact Sheet. CDC. <a href="http://www.cdc.gov/ncipc/factsheets/childpas.htm">http://www.cdc.gov/ncipc/factsheets/childpas.htm</a>
- 2005 Kansas Accident Facts. Kansas Department of Transportation. http://www.ksdot.org:9080/burtransplan/prodinfo/accstat/2005factsbook.pdf
- "Drowning is a Leading Cause of Death for Children." Safe Kids USA. <a href="http://www.usa.safekids.org/tier3">http://www.usa.safekids.org/tier3</a> cd.cfm?folder id=183&content item id=18330
- "Traffic Safety Facts". <a href="http://www.nhtsa.dot.gov/people/injury/TSFLaws/PDFs/810727W.pdf">http://www.nhtsa.dot.gov/people/injury/TSFLaws/PDFs/810727W.pdf</a>

Kids and Cars statistics, <a href="http://www.kidsandcars.org/">http://www.kidsandcars.org/</a>.

Annual Estimates of the Population by Sex and Age for Kansas: April 1, 2000 to July 1, 2007. Population Division, U.S. Census Burearu, <a href="http://www.census.gov/popest/states/asrh/SC-EST2007-02.html">http://www.census.gov/popest/states/asrh/SC-EST2007-02.html</a>

State Child Death Review Board 120 SW 10th Avenue, 2<sup>nd</sup> Floor Topeka, KS 66612-1597 Office: (785) 296-2215

Fax: (785) 291-3875



The cost of this publication was paid for through the Federal Children's

Justice Act administered by the

Kansas Department of Social Rehabilitation Services.