2015

KANSAS ATTORNEY GENERAL
Derek Schmidt

State Child Death Review Board

2015 Annual Report
(2013 Data)

www.ag.ks.gov

Kansas Attorney General Derek Schmidt

October 1, 2015

Dear Fellow Kansans:

For almost a quarter of a century, dedicated professionals serving on the State Child Death Review Board have worked diligently to review the causes of child death in our state in an effort to compile meaningful data and analysis that can make our kids safer. This year, as always, I am grateful for their service.

This report compiles and evaluates information collected from 2013, the most recent year for which data is available. It provides analysis, context and an assessment of what might be considered "lessons learned" – recommendations and suggestions that can help prevent similar tragedies in the future.

I hope this information will add to the many discussions about our efforts in Kansas, both together and individually, to make Kansas a safer place for our children to grow up. As one of the great Kansans, Dwight David Eisenhower, said after the death of his young son, "There's no tragedy in life like the death of a child. Things never get back to the way they were."

Best wishes,

Derek

Derek Schmidt
Kansas Attorney General

Executive Summary

The State Child Death Review Board was created by statute in 1992 and is charged with reviewing all deaths of children ages birth through 17 years old who die within Kansas and Kansas residents in that age group who die outside the state. The board works to identify patterns, trends, and risk factors and to determine the circumstances surrounding child fatalities. The ultimate goal is to reduce the number of child fatalities in the state.

The board is unique in its duties as it is the only entity in the State of Kansas that conducts a thorough review of each child death by analyzing medical records, law enforcement reports, social service histories, school records, and other pertinent information including birth certificate, death certificate, and autopsy. The information collected is maintained confidentially and is used to review and analyze the circumstances of each child's death. The work allows the board to assist other agencies in prioritizing education and prevention efforts. The board members and staff collaborate with other agencies on child safety issues, testify on pertinent legislation, conduct trainings, and serve on committees and task forces in an effort to support the work being done to protect Kansas children.

Between July 1, 2014 and June 30, 2015, the board:

- Held 18 board meetings
- Reviewed and presented 447 cases
- Made five public policy recommendations and prevention strategy recommendations
- Attended/participated in 54 public meetings/training seminars
- Provided training to approximately 185 participants
- Submitted an annual report

Since 1994, the board has reviewed a total of 9,658 child deaths. In 2013 Kansas had 447 child fatalities. The manners of death are classified into one of the following six categories:

1. Natural-Except Sudden Infant Death Syndrome – death brought about by natural causes such as prematurity, congenital conditions, and disease. Natural Death remains the category with the most deaths: 276 in total. More than half (63%) of these deaths were infants less than 30 days of age and 44% were born before 32 weeks gestation.

- **Asthma Related Deaths**- death due to restriction of air in the lungs. The board reviewed three 2013 deaths due to asthma. Since asthma is largely controllable with proper primary care, hospitalization can usually be prevented. After thorough review, the board classified all three of these deaths as preventable.

2. Natural-Sudden Infant Death Syndrome (SIDS) – children who die prior to age one, and display no discoverable cause of death. Kansas statute requires an investigation and an autopsy be performed before this classification can be applied. There were 36 SIDS cases in 2013, of which 34 were classified as SIDS II. A full description of SIDS categories can be found on page 10. Unsafe sleep environment was noted in 86% of SIDS cases. There were also nine Unclassified Sudden Infant Deaths (USID) for which manner of death was categorized as Undetermined. For further description of this category see page 11.

3. Unintentional Injury – death caused by incidents such as motor vehicle crashes, drowning, or fire, which were not the result of an intentional act. In 2013, there were 83 total unintentional injury deaths with the leading cause of death being motor vehicle crashes (MVC). Thirty- eight children died as a result of MVC. Of those deaths, 39% were rear-seat passengers. Of all the age groups, the 15 - 17 year old group accounted for the majority of the MVC deaths. Fifty-percent of the child deaths in the 15-17 year old age group were not using a safety restraint. That, coupled with inattentive driving, excessive speed, and driver inexperience leaves this age group at the greatest risk.

- **Drowning**- The second most prevalent unintentional injury was drowning with 14 deaths occurring in 2013. Of those deaths only one child was documented to be wearing a personal flotation device. Inadequate supervision was a contributing factor in each of these deaths. The board determined all 14 drowning deaths in 2013 were preventable.

4. Homicide – death due to an intentional, unintentional, or criminally negligent act leading to the death of another human being, including Child Abuse Homicide and Gang-Related Homicide. There were 17 child homicides in 2013, and of those, 59% were under the age of 4. In 71% of the cases the homicide took place at the residence of the child.

5. Suicide – death due to the intentional taking of one's own life. In 2013, there were 15 suicide deaths, four of which were age 14 or under. Of the 15 suicides, 73% were male, 87% were white and 47% were documented as having a mental health concern such as depression. Additionally, 47% used a firearm, 40% died from mechanical asphyxia or strangulation and 13% died from drug overdose.

6. Undetermined – cases in which the manner of death could not be positively identified from the evidence collected. In 2013, 20 cases were classified as Undetermined and nine of those were listed as USID. Of the deaths listed as undetermined, 65% occurred to children under 1 year of age. Often the undetermined classification is assigned when there is a lack of thorough, comprehensive investigation and/or autopsy; however, in 2013, 85% of the deaths were noted to have a complete investigation and the autopsy did not reveal an anatomic cause of death. Six cases were noted to have inadequate scene information.

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Acknowledgments

The review of each child death in Kansas could not be accomplished without the invaluable commitment of many people across the State. The Kansas State Child Death Review Board (SCDRB) remains grateful for the significant contributions of the Office of the Attorney General, county coroners, law enforcement agencies, the Department for Children and Families (DCF), the Kansas Department of Health and Environment (KDHE), physicians, hospitals, child advocates, county and district attorneys, and all others who offer their assistance in supplying the information necessary for our review.

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

SCDRB SERVES AS A CITIZEN REVIEW PANEL

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

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

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

Board Members

Attorney General appointee

Steve Karrer, J.D., Chairperson
Assistant Attorney General, Topeka

Director of Kansas Bureau of Investigation appointee

David Klamm, SSA
Kansas Bureau of Investigation, Wichita

Secretary for Children and Families appointee

Dianne Keech
Department for Children and Families, Prevention and Protection Director, Topeka

Secretary of Health and Environment appointee

Elizabeth W. Saadi, Ph.D
Kansas Department of Health and Environment, Topeka

Commissioner of Education appointee

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

State Board of Healing Arts appointees

Erik Mitchell M.D. (Pathologist member)
Deputy Coroner, Kansas City

Jaime Oeberst, M.D. (Coroner member)
District Coroner, Wichita

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

Attorney General appointee to represent advocacy groups

Mary A. McDonald, J.D.
McDonald Law, LLC, Newton

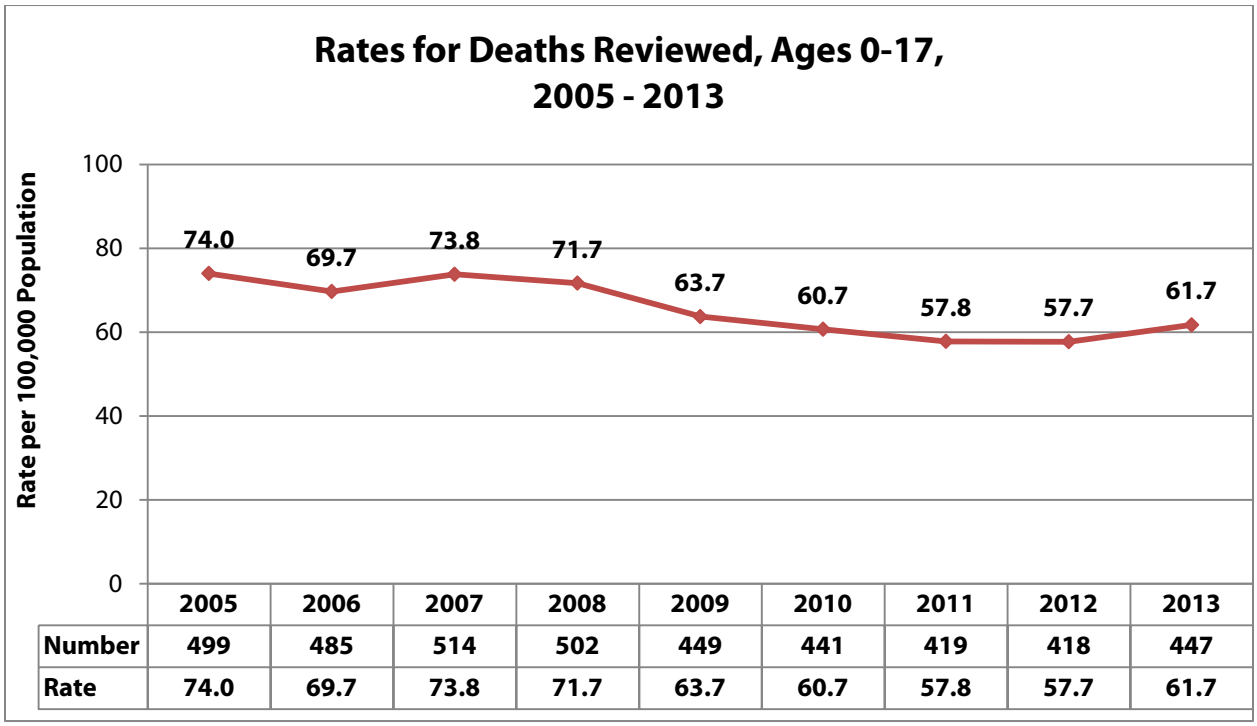
Kansas County and District Attorneys Association appointee

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

Staff	**Staff**	**General Counsel**
Executive Director	**Administrative Specialist**	**Assistant Attorney General**
Angela Nordhus (-4/24/15)	Susan Croucher	Craig Paschang, JD
Sara Hortenstine (current)		

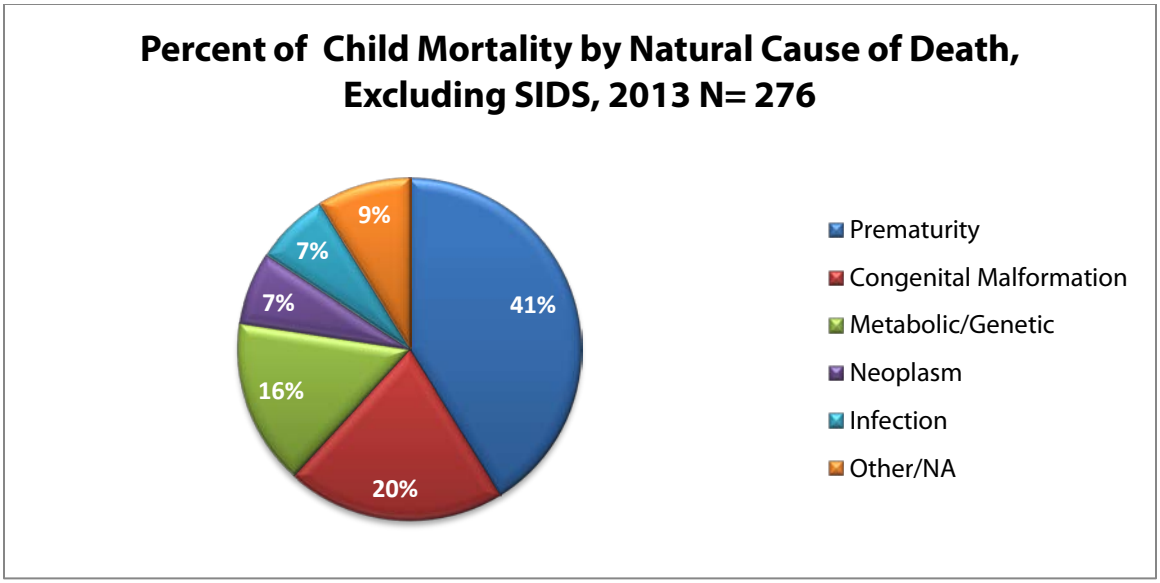
2013 Overview

In 2013, the State Child Death Review Board reviewed the deaths of 447 children, aged 0-17, who died in Kansas.

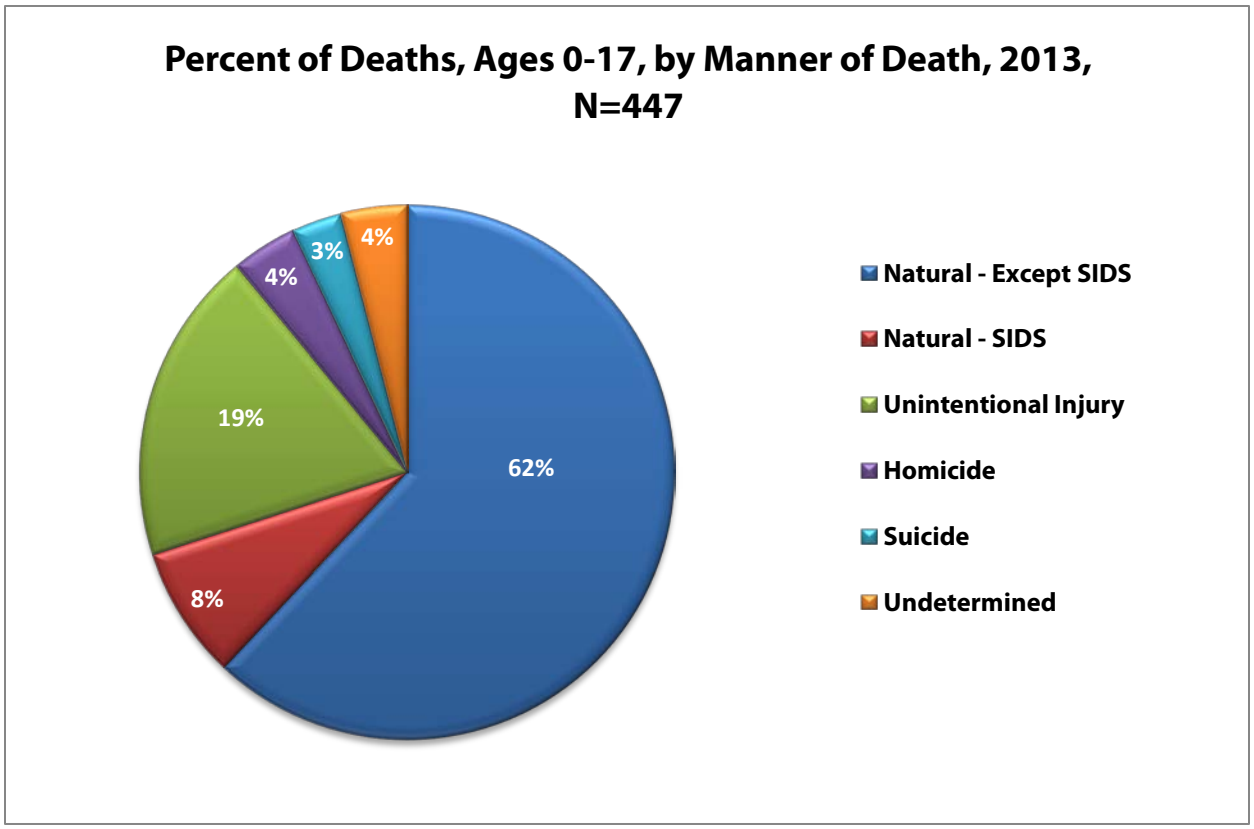


	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number	499	485	514	502	449	441	419	418	447
Rate	74.0	69.7	73.8	71.7	63.7	60.7	57.8	57.7	61.7

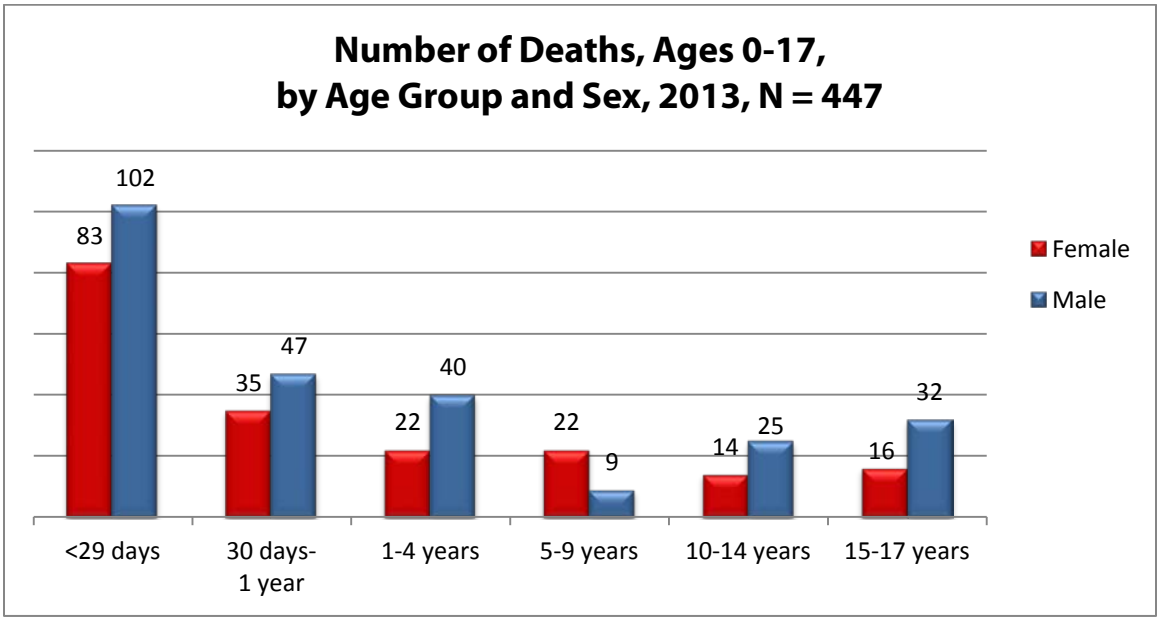
The majority of the 447 deaths in 2013 were from natural causes, with prematurity being the most prevalent.



Of the total deaths, 19% were due to unintentional injuries and 8% were due to Sudden Infant Death Syndrome (SIDS).



The highest percentage of child deaths occurred in the youngest age groups, with 59% less than 29 days of age, and 18% ages 30 days to 1 year. Males accounted for more deaths in most of the age groups, and comprised 57% of all child deaths in 2013.

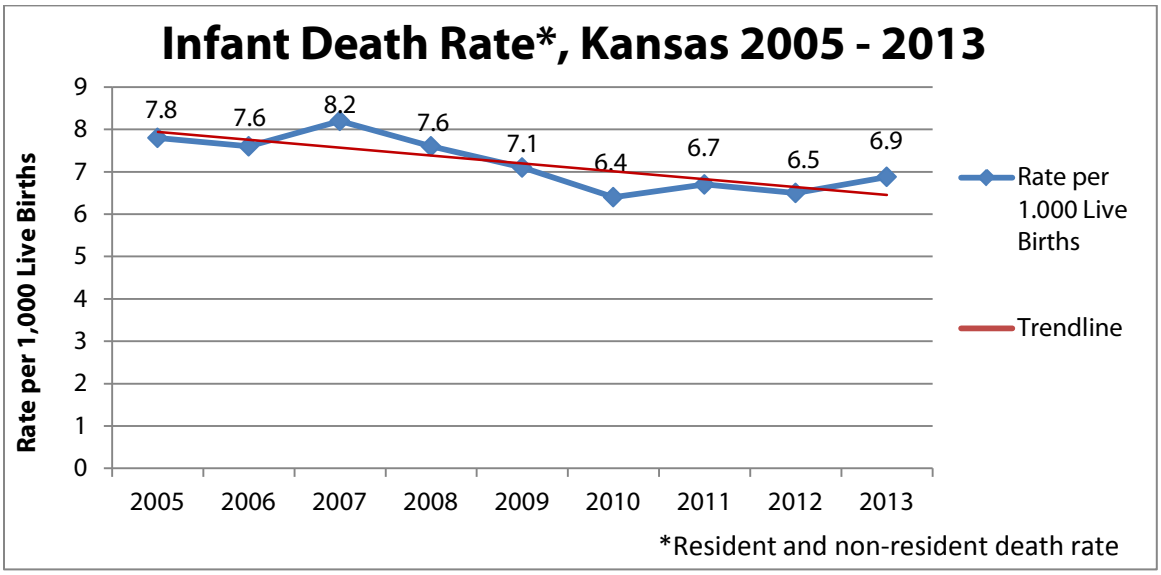


Manner Of Death	Number of Manner	Male	Female
Natural - except SIDS	276	144	132
Natural - SIDS	36	18	18
Suicide	15	11	4
Unintentional Injury	45	31	14
Undetermined	20	17	3
Unintentional Injury - MVA	38	24	14
Homicide	17	10	7
Total	447	255	192

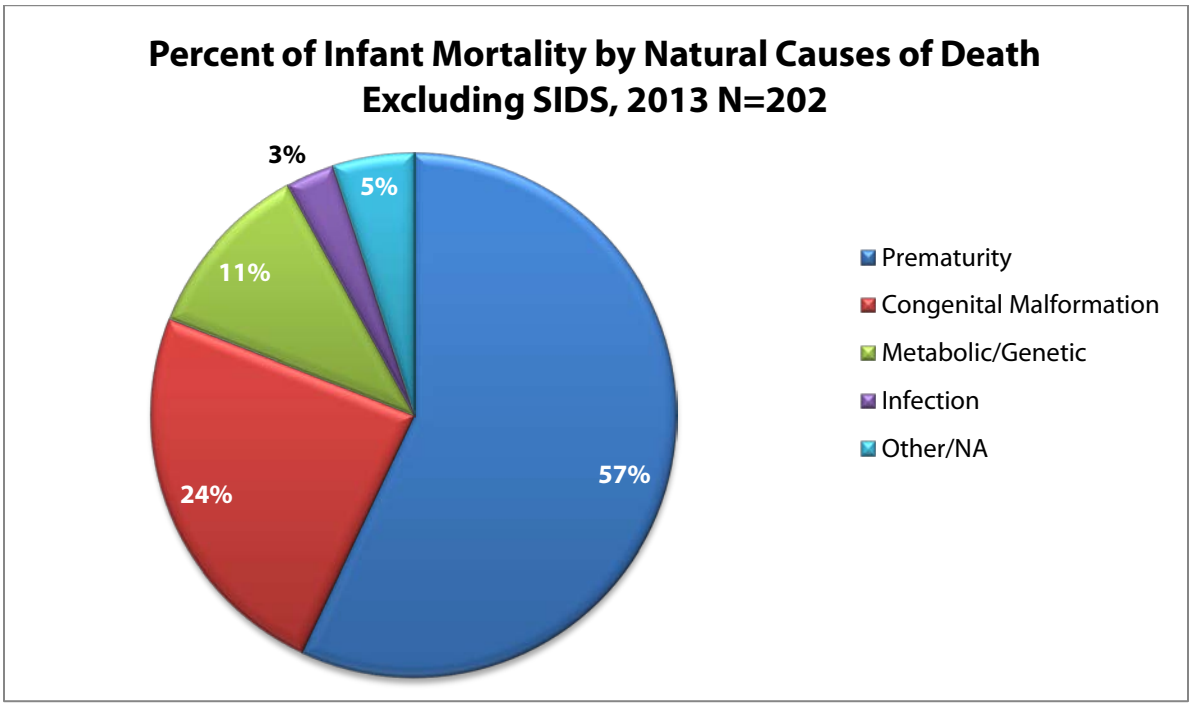
Mortality Affecting Infants

(Age Less Than One Year)

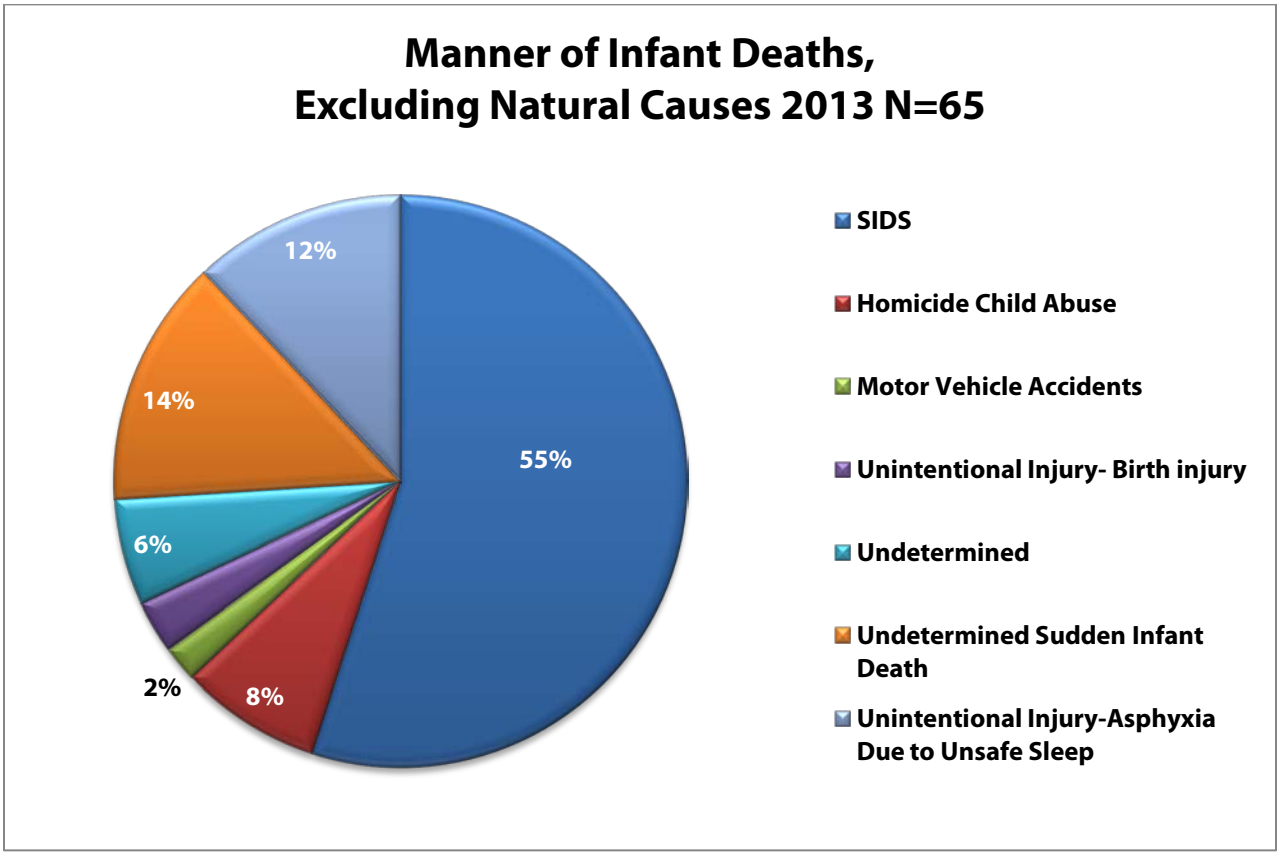
In Kansas, special emphasis has been placed on infant mortality (age less than one year) as an area in need of improvement. In 2013, the rate of infant deaths per 1,000 live births increased to 6.9*.



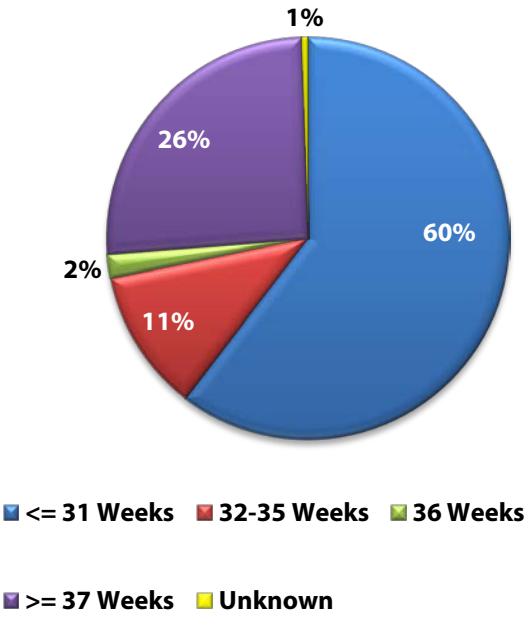
There were 267 infant deaths reviewed in 2013. Prematurity was the leading cause of infant death in Kansas in 2013, followed by congenital malformation and metabolic/genetic conditions. The "Other" designation included a variety of causes such as encephalopathy and cerebral palsy.



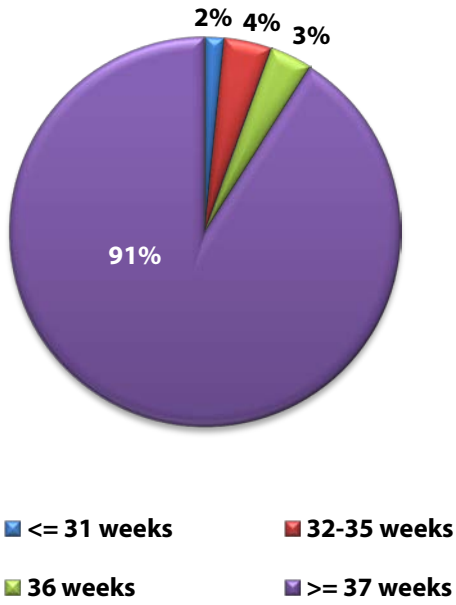
Of all infant deaths reported in 2013, 24% (65) were due to reasons other than natural causes. Sudden Infant Death Syndrome accounted for 55% of those deaths while another 14% were due to deaths which were Unclassified Sudden Infant Death (description on page 11) The remaining 6% of deaths were due to Unintentional Injury by Asphyxia which occurred in unsafe sleep environments. Inappropriate sleep environments are noted as a concern in the majority of all natural deaths in children under the age of 1.



Natural Deaths, Excluding SIDS, Ages <1 year, by Weeks Gestation at Birth, 2013 , N=202



Live Births by Weeks Gestation, 2013



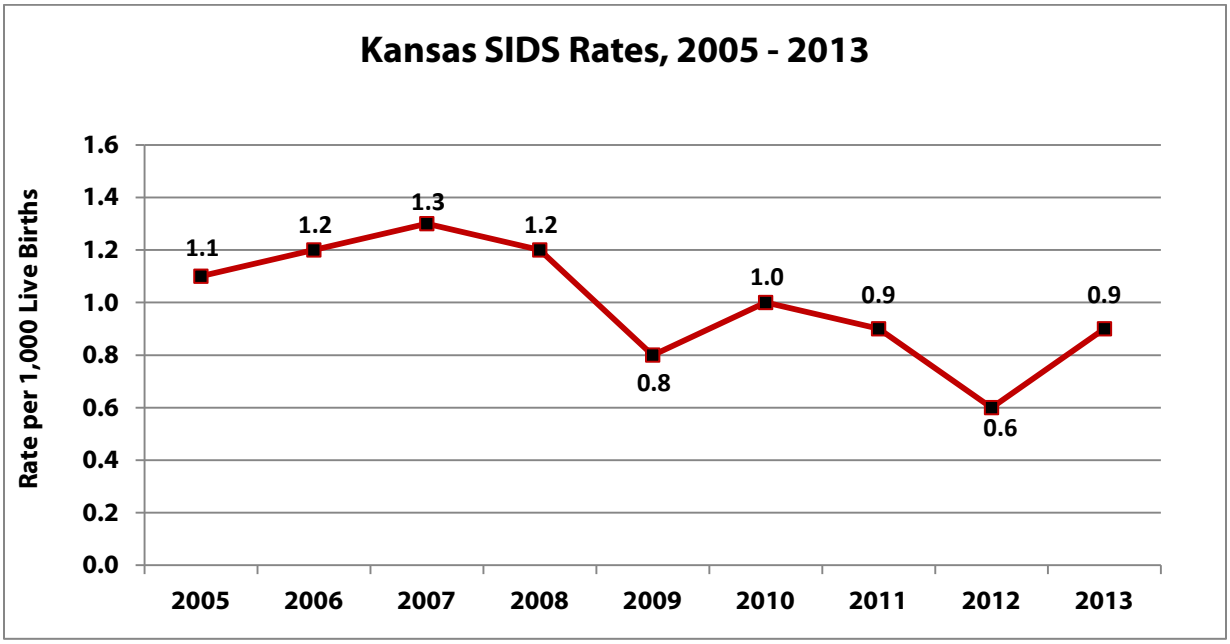
KDHE: BEPHI, Public Health Informatics
Kansas residence data

PREVENTION POINTS

- **Prenatal Care** – Medical care during a pregnancy can identify risk factors and health problems, allowing early treatment and minimizing poor outcomes. Proper nutrition is vital to a pregnancy. Iron and folic acid supplements, along with other physician prescribed regimens can help ensure a healthy pregnancy and newborn.
- **Avoid Drugs, Alcohol, and Nicotine** – The use of illicit substances, alcohol, and nicotine should be avoided during pregnancy. These elements all have the ability to cause serious health issues and sometimes death for newborns and infants.
- **Diagnose and Manage Chronic Health Conditions** – Medical care for infants and children with chronic health conditions can optimize health. Having a medical home in which education and coordinated care for chronic conditions and illnesses can be monitored is essential for improving such conditions.

Sudden Infant Death Syndrome (SIDS)

SIDS is defined as the sudden unexpected death of an infant less than 1 year of age with onset of the fatal episode apparently occurring during sleep, which remains unexplained after a thorough investigation, including performance of a complete autopsy and review of the circumstances of death and clinical history. There were 36 SIDS deaths in Kansas in 2013, and another nine deaths which were Unclassified Sudden Infant Deaths (USID), and were listed as an undetermined manner of death (see page 34).



Characteristics of the 36 SIDS Deaths, 2013

86% had one or more factors that contributed to an unsafe sleep environment
39% were co-sleeping with adults and/or other children
89% occurred at the decedent's residence
11% occurred in a child care setting
64% were not placed on their back to sleep (recommended position)
56% were found on their abdomen or side

A majority of SIDS deaths involved infants placed to sleep in an infant crib or portable play pen which had additional items in the sleep environment such as blankets, pillows, or stuffed animals contributing to an unsafe sleep environment.

The board's concerns about unsafe sleep environments are affirmed in a safe-sleep study published in August 2014 in *Pediatrics*, the journal of the American Academy of Pediatrics. A cross-sectional examination of 8,207 sleep-related infant deaths extracted from the National Center for the Review and Prevention of Child Deaths Case Reporting System (NCRPCD) between 2004 and 2012, showed that 69% of the infants were bed-sharing (co-sleeping) at the time of their demise. It also noted that "older infants (ages 4 months to 12 months) were more likely than younger infants to have objects in their sleep area, such as pillows, blankets, bumper pads and stuffed animals, at the time of death." Causation and risk cannot be determined from these findings without a comparison group; however, it appears that co-sleeping continues to be a significant risk factor for SIDS. Data for this study were obtained from NCRPCD Case Priority system, a database comprising reports of individual child death reviewed by state child death review teams. As of late 2013, 43 states were participating in the database.

By more clearly defining subsets of infant deaths that occur suddenly and unexpectedly, uniformity of diagnosis, accuracy of information, and accumulated data for research and assessment of recommendations are enhanced. The SCDRB has adopted the following sub-classifications for SIDS deaths:

Category IA: Classic features of SIDS present and completely documented

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

Category IB: Classic features of SIDS present, but incompletely documented
Investigation of the various scenes where incidents leading to death might have occurred was not performed and/or one or more of the analyses listed above was not performed.

Category II: Infant deaths that meet Category I criteria, except for one or more of the following:

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

Unclassified Sudden Infant Death (USID):
Includes deaths that do not meet the criteria for Category I or II SIDS but for which alternative diagnoses of natural or unnatural conditions are equivocal, including cases for which autopsies were not performed. The board most generally classifies these cases as Undetermined.

In 2013, the SCDRB determined the following number of child deaths due to SIDS and Unclassified Sudden Infant Death (USID):

Category	Total	Explanation
SIDS 1A	1	This infant was found in a safe sleep environment with no evidence of an accidental death.
SIDS 1B	1	This infant's death has incomplete investigation records.
SIDS II	34	In 91% of these cases an overlay or positional asphyxia could not be ruled out. In previous years, medical problems or inflammatory changes, such as evidence of a respiratory infection that were present, but not sufficient to be clear causes of death, have been factors in cases in this category.
USID	9	All of the USID cases whose death occurred while they were sleeping had an element of an unsafe sleep environment. In 78% of the cases there was current or past DCF involvement with 56% of the cases showing current or recent concerns of domestic violence and or parental substance abuse. The board stresses the importance of concise and thorough investigations by law enforcement and medical personnel, and properly conducted/complete autopsies. Information on autopsy guidelines can be found at http://ag.ks.gov/docs/default-source/forms/autopsy-guidlines.pdf?sfvrsn=4 .

The SCDRB has significant concern about the number of SIDS deaths classified as Category II. Most Category II deaths are classified as such due to the inability to definitively eliminate overlay or positional asphyxia as a cause of death. These are babies sleeping with parents or siblings, placed to sleep on soft surfaces, or with pillows or excessive bedding in the sleep environment. Although these cases are suitable to classify as SIDS, the possibility exists that some of the deaths are due to overlay by a parent, or mechanical asphyxia from bedding or pillows. The large number of infants who sleep in less than ideal circumstances is a continued concern for the board.

An infant was found unresponsive after being placed to sleep with a parent on the couch and covered with a heavy blanket. The infant's death was determined by the board to be a SIDS II Death. The board recommends avoiding having infants co-sleep with adults or other children, and placing infants on firm sleep surfaces without soft materials such as heavy blankets.

PREVENTION POINTS

- Infants should be placed to sleep in a supine position (on the back). Side sleeping is not as safe as supine sleeping and is not advised.
- A firm sleep surface should be used. Soft materials such as pillows, quilts, comforters, or sheepskins should not be placed with the infant.
- Use sleep clothing, such as sleep sacks designed to keep the infant warm, instead of bedding that could overheat the infant or cover the baby's head. Avoid overheating the infant's room.
- Smoking during pregnancy is a major risk factor and should be avoided.
- A separate, but proximate sleeping environment is recommended. Bed-sharing (co-sleeping) with adults or other siblings should be avoided.
- Many devices promoted to reduce SIDS have not been proven to reduce the incidence of SIDS. Obtain an evaluation/recommendation from a medical professional before use of such products.
- For more information on safe sleep, visit the SCDRB's website at http://ag.ks.gov/scdrb , the AAP at http://www.aap.org/, or Safe Kids Kansas at http://www.safekidskansas.org/.

Since many infants spend a significant portion of their time in day care or other child care environments, assuring safe sleeping arrangements at every site is critical. Many SIDS deaths have been associated with the child being prone, especially when the baby is used to sleeping on his/her back. Babysitters and family members who provide periodic care for babies may not be aware of the importance of supine sleeping and other safe sleeping arrangements.

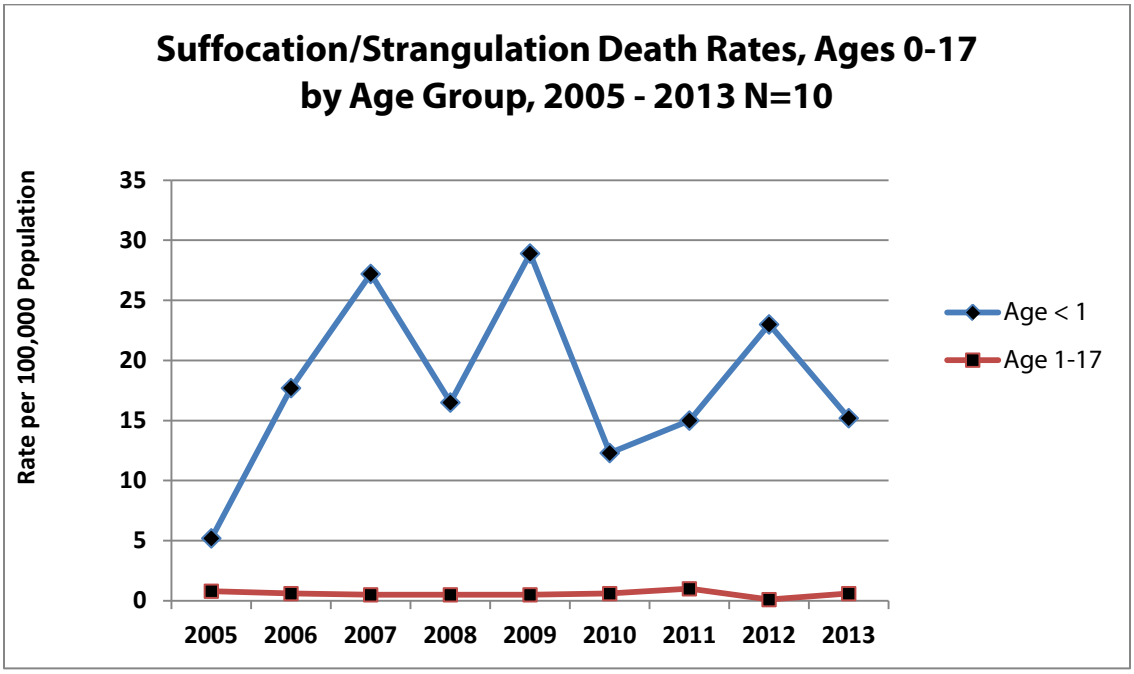
An infant was found unresponsive at a home day care after being placed on an adult mattress with pillows for his afternoon nap. The board determined this death to be preventable and recommended practices of safe sleep in child care settings be followed as regulated by child care licensing.

PREVENTION POINTS FOR PARENTS WHEN SELECTING CHILD CARE HOMES AND CENTERS

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

Suffocation/Strangulation

Unintentional asphyxia deaths most often affect very young children who have not yet developed the strength or motor skills to remove themselves from dangerous situations. Reviews from Kansas and across the nation show there are several common practices that increase the risk for asphyxial death. These include sleeping somewhere other than a crib, being placed on the abdomen to sleep, sleeping in a cluttered area, being placed on a soft surface such as a pillow or quilt, and bed-sharing (co-sleeping) with parents or siblings. Some cribs, bassinets and playpens have been recalled because of known or suspected risk of strangulation. Before purchasing baby furniture ensure no recalls have been issued. The U.S. Consumer Product Safety Commission (http://www.cpsc.gov/) is a resource for recall information.



Characteristics of Suffocation/Strangulation Deaths, 2013

- Ten child deaths occurred due to suffocation/strangulation
- Six were less than one year of age
- Two deaths were by choking on toys or food
- Eight were in unsafe sleeping environments,
  (co-sleeping with an adult or sibling, placed on soft surface, etc.)

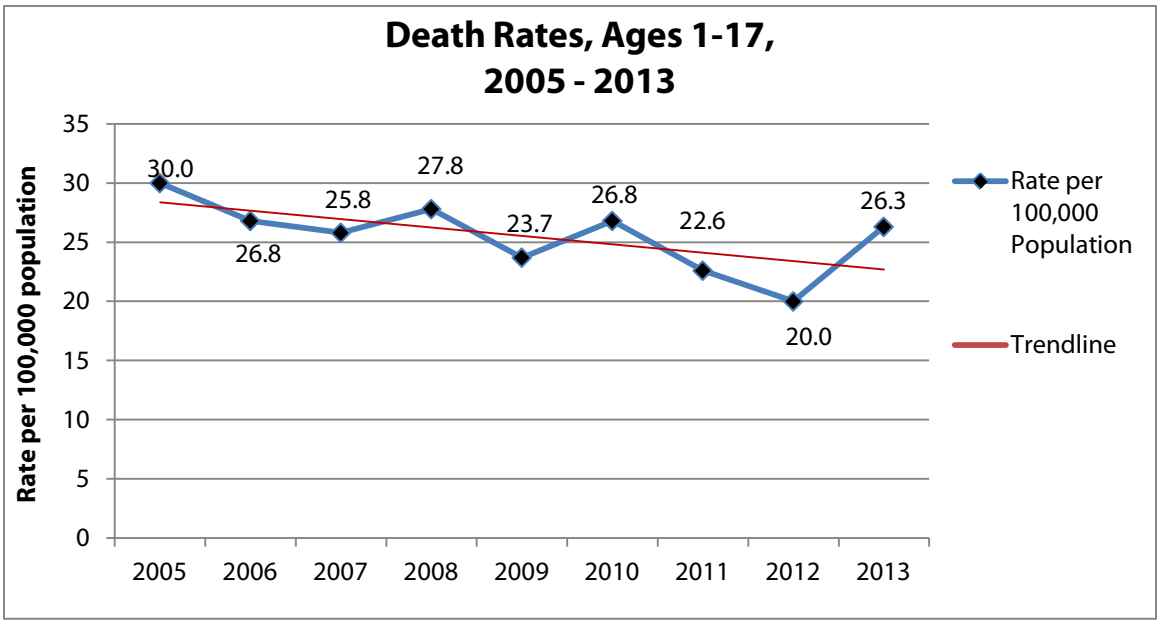
The board determined the death of a healthy infant to be caused by asphyxia after being found "wedged" between an adult mattress and a wall. The board determined this death to be preventable and recommends that infant sleep in an approved crib with proper supervision.

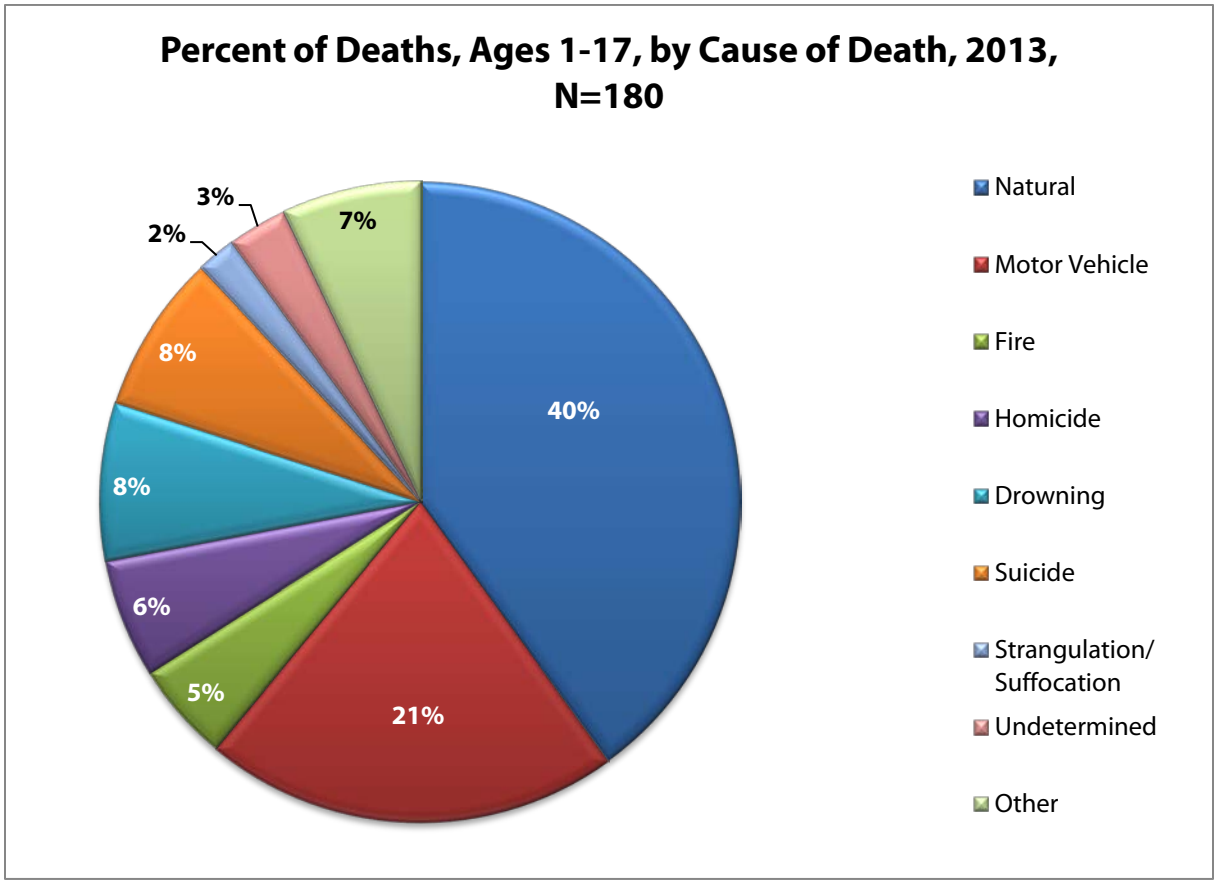
PREVENTION POINTS

- **Proper Supervision** - Young children should be watched attentively. Leaving them alone for even a few minutes allows opportunities for accidents. Child-specific training in CPR and other emergency responses can help prevent death.
- **Safe Environments** - Be vigilant about potential dangers to children. Consideration must be given to their size, curiosity, and motor ability. Living, sleeping, and play areas should be routinely inspected for dangers which may not be threats to adults (e.g. chests/coolers, hanging cords, plastic bags), but can be deadly to children. Check play areas for hazards like protruding bolts that can catch clothing and strangle a child. Check playground equipment parts and hand rails for spaces that may be large enough to allow a child's body to slip through causing strangulation by trapping the head or neck.
- **Infant Sleeping Arrangements** - The safest sleeping arrangement for an infant is alone in an approved crib, on his or her back. Babies should not sleep in adult beds and should not be placed in bed with parents or siblings. The crib mattress should be firm and fit tightly so the child cannot be trapped between the mattress and side of the crib. Soft items such as blankets, bumper pads, pillows, and stuffed animals are at risk for suffocation and should not be in the crib with the baby.

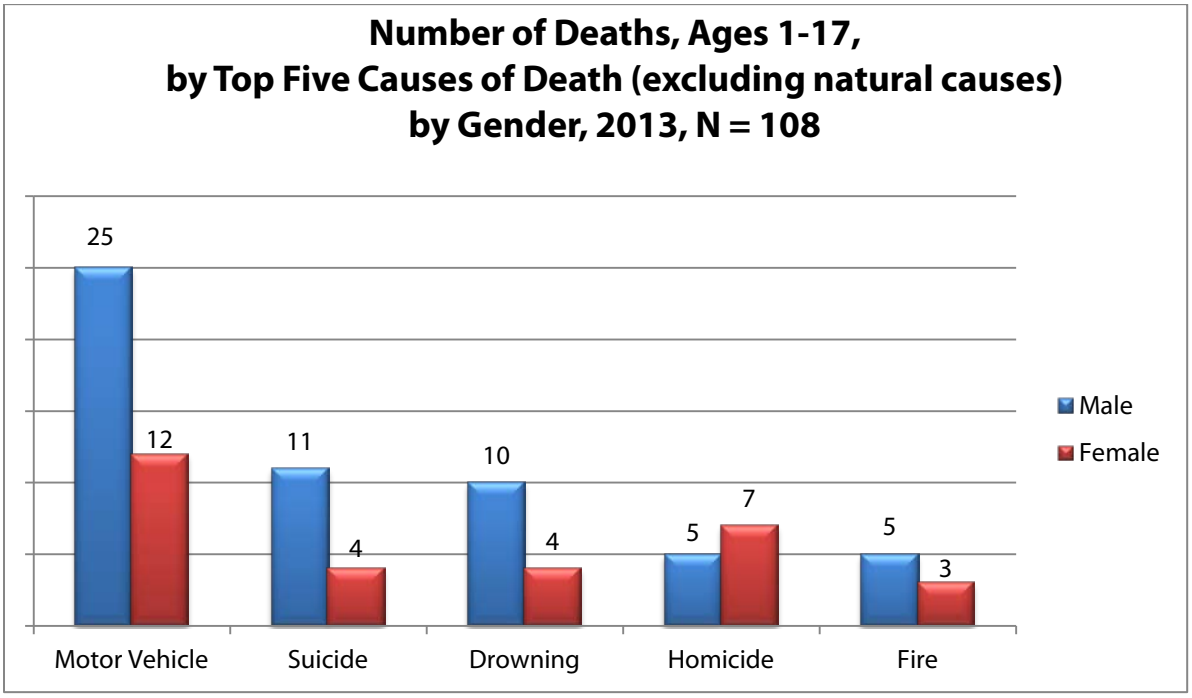
Mortality Affecting Children Ages 1-17

Overall, death rates for children ages 1-17 have declined since 2005. There were 180 deaths in this age group in 2013.

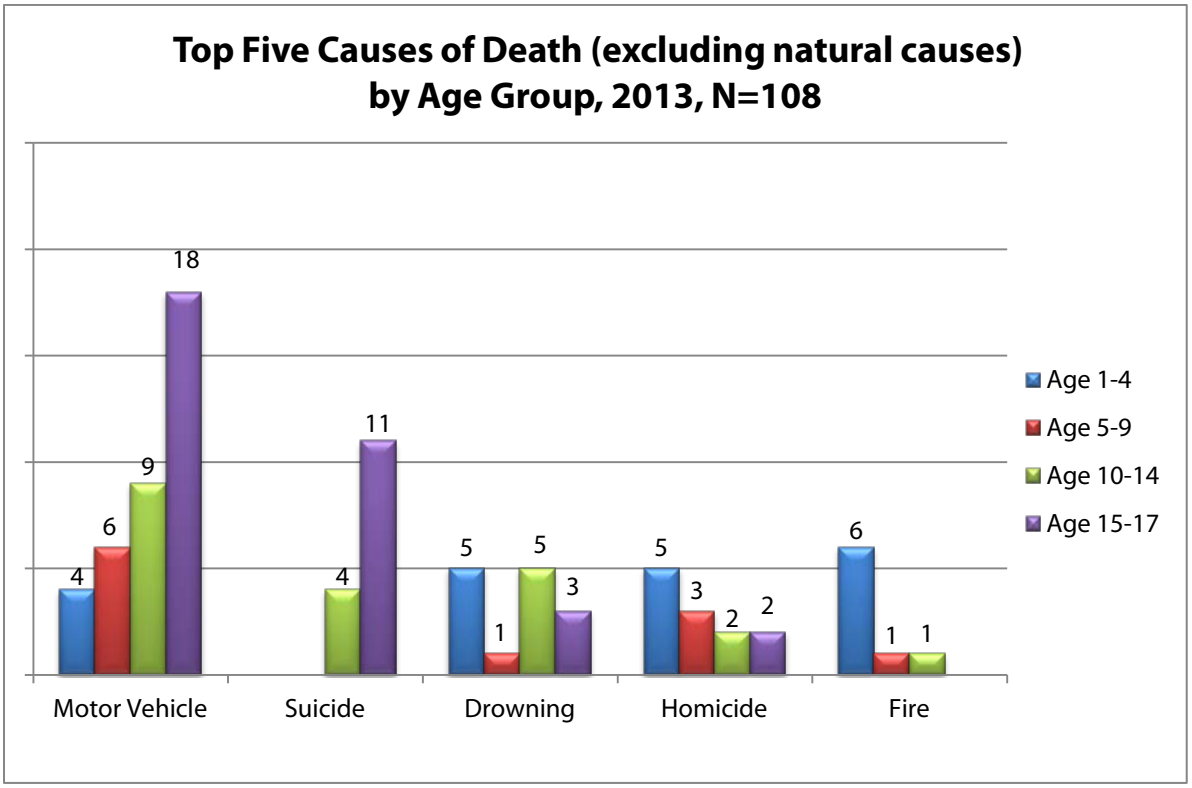




The following chart excludes Natural deaths and shows cause of death for 108 children ages 1-17 by sex. Overwhelmingly more males commit suicide than females both nationwide and in Kansas.



Older children account for more motor vehicle crash deaths and suicides, while younger children account for a larger number of deaths by homicide and fire.



Of the deaths age 1-17, 46% were the result of unintentional injuries, including 21% from motor vehicle crashes and 8% from drowning. Natural causes including cancer, heart conditions and respiratory diseases such as asthma accounted for another 40%.

Asthma

In the last four years of SCDRB cases (2010 – 2013) there have been eight deaths due to asthma. These deaths occurred in children from ages 1 -14 with the majority of deaths occurring to children in the 10-14 age group. Although the number of deaths is small, even one death is too many.

The numbers and rates of pediatric asthma hospitalizations is one indication of how well a state overall is managing asthma. If asthma is well controlled a child should not need to be hospitalized for the disease. For the same years, 2010 – 2013, the rates of hospitalization for asthma in children 2 through 17 years of age appears to be decreasing, with the exception of a rather dramatic increase in 2012.

Numbers and Rates of Pediatric Asthma Hospitalizations
Kansas, 2010-2013

(Admissions with principal diagnosis of asthma per 100,000 population, ages 2 through 17 yrs)

Year	Number	Rate
2010	732	113.3
2011	700	108.5
2012	886	138.2
2013	600	93.5

Source: Kansas Hospital Association
Prepared by KDHE Bureau of Epidemiology and Public Health Informatics, 2015

Asthma is a chronic disease that affects the airways in the lungs. It is characterized by inflammation that restricts the ability to move air out of the lungs and leads to episodes of wheezing, coughing, shortness of breath and chest tightness. Severe asthma can lead to complete closure of the airways and is life threatening. There is no cure for asthma. It can be kept under control with a management plan that includes rescue inhalers and preventive medications through quality medical care and asthma education. This also includes the ability to recognize and avoid each child's specific triggers such as allergens, exercise, tobacco smoke, air pollution and infections. It is estimated that 1 in 11 children have asthma, which makes it a very common problem. Because it is common, parents and care providers often fail to understand that asthma is not a one-size-fits-all disease and do not appreciate how life threatening it can be if not treated quickly and appropriately.

It is imperative that children have access to medical providers who can effectively manage and control asthma in children, provide ongoing education and monitoring, and work with families, child care facilities and schools to improve the lives of children with asthma and prevent asthma related deaths. Child care providers and school personnel, including coaches and trainers, must have appropriate asthma education and access to each child's asthma action plan and medications. Immediate access to medical providers who can provide direction in urgent situations is also important to those caring for children with asthma.

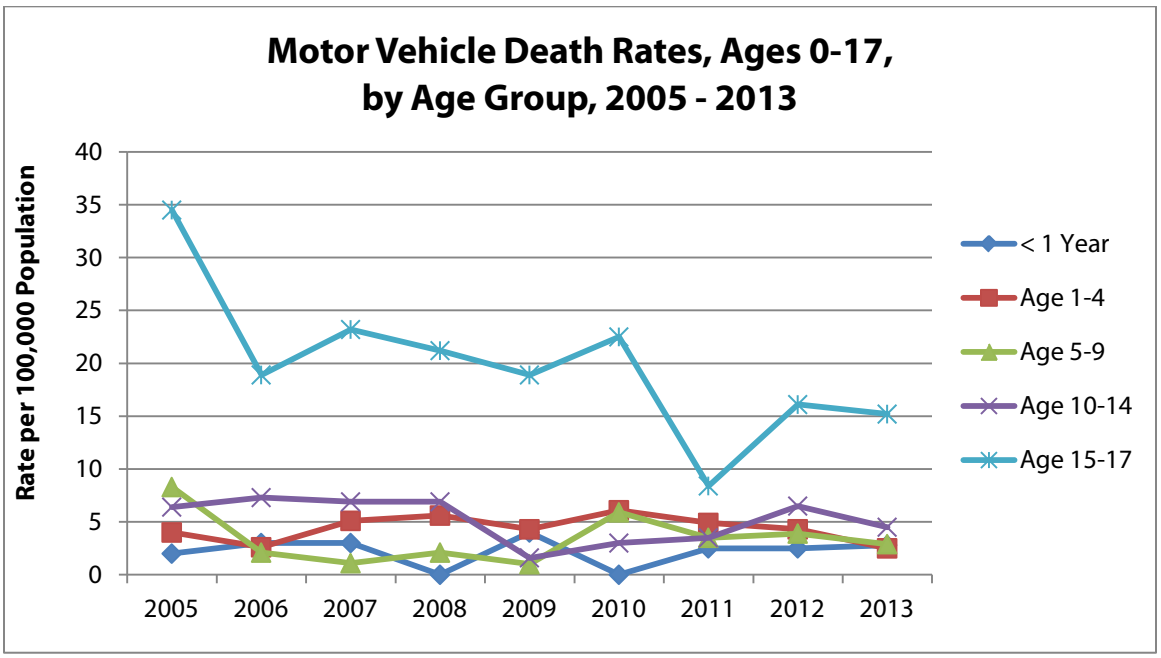
Efforts to improve asthma care and education are part of hospital quality improvement across the state. Involving families and other care providers in education is also essential. Continued monitoring of Kansas asthma hospitalizations and deaths will help in our assessment of how well our state is caring for children with asthma.

PREVENTION POINTS

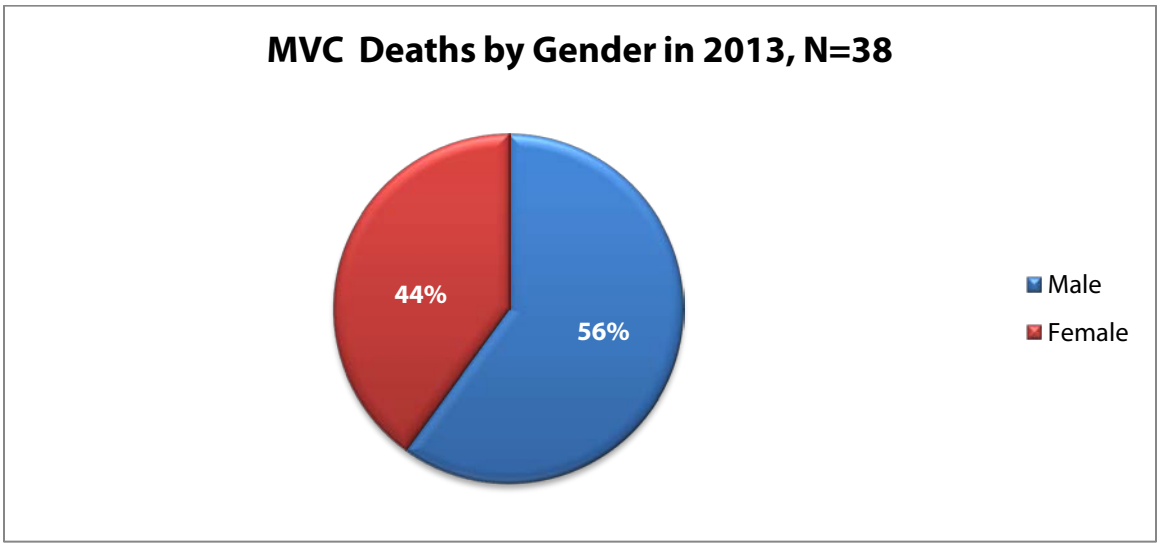
- **Assessment and Monitoring**: Asthma is highly variable over time. Periodic, scheduled monitoring by health care providers familiar with standardized and evidence-based care is essential, even if the patient and family feel the child is doing well.
- **Education:** Teaching and reinforcement of self-monitoring skills and devices, use of a written asthma action plan, correct use of medications and devices, and avoidance of asthma triggers in the environment are areas of knowledge to adapt to each child's care and integrate into all points of care.
- **Control of Environmental Factors and Comorbid Conditions**: Avoidance of cigarette smoke exposure, determining and reducing exposures to allergens, consideration of allergen immunotherapy if indicated, and management of obesity, gastroesophageal reflux, obstructive sleep apnea and infections (including annual use of influenza vaccine) are important steps in asthma control.
- **Medications**: Medications and delivery devices must meet the child's needs and circumstances. A stepwise approach with therapy adjustments based on the child's asthma control are outlined with evidence-based support in Guidelines for the Diagnosis and Management of Asthma published by the National Heart, Lung and Blood Institute of the National Institutes of Health. (http://www.nhlbi.nih.gov/health-pro/guidelines/current/asthma-guidelines/full-report)

Motor Vehicle Crash

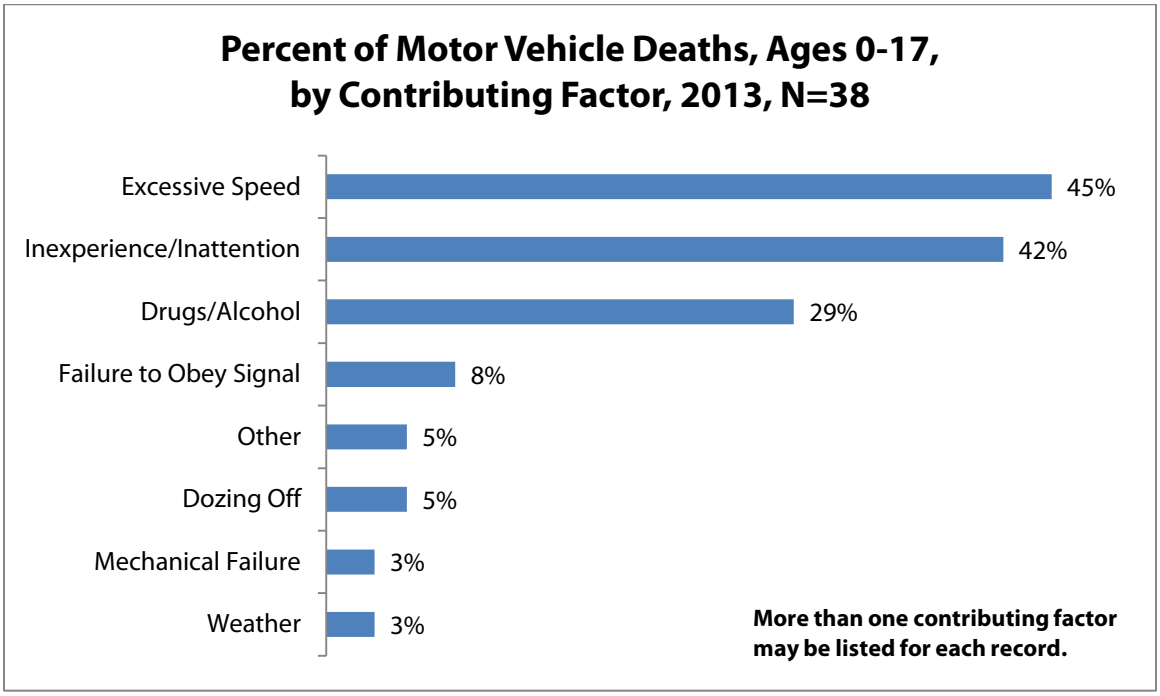
In 2013, 38 children died in Kansas as a result of a Motor Vehicle Crash (MVC). There were five MVC deaths in the 0-4 age range; of those that were passengers in a car, none were restrained. Of the MVC deaths in the 5-9 age group, 67% were unrestrained, as well as 78% in the 10–14 age group. There were 18 deaths ages 15-17 and 50% of those were unrestrained



Most of the deaths were in the 15-17 year age group and males accounted for the majority of all MVC deaths.



Driver inexperience and inattentive driving were noted as contributing factors in 42% of the total cases and excessive speed was noted in 45%. Drugs and/or alcohol use was noted to be a contributory factor in 29% of the cases, however in only one case was the decedent under the influence of drugs while driving.



Characteristics of the 38 Motor Vehicle Crash Deaths, 2013

67% of the deaths in the 15-17 age groups were males
39% of the decedents were rear-seat passengers
74% of the decedents did not use, or misused, safety restraints
10% were ATV crash deaths

A 15 year old was driving on a rural road when he approached a curve at an excessive speed. The driver lost control of the vehicle and was ejected from the car due to being improperly restrained. The board encourages use of proper safety restraints, appropriate speeds for the road conditions, and attentive driving.

All-terrain vehicle use has become popular in both recreation and work. Their size, maneuverability, and durability make them extremely handy and fun to ride. Unfortunately, the thrills can quickly turn to tragedy. In Kansas, children ages 10 - 14 have comprised the highest number of ATV child-related

fatalities since 1994. Young riders lack the size and strength to safely control an ATV. ATV drivers often travel on roadways that are not designed for ATV travel and drive at unsafe speeds.

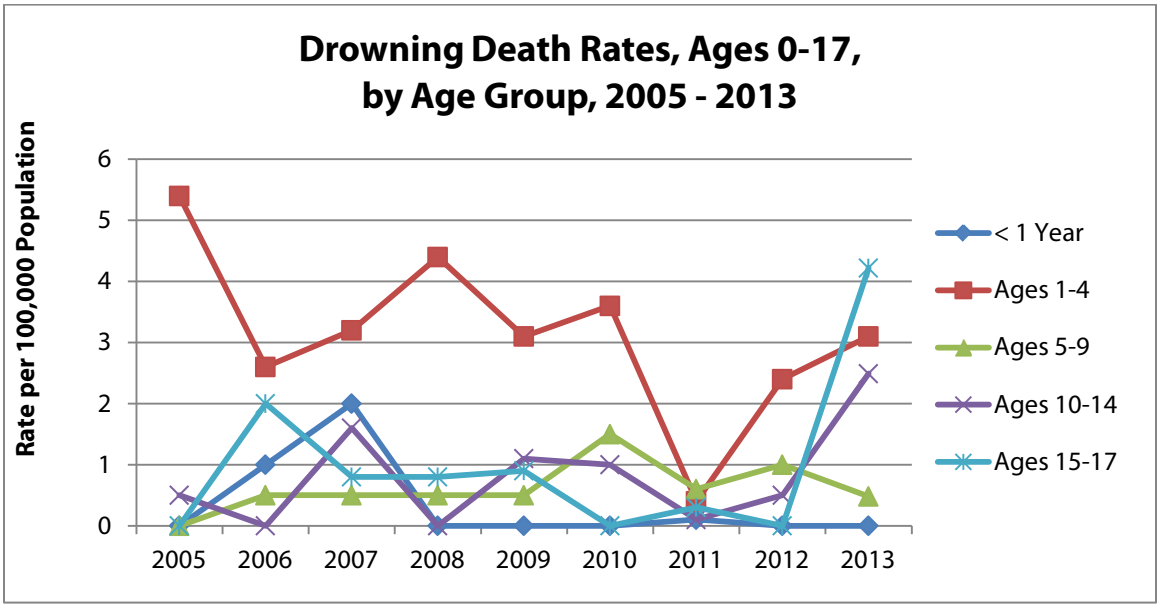
PREVENTION POINTS

- **Use of Proper Safety Restraints** - Wear seat belts. Seat belts and appropriate child safety restraints consistently prevent serious injury and death. The importance of parental seat belt use as an example is invaluable. According to the National Highway Traffic Safety Administration, parents who buckle up are more likely to use safety restraints for their children. Children under 4 years of age should be placed in a child safety seat firmly secured in the backseat. Children between the ages of 4 and 8 should be in belt-positioning booster seats.
- **Attentive Driving** - Avoid distractions such as cell phones and other electronic devices. Novice drivers should have limits placed on the number of passengers and nighttime driving, both known risk factors. As of January 1, 2011, a person who is operating a motor vehicle is prohibited from using a wireless communication device to write, send, or read a written communication in Kansas.
- **Avoiding Alcohol or Drug Use** - It is never safe to drive after drinking alcohol or using narcotics or other mood-altering drugs. Avoid riding with anyone who is suspected of being under the influence of drugs or alcohol.
- **Driving Experience** - Driving is not a quickly learned skill and requires practice, focus and good judgment. Young drivers should be accompanied by an experienced adult and avoid complex driving situations. In January 2010, the revised graduated driver's license system was enacted and does not confer full driving privileges until age 17 and after significant supervised driving time.

Drowning

Children are drawn to water. They like to splash and play in it, but this lure is deceptive and can lead to tragedy. Children can drown in a couple of minutes and in only a few inches of water. Drowning is a leading cause of unintentional injury deaths nationwide. In 2013, 14 children died from drowning in Kansas which is twice the number of deaths compared to 2012. In all 14 cases, the children had been left alone or were improperly supervised.

Between 1994 and 2013, the board has reviewed 224 drowning cases. In total, 40% occurred in rivers/lakes, 39% in a pool or hot tub, and 27% were in other locations, including bathtubs. Since 2012, the 1 - 4 year age group has accounted for the largest number of drowning deaths.



Characteristics of the 14 Drowning Deaths, 2013

- All were improperly supervised
- Six were swimming in a river, lake, or pond
- One decedent was using a personal flotation device
- Three were documented as knowing how to swim

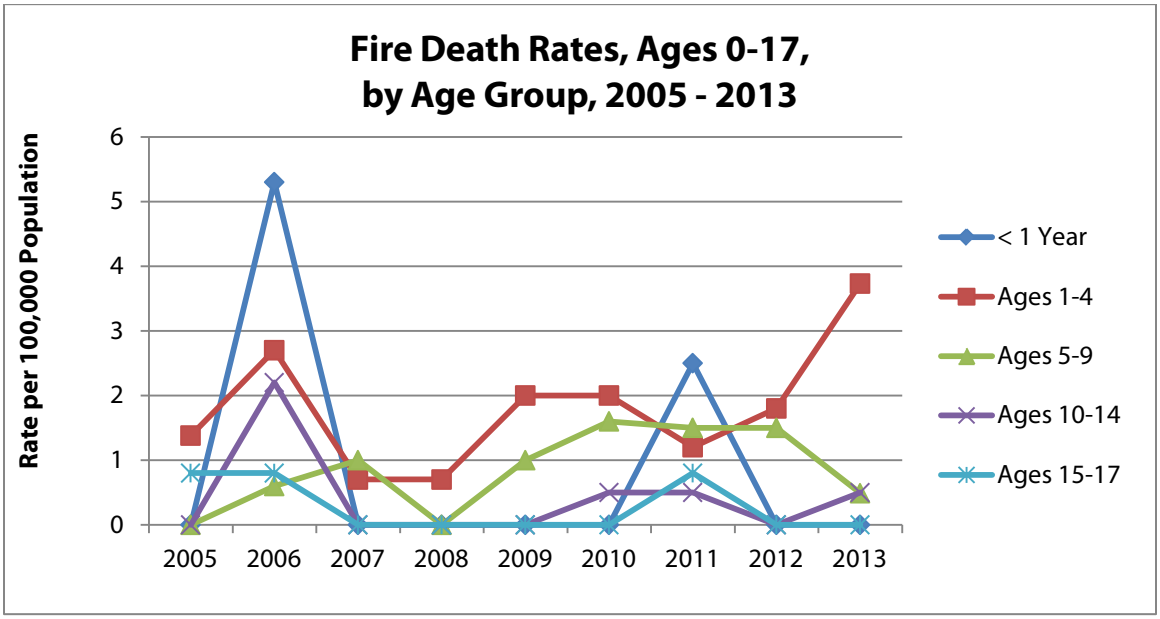
The board reviewed two cases in which teens were swimming in a river when they began having problems in fast moving water. Both teens were reported as knowing how to swim. The board determined both deaths to be preventable and encourages individuals to be aware of the water conditions where they choose to swim.

PREVENTION POINTS

- **Proper Supervision** - There should always be an adult who is capable of responding to an emergency, observing children around water. The adult should be actively watching and avoid distractions. Assigning swimming "buddies" is a good idea, especially if there are many swimmers. Supervision also applies to bathtubs, where children should never be left alone even for short periods of time.
- **Pool/Environment Safety** - Most cities/counties have ordinances in place regarding fencing around pools. A five-foot fence with safety latched gates completely encircling a pool or hot tub is recommended. In bathtubs, seats designed to hold a baby's head above water are no substitution for adult supervision. Also, small children can drown after falling into buckets, toilets, washing machines or other such water holding basins. Caregivers must be vigilant about these less obvious dangers.
- **Use of Safety Equipment** - When participating in water activities, children should always wear Personal Flotation Devices (PFDs) that are Coast Guard Approved and suited for the proper weight of the child. PFDs should be checked for broken zippers and buckles. "Water wings" and other inflatable items are not adequate substitutes.
- **Water Safety Education** - Children should have swimming lessons and water safety education. The American Academy of Pediatrics recommends waiting until age 4 to begin lessons. While this is vital, swimming ability alone does not relieve the need for adult supervision or PFDs.
- **Water conditions**- Lakes, ponds and ditches often contain murky water and tangled branches or other items that pose a potential danger to swimmers. Research these areas and become familiar with possible dangers such as large rocks and underwater currents. Know water depth and underwater hazards before allowing children to jump into any body of water. It is also advised to check local weather conditions prior to swimming or boating as thunderstorms with lightning or strong winds could be fatal.

Fire

Nationwide, fires and burns are a common cause of unintentional injury deaths and home injury in the United States. Children 4 years old and under are most at risk. According to the United States Fire Association, in 2013 there were 2,755 reported civilian residential fire deaths in the United States, 28 of those were Kansans, and eight were children.



Characteristics of the 8 Fire-Related Deaths, 2013

- Seven were age 1 to 10
- Eight locations either did not have a working smoke detector or the presence of a smoke detector was unknown
- Four fires were started by cooking appliances
- Eight fires occurred at the decedent's residence

Fire is often started by children playing with matches or lighters. It is vital for parents and caregivers to keep all lighters, matches, and other igniting sources out of reach of children. They also need to educate children on the dangers of fire and practice escape routes in the event a fire does occur.

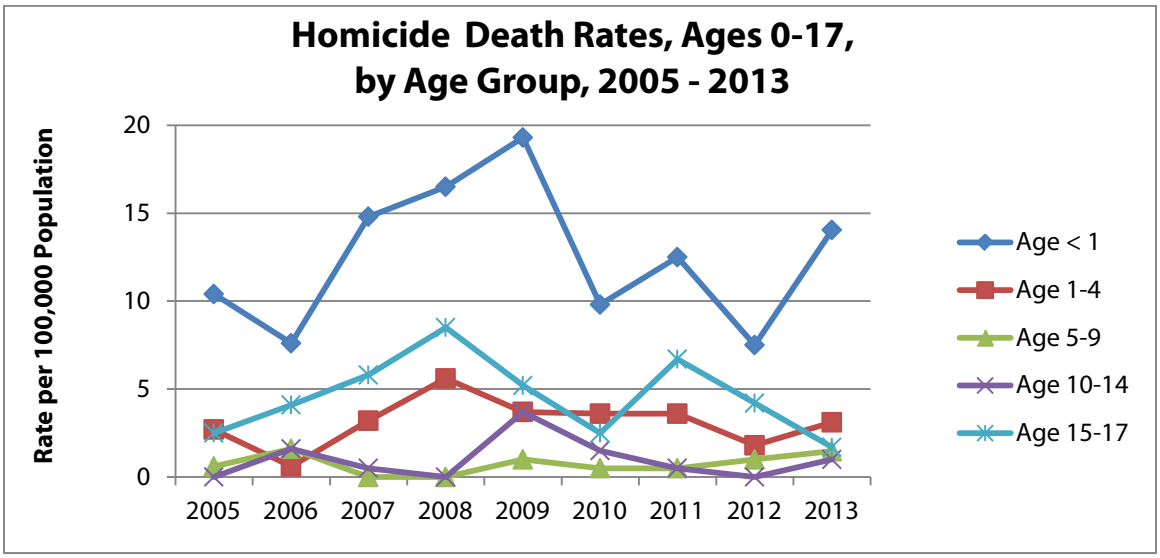
In 2013, all of the eight Kansas fire deaths of children occurred in a home that had no smoke detector or where it was unknown if the smoke detector was working. Parents and caregivers should be diligent about having functional smoke detectors in all appropriate locations in the home. Smoke detectors need to be installed on every level in the home and by each sleeping area. They need to be tested once a month, have new batteries at least once a year, and should be replaced every 10 years. Close supervision of children, safe storage of matches and lighters, and working smoke detectors in the home are critical.

PREVENTION POINTS

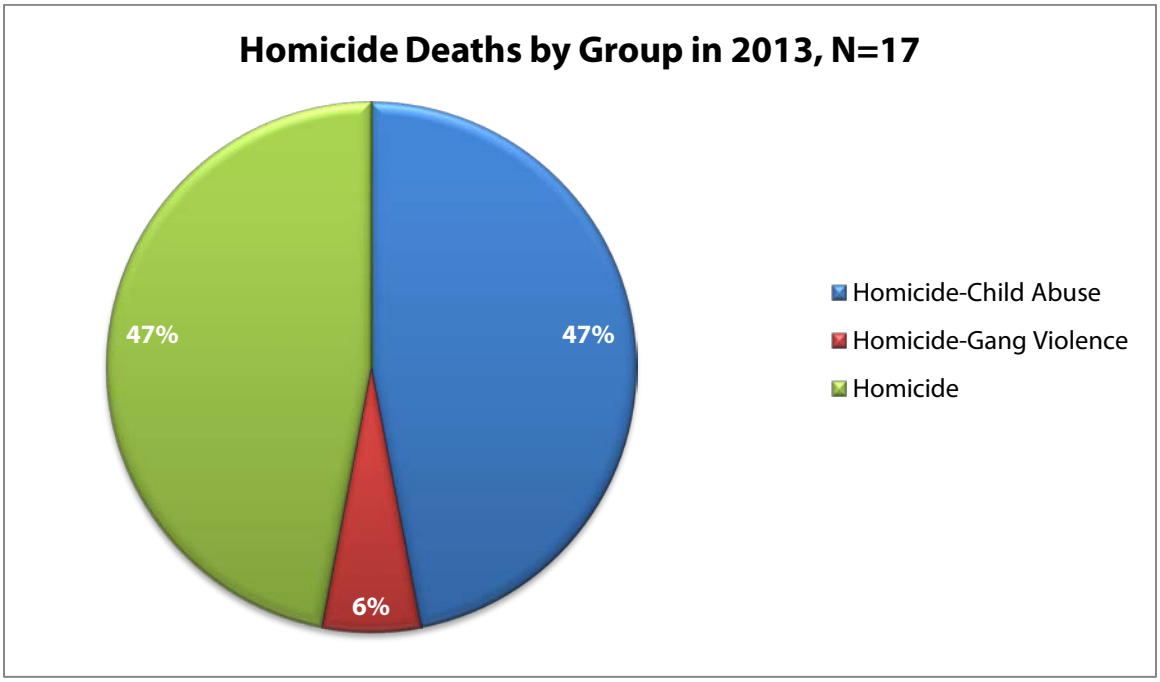
- **Proper Supervision** - Young children must be watched closely. Leaving them unsupervised, especially if there are objects like candles or matches within their reach, could result in a serious injury or death.
- **Prevent Access to Fire-starting Material** - Matches, lighters, candles, etc. should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

Homicide

Homicide is defined as the death of one person resulting from the intentional or unintentional actions of another person. The board reviewed 17 child homicides. When examining child homicides, the rate for the less than 1 year age group is much higher than the other age groups.



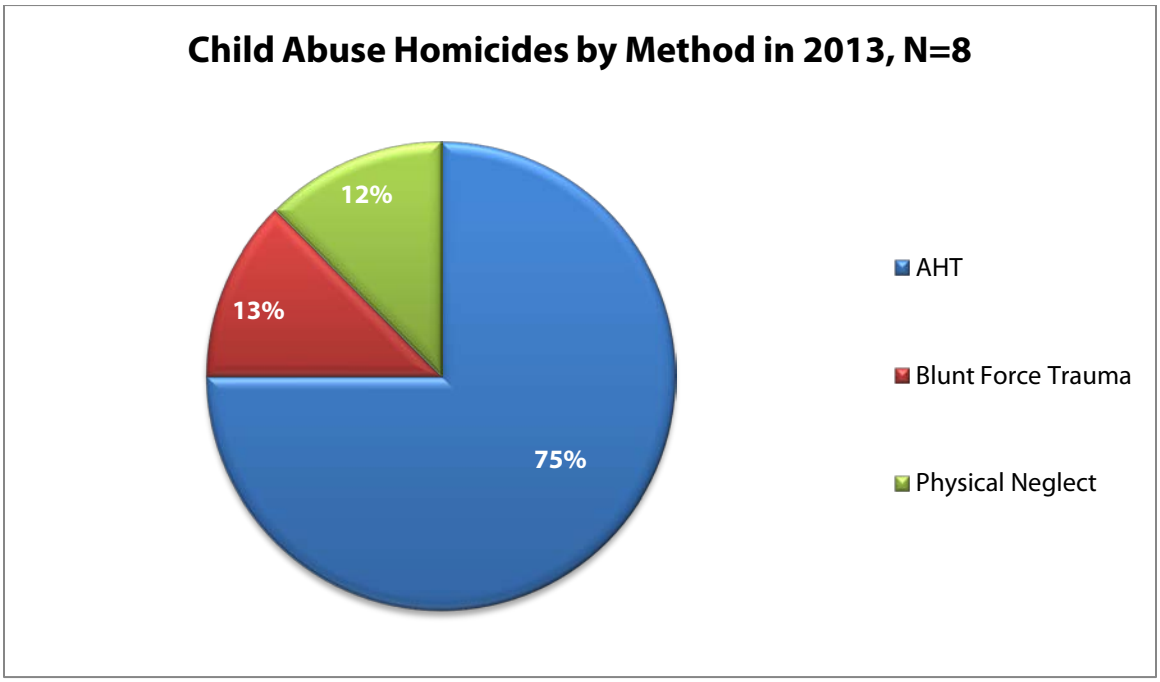
The SCDRB categorized each child homicide into the following groups below. Of the 17 child homicides, 1 death was due to gang violence while the other 16 deaths were the result of child abuse and other types of homicides. By categorizing homicides in this way the board is able to look more in depth at specific issues pertaining to each category.



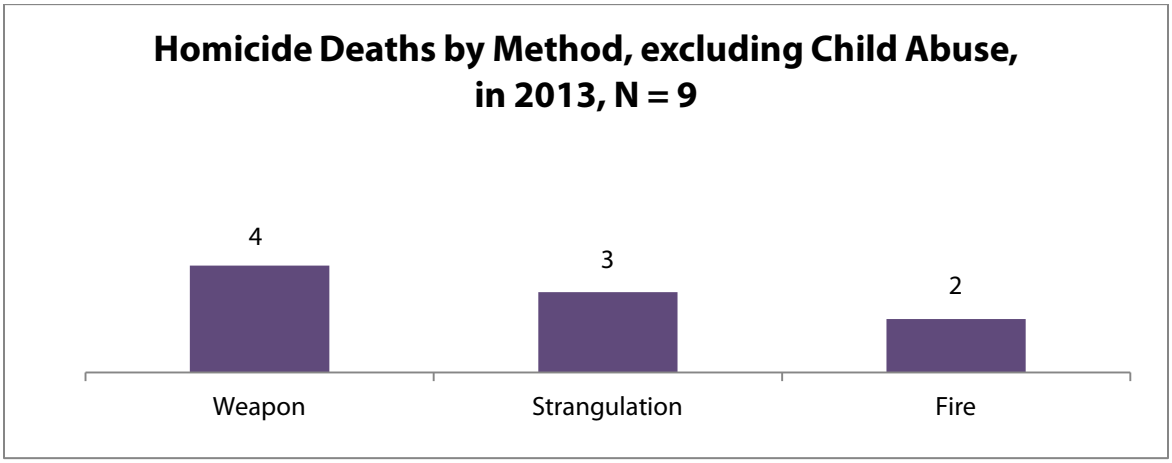
The board defines Child Abuse Homicide as resulting from abuse (inflicting injury with malicious intent, usually as a form of punishment or out of frustration with a child's crying or perceived

misbehavior) or neglect (failing to provide shelter, safety, supervision and nutritional needs) by caretakers. Child abuse is a complex problem that stems from a variety of factors including, but not limited to financial stressors, domestic violence, substance abuse and mental illness.

The method of child abuse homicide can vary. In general, most occur as a result of blunt force trauma. The most prevalent form is abusive head trauma (AHT), commonly referred to as Shaken Baby or Shaken/Impact Syndrome. AHT occurs when an infant or toddler is severely or violently shaken resulting in serious injury and/or death. When infants are shaken or their heads sustain a severe impact, the brain moves back and forth within the skull. The blood vessels and brain tissue cannot tolerate the sheering force caused by the violent shaking. Blood vessels will break causing internal bleeding, and brain cells are damaged. As a result of the internal head injuries, the child may encounter trouble breathing or lose consciousness, which can cause brain damage due to lack of oxygen. These injuries lead to serious complications such as blindness or eye damage, delay in normal development, seizures, damage to the spinal cord (paralysis), brain damage or death. It is important to note that it is common for children who die from AHT to have autopsy evidence of impact injuries, but no visible external evidence of trauma.



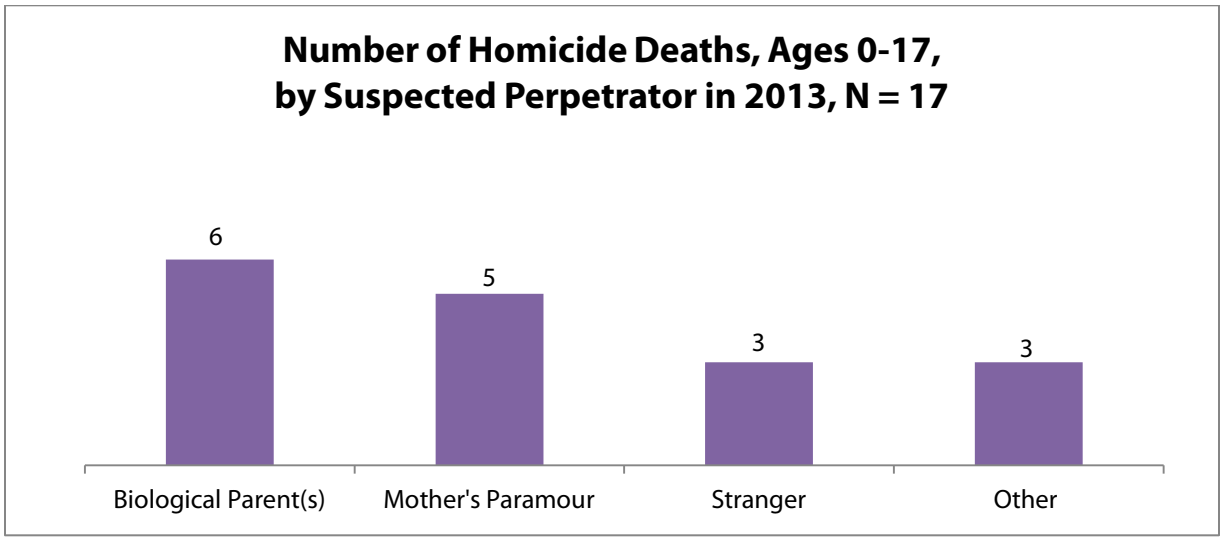
There are several risk factors associated with child abuse homicide including maternal risk factors (young age, less than 12 years of education, and being a single parent) and household risk factors (male not related to the child in home, prior substantiation of child abuse and neglect, substance abuse, and low socioeconomic status). Effective methods for preventing child abuse involve programs that enhance parenting skills for at-risk parents. Examples include home visits by nurses who provide information on quality childhood programs; coaching in parenting skills which include parent training and education about normal child behaviors and appropriate discipline; and educating parents of newborns about appropriate responses to infant crying and how to select appropriate child caregivers.



Characteristics of the 17 Child Homicides, 2013

- 8 cases were child abuse homicide
- 5 victims were under the age of 1, of which all were child abuse homicides
- 10 had current or past DCF involvement
- 4 involved a firearm
- 12 occurred at the residence of the child

As shown in the chart below, in most child homicides the perpetrator was suspected to be either the biological parents of the child or the paramour of the biological mother. While strangers are suspected as responsible for three of those deaths, two of the deaths were due to either gang violence or an attempted robbery. The three cases in which the children died by "other" perpetrators involved cases where the child was with other biological family members or their paramour at the time of their death.

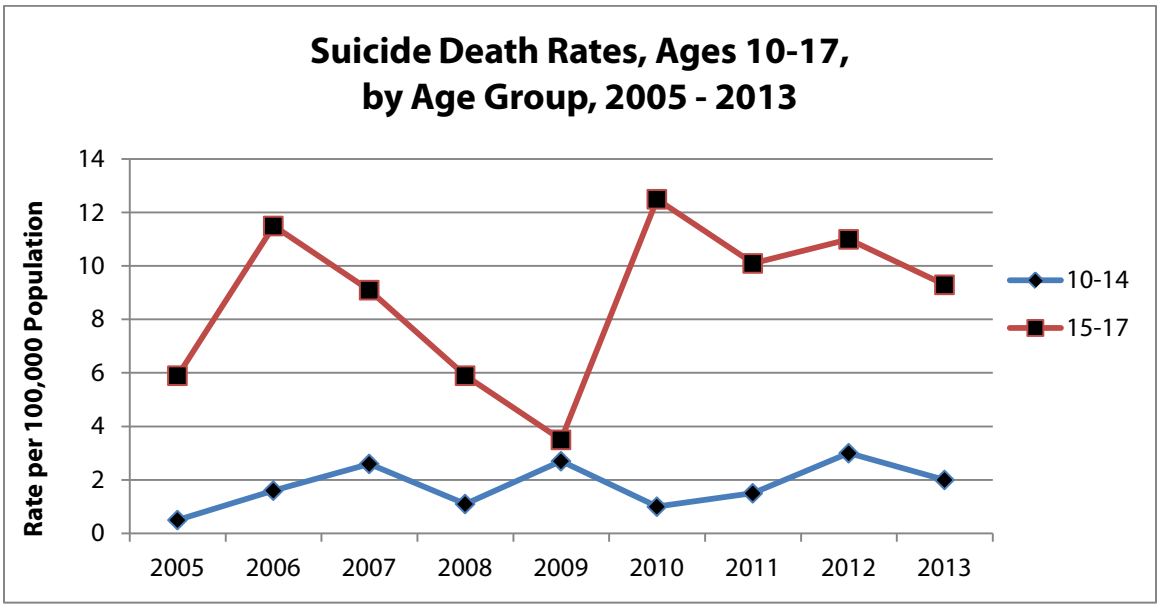


PREVENTION POINTS

- **Family Violence** – Extra care should be given to ensure the safety of children living in homes where domestic violence occurs. Children living in such environments are at increased risk of abuse, neglect or death.
- **Drug Environments –** Extra care should be given to ensure the safety of children living in homes where drugs (including illicit prescription medication and alcohol) are used. Children living in such environments are at increased risk of abuse, neglect or death.
- **Take Extra Care with Young Children** – The victims of child abuse homicide are more often in the younger age categories. Frustrated caregivers, often without any parental training, combine unrealistic expectations for children's behavior with a lack of appreciation for their vulnerability. Abusive head trauma is an example of how an impact or violent shaking of a baby can cause serious or fatal trauma to the child's brain. Caregivers should be mindful of a child's capabilities and susceptibility. Education should be provided at all points of contact with parents and caregivers.
- **Pay Attention, Familiarize Yourself with Signs of Child Abuse –** It is important to use common sense in trying to determine if a child is being abused. Normal, active children get bruises and bumps from everyday play. These bruises are most often over bony areas such as the knees, elbows, and shins. However, if a child has injuries on other parts of the body, such as the cheeks, ears, mouth, stomach, buttocks or thighs, consider the possibility that the child is being abused. Bruises in these areas, human bite marks, and round burns the size of a cigarette seldom come from everyday play. If you suspect a child is being abused or neglected, please call the Kansas Protection Report Center at 1-800-922-5330 (toll-free) or call 911 if the child is in imminent danger.

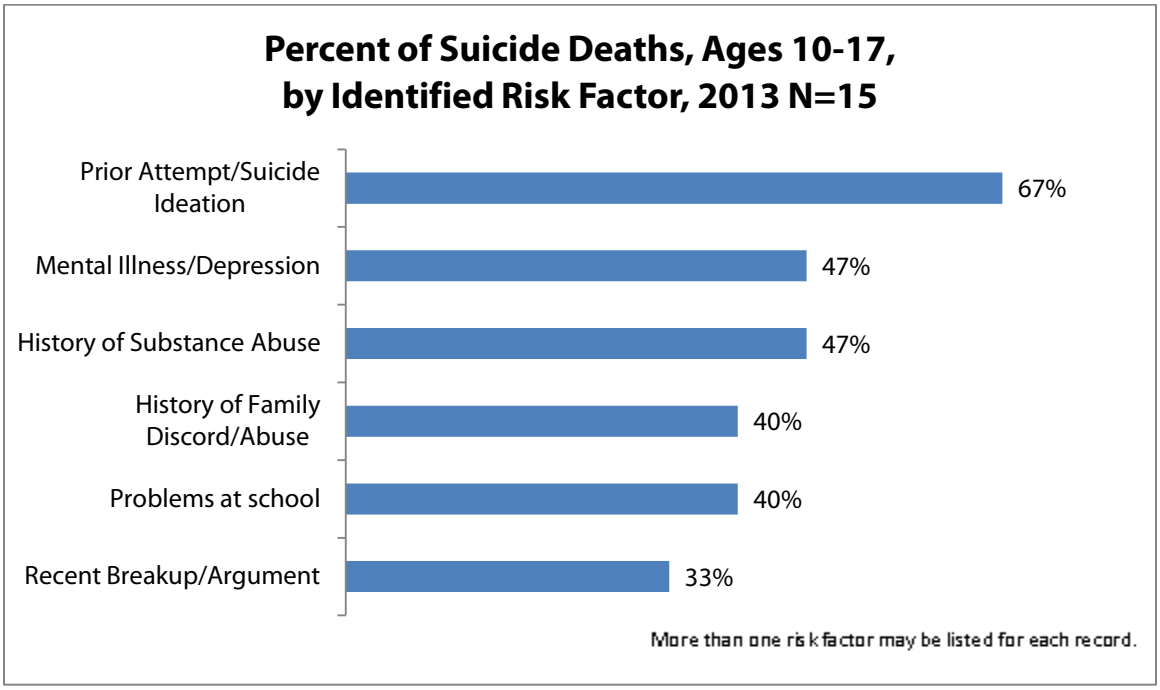
Suicide

According to the Centers for Disease Control and Prevention, In 2013 suicide was the third leading cause of death among U.S. children age 10-14, and the second among persons aged 15-34 years of age. Of the 15 Kansas children identified as committing suicide in 2013, 73% were male. Similar to national studies, suicides in Kansas indicate adolescent females are more likely to attempt suicide, but teenage males are more likely to complete it. The rates of suicide vary according to race and ethnicity, with the adolescent suicide rate highest for white males. Suicide rates increase with age after puberty. The most common method for suicide by males is firearms, while females more frequently use hanging, suffocation or drugs. While it is known there is a connection between suicide and vehicular crashes, the number of intentional crashes remains unidentified.



Risk factors for adolescent suicide may be categorized as predisposing and precipitating factors. Predisposing factors include psychiatric disorders, previous suicide attempt, family history of suicide, history of physical or sexual abuse, exposure to violence and biological factors. Precipitating factors include access to means, alcohol and drug use, exposure to suicide and suicide attempts, social stress and isolation, and emotional and cognitive factors. In recent years, binge drinking has been identified as a significant risk factor. Well-identified examples of social stress include parental divorce or separation, or the breakup of a significant relationship. Bullying has been identified as a risk factor, placing both bullies and victims at risk. Additionally, an increased risk for suicide for females has been correlated with a recent family move and an increased risk for males with the loss of a relationship.

While it can be a painful process, thorough investigations of suicides are necessary for developing effective prevention strategies. Often the board reviews suicide deaths and discovers the family has not been thoroughly interviewed or autopsies have not been performed in a manner which would provide a complete evaluation of the youth's situation and health at the time of death.



Characteristics of the 15 Suicide Deaths, 2013

73% were male
47% involved the use of a firearm
40% were due to strangulation
13% were from drug overdose
53% left a suicide note

PREVENTION POINTS

- **Early Diagnosis and Treatment of Mental Conditions –** Early involvement of mental health professionals may prevent suicide attempts. Special caution should be taken with children who are taking antidepressant medication as health officials have issued warnings that these medications might increase the risk of hostility, mood swings, aggression and suicide in children and adolescents.
- **Observation of Behaviors –** Watch for changes in a young person's psychological state (increase in rage, anxiety, depression or hopelessness), withdrawal, reckless behavior or substance use.
- **Evaluation of Suicidal Thinking –** ***Do not ignore statements about suicide, even if they seem casual or fake.*** The months following a suicide attempt or severe depression can be a time of increased risk, no matter how well the child seems to be functioning. This is a critical time for family interaction and securing family support systems.
- **Limit Access to Lethal Agents –** Easily obtained or improperly secured firearms and other weapons are often used in suicides. The harder it is for children to put their hands on these items, the more likely they are to rethink their intentions, allowing time for someone to intervene.
- **Talk About the Issue –** Bringing up suicide does not "give kids the idea" but rather gives them the opportunity to discuss their thoughts and concerns. This communication can be a significant deterrent.
- **Pay Attention –** Pay close attention to a child's response to a parental separation or a relationship breakup.

Undetermined Manner

Periodically, the board encounters a case where questions remain as to the cause or manner of the child's death. When there are multiple circumstances that may have contributed to the child's death and no identifiable cause is established, the board will classify the death as undetermined. The SCDRB has classified 318 deaths as undetermined manner since 1994.

In 2013, there were 20 such deaths; 83% occurred at the decedent's residence and 96% were less than 4 years old. Of the 20, nine were Unclassified Sudden Infant Death (USID). As noted in the SIDS section of this report, USID includes deaths that do not meet the criteria for SIDS I or II and for which alternative diagnoses of natural or unnatural conditions are unclear. The nine USID cases were listed as such due to incomplete scene investigations, improperly conducted/incomplete autopsies, possible underlying medical conditions and positive toxicology results.

All non-natural child deaths should be exhaustively investigated. The circumstances and family situation should not affect the detail of the inquiry. Hospitals need to have protocols in place to ensure law enforcement is notified when a child dies from other than expected natural causes and when a child is admitted with what appears to be an apparent life-threatening event of unknown etiology that is likely to be fatal. Investigations in the undetermined cases varied significantly. In some instances, although every effort was made to determine why a death occurred, the cause of death could not be ascertained. Other cases revealed incomplete investigations or law enforcement agencies not being informed of the death. In some, autopsies were not performed or were incomplete, or toxicology testing on the victim was not performed.

Combined with excellent law enforcement investigations, complete autopsies often provide a better understanding of child deaths. However, there are situations in which an autopsy should have been performed and was not or the autopsy did not include all aspects of a standard forensic investigation such as full-body x-rays, cultures, metabolic and toxicologic studies. Coroners must be mindful of their statutory duties and should be aware of the autopsy reimbursement program through KDHE. Visit the SCDRB's website at http://ag.ks.gov/scdrb for additional information.

Appendix: Death by County of Residence

County	Population Age 0-17	Total Deaths	Natural Deaths Except SIDS	Unintentional Injury Motor Vehicle	Unintentional Injury	Natural SIDS	Homicide	Suicide	Undetermined
Allen	3,039								
Anderson	2,002	3	2		1				
Atchison	3,984	2	1			1			
Barber	1,109	1						1	
Barton	6,735	2	2						
Bourbon	3,714	3		1			1		1
Brown	2,526	2	1				1		
Butler	17,139	10	8	1		1			
Chase	565								
Chautauqua	715								
Cherokee	5,145	3	3						
Cheyenne	570								
Clark	555								
Clay	1,948	3			2	1			
Cloud	2,031	1	1						
Coffey	1,905	1		1					
Comanche	516	0							
Cowley	8,756	8	5		2		1		
Crawford	8,686	4	1		1	2			
Decatur	567	0							
Dickinson	4,804	4	1		2	1			
Doniphan	1,712	0							
Douglas	21,749	8	6		1		1		
Edwards	673	0							
Elk	518	1	1						
Ellis	6,334	2	2						
Ellsworth	1,164	1			1				
Finney	11,649	7	4		2	1			
Ford	10,694	7	5	1					1
Franklin	6,385	3	3						
Geary	11,577	9	4		2	2			1
Gove	685								
Graham	518								
Grant	2,578								
Gray	1,763	2	2						
Greeley	291	1		1					
Greenwood	1,383	1				1			
Hamilton	750								
Harper	1,390	2	2						

Appendix: Death by County of Residence, continued

County	Population Age 0-17	Total Deaths	Natural Deaths Except SIDS	Unintentional Injury Motor Vehicle	Unintentional Injury	Natural SIDS	Homicide	Suicide	Undetermined
Harvey	8,727	5	3	1					1
Haskell	1,205								
Hodgeman	436								
Jackson	3,447	1						1	
Jefferson	4,400	3	1			2			
Jewell	566								
Johnson	145,314	62	49	5	3	2	1	2	
Kearny	1,155								
Kingman	1,788	1	1						
Kiowa	512								
Labette	4,864	8	1	1		1	3	2	
Lane	384	1		1					
Leavenworth	19,020	12	10	1	1				
Lincoln	757								
Linn	2,256	1		1					
Logan	630								
Lyon	7,649	3	3						
Marion	2,586	1	1						
Marshall	2,293								
McPherson	6,893	1	1						
Meade	1,198	1		1					
Miami	8,562	3	1	1				1	
Mitchell	1,406								
Montgomery	8,076	5	2		2			1	
Morris	1,191								
Morton	820								
Nemaha	2,594	5	3		1			1	
Neosho	4,033	3	3						
Ness	668	2			1	1			
Norton	1,079	3	2						1
Osage	3,945	2	1						1
Osborne	808	1							1
Ottawa	1,451								
Pawnee	1,396								
Phillips	1,294	2		1					1
Pottawatomie	6,738	3	1			1		1	
Pratt	2,409	4	1	1	2				
Rawlins	484								
Reno	14,946	19	13	2	2		2		
Republic	951	2	1	1					
Rice	2,362								

County	Population Age 0-17	Total Deaths	Natural Deaths Except SIDS	Unintentional Injury Motor Vehicle	Unintentional Injury	Natural SIDS	Homicide	Suicide	Undetermined
Riley	13,337	9	7	1			1		
Rooks	1,209								
Rush	616								
Russell	1,476								
Saline	13,607	13	7		3		1		2
Scott	1,314								
Sedgwick	134,507	91	62	5	9	6		5	4
Seward	7,372	3	2						1
Shawnee	43,750	23	14	1	3	4			1
Sheridan	598	2	1	1					
Sherman	1,442	1			1				
Smith	705	1		1					
Stafford	1,064								
Stanton	617								
Stevens	1,771	1			1				
Sumner	5,940	2	1						1
Thomas	1,819								
Trego	568								
Wabaunsee	1,757								
Wallace	402								
Washington	1,248	2	2						
Wichita	566	2	2						
Wilson	2,183	3	2				1		
Woodson	712	1		1					
Wyandotte	45,395	26	10	1	2	8	3		2
Out of State		22	14	5		1	1		1
Total	**724,092**	**447**	**276**	**38**	**45**	**36**	**17**	**15**	**20**

Methodology

Kansas Child Death Review Board 2013 Data

The SCDRB meets monthly to examine the circumstances surrounding the deaths of all Kansas children aged birth through 17 years old, as well as children who are not residents but died in Kansas. As a rule, the SCDRB is notified of a death when a death certificate, matched with its corresponding birth certificate, is received from the Kansas Department of Health and Environment's Office of Vital Statistics. On a monthly basis, KDHE provides the SCDRB with a list of children whose deaths have been reported. The Office of Vital Statistics has a close working relationship with other state vital statistics departments per inter-jurisdictional agreement and receives death certificates from those departments when a Kansas child dies in another state. This provides relative information about out of state deaths to the SCDRB for review.

When a death certificate is received, the SCDRB staff creates a file. Death and birth certificates, as well as the coroner information are used to identify sources of additional information necessary for a comprehensive review. Before a case can be reviewed, pertinent records which could provide circumstances that led to the child's demise are collected for the file. Such records may include: coroner reports, autopsy reports and photos, medical records, law enforcement reports, scene photographs, DCF records, school records, media reports and obituaries, and other relative documents. 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 is expected to review his or her assigned cases and enter case information into a secure web-based database. All case information entered by the board is maintained in the online database. [1]

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. Upon agreement of the cause and manner of death, cases are finalized and saved. In some instances the SCDRB may determine that it is appropriate to refer a case to the county or district attorney in the county where the death occurred with recommendations for further action.

It should be noted that the numbers and rates in this report should not be expected to be the same as those reported in the KDHE Annual Summary of Vital Statistics, which monitors deaths of Kansas residents only. Case file information may not be available to the coroner when cause of death is determined, resulting in incomplete information about the circumstances of the death. After review by the board, the classification of the cause or manner of death may be different from the coroner's. For example, an infant death suspicious for asphyxia may be called an undetermined death by the coroner, but after the board reviews medical, law enforcement, and other pertinent reports, additional

[1] Transfer of information between outdated software to the new system in 2000 created the possibility for slight number adjustments when reviewing data from past years.

information may support the board's classification of the death as Sudden Infant Death Syndrome, Category II or Unintentional Injury due to Suffocation depending on the review findings.

The current publication follows the custom of presenting death rates for infants per 1,000 live births, and death rates for all other age groups per 100,000 age-group population. The exception to this rule is when rates for infants and older children are compared in the same graph. In such an instance, infant mortality is expressed as deaths per 100,000 infant populations. An example is the graph for Homicide death rates on page 27.

To determine the infant death rate per 1,000 live births in a specific year or the number of deaths is divided by the corresponding number of live births, and then multiplied by 1,000. The Kansas Department of Health and Environment (KDHE) Bureau of Epidemiology and Public Health Informatics (BEPHI) is the source for numbers of live births used as denominators in this report.

Example: Infant death rate, Kansas 2013 =

$$\left(\frac{\text{267 (number of infant deaths which occurred in 2013, reviewed by the CDRB)}}{\text{38,805 (number of Kansas resident live births in 2013)}} \right) \times 1{,}000$$

$$= 6.9$$

To determine the death rate per 100,000 population for an age group for a specific year or the number of deaths is divided by the corresponding population, and then multiplied by 100,000. The U.S. Census Bureau is the source for population denominators for this report.

Example: Motor Vehicle Death Rate, age 15-17, Kansas 2013=

$$\left(\frac{\text{18 (number of MVC deaths age 15-17 which occurred in 2013, reviewed by the CDRB)}}{\text{118,384 (population of Kansas residents age 15-17 in 2013)}} \right) \times 100{,}000$$

$$= 15.20$$

Any questions about this report or about the work of the SCDRB should be directed to Sara Hortenstine, Executive Director, at (785) 296-7970 or by e-mail at sara.hortenstine@ag.ks.gov.

The information and data contained in this report are compiled from multiple reporting sources and have been represented to be accurate as of the date of this report. The information and data contained herein are subject to later modification by the reporting sources

Goals and History

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

1) To describe trends and patterns of child deaths (birth through 17 years old) in Kansas and to identify risk factors in the population;

2) To improve sources of data and communication among agencies so that recommendations can be made regarding recording of the actual cause of death, investigation of suspicious deaths, and system responses to child deaths. This interagency communication should occur at the individual case level and at the local and state levels;

3) To develop prevention strategies including community education and mobilization, professional training, and needed changes in legislation, public policy, and/or agency practices.

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

This multi-agency, multi-disciplinary volunteer board meets monthly to examine circumstances surrounding the deaths of Kansas children (birth through 17 years old). Members bring a wide variety of experience and perspective on children's health, safety, and maltreatment issues, which strengthen the decision-making of this body.

With assistance from law enforcement agencies, county and district attorneys, DCF, KDHE, physicians, coroners, and other medical professionals, the SCDRB is given necessary information needed to examine the circumstances which led 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, which improves comparison of data and trends related to child deaths.

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