STATE OF KANSAS

# STATE CHILD DEATH REVIEW BOARD

## Annual Report
## 1998 Data

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OFFICE OF THE ATTORNEY GENERAL

PUBLISHED APRIL 2001


State of Kansas

Office of the Attorney General

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April 2001

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 five-year period from 1994 through 1998, 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

# Kansas State Child Death Review Board

The State Child Death Review Board (SCDRB) comprehensively reviewed 526 child deaths that occurred during calendar year 1998. 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.

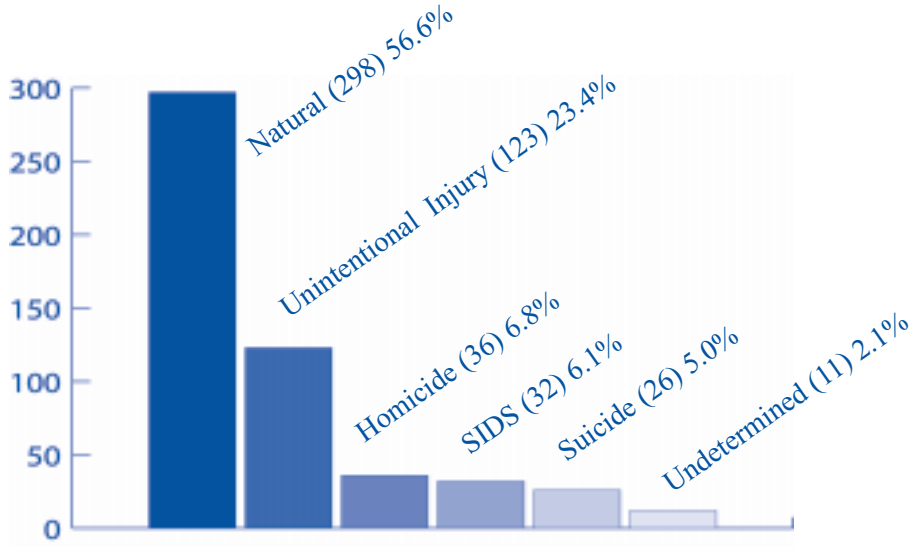
Of the 526 deaths, natural and unintentional injury deaths continue to be the two largest categories of death of Kansas children. The largest group of children, 56.6 percent, died of natural causes, not including SIDS, in 1998.

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 23.4 percent of the children who died in 1998. 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.

According to the SCDRB's review, homicide was the third largest manner of death. In 1998, 36 homicide deaths were reported. SIDS claimed the lives of 32 children. Twenty-six children committed suicide. Finally, after a comprehensive review of all available records, the manner of death for 11 children could not be determined by the SCDRB.

All Manners
of Death in 1998
N=526




According to the U.S. Census Bureau's 1998 population estimates, females made up 48.6 percent of the 697,618 children in Kansas under age 18, and males accounted for 51.4 percent. However, of the 526 child deaths reviewed by the SCDRB, 40.1 percent of the children who died were female and 59.9 percent were male.

## EXECUTIVE SUMMARY 1998 DATA

# Kansas State Child Death Review Board

In 1998, whites composed 90 percent of the Kansas population under the age of 18, with the remaining 10 percent of the population consisting of blacks, Asian/Pacific Islanders, and American Indian/Alaskan Natives. The SCDRB's data from 1998 revealed that 82.3 percent of the children who died were white, 13.9 percent were black, 1.3 percent were Asian Pacific Islander, 1.1 percent were American Indian/Alaskan Native, and the remaining .99 percent were categorized as other or unknown.

Of the 526 deaths reviewed by the SCDRB, neonates, less than 29 days of age, accounted for 181 deaths. In 1998, 97 postneonates, infants ranging from 30 days old to one year old, died. The deaths reviewed included 62 children from one to four years old. Thirty-eight children from five to nine years old died. Deaths were recorded for 54 children from 10 to 14 years old, while 94 adolescents from 15 to 17 years of age died in 1998.

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 149 of the unintentional injury deaths, homicides, and suicides occurring in 1998 alone may have been prevented.

Recommendations for policy makers, the general public, caregivers, schools and educators, health care and mental health professionals, law enforcement, and coroners are included in this report. The public policy recommendations are highlighted here.

1. ENHANCE CHILD PASSENGER SAFETY LAWS AND PRIMARY SEATBELT ENFORCEMENT. Expand the law to require youth 18 and younger, seated anywhere in the vehicle, to be properly restrained in a seat belt. Increase fines for violations of the child passenger safety and safety belt laws.
2. LIMIT CHILDREN'S ACCESS TO FIREARMS. Allow adults to be held criminally liable for failure to either store firearms in places inaccessible to children, or to use safety lock devices.
3. EXPAND OUTREACH AND INCREASE FUNDING FOR HOME VISITATION PROGRAMS TO HELP PREVENT NUMEROUS RISK FACTORS ASSOCIATED WITH CHILD FATALITIES. Continue funding and expand education efforts for HealthWave, a program that provides health insurance at little or no cost to children in families with limited incomes.

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

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

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Executive Director
State Child Death
Review Board

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

## EXECUTIVE SUMMARY 1998 DATA

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# 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, 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 in that it is not duplicated by any other agency in Kansas.

The SCDRB would like to acknowledge the significant contributions of former board members Timothy Henderson and Timothy Chambers. Mr. Henderson, a former SRS attorney, served as the appointee of the Commissioner of SRS. He left the board when he was elected District Court Judge for District 18 in Wichita. Mr. Chambers served on the SCDRB as the appointee of the Kansas Association of County and District Attorneys. He was formerly the Reno County District Attorney and left the board when he was elected District Court Judge for District 27 in Hutchinson. The SCDRB is grateful for their commitment of time, energy, and talent.

The SCDRB also expresses appreciation to Carol Luttjohann who was employed as a research analyst. Carol worked diligently to compile information and help prepare data for this report. A special thanks, also, to Don Owen of KDHE for his help and expertise. He has given his time and talent to help with the database management for 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. SRS provides the Children's Justice Act Grant and KDHE provides the Maternal and Child Health Block Grant and the Preventive and Health Services Block Grant.

# SCDRB Members

**Attorney General appointee**

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

**Director of Kansas Bureau of Investigation appointee**

Don Winsor
KBI Senior Special Agent, Wamego

**Secretary of Social and Rehabilitation Services appointee**

Roberta Sue McKenna, J.D.
Department of Social and Rehabilitation Services, Area Attorney, 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**

Herbert Doubek, M.D. (Coroner member)
District Coroner, Belleville

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

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**

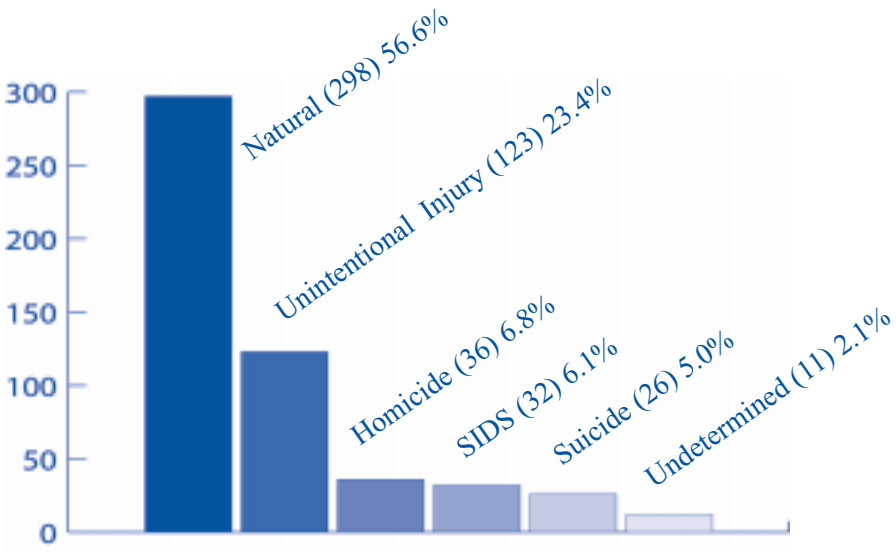
Kevin Graham, J.D.
Assistant Attorney General, Topeka

# 1998 Overview

The SCDRB comprehensively reviewed 526 child deaths that occurred during calendar year 1998. 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.

The chart below illustrates the number of deaths in each of the six manners of death reviewed by the SCDRB in 1998. 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 1998
N=526




Natural and unintentional injury deaths continue to make up the two largest categories of death of Kansas children. The largest group of children, 56.6 percent, died of natural causes, not including SIDS.

The second largest manner of death, unintentional injuries, claimed the lives of 23.4 percent of the children who died in 1998. 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.

According to the SCDRB's review, homicide was the third largest manner of death. In 1998, 36 homicide deaths were reported.

SIDS claimed the lives of 32 children in 1998, and 26 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.

# 1998 Overview

The following figures compare the demographics of deaths of Kansas children with the Kansas population who are under age 18. According to the U.S. Census Bureau's 1998 population estimates, Kansas has 697,618 children under age 18. Females account for 48.6 percent of this population, and males account for 51.4 percent. Of the 526 child deaths reviewed by SCDRB, 40.1 percent were females, and 59.9 percent were males.

Figure 2:
Kansas Population by Sex. Ages Birth Through 17. Based on 1998 U.S. Census Estimate. N=697,618

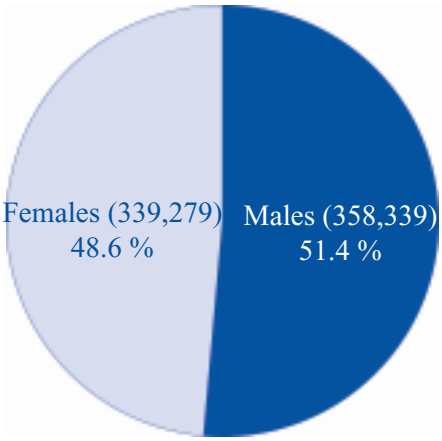
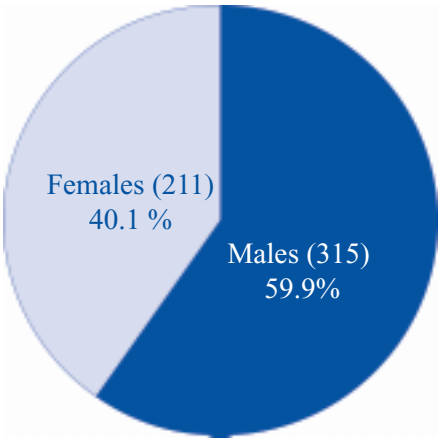


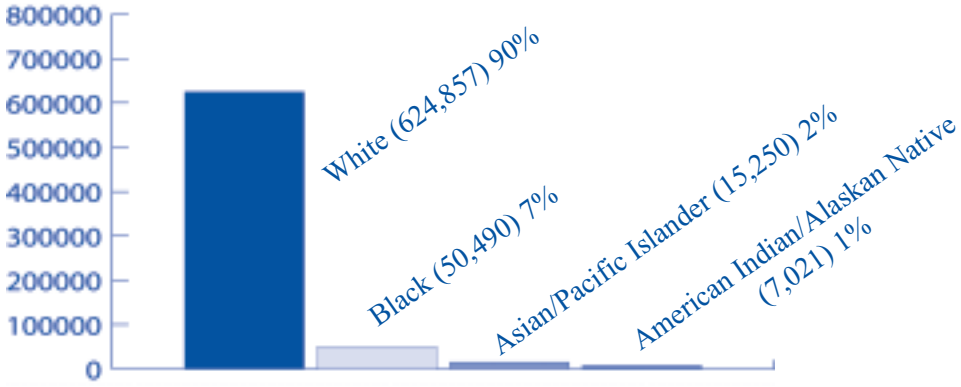

Figure 3:
Child Deaths in 1998 by Sex. Ages Birth Through 17. N=526



# 1998 Overview

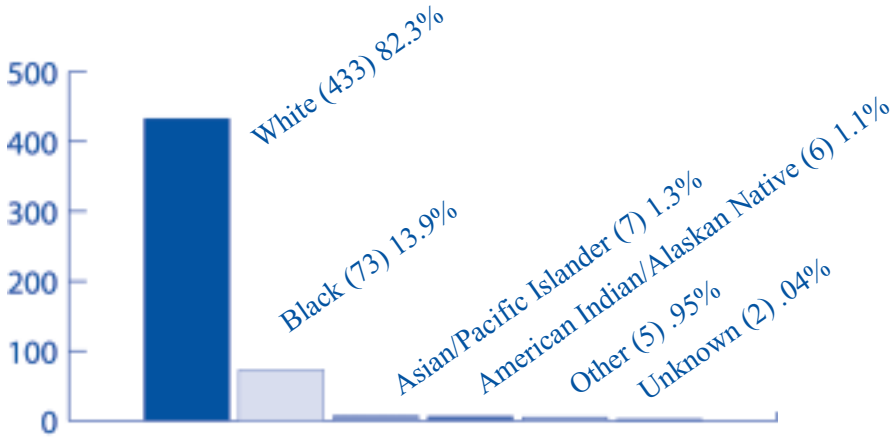
In 1998, whites composed 90 percent of the Kansas population under the age of 18. The remaining 10 percent of the population consisted of blacks, Asian/Pacific Islanders, and American Indian/Alaskan Natives.

Figure 4: Kansas Population by Race. Ages Birth Through 17. Based on 1998 U.S. Census Estimate. N=697,618




The SCDRB's data from 1998 revealed that 82.3 percent of children who died were white, 13.9 percent were black, 1.3 percent were Asian Pacific Islander, 1.1 percent were American Indian/Alaskan Native, and the remaining .99 percent were categorized as other or unknown.

Figure 5: Child Deaths in 1998 by Race. Ages Birth Through 17. N=526



# 1998 Overview

The figure below shows the 526 child deaths in 1998 by age group. Neonates, less than 29 days of age, accounted for 181 deaths. In 1998, 97 postneonates, 30 days old up to one year old, died. The deaths reviewed included 62 children from one to four years of age. Thirty-eight children from five to nine years old died. Deaths were recorded for 54 children from 10 to 14 years old, while 94 adolescents from 15 to 17 years of age died in 1998.

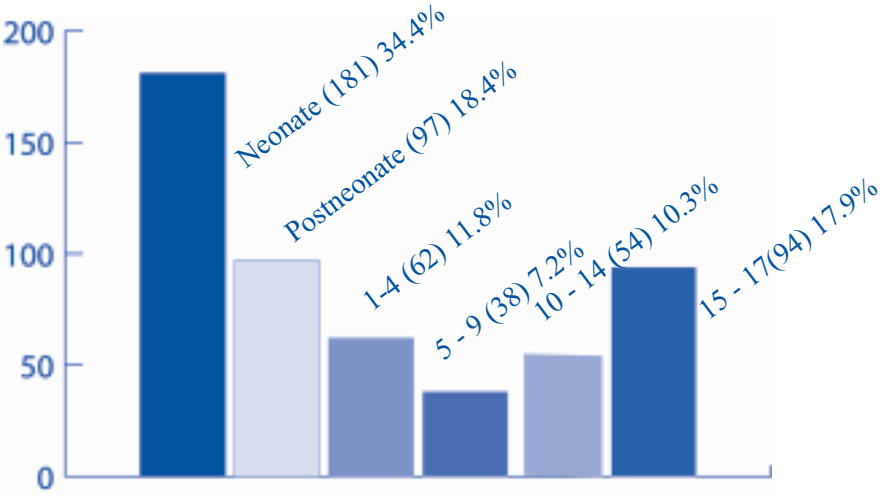



Figure 6:
Child Deaths by Age Group in 1998. Ages Birth Through 17. N=526

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 149 of the unintentional injury deaths, homicides, and suicides may have been prevented with reasonable individual or community action.

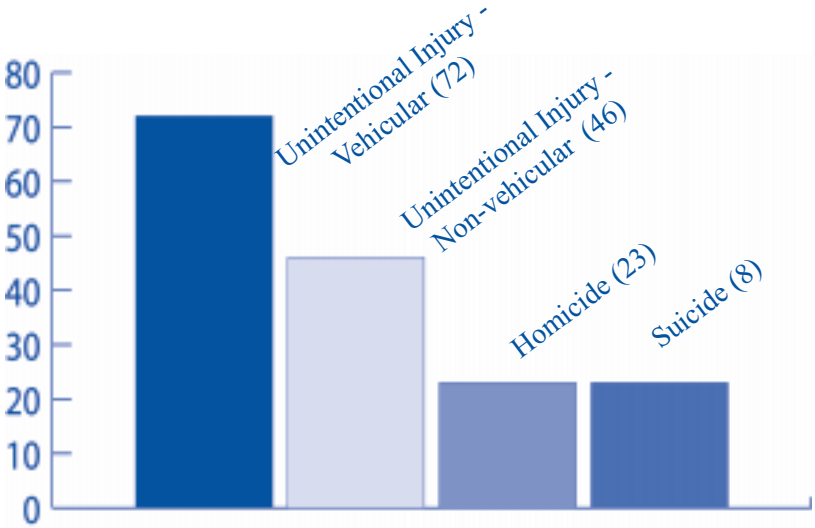



Figure 7:
Preventable Child Deaths by Selected Manners in 1998. Ages Birth Through 17. N=149

# Cumulative Data 1994-1998

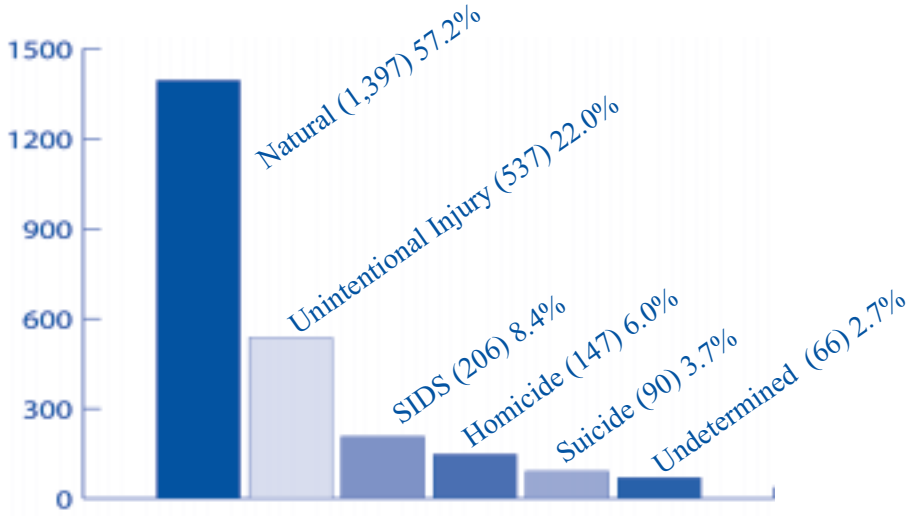
This section contains a cumulative study of calendar years 1994 through 1998. The numbers of children who died each year, by manner of death, are as follows:

Figure 8:
Child Deaths by Manner and Year from 1994 - 1998. Ages Birth Through 17. N=2,443

| | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|---|---|---|---|---|---|---|
| Natural | 264 | 226 | 328 | 281 | 298 | 1,397 |
| Unintentional Injury | 98 | 84 | 125 | 107 | 123 | 537 |
| SIDS | 49 | 44 | 35 | 46 | 32 | 206 |
| Homicide | 33 | 25 | 31 | 22 | 36 | 147 |
| Suicide | 15 | 12 | 16 | 21 | 26 | 90 |
| Undetermined | 5 | 13 | 20 | 17 | 11 | 66 |
| TOTAL | 464 | 404 | 555 | 494 | 526 | 2,443 |

In total, 2,443 child fatalities were reviewed by the SCDRB in this five-year period. Natural causes claimed the lives of 1,397 (57.2 percent) children. Unintentional injuries claimed the lives of 537 children (334 vehicular and 203 non-vehicular deaths); 206 infants died of SIDS; 147 deaths were homicides; 90 deaths were suicides; and 66 deaths were classified as undetermined.

Figure 9:
Child Deaths by Manner from 1994 - 1998. Ages Birth Through 17. N=2,443



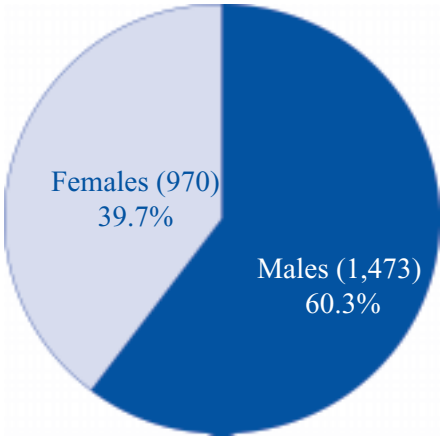
# Cumulative Data 1994-1998

During the period from 1994 through 1998, 1,473 males and 970 females under the age of 18 died.

Figure 10:
Child Deaths by Sex and Year from 1994 - 1998. Ages Birth Through 17. N=2,443

| | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|---|---|---|---|---|---|---|
| Males | 274 | 246 | 334 | 304 | 315 | 1,473 |
| Females | 190 | 158 | 221 | 190 | 211 | 970 |
| TOTAL | 464 | 404 | 555 | 494 | 526 | 2,443 |

Figure 11:
Child Deaths by Sex from 1994 - 1998. Ages Birth Through 17. N=2,443




The figure below illustrates child deaths by age group during the five-year period. Children less than one year of age accounted for 54.8 percent of the deaths reviewed by the SCDRB. In the period from 1994 through 1998, 283 one to four year olds died; along with 174 five to nine year olds; 237 10 to 14 year olds; and 411 15 to 17 year olds.

Figure 12:
Child Deaths by Age Group and Year from 1994 - 1998. Ages Birth Through 17. N=2,443

| | 1994 | 1995 | 1996 | 1997 | 1998 | TOTAL |
|---|---|---|---|---|---|---|
| Neonate | 153 | 136 | 205 | 178 | 181 | 853 |
| Postneonate | 108 | 83 | 96 | 101 | 97 | 485 |
| 1-4 | 47 | 51 | 63 | 60 | 62 | 283 |
| 5-9 | 31 | 31 | 40 | 34 | 38 | 174 |
| 10-14 | 40 | 40 | 61 | 42 | 54 | 237 |
| 15-17 | 85 | 63 | 90 | 79 | 94 | 411 |
| TOTAL | 464 | 404 | 555 | 494 | 526 | 2,443 |

# Cumulative Data 1994-1998

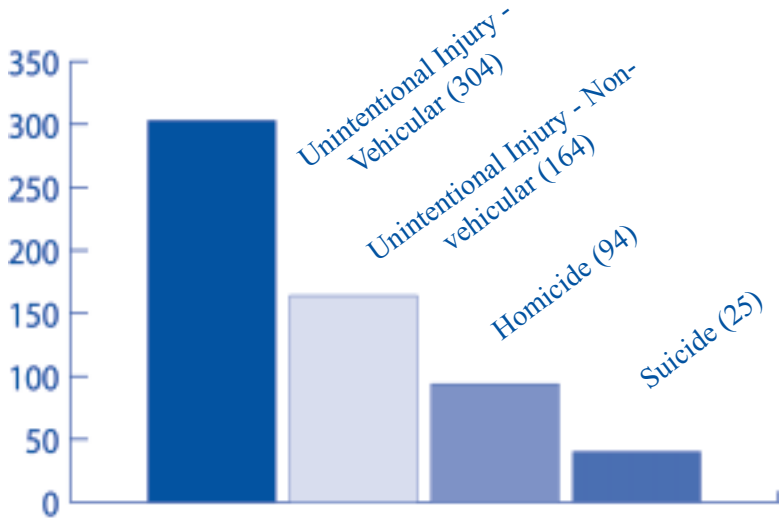
The figure below compares the death rates of Kansas children to the population by manner and year. The cumulative rate for the five-year period from 1994 through 1998 for natural deaths was 40.42; unintentional injuries - non-vehicular 5.85; unintentional injuries - vehicular 9.70; homicide 4.26; SIDS 1.13 (per 1,000); suicide 5.18; and undetermined 1.91.

Figure 13: Child Death Rates by Manner from 1994 - 1998. Ages Birth Through 17.

| | 1994 | 1995 | 1996 | 1997 | 1998 | CUMULATIVE RATE |
|---|---|---|---|---|---|---|
| **Natural** *per 100,000 (Birth-17)* | 38.40 | 32.92 | 47.54 | 40.54 | 42.72 | 40.42 |
| **Unintentional Injury-Non-vehicular** per 100,00 (Birth-17) | 5.38 | 4.08 | 5.97 | 6.78 | 7.02 | 5.85 |
| **Unintentional Injury-Vehicular** *per 100,000 (Birth-17)* | 8.87 | 8.16 | 12.22 | 8.66 | 10.61 | 9.70 |
| **Homicide** *per 100,000 (Birth-17)* | 4.80 | 3.64 | 4.51 | 3.17 | 5.16 | 4.26 |
| **SIDS** *per 1,000 (Under Age 1)* | 1.35 | 1.22 | .98 | 1.26 | 0.86 | 1.13 |
| **Suicide** *per 100,000 (Ages 9-17)* | 4.26 | 4.32 | 4.46 | 5.78 | 7.10 | 5.18 |
| **Undetermined** *per 100,000 (Birth-17)* | .73 | 1.89 | 2.91 | 2.45 | 1.58 | 1.91 |

During the five-year period from 1994 through 1998, the SCDRB concluded that 587 unintentional injuries and violence-related deaths may have been prevented. The SCDRB used the information gathered during this five-year period to develop prevention points and recommendations for the general public and caregivers, policy makers, schools and educators, health care and mental health professionals, law enforcement, and coroners.

Figure 14: Preventable Child Deaths by Selected Manners from 1994 - 1998. Ages Birth Through 17. N=587



# 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. The guiding principle of the SCDRB 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.

The prevention issues discussed in this section include statistics collected by the SCDRB in the five-year period from 1994 through 1998. These issues include:

- Inadequate supervision was identified by the SCDRB as a contributing factor in 71 child deaths.

- Fifty-seven children died in 47 house fires. In those 47 fires, 23 homes were not equipped with working smoke detectors. Children who were left unsupervised with matches, lighters, or candles started 12 of the fires.

- Drowning claimed the lives of 59 children. Adequate supervision and use of personal floatation devices may have prevented 55 of these deaths.

- If seatbelts or child safety seats had been used, 197 motor vehicle fatalities may have been prevented. Among 15 through 17 year olds, the ages when most teenagers begin driving, 146 teens died in car crashes and 121 (82.8 percent) of them were not restrained.

- Teenage drivers, ages 15 through 17, accounted for 146 (56.4 percent) of the 259 motor vehicle fatalities (excluding pedestrians, bicycles, ATV's, etc.) reviewed by the SCDRB. This age group of youths also was unlikely to use seat belts. Forty-seven percent of all children not using safety restraints were ages 15 through 17.

- Ninety children committed suicide during this five-year period. Firearms were the most prevalent method of suicide and claimed the lives of 48 victims. Some of these deaths may have been prevented if lethal weapons had not been accessible.

- Twenty-seven children died while sleeping or in bed. Unsafe sleeping arrangements, such as co-sleeping, unsafe cribs, or being placed in an adult bed or waterbed, may have contributed to at least 20 of these deaths.

# Public Policy Recommendations

## ENHANCE CHILD PASSENGER SAFETY LAWS AND PRIMARY SEATBELT ENFORCEMENT:

Motor vehicle crashes remain the leading cause of unintentional injury-related deaths among children ages 17 and under. During the period from 1994 through 1998, the SCDRB found that 62.2 percent of unintentional injury-related deaths among children ages 17 and under were caused by motor vehicle crashes.

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. However, from 1994 to 1998, 203 children died in motor vehicle crashes because they were not properly restrained.

Furthermore, 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. Expanding the law to require youth 18 and younger, seated anywhere in the vehicle, to use proper safety restraint systems may have prevented these deaths. Consequences for non-compliance by parents of young children and by adolescents should be severe enough to change unsafe behaviors.

Only 17 states and the District of Columbia currently have primary (standard) enforcement laws which allow law enforcement officers to make a stop and issue a citation for a driver not wearing a seat belt. Kansas currently has secondary enforcement laws for unrestrained youth who are more than 14 years old. Secondary enforcement laws allow a driver to be cited for not wearing a seat belt only when stopped for another offense. 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. States with primary enforcement laws average a 15 percent increase in restraint usage rates as compared to states with secondary enforcement laws, as well as lower fatality and injury rates.

## LIMIT ACCESS TO FIREARMS:

According to the National SAFE KIDS Campaign, 17 states have enacted Child Access Prevention (CAP) laws which allow adults to be held criminally liable for failure to either store firearms in places inaccessible to children, or to use safety lock devices on guns. Kansas does not hold adults criminally liable in these situations.

Gunlocks and load indicators could prevent more than 30 percent of all unintentional firearm deaths, according to the National SAFE KIDS Campaign. Product design modifications can prevent unintentional firearm injury and death. Firearms are not federally regulated consumer products.

# Public Policy Recommendations

## INCREASE FUNDING AND PROMOTION OF HOME VISITATION PROGRAMS AND HEALTH INSURANCE PROGRAMS:

Expanded outreach and increased funding for effective home visitation programs may be helpful in reducing numerous risk factors associated with child fatalities. It is assumed that parents have the basic knowledge and resources to provide a healthy and safe environment for their children. However, many families lack adequate knowledge of parenting skills, have inadequate support systems, and have limited access to health care. Home visitation programs are a means of providing effective parental education, social support, and referrals for families. Home visitation is an integral part of comprehensive maternal and child health systems. A large body of research demonstrates that home visitation programs increase the use of prenatal care, increase birth weight, reduce pre-term labor, lower maternal risk factors such as smoking, reduce the number of unplanned pregnancies, decrease use of government assistance, and decrease verified incidents of child abuse and neglect.

Numerous home visitation programs are available to serve Kansas families. Kansas Healthy Start Home Visitor (HSHV) Services are available through the 105 county health departments for all pregnant women and families with newborns, with priority given to high-risk families. The Kansas Children's Service League's Healthy Families program targets new, first-time parents who are over-burdened by such risk factors as unemployment, lack of parenting skills, and a family history of child abuse and neglect.

Also of vital importance in reducing child fatalities is affordable access to health care. Often, families experience barriers when trying to access health care. Frequently, this is because they have no health insurance or inadequate coverage. The SCDRB strongly supports continued funding and expanded public education efforts for HealthWave. HealthWave is a program that provides insurance at little or no cost to Kansas children in families with limited incomes.

# General Public and Caregiver Recommendations

## TO PREVENT MOTOR VEHICLE FATALITIES:

Always use child safety seats and/or safety belts correctly when riding in a car or transporting children. Children age 12 and under should be properly restrained in the back seat of the car.

Read the child safety seat instruction manual and the car owner's manual for directions on proper safety seat installation.

If a child safety seat has been involved in a car crash, the seat should be replaced.

Call the National Highway Traffic Safety Administration's (NHTSA) Auto Safety Hotline, (888) 327-4236, to inquire about any recalls or safety notices on a child safety seat.

Infants, until at least one year old and at least 20 pounds, should be in rear-facing child safety seats. Never put a rear-facing infant or convertible safety seat in the front passenger seat of a vehicle with an active passenger air bag.

Children more than one year old and between 20 and 40 pounds should be restrained in forward-facing child safety seats. In addition, children ages four to eight (about 40 to 80 pounds) should ride in a car booster seat and be restrained with a lap/shoulder belt. On a small child, the adult lap belt rides up over the stomach and the shoulder belt cuts across the neck. In a crash, this could cause serious injuries or even death. The lap belt must fit low and snug on the hips. The shoulder belt must not be behind the child's back, under the child's arm, or across the child's face or neck.

Driver inexperience is a factor in numerous car crashes among teenagers. Teenagers may overestimate their driving ability and underestimate the risk involved with driving a car. Parents should be aware that teens are more likely to be involved in a car crash in the afternoon and evening hours and if passengers are in the car. Of critical importance is that teenagers use seat belts when driving or riding in a car.

## TO PREVENT FIRE-RELATED FATALITIES:

Close supervision of children and safe storage of matches and lighters are important. It is natural for children to be curious about using lighters and matches after seeing adults use them. Knowing this, parents should be watchful of their children and educate them on the dangers of fire. The Kansas SAFE KIDS Coalition recommends the following:

- Keep matches, gasoline, lighters, and all other flammable materials locked away and out of the reach of children.

- Install smoke detectors in the home on every level and by each sleeping area. Test them once a month, replace the batteries at least once a year, and replace the detectors every 10 years. The chances of dying in a residential fire are cut in half when a working smoke detector is present in the home.

- Plan and practice two escape routes out of each room in the home. Designate an outside meeting place.

# General Public and Caregiver Recommendations

- Make sure children know exactly what to do in case of a fire. Unprepared children will most likely attempt to hide from the fire.

- Teach children to crawl low under smoke. Two-thirds of all childhood fire-related deaths are from smoke inhalation caused by the toxic gases produced as fires develop and spread.

- Teach children not to re-enter a burning structure even for a toy or pet.

- Take children to the local fire station for a tour. Children will be able to see a firefighter in full firefighting gear and learn that the firefighter saves children.

## TO PREVENT SUICIDES:

Even if a person feels powerless, a number of steps can be taken to help teens who are going through difficult times. Individuals who are concerned about a teen's behavior should pay attention to the following tips:

- Make sure the child has someone he or she can confide in. If the teen feels a caregiver does not understand, have them talk to a more neutral person - a grandparent, minister, coach, school counselor, or the child's doctor.

- Don't attempt to minimize or discount what a child is going through. This will only reinforce the child's sense of hopelessness.

- Always express love, concern, and support.

- Don't postpone seeing a doctor. The child should be evaluated for depression so treatment can be started immediately.

- Express to the child that, with help, he or she will begin to feel better and the problems can be overcome.

According to the Centers for Disease Control and Prevention (CDC), nearly three out of every five (58 percent) suicides in 1997 were committed with a firearm. Firearms should always be stored properly. Caregivers with children who exhibit any risk factors for depression or suicide should consider removing all firearms from the home.

# General Public and Caregiver Recommendations

## TO PREVENT FIREARM FATALITIES:

Firearms must be kept from unsupervised children. Exposure to guns and access to loaded firearms increase the risk of unintentional firearm-related death or injury. All firearms and ammunition should be stored separately, unloaded, and locked in a secure place. Adults commonly have unrealistic perceptions of children's capabilities and behaviors that include:

- Misunderstanding a child's ability to gain access to and fire a gun.
- Misunderstanding a child's ability to distinguish between real and toy guns.
- Misunderstanding a child's ability to make good judgments about handling a gun.
- Misunderstanding a child's ability to consistently follow rules about gun safety.

Ask relatives, friends, and neighbors if they own a firearm and, if so, how it is stored. Do not allow a child to play in a home where guns are not properly stored.

The SCDRB strongly supports the efforts of local law enforcement agencies like the Derby and McPherson Police Departments which have participated in firearm trigger lock give-away programs.

The American Academy of Child & Adolescent Psychiatry (AACAP) states, "in home firearms are particularly dangerous during adolescence due to the potential for impulsive, unplanned use by teens resulting in either suicide, homicide, or other serious injuries." AACAP indicates that every day 10 American children, ages 18 and younger, are killed in handgun-related suicides, homicides, and accidents. The AACAP also reports that when adolescents use alcohol and also have access to a gun, the risk for violence increases greatly.

## TO PREVENT DROWNING FATALITIES:

Children should never be left alone when playing in or near water. Floatation devices should always be worn. The following prevention tips are provided by the National SAFE KIDS Campaign:

- Never leave a child unsupervised in or around water in the home. Empty all containers immediately after use and store them out of reach. A child can drown in as little as one inch of water.
- Never leave a child unsupervised in or around a swimming pool, hot tub, or other body of water.
- Install self-closing and self-latching gates that completely surround swimming pools or hot tubs, and prevent direct access from a house and yard.
- Always instruct children to wear approved personal floatation devices when near open bodies of water or when participating in water activities.
- Air-filled swimming aids such as "water wings" are not considered safety devices and should not be substitutes for personal floatation devices.

# General Public and Caregiver Recommendations

## TO PREVENT INFANT ASPHYXIAL FATALITIES:

Unsafe cribs can be dangerous for babies. Each year babies suffocate or are strangled when they become trapped between broken crib parts or cribs with older, unsafe designs. The Consumer Product Safety Commission (CPSC) provides the following information on the characteristics of a safe crib:

- No missing, loose, broken, or improperly installed screws, brackets, or other hardware on the crib or the mattress support.
- No more than 2 and 3/8 inches between crib slats so a baby cannot fit through the slats.
- A firm, snug-fitting mattress so a baby cannot get trapped between the mattress and the side of the crib.
- No cutout areas on the headboard or footboard in which a baby's head can become trapped.
- A mattress support that does not easily pull apart from the corner posts so a baby cannot be trapped between the mattress and crib.
- No cracked or peeling paint to prevent lead poisoning.
- No splinters or rough edges.

If a crib does not meet these guidelines, destroy it and replace it with a safe crib. Call the CPSC's hotline at (800) 638-2772 or CPSC's teletypewriter at (800) 638-8270 to inquire about any recalls or safety notices on your child's crib.

According to the American Academy of Pediatrics (AAP), bed sharing or co-sleeping also can increase the risk of infant death. Cribs are the safest places for babies to sleep. Infants should not be placed to sleep on a waterbed, adult bed, or couch.

## TO REDUCE THE RISK FACTORS FOR SIDS:

Infants should be placed on their backs to sleep. In addition, infants should not be placed to sleep on soft bedding products, including those products intended for use by infants. The CPSC indicates that some infants placed on fluffy, plush products such as sheepskins, quilts, comforters, and pillows have been found on their stomachs with their faces, noses, and mouths covered by the soft bedding.

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

# General Public and Caregiver Recommendations

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

Since 1994, when the NICHD launched the Back to Sleep campaign, a national effort to remind caregivers to place babies on their backs to sleep, SIDS rates in the United States have dropped 43 percent. To obtain Back to Sleep education materials for parents and health care professionals, in both English and Spanish, call 1-800-505-CRIB.

## TO PREVENT CHILD DEATHS RELATED TO MEDICAL CONDITIONS:

It is important that all children be seen by a health care professional when needed. HealthWave is a program for children in families with limited incomes that provides insurance at little or no cost. For more information about this program, call HealthWave toll free at 1-800-792-4884, or TTY 1-800-792-4292 (hearing impaired).

# School and Educator Recommendations

## TO PREVENT SUICIDES:

All persons who work with adolescents and children should be educated about the risk factors for suicide. According to the Kids Health Organization, suicide rates increase in the teen years due to many factors including greater access to lethal weapons such as firearms; greater access to drugs and alcohol; and greater access to motor vehicles. Knowing this, public information campaigns must be offered to students, parents, educators, and others regarding the signs that could signal a child is considering taking his or her own life.

The following is a list of risk factors for suicide published by the United States Department of Health and Human Services:

- Previous suicide attempt.
- Mental disorders — particularly mood disorders such as depression and bipolar disorder.
- Co-occurring mental, alcohol, and substance abuse disorders.
- Family history of suicide.
- Hopelessness.
- Impulsive and/or aggressive tendencies.
- Barriers to accessing mental health treatment.
- Relational, social, work, or financial loss.
- Physical illness.
- Easy access to lethal methods, especially guns.
- Unwillingness to seek help because of stigma attached to mental and substance abuse disorders and/or suicidal thoughts.
- Influence of significant people—family members, celebrities, and peers who have died by suicide—both through direct personal contact or media representations.
- Cultural and religious beliefs—for instance, the belief that suicide is a noble resolution of a personal dilemma.
- Local epidemics of suicide that have a contagious influence.
- Isolation, a feeling of being cut off from other people.

# School and Educator Recommendations

## TO PREVENT MEDICAL AND SPORTS-RELATED FATALITIES:

The SCDRB has identified several precautions that schools and educators should be aware of in order to reduce the number of medical and sports-related fatalities and injuries at school:

- Pre-participation school physicals must be taken seriously. A current sports physical always should be on file and any restrictions on the student's activities should be followed.

- Appropriate precautions should be taken to reduce the risk of hyperthermia (exceptionally high body temperature) and to ensure the safety of sports equipment.

- Children with asthma need access to their inhalers and medications.

- A core of teachers and coaches should be certified in basic CPR and first aid, and should help ensure that prompt access to emergency medical care is available.

- When deaths do occur at school, it is vital that full investigations, including autopsies, be performed.

## TO PREVENT MOTOR VEHICLE FATALITIES:

Comprehensive driver education is one critical element used to reduce the number of motor vehicle crashes among new teenage drivers. Car crashes are the leading cause of death among school-age children. Unsafe driving behaviors frequently result in a crash with injuries or death for young drivers. These behaviors are compounded by: 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.

# Health Care and Mental Health Professional Recommendations

## ESTABLISH A STANDARD PROTOCOL FOR CHILD DEATHS:

Hospitals, emergency departments, and physicians play a vital role in helping the public and investigators understand the circumstances surrounding a child's death. The AAP makes the following recommendations to health care departments and professionals:

- Emergency departments should have written policies in place regarding procedures to follow after a child's death.

- Documentation should include: details of any resuscitation or other treatment conducted before admission to the hospital or in the emergency department (ED); notation of the time of death; the child's history and circumstances leading to the death; the physical examination, including core body temperature on arrival, and findings on examination of the optic fundi, skin, and genitalia; presumed diagnosis; notation of laboratory or any other evaluation performed in the ED; and notification of the parents and/or guardians, medical examiner or coroner, child's physician, SRS, and law enforcement, if indicated. When possible, documentation should include relative findings from a review of any previous medical records of the patient.

- The evaluation to determine the cause of the child's death should be initiated in the ED, with the input of the coroner or medical examiner, and documented on the medical record. Such an evaluation might include a skeletal survey, cultures, a drug screen, photographs of injuries, and forensic evaluation for sexual assault.

- The medical examiner or coroner should be notified of all deaths. Autopsies should be required on all deaths of children that (1) result from trauma; (2) are unexpected, including SIDS; and (3) are suspicious, obscure, or otherwise unexplained.

- All unexpected deaths of children require a more comprehensive investigation including an autopsy, investigation of the circumstances of the death, review of the child's medical and family history, and a review of information from relevant agencies and health providers.

- Personal or referring physicians should be notified of the child's death. Personal physicians are encouraged to be involved in the support of the family and in holding a postmortem conference when autopsy findings are discussed. This conference should be timed to follow completion of the death investigation.

- Advocate for proper death certification for children. Such certification is not possible in sudden unexpected deaths in the absence of a comprehensive death investigation, including scene investigation, autopsy, and review of previous medical records.

- Accept the responsibility to be involved with the death review process, including serving as a member of a review team and providing information from case files to the medical examiner, coroner, or other agency investigating the death of a child who was a patient.

- Become involved in the training of death scene investigators so that appropriate knowledge of issues such as SIDS, child abuse, child development, and pediatric disease is used in determining the cause of death.

## TO PREVENT SUICIDES:

Suicide is a serious public health problem. The 1995 National Youth Risk Behavior Survey of students in grades seven through 12 indicated that nearly one-fourth of students had seriously considered attempting suicide during the 12 months preceding the survey; nearly 18 percent had made a specific plan; and nearly nine percent had made an attempt.

The AAP recommends that physicians be aware of the "risk factors associated with suicide, routinely ask questions about depression and firearms in the home, and serve as a resource for parents and other community leaders on issues related to suicide." In addition, physicians "are urged to work closely with families and health care professionals involved in the management and follow-up of those youths at risk of suicide or those who have already attempted suicide."

According to the National Institute of Mental Health (NIMH), depression in children and adolescents is associated with an increased risk of suicidal behaviors. This risk is increased among adolescent boys if the depression is accompanied by conduct disorder and alcohol or other substance abuse. It is vital for doctors and parents to take all threats of suicide seriously.

The NIMH states that "early diagnosis and treatment, accurate evaluation of suicidal thinking, and limiting young people's access to lethal agents including firearms and medications may hold the greatest suicide prevention value."

## LINK FAMILIES WITH HEALTH INSURANCE RESOURCES:

Hospitals and health care providers need to be aware of available state and community resources and assist patients in accessing those resources. The American Academy of Pediatrics Division of Health Policy Research reports that about 57,000 of the 740,000 children in Kansas still do not have health insurance. More than half of the total number of uninsured children in Kansas are eligible for Medicaid or HealthWave, but are not enrolled.

# Law Enforcement and Coroner Recommendations

## CONDUCT THOROUGH SCENE INVESTIGATIONS AND 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 cause 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 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 1,046 child deaths that occurred between 1994 and 1998 resulting from homicide, SIDS, suicide, unintentional injuries, or an undetermined cause, only 760 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. According to K.S.A. 22a-242, KDHE may reimburse counties for the cost of certain child autopsies and travel allowance as determined to be reasonable by KDHE.

## INVESTIGATE SUDDEN, UNEXPLAINED INFANT DEATHS:

Using a standard infant death scene investigation checklist is vital to accurately determine the cause and manner of child fatalities. The CDC has developed a sudden, unexplained infant death (SUID) scene investigation form. The SCDRB and the Kansas Bureau of Investigation recommend that this form be used by law enforcement agencies and coroners when investigating SUIDs. The form also can be downloaded from http://www.cdc.gov/mmwr/PDF/rr/rr4510.pdf. Investigative agencies are asked to use this form and submit it to the SCDRB in all applicable child death cases.

Most frequently, SIDS is the determined cause of SUIDs. 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."

# Law Enforcement and Coroner Recommendations

Using this form is critical in helping to determine the cause of SUID's, as well as:

- Assisting the pathologist or coroner in ruling in or ruling out natural causes of death, child abuse or neglect, or injury.

- Identifying public health threats, such as those related to consumer products or unsafe health practices.

- Contributing to the understanding of the cause of and risk factors for SIDS and other reasons for SUIDs, and to develop prevention strategies.

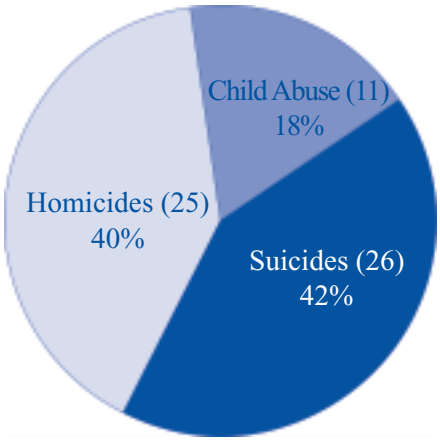
- Providing an opportunity to furnish parents and caregivers with information about grief counseling, support groups, and healthy infant-care practices.

# I. Violence-Related Deaths

Emergency Medical Service was called to respond to a report of a four-year-old girl with injuries from a fall. Despite medical intervention, the girl died. After a thorough law enforcement investigation and autopsy, it was concluded that the injuries were the result of abuse perpetrated by the victim's mother. Several reports of abuse and medical neglect were received prior to the victim's death. The mother pleaded guilty to second-degree intentional murder.

In 1998, 62 children were victims of violence-related deaths. A total of 36 children were victims of homicide. Eleven of these homicide deaths were the result of child abuse as identified by the SCDRB. Twenty-six children committed suicide in 1998.

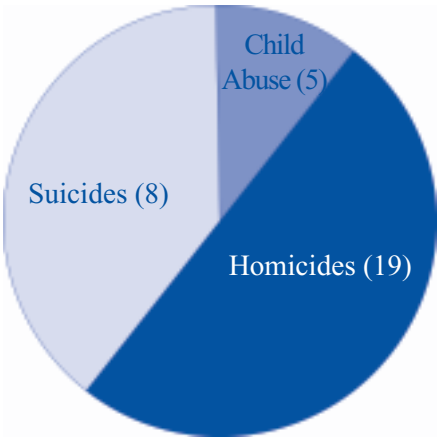
Figure 15: Violence-Related Deaths by Manner in 1998. N=62




A handgun was used during an argument in a school parking lot. A 16-year-old boy was fighting with a younger student who grabbed a gun out of a nearby car and fatally shot the 16 year old in the head. The 15-year-old perpetrator was tried as an adult and convicted of first degree murder.

It is particularly challenging to determine preventability in most child deaths. However, at least in the short-term, 32 (50 percent) violence-related deaths may have been prevented. Violence-related deaths accounted for 19.9 percent of all preventable deaths in 1998.

Figure 16: Preventable Violence-Related Deaths by Manner in 1998. N=32

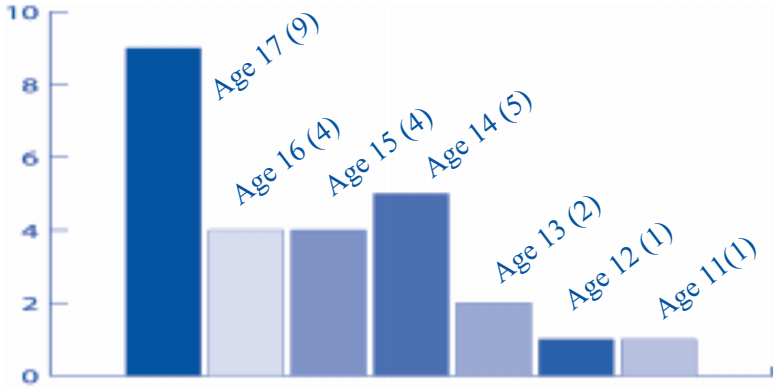


# I. Violence-Related Deaths

A 16-year-old boy had a history of depression and suicidal thoughts. A friend of the boy had recently committed suicide. The boy told a number of people that he was planning to commit suicide and proceeded to do so by hanging himself. A significant number of warning signs were present in this case. His death may have been prevented if his suicide threats had been taken seriously.

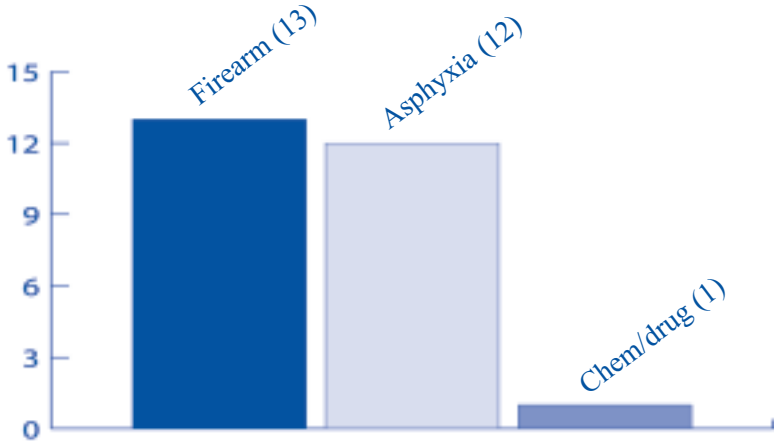
Seventeen year olds made up the largest number of teenage suicide deaths in 1998. The chart below illustrates the 26 suicide deaths by age.

Figure 17:
Suicide Deaths by Age in 1998.
N=26




In 1998, the SCDRB reviewed 26 child suicide deaths. Twenty-one white males, one white female, three black males, and one Asian/Pacific Islander male took their lives. Twelve suicide deaths were due to asphyxia by males hanging themselves. Thirteen males took their lives with firearms, and one female died from a drug overdose.

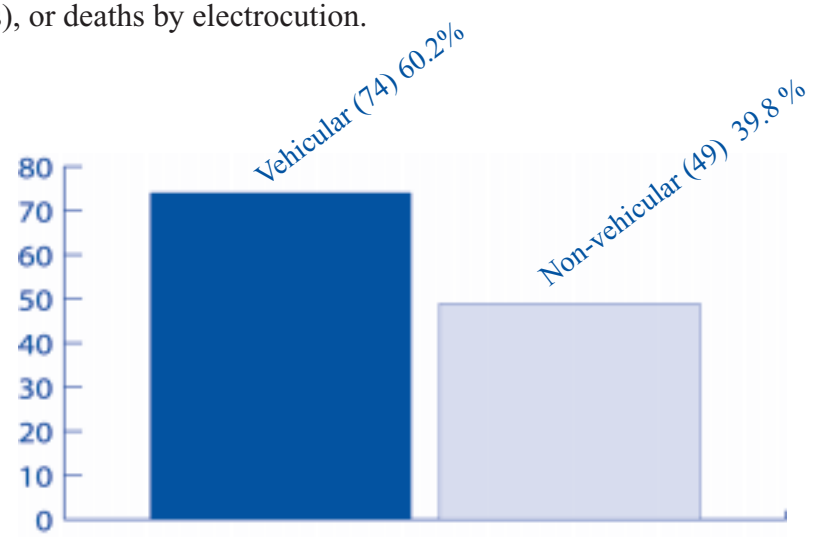
Figure 18:
Suicide Deaths by Method in 1998.
N=26



# 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), or deaths by electrocution.

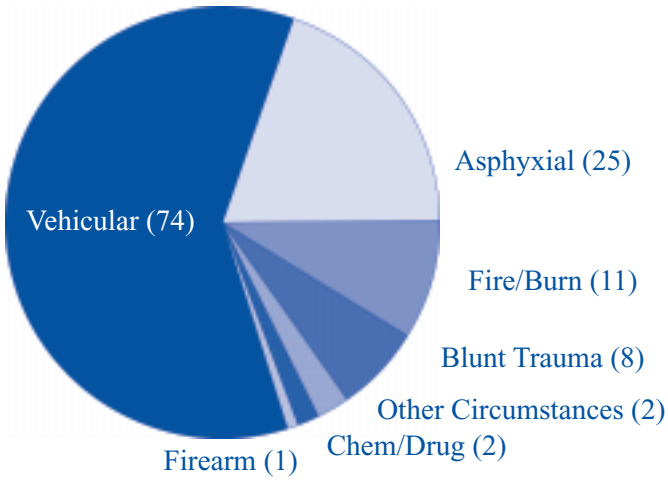
Figure 19: Unintentional Injuries - Vehicular and Non-vehicular in 1998. N=123




Unintentional injuries caused a total of 123 child deaths in 1998. Seventy-four deaths were vehicular and 49 were non-vehicular. The breakdown of non-vehicular deaths was: 25 asphyxial deaths (20 drownings and five deaths due to suffocation); 11 fire/burn deaths; eight blunt trauma deaths; two chemical/drug deaths; one firearm death; and two deaths from other circumstances. No deaths due to electrocution were reviewed in 1998.

Of the 123 unintentional injury deaths, 118 (96 percent) of the deaths had at least one issue of preventability noted by the SCDRB. Among the 74 vehicular deaths, 72 (97.2 percent) deaths were identified as preventable. In the 49 non-vehicular unintentional injury deaths, 46 (94 percent) deaths 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 floatation devices.

Figure 20: Unintentional Injuries by Cause in 1998. N=123



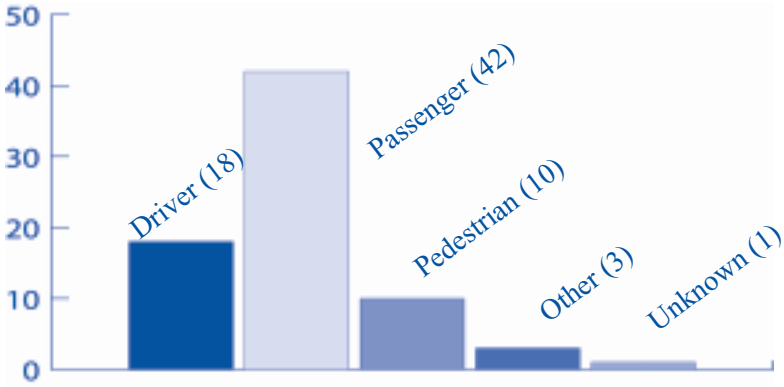
# II. Unintentional Injuries

## Unintentional Injuries
## A. Motor Vehicle Deaths

Attentive driving and proper use of seat belts are critical to preventing injuries and deaths from car crashes. A seven-year-old boy was a back seat passenger in his mother's car when his mother lost control of the vehicle on a gravel road. The mother, an 11-year-old sister, and the boy were not wearing seat belts. The boy was thrown from the car and killed. This death may have been prevented if the child had been properly restrained.

Motor vehicle fatalities continue to be the cause of the largest number of unintentional injuries and claimed the lives of 74 children in 1998. Eighteen teenagers were the drivers of vehicles; 42 children were passengers; 10 were pedestrians; three were classified as other, and in one case the information was not known. In six of the motor vehicle fatalities, alcohol was known to be involved.

Figure 21: Victim Status in Vehicular Unintentional Injuries in 1998. N=74




An 11-year-old boy was a front seat passenger in a car driven by his mother. The left rear tire exploded and the mother lost control of the car which rolled over several times. The boy was ejected from the car. This death may have been prevented if the child had been properly restrained in the back seat.

A 15 year-old boy was driving and his 12-year-old sister was in the front passenger seat. Neither child was wearing a seat belt and both were ejected from the car when the boy crashed the car into a guard rail. The boy died at the scene and his sister survived, but sustained serious injuries. This death may have been prevented if seat belts had been used and if the boy had been an experienced driver.

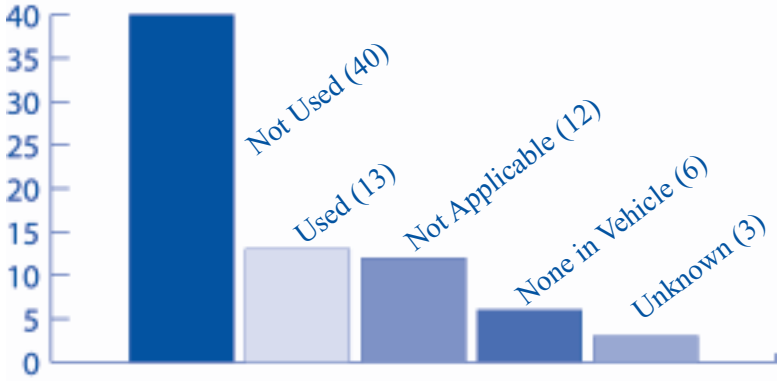
According to the Kansas Department of Transportation, 14,145 children under age 18 were injured as a result of car crashes in 1998. A total of 31,206 injuries from car crashes were reported among all ages. Children under age 18 represented 45.3 percent of the motor vehicle injuries in 1998.

# II. Unintentional Injuries

A three-year-old girl was a front seat passenger, wearing an adult seatbelt, in a car driven by her mother. The mother lost control of the car and struck a concrete bridge pillar. This death may have been prevented if the girl had been properly restrained in a child safety seat in the back seat of the car. Speed and inattentive driving contributed to this fatal car crash.

In a crash, seat belts are the primary device that protects the occupants in a car. In 1998, 46 children who were not wearing seat belts or not being restrained in a child safety seat, were killed in car crashes. Safety restraints were used in 13 cases; in 12 cases safety restraints were not applicable (deaths involving pedestrians, or children riding bicycles); and in three cases this information was not known.

Figure 22: Safety Restraint Use in Vehicular Unintentional Injuries in 1998. N=74

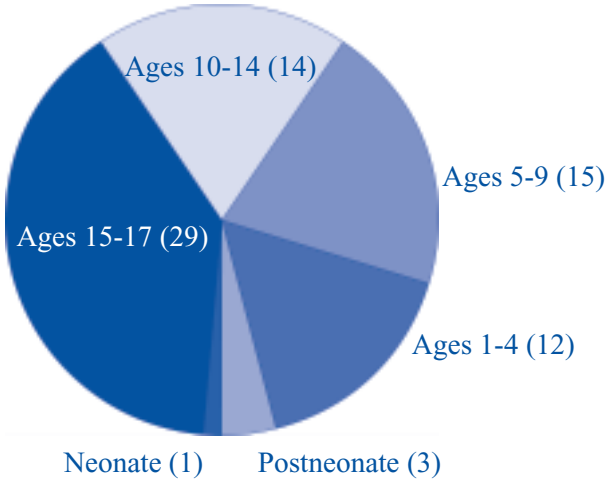



A five-year-old boy was unrestrained in the back seat of a rented car driven by an 18 year old. The driver lost control of the car. The car rolled over and was struck by an oncoming car. The boy was ejected from the car and killed. Inattentive driving contributed to this car wreck. In addition, this death may have been prevented if the child had been properly restrained.

A one-year-old girl was sitting on the lap of a front seat passenger when the driver lost control of the car. The passenger and the girl were killed. A total of eight people were in the car, none of whom were restrained. This death may have been prevented if the child had been properly restrained in a child safety seat in the back seat of the car.

The age group which had the largest number of vehicular deaths in 1998 was 15 through 17 year olds. The chart below illustrates the number of children who died in vehicular crashes by age group.

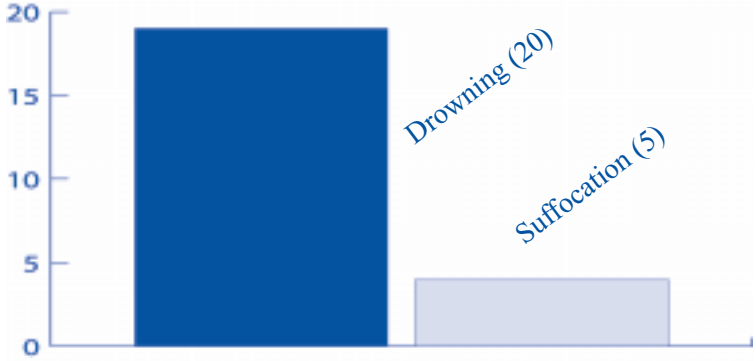
Figure 23: Vehicular Unintentional Injuries by Age Group in 1998. N=74



## Unintentional Injuries
## B. Asphyxial Deaths

In 1998, 25 children lost their lives to unintentional asphixial injuries. Accidental drownings claimed the lives of 20 children. Suffocation or strangulation claimed the lives of five children. The SCDRB concluded that all 25 of these deaths may have been prevented.

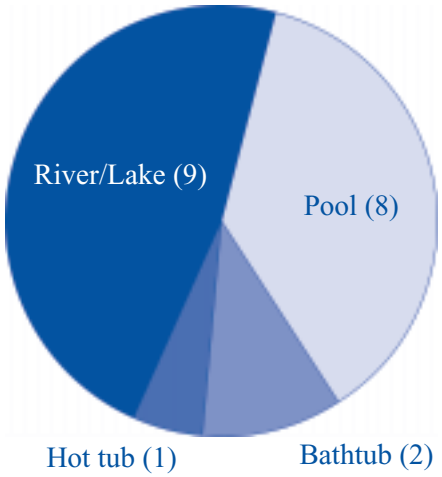
Figure 24: Unintentional Asphyxial Deaths in 1998. N=25




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 20 drowning fatalities reviewed by the SCDRB in 1998, nine children drowned in creeks, rivers, ponds, and lakes; eight children drowned in swimming pools; two children died in bathtubs; and one child died in a hot tub.

A two-year-old girl fell into an above ground pool and drowned. Poor communication among the adults present led to the girl being unsupervised. Proper supervision and a personal floatation device may have prevented this death.

Figure 25: Unintentional Drowning Deaths by Location in 1998. N=20




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 seven-month-old boy was placed to sleep in an adult waterbed with pillows tucked into the waterbed frame. The boy was found trapped between the pillows and the bed frame. He died of suffocation. This death may have been prevented had a proper sleeping arrangement for the child been used.

# II. Unintentional Injuries

## Unintentional Injuries
## C. Fire/Burn Deaths

Eleven children lost their lives due to fire/burn incidents in 1998. All 11 deaths due to unintentional fire/burn injuries were identified as preventable by the SCDRB. The prevention issues identified in these cases were related to supervising small children, using heating or cooking appliances properly, planning an escape route, and maintaining or installing working smoke detectors.

An 11-month-old girl was placed to sleep in a crib and a candle lit as a nightlight was left burning in her room. Her mother discovered the girl's room filled with smoke. Rescue was delayed because of the heat and dense smoke and the girl died of thermal burns. This death may have been prevented with proper supervision and a working smoke detector.

A four-year-old boy and his five-year-old brother died of smoke inhalation in a house fire. Their mother also died in the fire. The four year old set fire to a couch pillow using his mother's cigarette lighter. The mother underestimated the fire and did not remove the children from the house. In addition, a locked door blocked access to one exit. These deaths may have been prevented if an escape route had been planned and proper supervision was provided.

## Unintentional Injuries
## D. Firearm Deaths and Other Unintentional Injuries

Thirteen children died of other unintentional injuries in 1998. One death was caused by unintentional firearm use; eight children died from falls, crush injuries or other blunt trauma; two children died from chemicals/drugs; and two children died from heat stroke while participating in school sports.

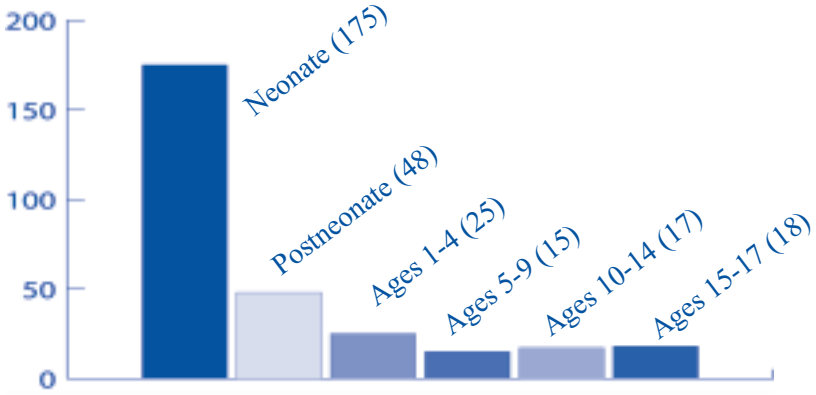
A 16-year-old girl died of a gunshot wound to the head. She was shot when a friend attempted to clear a jammed rifle and it discharged. This death may have been prevented if the firearm had been handled properly.

A 15-year-old boy died of heat stroke after a three-and-a-half hour school football practice during temperatures of more than 100 degrees. However, no autopsy was performed and no toxicology screening was conducted, which made evaluation of the death more difficult.

# III. Natural Deaths

Fifty-seven percent of the 1998 deaths were attributed to natural causes. In 135 (45.3 percent) of the 298 natural deaths, prematurity was identified as a contributing factor. Neonates, children less than 29 days old, accounted for 175 (58.7 percent) of the natural deaths in 1998.

Figure 26: Natural Death by Age Group 1998. N=298




In 1998, 167 males and 131 females died of natural causes. The breakdown by cause of death for the 298 natural deaths in 1998 is as follows: 60 deaths due to congenital malformations, 37 deaths due to infections; 15 deaths due to metabolic/genetic disorders; 13 due to neoplasms (cancer); 163 due to non-metabolic diseases; and 10 deaths were due to other causes.

In reviewing the deaths of children under one year of age, the information provided indicates that 40 mothers smoked tobacco products during their pregnancies; 13 mothers were non-compliant with their prenatal care; six mothers used alcohol; and three used drugs.

# IV. Sudden Infant Death Syndrome

After 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 reflect that most SIDS deaths occur when infants are between one and four months of age. Fall, winter, and early spring tend to be when most SIDS deaths occur and males are more likely to be victims of SIDS than females.

In 1998, the SCDRB reviewed 32 SIDS deaths. It is of critical importance to identify all possible risk factors in SIDS deaths. As stated in the prevention recommendations of this report, placing a baby on his or her back to sleep lowers the incidence of SIDS. According to the information provided to the SCDRB on the 32 SIDS deaths in 1998, the sleeping position was not known in 13 cases. Five of the children were placed on their backs to sleep, and 14 children were placed on their stomachs or sides.

Figure 27:
SIDS Deaths by Age in Months in 1998. N=32

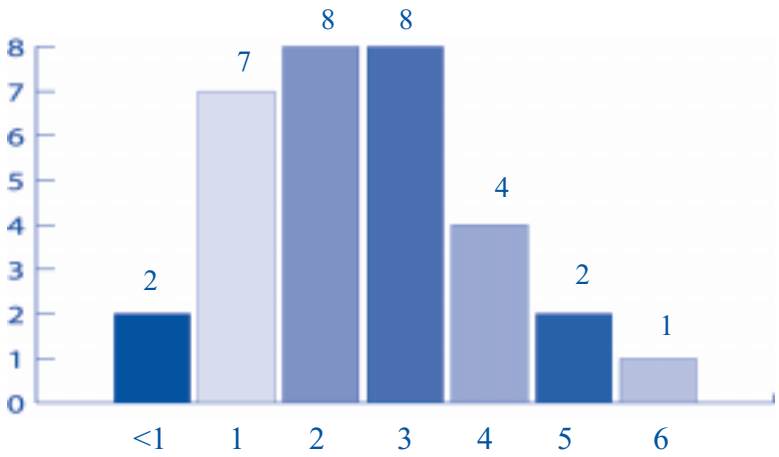
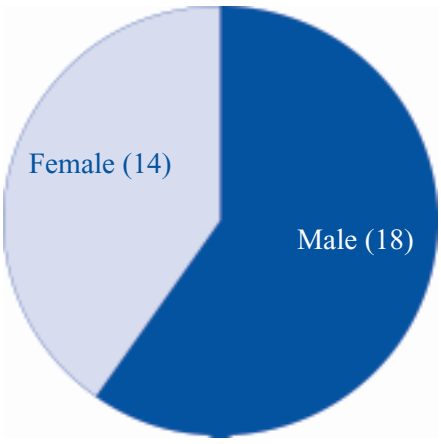



Figure 28:
SIDS Deaths by Sex in 1998. N=32



# 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 1998, the SCDRB catagorized 11 deaths to be of an undetermined manner.

One case involved a teenage girl who died of carbon monoxide poisoning, but the manner of death could not be conclusively determined. She was found with her boyfriend in a running car in a closed garage. Her boyfriend survived. Based on information provided for the SCDRB's case review, this death may have been a result of a suicide or an unintentional injury.

Six 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.

The SCDRB strives to avoid catagorizing 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 death.

# Appendices

## Appendix A

# Child Deaths By County of Residence

**1998 Data**
**N = 526**

| County of Residence | County Population 17& under | Total | Natural | Unintent'l Injury | Uninten'l Injury-MVA | SIDS | Suicide | Homicide | Undetermined |
|---|---|---|---|---|---|---|---|---|---|
| Allen | 3,924 | 2 | 1 | | | 1 | | | |
| Anderson | 2,137 | 2 | 1 | 1 | | | | | |
| Atchison | 4,406 | 2 | 1 | 1 | | | | | |
| Barber | 1,401 | 2 | 2 | | | | | | |
| Barton | 7,604 | 5 | 2 | 1 | | 1 | | 1 | |
| Bourbon | 3,911 | 4 | 2 | 1 | 1 | | | | |
| Brown | 3,037 | 6 | 4 | | 1 | 1 | | | |
| Butler | 17,392 | 10 | 6 | 3 | 1 | | | | |
| Chase | 752 | 0 | | | | | | | |
| Chautauqua | 1,011 | 0 | | | | | | | |
| Cherokee | 5,973 | 2 | 2 | | | | | | |
| Cheyenne | 756 | 0 | | | | | | | |
| Clark | 589 | 0 | | | | | | | |
| Clay | 2,336 | 4 | 3 | | 1 | | | | |
| Cloud | 2,259 | 0 | | | | | | | |
| Coffey | 2,401 | 0 | | | | | | | |
| Comanche | 477 | 0 | | | | | | | |
| Cowley | 9,703 | 5 | 1 | 1 | 1 | 2 | | | |
| Crawford | 8,519 | 5 | 3 | | 2 | | | | |
| Decatur | 856 | 0 | | | | | | | |
| Dickinson | 5,503 | 4 | 1 | | | | | 3 | |
| Doniphan | 1,994 | 1 | 1 | | | | | | |
| Douglas | 19,945 | 14 | 8 | 2 | 2 | | 1 | | 1 |
| Edwards | 818 | 2 | | | 2 | | | | |
| Elk | 757 | 0 | | | | | | | |
| Ellis | 6,668 | 6 | 4 | | | | 1 | | 1 |
| Ellsworth | 1,422 | 3 | 1 | 2 | | | | | |
| Finney | 12,715 | 11 | 9 | | 1 | | | | 1 |
| Ford | 8,780 | 7 | 3 | 1 | 1 | | 1 | | 1 |
| Franklin | 6,986 | 7 | 3 | 1 | 1 | 2 | | | |
| Geary | 7,045 | 18 | 11 | 1 | 3 | 3 | | | |
| Gove | 784 | 0 | | | | | | | |
| Graham | 797 | 0 | | | | | | | |
| Grant | 2,771 | 1 | 1 | | | | | | |
| Gray | 1,776 | 1 | 1 | | | | | | |
| Greeley | 503 | 0 | | | | | | | |
| Greenwood | 1,969 | 3 | 2 | | | | | 1 | |
| Hamilton | 595 | 0 | | | | | | | |
| Harper | 1,572 | 1 | 1 | | | | | | |
| Harvey | 8,804 | 8 | 5 | | 1 | | 1 | | 1 |
| Haskell | 1,278 | 4 | 1 | | 3 | | | | |
| Hodgemen | 609 | 0 | | | | | | | |
| Jackson | 3,370 | 2 | 1 | | 1 | | | | |
| Jefferson | 4,932 | 2 | 2 | | | | | | |
| Jewell | 903 | 0 | | | | | | | |
| Johnson | 112,321 | 69 | 44 | 2 | 13 | 1 | 6 | 2 | 1 |
| Kearny | 1,367 | 2 | 1 | 1 | | | | | |
| Kingman | 2,328 | 1 | | 1 | | | | | |
| Kiowa | 869 | 0 | | | | | | | |
| Labette | 6,054 | 5 | 1 | 1 | 2 | | 1 | | |
| Lane | 597 | 0 | | | | | | | |
| Leavenworth | 18,950 | 12 | 6 | | | 2 | | 2 | 2 |
| Lincoln | 801 | 0 | | | | | | | |
| Linn | 2,383 | 2 | 1 | | 1 | | | | |

## Appendix A

# Child Deaths By County of Residence

**1998 Data**
**N = 526**

| County of Residence | County Population 17& under | Total | Natural | Unintent'l Injury | Uninten'l Injury-MVA | SIDS | Suicide | Homicide | Undetermined |
|---|---|---|---|---|---|---|---|---|---|
| Logan | 769 | 1 | 1 | | | | | | |
| Lyon | 9,140 | 7 | 4 | | 1 | 2 | | | |
| Marion | 3,164 | 0 | | | | | | | |
| Marshall | 2,879 | 2 | 2 | | | | | | |
| McPherson | 7,307 | 4 | 1 | 2 | | | 1 | | |
| Meade | 1,212 | 0 | | | | | | | |
| Miami | 7,302 | 1 | | | | 1 | | | |
| Mitchell | 1,826 | 0 | | | | | | | |
| Montgomery | 9,407 | 8 | 6 | | | 1 | | 1 | |
| Morris | 1,550 | 3 | 2 | | | | | 1 | |
| Morton | 1,033 | 0 | | | | | | | |
| Nemaha | 2,879 | 1 | | | 1 | | | | |
| Neosho | 4,266 | 2 | 1 | | | 1 | | | |
| Ness | 926 | 0 | | | | | | | |
| Norton | 1,257 | 1 | | | 1 | | | | |
| Osage | 4,665 | 0 | | | | | | | |
| Osborne | 1,127 | 0 | | | | | | | |
| Ottawa | 1,532 | 1 | 1 | | | | | | |
| Pawnee | 1,806 | 0 | | | | | | | |
| Phillips | 1,479 | 1 | | | 1 | | | | |
| Pottawatomie | 5,502 | 4 | 3 | | 1 | | | | |
| Pratt | 2,466 | 0 | | | | | | | |
| Rawlins | 789 | 1 | 1 | | | | | | |
| Reno | 15,778 | 14 | 11 | | 2 | | | 1 | |
| Republic | 1,401 | 0 | | | | | | | |
| Rice | 2,688 | 4 | 2 | 1 | 1 | | | | |
| Riley | 13,875 | 8 | 4 | 1 | 1 | | 1 | | 1 |
| Rooks | 1,501 | 0 | | | | | | | |
| Rush | 737 | 0 | | | | | | | |
| Russell | 1,679 | 1 | 1 | | | | | | |
| Saline | 13,323 | 5 | 4 | | | 1 | | | |
| Scott | 1,536 | 1 | | | | | | 1 | |
| Sedgwick | 123,268 | 113 | 71 | 9 | 12 | 8 | 4 | 9 | |
| Seward | 6,458 | 5 | 3 | 1 | | | 1 | | |
| Shawnee | 43,400 | 32 | 17 | 2 | 4 | 2 | 4 | 2 | 1 |
| Sheridan | 744 | 1 | | | 1 | | | | |
| Sherman | 1,701 | 3 | | 2 | | | 1 | | |
| Smith | 1,009 | 0 | | | | | | | |
| Stafford | 1,318 | 3 | 3 | | | | | | |
| Stanton | 710 | 0 | | | | | | | |
| Stevens | 1,681 | 0 | | | | | | | |
| Sumner | 7,898 | 5 | 1 | 1 | 1 | | 1 | | 1 |
| Thomas | 2,246 | 1 | 1 | | | | | | |
| Trego | 846 | 0 | | | | | | | |
| Wabaunsee | 1,760 | 2 | | | 1 | | | 1 | |
| Wallace | 516 | 1 | 1 | | | | | | |
| Washington | 1,614 | 1 | | 1 | | | | | |
| Wichita | 826 | 1 | 1 | | | | | | |
| Wilson | 2,633 | 3 | 2 | | | | 1 | | |
| Woodson | 952 | 0 | | | | | | | |
| Wyandotte | 43,077 | 35 | 15 | 3 | 4 | 3 | 1 | 9 | |
| Out of State* | | 15 | 3 | 6 | 4 | | | 2 | |
| **Grand Total** | 697,918 | **526** | **298** | **49** | **74** | **32** | **26** | **36** | **11** |

*Out of State is included for those children who were not Kansas residents, but who died in Kansas.
1998 data on county population from the United State's Census Bureau 1998 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 nonresidents 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, 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 by a grant from KDHE. The research analyst compiles, analyzes, and reports the statistics accumulated from the work of the SCDRB.

# Resources

National SAFEKIDS Campaign
http://www.safekids.org

Kansas SAFEKIDS Coalition
http://www.kdhe.state.ks.us/safekids

American Academy of Pediatrics (AAP)
http://www.aap.org

National Highway Transportation Safety Administration (NHTSA)
http://www.nhtsa.dot.gov

National Institute of Child Death and Human Development
http://www.nih.gov

Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control (NCIPC)
www.cdc.gov/ncipc/ncipchm.htm

National Suicide Prevention Strategy
www.sg.gov/library/calltoaction/strategymain.htm

Suicide Prevention Advocacy Network (SPAN)
www.spanusa.org

American Association of Suicidology
www.suicidology.org or call 1-202-237-2280

National Institute of Mental Health (NIMH)
www.nimh.nih.gov

Substance Abuse and Mental Health Administration (SAMHSA)
www.samhsa.gov

United States Census Bureau
www.census.gov

American Academy of Child and Adolescent Psychiatry
http://www.aacap.org/web/aacap

# KANSAS STATE CHILD DEATH REVIEW BOARD
## CORONER REPORT
To Be Completed for All Child Deaths (Age 0-17 Years)

***For SCDRB Use Only*** No. _____
Assigned Bd. Member: _____
Vital stats _____ Assigned

### A. IDENTIFICATION OF THE VICTIM

| 1. NAME (LAST, FIRST, MI) | 2. BIRTH DATE (MO/DAY/YR) | 3. DEATH DATE (MO/DAY/YR) AND TIME (MILITARY) | 4. COUNTY OF RESIDENCE |
|---|---|---|---|
| | | | |

| 5. COUNTY OF INJURY/ILLNESS | 6. COUNTY OF DEATH | 7. SEX | 8. RACE | 9. ETHNICITY |
|---|---|---|---|---|
| | | | | |

### B. MANNER OF DEATH

☐10. Natural (except SIDS) Specify: _____
☐11. SIDS ☐12. Unintentional Injury ☐13. Suicide ☐14. Homicide: 14a. ☐ Child Abuse 14b. ☐ Gang-Related ☐15.Undetermined

### C. DIRECTIONS

Coroner: Within 30 days of date of death complete form to the best of your ability and file **original** along with a **copy of autopsy report** and **Report of Death** form with the State Child Death Review Board. Send to:

State Child Death Review Board
Office of Attorney General
120 SW 10th Avenue, 2nd Floor
Topeka, Kansas 66612
(785) 296-2215
(785)296-6296 (fax)

## Coroner Protocol

1. Take report of child death (ages 0-17) from law enforcement personnel, health care provider or other person having knowledge of the death.
2. Record facts of the death including time, place, manner and circumstances of death.
3. Determine necessity for autopsy and/or further investigation.
4. If an autopsy is needed, it is performed by a certified pathologist. A copy of the autopsy report including microscopic examination and toxicology results are sent to the State Child Death Review Board.
5. Notify appropriate local investigative agencies (police, SRS, etc.) As indicated for further investigation and appropriate action.
6. Complete Form 1 within one month of a child's death (ages 0-17). Use local investigative agencies (police, SRS, etc.) when necessary to gather detailed information to complete form.
7. Send completed Form 1 to the State Child Death Review Board.
8. Participate in local child death review activities if such activities are available.
9. Whenever indicated, provide comments and/or suggestions to State Child Death Review Board regarding the child death review process.

### D. SOCIAL INFORMATION

*Choose all that apply:*

17. Persons in charge of victim at time of fatal illness or injury event:
    a. ☐Natural Father
    b. ☐Adoptive Father
    c. ☐Step Father
    d. ☐Foster Father
    e. ☐Natural Mother
    f. ☐Adoptive Mother
    g. ☐Step Mother
    h. ☐Foster Mother
    i. ☐Child(ren)
    j. ☐Parent's male paramour
    k. ☐Parent's female paramour
    l. ☐No one in charge
    m. ☐Other: _____
    n. ☐Unknown
18. If child(ren) in charge-ages: a. ☐N/A
    b. _____yrs c. _____yrs d. _____yrs
19. Were one or more persons in charge intoxicated or under influence of drugs at time of fatal illness/injury event?
    a. ☐Yes b. ☐No c. ☐Unknown
20. Have there been any other child fatalities associated with any of the above?
    a. ☐Yes b. ☐No c. ☐Unknown
    If yes, explain: _____

### E. TIME & LOCATION

*Choose all that apply:*

21. Scene of illness or injury event:
    a. ☐Highway f. ☐Public driveway
    b. ☐City street g. ☐Private driveway
    c. ☐Rural road h. ☐Other private prop
    d. ☐Farm I. ☐Resid. of victim
    e. ☐Body of water j. ☐Other residence
    k. ☐Other: _____
    l. ☐Unknown

*If illness, skip to Section I.*

22. Date of injury event (mo/day/yr): _____
23. Time of injury event:
    a. _____ (Military time)
    b. Between _____ and _____
    c. ☐Unknown
24. How much time elapsed from the time the victim was last seen until the time of the incident?
    a. ☐Known _____hrs. _____mins.
    b. ☐Unknown c. ☐N/A
25. Was the person in charge of child's care at the time of the injury event asleep at the time?
    a. ☐Yes b. ☐No c. ☐Unknown d. ☐N/A

### F. NATURAL

26. ☐Infection:
    a. ☐Bacterial
    b. ☐Viral
    c. ☐Other: _____
    d. ☐Unknown
27. ☐Metabolic/Genetic (specify): _____
28. Prematurity a contributing factor:
    a. ☐Yes b. ☐No c. ☐Unknown
29. ☐Neoplasm (type): _____
30. ☐Congenital malformation:
    a. ☐Genetic-non-metabolic causes:
       1. ☐Trisomy 21 (T21)
       2. ☐Trisomy 18 (T18)
       3. ☐Trisomy 13 (T13)
    b. ☐Systemic involvement-primary malformation (major):
       1. ☐Heart (HRT)(specify): _____
       2. ☐Lung (Pul)(specify): _____
       3. ☐Renal/urinary tract (REN)(specify): _____
       4. ☐Brain (CNS)(specify): _____
    c. ☐Isolated-other single malformation (OTH)(specify): _____
    d. ☐Multiple:
       1. ☐Named syndrome (MSY)(specify): _____
       2. ☐Non-specific (NSP)(specify): _____
31. Other: _____
32. ☐Infant/neonatal deaths:
    a. ☐Neonatal
    b. ☐Post neonatal (never left hospital)
    c. ☐Gestational age (clinical assessment): _____weeks
    d. ☐Maternal medical condition
    e. ☐Resuscitation at birth
       ☐Yes ☐No
33. ☐If multiple birth, total number: _____
34. Drug abuse during pregnancy?
    ☐Yes ☐No ☐Unknown
    If yes, type: _____
35. Alcohol use during pregnancy?
    ☐Yes ☐No ☐Unknown
36. Smoking during pregnancy?
    ☐Yes ☐No ☐Unknown

**F. NATURAL (continued)**

37. Prenatal care, which trimester?
*Choose all that apply:*
☐1st ☐2nd ☐3rd
☐None ☐Unknown
38. Prenatal Care
☐Compliant ☐Non-Compliant ☐Unknown
39. Birth weight: _____
40. Delivery in a hospital?
☐Yes ☐No

**G. SIDS**

41. Position when found:
a. ☐On abdomen
b. ☐On back
c. ☐On side
d. ☐Other
e. ☐Unknown

42. Sleeping place:
a. ☐Crib
b. ☐Adult bed
c. ☐Waterbed
d. ☐Firm surface
e. ☐Soft surface
f. ☐Other
g. ☐Unknown
43. Sleeping arrangement:
a. ☐Overlying
b. ☐Sleeping alone
c. ☐Co-sleeping
1. ☐Adult
2. ☐Child
44. Recent URI (In last 2 weeks of life)?
☐Yes ☐No ☐Unknown
45. Other recent illness last 2 weeks of life?
☐Yes ☐No
_____
_____

**H. DEATH DUE TO NEGLECT**

46. Cause of Death:
a. ☐Malnutrition/dehydration
b. ☐Delayed medical care
c. ☐Known illness: _____
d. ☐Inadequate supervision
e. ☐Other: _____
f. ☐Unknown

**I. BRIEF DESCRIPTION OF CIRCUMSTANCES AND OTHER COMMENTS Note: Complete this section or attach Report of Death form.**

_____
_____
_____
_____
_____
_____
_____

**J. OTHER SOURCE INFORMATION (If applicable)**

Source(s) of Information:

1. _____ _____
(Name/Agency/Phone Number) Date (mo/day/yr)

2. _____ _____
(Name/Agency/Phone Number) Date (mo/day/yr)

3. _____ _____
(Name/Agency/Phone Number) Date (mo/day/yr)

4. _____ _____
(Name/Agency/Phone Number) Date (mo/day/yr)

**K. SIGNATURES**

_____
CORONER/PHYSICIAN (Print or type name)

_____ _____
CORONER/PHYSICIAN SIGNATURE DATE (MO/DAY/YR)

# KANSAS STATE CHILD DEATH REVIEW BOARD
## BOARD REPORT

Vital Stats _____ For SCDRB Use Only
Assigned _____
Completed _____ No. _____
Bd. Mem _____

### A. IDENTIFICATION OF THE VICTIM

| 1. NAME (LAST, FIRST, MI) | 2. BIRTH DATE (MO/DAY/YR) | 3. DEATH DATE (MO/DAY/YR) AND TIME (MILITARY) | 4. COUNTY OF RESIDENCE (SEE #1 OF CODE TABLE) |
|---|---|---|---|
| | | | |

| 5. COUNTY OF INJURY/ILLNESS (SEE #1 CODE TABLE) | 6. COUNTY OF DEATH (SEE #1 CODE TABLE) | 7. SEX | 8. RACE (#2 CODE TABLE) | 9. ANCESTRY |
|---|---|---|---|---|
| | | | | |

### B: MANNER OF DEATH
**Note: If death due to natural cause, answer only Sections that are applicable.**

☐10. Natural (except SIDS) Specify: _____
☐11. SIDS ☐12. Unintentional Injury ☐13. Suicide ☐14. Homicide: 14a. ☐ Child Abuse 14b. ☐ Gang-Related ☐15.Undetermined

### C. SOCIAL INFORMATION

*Choose all that apply:*

16. Persons living in residence of victim (See #4 of Code Table):
_____

17. Children including victim under 18 years living in residence: #_____

18. Children living in residence-ages: (use "<1" if less than one year):
_____yrs _____yrs
_____yrs _____yrs _____yrs _____yrs

19. Persons in charge of victim at time of fatal illness or injury event (See #4 of Code Table):
_____

20. If child(ren) in charge--ages: ☐ Unknown
☐N/A _____yrs _____yrs _____yrs

21. Were one or more persons in charge intoxicated or under influence of drugs or alcohol at time of fatal illness/injury event?
☐Yes ☐No ☐Unknown

22. Who had legal custody of the victim at the time of the fatal illness/injury? (See #4 of Code Table):_____

23. If two persons are described as having legal custody, they are: ☐Unknown
☐Currently married ☐Separated
☐Never married ☐Divorced

24. Have there been any other child fatalities associated with any of the above?
☐Yes ☐No ☐Unknown
If yes, explain: _____
_____
_____

### D. LOCATION AND WITNESSES

*Choose all that apply:*

25. Scene of illness or event:
☐Highway ☐Public driveway
☐City street ☐Private driveway
☐Rural road ☐Other private prop
☐Farm ☐Resid. of victim
☐Body of water ☐Other residence
☐Other:
_____
☐Unknown

*If illness, skip to Section E.*

26. Date of event (mo/day/yr):
_____

27. Time of injury event:
_____ (Military time)
Between _____ and _____
☐Unknown

28. How much time elapsed from the time the victim was last seen until the time of the incident?
☐Known _____hrs. _____mins.
☐Unknown ☐ N/A

29. Was the person in charge of child's care asleep at the time of the event?
☐Yes ☐No ☐Unknown ☐N/A

30. Approximate distance between victim and person in charge of the victim at time of fatal event:
_____(Number of):
☐Feet ☐Miles
☐Blocks ☐Not applicable
☐Yards ☐Unknown

### E. REVIEW BOARD FINDINGS

*Choose all that apply.*

31. Autopsy:
☐ Not performed
☐ Performed by (specify):
_____
_____

32. Toxicology done: ☐Yes ☐No ☐Unknown
Positive: ☐Yes ☐No
Substance involved: _____
Level (if available): _____

33. Death scene investigation:
☐ Not conducted
☐ Conducted by coroner
☐ Conducted by law enforcement
☐ Conducted by fire investigator
☐ Conducted by other (specify): _____
_____

34. Law enforcement investigation (See #5 Code Table): _____

35. Medical records inquiry (See #5 Code Table):
_____

36. Prosecutor action ☐Yes ☐No
If yes,
☐Pending or in progress
☐Case closed, no charge(s) filed
☐Suspected perp but no arrest or charge
☐Charge(s) filed (specify): _____
_____
Disposition: _____
_____
_____
_____
_____

### F. PERSON(S) CHARGED (If no charge was made, skip to Section G)

37. Number of persons charged:
☐One ☐Two ☐More

38. Was the person(s) charged caring for or in charge of the victim at the time of the fatal illness or injury event?
☐Yes ☐No ☐Unknown

39. Person #1 charged (See #4 of Code Table):
_____
Sex of person: ☐Male ☐Female
Age of person (approx.): _____ years
Race (See #2 of Code Table): _____

40. Person #2 charged (See #4 of Code Table):
_____
Sex of person: ☐Male ☐Female
Age of person (approx.): _____ years
Race (See #2 of Code Table): _____

## G. SRS INFORMATION

41. Was SRS information requested?
☐Yes ☐ No
If yes, continue. If no, stop here.

*Choose all that apply:*

42a. Was a case opened as a result of the child's death or were services provided the child or child's family prior to the death?
☐Yes ☐No
If no, stop here.

42b. Services provided prior to death:
☐ Cash Assistance
☐ Medical Services
☐ Food Services
☐ Child Support Enforcement
☐ Mental Health & Rehabilitation Services
☐ Alcohol and Drug Abuse Services
☐ Youth & Adult Services
☐ Vocational Rehabilitation

43. Assessment conducted?
☐Yes ☐ No

*If completed, check one:*

44. Findings from assessment (deceased child only):
☐ Case unconfirmed
☐ Case confirmed - physical abuse
☐ Case confirmed - sexual abuse
☐ Case confirmed - physical neglect
☐ Case confirmed - medical neglect
☐ Case confirmed - inadequate supervision

*If confirmed:*

45. How many confirmed perpetrators?
☐One ☐Two ☐More than 2
☐Unknown

46. Person #1 (case substantiated against) (See #4 of Table Code):_____
_____

47. Person #2 (case substantiated against) (See #4 of Table Code):
_____
_____
_____

48. Comments:
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

## H. PRELIMINARY CAUSE AND CIRCUMSTANCES OF THE DEATH TO INCLUDE ADDITIONAL INFORMATION ON SUICIDE, HOMICIDE, AND ACCIDENTS

Mark all applicable cause categories and specific circumstances to describe the fatality based on information presently available. More than one cause may be indicated.

### 49. NATURAL

A. ☐Infection:
☐Bacterial
☐Viral
☐Other: _____
☐Unknown

B. ☐Metabolic/Genetic (specify):_____
_____

C. Prematurity a contributing factor:
☐Yes ☐No ☐Unknown

D. ☐Neoplasm (type): _____

E. ☐Congenital malformation:
1. ☐ Genetic-non-metabolic causes:
☐Trisomy 13 (T13)
☐Trisomy 18 (T18)
☐Trisomy 21 (T21)
2. ☐ Systemic involvement-primary malformation (major):
☐Brain (CNS)(specify):
_____
☐Heart (HRT)(specify): _____
_____
☐Lung (Pul)(specify):_____
_____
☐Renal/urinary tract (REN)(specify):
_____
3. ☐ Isolated-other single malformation (OTH)(specify):
_____
4. ☐ Multiple:
☐Named syndrome (MSY) (specify):
_____
☐Non-specific (NSP) (specify):
_____

F. Other: _____
_____
_____

G. ☐Infant/neonatal deaths:
☐Gestational age (clinical assessment):
_____weeks
☐Maternal medical condition
☐Metabolic/genetic
☐Neonatal
☐Post neonatal (never left hospital)
☐Prematurity
☐Resuscitation at birth
☐Yes ☐No

H. If multiple birth, total number: _____

I. Drug abuse during pregnancy?
☐Yes ☐No ☐Unknown
If yes, type:_____

J. Alcohol use during pregnancy?
☐Yes ☐No ☐Unknown

K. Smoking during pregnancy?
☐Yes ☐No ☐Unknown

L. Prenatal care, which trimester?
☐1st ☐2nd ☐3rd
☐None ☐Unknown

M. Prenatal Care
☐Compliant ☐Non-Compliant

N. Birth weight: _____

O. Delivery in a hospital?
☐Yes ☐No

### 50. SIDS

A. Position when found:
☐On abdomen
☐On back
☐On side
☐Other
☐Unknown

B. Sleeping place:
☐Crib
☐Adult bed
☐Waterbed
☐Firm surface
☐Soft surface
☐Other
☐Unknown

C. Sleeping arrangement:
☐Overlying
☐Sleeping alone
☐Co-sleeping Adult
☐Co-sleeping Child

D. Recent URI (In last 2 weeks of life)?
☐Yes ☐No ☐Unknown

E. Other recent illness last 2 weeks of life?
_____
_____
_____
_____
_____

CONTINUE ON PAGE 3

## I. PRELIMINARY CAUSE AND CIRCUMSTANCES OF THE DEATH

Mark all applicable cause categories and specific circumstances to describe the fatality, based on information presently available. More than one cause may be indicated.

**51. ☐ DEATH DUE TO NEGLECT**
A. Cause of Death:
☐Delayed medical care
☐Known illness: _____
☐Malnutrition/dehydration
☐Other: _____
☐Unknown

**52. ☐BLUNT TRAUMA (skip if does not apply)**
**A. ☐VEHICULAR INJURY**
Status of victim:
☐Occup. of vehicle ☐Other
☐Driver of vehicle ☐Unknown
☐Pedestrian
Type of vehicle:
☐Car ☐Other farm veh
☐Farm tractor ☐Riding mower
☐All-terrain veh ☐Motorcycle
☐Bicycle ☐Other: _____
☐Bus/Truck _____
☐Pick-up/Van ☐Unknown
Road condition:
☐Normal ☐Other: _____
☐Wet _____
☐Loose gravel ☐Unknown
☐Ice/snow ☐N/A
Safety restraint use by victim (seatbelt, infant seat, etc.):
☐Used ☐Not used
☐None in vehicle ☐Unknown
☐N/A
Deceased was wearing helmet:
☐Yes ☐No ☐N/A
Operator of occupant vehicle:
☐ Alcohol involved
☐ BAT _____
☐ Brake failure
☐ Drug screen
☐ No operator
☐ Other mechanical failure
☐ Other violation
☐ Speed/recklessness:
(Est. Speed _____mph)
(Speed limit _____mph)
☐ Unknown
☐ Other _____

Operator of non-occupant vehicle:
☐ Alcohol involved
☐ BAT _____
☐ Drug screen
☐ Speed/recklessness:
(Est. Speed _____mph)
(Speed limit _____mph)
☐ Assault with vehicle
☐Other violation
☐Brake failure
☐No operator
☐Other mechanical failure
☐Other _____
☐Unknown
☐None

**B. ☐ FALL INJURY**
Deceased fell from:
☐Stair, steps (in baby walker)
☐Stair, steps (other)
☐Open window ☐Other:_____
☐Natural elevation _____
☐Furniture ☐Unknown
Describe composition of landing surface (type): _____
Height of fall: _____feet
☐Circumstances unknown

**C. ☐ CRUSH INJURY (non-vehicular)**
Cause: _____
_____
☐Circumstances unknown

**D. ☐ OTHER BLUNT TRAUMA INJURIES**
Type of trauma:
☐Shaken ☐Other:_____
☐Thrown _____
☐Struck, object used:
_____
☐Unknown
Site of injury (Check all that apply):
☐Head
☐Chest
☐Abdomen
☐Extremities
☐Other: _____
☐Unknown
Who inflicted the injury (See #4 of Code Table)?_____
_____

**53. ☐ SHARP TRAUMA (skip if does not apply)**
Type of injury:
☐Cut ☐Stabbed ☐Bite
Site of injury (Check all that apply):
☐Head
☐Chest
☐Abdomen
☐Extremities
☐Other: _____
☐Unknown
Who caused injury?
☐Known ☐Unknown ☐Animal
Weapon causing injury:
☐Knife
☐Scissors
☐Other: _____
☐Unknown

**54. ☐FIREARM INJURY (skip if does not apply)**
Type of firearm involved:
☐Handgun ☐Other:_____
☐Rifle _____
☐Shotgun ☐Unknown
Site of injury:
☐Head
☐Chest
☐Abdomen
☐Extremities
☐Other: _____
☐Unknown
Person handling firearm was:
☐Deceased ☐ Other person
☐Unknown
Age of person handling firearm:
_____yrs ☐Unknown
Use of firearm at time of injury:
☐Cleaning ☐Assault
☐Hunting ☐Suicide
☐Loading ☐Other: _____
☐Playing ☐Unknown
☐Target shooting
☐ Circumstances unknown

**55. ☐ ASPHYXIAL (skip if does not apply)**
**A. ☐ SUFFOCATION/STRANGULATION**
Was suffocation caused by refrigerator/appliance?
☐Yes ☐No ☐Unknown
Was injury caused by another person?
☐Yes ☐No ☐Unknown
Did an object impede breath?
☐Yes ☐No ☐Unknown
If yes, specify: _____
Did an object cause strangulation?
☐Yes ☐No ☐Unknown
If yes, specify: _____
(i.e. rope for hanging)
Did injury occur in a bed, crib or other sleeping arrangement?
☐Yes ☐No ☐Unknown
If yes, check:
☐Crib, functioning properly
☐Crib, unsafe
☐Bed, conventional
☐Waterbed
☐Other sleeping arrangement
(specify): _____
☐Unknown

**B. ☐ DROWNING**
Place of drowning
☐Swimming pool ☐Other: _____
☐Wading pool _____
☐Bathtub ☐Unknown
☐Bucket
☐Creek/river/pond/lake
☐Well/cistern/septic tank
Location prior to drowning:
☐Boat
☐Water edge
☐Other: _____
☐Unknown
Wearing floatation device:
☐Yes ☐No ☐Unknown
☐Circumstances unknown

**C. ☐ OTHER**
Cause of asphyxia (if smoke inhalation, see fire):
☐Carbon monoxide
☐Natural or other gas
☐Other: _____
☐Unknown

**56. ☐ FIRE, BURN (skip if does not apply)**
Source of ignition/fire:
☐Combustible liquid
☐Cooking appliance used as heat source
☐Space heater
☐Electrical wire
☐Explosion of oven/stove
☐Explosives/fireworks
☐Furnace
☐Lighter
☐Lit cigarette
☐Matches
☐Other: _____
☐Unknown
Source of non-fire burn:
☐Hot water (bath, etc.)
☐Appliance
☐Other: _____
☐Unknown
Did a person start the fire?
☐Yes ☐No ☐Unknown
If yes, age of person _____years
Activity of person:
☐Cooking ☐Smoking
☐Criminal Activity ☐Unknown
☐Other: _____
☐Playing
☐Circumstances unknown
Smoke Detector ☐Yes ☐No ☐Unknown
Working: ☐Yes ☐No ☐Unknown

CONTINUED ON PAGE 4

## I. PRELIMINARY CAUSE AND CIRCUMSTANCES OF THE DEATH (Continued)

Mark all applicable cause categories and specific circumstances to describe the fatality, based on information presently available. More than one cause may be indicated.

**57. ☐ELECTROCUTION (skip if does not apply)**
Cause of electrocution:
- ☐Appliance defect
- ☐Appliance-water contact
- ☐Electrical wire defect
- ☐Lightning
- ☐Other: _____
- ☐Other electrical hazard
- ☐Outlet defect
- ☐Outlet-object contact
- ☐Tool defect
- ☐Tool-water contact

☐Circumstances unknown

**58. ☐CHEMICAL/POISONING AND DRUGS (skip if does not apply)**
Substance causing death (Check all that apply):
- ☐Alcohol
- ☐illicit drug
- ☐Natural
- ☐Other drug or chemical? (specify)

_____
- ☐Prescription drug

☐Circumstances unknown

**59. ☐OTHER CIRCUMSTANCES OF INJURY (skip if does not apply)**
Place of confinement:
- ☐Chest/box/foot locker
- ☐Motor vehicle
- ☐Room, building
- ☐Other: _____

☐Exposure to elements
☐Sexually assaulted
☐Prior physical abuse
☐Circumstances unknown

**60. ☐CIRCUMSTANCES UNKNOWN (skip if does not apply)**
Describe:
_____
_____
_____
_____

## J. CORONER'S NAME/CORONER'S BRIEF DESCRIPTION OF CIRCUMSTANCES AND OTHER COMMENTS

## K. MAIN CONCLUSIONS

1. Is the CDRB's finding different from the cause of death on the death certificate? ☐ Yes ☐No
2. Was this death preventable? If so, how? ☐ Yes ☐No
3. Was case referred back to DA/CA? ☐ Yes ☐No

## L. FOLLOW-UP REQUESTED/RECOMMENDATIONS

## M. SOURCES OF REPORT

| Yes | Source: |
|---|---|
| ☐ | Medical records |
| ☐ | Autopsy report |
| ☐ | Report of death |
| ☐ | Death certificate |
| ☐ | Birth certificate |
| ☐ | Law enforcement report |
| ☐ | SRS reports |
| ☐ | Court reports |
| ☐ | Mental health records |
| ☐ | Public health records |
| ☐ | Education reports |
| ☐ | Press clippings |
| ☐ | Coroner's report |

## N. SIGNATURES

_____ _____
REVIEW BOARD MEMBER DATE (MO/DAY/YR)

_____ _____
CHAIR/EXECUTIVE DIRECTOR DATE (MO/DAY/YR)

END REPORT

June 21, 1996

**SUDDEN UNEXPLAINED INFANT DEATH**
**INVESTIGATION REPORT FORM (SUIDIRF) 3.96**

**Case number** _____

Infant's full name _____ Age _____ DOB _____

Home address _____ Race _____ Sex _____

City, state, zip _____ Ethnicity _____

County _____ SS# _____

Police complaint number _____ Police department _____

## I. CIRCUMSTANCES OF DEATH

| Action | Date | Time | By whom (person or agency) | Remarks |
|---|---|---|---|---|
| ME/C notified | | | | Receipt by: |
| NOK notified | | | | Person: |
| Scene visit | | | | ___ ME/C staff ___ Other agency ___ Not done |
| Scene address | | | | |
| Condition of infant when found | | | ___ Dead (D) ___ Unresponsive (U) ___ In distress (I) ___ NA (N) | |
| Sequence of events before death: | | | | |

| Event | Date | Time | Location (street, city, state, county, zip code) |
|---|---|---|---|
| Injury | | | |
| Discovery | | | |
| Arrival | | | Hospital: Transport by: |
| Actual death | | | ___ On scene (S) ___ Emergency room (E) ___ Inpatient (I)<br>___ En route or DOA (D) ___ During surgery (O) |
| Pronounced dead | | | By whom:<br>License #: Where: |

| Event | Date | Time | By whom (person) | Remarks |
|---|---|---|---|---|
| Infant placed | | | | Place: |
| Known alive | | | | Place: |
| Infant found | | | | Place: |
| First response | | | | Type: |
| EMS called | | | | From where: |
| EMS response | | | Agency: | |
| Police response | | | Agency: | |

| Place of fatal event | | Describe type of place: |
|---|---|---|
| ___ Witness in room or area (W) | or ___ Unwitnessed (U) | |
| ___ At own home (H) | or ___ Away from home (A) | |
| ___ Indoors (I) | or ___ Outdoors (O) | |
| ___ In vehicle (V) | or ___ Not in vehicle (N) | |

**SUDDEN UNEXPLAINED INFANT DEATH**
**INVESTIGATION REPORT FORM (SUIDIRF) 3.96** **Case number** _____

## II. BASIC MEDICAL INFORMATION

Health care provider for infant: Phone:

Medical history ___ Not investigated (X) ___ Unk (U) ___ No past problems (N) ___ Medical problems (P)

Medical source ___ Physician (P) ___ Other health care provider (H) ___ Other (O) ___ Medical records (M) ___ Family (F) ___ None (N)

| Specific infant medical history | Yes | No | Unk | Remarks |
|---|---|---|---|---|
| A. Problems during labor or delivery<br>Birth hospital:<br>Birth city and state: | | | | |
| B. Maternal illness or complications during pregnancy<br>Number of prenatal visits: | | | | |
| C. Major birth defects | | | | |
| D. Infant was one of multiple births (e.g., a twin)<br>Birth weight:<br>Gestational age at birth (weeks): | | | | |
| E. Hospitalization of infant after initial discharge | | | | |
| F. Emergency room visits in past 2 weeks | | | | |
| G. Known allergies | | | | |
| H. Growth and weight gain considered normal | | | | |
| I. Exposure to contagious disease in past 2 weeks | | | | |
| J. Illness in past 2 weeks | | | | |
| K. Lethargy, crankiness, or excessive crying in past 48 hours | | | | |
| L. Appetite changes in past 48 hours | | | | |
| M. Vomiting or choking in past 48 hours | | | | |
| N. Fever or excessive sweating in past 48 hours | | | | |
| O. Diarrhea or stool changes in past 48 hours | | | | |
| P. Infant has ever stopped breathing or turned blue | | | | |
| Q. Infant was ever breast-fed | | | | |
| R. Vaccinations in past 72 hours | | | | |
| S. Infant injury or other condition not mentioned above | | | | |
| T. Deceased siblings | | | | |

Diet in past 2 weeks included: ___ Breast milk ___ Formula ___ Cow's milk ___ Solids
Date and time of last meal:
Content of last meal:

Medication history ___ Not investigated (X) ___ Unk (U) ___ Rx (P) ___ OTC (O) ___ Home remedies (H) ___ None (N)

Emergency medical treatment ___ None (N) ___ CPR (R) ___ Transfusion (T) ___ IV fluids (F) ___ Surgery (S)

| Medicine names and doses; if prescription, include Rx number, Rx date, and name of pharmacy: | Describe nature and duration of resuscitation and treatments used to revive infant: | Describe any known injuries or marks on infant created or observed during resuscitation or treatment: |
|---|---|---|
| | | |

**SUDDEN UNEXPLAINED INFANT DEATH**
**INVESTIGATION REPORT FORM (SUIDIRF) 3.96** **Case number** _____

## III. HOUSEHOLD ENVIRONMENT

| Action | Yes | No | Unk | Remarks |
|---|---|---|---|---|
| A. House was visited | | | | |
| B. Evidence of alcohol abuse | | | | |
| C. Evidence of drug abuse | | | | |
| D. Serious physical or mental illness in household | | | | |
| E. Police have been called to home in past | | | | |
| F. Prior contact with social services | | | | |
| G. Documented history of child abuse | | | | |
| H. Odors, fumes, or peeling paint in household | | | | |
| I. Dampness, visible standing water, or mold growth | | | | |
| J. Pets in household | | | | |

Type of dwelling: Water source: Number of bedrooms:

Main language in home: Estimated annual income: On public assistance ___ Yes ___ No

Number of adults (≥18 years of age): ___ and children (<18 years of age): ___ living in household. Total = ___ people.

Number of smokers in household: Does usual caregiver smoke? ___ Yes ___ No ___ Unk If yes, ___ cigarettes/day

Maternal information: Age: ___ Married (M) ___ Divorced (D) ___ Single (S) ___ Widowed (W) Cohabiting w/partner: ___ Yes ___ No Education (years): ___ Employed (E) ___ Not employed (N)

## IV. INFANT AND ENVIRONMENT

___ In crib (C) ___ In bed (B) ___ Other (O)
___ Sleeping alone (A) ___ NA (N) ___ Sleeping with others (O)
Temperature of area:

Body position when placed: ___ Unk ___ Back ___ Stomach ___ Side ___ Other

Body position when found: ___ Unk ___ Back ___ Stomach ___ Side ___ Other

Face position when found: ___ Unk ___ To left ___ To right ___ Facedown ___ Face up ___ To side

Nose or mouth was covered or obstructed: ___ Unk ___ No ___ Yes

Postmortem changes when found: ___ Unk ___ None ___ Rigor ___ Lividity ___ Other

Number of cover or blanket layers on infant: ___ Covers on infant (C) ___ Wrapped (W) ___ No covers (N)

Sleeping or supporting surface:

Clothing:

Other items in contact with infant:

Items in crib or immediate environment:

Devices operating in room:

Cooling source in room: ___ On (+) ___ Central (C) ___ None (N) ___ Off (-) ___ Space (S)

Heat source in room: ___ On (+) ___ Central (C) ___ None (N) ___ Off (-) ___ Space (S)

| Item collected | Yes | No | Item collected | Yes | No |
|---|---|---|---|---|---|
| Baby bottle | | | Apnea monitor | | |
| Formula | | | Medicines | | |
| Diaper | | | Pacifier | | |
| Clothing | | | Bedding | | |

Number of scene photos taken:

Other items collected:

**SUDDEN UNEXPLAINED INFANT DEATH**
**INVESTIGATION REPORT FORM (SUIDIRF) 3.96** **Case number** _____

## V. INTERVIEW AND PROCEDURAL TRACKING

| Contact | Name | Date | Time | Phone | Relationship to infant |
|---|---|---|---|---|---|
| Mother | | | | | |
| Father | | | | | |
| Usual caregiver | | | | | |
| Last caregiver | | | | | |
| Placer | | | | | |
| Last witness | | | | | |
| Finder | | | | | |
| First responder | | | | | |
| EMS caller | | | | | |
| EMS responder | | | | | |
| Police | | | | | |

Alternate contact person: Phone:

| Action | Date | Time | Action | | | |
|---|---|---|---|---|---|---|
| Medical record review for infant | | | Doll reenactment performed | ___ Yes | ___ No | |
| Medical record review for mother | | | Scene diagram completed | ___ Yes | ___ No | |
| Physician or provider interview | | | Body diagram completed | ___ Yes | ___ No | |
| Referral to social or SIDS services | | | Detailed protocol completed | ___ Yes | ___ No | ___ NA |
| Cause of death discussed with family | | | Other: | | | |

## VI. OVERALL PRELIMINARY SUMMARY

Notes to pathologist performing autopsy:

Indications that an environmental hazard, drug, poison, or consumer product contributed to death ___ Yes ___ No

Organ or tissue donation requested by family or agency ___ Yes ___ No ___ Unk

**Cause of death:** ___ **Presumed SIDS** ___ **Suspect trauma or injury** ___ **Other**

## VII. CASE DISPOSITION

| | | |
|---|---|---|
| Case disposition | ___ Case declined (D) due to ___ Topic (T) ___ Locale (L) | ___ Case accepted (J) for ___ Autopsy (A) ___ Inspection (I) ___ Certification (C) |
| Body disposition | ___ Brought in for exam (E) ___ Brought in for holding or claim (C) ___ Released from site (R) | |
| Who will sign DC? | | |

Transport agent:

Funeral home:

Investigator and affiliation:

Date:

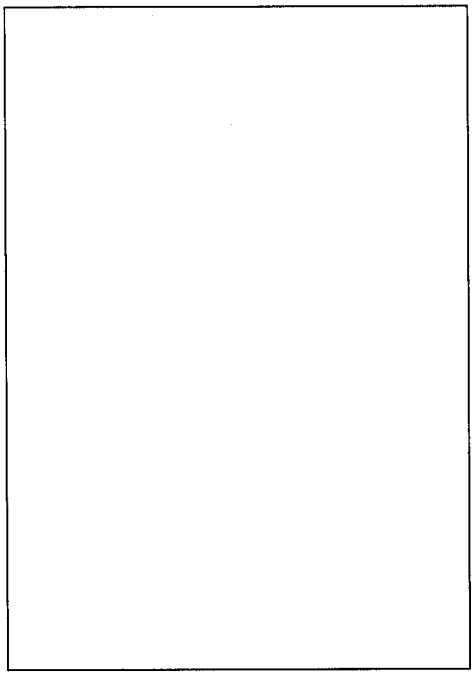
Number of supplement pages attached:

**SUDDEN UNEXPLAINED INFANT DEATH**
**INVESTIGATION REPORT FORM (SUIDIRF) 3.96** **Case number** _____

# SCENE DIAGRAM

**Instructions**

1) Use figure at right for a rectangular room, and use figure below right for a square room. Use a supplementary page to draw an unusually shaped room.



2) Indicate the following on the diagram (check when done):

___ North direction
___ Windows and doors
___ Wall lengths
Ceiling height: _____
___ Location of furniture
___ Location of crib or bed
___ Body location when found
___ Location of other objects in room
___ Location of heating and cooling supplies and returns

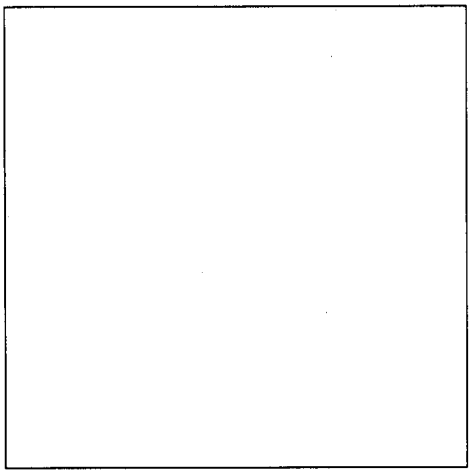
3) Make additional notes or drawings in available spaces as needed.

4) Check all that apply about heat source:

___ Gas furnace or boiler
___ Electric furnace or boiler
___ Forced air
___ Steam or hot water
___ Electric baseboard
Other: _____
___ None

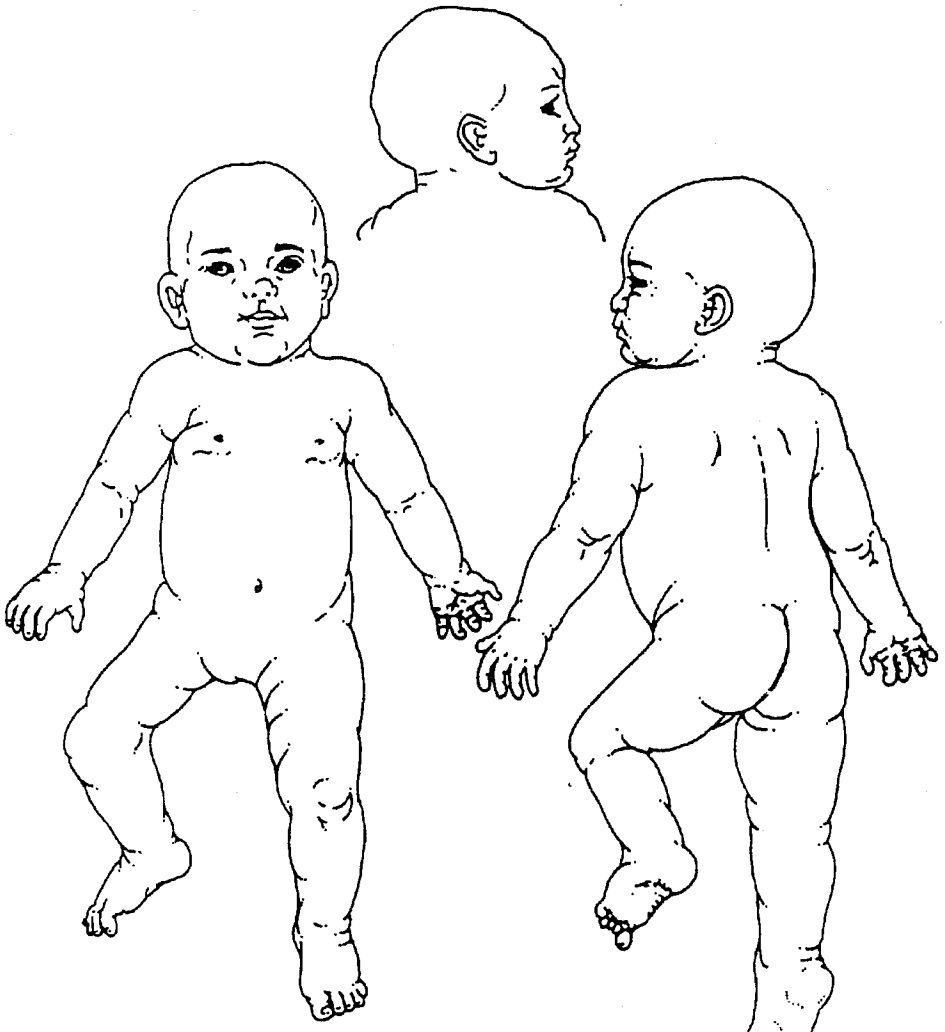
5) Complete the following:

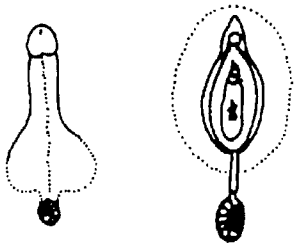
Thermostat setting: _____
Thermostat reading: _____
Actual room temperature: _____
Outside temperature: _____



**Case number** _____

## BABY DIAGRAM





**Instructions**

1) If present, indicate the following on the diagram. If not present, enter "None."

_____ Drainage or discharge from body or orifices
_____ Marks or bruises
_____ Location of diagnostic or therapeutic devices
_____ Pale pressure mark areas
_____ Predominate areas of lividity

2) Complete the following:
Body temperature: _____
Source of temperature: _____

SUDDEN UNEXPLAINED INFANT DEATH
INVESTIGATION REPORT FORM (SUIDIRF) 3.96

Case number _____

## SUIDIRF SUPPLEMENT

# SUIDIRF

Sudden Unexplained Infant Death Investigation Report Form

## INSTRUCTIONS

### 1] PURPOSE

SUIDIRF was developed as a guide for basic investigation of sudden, unexplained infant deaths, and to promote uniformity in the collection and documentation of information obtained in such investigations. It has also been designed to facilitate the development of a standardized electronic data base.

### 2] USAGE

SUIDIRF may be used for any death of an infant or young child in which the cause of death is not apparent prior to autopsy. It may also be used for any death of an infant or child where death is due to obvious causes, using only those parts of the form that are applicable. The SUIDIRF is to be completed by the Medical Examiner or Coroner (ME/C) or Investigator acting on behalf of the ME/C who conducts the initial investigation of death

### 3] COMPLETION

The form may be completed using a blue or black pen or #2 soft lead pencil to facilitate electronic scanning, photocopying, and fax transmission. Pencil or erasable ink is recommended to facilitate corrections. In order to ensure legibility of the forms, writing on the blank side (back) of the forms is discouraged— extra notes may be included on additional pieces of paper, if required.

### 4] DESIGN

SUIDIRF was designed to facilitate its use on a clipboard and to allow easy copying. The SUIDIRF forms are bound at the top in a six page packet, but the pages may be separated from each other in order to copy, fax, or scan. Each of the six pieces of paper in the packet have printing on one side only in order to ensure legibility.

### 5] COMPATIBILITY WITH OTHER FORMS AND DATA BASES

The Centers for Disease Control and Prevention's (CDC) Medical Examiner and Coroner Information Sharing Program (MECISP) has published generic Death Investigation Report Forms (DIRFs)— one for investigators conducting the initial phases of the investigation (IDIRF), and another for the person who certifies the death or otherwise finalizes and "closes" the investigation (CDIRF).[1] SUIDIRF is designed in a format consistent with the DIRFs, having many information items in common. The CDIRF is such that it may be used in conjunction with the SUIDIRF.

For infant deaths, SUIDIRF would be used instead of the generic IDIRF. MECISP has also developed a generic Medical Examiner/Coroner Death Investigation Data Set (McDIDS) to foster uniformity among ME/C electronic databases.[2] Many of the information items in SUIDIRF are contained in McDIDS, and a McDIDS manual is available that contains recommended names for information fields as well as recommended field lengths and instructions for using each field. For SUIDIRF information items that are not included in McDIDS, similar information will be provided in subsequent

publications to guide the development of electronic data bases involving data from infant death investigations.

## 6] HISTORY OF SUIDIRF DEVELOPMENT

The 1992 Senate Report #102-104 and House Report #102-121 recommended that the U.S. Department of Health and Human Services direct its Interagency Panel on Sudden Infant Death Syndrome to review and establish updated standard death scene investigation protocol for investigation of unexplained infant deaths. In 1993, the panel held a "Workshop on Guidelines for Scene Investigation of Sudden Unexplained Infant Deaths" to discuss and develop such a protocol.[3] SIDS experts and representatives from numerous federal, local, public, and private sector agencies and organizations attended, many with a direct interest in unexplained infant deaths. One of the major recommendations of the workshop was that both a short and long version of an investigation protocol be developed. SUIDIRF constitutes the short protocol form. It has been extensively reviewed and edited by the SIDS Panel. The longer version, entitled "U.S. Model Protocol SUID Investigation Protocol will be published separately in the near future. It has been designed to expand upon the information that can be obtained using the SUIDIRF.

## 7] BASIC GOAL OF THE SUIDIRF

The basic goals of the SUIDIRF are 1) to ensure that critical issues are considered in each investigation, 2) to document the extent of investigation, and 3) to provide information to guide the pathologist in autopsy examination.

## 8] GENERAL INSTRUCTIONS

Use military time. Military time (i.e., midnight=0000, noon=1200) facilitates computer applications and requires less space than having to indicate a.m. and p.m. Midnight (0000) belongs to the same day as 0001 (one minute after midnight).

Month and date are sufficient for many fields. Birth dates, death dates, and the date the case was reported to the ME/C should each contain the month, day, and year in MO/DAY/YEAR format (e.g., 01/05/95). For other events that occur in the same year as the report date, it is sufficient to indicate the month and day only.

Use NA to indicate that a specific item of information is not applicable in the case .
If a given item of information is not applicable in a particular case, write NA to indicate that the item is not applicable. Following this procedure will ensure that a reader of the form will know that an item has not been overlooked.

Indicating answers with an **X** or by circling. Most items that have multiple alternatives for an answer are preceded by a line (e.g., ___On scene) or have a box in which an X may be written. In such cases, indicate the correct answer by writing an X on the appropriate line or box (e.g., **X** On Scene). In a few places, alternative answers are presented but not preceded by a line or followed by a box. In such cases, CIRCLE the appropriate response.

Correct errors by erasing or scratching through an incorrect response. If pencil or erasable ink are used, incorrect responses may be erased and corrected. If this is not possible, scratch out the incorrect response and indicate the correct response as needed with an X, or by circling, or by writing text as needed.

Understand abbreviations on the SUIDIRF. In a few places, abbreviations are used on the form to conserve space. They are:
**CPR** (Cardiopulmonary resuscitation)
**DC** (Death certificate)
**DOB** (Date of birth)
**EMS** (Emergency medical services)
**LEO** (Law enforcement officer, i.e., police)
**NOK** (Next of kin)
**O-T-C** (Over-the-counter medications)
**RX** (Prescription medications)
**SIDS** (Sudden infant death syndrome)
**SS#** (Social security number)
**Unk** (Unknown)

Understand specific definitions for terms used on the form. A few terms are in need of specific definition. They are:

**Doll re-enactment**. The use of a doll by the investigator or other person to assist the informants in describing the position of the infant when placed or found.

**Detailed protocol**. The U.S. Model SUID Investigation Protocol.

**EMS Caller**. The person who first called for emergency medical services.

**EMS Responder**. The person who first responded on behalf of the emergency medical service agency that was called.

**Father**. The person serving as the father at the time of the incident. The relationship as natural (birth) father, step-father, or other may be indicated.

**Finder**. The person who discovered the infant dead, unresponsive, or in distress.

**1st responder**. The person who first attempted to render aid when the infant was discovered by the finder.

**Health Care Provider**. The physician, nurse, clinic, or other medical service provider to whom, or to which the infant would usually be taken for medical care or well baby checks.

**Last caregiver**. The person who was responsible for the care of the infant on or about the time it was discovered by the finder, such as a baby sitter, a child care custodian, the mother, or other family member or person.

**Last witness**. The person who last observed the infant in or near the area where it was discovered by the finder.

**LEO**. The law enforcement officer who first responded to the scene.

**Mother.** The person serving as mother of the child at the time of the incident. The relationship as natural (birth) mother, step mother, or other may be indicated.

**Placer.** The person who placed the infant in or near the area where it was discovered by the finder.

**Usual caregiver**. The person who was responsible for providing the usual, ordinary care for the infant (such as feeding, diaper changes, etc) on an ongoing basis, such as the mother, a grandmother, an aunt or uncle, or other person.

**9] SPECIFIC INSTRUCTIONS BY SUIDIRF PAGE**

Many of the information items on SUIDIRF are self-explanatory. Instructions are provided only for the items from which some confusion may arise.

**SUIDIRF Page 1**

Page 1 is used to document the dates and times of critical events, including a brief description of circumstances as they were reported. Addtional pages for narrative descriptions may be attached.

"**ME/C notified**" is used to document the date and time that the death was first reported to the medical examiner or coroner, and by whom it was reported. "Intake by:" is used to indicate the name of the investigator who may have received the first notification, or the name of a receptionist if other than the investigator.

"**Scene visit**" is used to indicate the date and time the medical examiner, coroner, or an investigator acting on behalf of the ME/C visited the scene and conducted an investigation. If such a scene visit occurs, enter the date and time and indicate the name of the person who went to the scene. If, for some reason, a scene investigation is not conducted by an agent of the ME/C, enter "NONE" in the date field. If scene investigation was limited to one conducted by the police or other third party, but an agent of

the ME/C did not visit the scene, write "NONE" in the date field and complete the "BY WHOM" item indicating the name and/or agency who did examine the scene.

"**NOK notified**" is used to indicate the date and time that the next-of-kin was notified of the infant's death if they were not at the scene, as well as the person was notified and by whom he or she was notified. If the family was present at the scene and already knew of the death at the time of its report, write "NA" in the date field.

"**Death Place**" is used to indicate in general terms where death actually occurred, not necessarily where death was pronounced. Options include the scene, en route to a hospital, in the emergency room, in surgery, or after being admitted to a hospital (inpatient).

**"At hospital"** is used to document the date and time that the infant arrived at a hospital if such is the case. "Taken by" is used to indicate the transport agency, ambulance, or other information about who took the infant to the hospital.

'**Injury/event**" is used to document the date, time, and address of a known or suspected injury, OR, when injury is not apparent, to document the date, time, and address where the infant was found.

"**Actual death**" is used to specifically indicate the date, time, and address where death is thought or known to have occurred, not necessarily where death was pronounced.

"**Infant placed**" is used to document the date, time, and type of place where the infant was last placed, and who placed it before being found. A place might be listed as "crib in bedroom"
"**Known alive**" is used to document the date, time, and type of place where the infant was last seen or otherwise known (or assumed) to be alive, and who thought it to be alive.

**"1st response**" is used to document the date, time, and type of response rendered by the first person who attempted to aid or revive the infant, and who rendered such aid.

**"EMS called**" is used to indicate the date and time that emergency services were called to respond. "From where" is used to indicate the place from where EMS was called.

**"EMS response**" is used to indicate the date and time that emergency medical services personnel arrived at the scene. "Agency" is used to indicate the name of the EMS agency.

**"LEO response**" is used to indicate the date and time that police arrived at the scene. "Agency" is used to indicated the name of the police department.

In any box or space that is not applicable, "NA" may be written to ensure other users of the form that an item has not been overlooked or omitted.

The specific names and relationships of all involved individuals referenced on the lower part of SUIDIRF Page 1 should be listed in the table at the top of SUIDIRF Page 4. On SUIDIRF Page 1 it is adequate to use generic terms to indicate "BY WHOM", such as "mother", "sister", "aunt", "neighbor", etc, because further specific details will be provided on SUIDIRF page 4.

Each of the choices in the box at the bottom of SUIDIRF Page 1 is constructed so that, on a given line, only one of the conditions can apply. Indicate the correct choice on each line with an **X.**

"**Describe type of place"** is used to give a concise, but thorough description of the place where the events leading to death occurred. A few examples include "infant's bedroom at home", "privately owned day care center", "child restraint in back seat of moving car", "infant seat in booth at fast-food restaurant".

**SUIDIRF Page 2.**

Page 2 is used to document the infant's medical history information, to assess recent symptoms, signs, and behavioral changes, to document medication history, and to decribe resuscitation attempts and medical treatments and procedures that were used in an attempt to revive the infant.

"**Agonal medical treatment**" is used to indicate the types of medical treatment that were rendered in an effort to revive the infant. They can be explained further, if necessary, in the space provided in the last box on SUIDIRF Page 2.

**SUIDIRF Page 3.**

Page 3 is used to document observations about the household environment in general, to assess the environment in the immediate area where the infant was discovered, and to document evidence that may be secured. To the extent possible, the items on this page should be drawn on personal observations of the investigator who is completing the SUIDIRF.

"**HOUSEHOLD ENVIRONMENT**" is used to assess and document the presence or absence of selected risk factors in the home, even if the events leading to death occurred somewhere else.

"**Type of dwelling**" is used to document concisely the type of household such as "single family home", apartment", "trailor".

'**Water supply**" is used to document whether drinking water is "city water", "well", "bottled", "spring" or other.

"**Estimated income**" is used to document the estimated annual or monthly income for the household, being sure to indicate if the estimate is annual or monthly (e.g., $2000/mo).

"**INFANT AND ENVIRONMENT**" is used to assess and document the immediate environment in which the events leading to death occurred. This may or may not be at the household.

"**Type of area where infant was found**" is used to describe the immediate environment, such as "carpet on floor of kitchen", "bed in parent's bedroom."

"**Temperature of area**" is used to document a measured temperature in the immediate area around where the infant was discovered. If a thermometer is not available, subjective terms such as "cold", "cool", "comfortable", "warm", and "hot" may be used.

The next three items are included to evaluate the possibility of asphyxia and external conditions as a cause of death. The questions are geared to evaluate the possibility of interference with breathing (such as covering of the nose and mouth) or hazards related to aspiration, choking, electrocution, excessive heat or cold, and other such external factors.

"**Describe sleeping/supporting surface**" is used to document the characteristics of the crib, bed, floor, or other object that directly supported the infant when discovered. Some examples include "sheepskin on cement floor", "mesh seat of baby swing", "sheeted mattress in crib", "uncovered mattress on wood floor", and "plastic covered foam sofa cushion on sofa". If the surface shows easy compression or deformation, that fact should be noted and the item should be obtained as evidence.

"**List items in contact with infant other than above**" is used to document any objects, other than the sleeping surface and clothing, that was in contact with the infant, such as "plastic covered, foam-filled bumper guard", "pacifier", "dangling puppet on mobile." Applicable items should be secured as evidence.

"**List items in crib or immediate environment**" Is used to document any other items in the immediate area, to which, within reason, the infant may have had access. Some examples include "pill on floor 16" from body", "pacifier in opposite end of crib", "electric cord draping through crib sleeping area", etc. Appropriate items should be secured as evidence.

<u>When possible, the manufacturer, brand, and lot or product number of relevant consumer products should be documented, using an extra form or paper if needed</u>.

"**EVIDENCE**" is used to document items that are secured as evidence for presentation to the ME/C, crime lab, or other expert for further observation or analysis. NA means "not applicable" or "not available", "obtained" means that the item was secured as evidence, and "not obtained" means that the item was present but it was not secured as evidence. The correct response should be circled for each item. Additional items may be added as needed.

**SUIDIRF Page 4.**

Page 4 is used to document interviews and procedures related to the investigation (such as review of medical records and referral of the case to SIDS services agencies), to provide notes to the pathologist, to indicate an overall assessment of whether findings point to SIDS or another diagnosis or injury, to describe interest in organ/tissue donation, and to document disposition of the body and case report.

Under **"INTERVIEW AND PROCEDURAL TRACKING"** the names of informants, their relationship to the infant, contact phone numbers, and the date and time of interview may be documented. **"Relation to infant"** should be stated as specifically as possible, such as "step-father", "natural (or birth) father", "maternal aunt" "neighbor" etc. **"Last Witness"** refers to the last person who knew (or saw and assumed) the infant to be alive.

**"Doll re-enactment performed"** is used to indicate whether a doll was used to assist the family or witnesses in reconstructing body and face position.

**'OVERALL PRELIMINARY SUMMARY"** is used provide notes to the pathologist concerning specific concerns (e.g. "Please note and evaluate subtle mark on neck"), to generally indicate if environmental hazards or consumer products may have contributed to death, and to indicate if the family has expressed interest in organ or tissue donation. The last line is for the investigator to indicate whether, in the investigator's opinion to-date, investigation points to SIDS or other causes of death, and whether or not there is a suspicion of injury.

Under **"CASE DISPOSITION"**, all reported cases must be checked as either "Case Declined" or "Jurisdiction Accepted". For cases declined, an indication is then made whether the case was declined because the cause and circumstances of death do not place the case within the ME/Cs jurisdiction (i.e., "Topic"), or because the place of fatal events or death places responsibility for investigation with the ME/C in another jurisdiction (i.e., "Locale"). For cases accepted, an indication is then made if the case was accepted mainly so an autopsy (including external examination) could be performed, or because only an external examination is needed, or in order to certify the cause and manner of death.

**"Transport agency"** is used to indicate the person or transport service who brings the body to the morgue from its location at the time of the death report. Enter NA if the body is not brought to the morgue.

**"Funeral home"** is used to indicate the authorized funeral home who will handle the disposition of the remains, whether or not the body has been brought to the morgue.

**SUIDIRF Page 5.**

Page 5 is used to diagram the scene in the immediate area of the infant, and to record selected observations about the scene area.

The scene diagram is self-explanatory, except to note that the box containing words is used to guide and document observations, and as a checklist to ensure that selected observations are made.

**SUIDIRF Page 6.**
Page 6 is an infant body diagram that may be used by the investigator to note marks, bruises, discolorations, drainage from orifices, and other observations about the infant's body.

The body diagram is self explanatory and may be used by the investigator to note relevant findings. The box containing words is used as a checklist to ensure that selected observations are made and documented. Body temperature determinations should be made according to instructions by the ME/C, if made at all, and should be specified as to source (e.g., "axillary", "skin", "rectal" etc.)

## 10] PILOT TESTING

Workshop participants recommended that pilot testing of forms and protocols be conducted. However, significant time has elapsed since the workshop and numerous requests for the SUIDIRF forms have been received. As a result, the SUIDIRF has been made available without prior pilot testing. Comments and suggestions aimed at improving the utility of the SUIDIRF are welcome, and may be directed to:

Centers for Disease Control and Prevention
Medical Examiner and Coroner Information Sharing Program
4770 Buford Highway NE
Mail Stop F35
Atlanta, Georgia 30341-3724
Phone: (404)488-7060
FAX: (404)488-7044
E-mail: MECISP1@cehdeh1.em.cdc.gov

## 11] SUIDIRF MODIFICATIONS

The SUIDIRF is available in electronic form and may be modified to meet the needs of specific ME/Cs or ME/C offices, including the provision or more or larger spaces for writing. ME/Cs are encouraged to expand on the SUIDIRF by incorporating additional information items, if needed or desired.

## 12] REFERENCES

1) Hanzlick R, Parrish RG. Death investigation report forms (DIRFs): generic forms for investigators (IDIRFs) and Certifiers (CDIRFs). J Forensic Sciences. 1994;39:629-36. NOTE: The CDIRF and IDIRF have been modified slightly since publication in the referenced article. The new version may be obtained from CDC-MECISP.

2) McDIDS: Medical Examiner/Coroner Death Investigation Data Set Manual. Available from CDC-MECISP (50 pages). NOTE: The McDIDS Manual contains the revised IDIRF AND CDIRF.

3) Iyasu S, Hanzlick R, Rowley D, Willinger M. Proceedings of "Workshop on guidelines for scene investigation of sudden unexplained infant deaths"-- July 12-13, 1993. J Forensic Sciences. 1994;39:1126-36.