2024

State Child Death Review Board

2024 Annual Report
(2022 Data)

www.ag.ks.gov/scdrb

KANSAS ATTORNEY GENERAL

KRIS W. KOBACH

PAGE INTENTIONALLY LEFT BLANK

KANSAS ATTORNEY GENERAL KRIS KOBACH

September 30, 2024

Dear Fellow Kansans,

In 1992, the Kansas State Legislature established the Kansas State Child Death Review Board (SCDRB) with a clear mission: to gain a deeper understanding of child mortality in our state. For over 30 years, Kansas has been fortunate to have a dedicated board of professionals who devote their expertise and compassion in their review of each child fatality. Their goal is not only to learn from these tragic losses but also to offer recommendations that can help prevent future deaths of children.

The data collected and analyzed by the Board each year provides invaluable insight into trends and patterns of child fatalities. By closely examining this information, we can identify opportunities to improve our strategies for keeping Kansas children safe. This report, which evaluates child deaths in 2022, offers both historical context and recommendations that we believe are critical for consideration by policymakers throughout the state.

As you review the findings of this report, it is my sincere hope that the information presented will deepen our collective understanding and inspire further action. By working together, we can continue to build a safer, healthier future for all Kansas children.

Sincerely,

Kris W. Kobach

Kris W. Kobach
Kansas Attorney General

CONTENTS

Executive Summary 3
Legislative Priorities 4
Acknowledgements 6
Board Members 7
2022 Overview 8
Mortality Affecting Infants 14
Mortality Affecting Children Ages 1-17 25
Natural Deaths 27
Unintentional Injury Deaths 32
Homicide Deaths 50
Suicide Deaths 58
Undetermined Manner 65
Deaths In Non-Relative Child Care Homes and Centers 68
Drug-Related Deaths - All Manners 70
Firearm Deaths - All Manners 75
Death Investigation and Autopsy Examinations 78
Public Policy Recommendations 80
Goals and History 90
Methodology 91
Appendix A 93
References 97

EXECUTIVE SUMMARY

Since its inception in 1994, the Kansas State Child Death Review Board (SCDRB) has comprehensively reviewed 13,131 child deaths. In 2022 alone, Kansas recorded 389 child fatalities. These deaths are categorized into five primary manners: Natural, Unintentional Injury (Accident), Homicide, Suicide, and Undetermined. The following are key highlights from the report:

- The child death rate (ages 0-17) has remained stable over the past five years, with 2022 showing a rate of 56.3 deaths per 100,000 population. Specific trends are:
    - The rate of death due to natural causes had been decreasing since 2018 but increased in 2022.
    - Unintentional injury deaths have remained stable, with a notable decrease in drowning deaths from 14 in 2021 to 4 in 2022.
    - Homicide rates have increased over the past five years, though the 22 child homicides in 2022 were a decrease from 32 in 2021.
    - Suicide rates have declined since peaking in 2018, with 21 youth suicides in 2022 compared to 35 in 2018.
    - The rate of deaths of Undetermined Manner has risen since 2019, largely due to reclassification of sleep-related deaths previously categorized as natural.
    - Fentanyl-related deaths have surged, and were twice as high in 2021 and 2022 compared to 2020 and 22 times greater than in 2018 and 2019.
    - In 2022, there were 30 firearm-related deaths of children ages 0-17 in Kansas, a decrease from a peak of 44 in 2021 but still higher than rates in 2018 and 2019.
- Males accounted for more deaths in nearly all age groups and comprised 60% of child deaths in 2022. This is consistent with past reporting years.
- Rate of death by race/ethnicity for multiple groupings of deaths in the combined years of 2018-2022 indicated Black/Non-Hispanic children had a rate of death in all categories that was higher than expected based on the Kansas population. This disparity was seen in all race/ethnicity groups when compared to White/Non-Hispanic children, who had the lowest rate of death in all categories.
- Of the 1,463 child fatalities between 2019 and 2022, 529 children (36%) had history with the child welfare system, specifically with the Department for Children and Families (DCF) Division of Child Protective Services (CPS).
    - In 149 of the deaths with CPS involvement, the decedent or a sibling had been removed from the home at some point prior to the death, with 36 of them being in state custody at the time of death.
    - There were 77 children who had an open CPS case at the time of death, 29 were infants under the age of 1.

LEGISLATIVE PRIORITIES

The Board strongly encourages the members of the State Legislature to consider each of the Public Policy Recommendations, during the 2025 legislative session. The following recommendations below are prioritized by the Board as needing immediate attention in order to address and prevent child fatalities in Kansas.

1.) **Ensure compliance with Kansas Statute 38-2226 (h) and (i) –** Kansas Statute 38-2226 subsections (h), Adrian's Law, and (i) Child Abuse Review and Evaluation (CARE) referrals, establish critical procedures for handling child abuse and neglect cases. Adrian's Law stipulates that any child under investigation must undergo a visual examination by a member of DCF or law enforcement. If there is a joint investigation between DCF and law enforcement, members of both agencies must visually observe the child under investigation. This step is essential for identifying any concerns for physical signs of abuse or neglect. CARE further mandates that, if an investigation involves a report of physical abuse or physical neglect for any child age five or younger, a referral must be made to a CARE health provider. This provider is tasked with conducting a comprehensive review and recommendation for further action related to the need for medical evaluation. These measures ensure that children receive thorough evaluations and that cases involving potential abuse or neglect are handled with an appropriate level of investigation and intervention.

    The Kansas State Child Death Review Board has reviewed cases where a child's safety was not confirmed through visual observation following an investigation initiated by DCF concerning allegations of physical abuse or neglect. It is imperative to enhance existing procedures for reporting and accountability.

    To enhance compliance with Kansas Statute 38-2226 subsections (h) and (i) and improve the management of child abuse and neglect cases, it is recommended that a comprehensive training program be developed for employees involved in these investigations. This program should offer a detailed overview of the statutory requirements, specifically focusing on the necessity of conducting visual examinations by qualified professionals and making appropriate referrals to CARE providers. The training should incorporate practical scenarios and case studies to illustrate the application of these requirements in real-world situations, helping employees navigate complex cases effectively. Workshops aimed at developing skills for accurate visual examinations and recognizing when referrals are necessary should also be included, emphasizing best practices and techniques for managing sensitive information. To ensure ongoing compliance and adaptation to any changes in statutory requirements or best practices, the training program should feature regular updates and refresher courses. Additionally, an evaluation and feedback mechanism should be established to assess the training's effectiveness and gather participant input, allowing for continuous improvement. Implementing this comprehensive training program will equip employees with the knowledge and skills needed to meet statutory requirements, enhance their handling of child abuse and neglect cases, and ultimately better safeguard the welfare of children.

    When the criteria outlined in Kansas Statute 38-2226 subsections (h) and (i) are not met—such as when a required visual examination is not conducted or a referral to a child abuse review and evaluation provider is omitted—it is essential to ensure that these lapses are addressed

with the appropriate staff and supervisors. To address such situations, it is recommended that the Kansas State Child Death Review Board immediately notify DCF about noted deficiencies, including a detailed account of their potential implications. Additionally, the Kansas State Child Death Review Board should be authorized to disclose relevant case information to designated oversight bodies or professionals who can conduct a thorough follow-up, ensuring that the disclosure is controlled and pertinent to process improvement and prevention of future injuries and deaths. Enhanced monitoring and documentation systems should be implemented within DCF to track cases of non-compliance, ensuring that corrective actions are taken quickly. These measures will help safeguard children and address shortcomings in the initial investigative and referral processes effectively.

2.) **Child Care Licensing Laws –** Each year, the Board finds instances of children dying in the care of unlicensed child care providers or providers that are not in compliance with their license requirements. K.S.A. 65-501 requires persons maintaining a child care facility for children under 16 be licensed. If someone is found to be out of compliance after remedial measures have been attempted, the current Kansas statute authorizes the person to be prosecuted by the County Attorney for an unclassified misdemeanor. If the provider is found guilty, the current penalty is between $5 and $50 for each day they are out of compliance. Through enhanced monitoring, enforcement, higher fines and increased prosecution, the Board hopes that the quality of child care available to Kansas children will be improved.

3.) **Enhance Training Requirements for Coroners –** In Kansas, although coroners must be licensed physicians, many lack specialized training in medicolegal death investigation. To address this issue, it is crucial that newly appointed coroners receive immediate and comprehensive training, supplemented by a structured plan for ongoing professional development to ensure that all coroners are informed on best practices and emerging trends in child death investigations.

ACKNOWLEDGEMENTS

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 others who help in supplying the information necessary for reviews.

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

SCDRB SERVES AS A CITIZEN REVIEW PANEL

The Federal Child Abuse Prevention and Treatment Act (CAPTA) requires each state 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. The Kansas State Child Death Review Board serves in the capacity as one of the three Citizen Review Panels in the State. In addition to the SCDRB, the Kansas Intake to Petition Panel and Kansas Custody to Transition Panel serve as citizen review panels.

The citizen review panels, as a group, are required by CAPTA to accomplish 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.

More information regarding the Citizen Review Panels in Kansas can be found at:
http://www.dcf.ks.gov/services/PPS/Pages/CitizenReviewPanel.aspx

BOARD MEMBERS

Attorney General appointees

Jane Weiler, J.D., (Chairperson)
Office of the Kansas Attorney General, Topeka

Mary A. McDonald, J.D., (Advocacy Group)
McDonald Law LLC, Newton

Director of Kansas Bureau of Investigation appointee

Doug Younger, Special Agent in Charge
Kansas Bureau of Investigation, Topeka

Secretary for Children and Families appointee

Jennifer Slagle, CAPTA/CJA Program Administrator,
Kansas Department for Children and Families, Topeka

Secretary of Health and Environment appointee

Jeff Wilhelm, Program Manager
Kansas Department for Health and Environment

Commissioner of Education appointee

Kim Jones, RN, BSN, School Nurse
Kansas Department of Education, Topeka

State Board of Healing Arts appointees

Harley Schainost, MD, (Forensic Pathologist Member)
Deputy Coroner/Medical Examiner, Sedgwick County

Diane C. Peterson, M.D. (District Coroner Member)
Chief Medical Examiner/Coroner, Johnson County

Katherine Melhorn, M.D. (Pediatrician Member)
Clinical Professor of Pediatrics, Emeritus, KU School of Medicine, Wichita

Stephanie Kuhlmann, D.O. (Pediatrician Member)
Clinical Professor of Pediatrics, KU School of Medicine, Wichita

Kansas County and District Attorneys Association appointee

Melissa G. Johnson, J.D.
Montgomery County Attorney, Independence

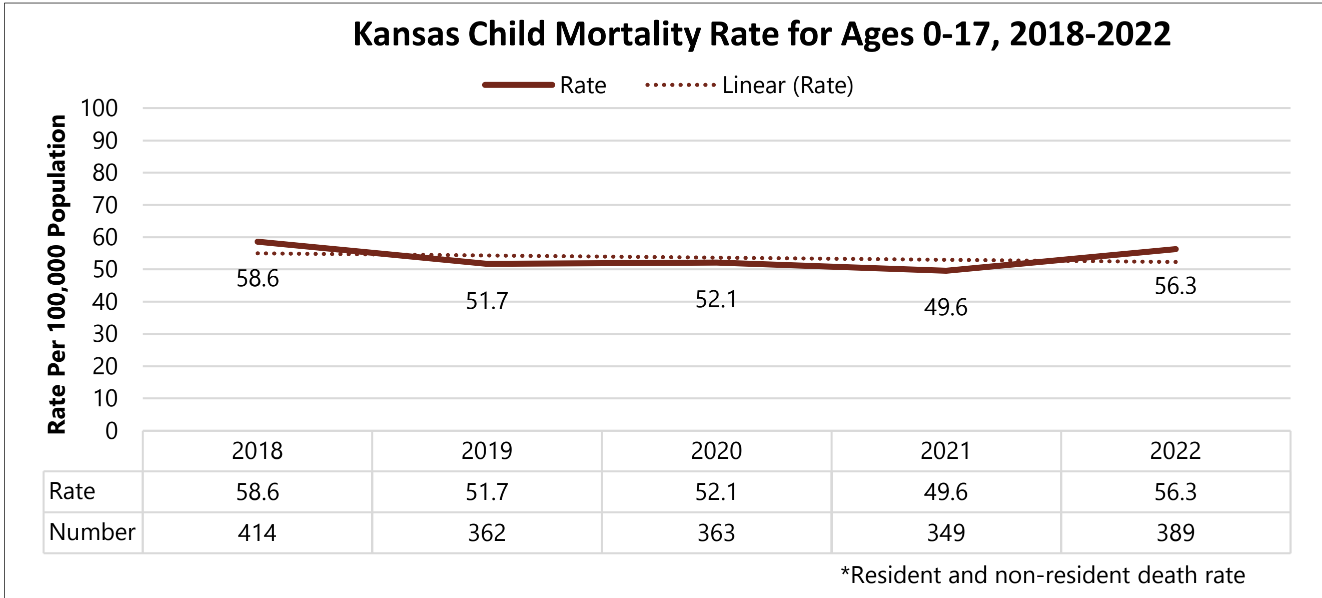
STAFF

Sara Hortenstine, Executive Director
Sri Gayatri Mandem, Epidemiologist
Susan Croucher, Program Consultant
Yalexia Ramirez, Program Consultant
Robert Hutchison, Deputy Attorney General, General Counsel

2022 OVERVIEW

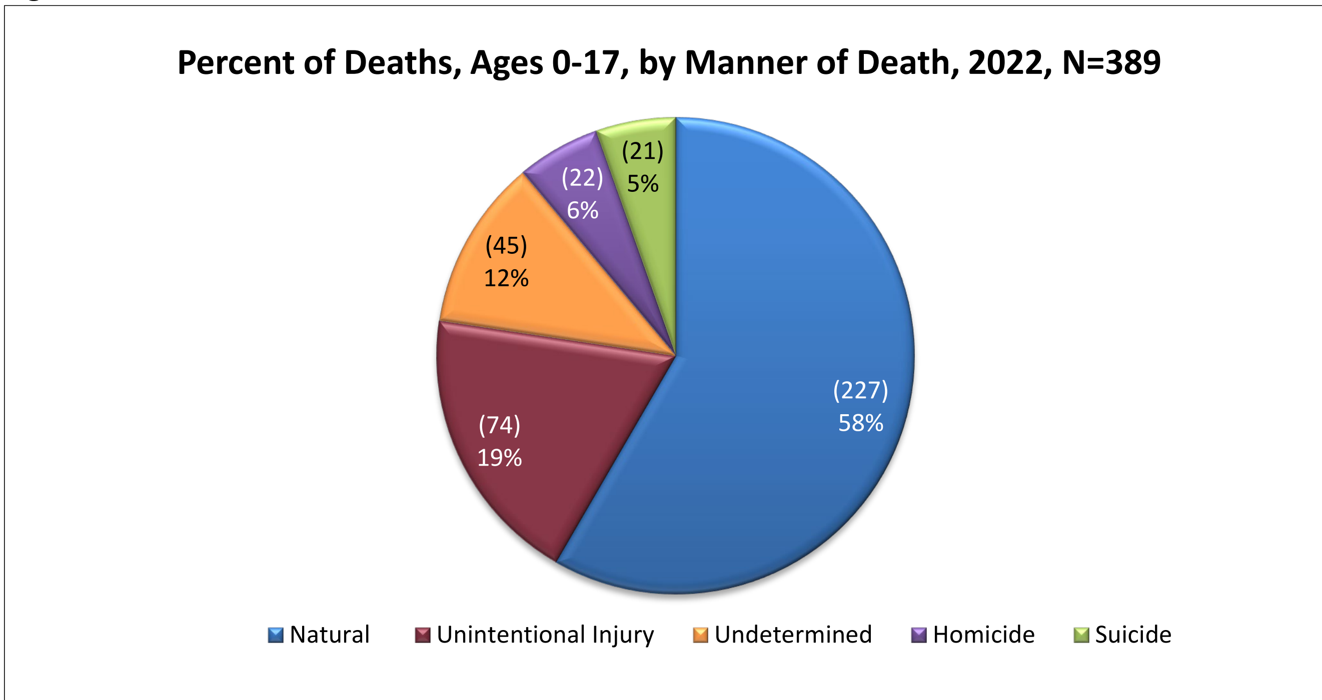
The Kansas State Child Death Review Board reviewed the deaths of 389 children, ages 0-17, who died in Kansas, or were Kansas residents who died outside of the state, during the year 2022. The death rate calculated per 100,000 Kansas children increased in calendar year 2022. The overall death rate shows a stable trend for the last five reported years (Figure 1).

Figure 1



	2018	2019	2020	2021	2022
Rate	58.6	51.7	52.1	49.6	56.3
Number	414	362	363	349	389

Figure 2



As shown in Figure 2, of the total deaths in 2022, 19% were due to unintentional injuries, 12% were of Undetermined Manner, 6% were due to Homicides and 5% were due to Suicide. Natural Manner of death accounted for the largest percentage, at 58% of all deaths in 2022.

Males accounted for more deaths in nearly all age groups and comprised 60% of all child deaths in 2022 (Figures 3 and 4).

Figure 3

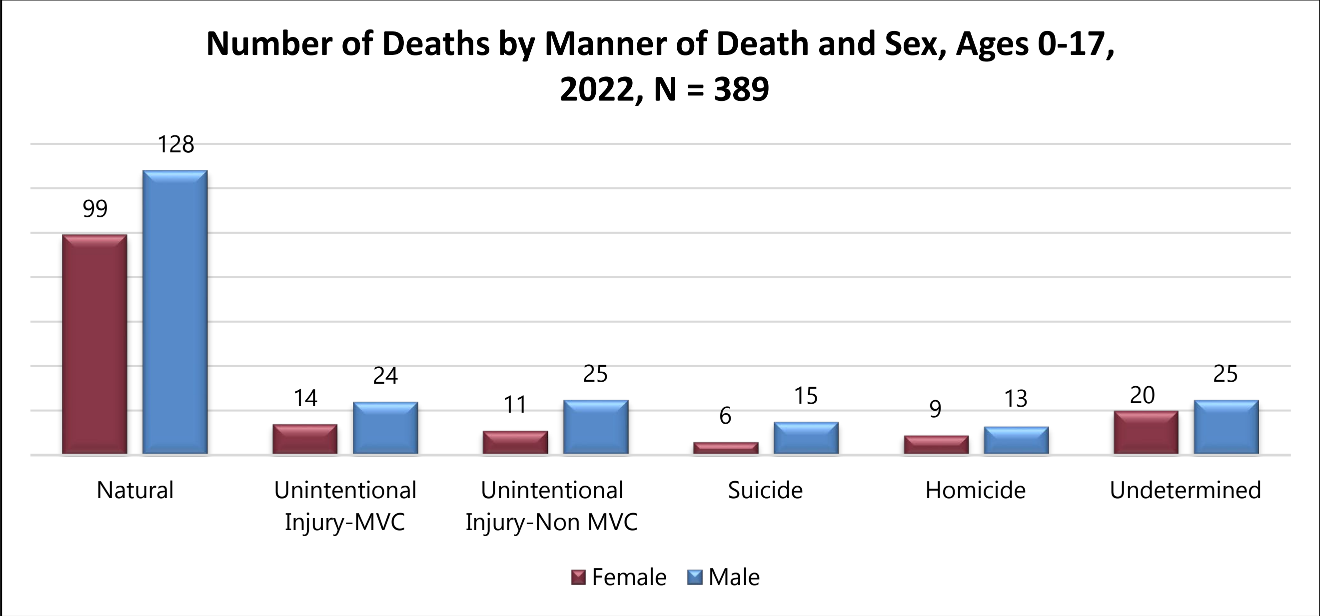


Figure 4

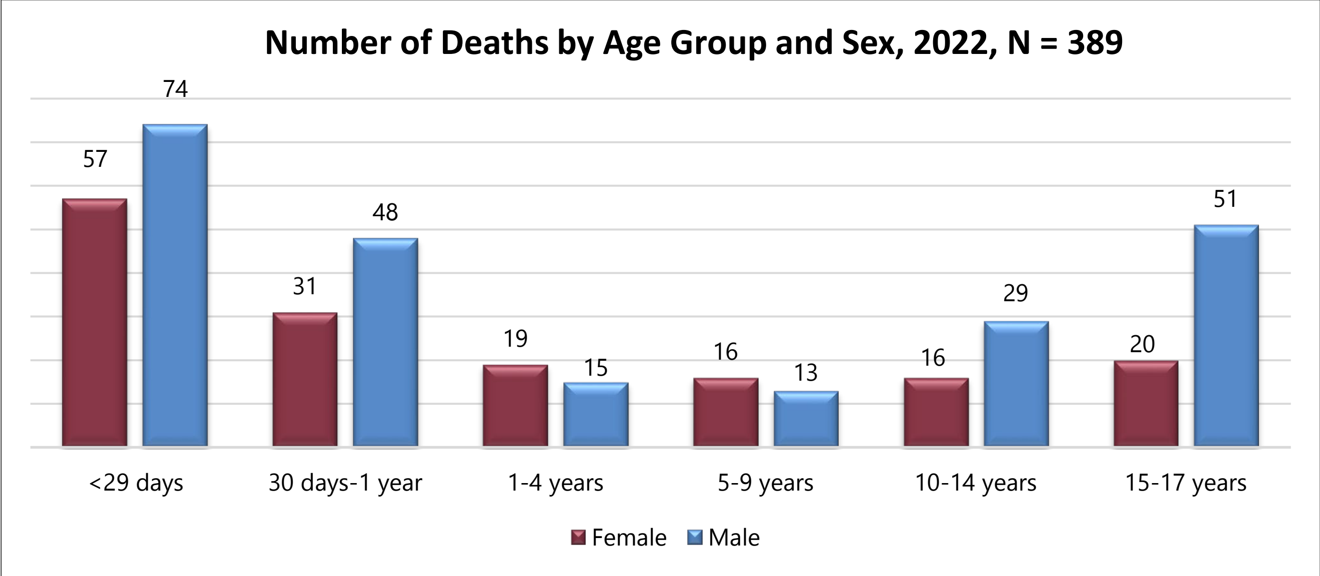


Figure 5 shows the rate of death by race/ethnicity for multiple groupings of deaths in the combined years of 2018-2022. Black/Non-Hispanic children had a rate of death higher than the Kansas rate in all categories except for suicide which is not displayed due to low numbers. Disparities are seen in all race/ethnicity groups compared to White/Non-Hispanic and Asian/Non-Hispanic children for which the death rates were lowest in all reported categories.

Rates for Figure 5 were calculated using population and birth data provided by the Kansas Department for Health and Environment (KDHE). For more information regarding rate of death or definitions regarding race and ethnicity, please refer to the Methodology section.

Figure 5

Rate of Death by Race/Ethnicity, 2018-2022 Infant Mortality Rate per 1,000 Live Births and Mortality Rate for Ages 0-17 per 100,000 Population							
	KS Rate All Races	White/ Non-Hispanic	Black/ Non-Hispanic	American Indian/ Non-Hispanic	Asian/ Non-Hispanic	Multiple Race/ Non-Hispanic	Hispanic- Any Race
2018-2022- All Manners of Deaths, Age <1 (Infant)	6.0	4.6	11.3	*	4.1	16.3	8.1
2018-2022- All Manners of Deaths, Age 0-17	52.5	42.5	117.4	47.6**	39.8	71.3	64.5
2018-2022- All Manners of Deaths, Age 1-17	25.0	21.2	71.9	*	12.3	24.6	27.4
2018-2022- Natural Deaths, Age 0-17	29.6	24.8	58.7	*	27.2	34.8	36.7
2018-2022- Unintentional Injury Deaths, Age 0-17	9.9	8.3	22.1	*	*	12.51	11.9
2018-2022- Homicide Deaths, Age 0-17	3.3	1.4	17.4	*	1.0	6.0**	5.4
2018-2022- Suicide Deaths, Age 0-17	3.9	3.6	5.2**	*	*	*	3.7
2018-2022- Undetermined Deaths, Age 0-17	5.8	4.3	14.1	*	*	14.7	6.8
*Death count of 9 or less, suppressed **Death count of 10-19, which should be used with caution							

Child Welfare Overview

While there is an expectation for all caseworkers, providers, and administrators serving in our child welfare system to be highly trained, dedicated professionals, we cannot expect each of them to be an expert in every area of involvement with families. Ensuring the safety of the more than 690,000 children in Kansas is a shared responsibility that extends to law enforcement, public health, medical and mental health professionals, educators, child care providers, and private citizens.

Through the review of more than 13,000 child fatalities since 1994, which includes the social circumstances of the lives of these children, there is an ever-increasing awareness that our social welfare system is directly connected to the potential prevention of child fatalities in our state. The Board sees opportunities in this area to improve the outcomes for our children.

As shown in Figure 6, in 529 (36%) of the 1,463 child fatality cases reviewed by the Board between 2019 and 2022, the decedent and/or decedent's family had history with the child welfare system, specifically with the Department for Children and Families (DCF) Division of Child Protective Services (CPS). Of the 529 cases with past CPS history, in 149 of them, the decedent and/or a sibling had been removed from the home at some time prior to the death (Figure 7). Also noted in Figure 7 are the ages of children in state's custody at the time of their death, as well as those for which there were open CPS cases at the time of death.

Figure 6

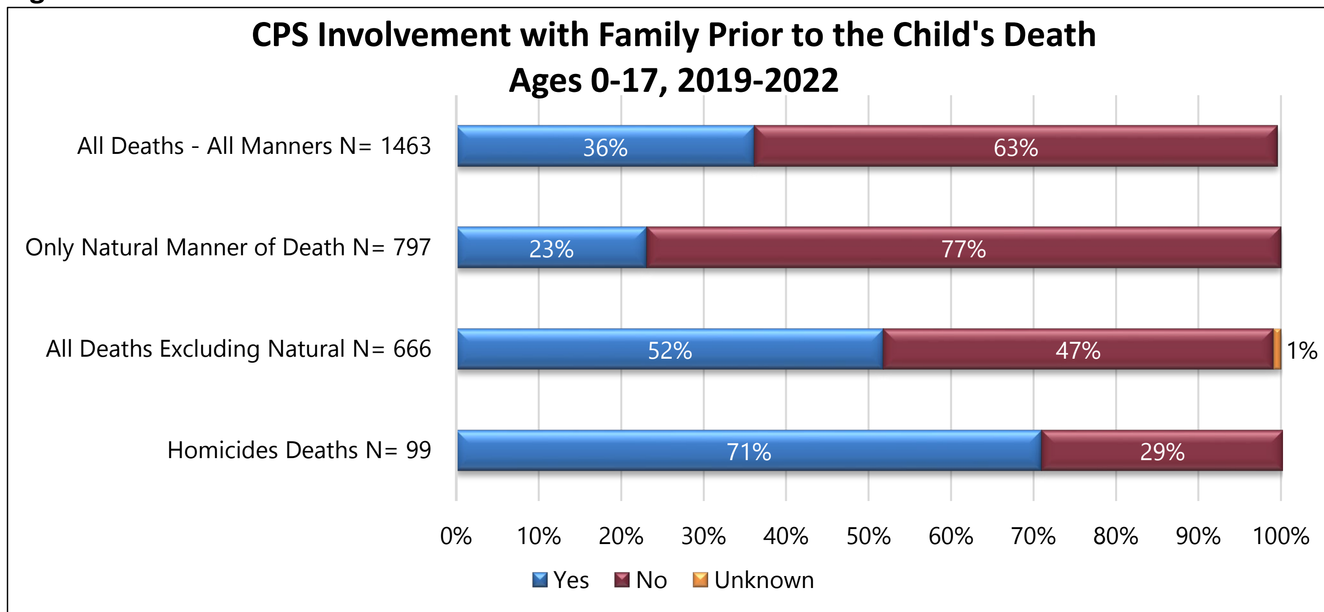
Number of Child Deaths by Involvement with Child Welfare System, All Cause and Manners, Ages 0-17 Years, 2019-2022, N=1,463						
	Total-All Ages	Age <1	Age 1-4	Age 5-9	Age 10-14	Age 15-17
No Known CPS History	927	620	66	62	65	114
CPS History Prior to Death	529	184	67	39	86	153
Unknown	7	1	1	2	2	1

Figure 7

Type of Case History When Decedent had CPS History Prior to Death, Age 0-17, 2019-2022, N=529*						
	Total- All Ages	Age <1	Age 1-4	Age 5-9	Age 10-14	Age 15-17
Removal of Sibling or Decedent Prior to Death	149	51	17	11	25	45
Open CPS at Time of Death	77	29	13	6	14	15
Decedent in Custody at Time of Death	36	8	8	2	4	14
Decedents with history not described in above categories	345	118	45	25	53	104
*Categories are not exclusive as cases will overlap and equal more than 529						

Overall, 36% (529) of all decedents had CPS involvement with their family prior to their death. As shown in Figure 8, for comparison, of those children that died from a Natural Manner of death, only 23% (184) of the 797 decedents had CPS involvement. When Natural Manner is excluded from the total deaths with CPS involvement, the percentage of cases with CPS involvement increases, which is especially notable in the Homicide category, where 71% (70) of the cases had prior CPS involvement.

Figure 8



In 2016, The Commission to Eliminate Child Abuse and Neglect Fatalities published a national report entitled, "Within our Reach,"[1] which focused on child welfare system changes that could lead to prevention of child abuse and neglect deaths. Consistent with the Commission's research and findings, data from the SCDRB supports the following:

- Infants and toddlers are at a higher risk of abuse or neglect fatalities compared to other age groups.
- A call to a child protection-reporting center, regardless of the disposition, is the best predictor of a later child abuse or neglect fatality. This highlights the importance of how decisions are made to screen in reports. Screening out a report risks leaving children in unseen situations where there may be a high risk for later fatality or serious injury.
- Involvement of health care and public health agencies and professionals is vital to safety for children. Well-coordinated interagency efforts are essential in ensuring timely and accurate communication and effective family services.
- The importance of child protection workers' access to real-time information about families cannot be overstated.
- It is critical to have an accurate count of child protection fatalities. Better data allows us to better understand what works and how to best use resources and guide research.

The Board believes that additional child welfare improvement is needed in Kansas to reduce the number of child abuse and neglect deaths. The most vulnerable children are infants and toddlers who cannot speak for or protect themselves, and are fully dependent on caregivers in the home. The DCF policy of allowing newborns and infants to remain in a home previously deemed unsafe for older children to be successfully reintegrated into, needs to be reconsidered. As noted in the legislative priorities and public policy recommendations sections, it is imperative that those who investigate child abuse and neglect have adequate and continued training and follow established procedures in managing the investigations with a multidisciplinary approach. Additional recommendations include timely referrals for drug and alcohol assessments and treatment when parental use is suspected, consistent and regular monitoring of cases, and effective and frequent communication with other community agencies providing services to families known to the child welfare system.

CASE VIGNETTE
Deaths with Child Welfare Involvement

Case #1 – *DCF had 70 reports on this youth with 24 assigned for allegations of abuse or neglect. These included allegations of physical abuse by family members and staff at DCF contracted facilities, a lack of training for the child's medical conditions by family members and foster placements, family members berating the youth, and sexual assaults. All reports were unsubstantiated. Mother was not allowed to have contact and parental rights were eventually severed. Youth was living with a relative before being placed in the custody of DCF, which led to more than 80 placements and missing from placement more than 10 times, including at the time of their death. Due to multiple moves and behavior issues, the youth rarely attended school and when at school was bullied. This youth was diagnosed at a young age with multiple mental health diagnoses and had more than 20 hospitalizations. The youth began engaging in suicidal behaviors several years prior to death. Individual and group therapy, case management, and medication management was provided in facilities and group homes but not while missing from placement. Substance use began at young age, using whatever was available on a daily basis. Despite prior overdoses, the youth refused treatment. The use of drugs and lack of health maintenance ultimately led to their death.*

This youth faced many issues including family, educational, medical, emotional, and mental health neglect and abuse. Although steps were taken to support this youth, there were many shortcomings seen in all systems. This youth needed earlier and higher levels of consistent, wraparound services.

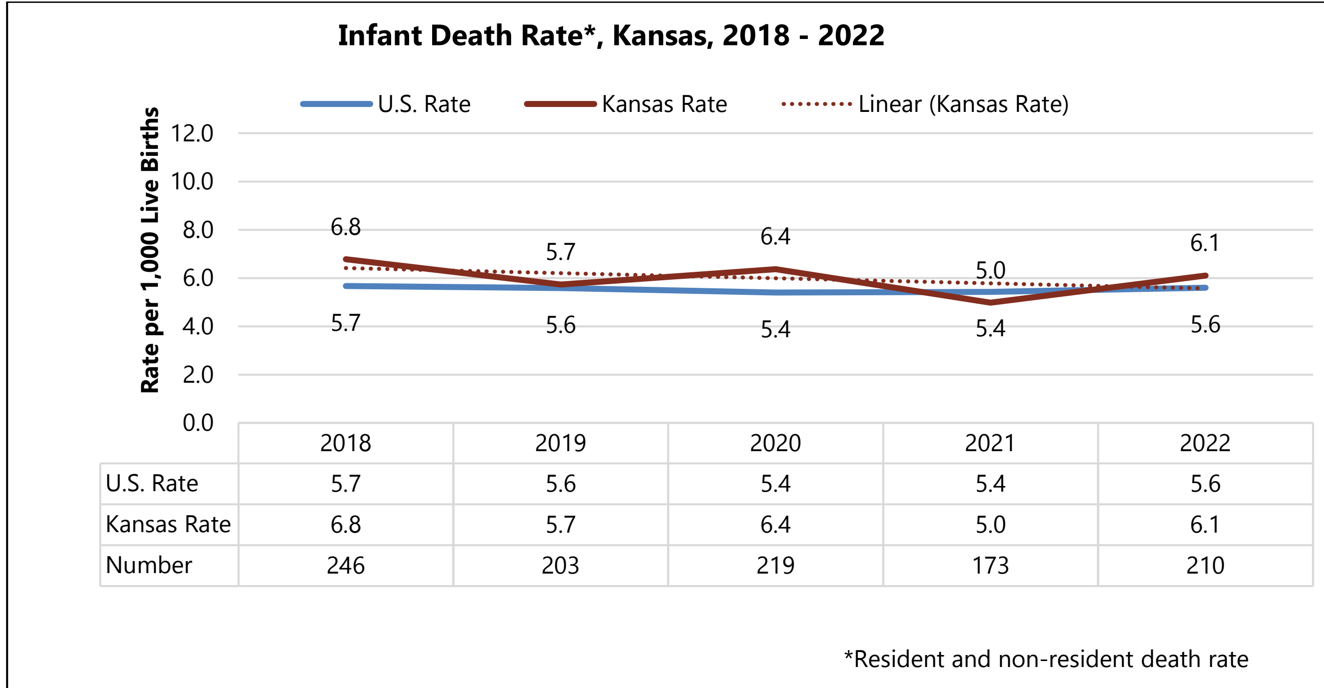
Case #2 *– The mother of an infant received family preservation services after a report to DCF of poor living conditions including filth throughout the home, piles of trash and dirty diapers, and insect and rodent infestations. Frequent visits, support and education by the worker produced minimal improvement for short periods. Mother signed a safety plan indicating her children were not to be left with a relative who was providing care while mother worked due to concerns about the relative's criminal history. Despite continuing concerns about the health and safety of this infant and sibling, the family preservation case was closed six months after the DCF intake with no referral made to DCF about those concerns. At the time of the infant's death, the child was in the care of the relative who was not to provide child care; the home and sleep environment remained unsafe and unfit for children.*

This family met the time requirement for family preservation services in the home; however, family did not improve the situation or address safety concerns. This case should have been reviewed with DCF prior to closing the family preservation case. Case closure should be based on the outcome of the services, not the length of time services are provided. Family preservation providers must communicate continued concerns to DCF and consider alternative care until parents are able provide a safe environment.

MORTALITY AFFECTING INFANTS

In Kansas, infant mortality (age less than 1 year) has been noted as an area in need of improvement. There were 210 infants who died in 2022, for an infant mortality rate of 6.1 deaths per 1,000 live births. Over the last five years, Kansas has experienced a downward trend in annual infant mortality rates (Figure 9). According to “The Healthy People 2030,” the national goal for infant mortality is 5.0 infant deaths per 1,000 live births by the year 2030.[2]

Figure 9



	2018	2019	2020	2021	2022
U.S. Rate	5.7	5.6	5.4	5.4	5.6
Kansas Rate	6.8	5.7	6.4	5.0	6.1
Number	246	203	219	173	210

*Resident and non-resident death rate

Figure 10

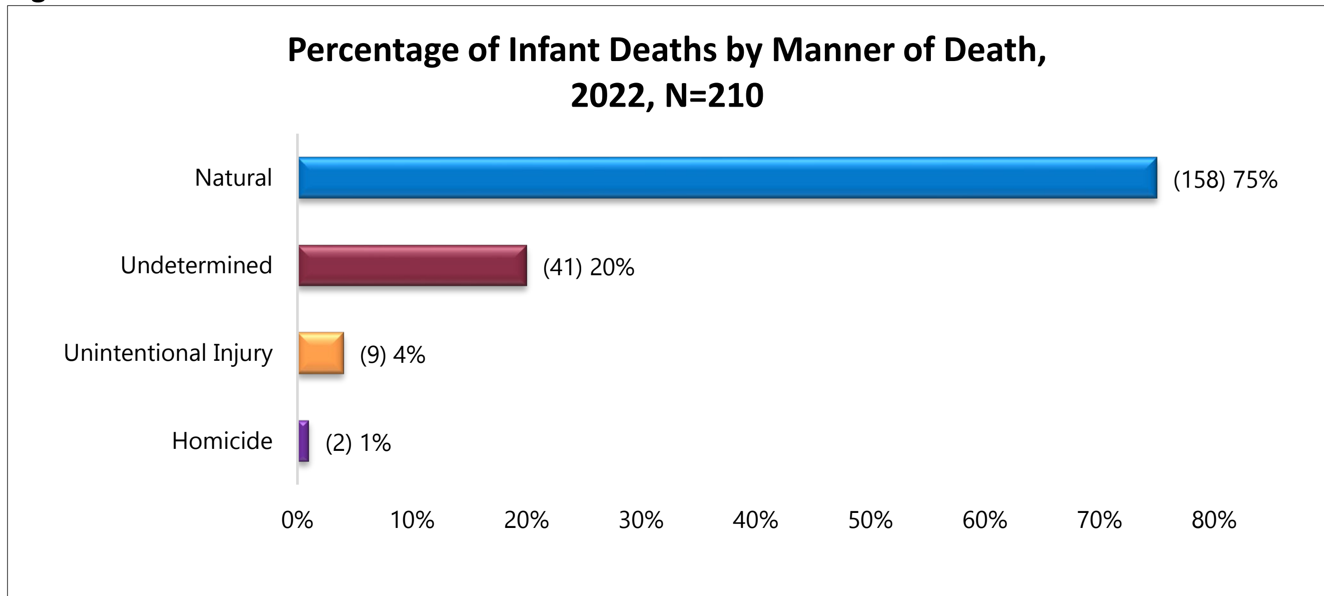


Figure 10 shows the percentage of infant deaths by manner. Figure 11 indicates that of the 158 infants who were found to have died by natural causes, the leading causes were prematurity and congenital anomalies. When looking at the 52 non-natural causes of death, the leading causes were Undetermined-Sudden Unexpected Infant Deaths (SUID) and Unintentional Injury-Suffocation with Unsafe Sleep.

Figure 11

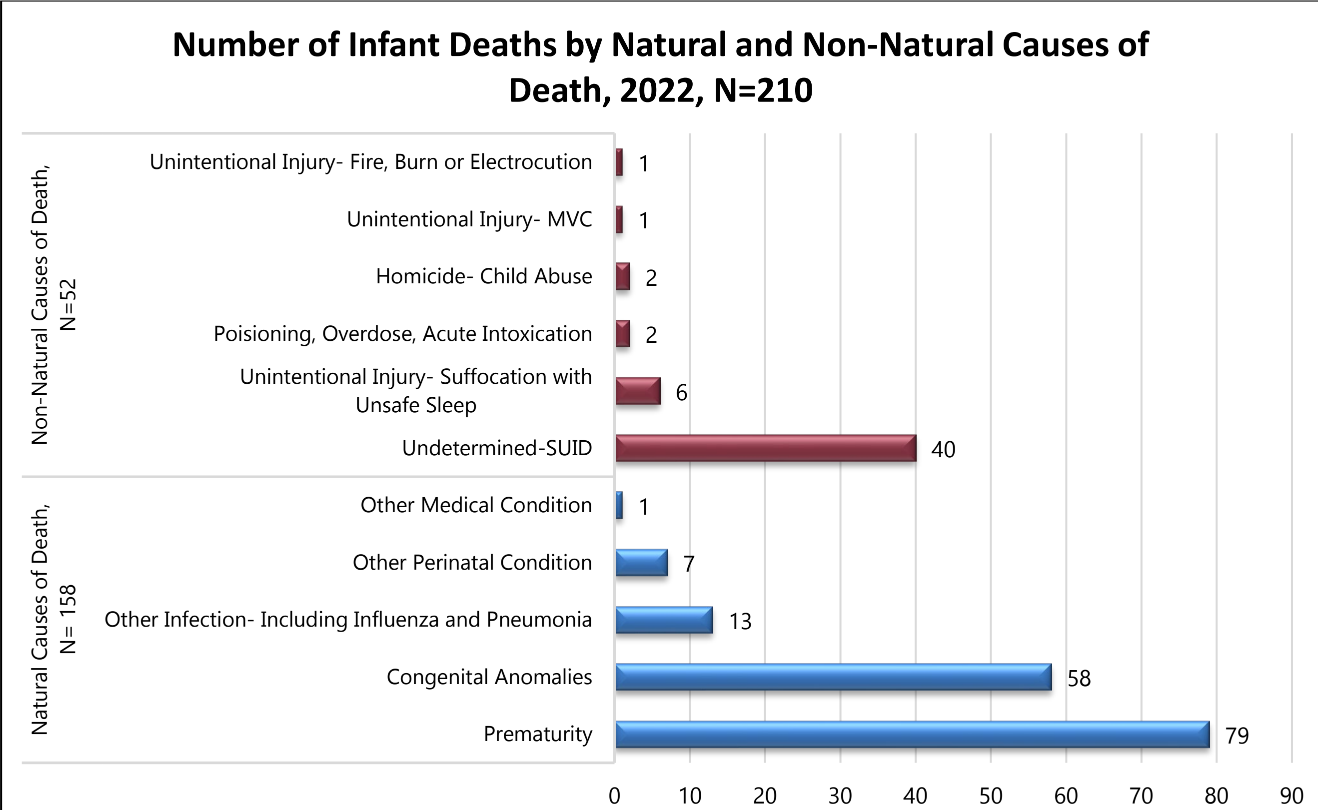
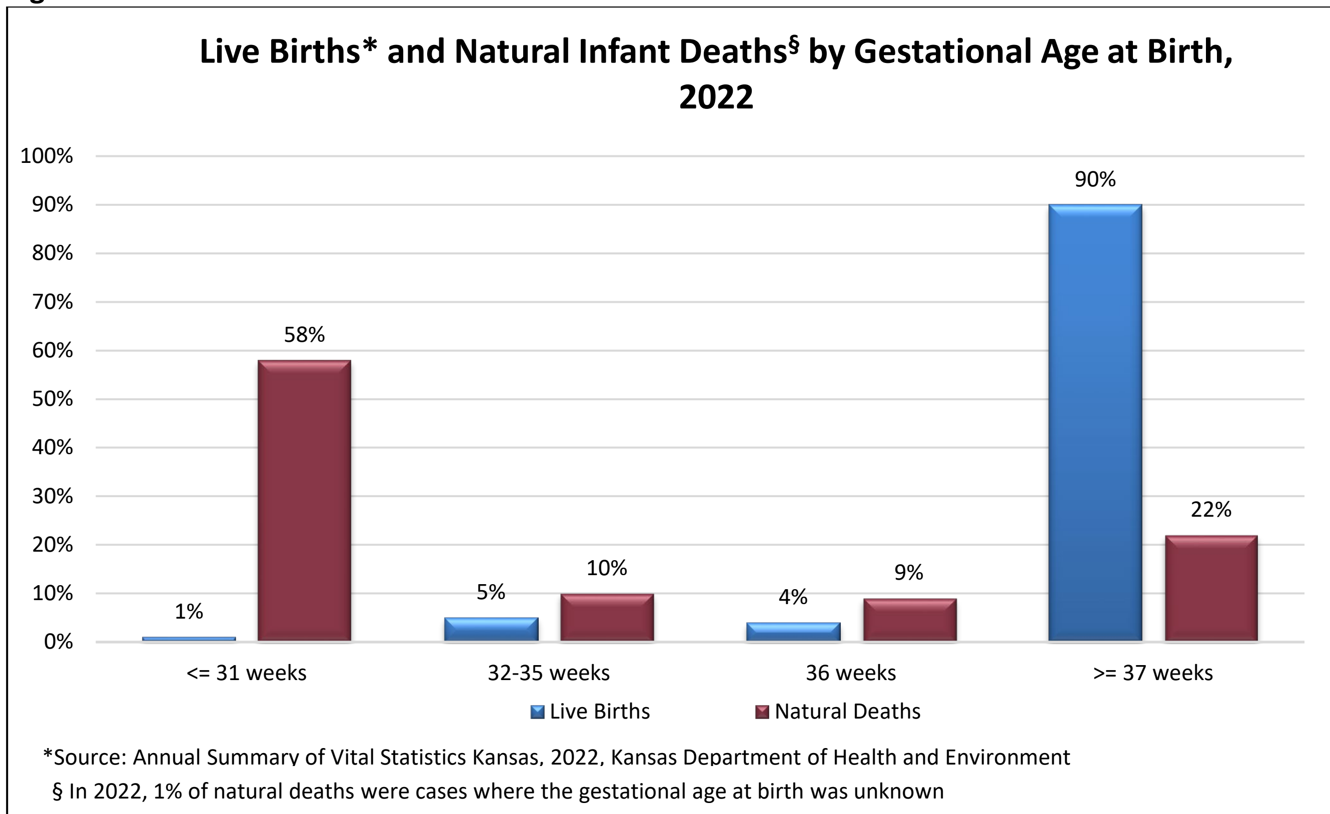


Figure 12



Though the majority (90%) of infants are born at or after 37 weeks gestation, deaths are disproportionately associated with those born prior to 37 weeks gestation. As shown in Figure 12, 58% of the infants who died from natural causes were born prior to, or at, 31 weeks gestation. In addition to being a direct cause of death, prematurity is a significant risk factor for infant mortality from other causes.

Figure 13 shows that the rate of death per 1,000 live births by race/ethnicity for infants was the lowest for Asian/Non-Hispanic and White/Non-Hispanic infants. The other race/ethnicity groups listed all had a rate of death higher than the Kansas rate of death when all races are combined.

Figure 13

Rate of Death per 1,000 Live Births by Race/Ethnicity, All Manners of Death, Age <1, 2018-2022						
KS Rate All Races	**White/ Non-Hispanic**	**Black/ Non-Hispanic**	**American Indian/ Non-Hispanic**	**Asian/ Non-Hispanic**	**Multiple Race/ Non-Hispanic**	**Hispanic- Any Race**
6.0	4.6	11.3	*	4.1	16.3	8.1
*Death count of 9 or less, suppressed						

PREVENTION POINTS

- **Prenatal Care –** Medical care during a pregnancy can identify risk factors and health problems, allowing for early treatment and improved 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 must be avoided during pregnancy. These elements are known to cause serious health problems and increase the risk for death in newborns and infants.
- **Drug Environments –** Children living in environments where they are exposed to drugs (including illicit drugs and prescription medication misuse) and alcohol abuse are at increased risk of abuse, neglect, or death. If caregiver substance use disorder is suspected or identified at birth, the safety of the infant and other children should be assessed by DCF and the family be provided drug treatment and medical and mental health services in a closely monitored, supportive, trauma-informed system to reduce potential harm.
- **Diagnose and Manage Chronic Health Conditions –** Medical care for infants and children with chronic conditions can optimize health. Having a medical home is essential for improving such conditions. The medical home is a care delivery model where patient treatment is coordinated through a primary care physician to ensure children receive necessary and consistent care when and where they need it, in a manner that is understood, and in which education and care for chronic conditions and illnesses can be monitored.[4]
- **Home Visitation –** A study by Cincinnati Children's Hospital compared infants whose families received regular home visits with a control group that did not. The visits were provided by nurses, social workers and paraprofessionals through the "Every Child Succeeds" program. The study found that infants who did not receive home visitation services were 2.5 times more likely to die in infancy. These findings are consistent with prevention efforts that support the role of intensive home visiting in reducing the risk of infant death. [5]

Sleep-Related Sudden Unexpected Infant Deaths (SUID)

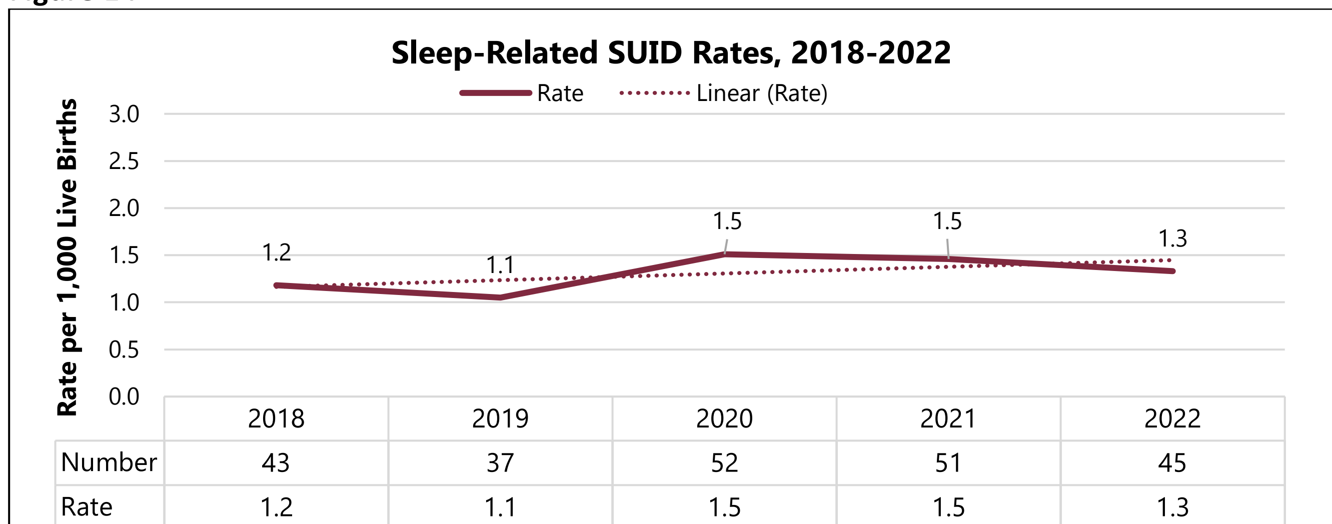
According to the CDC, Sudden Unexpected Infant Death (SUID) is a term used to describe the sudden and unexpected death of a child less than 1 year old in which the cause is not obvious before investigation. These deaths usually occur during sleep or in the child's sleep area. In 2022, there were approximately 3,700 SUIDs in the United States.[9] Sleep-Related Sudden Unexpected Infant Deaths are defined as infant deaths from explained or unexplained circumstances that occur during sleep.

Prior to 2019, sleep-related deaths of infants (less than 1 year of age) were classified in one of three manners of death depending on the circumstances and the cause of death.

1. **Natural-Sudden Infant Death Syndrome (SIDS)**
2. **Unintentional Injury-Asphyxia**
3. **Undetermined**

Sleep-related infant death rates over the last five years have not significantly changed. In 2022, the rate of infant deaths from sudden unexpected causes, which includes both Undetermined and Unintentional Injury-Asphyxia SUID deaths during sleep, slightly decreased in comparison to the previous two years to a rate of 1.3 deaths per 1,000 live births (Figure 14).

Figure 14



	2018	2019	2020	2021	2022
Number	43	37	52	51	45
Rate	1.2	1.1	1.5	1.5	1.3

In 2022, there were 45 sleep-related, SUIDs. The classifications of these deaths are described in Figure 15. Both of the unexplained categories with unsafe sleep factors may also include cases in which there are other potentially fatal findings, concerning conditions, or competing causes of death; however, how, or to what degree, these factors contributed to the death is uncertain.

To standardize the categorization of Sudden Unexpected Infant Deaths (SUIDs) with practices in other states, beginning with the review of the 2019 infant sleep-related fatalities, the SCDRB is using the SUID Case Registry Decision-Making Algorithm. These categories of Sleep-Related SUID cases, as listed in Figure 15, have replaced the previous categories of Sudden Infant Death Syndrome used in the review of cases prior to 2019. More information regarding the SUID case registry can be found at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4311566/.

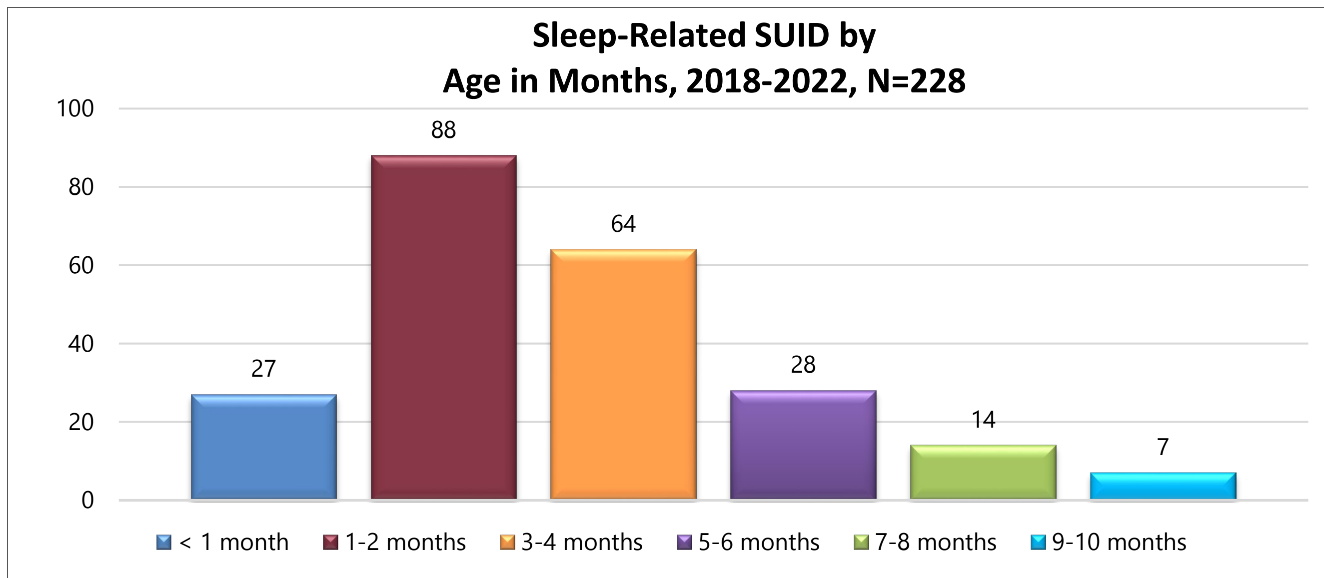
Figure 15

Sleep-Related SUID Classifications for Infants, 2019-2022, N= 185					
Undetermined-SUID	**Further Explanation**	**2019 Deaths**	**2020 Deaths**	**2021 Deaths**	**2022 Deaths**
Unexplained: No autopsy or death scene investigation	Autopsy or death scene investigation not completed.	0	3	2	2
Unexplained: Incomplete case information	Incomplete case information pertinent to case review.	8	15	4	10
Unexplained: No unsafe sleep factors	Cases in which infant was placed alone on their back on a sleep surface recommended for an infant without any soft or loose objects in the sleep area.	1	1	0	1
Unexplained: Unsafe sleep factors	Cases in which the infant's sleep environment had one or more unsafe sleep factors (e.g., not in a crib, on a shared sleep surface, not supine) but evidence of airway obstruction was not present.	13	18	29	22
Unexplained: Possible Suffocation with unsafe sleep factors	Cases in which unsafe sleep factors were present and evidence of what caused at least partial obstruction of the airway is known but does not meet the criteria of the explained suffocation below.	6	5	7	4
Unintentional Injury-Asphyxia	**Further Explanation**	**2019 Deaths**	**2020 Deaths**	**2021 Deaths**	**2022 Deaths**
Explained: Suffocation with unsafe sleep factors	Cases with a non-conflicting account of placed and found position, no other potentially fatal findings or conditions from autopsy, age and developmental stage that made a suffocation event possible, evidence to visualize how the airway obstruction occurred and strong evidence of external obstruction of the airway.	9	10	9	6
	Total Sleep-Related Deaths	**37**	**52**	**51**	**45**

Due to the change in classifications, the Board will no longer classify deaths as Natural-SIDS. Historical information about SIDS related deaths may be accessed in previous annual reports at: SCDRB Annual Reports.

Although by definition, sleep-related SUIDs can occur at any time during an infant's first year, most occur in infants between 1 and 4 months of age as shown in Figure 16.

Figure 16



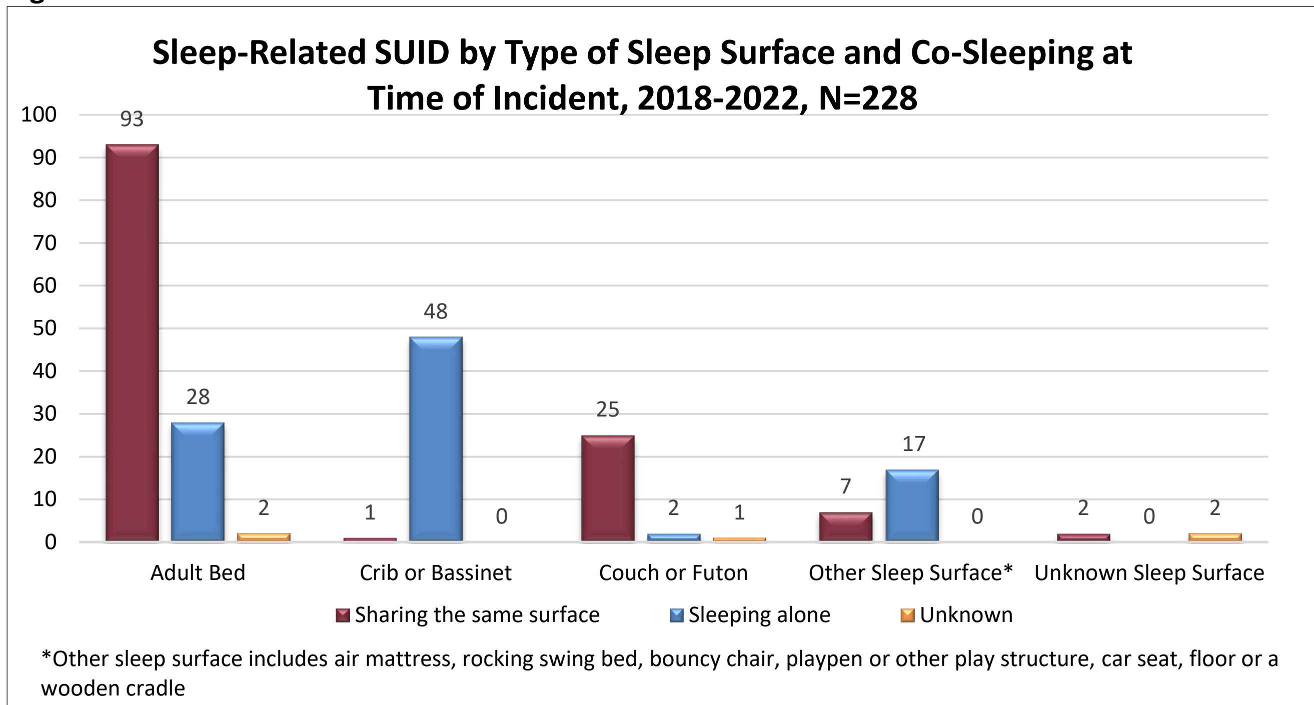
While most sleep-related SUIDs occur in the child's home, 17% of the sleep-related fatalities occurred in a location outside the child's home (Figure 17). Safe sleep practices should be consistent at each sleep (naptime and nighttime) both in the home and when away from the home.

Figure 17

Sleep-Related SUID by Location of Incident*, 2018-2022, N=228		
Location	**Number**	**Percent**
Child's Home	190	83%
Relative's Home	20	9%
Unlicensed Child Care	9	4%
Friend's Home	5	2%
Other§	2	1%
Licensed Child Care	3	1%
Foster Care	1	0%
*Multiple responses are appropriate for some circumstances regarding incident location; therefore, the sum could be greater than the total number of sleep-related SUID. §Other includes hotel rooms, shelters, etc.		

Out of the 228 sleep-related deaths reviewed by the Board between 2018 and 2022, only 21% of infants were placed in a crib or bassinet at the time of the death. Additionally, 55% of the infants were found to have been sharing a sleep surface with one or more individuals at the time of the incident (Figure 18). More than half (53%) of the sleep-related deaths occurred when the infant was sleeping on the adult bed, with 40% of those co-sleeping with one or more individuals (Figure 18).

Figure 18



*Other sleep surface includes air mattress, rocking swing bed, bouncy chair, playpen or other play structure, car seat, floor or a wooden cradle

As recommended by The American Academy of Pediatrics (AAP), infants should be placed on a firm, flat, non-inclined sleep surface (a safety-approved crib and mattress) covered by a fitted sheet with no other bedding or objects in the crib. It is also recommended that infants sleep in close proximity to their parents (room sharing), but on a separate surface designed for infants without bed- sharing. [6]

In all but one of the sleep-related SUID deaths reviewed by the Board in 2022, there was evidence of one or more unsafe sleep practices. The images below depict a safe sleep environment in which the infant is placed **A**lone, on their **B**ack, and in a **C**rib. Parents and caregivers should ensure the **ABC**s of safe sleep, for every sleep. [6]

Photos Credit-KIDS Network *http://www.kidsks.org/*

From 2018 through 2022 there have been 26 deaths in which the caregiver reportedly fell asleep while breast (15) or bottle (11) feeding the infant (Figure 19). As noted in the prevention points on page 24, mothers should be encouraged and supported to breastfeed safely. Education about how to safely breastfeed in bed and counseling about risk factors and prevention is critical. Parents should be reminded that if infants are brought to an adult bed for a feeding (breast or bottle), they should be returned to a separate safe crib or bassinet when the parent is ready to return to sleep.[6]

Figure 19

Caregiver or Supervisor Fell Asleep While Feeding Infant, Sleep-Related SUID, 2018-2022, N=228		
Caregiver or Supervisor Fell Asleep While Feeding Infant		**Number**
Yes		**26**
If Yes, Feeding Type	Breast	15
	Bottle	11
No		**190**
Unknown		**12**

Figure 20

Sleep-Related SUID Rate of Death per 1,000 live births by Race/Ethnicity, Age <1, 2018-2022						
KS Rate All Races	**White/ Non-Hispanic**	**Black/Non-Hispanic**	**American Indian/Non-Hispanic**	**Asian/ Non-Hispanic**	**Multiple Race/ Non-Hispanic**	**Hispanic- Any Race**
1.3	1.0	2.7	*	*	5.4	1.5
*Death count of 9 or less, suppressed						

Figure 20 shows the rate of infant sleep-related deaths in Kansas by race and ethnicity. Black/Non-Hispanic infants are nearly three times more likely and Multiple Race/Non-Hispanic infants are nearly five times as likely to have a sleep-related death when compared to White/Non-Hispanic infants.

Figure 21

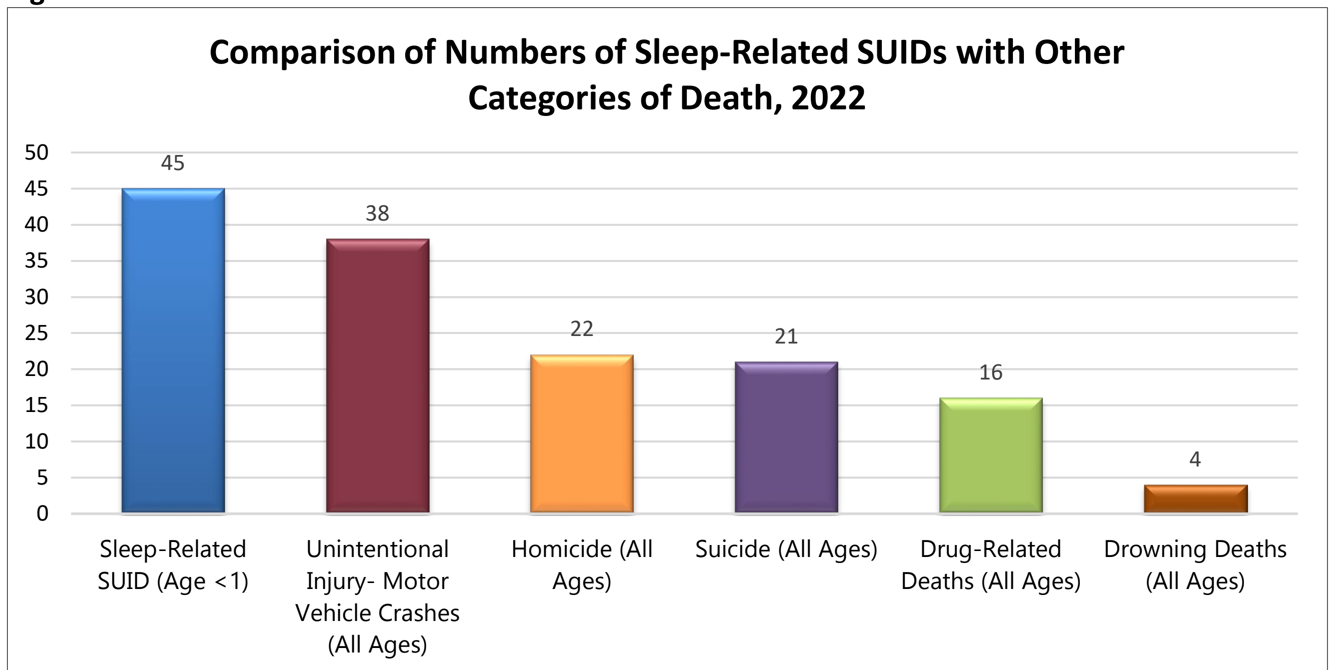


Figure 21 compares the number of Sleep-Related Sudden Unexpected Infant Deaths (SUIDs) in infants under 1 year of age with other categories of deaths across all age groups reported in 2022. As seen in the figure, which excludes natural manner of death, the number of sleep-related SUID deaths is greater than all other categories and is 10 times the number of drowning deaths across all age groups, twice as high as the number of homicides for all ages and surpasses the number of fatalities from motor vehicle crashes, a leading cause of death in many age groups. This striking data underscores the critical importance of promoting and implementing safe-sleep practices statewide to protect vulnerable infants. The prevention of sleep-related SUIDs should be prioritized through public health interventions and education aimed at caregivers, healthcare providers, and community agencies serving children and families.

The Board stresses the importance of thorough investigations by law enforcement and medical personnel, along with properly conducted, complete autopsies. In 2022 there were two deaths in which a death scene investigation was not conducted, and an additional 10 that lacked pertinent information necessary to determine factors for unsafe sleep or suffocation.

Board recommendations include using photographed scene recreations and re-enactments with dolls, additional witness interviews, improving the quality of scene photographs, and documenting room temperature, the availability of a crib, and the size of the bed. Use of the Center for Disease Control's Sudden Unexpected Infant Death Investigation Form is the expected standard in all investigations and would aid in obtaining critical information at the scene and from interviews: https://www.cdc.gov/sudden-infant-death/media/pdfs/2024/04/SUID-Investigation_Fillable_2021-printer-friendly_508_1.pdf A Sudden Unexpected Infant Death Investigation (SUIDI) form was completed in only 17 of the 45 sleep-related deaths in 2022.

CHARACTERISTICS OF SLEEP-RELATED SUIDs, 2018-2022, N=228

- The number of Sleep-Related SUIDs in 2022 is substantially higher than other causes of death in children; specifically, 10 times the number of drowning deaths and 2 times greater than the homicide and suicide deaths in 2022
- 99% had evidence of one or more unsafe sleep practices
- 79% occurred when the infant was sleeping in a place other than a crib or bassinet
    - 53% were put to sleep on an adult bed, and 12% were put to sleep on a couch or futon
- 54% were sharing a sleep-surface
- 52% were put to sleep on their stomach, side, or a position other than the recommended supine (on their back) placement
- 33% of the investigations lacked information that would normally be expected in a child death investigation
- 11% of parents or caregivers fell asleep while either breastfeeding or bottle feeding the infant
- Black/Non-Hispanic infants were nearly three times more likely and Multiple Race/Non-Hispanic infants nearly five times more likely to have a sleep-related SUID when compared to White/Non-Hispanic infants

PREVENTION POINTS

- Infants should be placed to sleep in a supine position. Side sleeping is not as safe as supine sleeping and is not advised. Infants 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 significantly increased risk of sudden death.[6]
- A separate but proximate sleeping environment is recommended. Bed-sharing with adults or siblings is not safe.
- A firm, flat, non-inclined sleep surface should be used. Soft materials such as pillows, quilts, comforters, or sheepskins should not be placed in the crib with the infant.[6]
- Sleep clothing, such as wearable blankets designed to keep the infant warm should be used instead of blankets and quilts that could overheat the infant, block their airway, cover the infant's head, or cause entrapment. Avoid overheating the infant's room.[6]
- Smoking during pregnancy and in the infant's environment are risk factors for mortality and should be avoided.
- Mothers should be encouraged and supported to breastfeed, not only for the known nutritional value but as a protective factor against sudden unexpected infant deaths. Infants brought to the adult bed for nursing should be returned to a separate safe surface (i.e., crib or bassinet) when the parent is ready to return to sleep.[6]
- Devices promoted to reduce "SIDS" have not been proven to reduce the incidence of sudden unexpected infant deaths. They should not be used unless prescribed for a specific disorder.
- Consistent messaging throughout state agencies about research-based safe sleep recommendations is critical. For more information on safe sleep, visit these websites: AAP at http://www.aap.org/, or Kansas Infant Death and SIDS Network at http://www.kidsks.org/.

CASE VIGNETTE
Sleep-Related Infant Death

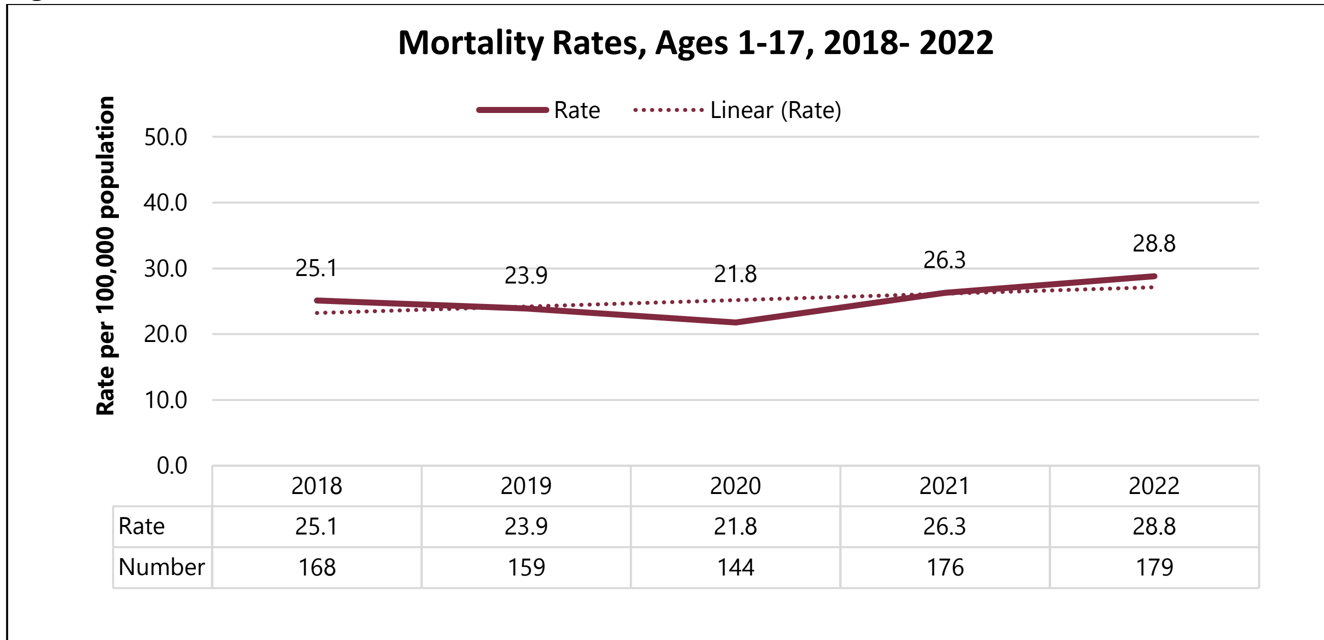
Safe Sleep Surfaces- *An infant was placed in a safe-sleep location of a crib at bedtime. During the night, the infant woke for a feeding and the young mother brought the infant to the parents' adult bed to be breastfed. During the course of the feeding, the mother fell asleep and woke a few hours later to find the infant unresponsive. This death was classified as Sudden Unexpected Infant Death due to possible suffocation and an unsafe sleep environment.*

Board Reflection- *Parents should be reminded that if infants are brought to an adult bed for a feeding (breast or bottle), the parent should consider some type of alert so the infant can be returned to a separate safe crib or bassinet when the parent is ready to return to sleep.*

MORTALITY AFFECTING CHILDREN AGES 1-17

The mortality rate for children ages 1-17 had been on a downward trend until 2020. There has been a slight increase in the rate of death over the last two reporting years for this age group (Figure 22).

Figure 22



	2018	2019	2020	2021	2022
Rate	25.1	23.9	21.8	26.3	28.8
Number	168	159	144	176	179

Figure 23 shows the percentage of child deaths age 1-17 based on the manner of death in 2022. All non-natural manners of death accounted for 51% percent of the total deaths, while Natural deaths were 49% of the total in the age group 1-17. These non-natural deaths are described in Figure 24.

Figure 23

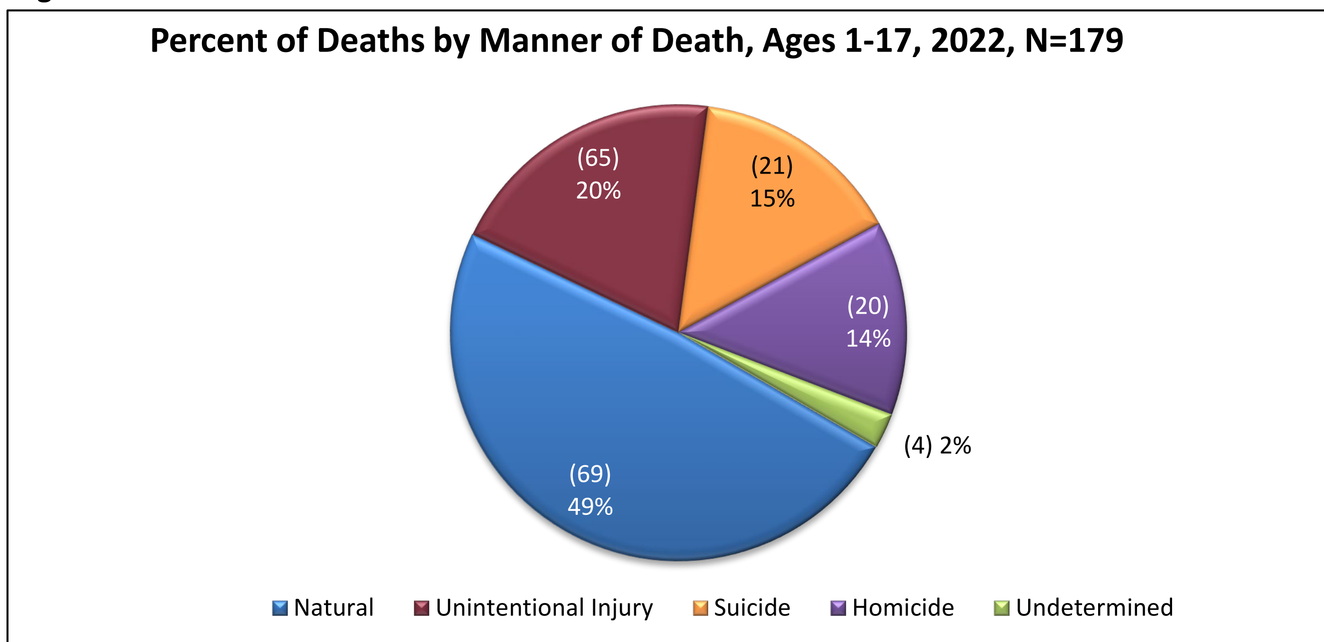


Figure 24

Non-Natural Deaths, Ages 1-17, 2022, N=110	
	Total
Unintentional Injury	**65**
Asphyxia	3
Drowning	4
Fall/Crush	1
Fire, Burn, Electrocution	4
Motor Vehicle Crash	37
Other Injury	2
Poisoning, Overdose, or Acute Intoxication	12
Weapon	2
Homicide- All Causes	**20**
Child Abuse	4
Gang Violence	0
Other Causes	16
Suicide- All Causes	**21**
Undetermined- All Causes	**4**

Figure 25

Rate of Death by Race/Ethnicity, Ages 1-17, 2018-2022						
KS Rate All Races	**White/ Non-Hispanic**	**Black/Non-Hispanic**	**American Indian/Non-Hispanic**	**Asian/ Non-Hispanic**	**Multiple Race/ Non-Hispanic**	**Hispanic- Any Race**
25.0	21.2	72.0	*	12.3	24.6	27.4
*Death count of 9 or less, suppressed						

Figure 25 shows the rate of death per 100,000 population for children ages 1-17 in Kansas by race/ethnicity. Black/Non-Hispanic children in this age group died at a rate more than three times higher than White/Non- Hispanic children.

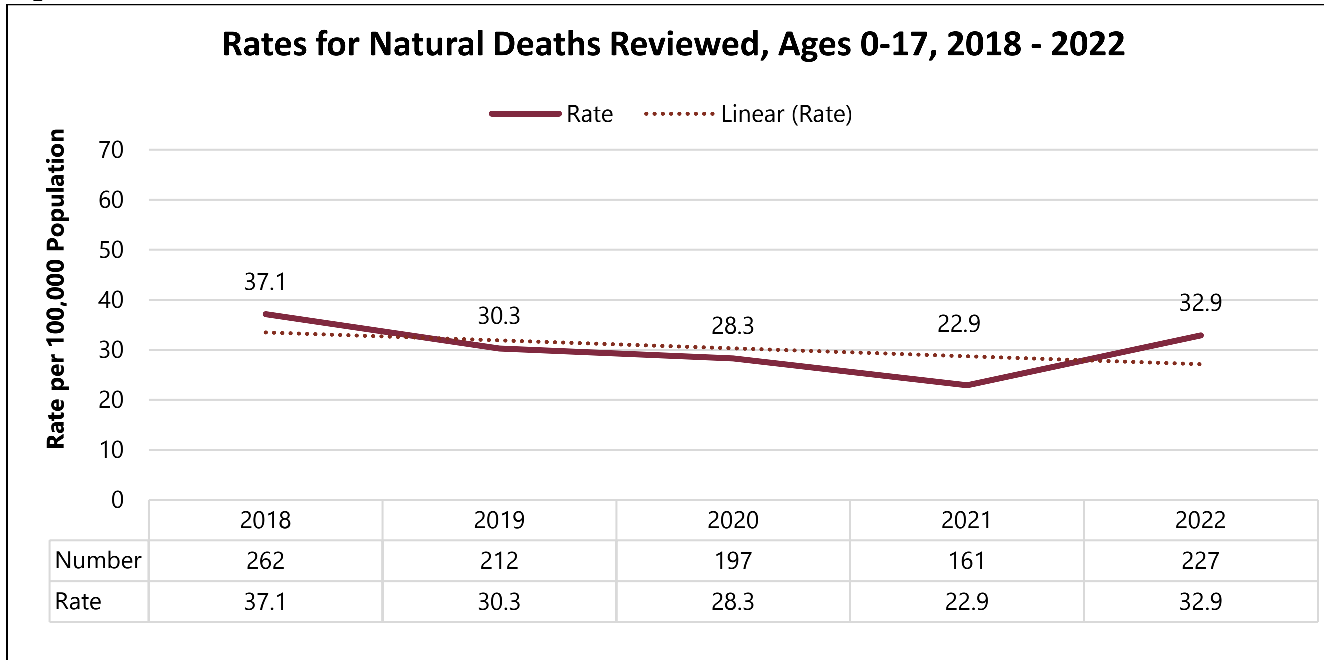
CHARACTERISTICS OF DEATHS, AGES 1-17, 2018-2022, N=179

- The rate of death for this age group increased by 7.0 deaths per 100,000 population between 2020 and 2022
- Black/Non-Hispanic children in this age group died at a rate more than three times higher than White/Non- Hispanic children
- 60% were male, 40% were female
- 51% of the deaths in 2022 for this age group were from non-natural causes

NATURAL DEATHS

Natural deaths are those due to causes such as prematurity, congenital conditions, cancer, and other diseases. Figure 26 indicates that in 2022 there were 227 natural deaths. The rate of death due to natural causes in children has declined over the last five reporting years despite an increase to 32.9 deaths per 100,000 population in 2022.

Figure 26



	2018	2019	2020	2021	2022
Number	262	212	197	161	227
Rate	37.1	30.3	28.3	22.9	32.9

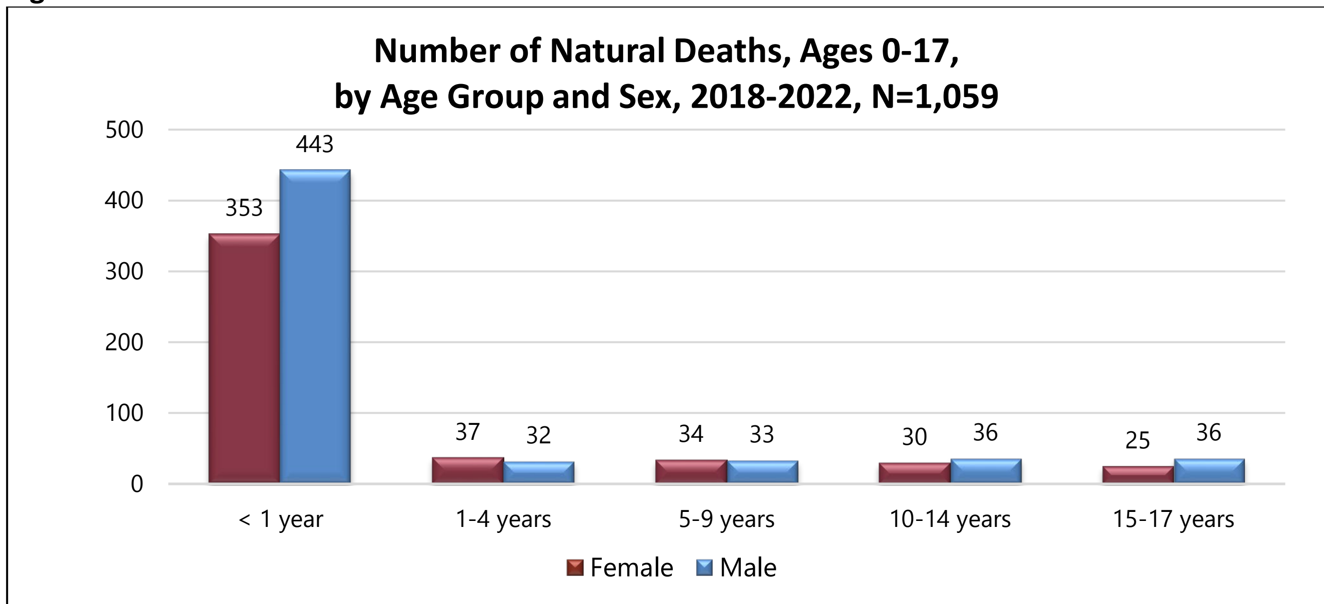
Figure 27 shows the Kansas child death rates for Natural Manners of death by race/ethnicity. Black/Non-Hispanic individuals are nearly twice as likely to die from natural causes of death compared to children of all races/ethnicities in Kansas.

Figure 27

Rate of Death, Natural Manner by Race/Ethnicity, Ages 0-17, 2018-2022						
KS Rate All Races	**White/ Non-Hispanic**	**Black/Non-Hispanic**	**American Indian/Non-Hispanic**	**Asian/ Non-Hispanic**	**Multiple Race/ Non-Hispanic**	**Hispanic- Any Race**
29.6	24.8	58.7	*	27.2	34.8	36.7
*Death count of 9 or less, suppressed						

Figure 28 describes the number of natural deaths by all age groups and sex. Children who were less than one year of age accounted for 75% of natural deaths between 2018 and 2022.

Figure 28



Prematurity and congenital anomalies led to 71% of the natural deaths. Cancer claimed the lives of 72 children as the third-leading natural cause of death (Figure 29).

Figure 29

Natural Causes of Death, Ages 0-17, 2018-2022, N= 1,059						
Cause of Death	**2018**	**2019**	**2020**	**2021**	**2022**	**Total**
Prematurity	102	81	88	66	79	416
Congenital Anomaly	80	73	56	50	81	340
Cancer	20	15	10	11	16	72
Other Perinatal Condition	16	13	13	9	7	58
Other Infection	8	8	8	6	12	42
Other Medical Condition	6	6	4	7	2	25
Pneumonia	8	4	0	1	7	20
Cardiovascular	1	4	5	2	7	19
Neurological Seizure disorder	3	2	4	0	5	14
SIDS*	13	0	0	0	0	13
Asthma	2	3	2	2	3	12
COVID-19	0	0	1	5	3	9
Influenza	1	3	3	0	1	8
Undetermined	2	0	3	1	2	8
Diabetes	0	0	0	1	1	2
Malnutrition, dehydration	0	0	0	0	1	1
***SIDS classification use was discontinued by the SCDRB in 2019**						

CHARACTERISTICS OF NATURAL DEATHS, AGES 0-17, 2018-2022, N= 1,059

- Deaths due to natural causes were decreasing since 2018 until an increase was noted in 2022
- 75% of natural deaths occurred to infants less than one year of age, primarily due to prematurity and congenital/genetic disorders
- Males accounted for 55% of natural deaths
- The rate of death for Black/Non-Hispanic children was 58.7 per 100,000, compared to 24.8 for White/Non-Hispanic

Asthma Deaths

In the last five years (2018-2022) there have been 12 child deaths due to asthma, three of which occurred in 2022. These deaths occurred in children from ages 1-17, with the majority of deaths occurring in children in the 10-14 age group. Although the number of deaths is small, even one death is too many, since asthma deaths are nearly all preventable.

The numbers and rates of pediatric asthma hospitalizations is one indication of how well a state is managing asthma overall. If asthma is well controlled, a child should rarely need to be hospitalized for the disease. As shown in Figure 30, asthma hospitalizations had shown an overall decline until 2021 and 2022. This warrants continued caution and demonstrates the need for continued education.

Figure 30

Numbers and Rates of Pediatric Asthma Hospitalizations* Kansas, 2018-2022

Year	Number	Rate
2018	425	67.4
2019	341	54.5
2020	214	32.0
2021	331	49.4
2022	468	69.9

* Admissions with a principal diagnosis of asthma per 100,000 population, ages 2 through 17 years. Excludes cases with a diagnosis code for cystic fibrosis and anomalies of the respiratory system, obstetric admissions, and transfers from other institutions

Source data: Kansas Hospital Association

Calculated using Agency for Healthcare Research and Quality Pediatric Quality Indicator software. Prepared by: Kansas Department of Health and Environment

Bureau of Epidemiology and Public Health Informatics Created: August 27, 2024

Contact: KDHE.HealthStatistics@ks.gov

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 controlled through quality medical care with a management plan that includes rescue inhalers, preventive medications and asthma education. This also includes the ability to recognize and avoid each child's specific triggers such as allergens, exercise, cigarette smoke, air pollution and infections. It is estimated that one in 12 children have asthma, which makes it a common problem.[7] Because it is common, parents and care providers often fail to understand that asthma is not a one-size-fits-all disease and may not appreciate how life-threatening it can become if not treated quickly and appropriately.

It is imperative that children have access to medical providers who can effectively manage and

control asthma, 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.

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.[8]
- **Education –** Teaching and reinforcement of disease monitoring, 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 and integrate into all points of a child's care.[8]
- **Control of Environmental Factors and Comorbid Conditions –** Avoidance of cigarette smoke and other allergen exposures, consideration of immunotherapy if indicated, management of comorbid factors, and annual use of influenza and COVID vaccines are important in asthma control.[8]
- **Medications –** Medications and devices must meet a child's needs. Insurance companies must provide flexibility in approval of medications based on a child's ability to use a particular device and the clinical response to prescribed medications. An evidence-based approach to therapy adjustments is outlined in Guidelines for the Diagnosis and Management of Asthma as well as the 2020 Focused Updates to the Asthma Management guidelines both published by the National Heart, Lung and Blood Institute of the NIH.

CASE VIGNETTE

Youth Death Related to Complications of Asthma

Access to medications and health monitoring must be readily available – *A Kansas youth, diagnosed with moderate intermittent asthma between 2 and 3 years of age, had been relatively stable for 5 years when he developed acute symptoms necessitating an emergency department visit. Instructions for treatment and follow-up with a primary care provider were provided. A year later he was again seen in an ED for wheezing. He reported not having an inhaler at home. Twice within the two months prior to his death, he was seen for emergency visits for respiratory distress related to asthma. At the most recent visit he had been short of breath for two days. His parent acknowledged using a nebulizer more often and not having an inhaler available, all signs of poor asthma control that should have prompted an earlier visit. He was treated and sent home with a written asthma action plan and was instructed to see his primary care provider in two days, or sooner if acute symptoms developed. Primary care notes from three providers of record indicated no follow-up occurred and most notably, very limited primary care had occurred. On the day of his death, a parent provided multiple breathing treatments before the youth asked to be taken to the hospital, where he arrived unresponsive and not breathing. Despite a rapid emergency response and resuscitation, the child died due to his asthma exacerbation. There was second-hand cigarette smoke exposure in the home and concern for marijuana smoke exposure. The child was not immunized against influenza or SARS-CoV-2 (COVID-19 virus).*

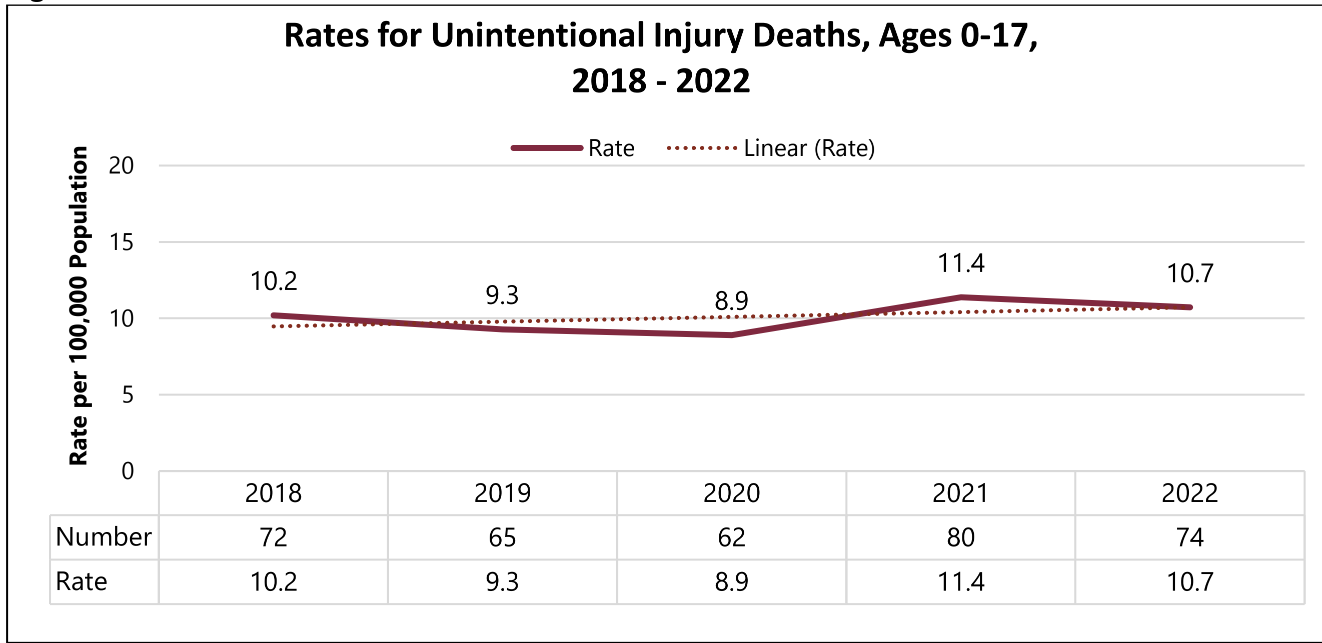
Asthma deaths are preventable with appropriate monitoring and intervention. This child had several recent emergency visits for asthma exacerbations and the family received education from medical providers about symptoms of concern and how to appropriately respond; however, there was no follow-up care to assure he was improving, to provide on-going monitoring, testing and preventive measures, and to reinforce the asthma action plan.

Board Reflection – *Asthma is a common chronic disorder. Because symptoms vary and are dependent on genetic and environmental factors, families may not understand how unexpectedly asthma can become life threatening. Education should focus on the need for rescue medications to be readily available, keeping prescriptions filled, and avoiding known triggers, even if the child is doing well. Asthma action plans provide critical directions to caregivers about assessment and treatment of asthma based on severity of symptoms. Communication between emergency department providers and primary care providers is an important aspect of assuring disease monitoring, asthma control and prevention of exacerbations.*

UNINTENTIONAL INJURY DEATHS

Unintentional Injury deaths are those caused by incidents such as motor vehicle crashes, drowning or fire, which are not the result of an intentional act. In 2022, the unintentional injury death rate of 10.7 deaths per 100,000 population reflects a relatively stable pattern over the past 5 years (Figure 31).

Figure 31



	2018	2019	2020	2021	2022
Number	72	65	62	80	74
Rate	10.2	9.3	8.9	11.4	10.7

Figure 32 shows the number of unintentional injuries by age classification between 2018 and 2022. Motor vehicle crashes (MVC) and other transportation-related deaths claimed the lives of 182 children and teens and were the primary cause of Unintentional Injury deaths in children over the age of one. Asphyxia causes of death accounted for the second highest number of Unintentional Injury deaths overall, but are seen mostly in children less than 1 year of age and are sleep-related. These are discussed in the Unintentional Injury-Asphyxia Deaths section of the report. The second and third highest numbers of Unintentional Injury deaths in the 1-17 age group were drownings and the category of poisoning/overdose/acute intoxication, respectively.

Figure 32

Unintentional Injury by Cause and Age Classification, 2018-2022, N=353						
	Age <1	**Age 1-4**	**Age 5-9**	**Age 10-14**	**Age 15-17**	**Total**
MVC and Other Transportation	8	25	33	45	71	182
Asphyxia	47	6	2	2	0	57
Drowning	0	17	5	6	11	39
Poisoning, Overdose or Acute Intoxication	2	4	1	1	27	35
Fire, Burn, Electrocution	3	4	6	0	1	14
Weapon	0	2	0	4	3	9
Fall or Crush	0	0	5	0	4	9
Other Causes	2	6	0	0	0	8
Total	62	64	52	58	117	353

Also shown in Figure 32 are the unintentional injury deaths due to weapon use, which accounted for 9 deaths for ages 0-17 between 2018 and 2022. Firearms should be stored unloaded in a locked location out of a child's reach and sight. Leaving guns where they are accessible to children, such as in or on dressers or nightstands, can lead to injury or death.

It should not go unnoticed that the second leading cause of unintentional injury death for youth aged 15-17 was poisoning, overdose, or acute intoxication. The environment in which our youth are raised may influence whether they try drugs or other substances. At home, school and in the community, caregivers and school educators should address the dangers of drugs and alcohol and the risk of lethality from misuse or abuse. The Centers for Disease Control and Prevention (CDC) measures the prevalence of risk behaviors for students in grades 9-12 through the national Youth Risk Behavior Surveillance System (YRBSS). YRBSS monitors six categories of priority health-risk behaviors among youth and young adults. One of those categories is *Alcohol and Other Drug Use*. In 2023, 12% of youth in Kansas reported having taken prescription pain medicine without a doctor's prescription or differently than how a doctor prescribed it to be used.[10] More information and data about this topic can be found at: https://www.cdc.gov/healthyyouth/data/yrbs/index.htm. Further information regarding drug-related deaths can be found in the Drug-Related Deaths section of this report.

There were nine children who died from Unintentional Fall or Crush injuries; 56% due to falls from heights typically associated with an expected poor outcome. The remainder were deaths due to crush injuries sustained from an object falling on or entrapping the child. In 3 of the 4 deaths from crush injuries, the use or misuse of farm equipment led to the fatal injury.

Eight children died from Unintentional Injuries-Other Causes, which includes deaths from exposure or hyperthermia, 3 of which were left in hot cars, and 5 other injury deaths that do not meet the criteria explained in other cause of death injuries referenced in Figure 32. All eight children were of age four or under.

Figure 33

Rate of Death, Manner-Accident/Unintentional Injury by Race/Ethnicity, Ages 0-17, 2018-2022

KS Rate All Races	White/Non-Hispanic	Black/Non-Hispanic	American Indian/Non-Hispanic	Asian/Non-Hispanic	Multiple Race/Non-Hispanic	Hispanic - Any Race
9.9	8.3	22.1	*	*	12.5	11.9

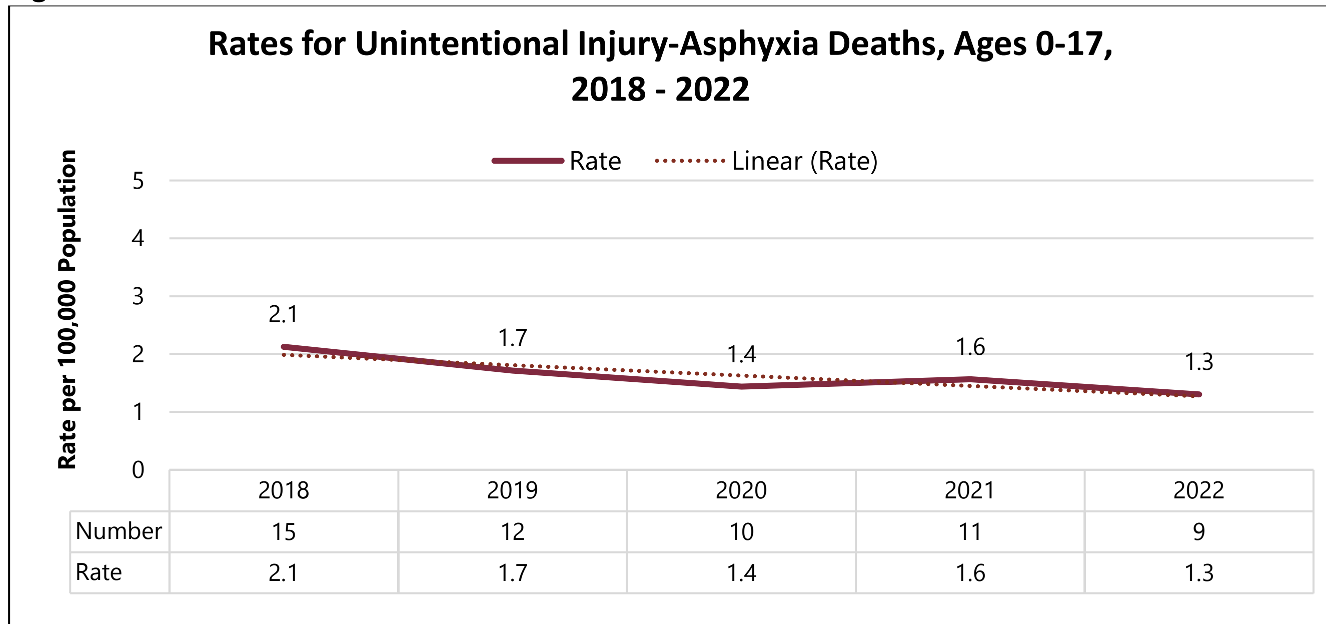
*Death count of 9 or less, suppressed

Figure 33 shows the death rates for Unintentional Injury/Accidental manners of death in Kansas by race and ethnicity. Black/Non-Hispanic children in this age group are more than twice as likely to die from unintentional injuries than White/Non-Hispanic children.

Unintentional Injury - Asphyxia Deaths

As shown in the previous section, asphyxia was the leading cause of unintentional injury deaths in infants in 2022 and previous years. In 2022, nine children between the ages of 0-17 died due to unintentional asphyxia such as suffocation, strangulation or choking. Figure 34 indicates a downward trend between 2018 and 2022 with a rate of 1.3 deaths per 100,000 population in 2022.

Figure 34



	2018	2019	2020	2021	2022
Number	15	12	10	11	9
Rate	2.1	1.7	1.4	1.6	1.3

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. Of the nine deaths due to unintentional asphyxia in 2022, six were under the age of one and were the result of unsafe sleeping conditions. Reviews from Kansas and across the nation show there are several common practices that increase the risk for these deaths. These include sleeping somewhere other than a crib or bassinet, sleeping in a cluttered area, being placed on a soft surface such as an air mattress, pillow or quilt, and bed-sharing** with parents or siblings.

Between 2018 and 2022, there were 10 unintentional injury asphyxia deaths in children over the age of one year that were not due to an unsafe sleep environment. Figure 35 shows the breakdown of those deaths by age classification and if the death was related to choking or suffocation/strangulation. Of the six choking deaths, four of the children choked on food such as hotdogs or grapes and the other two children choked on objects that were not intended to be placed in the mouth. In the four suffocation/strangulation deaths the children were either entangled with straps or ropes (strangulation) or were suffocated or wedged between objects.

** Bed Sharing - A type of sleeping practice in which the sleeping surface (e.g., bed, couch or armchair, or other sleeping surface) is shared between the infant and another person.

Figure 35

Unintentional Injury, Asphyxia Deaths, Ages 1-17, Excluding Sleep-Related Incidents, 2018-2022 N = 10		
	Choking	**Suffocation/Strangulation**
Age 1-4	3	3
Age 5-9	2	0
Age 10-14	1	1
Total	**6**	**4**

Characteristics of Unintentional Injury-Asphyxia Deaths, 2018-2022, N=57

- 82% were infants, 10% were age 1-4, 4% were age 5-9 and 4% were age 10-14
- 81% (46) of the deaths were due to sleep-related asphyxia in infants. Unsafe sleep practices were a contributing factor in all cases
- 19% (11) of the deaths were related to choking or strangulation. Ten of the 11 deaths were over the age of one

In May of 2022, the Safe Sleep for Babies Act of 2021 was signed into federal law.[11] This bill makes it unlawful to manufacture, sell, or distribute crib bumpers or inclined sleepers, both of which are unsafe for infant sleep and have been linked to deaths. Additionally, some cribs, bassinets, playpens, and child beds have been recalled because of known or suspected risk of asphyxia. Before caregivers purchase furniture or other infant equipment for their children, they should ensure no recalls have been issued. The U.S. Consumer Product Safety Commission (http://www.cpsc.gov/) is a resource for recall information.

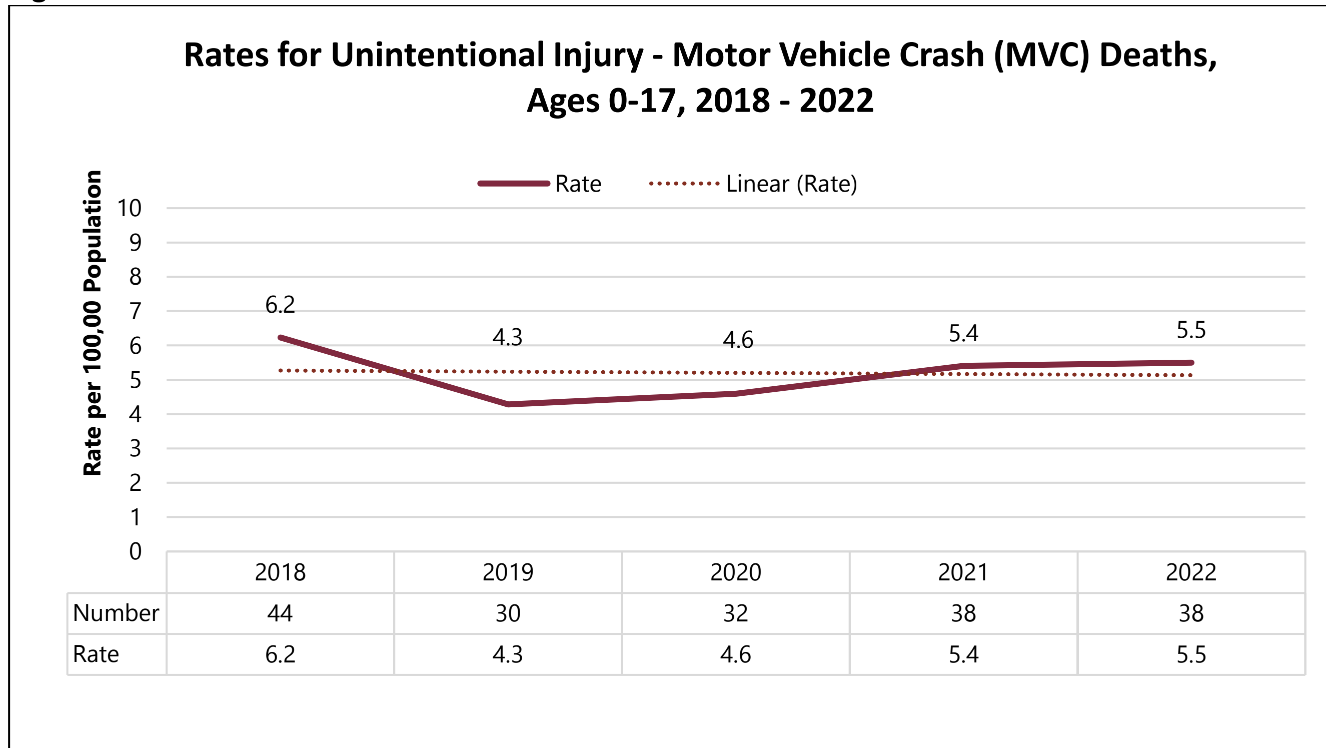
PREVENTION POINTS

- **Proper Supervision –** Young children should be watched attentively. Leaving them alone for even a few minutes allows opportunities for unintentional injuries. Child-specific training in CPR and other emergency responses can help prevent death.
- **Safe Environments –** Areas where children live, sleep and play should be routinely inspected for dangers such as chests, coolers, cords, hanging materials, or plastic bags, which can be deadly to children. Check play areas for hazards like protruding bolts that can catch clothing. Playground equipment parts and handrails should be checked for spaces that are large enough to allow a child's body to slip through, trapping the head or neck. Children playing with rope swings and swing sets should be supervised at all times.
- **Infant Sleeping Arrangements –** The safest sleeping arrangement for an infant is alone, in a clutter free crib, on their back. Babies should not sleep in adult beds and should not be placed in bed with others. The crib mattress should be firm and fit tightly in the crib so the child cannot be trapped between the mattress and side of the crib. No other items that might create a risk for suffocation or entanglement, including blankets, bumper pads, pillows, stuffed animals or infant supplies, should be in the crib with the baby.[6]
- **Choking Hazards –** Children under age four are most at risk for choking on food and small objects. In addition to small toys, balloons and coins, some foods can be a choking hazard for young children. Hot dogs, whole grapes, raw carrots, popcorn and other foods can become lodged in a child's airway. Young children need supervision while eating and when playing with or near potential choking hazards.[12]

Unintentional Injury - Motor Vehicle Crash Deaths

In 2022, 38 children died in Kansas due to unintentional injuries sustained in Motor Vehicle Crashes (MVC). Figure 36 shows the MVC death rate between 2018 and 2022. In 2019 Kansas recorded the lowest rate (4.3 deaths per 100,000 population) since the inception of the Board. Since then, the rate of MVC deaths has increased to 5.5 deaths per 100,000 population in 2022.

Figure 36

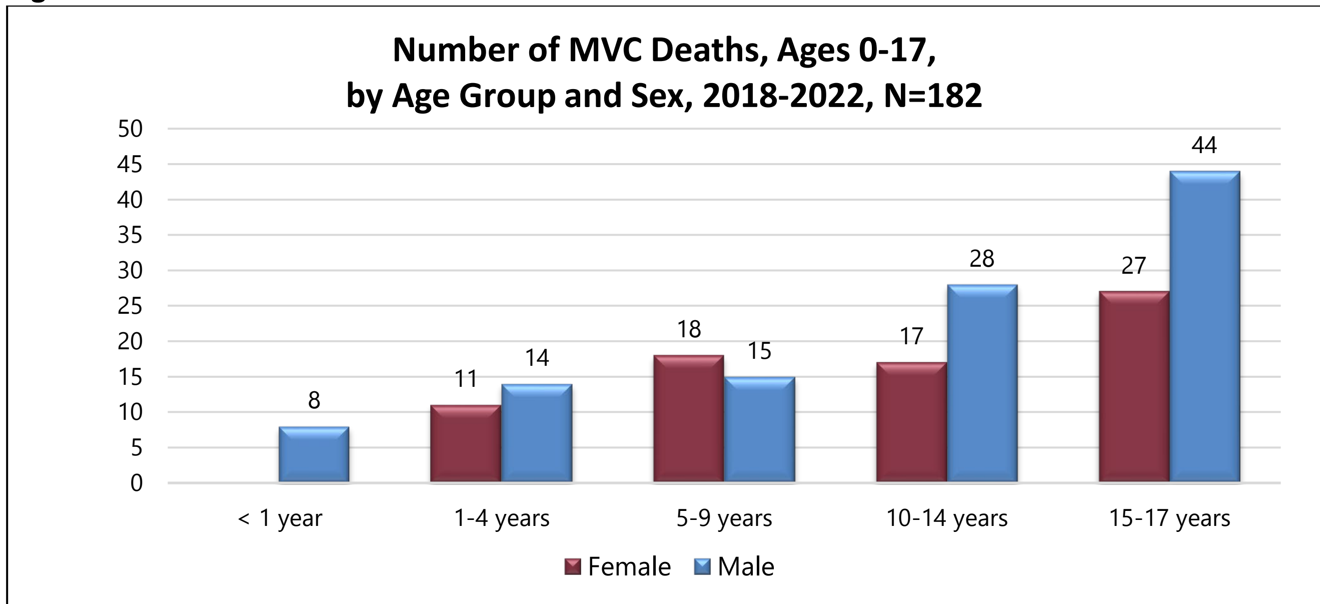


	2018	2019	2020	2021	2022
Number	44	30	32	38	38
Rate	6.2	4.3	4.6	5.4	5.5

Figure 37 shows that the majority of motor vehicle crash (MVC) deaths, 64%, occurred in children ages 10 years and older. Among these, 39% were in the 15-17 age group, making older teens the most affected age group compared to others. Of the 182 total MVC deaths, 60% were males, while females accounted for 40%.

Of the 38 motor vehicle deaths in 2022, 34 children were either drivers or passengers in a vehicle. Three others were pedestrians and one child was riding a bicycle.

Figure 37



It is important to note there are multiple factors that can lead to a MVC death. Combined data for 2018-2022 includes 182 MVC fatalities. When examining the top 10 contributing factors related to the crash, there were 334 combined factors reported as having contributed to those deaths. A list of those factors is found in Figure 38. Speeding, whether over the limit or unsafe for the conditions, was a contributing factor in 51% (92) of the MVC deaths in 2018-2022. Driver inexperience accounted for another 20% (37) of the MVC deaths. During this five-year period, 15% (28) of the MVC deaths had a contributing factor of alcohol or drug use.

Figure 38

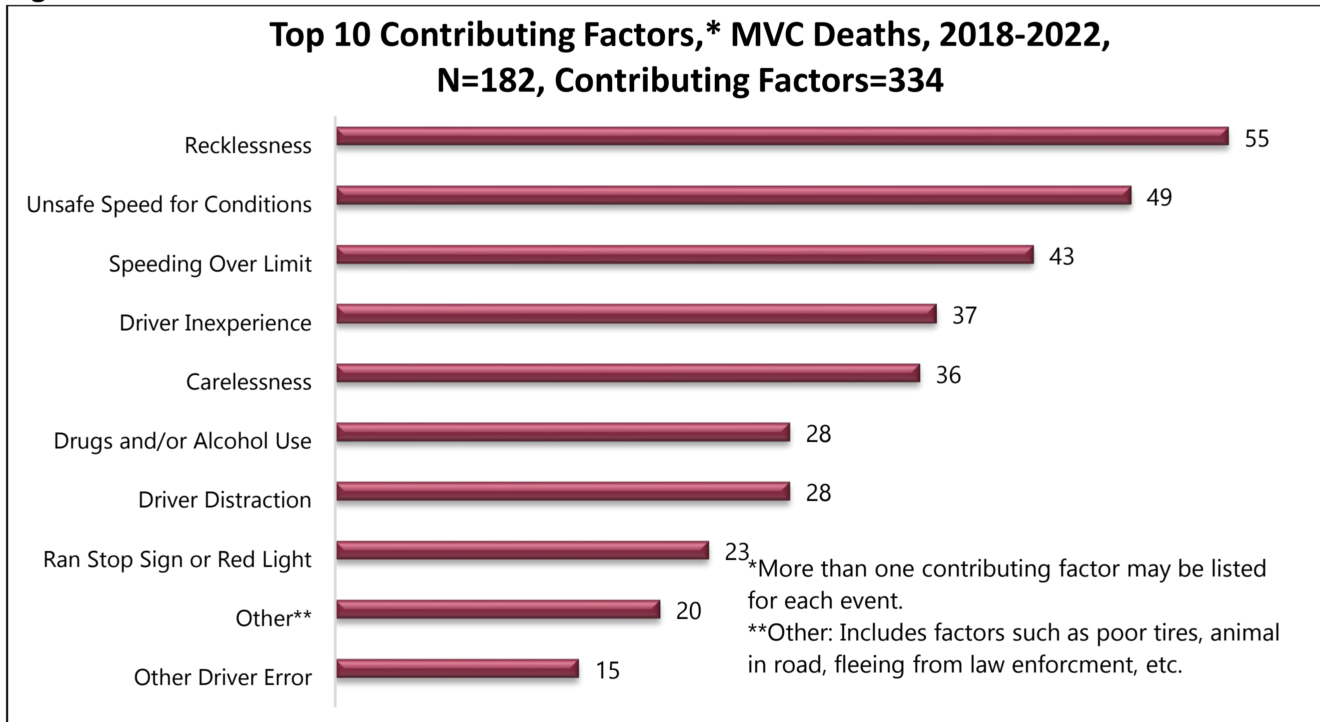


Figure 39

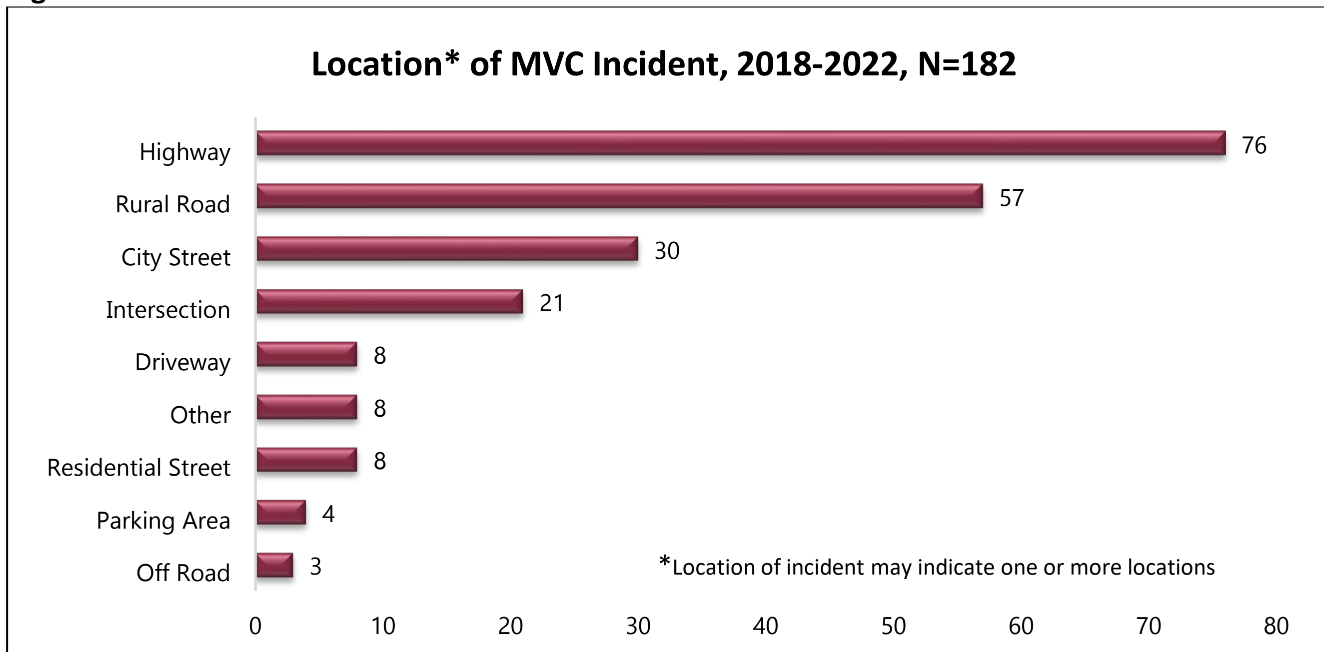


Figure 39 shows that 42% (76) of motor vehicle crash deaths of children in Kansas during this five-year period occurred on a highway and 31% (57) on rural roads.

Figure 40

Restraint Use by Decedent and Location* of Decedent in Vehicle, 2018-2022, N = 142*				
	Driver	**Passenger Front Seat**	**Passenger Back Seat**	**Total**
Restrained	19	18	36	**73**
Unrestrained	24	15	26	**65**
Unknown if Restrained	2	0	2	**4**
Total	**45**	**33**	**64**	**142**

*Does not include deaths in which the decedent was not in a vehicle with a safety restraint system (tractor, airplanes, motorcycle, etc.), or deaths in which the child was a passenger of a vehicle with safety restraints, but in a location where they could not be accessed (decedent in utero at time of crash, in truck bed, riding on bumper, etc.)

Figure 40 displays whether a restraint was used based on the location of the victim in the vehicle. For the purpose of this figure, between the years of 2018 and 2022 there were 142 deaths of children due to MVCs in which the decedent had access to a safety restraint. Of those deaths, 32% (45) of the decedents were the driver of a motor vehicle at the time of their death with only 42% (19) being properly restrained at the time of the crash. In total, when looking at safety restraint use, 46% of the decedents were unrestrained.

There were 29 pedestrian deaths of children between 2018 and 2022. Of those 29 deaths, eight were either riding a bicycle, skateboarding or roller-blading at the time of the incident. Of the 29 pedestrian deaths, 31% (9) occurred when the driver of the vehicle was backing up and unintentionally drove over or struck the pedestrian. Deaths such as these are called backover deaths. According to KidsAndCars.org, at least 50 children are injured or killed in backover incidents every week in the United States because a driver did not see the child.[13] Public campaigns to encourage drivers to "look before you leave" should be promoted and drivers should be encouraged to walk completely around their vehicle and ensure children are secured prior to moving their vehicle.

Kansas experienced 10 child deaths from All Terrain Vehicle (ATV) crashes in the five-year period from 2018 and 2022. According to the 2023 Annual Report of Deaths and Injuries Involving Off-Highway Vehicles published by the U.S. Consumer Product Safety Commission, in 2022, there were an estimated 94,700 ATV-related, emergency department-treated injuries in the United States. An estimated 27% of these involved children younger than 16 years of age, while children under 12 years made up around 13% of all estimated injuries. [14]

ATVs are popular in both recreational and agricultural use. The ATV size, maneuverability and durability make it extremely versatile and fun to ride. Drivers of ATVs often use roadways not designed for ATV travel and often drive at unsafe speeds.[14]

Since the board began reviewing child deaths in 1994, the largest number of ATV-related child fatalities has been in the 10-14 age range. In 2022, two children died in ATV crashes. Young riders lack the size and strength to safely control an ATV. Operating or riding in an ATV carries a substantial risk of serious injury or death. Due to the risk associated with operating ATVs, laws requiring a minimum operator age of at least 16 should be considered as a way to prevent future ATV-related deaths in children. At a minimum, all ATV users should wear a helmet, eye protection, and protective clothing, and use appropriate restraints when riding in or operating an ATV.

CHARACTERISTICS OF UNINTENTIONAL INJURY- MVC DEATHS, 2018-2022 N=182

- 60% were male; 40% were female
- 39% were ages 15-17, 25% were age 10-14, 18% were age 5-9, 18% were age birth to age 4
- 46% were unrestrained drivers or passengers in a vehicle
- 13% involved the use of drugs or alcohol at the time of the crash
- 45 were driving a vehicle at the time of the crash
    - Only 19 of those drivers were restrained at the time of the crash
- 16% (29) were pedestrian deaths
    - 28% (8) were either riding a bicycle, skateboarding or roller-blading at the time of the incident
    - 31% (9) were the result of a backover by a vehicle
- 5% (10) were ATV related deaths
- 14 children were front seat passengers ages 12 or younger. Children in this age group are safest in the backseat of a vehicle

CASE VIGNETTE
Youth Death Due to Motor Vehicle Crash

Seat belts save lives – *A Kansas youth was driving a vehicle and lost control, leading to a crash which ejected the youth driver and another passenger who were both unrestrained. Another passenger who was properly restrained, was not ejected or injured in the crash. The youth driver was found to have used marijuana prior to the crash. Case review by the board noted the law enforcement investigation was missing elements that would be helpful in understanding and preventing underlying issues that led to the crash and the death.*

Board Reflection – *To ensure the safety of children while traveling, it is essential that they always wear seatbelts and use age-appropriate restraint systems. Proper seatbelt use is one of the most effective ways to protect passengers in the event of a collision. Consistent seatbelt use helps instill good habits and underscores its importance. Educating children about why seatbelts are essential and encouraging them to remind others to buckle up further reinforces this practice. Additionally, parents and caregivers can set a good example by always wearing their seatbelts and ensuring all passengers are buckled up before driving. By following these guidelines, we can significantly reduce the risk of injury and create a safer driving environment for our children.*

Car crashes can be significantly mitigated by ensuring that underage drivers are not under the influence of drugs or alcohol. The impact of substance abuse on driving ability is profound, as both drugs and alcohol impair judgment, coordination, and reaction times, making it much more difficult for drivers to respond to hazards on the road. For youth, who are inexperienced in navigating the complexities of driving, the risks are even greater. To prevent accidents, it is crucial to educate youth about the dangers of driving under the influence and to promote a culture of responsible behavior. Parents and caregivers play a key role by setting clear expectations and modeling sober driving practices. By prioritizing these measures, we can enhance road safety and ensure that young drivers are equipped to handle the responsibilities of driving without the impairing effects of drugs or alcohol.

For effective oversight and informed decision-making, it is imperative that law enforcement agencies provide complete and detailed case information to the Kansas State Child Death Review Board. Comprehensive case documentation ensures that the Board can thoroughly assess each incident and make well-informed recommendations for improvements. This includes providing all relevant reports, evidence, witness statements, and any other pertinent details that can shed light on the circumstances surrounding the case. By ensuring that the Kansas State Child Death Review Board has access to full case information, law enforcement agencies contribute to a more transparent, accountable, and effective review process, ultimately leading to successful prevention efforts.

PREVENTION POINTS

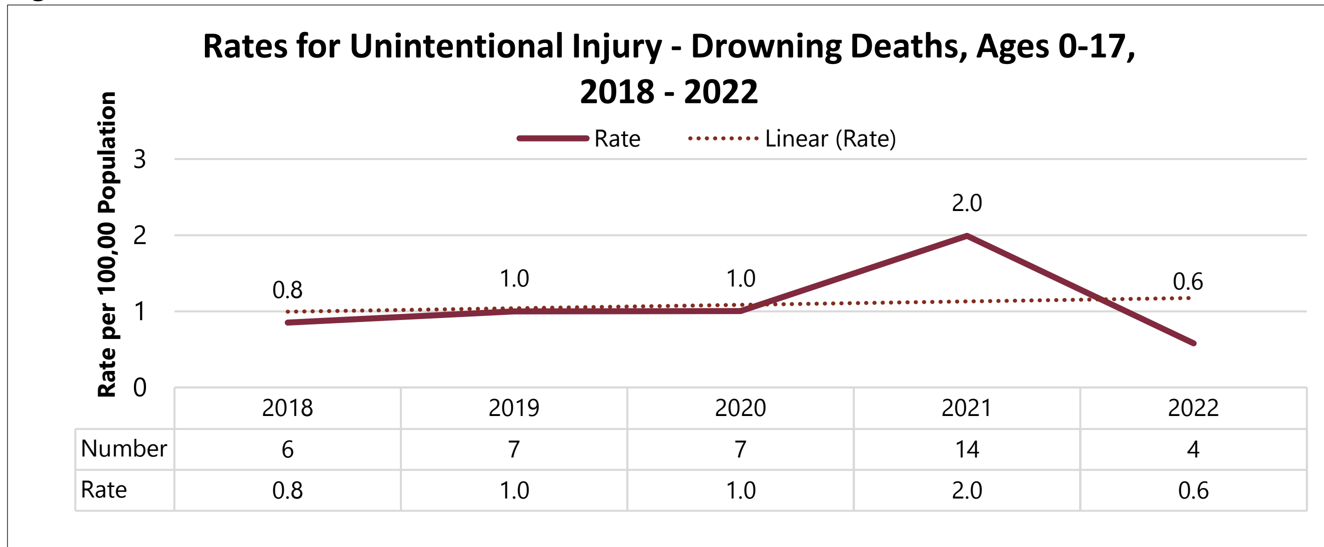
- **Use of Proper Safety Restraints –** Wear seat belts. Seat belts and appropriate child safety restraints consistently prevent serious injury and death. According to the National Highway Traffic Safety Administration, parents who buckle up are more likely to use safety restraints for their children. Children under 4 years of age should be placed in a child safety seat firmly secured in the backseat. Children between the ages of four and eight should be in belt-positioning booster seats in the back seat or, depending on weight and height, remain in a child safety seat in the back seat. Parental seatbelt use as an example to children and passengers is invaluable.[15]
- **Front Seat Passengers –** General guidance and recommendations suggest that children 12 and under should ride in the back seat. Front seat airbags are designed to cushion full-sized adults in the event of a crash and may cause injury to smaller children. If a child must ride in the front seat, it is recommended to disable the front air bag and/or slide the seat back as far as possible.[15]
- **Backover Deaths –** Drivers should "look before you leave" which includes walking completely around the vehicle and ensuring that children are supervised and secure prior to moving the vehicle.[13]
- **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 of which are known risk factors.[16]
- **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 in Kansas. Full driving privileges are not conferred until age 17 and require significant supervised driving time.[17]
- **Stay Alert –** Pedestrians need to be visible to drivers at all times and stay in well-lit areas, especially when crossing the street. While distractions such as cell phones and headphones are a commonly used, they are dangerous to pedestrians who are looking down or unable to hear what is occurring in their surroundings.

Unintentional Injury - Drowning Deaths

In 2022, four children died from unintentional drowning. Figure 41 shows drowning death rates for all ages 0-17 over the last 5 years. On average, the 1-4 age group accounts for the highest number of deaths when compared to other age groups (Figure 42).

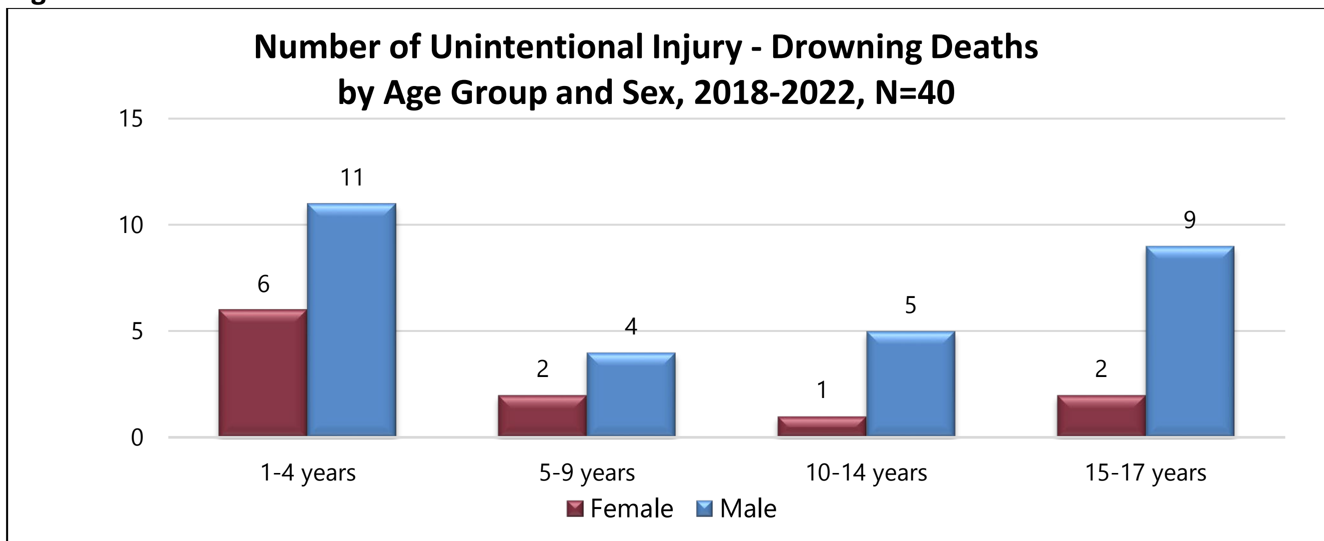
In 2022, the Board contracted with the National Center for Fatality Review and Prevention to participate in a pilot project with six other sites to test a Drowning Death Scene Investigation tool. The immediate goal is to standardize drowning death scene investigations and enhance data collection for the national database. The ensuing goal is to prevent future drownings, lower the racial and economic disparities in child drownings, and ensure that all drowning deaths are investigated thoroughly. The drowning case registry website is: https://ncfrp.org/cdr/drowning-case-registry/ [18]

Figure 41



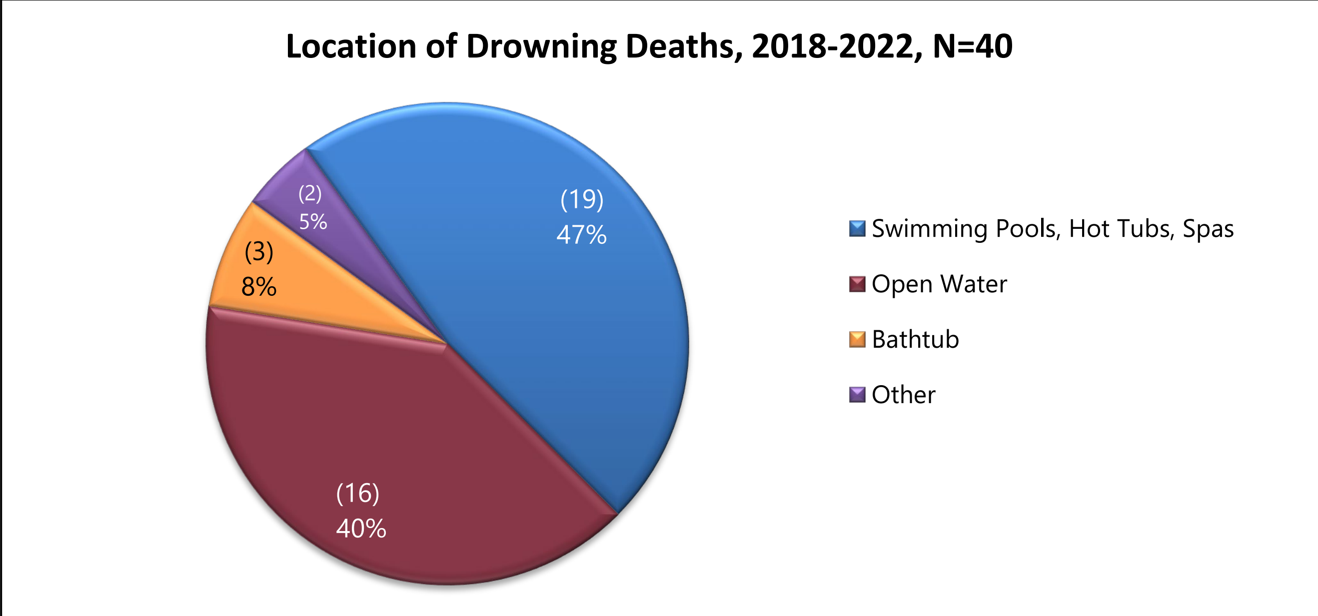
	2018	2019	2020	2021	2022
Number	6	7	7	14	4
Rate	0.8	1.0	1.0	2.0	0.6

Figure 42



As shown in Figure 43, swimming pools and open water are the primary locations of child drownings. Proper supervision and use of flotation devices for children of all ages are critical. Children are not only at risk during the summer when pools are mainly in use, but also when not in use and still accessible. Fencing of swimming pools, including soft-sided pools, on residential properties is an additional and necessary tool to prevent drownings.[19] Many of the same prevention points can be applied to swimming in open water locations.

Figure 43



Because drownings can occur in only a few minutes and with only a few inches of water present, young children are vulnerable to drowning in locations that most caregivers would not see as a threat. Figure 43 shows that in 5% of the drowning deaths, “other” location of the drowning was listed. Toilets, buckets of water, washing machines, large puddles, etc., are locations that small children can encounter within the home and that without proper supervision can endanger them. In 70% (28 of 40) of unintentional drowning deaths between 2018 and 2022, poor or absent supervision was noted to be either the direct or contributing factor. Proper supervision and appropriate personal flotation devices are critical prevention measures when children are near water.

Figure 44

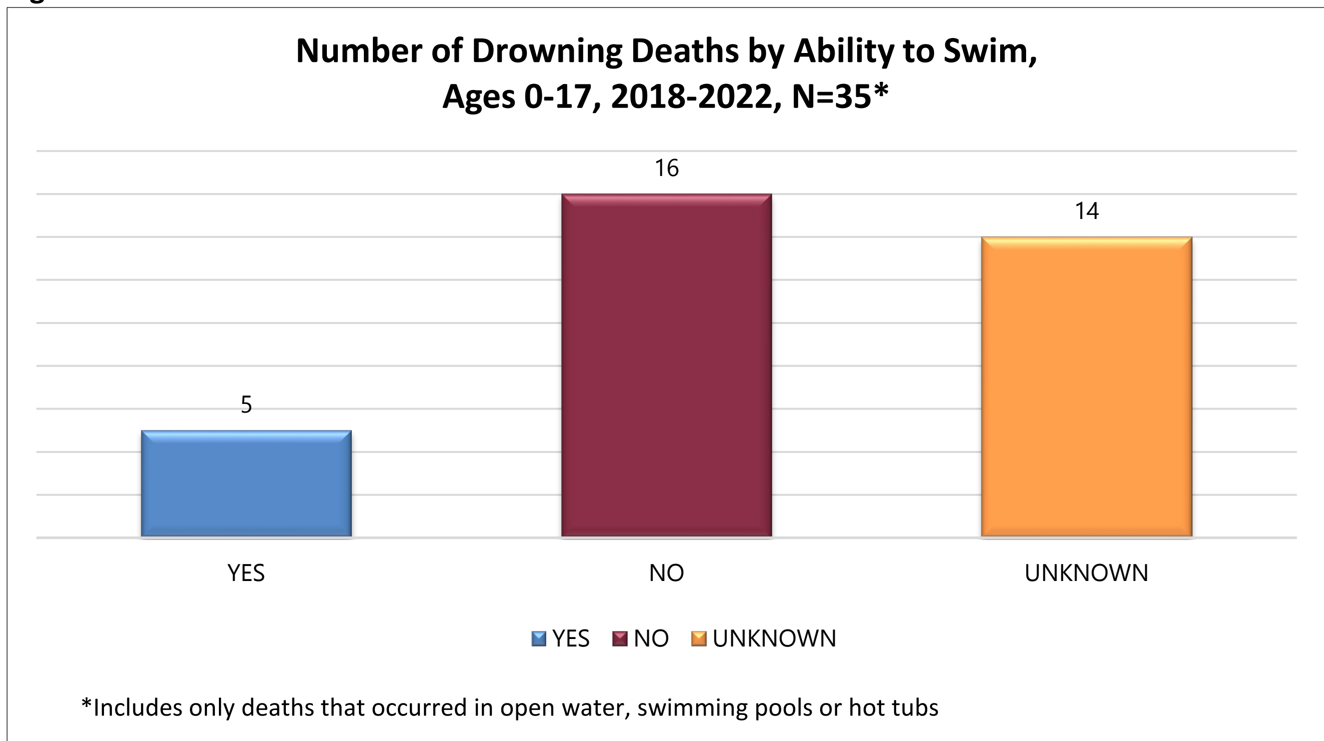
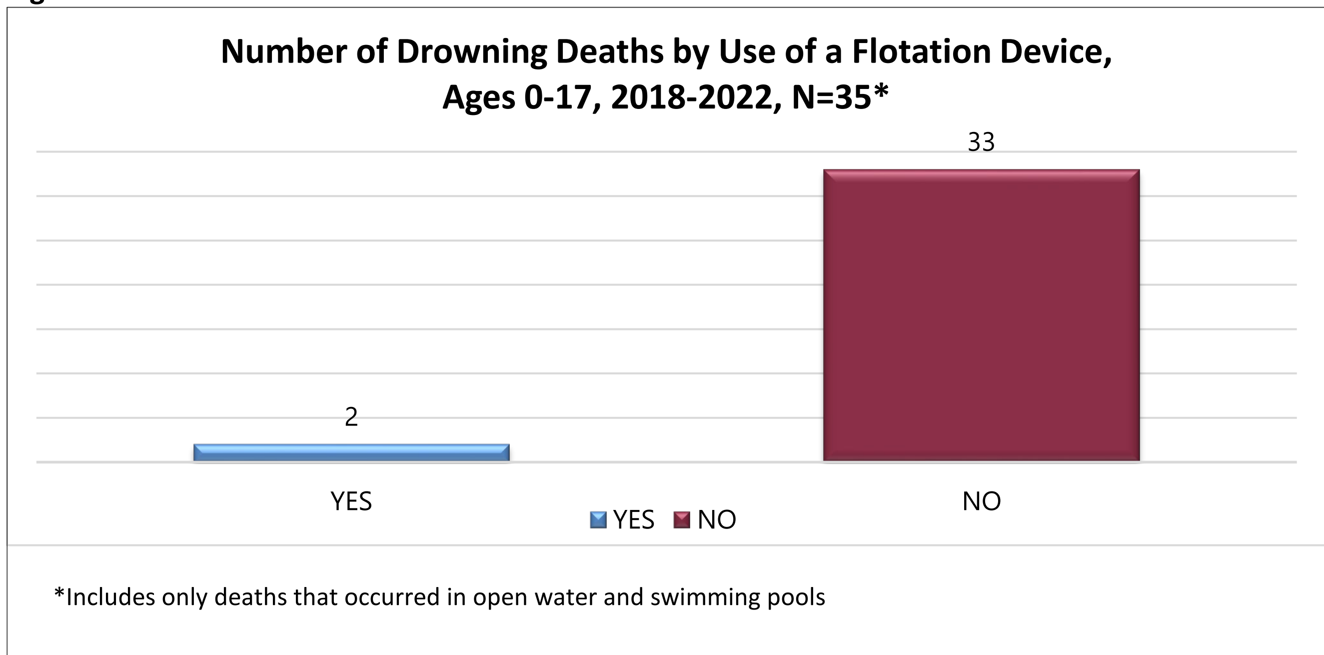


Figure 44 shows the number of deaths in open water, swimming pools, hot tubs, or spas based on the child's ability to swim, for years 2018-2022. Only 14% of children who died from drowning in these water sources were reported to be able to swim, 46% were confirmed as not able to swim, and 40% had no documentation of swimming ability. The Board is hopeful that with the use of a standardized investigation tool, thorough and accurate information will be collected to aid in understanding and preventing drowning deaths.

Figure 45



The use of personal flotation devices is essential for children of any age despite their ability to swim. Figure 45 documents the number of deaths where the child was wearing a flotation device in open water. Only two of the 45 drowning deaths from 2018-2022 were reported to be wearing a flotation device at the time of death, both occurred in open water in 2021. While many children like to use air-filled toys and foam noodles, the CDC recommends using only well-fitting Coast Guard-approved life jackets for flotation assistance.

CASE VIGNETTE

Youth Death Due to Drowning

Flotation devices are critical – *A group of youth were swimming in a local pond. Despite the ability to swim, the decedent began to struggle in the water and yelled for help. Other youths attempted to assist the decedent but were unsuccessful. Neither the decedent nor the other youths were using life jackets or other floatation devices.*

Board Reflection – *Despite the ability to swim, swimming in open water is more challenging than in a pool. Children and youth can tire quickly and if they go under water, the murky water and currents can make it difficult for even the best swimmer to be seen and rescued. It is essential that any child, despite age or ability to swim, use a personal flotation device when swimming in open bodies of water.*

CHARACTERISTICS OF UNINTENTIONAL INJURY - DROWNING DEATHS, 2018-2022, N=40

- 73% were male, 27% were female
- 91% were not wearing a flotation device at the time of the drowning
- 43% were in the 1-4 age group
- 70% had poor/absent supervision or neglect noted to be either a direct or contributing factor in the drowning
- 47% of drowning deaths in pools lacked appropriate barriers to prevent access to the water

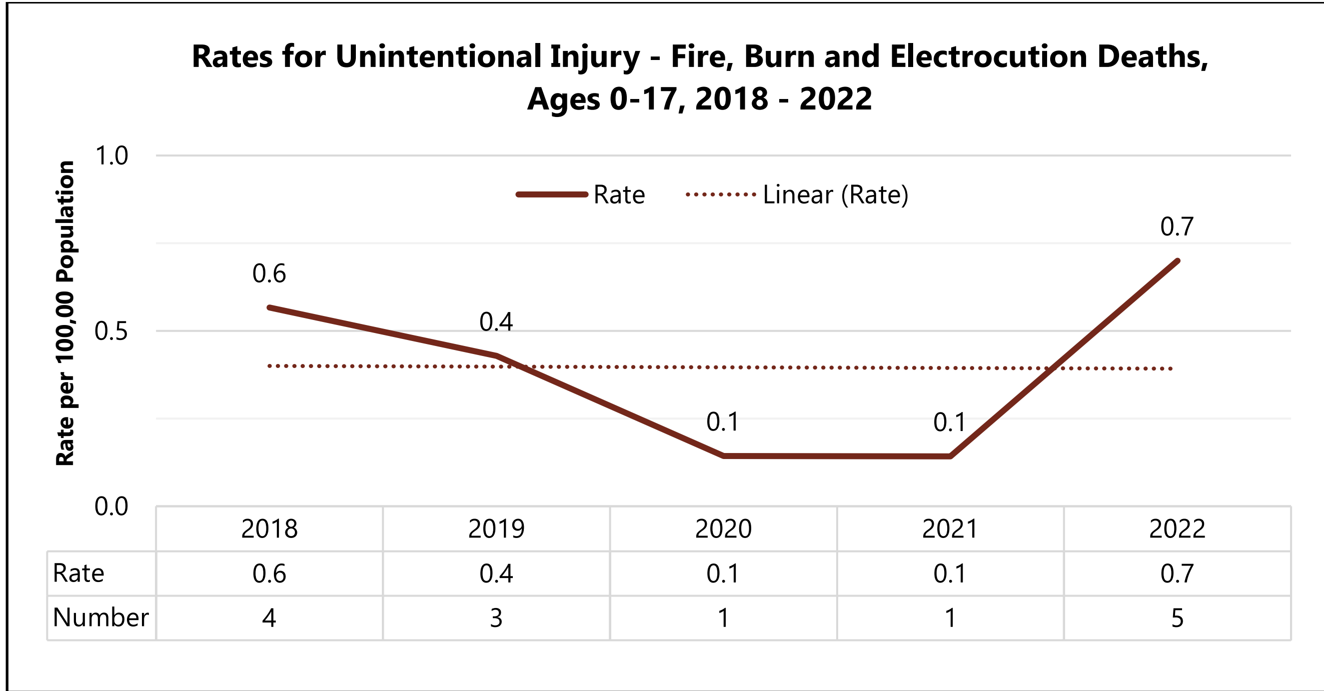
PREVENTION POINTS

- **Supervision –** An adult should be designated to closely and constantly supervise any children who are in or near water, including bathtubs. Adults who are supervising must avoid distractions such as using their phone, watching TV, or reading.[20]
- **Learn Basic Swimming and Water Safety Skills –** Formal swimming lessons can reduce the risk of drowning and can be beneficial for children as early as age 1.[20]
- **Restriction/Barriers to Water –** Pools need to be enclosed on all four sides by a wall, fence, or barrier. Gates and locks should be utilized and there should be no gaps that children can slip through, or barriers low enough to climb over.[20]
- **Wear a Life Vest –** Certified life jackets reduce the risk of drowning and should be used by children regardless of their activity in or near water.[20]
- **Learn CPR –** Adults and caregivers should learn CPR. Immediate resuscitation can be the difference between life and death in a drowning situation – every minute counts. Organizations such as the American Red Cross and the American Heart Association offer CPR courses.[20]

Unintentional Injury - Fire, Burn and Electrocution

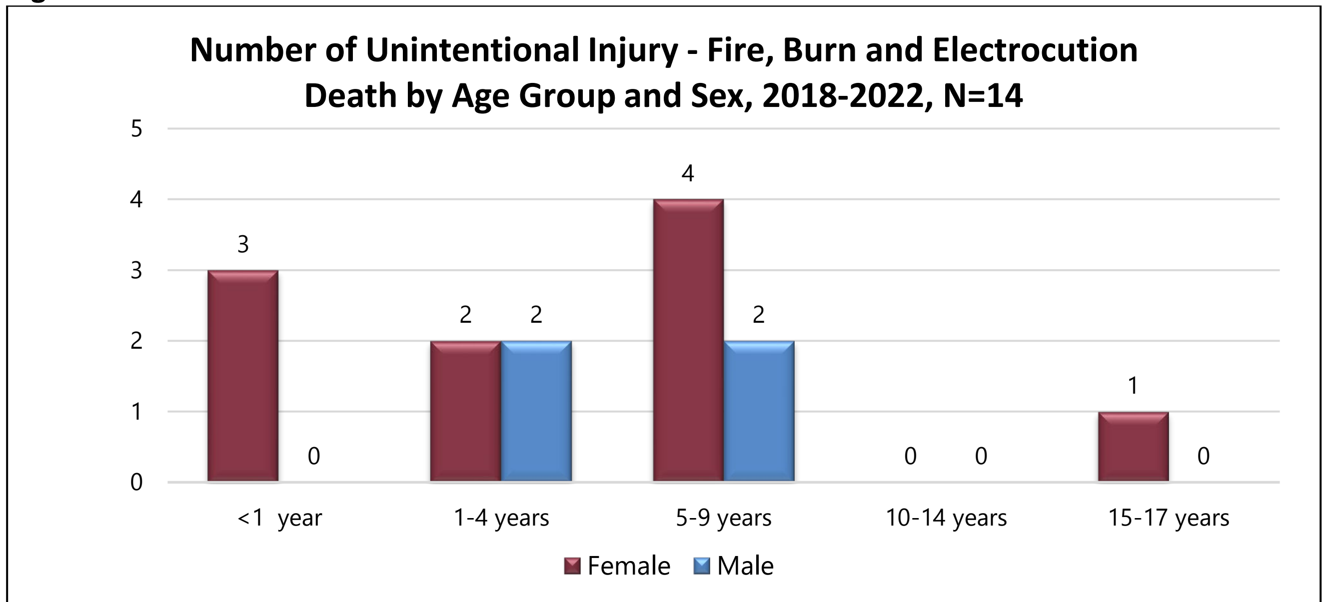
In 2022, there were five child deaths due to unintentional fire, burn or electrocution incidents. Figures 46 and 47 indicate death rates in this category for all children and by age group and sex per 100,000 population for the past 5 reporting years in Kansas.

Figure 46



	2018	2019	2020	2021	2022
Rate	0.6	0.4	0.1	0.1	0.7
Number	4	3	1	1	5

Figure 47



Between 2018-2022 there were 14 unintentional injury deaths due to fire (13) and burns (1). Thirteen deaths occurred in structure fires and one death was due to a scald burn. None of the deaths during this time frame were due to electrocution. Figure 48 describes the use of smoke alarms in the 13 fire deaths that occurred between 2018 and 2022. In only 8% (1) of the fire related deaths was a working smoke alarm known to be present.

Figure 48

Prevalence of Smoke Alarms in Unintentional Injury Fire Deaths, 2018-2022, N=13		
Was smoke alarm present?		**Number**
Yes		**3**
If Yes, was it working properly?	**Yes**	1
	No	2
No		**9**
Unknown		**1**

CHARACTERISTICS OF UNINTENTIONAL INJURY - FIRE, BURN AND ELECTROCUTION DEATHS, 2018-2022, N=14

- 13 deaths due to structure fires, 1 death due to scald burn
- Of the 13 structure fires, 11 occurred in single family homes
- Only one of deaths from a structure fire had a working smoke alarm known to be present
- Cigarette lighters were the ignition source in 31% (4) of the structure fire deaths
- There were no deaths due to electrocution during this time period

PREVENTION POINTS

- **Proper Supervision –** Young children must be supervised closely. Leaving them unsupervised, especially if objects such as candles, lighters or matches are within their reach, could result in a serious injury or death.
- **Prevent Access to Fire-Starting Materials –** Matches, lighters, candles, etc. should be kept away from children. Do not assume a young child cannot operate a lighter or match.
- **Working Smoke Alarms –** Smoke alarms should be placed inside and outside of each sleeping area and on every level of the house, including the basement. Smoke alarms should be 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. Ensure that gates or clutter do not block exits. Designate a central meeting location outside of the home and have regular fire drills.

Unintentional Injury - Agriculture Deaths

The most recent census data from 2022 indicates there are likely more than 55,000 farms in Kansas, most of which are family owned.[21] Unlike other industries, the farm includes an intermingling of home and worksite activities for Kansas families. As a result, children can be exposed to agricultural hazards that lead to unintentional injury and fatalities.

In the last five reporting years, Kansas has experienced seven agriculture-related deaths of children. A majority of those agriculture-related child deaths involved a motor vehicle such as a tractor, ATV, or other heavy machinery. While lack of supervision was a primary contributor in many of these fatalities, failing farm equipment or equipment void of safety features were also contributing factors in several of the deaths.

Kansas Farm Bureau provides materials for all ages specific to agriculture and farm safety education. Additionally, Kansas Farm Bureau sponsors a “Safety Poster Program” offered to Grades 1-6 students. This injury prevention program, available since 1950, is an effort to develop “safety- minded” youth.[22] Educational materials and contest winners are accessible at https://www.kfb.org/. Pictured below is the 2024 Division III (5th and 6th grade), 1st Place poster submitted by a student in Kearny County. It is vital for parents, caregivers, and children to understand the potential dangers on a farm.

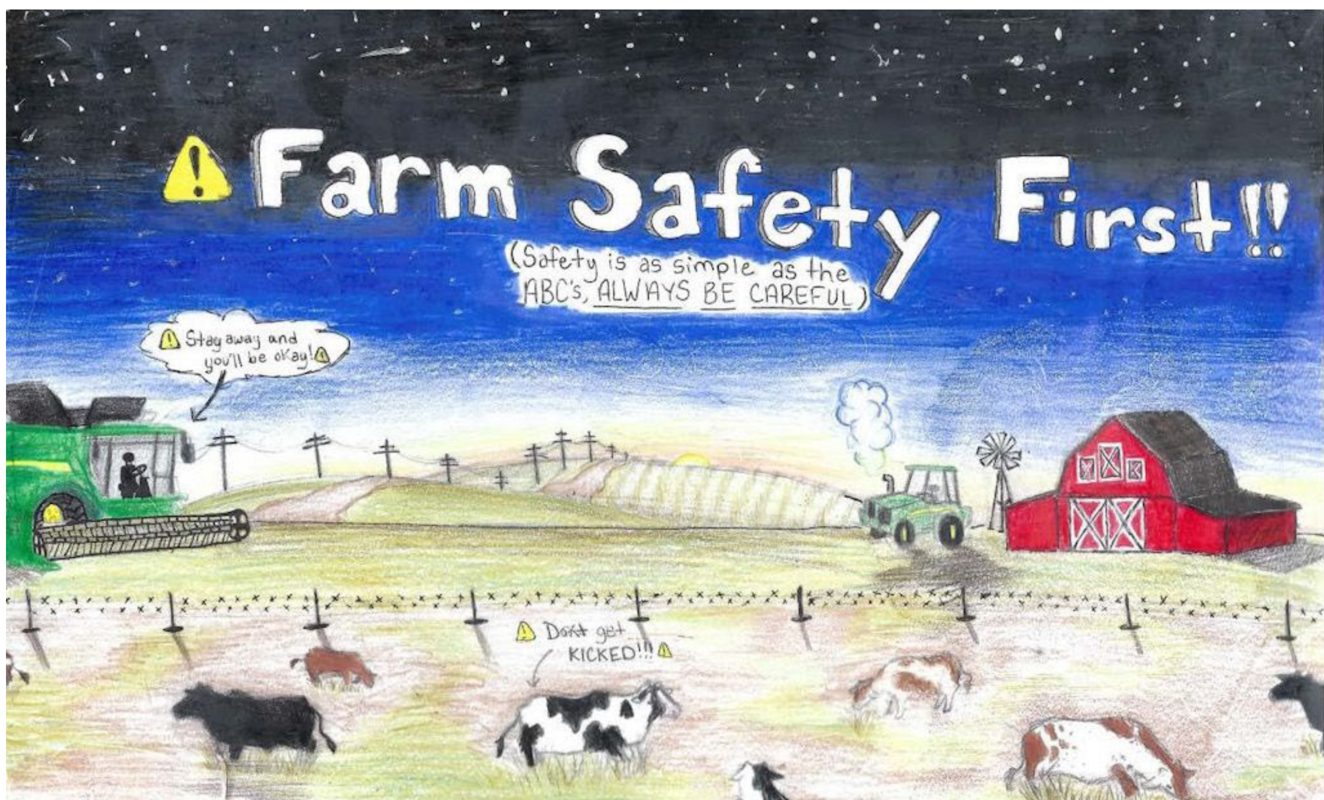


Photo source: https://www.kfb.org/ArticleFile/file/606300b2-3971-4d4c-9e49-02f1b8948f6a/D3-1st%20-%20Kearny.jpg

CHARACTERISTICS OF AGRICULTURE RELATED DEATHS,2018-2022, N= 7

- 100% of the deaths during this time period were males
- 57% were children ages 5-9
- 29% were backover deaths of children under the age of 5
- 29% involved ATV usage

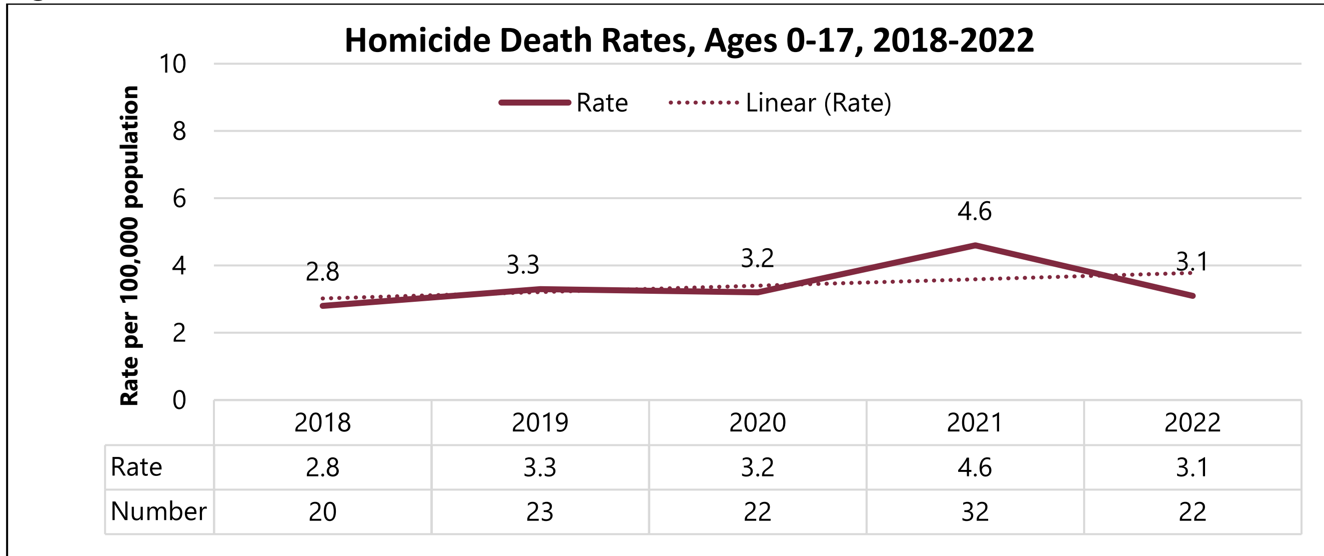
PREVENTION POINTS

- **Proper Supervision –** Parents and caregivers should provide undivided attention and not engage in farm work at the same time they are supervising young children. As children learn how to assist with farm related tasks, supervision and guidance are critical to their safety until they can demonstrate the ability to safely perform tasks appropriate for their age and development.[21]
- **Safety Around Power Take-Off (PTO) –** Many injuries and fatalities have been the result of entanglement in PTOs. Safety shields should be in place and in good working condition. Furthermore, children should be reminded to never step or jump over a PTO as clothing can become entangled in the moving parts. PTOs should be disengaged when idle or not in use.[21]
- **Equipment Safety –** Children should not operate machinery such as lawn mowers, tractors, or ATVs until they are trained and can safely be trusted to do so. Steps should be taken to ensure that riders and drivers of ATVs and other farm equipment use helmets and protective gear.[21]
- **Safe Play Area –** Children should have a safe place to play where they are supervised and protected from potential hazards, and away from roadways and areas where equipment is operated.[21]

HOMICIDE DEATHS

Homicide deaths are those that are due to an intentional or unintentional act, or criminally negligent act leading to the death of another human being. In 2022 there were 22 child homicides. The rate of homicide deaths has remained relatively unchanged over the past 5 reporting years with a rate of 3.1 deaths per 100,000 population in 2022 (Figure 49).

Figure 49



	2018	2019	2020	2021	2022
Rate	2.8	3.3	3.2	4.6	3.1
Number	20	23	22	32	22

Figure 50 highlights homicide deaths by age and sex. The 15-17 age group accounted for 45% of homicides, while the lowest percentage (8%) was in the 5-9 age group. Additionally, males were disproportionately affected, accounting for 70% of homicide victims, compared to 30% for females.

Figure 50

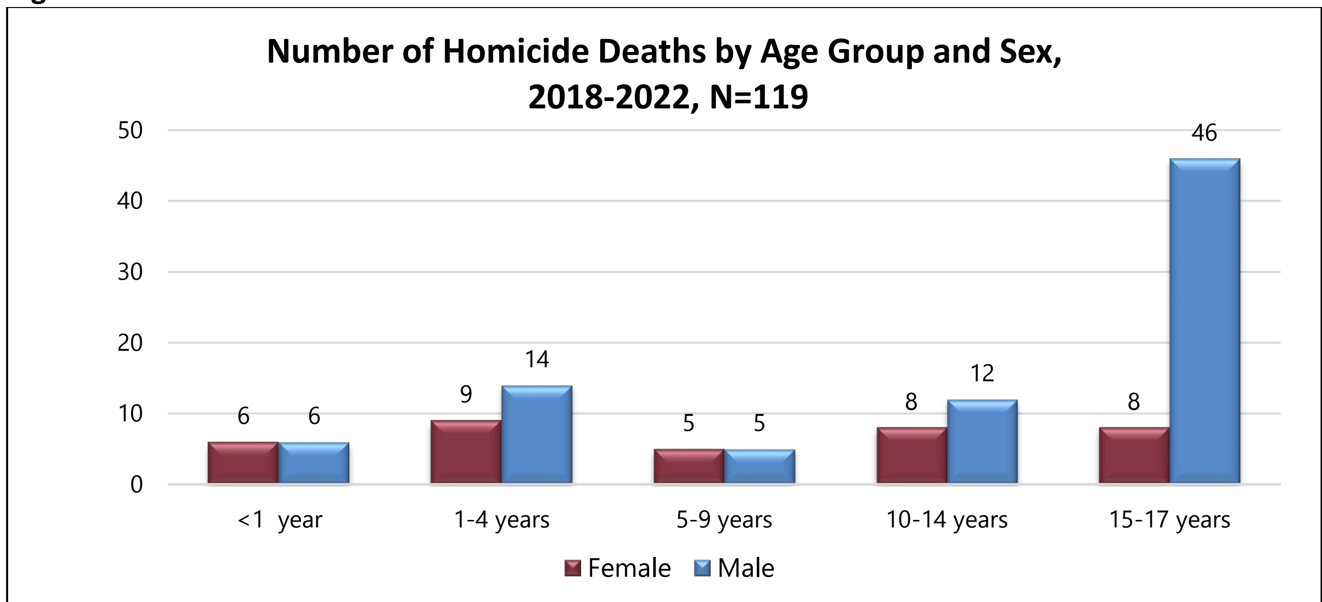


Figure 51

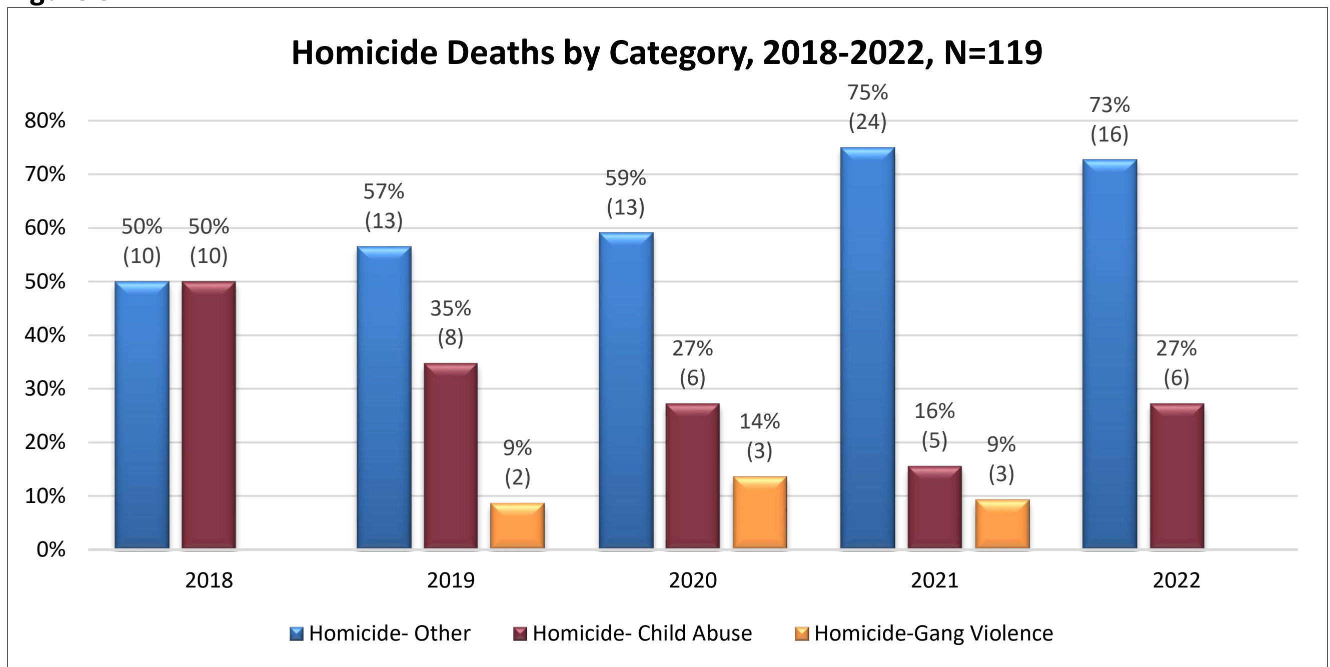
Rate of Death, Manner - Homicide, by Race/Ethnicity, Age 0-17, 2018-2021						
KS Rate All Races	White/ Non-Hispanic	Black/Non-Hispanic	American Indian/Non-Hispanic	Asian/ Non-Hispanic	Multiple Race/ Non-Hispanic	Hispanic- Any Race
3.3	1.4	17.4	*	1.0	6.0**	5.4

*Death count of 9 or less, suppressed
**Death count of 10-19, which should be used with caution

Figure 51 shows the rate of death for homicides by race/ethnicity. Homicide deaths of Black/Non-Hispanic children occurred at a rate of 17.4 deaths per 100,000 population compared to a rate of 1.4 deaths per 100,000 population for White/Non-Hispanic children.

Each child homicide is categorized into one of the following groups: Child Abuse Homicides, Gang Homicides, and Other Homicides. By categorizing homicides in this way, the Board is able to look in depth at specific issues pertaining to each category.

Figure 52



Of the total homicides in all categories (Figure 52), 29% (35) were due to child abuse and 7% (8) were related to gang violence. The remaining 64% (76), which did not meet the definition of gang violence or child abuse, were categorized as “other homicides.”

CHARACTERISTICS OF CHILD HOMICIDES, 2018-2022, N=119

- The rate of homicide deaths declined from 4.6 in 2021 to 3.1 per 100,000 population in 2022
- Males accounted for 70% of child homicides
- Black Non-Hispanic children had a mortality rate of 17.4 deaths per 100,000, significantly higher than the overall Kansas child death rate of 3.3 per 100,000, which includes all races and ethnicities
- 72% of all homicide victims had current or past DCF child protective service involvement prior to the fatal incident
- In 14 of the 119 homicides, the Board found sufficient evidence, after thorough review, to classify the manner of death as Homicide even though they were not originally classified in that manner. Of those, 1 had been certified as a Natural death, 3 as Accidents and 10 as Undetermined

PREVENTION POINTS

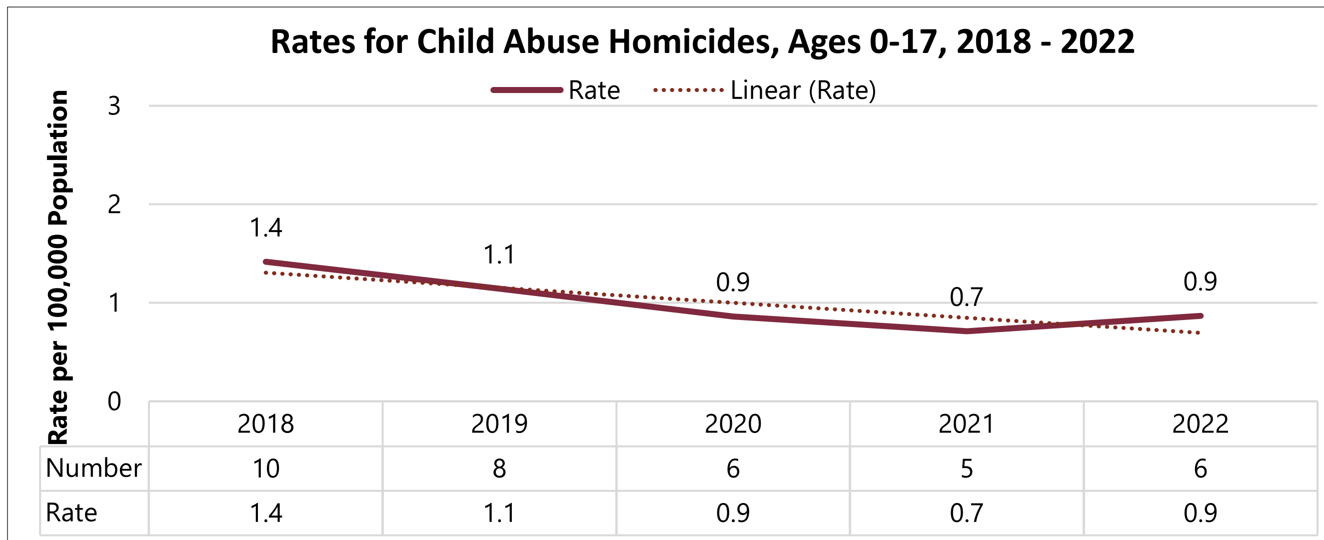
- **Family Violence –** The safety of children living in homes where domestic violence occurs needs to be addressed by DCF and law enforcement when visits are made to the home. Children living in such environments are at increased risk of abuse, neglect or death.
- **Drug Environments –** Children living in environments where they are exposed to caregivers with substance use disorders (including illicit drugs, prescription medications and alcohol) are at increased risk of abuse, neglect or death. If substance use in the home is suspected, the safety of the children must be addressed. Furthermore, youth who engage in buying or selling of drugs are at an increased risk of death due to homicide.
- **Education for Caregivers of Young Children –** The victims of child abuse homicide are most often in the younger age categories. Frustrated caregivers, often with minimal parenting training have unrealistic expectations for children's behavior with a lack of appreciation for their vulnerability. Education should be provided at all points of contact with parents and caregivers, especially addressing positive ways to respond to infant crying and child discipline, supporting parents through stressful periods, and adjusting work policies to give parents quality time with their young children.
- **Education about Signs of Child Abuse –** Active children are expected to have bruises and bumps from everyday play. These bruises are most often over bony areas such as the knees, elbows, and shins. If a child has injuries on areas such as the cheeks, ears, mouth, stomach, buttocks or thighs, the possibility that the child is being abused must be considered. Bruises in these areas, human bite marks, round burns the size of a cigarette, or larger poorly explained burns seldom come from everyday activities. Young children who are not crawling or walking rarely sustain bruises – "if you don't cruise, you don't bruise." Any bruises noted on a child less than 9 months of age, especially if recurrent, patterned, or in unusual locations on the body, should be evaluated for the possibility of abuse.
- **Report any Concerns for Child Abuse and Neglect –** If there is suspicion a child is being abused or neglected, a report should be made to the Kansas Protection Report Center at 1- 800-922-5330 (toll-free) or 911 if the child is in imminent danger.

Homicide-Child Abuse

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 a history of childhood abuse or neglect, financial stressors, domestic violence, substance abuse, mental illness and unreasonable expectations of children's behaviors.

Very young children are not capable of defending themselves against an assault and are small enough to pick up and shake, throw or strike. Furthermore, their behaviors can create triggers for caregivers to harm them. Figure 53 indicates a slight downward trend in child abuse homicides since 2018. In the last 5 years there have been 35 child abuse homicides, six of which occurred in 2022.

Figure 53



	2018	2019	2020	2021	2022
Number	10	8	6	5	6
Rate	1.4	1.1	0.9	0.7	0.9

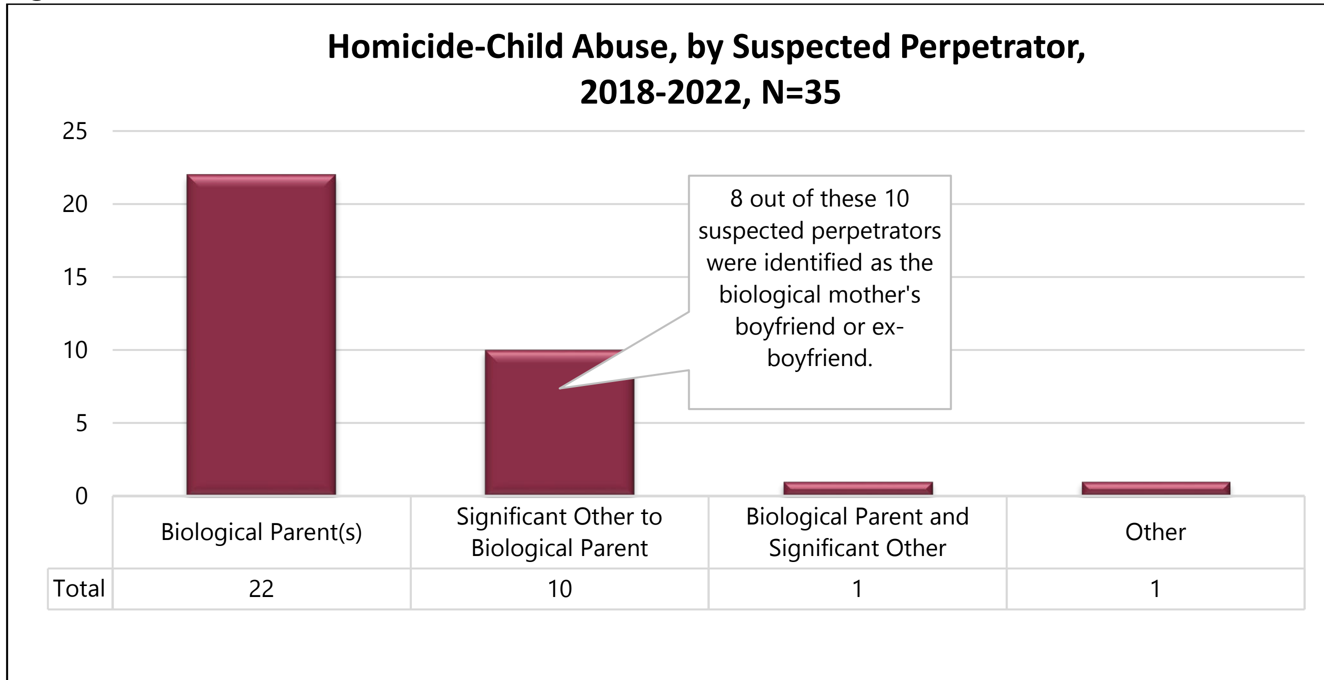
The method of child abuse homicide can vary. In general, most occur as a result of blunt force trauma. The most prevalent form is Abusive Head Trauma (AHT), which occurs when an infant or toddler is severely or violently shaken or struck resulting in serious injury and/or death. It is important to note that it is common for children who die from AHT to have autopsy evidence of blunt force injuries without visible external evidence of impact.

Caring for children can be overwhelming at times. Parents and caregivers are often facing multiple stressors and may have limited access to support. 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 (non-biological caregiver in the home, prior substantiation of child abuse and neglect, substance use disorders, and low socioeconomic status). Many of the child abuse homicides occurred when the primary caregiver was away from the home, with the child in the care of the mother's significant other† or a relative who was not the primary caregiver.[1]

† Significant Other- Used to reference a current or previous non-marriage relationship with no biological relationship to the child.

Figure 54 categorizes the suspected perpetrators in each of the child abuse homicides over the last five years. In 63% (22) of these deaths, the suspected perpetrator was a biological parent(s) of the child. Mother's significant other was the suspected perpetrator in 23% (8) of the child abuse homicides.

Figure 54



SCDRB data reflects characteristics of child abuse homicides from studies in other states. Child abuse homicide is proportionately greater in young children and has findings that are different from those of other child homicides. Research indicates that the circumstances of infant homicides include a majority of them being perpetrated by someone in a caregiving role and who is less than 25 years of age. More than 80% occurred in the child's home and in more than half, there were suspicions of previous abuse of the victim by the perpetrator or another person, or previous abuse of another child by the perpetrator. In sharp contrast to homicides in older youth, where the majority involve weapons, most infant and young child homicides are the result of beating, shaking or strangulation by someone entrusted with caring for the child.[23]

Child abuse homicides call for attention aimed at prevention. 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 includes parent training and education about normal childhood behaviors and age-appropriate discipline, and information on how to select appropriate child caregivers. Educational interventions to identify abuse cases before they lead to severe injuries or death, and to teach skills for dealing with angry and impulsive responses to infant crying and frustrating behaviors are needed.[1]

It is crucial that all citizens of Kansas help support families and protect children by reporting all suspicions of abuse or neglect. Children rely on those around them to speak up for their well-being when they are unable to do so themselves.

If there is suspicion a child is being abused or neglected, a report should be made to the Kansas Protection Report Center at 1-800-922-5330 (toll-free) or 911 if the child is in imminent danger.

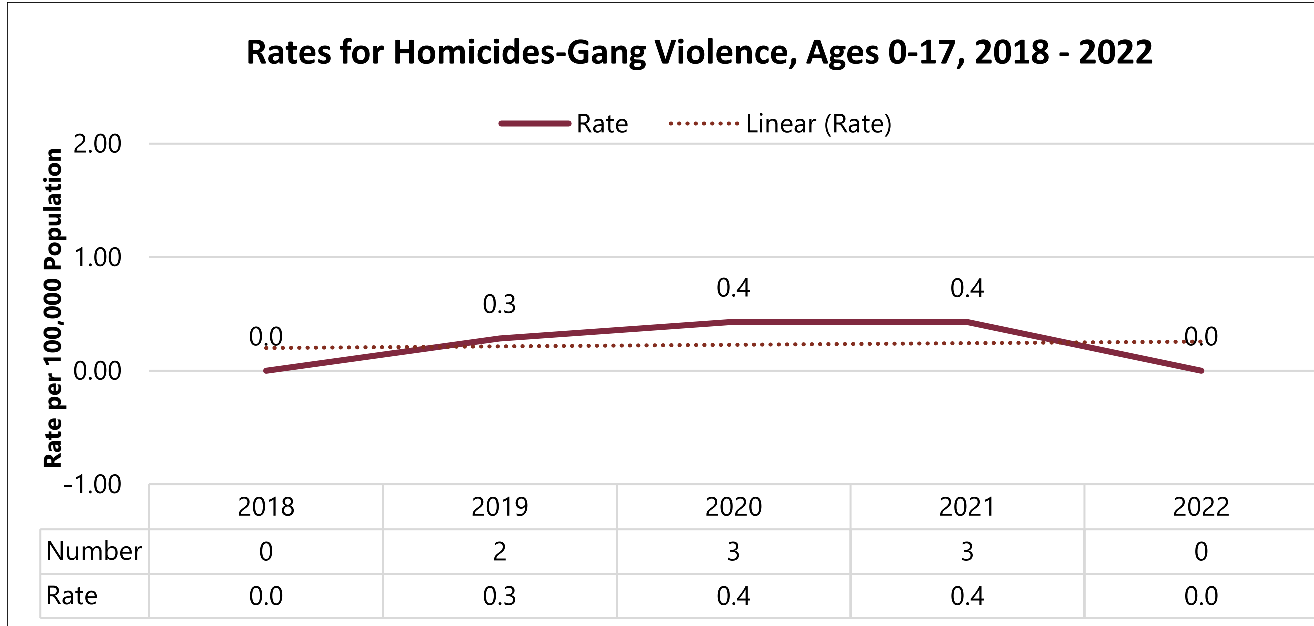
CHARACTERISTICS OF CHILD ABUSE HOMICIDES, 2018-2022, N=35

- 71% of the child abuse homicides involved children ages 4 and under. Among these, 37% were of ages 1-4 while 34% were under 1 year of age
- 60% of the child abuse homicides were male victims
- In 63% of the cases, the suspected perpetrator involved was the biological parent of the child
- 68% of the deaths succumbed to injuries related to abusive head trauma
- 31% of the perpetrators of child abuse homicides reported that the child's crying was the triggering event that led to the death
- In 68% of the cases, investigation revealed evidence of prior abuse

Homicide - Gang Violence

The Board categorizes a homicide as the result of gang violence when there is evidence to support the child died from direct or indirect actions carried out by known or suspected gang members. In many of the cases reviewed, children were at the “wrong place at the wrong time” and were unintentionally caught in gang violence. This can occur while a child is outside playing or even in the safety of his or her own home. A child living in a location with gang activity or in a home that has other household members with gang associations is at significant risk for injury or death. In other circumstances, the children are members of a gang and die during disputes related to gang activity.

Figure 55



	2018	2019	2020	2021	2022
Number	0	2	3	3	0
Rate	0.0	0.3	0.4	0.4	0.0

Figure 55 shows the rate of Homicides due to gang violence over the last 5 reporting years. Between the years of 2018 and 2022 there have been eight homicides due to gang violence, none of which occurred in 2022.

CHARACTERISTICS OF HOMICIDE - GANG VIOLENCE, 2018-2022, N=8

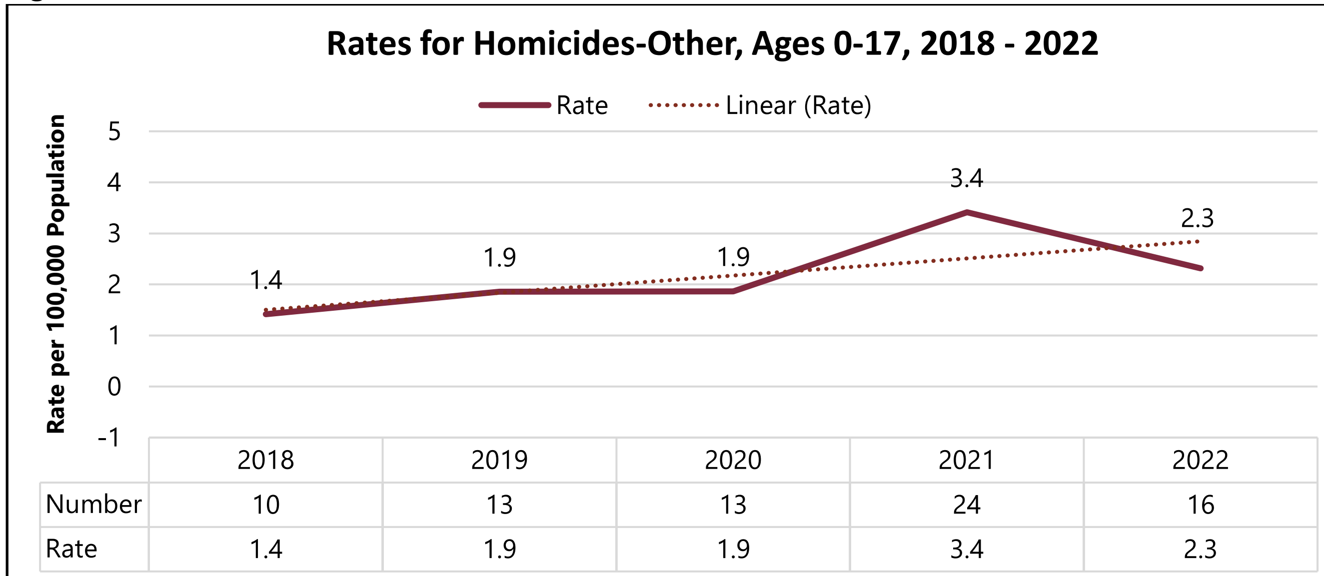
- 100% of the cases involved adolescents aged 15-17 years
- 75% of victims were male
- 100% of the gang-violence related homicides involved a firearm
- 75% of cases have a suspect who is charged with the death

Homicide - Other

Any death not categorized as Homicide-Child Abuse or Homicide-Gang Violence is categorized as Homicide-Other. In many of these deaths, the act of violence against the child is more chance in nature and a clear explanation for why the murder occurred may not be evident. In other situations, there are clear indications why the child was killed, however the circumstances had nothing to do with child abuse or gang-related violence. Between 2018 and 2022 there were 76 Homicides that fell into this category, with 16 of them occurring in 2022.

As shown in Figure 56, the rate of death due to Homicide-Other, was 2.3 deaths per 100,000 population in 2022. The linear rate for this category has increased over the last five years.

Figure 56



	2018	2019	2020	2021	2022
Number	10	13	13	24	16
Rate	1.4	1.9	1.9	3.4	2.3

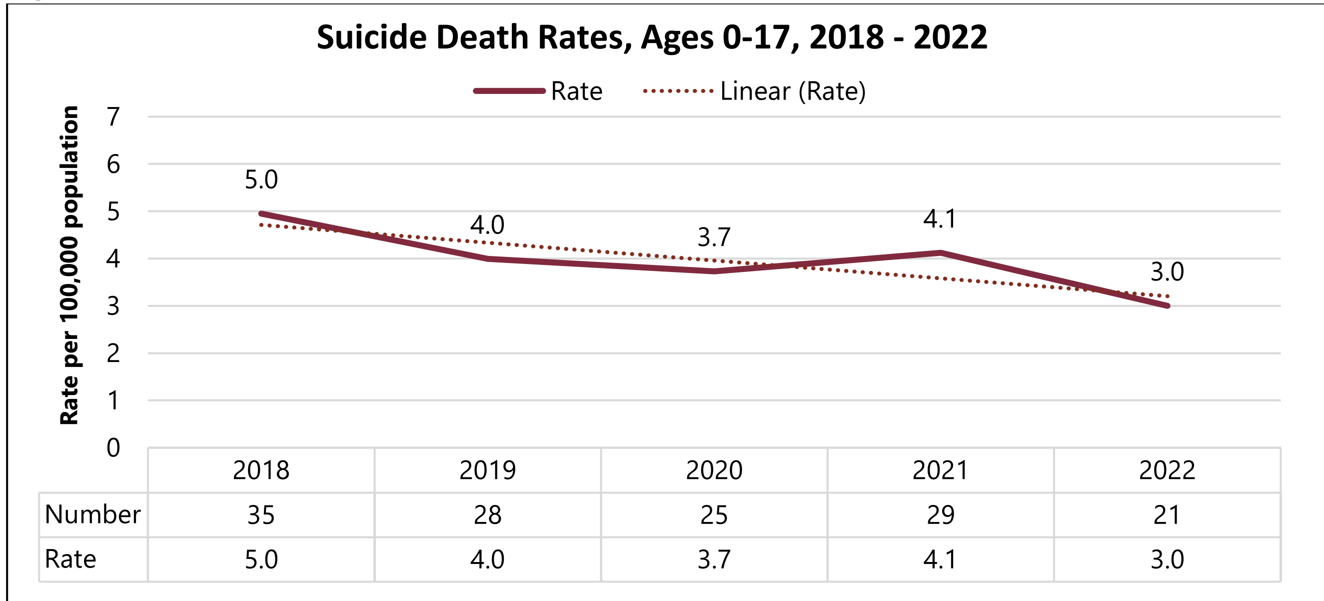
CHARACTERISTICS OF HOMICIDE-OTHER DEATHS, 2018-2022, N=76

- 85% died from a firearm injury
- 25% were attributed to interpersonal violence, while 18% were linked to robbery or burglary
- 22% of the perpetrators identified were biological parent(s) of the decedent, 21% were identified as a friend or acquaintance of the decedent, and in 16% of the cases a perpetrator was could not be identified
- 16% were the result of an unintentional shooting while the gun handler was either playing with or showing the weapon. These deaths, although unintentional in nature are ruled as homicides due to a criminally negligent act leading to the death of a person
- 13% occurred when the decedent was either the buyer, dealer, or victim of retaliation during a drug transaction

SUICIDE DEATHS

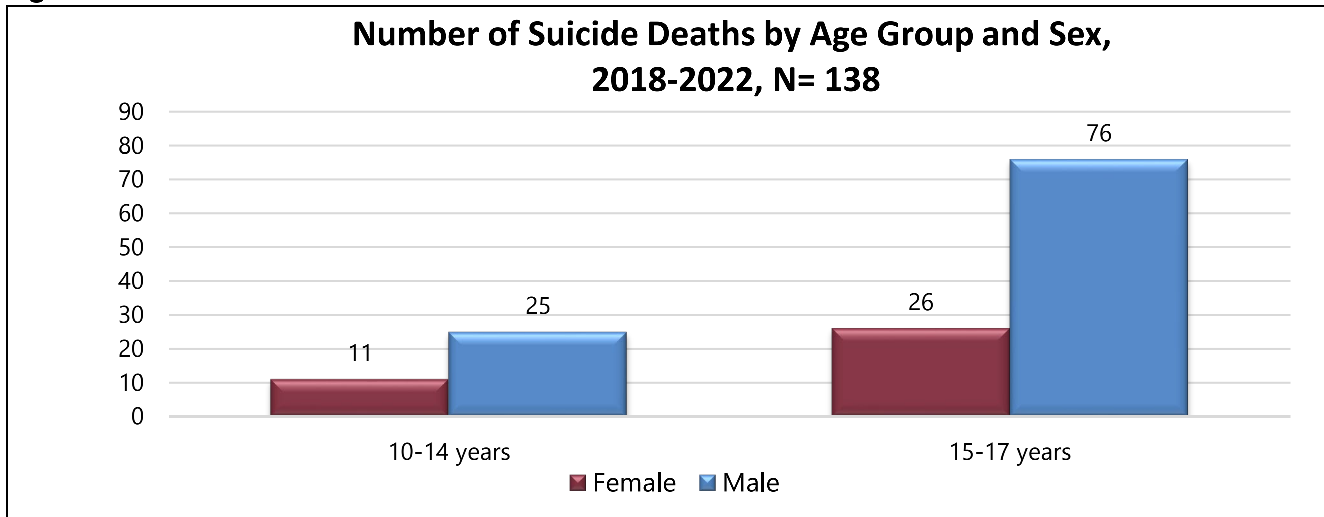
Suicide deaths are the intentional taking of one's own life. In 2022, 21 children in Kansas between the ages of 10-17 died by suicide; 15 were male and six were female. According to the Centers for Disease Control and Prevention, in 2022, suicide was the second leading cause of death for children ages 10-14 and the third leading cause of death for children ages 15-19.[24] Consistent with national studies, adolescent females are more likely to attempt suicide, but adolescent males are more likely to complete it. Figures 57 and 58 show suicide rates per 100,000 population for children ages 0- 17, and by age group and sex for the last 5 years in Kansas.

Figure 57



	2018	2019	2020	2021	2022
Number	35	28	25	29	21
Rate	5.0	4.0	3.7	4.1	3.0

Figure 58



Due to small numbers, the rates of suicide deaths for American Indian, Asian, and Multiple Race population groups cannot be reported. Among all racial and ethnic groups in Kansas, Black/Non-Hispanic youth had the highest rate of suicide deaths in ages 0-17 from 2018 to 2022 (Figure 59).

Figure 59

Suicide Death Rates by Race/Ethnicity, Ages 0-17, 2018-2022						
KS Rate All Races	**White/Non-Hispanic**	**Black/Non-Hispanic**	**American Indian/Non-Hispanic**	**Asian/ Non-Hispanic**	**Multiple Race/ Non-Hispanic**	**Hispanic- Any Race**
3.9	3.6	5.2**	*	*	*	3.7
*Death count of 9 or less, suppressed **Death count of 10-19, which should be used with caution						

Various methods are used by children and adolescents who die by suicide. The most common method of suicide for males is the use of a firearm; females more frequently use forms of asphyxia such as hanging. Many suicide attempts, as well as suicides reviewed by the Board, occur when the child is in short-term crisis. It is important for parents and caregivers to prevent access to lethal means especially during periods of increased risk of suicide or self-harm. Figure 60 indicates the methods used by sex of the child over the last five years.

Figure 60

Suicides by Method and Sex, 2018-2022, N= 138			
Method	**Male**	**Female**	**Total**
Firearm	62	8	70
Asphyxia	30	21	51
Poisoning, Overdose or Acute Intoxication	2	5	7
Fall or Crush	4	1	5
Undetermined	0	1	1
Other Transport*	3	1	4
*Train, Motor Vehicle Crash			

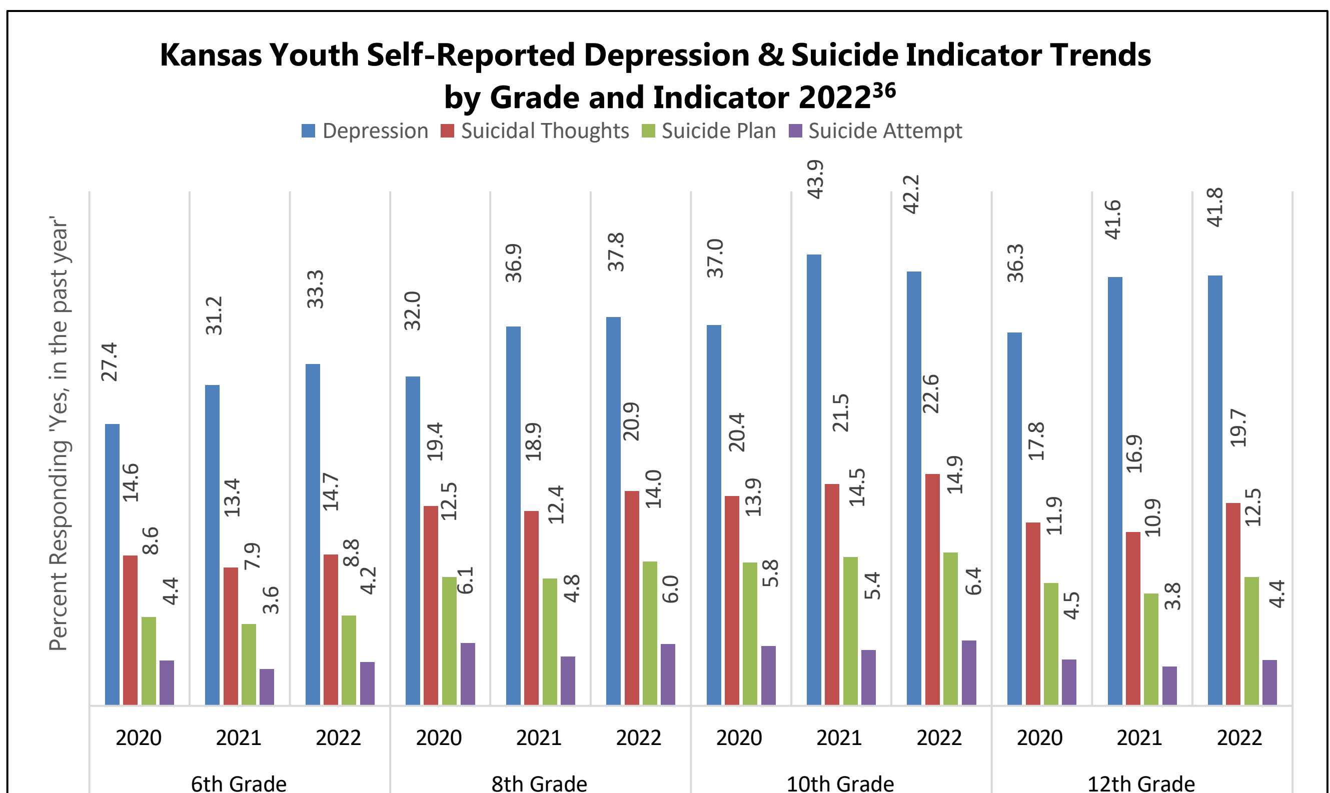
Risk factors for adolescent suicide are categorized as predisposing and precipitating factors. Predisposing factors include mental health problems and psychiatric disorders, previous suicide attempts, family history of suicide, history of physical or sexual abuse, and exposure to violence. Precipitating factors include access to means, alcohol and drug use, social stress, isolation, and exposure to suicide by friend or family including suicide attempts. Well-identified examples of stressors include parental divorce or separation, ostracism or rejection, minority gender identity or sexual orientation, or the breakup of a significant relationship. Young people who identify as LGBTQ+ are reported to have higher rates of suicidal thoughts and behavior compared to their peers. Bullying has also been identified as a risk factor, placing both bullies and victims at risk.

Figure 61 lists risk factors associated with youth suicides in Kansas between 2018 and 2022. Reasons for suicide can be complex and challenging to identify, however some suicides can be prevented. Parents, caregivers, friends, school personnel, and others need an awareness of risk factors displayed by those who may be considering harming themselves. There are many protective factors that can buffer individuals from suicidal thoughts and behaviors, including clinical care for mental health and substance use, family and community support, and promoting skills in problem solving and conflict resolution.

Figure 61

Risk Factors in Suicide Deaths, Ages 10-17, 2018-2022, N=138		
Risk Factor*	**Number**	**Percent**
Showed Warning Signs	77	56%
Past Suicidal Behaviors, Actions, or Intent	76	55%
History with Child Welfare System	65	47%
Family Discord, Argument with Parents or Caregivers, Parental Divorce	65	47%
Life Stressors Related to School	61	44%
History of Substance Use	56	40%
Received Mental Health Services	47	34%
Experienced a Known Crisis Within 30 Days of Death	47	34%
Breakup or Argument with Significant Other	30	22%
Disruptions or Significant Changes to Living Environment, School, Etc.	21	15%
*More than one risk factor may have been identified in each death		

Figure 62



Source: Kansas communities that care (KCTC) student survey [36]

The Kansas Communities That Care (KCTC) Student Survey is administered annually, free of charge to students in grades 6, 8, 10, and 12 at public and private schools in Kansas. Figure 62 represents a recent enhanced survey which measures youth depression and suicide thoughts, plans and attempts. Youth as young as sixth grade are reporting thoughts, plans and attempts of suicide. Each grade surveyed has shown an increase in self-reported depression between 2020 and 2022.[36] These data suggest that prevention efforts aimed at reducing youth suicide should be offered to children as early as elementary school.

Figure 63 indicates the gender identity and sexual orientation for youth who died by suicide between 2018 and 2022. It should be noted that sexual orientation and gender identity are not consistently reported or provided within the records that are reviewed by the Board. As noted in the Methodology Section of the report, identifying accurate information on sexual orientation and gender identity can be challenging. Figure 64 is included as a way to reflect how youth in Kansas are self-reporting their sexual orientation and gender identity.

Figure 63

Kansas Suicides by Sexual Orientation and Gender Identity, Ages 10-17, 2018-2022			
		Number	**Percent**
Sexual Orientation	Straight/Heterosexual	43	31%
	Gay/Lesbian	5	4%
	Bisexual	3	2%
	Questioning	2	1%
	No orientation expressed	7	5%
	Unknown	78	57%
Gender Identity	Male, not transgender	72	52%
	Female, not transgender	21	15%
	Male transgender	4	3%
	Female transgender	0	0%
	No identity expressed	9	6%
	Unknown	32	24%

Figure 64

Student Reported Sexual Orientation and Gender Identity (SOGI) from the 2022 Kansas Communities that Care (KCTC) Student Survey		
	Response Option	**KCTC Student Survey SOGI Pilot 2022**
Sexual Orientation	Straight	76.8%
	Lesbian or Gay	3.0%
	Bisexual	9.4%
	Something else	4.4%
	I'm not sure yet	6.4%
Gender Identity	Cisgender	92.8%
	Transgender	1.5%
	Nonbinary; I do not identify as either male or female	2.9%
	I'm not sure yet	2.8%

Figure 64 references data collected in the Kansas Communities That Care (KCTC) 2022 SOGI (sexual orientation gender identity) Pilot. Responses from 6th, 8th, 10th, and 12th grade students included in the Kansas pilot who responded to the SOGI demographic questions are shown with the results of the Child Trends survey on which KCTC questions were modeled. It should be noted that the KCTC Student survey SOGI Pilot was conducted on a voluntary basis and responses are limited to students who chose to participate and whose parents have given permission for the student to participate in the survey. With the self-selected sample, the reliability of the data might be impacted.

In response to the increased rate of youth suicide, former Kansas Attorney General Derek Schmidt and the Tower Mental Health Foundation formed the Youth Suicide Prevention Task Force in June 2018 to survey efforts that were currently underway in Kansas to reduce the incidence of youth suicide. In 2019, the Kansas Legislature adopted several of the task force recommendations by passing the conference committee report on HB 2290 that led to the creation of a Youth Suicide Prevention Coordinator (YSPC) position. More information regarding the Youth Suicide Prevention Task Force and their report can be found at https://www.ag.ks.gov/divisions/youth-services/youth-suicide-prevention.

The YSPC continues to focus on collaboration and coordination between state agencies and community partners to strengthen and sustain the infrastructure that enables us to improve the response to youth suicide in Kansas. The YSPC participates as a dynamic partner in several statewide suicide prevention organizations including the Inter-Agency Suicide Awareness Committee, KDHE's Zero Suicide Initiative, the 988 advisory implementation group and the Kansas Suicide Prevention Coalition. In partnership with the Jason Foundation, a free youth suicide prevention app, Kansas – A Friend AsKS was released by the Kansas Attorney General's Office in September 2022. The dual language app serves as a tool to assist youth in finding resources to aid themselves or a friend experiencing a mental health crisis or thoughts of suicide. Through the app, users can connect to 988, the national suicide and crisis lifeline. It is the Board's hope there will be continued state, local, and individual responses to the alarming youth suicide epidemic. It is through these actions that we can continue to address, reduce, and potentially eliminate youth suicide in Kansas.

CHARACTERISTICS OF SUICIDE DEATHS, 2018-2022, N=138

- Youth suicides in Kansas are on a downward trend from 2018 when Kansas recorded the highest rate of death for youth suicides
- In 60% of the firearm-related suicides, the owner of the firearm was the parent or caregiver of the deceased child
    - 81% of the firearms were not stored in a locked location
    - 50% were also loaded
- 73% of youth suicides were male
- 56% showed warning signs prior to taking their life
- 44% had recent school problems (academic, behavioral, suspensions, conflicts with peers, truancy, etc.)
- 34% received mental health services; among those, 23% were currently receiving mental health services
- 35% had been reported as a victim of child maltreatment
- 47% experienced relationship problems with family, including conflicts with parents, arguments prior to the incident, and challenges related to their parents' divorce or separation
- 40% of the decedents had a history of substance use
- 13% of the decedents had barriers preventing them from receiving mental health services. These included: lack of insurance, not scheduling appointments, in-person therapy not available during the pandemic, child refusing to participate or attend therapy and parental concern that a DCF report would be made if child attended therapy

PREVENTION POINTS

- **Early Diagnosis and Treatment of Mental Health Disorders –** Early involvement of mental health professionals may prevent suicide attempts. Children who are taking antidepressant medications should be monitored for hostility, mood swings, aggression, and suicide ideation, as health officials have issued warnings that these medications could result in these behaviors.
- **Evaluation of Suicide Threats or Ideation –** Never ignore statements about suicide, even if they seem casual or fake. The months following a suicide attempt or severe depression are a time of increased risk, no matter how well the child seems to be functioning.[26]
- **Transition of Treatment –** The transition from inpatient to outpatient behavioral health care is a critical time for patients with a history of suicide risk. Youth discharged from an inpatient care setting are at increased risk for suicide following hospitalization. [26]
- **Limit Access to Lethal Agents –** Easily obtained or improperly secured firearms or other weapons, and means such as prescription and over-the-counter medications are often used in suicides. The more difficult it is for children to put their hands on these items, the more time they have to rethink their intentions, or to allow someone to intervene.[26]
- **Talk About the Issue –** Discussing concerns about suicide does not introduce the idea of suicide for children, but rather gives them the opportunity to share their thoughts and concerns. This communication can be a significant deterrent.
- **Impact of Parental Mental Health on Children –** Children of parents with mental health issues are at a higher risk for developing symptoms of depression and anxiety. Research indicates that children whose primary caregiver has reported poor mental health are four times more likely to have poor general health and twice as likely to have mental, behavioral, or developmental disorders.[31]
- **Monitor Difficult Situations –** A child's response to parental separation, a relationship breakup, or a peer suicide may include signs or symptoms of depression or hopelessness. Counseling and support to address depression or situational difficulties is imperative.
- **Social Isolation and Lack of Connection –** Social connections may serve as protective factors against suicide. Evidence suggests that loneliness, social isolation, and inadequate social support are associated with an elevated risk of self-harm and suicidal ideation. Enhancing social connections can play a crucial role in mitigating the risk of self-harm and suicide.[37]
- **Don't Keep Suicide Threats a Secret –** If a friend or a loved one is considering suicide, promising to keep it a secret delays help and puts a life at risk. Young people should be counseled to tell a friend that help is available.
- **Resources for Youth –** Kansas – A Friend AsKS is a free youth suicide prevention app that can connect users to 988, the national suicide and crisis lifeline. When calls, texts or chats are received by trained crisis counselors at 988 call centers, callers are supported and directed to local mental health services.

Case Vignette

Youth Death due to Suicide

Threats of suicide must be referred to someone able to intervene – *A Kansas youth experienced a breakup with their partner shortly before taking their own life. The youth expressed thoughts of suicide to their ex-partner on the day of their death. Although the ex-partner tried to talk the youth out of taking their own life, information related to these concerns was not relayed to the youths' parents or others who could have intervened. The decedent had access to an unlocked gun in the parental home and died of a self-inflicted gunshot wound. The decedent left behind video "suicide notes" expressing love and apologizing for taking their own life. The decedent had a history of depression, anxiety and problems sleeping, and was on medication for mental health diagnoses.*

Board Reflection – *In many youth suicides, it is learned after the fact that the youth was considering suicide and had shared those thoughts with a close friend or family member. When a youth is considering suicide, even what seems to be an insignificant trigger can end in a fatality when coupled with access to lethal means.*

In August of 2023, SCDRB staff attended the Kansas Legislature's Special Committee on Mental Health where data surrounding youth suicide and mental health were shared. Members of the legislature questioned "why" youth were taking their lives, and inquired if the content of the suicide notes left behind could shed light on areas for prevention.

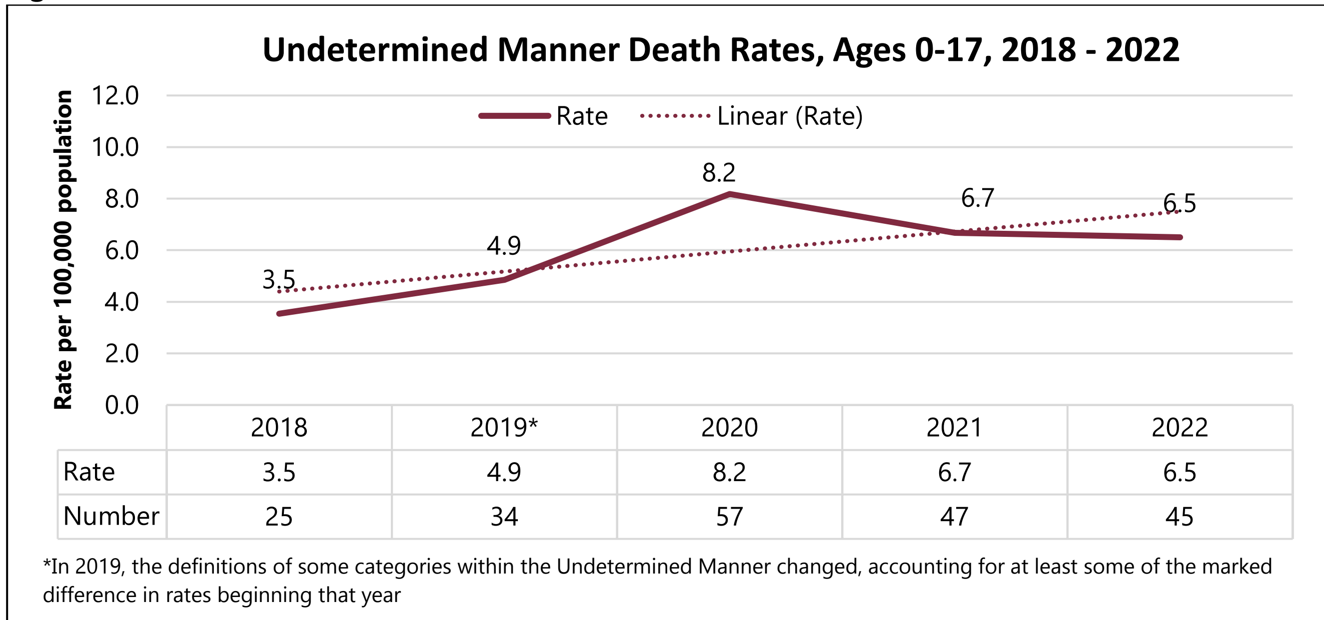
As the SCDRB is the only entity in Kansas that reviews all youth suicides, we find there are rare occasions when a note might provide specifics of the "why" that led that particular youth to end their life. Overwhelmingly, the Board finds that suicide notes share such things as the burden the youth felt they were to others, how they felt the world would be better without them, and how they love those around them and hope they will not miss them when they are gone. There is not a singular answer to "why" a youth ends their life. What has been learned from these letters is that youth need to know they are loved despite any shortcomings and that they are of value to someone. Youth need to hear a message that there is help for whatever challenges or problems they are facing.

UNDETERMINED MANNER

Undetermined deaths are those in which the manner of death could not be identified from the evidence collected. When there are multiple circumstances that may have contributed to the child's death or no identifiable cause is established, the Board will classify the death as undetermined.

Figure 65 shows Undetermined Manner death rates for the last 5 years of case reviews. The increase in cases classified as undetermined since 2019 is mainly due to reclassifications in sleep-related deaths, which are now being classified Undetermined–SUID instead of Natural-SIDS. In 2022, there were 45 deaths of Undetermined Manner. Of those 45 deaths, 39 were Sleep-Related Sudden Unexpected Infant Deaths (SUID) which are included in the Sleep-Related SUID Deaths section.

Figure 65

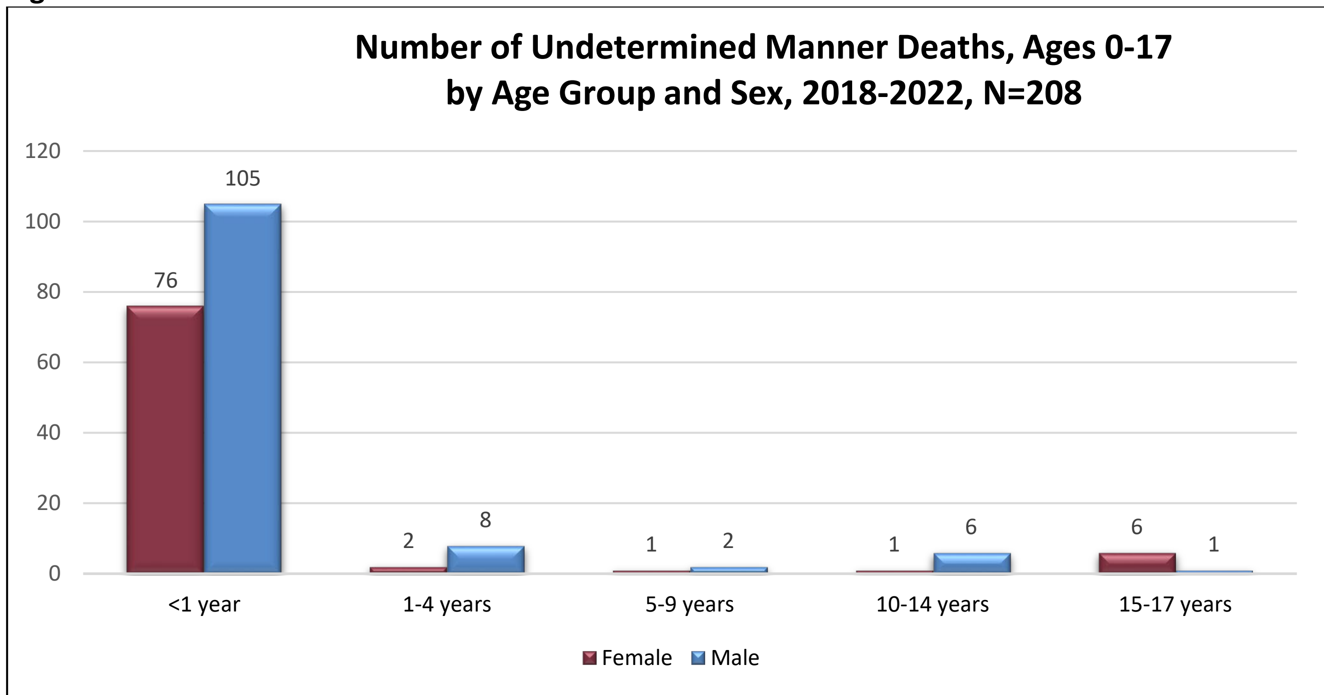


	2018	2019*	2020	2021	2022
Rate	3.5	4.9	8.2	6.7	6.5
Number	25	34	57	47	45

*In 2019, the definitions of some categories within the Undetermined Manner changed, accounting for at least some of the marked difference in rates beginning that year

Figure 66 displays the breakdown of Undetermined Manners of death by age group and sex. Of the 208 deaths with Undetermined Manner, males represented 59% for all ages, and infants (age <1) represented 87% of all deaths age 0-17.

Figure 66



The rate of Undetermined Manner deaths for all race/ethnicity groups between 2018 and 2022 was 5.8 deaths per 100,000 population. Multiple Race and Black/Non-Hispanic children showed the highest rate of death for this category – three times that of White/Non-Hispanic children (Figure 67).

Figure 67

Rate of Death by Race/Ethnicity, Undetermined Manner by Population Group, Ages 0-17, 2018-2022						
KS Rate All Races	**White/ Non-Hispanic**	**Black/Non-Hispanic**	**American Indian/Non-Hispanic**	**Asian/ Non-Hispanic**	**Multiple Race/ Non-Hispanic**	**Hispanic- Any Race**
5.8	4.3	14.1	*	*	14.7	6.8
*Death count of 9 or less, suppressed						

Historically, investigations in cases of Undetermined Manner have varied significantly. In some instances, although every effort was made to determine why a death occurred, the cause and manner of death could not be ascertained. Other cases had incomplete investigations, or law enforcement agencies were not informed of the death. In some, autopsies were not ordered, were incomplete, or toxicology testing on the victim was not performed even though the circumstances warranted testing. In 2022, all but one autopsy performed on cases within the Undetermined Manner category met basic standards.

All non-natural child deaths should be exhaustively investigated. The circumstances and family situation should not affect the detail of the inquiry. Hospitals must 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 a life-threatening event of unknown etiology that is likely to be fatal.

Case Vignette
Death Due to Undetermined Manner

Every case requires a thorough and coordinated investigation – *An infant was placed to sleep on an unsafe sleep surface that was shared with an adult. When the caregiver awoke, the infant was found to be unresponsive and later pronounced deceased. The investigation completed by law enforcement was minimal and lacked information regarding the circumstances of the death including the location were the infant and caregiver were sleeping. In addition, the autopsy was not performed in accordance with guidelines, as the cranial vault was not examined, the body and organs were not weighed, and toxicology and imaging were not performed. Due to the inadequate information available for the Board to review, this case was finalized as a Sudden Unexpected Infant Death-Incomplete Case information with Undetermined Manner of Death.*

Board Reflection – *Use of the CDC Sudden Unexpected Infant Death Investigation Reporting Form (SUIDIRF) aids law enforcement in obtaining appropriate and thorough information in the investigation of infant deaths. The Board recommends using this standardized form in all infant death investigations. Autopsies should be conducted in accordance with guidelines and by pathologists with training and experience in child deaths. Additional information regarding Autopsy Guidelines can be found at: Child Autopsy Guidelines and Recommendations.*

CHARACTERISTICS OF UNDETERMINED MANNER OF DEATH, 2018-2022, N=208

- Undetermined Manner of death is three times higher in the Non-Hispanic Black and Multiple Race child populations than in the White/Non-Hispanic child population
- 87% were under the age of 1
- 59% were male
- 13% of investigations did not include photos of the scene – a standard part of evidence collection
- 39% (71 of 181) of the infant deaths classified as Undetermined Manner were noted to have missing law enforcement information or other components of the death investigation. These included such things as scene recreations or doll re-enactments, completion of the SUIDI form, scene photos, witness interviews, and medical history.
- 9 deaths related to poisoning, overdose, or acute intoxication were classified as Undetermined Manner due to incomplete investigations and/or lack of information. All nine of these deaths occurred between 2020 and 2022

DEATHS IN NON-RELATIVE CHILD CARE HOMES AND CENTERS

Since many infants and children spend a significant portion of their time in child care environments, assuring safe sleeping arrangements and compliance with state safety regulations at every site is critical. Parents should talk about safe sleep practices with anyone who will be caring for their baby, including family, friends, babysitters and child care providers.

Many Sudden Unexpected Infant Deaths (SUID) have been associated with the child being prone, especially when the infant is accustomed to sleeping supine. Babysitters and family members who provide periodic care for infants may not be aware of the importance of supine sleeping and other safe sleeping arrangements. In licensed child care settings, it is expected that safe sleep environments and sleep position recommendations be followed. When child care homes are found to be operating without a license, enforcement of the law and penalties should be considered. For general information regarding the basis and purpose of child care licensing, please visit: https://www.kdhe.ks.gov/374/Child-Care-Facility-Requirements.

In the last 5 years (2018-2022), there have been 14 deaths of children that occurred while the child was in a non-relative child care home or center (Figure 68).

Figure 68

Type of Child Care Setting for Deaths, Ages 0-17, 2018-2022, N=14	
	Number of Deaths
Unlicensed	9
Licensed	4
Licensed- In violation of license	1

As discussed in the Legislative Priority Section of this report, the Board has found instances of children dying in the care of unlicensed child care providers or providers that are not in compliance with their license requirements. K.S.A. 65-501 requires persons maintaining a child care facility for children under 16 to be licensed. If someone is found to be out of compliance after remedial measures have been attempted, the current Kansas statute authorizes the person to be prosecuted by the County Attorney for an unclassified misdemeanor. If the provider is found guilty, the current penalty is between $5 and $50 each day they are out of compliance. Through enhanced monitoring, enforcement, higher fines and increased prosecution, the Board hopes that the quality of child care available to Kansas children will be improved.

CHARACTERISTICS OF DEATHS IN NON-RELATIVE CHILD CARE HOMES AND CENTERS 2018-2022, N=14

- 86% (12) were infants under the age of 1
- 79% (11) of the deaths occurred when the infant or child was sleeping
  - 8 of the 11 sleep-related deaths occurred in an unlicensed child-care location; all had one or more unsafe sleep factors
  - One death occurred in a licensed child-care location that was in violation of license requirements and had one or more unsafe sleep factors present
  - Two deaths occurred in licensed child care locations; one of those deaths had unsafe sleep factors present
- 21% (3) were not sleep-related
  - Two were children ages 1-4 and one was an infant
  - 2 of the 3 deaths were due to natural causes, the remaining death was an unintentional injury death due to asphyxia

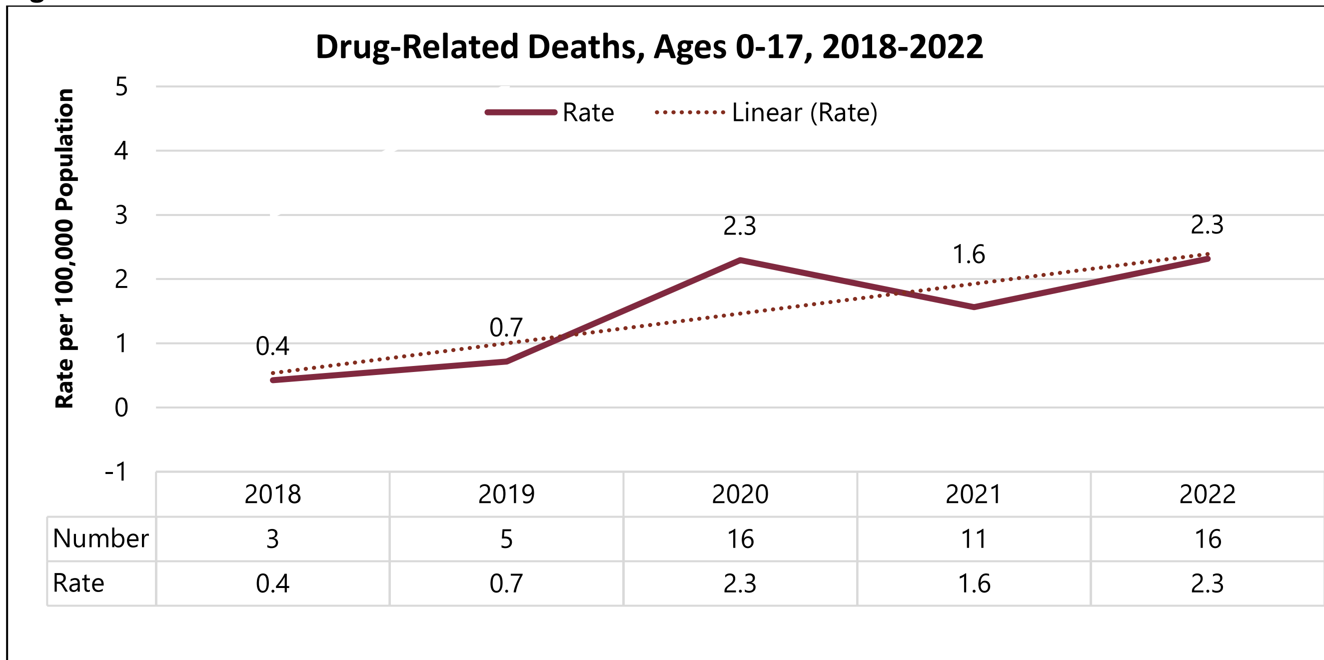
PREVENTION POINTS FOR PARENTS WHEN SELECTING CHILD CARE HOMES AND CENTERS

- **Child care homes and centers must be licensed by KDHE –** Parents should ask to see the license or certificate as it documents the license type and maximum number of children allowed to be enrolled in that home or center
- **Check compliance history –** The compliance history of a child care facility in Kansas can be accessed by calling the Kansas Department of Health and Environment Child Care Licensing Program at (785) 296-1270 or visiting https://www.kdhe.ks.gov/280/Child-Care-Licensing.
- **Safe-sleep practice –** Child care providers should develop and follow a safe sleep practice that is discussed with parents. Child care providers and parents should communicate frequently to assure they understand safe sleep and that these practices are followed at home and in child care. Safe sleep recommendations are listed with the Sleep-Related Deaths prevention points.

DRUG-RELATED DEATHS - ALL MANNERS

In 2022, Kansas experienced 16 drug-related deaths in children ages 0-17. Drug-related deaths are classified as such when the decedent's death was due to an overdose or toxicity of illicit substances, prescription or over-the-counter medications. Figure 69 indicates that the rate of drug-related deaths per 100,000 population has shown a significant increase in the last three reporting years.

Figure 69



	2018	2019	2020	2021	2022
Number	3	5	16	11	16
Rate	0.4	0.7	2.3	1.6	2.3

Of the drug-related deaths occurring between 2018 and 2022, a majority (65%) were unintentional/accidental in nature. Of the 9 deaths that were of Undetermined Manner, the board had either inadequate information for a determination, or despite thorough investigation the source or intent of the ingestion could not be determined (Figure 70).

Figure 70

Drug-Related Deaths by Manner of Death, 2018-2022, N=51	
Manner of Death	**2018-2022 Deaths**
Accident	33
Undetermined	9
Suicide	7
Homicide	2
Total	**51**

Youth ages 15-17 represented 66% of the drug-related deaths, and males accounted for 64% (Figure 71). The Board has become increasingly concerned about the number of younger children who die from ingestions. There were 10 deaths of children under the age of 5 from 2018-2022. Two were classified as Homicides in which the victims were given medications not prescribed to them, six were the result of the child finding unsecured illicit drugs and two were infants with exposure to illicit drugs. Five of the deaths involved exposure to fentanyl.

Figure 71

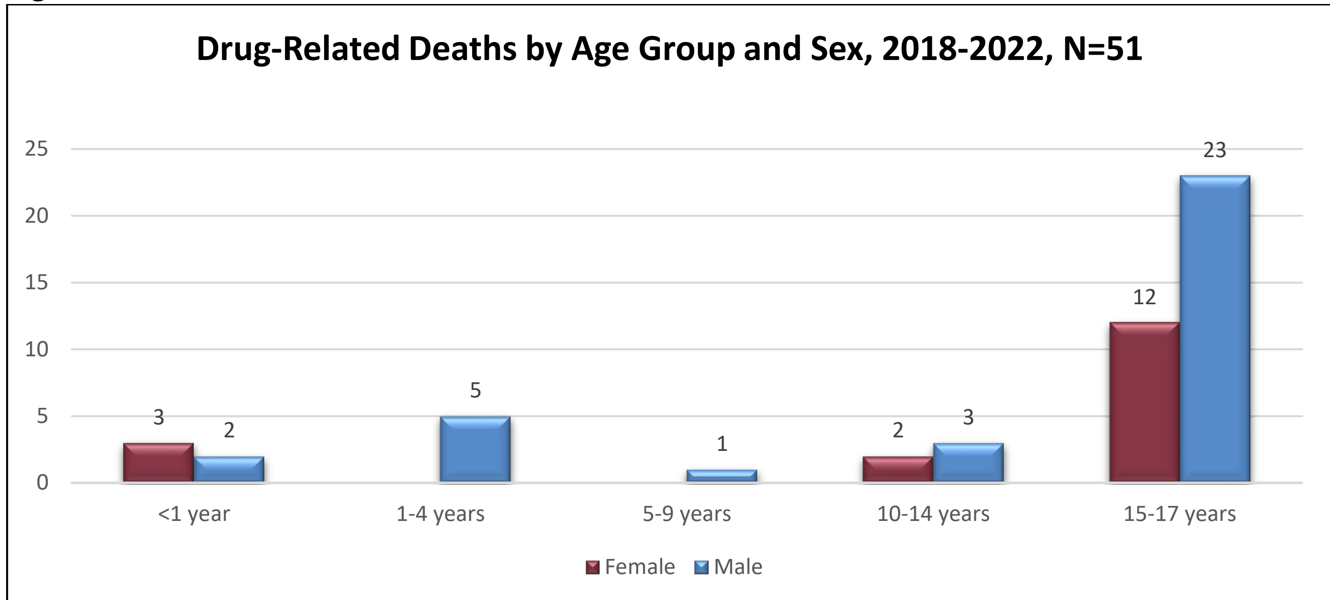


Figure 72 shows the types of substances involved in drug-related deaths during the years of 2018-2022. A majority (41) involved illicit drug use with 32 ingesting only an illicit substance and nine using a combination of illicit substances, prescription and/or over-the-counter medications.

Figure 72

Number of Drug Deaths by Drug Class, 2018-2022, N=51	
Illicit Drugs	32
Prescription Medication	8
Combination of Illicit, Prescription or Over-the-Counter Medication	9
Over-the-Counter Medication	2

Figure 73 shows the number of deaths due to the most common substances detected during the same period. Ethanol is classified as an illicit drug for the purposes of this report as alcohol consumption is illegal for persons younger than 21 years of age. **There were 33 fentanyl deaths between 2020 and 2022. This is compared to zero fentanyl deaths from 2018-2019.**

From a national standpoint, the CDC reported there were 107,941 drug overdose deaths for all age groups in 2022.[27] In recent years, both nationally and in Kansas, the data show an increase in the use of synthetic opioids like fentanyl. While fentanyl is a prescription drug, it is also manufactured illegally. Compared to morphine, fentanyl is 50 to 100 times more powerful, making even a small amount deadly. Fentanyl is frequently incorporated into illicitly manufactured pressed pills and mixed with other substances without the knowledge of the end user.[28]

The Drug Enforcement Administration (DEA) created a public safety alert, warning Americans of the increase in lethality and availability of fake prescription pills containing fentanyl. The public safety alert coincides with the launch of the DEA's "One Pill Can Kill" public campaign to educate people of the dangers of counterfeit pills.[32] More information about this campaign can be found at https://www.dea.gov/onepill/social-media.

Figure 73

Drug-Related Deaths by Type of Substance, Ages 0-17, 2018-2022, N=51					
	2018	2019	2020	2021	2022
Illicit Drugs					
Fentanyl	0	0	11	9	13
Methamphetamine	0	3	1	1	2
Cocaine	1	0	1	1	1
Flubromazolam	0	0	3	0	1
Ethanol	0	0	1	0	0
Prescription Drugs					
Oxycodone	1	0	2	0	1
Alprazolam	0	0	0	0	3
Tramadol	1	0	0	1	1
OTC Drug Deaths					
Diphenhydramine	2	0	0	0	1
*Cases may be counted more than once, depending on the number of drugs detected					

Figure 74 describes drug-related deaths by the child's county of residence, highlighting counties with populations of children greater than 100,000 in the five-year period. The rate of death for the five counties when combined is 10.9 deaths per 100,000 population. For all other counties, the rate was 0.9. Therefore, the five most populous counties in Kansas experienced a combined ten-fold higher death rate than that of the other counties in the state. Of note, there was one drug-related death during this period that was not a Kansas resident, which is excluded from this chart only. The Board is encouraged by ongoing local efforts to identify specific risk factors within these communities.

Figure 74

Drug-Related Deaths by County of Residence, Age 0-17, in Counties with Population > 100,000 2018-2022, N=50			
	Combined Population Age 0-17, 2018-2022	Total Drug- Related Deaths by Decedent County of Residency	Total Rate of Drug-Related Deaths
Douglas	107,908	2	1.9*
Shawnee	206,063	1	0.5*
Wyandotte	227,899	11	4.8*
Sedgwick	656,210	15	2.3*
Johnson	723,500	8	1.1*
All other KS counties combined	1,575,273	13	0.9*
* Death count of <20, which should be used with caution			

CASE VIGNETTE

Drug-Related Youth Death

One Pill Can Kill *–A youth was discovered unresponsive the morning following a night out with a friend. Reports indicate the youth had shown his friend a blue M30 pill which they believed to be a prescription pain pill. The youth died from a fentanyl overdose.*

Board Reflection – *Fentanyl is increasingly being incorporated into illicitly manufactured drugs. This is most often done without the knowledge of the end user. Because fentanyl is highly lethal, many children and youth who died in Kansas due to drug overdoses most likely were unaware that the substance they were taking contained fentanyl. Parents and caregivers need to ensure that youth are aware that any medication that is not prescribed by a doctor is not safe to take. With the rise in opiate overdoses, increased availability of opioid antagonists such as naloxone should be considered.*

CHARACTERISTICS OF DRUG-RELATED DEATHS, 2018-2022, N=51

- Drug-related death rates have shown a significant increase since 2020, mostly related to fentanyl
- The five most populous counties in the state had a drug-related death rate ten times higher than the rest of the counties
- Fentanyl-related deaths in 2021 and 2022 were twice as high as in 2020, and 22 times greater compared to 2018 and 2019
- Teens ages 15-17 represented 69% of the drug-related deaths, and males accounted for 67%

PREVENTION POINTS

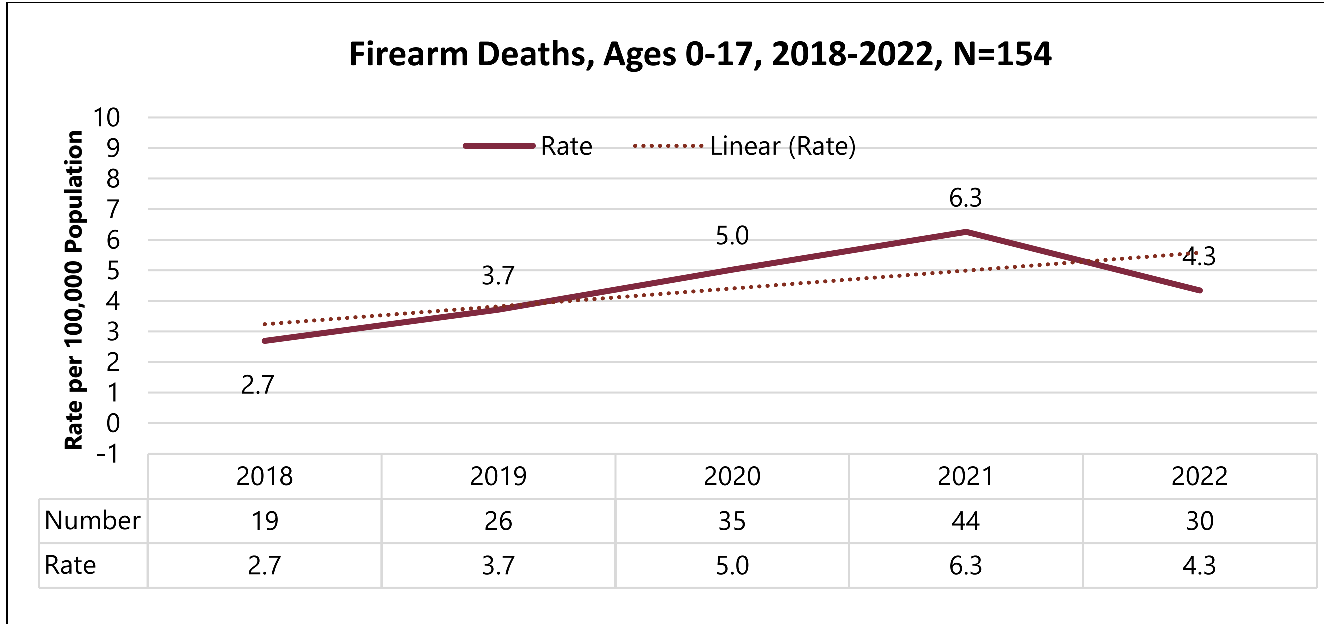
Young people are at high risk of substance use and overdose. These steps may help prevent youth from using alcohol and illicit substances, and from abusing prescription medications.

- **Discuss the dangers and rules of taking medications –** Medications are prescribed by physicians for specific patients and specific purposes. The fact that they are prescribed does not make them safe for others. Children and youth should be instructed to only take medications that are prescribed for them, never share medications with another person, and not combine medications unless instructed to by a physician.[28]
- **Consider alternatives to narcotic use –** Many people believe opioids work best for pain, but recent studies show that non-opioid medicines such as ibuprofen and naproxen, as well as other non-pharmaceutical approaches can be just as effective. Discuss alternatives to opioids with a physician. [28]
- **Positive parental involvement in children's lives –** Positive relationships between parents and adolescents can serve as a protective factor, offsetting the risk of substance use. Children and youth need parental involvement, and their activities and social media use monitored. [28]
- **Prescription medications should not be accessible to children –** Quantities of medications should be tracked and all medications kept in a locked cabinet.[28]
- **Discuss the dangers of alcohol use –** Underage use of alcohol and the use of alcohol with medications can increase the risk of accidental overdose.
- **The ability to order substances online is a risk factor for youth to obtain and use them inappropriately –** Some websites sell counterfeit and dangerous drugs and chemicals. Internet use should be monitored and caregivers should ensure youth are not accessing drugs through friends or outside sources.[28]
- **Properly dispose of medications –** Unused or expired drugs should be discarded. Patient information guides with the medication may provide disposal instructions, or pharmacies can be contacted for advice on disposal.
- **No street drug can be trusted to be what the seller says it is –** Any drug obtained illegally can contain any number of ingredients in unknown amounts that could be fatal. The crisis caused by fentanyl being manufactured to appear similar to oxycodone tablets and marijuana laced with fentanyl, has resulted in a devastating number of deaths. To address this issue, SB 174 which decriminalizes Fentanyl test strips, was signed into law in early 2023.

FIREARM DEATHS - ALL MANNERS

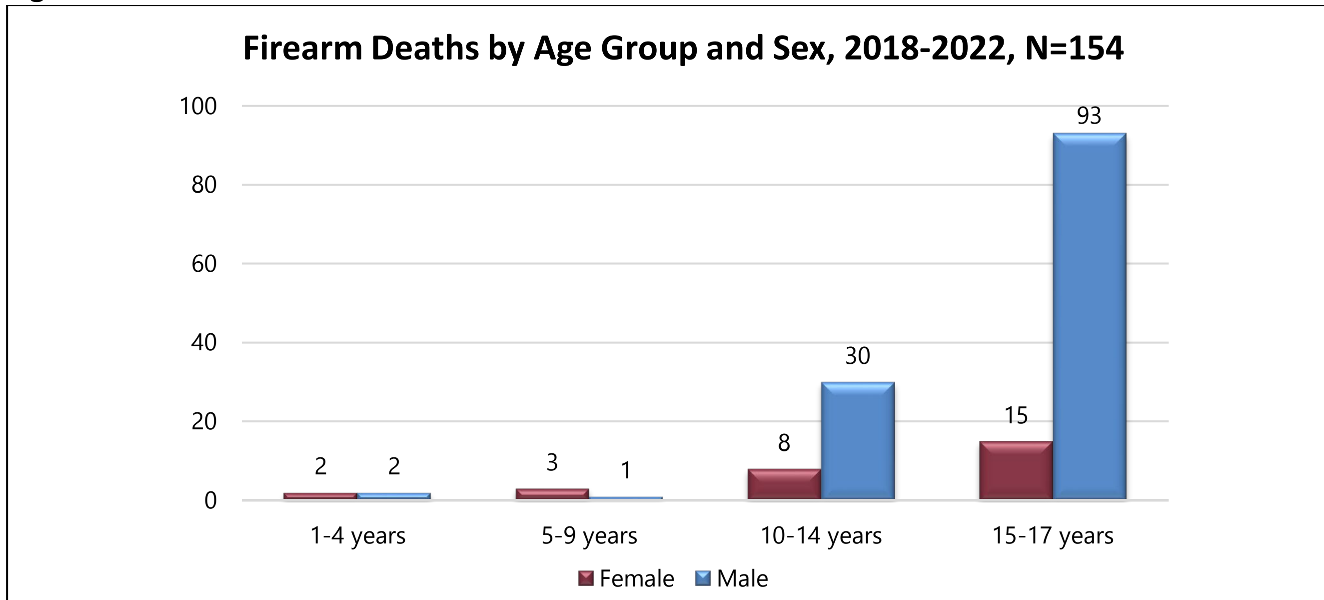
From 2018 through 2022, there were a total of 10,874 firearm deaths in the U.S of children ages 0-17.[33] The linear rate of firearm deaths in Kansas has shown a gradual increase over the last five reporting years (Figure 75). In 2022, 30 children died from firearm injuries.

Figure 75



	2018	2019	2020	2021	2022
Number	19	26	35	44	30
Rate	2.7	3.7	5.0	6.3	4.3

Figure 76



Of the 154 firearm deaths from 2018-2022, 82% (126) were male and 18% (28) were female with a majority (70%) of the deaths occurring in the 15-17 age group (Figure 76).

Fatal firearm injuries can include Homicides, Suicides, or Unintentional Injury (Accident) deaths which can occur if a child is playing with a firearm, or someone discharges a firearm without evidence of intentional harm. There are also circumstances in which firearm deaths are the result of interpersonal violence such as domestic violence or legal intervention by law enforcement. In other cases, the intent of the firearm use cannot be determined (Undetermined Manner) because despite investigation, it remains unknown if the injury was intentionally self-inflicted, unintentional, or an act of interpersonal violence. Figure 77 shows resident and non-resident numbers of death by manner of death.

Figure 77

Firearm Deaths, by Manner of Death, 2018-2022, N=154	
Manner of Death	**Number**
Accident	8
Undetermined	4
Suicide	70
Homicide	72
Total	**154**

Figure 78

Rate of Firearm Deaths, Age 0-17, by Counties with Population greater than 100,000 2018- 2022, N=154, with only residents of Kansas included											
County	**Population Age 0-17, 2018-2022**	**Total Firearm Related Deaths**	**Suicide Firearm**	**Homicide Firearm**	**Unintentional Injury Firearm**	**Undetermined Manner Firearm**	**Rate of Suicide Firearm***	**Rate of Homicide Firearm***	**Rate of Unintentional Injury Firearm***	**Rate of Undetermined Manner Firearm***	**Total Rate of Firearm Related Deaths***
Douglas	107,908	2	-	1	1	-	-	0.9*	0.9*	-	1.8*
Shawnee	206,063	12	6	5	1	-	2.9*	2.4*	0.4*	-	5.8*
Wyandotte	227,899	23	3	17	2	1	1.3*	7.4*	0.8*	-	10
Sedgwick	656,210	40	13	24	1	2	1.9*	3.6	0.1*	0.4*	6
Johnson	723,500	14	8	6	-	-	1.1*	0.8*	-	-	1.9*
All other KS Counties Combined	1,575,273	58	39	15	3	1	2.4	0.9	0.1*	0.1*	3.6
* Death count of <20, which should be used with caution											

In Kansas, the rate of firearm deaths, as a group, are most prevalent in counties with populations over 100,000. As demonstrated in Figure 78, The five most populous counties in Kansas have a firearm death rate that is 22 times higher than the rest of Kansas counties combined. Among them, Wyandotte County stands out with the highest rate, which is six times greater than that of all other Kansas counties combined. Not included in Figure 78 are the five out of state residents who died from firearm injuries in Kansas.

The Board is encouraged by ongoing local efforts in several of these locations to identify specific risk factors within their communities. Addressing issues related to firearm deaths is a county-by-county initiative. Given the unique characteristics of these communities, as well as the plethora of available research related to firearm deaths of children, the Board will continue to evaluate additional data to determine if more specific recommendations can be made in the future.

Characteristics of Firearm Deaths, 2018-2022, N=154

- The rate of firearm deaths in Kansas has shown a gradual overall increase over the last five reporting years despite a decrease in these deaths in 2022
- 70% of firearm deaths occurred in adolescents ages 15-17, with males accounting for 60% of those fatalities
- 47% were homicides; 45% were suicides
- In firearm-related suicides, 48% of guns involved were left unlocked; 26% of those were also left loaded
- Overall, only 7% of firearms were securely locked; 36% were left unlocked, with 20% of the unlocked guns left loaded, emphasizing the critical need for safe firearm storage
- 52% of the firearms used in these incidents were owned by the child's parent or caregiver
- 72% of the firearms involved in these deaths were handguns

PREVENTION POINTS

- Keep guns out of reach and out of sight of children by storing them securely. This means storing them unloaded, locked, and separate from ammunition. Leaving guns unsecured or in a place where a child can gain access increases the risk for injury or death.
- Teach children that if they see or find a gun to immediately tell an adult. Urge them not to touch it.
- If a youth or member of the household is in crisis and could be a risk to themselves or to others, firearms should be removed from the home. Such crises can involve people who are depressed, suicidal, or are abusing drugs or alcohol.

DEATH INVESTIGATION AND AUTOPSY EXAMINATIONS

The Kansas State Child Death Review Board relies significantly on law enforcement, death investigators, and forensic pathologists to ascertain not only the causes of child fatalities in Kansas but also to provide comprehensive details from their investigations. This information is crucial for the Board to understand the underlying factors contributing to these deaths and to develop strategies for prevention.

In the review of over 13,000 deaths of children in Kansas, the Board has found multiple areas in which death investigations in Kansas, including autopsies of children could be improved. Suggestions for improvement in our state include:

- **Following Child Autopsy Guidelines and Recommendations -** The Kansas State Child Death Review Board has issued comprehensive guidelines concerning the autopsies of children and adolescents under coroner jurisdiction. These guidelines specify that postmortem examinations of children be conducted by a forensic pathologist. The guidelines also stipulate rigorous standards for the procedure, including a thorough examination of all organs, including the brain, as well as the incorporation of toxicological analysis and radiographic imaging. These protocols ensure the highest standard of investigation and accuracy in the determination of cause and manner of death. Child Autopsy Guidelines created by the Board can be found at: Child Autopsy Guidelines.

- **Enhance Training Requirements for Coroners -** In Kansas, although coroners must be licensed physicians, many lack specialized training in medicolegal death investigation. To address this issue, it is crucial that newly appointed coroners receive immediate and comprehensive training, supplemented by a structured plan for ongoing professional development to ensure that all coroners are up-to-date on best practices and emerging trends in child death investigations. In other states, certification by the American Board of Medicolegal Death Investigators (ABMDI) is a requirement for coroners, deputy coroners, and death investigators.

- **Ensure Adequate Training for Law Enforcement in Child Death Investigations -** Adopting standardized death investigation practices and ensuring compliance with nationally recognized procedures and data collection protocols is particularly crucial as law enforcement, often tasked with investigating child deaths, frequently lacks specialized medicolegal training. Implementing standards will improve the overall quality and consistency of these investigations throughout the state. More information about ABMDI can be found at: https://abmdi.org/.

- **Effective Investigations of Sudden Unexpected Infant Deaths (SUIDs) -** Accurate investigations of Sudden Unexpected Infant Deaths (SUIDs) are vital for determining the cause and circumstances surrounding these tragic events. Utilizing the Sudden Unexpected Infant Death Investigation (SUIDI) form is essential in this process as it standardizes data collection and ensures comprehensive documentation. A thorough SUID investigation requires:
  - **Scene Recreation and Doll Re-enactments:** These techniques provide critical insights into conditions leading to the death that may not be apparent from interviews alone.
  - **Witness Interviews:** Conducting detailed interviews helps gather contextual information about the infant's environment and circumstances.
  - **Diagnostic Procedures:** Utilizing x-rays, toxicology, and autopsy examinations by a forensic pathologist ensures a thorough medical evaluation.

Incorporating these methods along with the SUIDI form facilitates a structured and consistent investigation process, enhancing the accuracy of findings and contributing to better prevention strategies. For additional guidance, the CDC has published resources for death investigators at CDC SUID Training Materials. Additionally, the National Center for Fatality Review offers a free 10-module series on various aspects of death scene investigation, with a focus on SUID, available at NCFRP Child DSI Learning Series.

- **Improving Youth Suicide Investigations -** Although most youth suicides in Kansas are investigated, the Board often lacks sufficient information from law enforcement reports to fully understand these deaths, complicating the development of effective prevention strategies. Other states have tackled this issue by using standardized Suicide Death Investigation Forms. These forms are beneficial for gathering detailed information on the factors and circumstances leading to suicides, helping to identify patterns and risk factors. They also foster collaboration among professionals, support researchers in creating effective prevention programs, and ensure consistent, unbiased data collection. For a standardized approach, the Colorado Department of Public Health & Environment provides a model form at https://cdphe.colorado.gov/suicide-prevention/suicide-investigation-form.

- **Improving Drug-Related Death Investigations -** When a child dies from an overdose, regardless of the manner of death, it is crucial to thoroughly investigate and gather information to understand how the child obtained the drugs and identify those responsible. This includes interviewing friends, family, and others who may provide insights into risk factors and the source of the drugs. Comprehensive information is needed to address the broader context of drug access and usage.

The Kansas Coroner and Medicolegal Death Investigator Conference held on April 24, 2024, brought together professionals from various fields, including law enforcement, coroners, and forensic pathologists. The focus was on enhancing skills in forensic toxicology, certifying drug-related deaths, and understanding the complexities of Sudden Unexplained Infant Death (SUID) cases. Attendees gained critical knowledge on investigating infant and child deaths. They also learned about the sensitive nature of doll re-enactments, a technique used to aid in understanding SUID cases. Participants of the conference were provided SUID Investigation Kits, which included tools for doll re-enactments, distributed by the Kansas State Child Death Review Board and the Office of the Kansas Attorney General. Since the training, there has been a noticeable increase in the use of these kits and the SUIDI form, highlighting the effectiveness of the education provided.

PUBLIC POLICY RECOMMENDATIONS

The Board strongly encourages consideration of each of the following policy recommendations to prevent child deaths in Kansas.

RECOMMENDATIONS TO PREVENT CHILD ABUSE AND NEGLECT DEATHS

INCREASE ACCESS TO AFFORDABLE, HIGH-QUALITY CHILD CARE

KDHE and DCF should continue working towards ensuring families have access to high quality and affordable child care. Children, and particularly young children, should be cared for by persons who are experienced and have reasonable expectations for children and their behaviors. Access to affordable, high-quality child care is associated with reduced parental stress and maternal depression, both of which are also risk factors for child abuse and neglect.

INCREASE FAMILY FRIENDLY WORKPLACES IN KANSAS

The Kansas Power of the Positive (KPoP) is a statewide coalition working to assure that all Kansas children grow up in safe, stable, nurturing relationships and environments. Their efforts to promote family friendly workplaces to support Kansas parents is a valuable and critical component of their work, and should receive continued support at the state level. Efforts to ensure that more Kansas families are employed at places that offer flexible work schedules, paid parental leave, child care, breastfeeding support, and livable wages support families in a way that can reduce risk factors for child physical abuse and neglect.[29]

COMPLIANCE WITH LAWS INTENTED TO PREVENT CHILD ABUSE/NEGLECT DEATHS

The Kansas State Child Death Review Board has reviewed cases where a child's safety was not confirmed through visual observation following an investigation initiated by DCF concerning allegations of physical abuse or neglect. Kansas Statute 38-2226 subsections (h), Adrian's Law, and (i) Child Abuse Review and Evaluation (CARE) referrals, establish critical procedures for handling child abuse and neglect cases. To enhance compliance with Kansas Statute 38-2226 subsections (h) and (i) and improve the management of child abuse and neglect cases, it is recommended that a comprehensive training program be developed for employees involved in these investigations. When the criteria outlined in Kansas Statute 38-2226 subsections (h) and (i) are not met—such as when a required visual examination is not conducted or a referral to a child abuse review and evaluation provider is omitted—it is essential to ensure there is a process to quickly address these lapses. These issues and recommendations are discussed in more detail in the earlier Legislative Priority Section of the report.

ADOPT AND CONSISTENTLY FOLLOW A BEST-PRACTICES APPROACH IN THE INVESTIGATION OF ALL ALLEGATIONS OF ABUSE AND NEGLECT

The Board was encouraged by House Sub. For SB 126 (2017) which directed the Secretary of the Department for Children and Families to establish a Child Welfare System Task Force to study the child welfare system in Kansas.

The Child Welfare System Task Force proposed several recommendations in their report to the 2019 Kansas Legislature, which align with recommendations proposed by the SCDRB over the last several reporting years. Information regarding The Child Welfare System Task Force and their report can be found at: http://www.dcf.ks.gov/Agency/CWSTF/Pages/default.aspx

While the Board acknowledges the financial limitations faced by all agencies and branches of government, until appropriate resources are available to provide a thorough, consistent and adequate investigation of all allegations of abuse and neglect, Kansas children will continue to be at risk. The deaths of several children in recent years have been widely reported in the media due to concerns about DCF actions or inactions; those deaths are not isolated examples. It is a continuing concern of the Board that all investigations of abuse and neglect be thorough and fact based, and that any confidentiality restrictions placed on DCF that prevent them from investigating collateral sources be removed. Additionally, K.S.A. 38-2226 requires a joint investigation between law enforcement and DCF in cases of serious physical harm to or sexual abuse of a child. It is important that both the law enforcement and social work perspective are present in all such investigations.

DCF and law enforcement should review and adopt a best practice approach for the investigation of all allegations of abuse and neglect. Once adopted, training should be conducted with all employees to ensure they understand the scope and extent of investigation necessary in all allegations of abuse and neglect. Standards for investigation should be carried out consistently among workers, law enforcement officers and among regions of the state. Caseloads must be manageable to ensure investigators have adequate time to investigate and follow up on allegations of abuse and neglect. Additionally, funding should be adequate to allow for the hiring of qualified, experienced investigators.

All investigative information obtained should be evaluated in an objective manner. An uncorroborated denial by a parent, in and of itself, should never be grounds for unsubstantiating a claim of abuse or neglect when there is other credible evidence to support such a finding. DCF should also consider any other information collected through law enforcement investigations and any prior or related judicial proceedings in evaluating whether an adult should be substantiated for purposes of the child abuse registry. Workers who consistently fail to conduct adequate investigations should receive additional training to correct those deficiencies or have disciplinary action taken if necessary. Prior history and investigations should be reviewed before placement decisions are made. DCF and collaborative providers should also develop a reliable system to ensure they have all relevant and necessary information for children in their custody in order that the child's health and well-being does not rely on the child or a relative to provide necessary information to DCF. A child's safety should not be compromised because the case decision-maker did not have access to relevant information when making placement decisions.

The Board is encouraged by the implementation and funding of the Kansas CARE (Child Abuse Review and Evaluation) Program statewide. The purpose is to ensure young children who may have been victims of physical abuse/neglect receive an expert medical assessment to aid in the determination of whether abuse has resulted in injury and/or if there are safety risks that require intervention. The goal of involving experts in child abuse pediatrics is to improve accurate assessments related to child maltreatment, improve the provision of targeted services to families and improve child safety outcomes. When DCF has assigned an investigation for a child 5 years or under with allegations of physical abuse and/or physical neglect, the assigned specialist completes a medical referral form with basic information about the allegations, which is then reviewed by a child abuse pediatrician who

provides recommendations regarding the need for medical evaluation or detailed case review. In House Bill 2034, the Legislature approved funding for KDHE to dedicate to the training of healthcare providers throughout Kansas for certification in child abuse examinations (CARE providers). In the first two months of CARE being implemented statewide, there were 519 referrals made involving 485 families with 16% of referrals resulting in a child being referred to a child abuse pediatrician or a CARE provider. [39,40]

ENHANCE TRAINING AND ACCESS TO APPROPRIATE INFORMATION FOR CHILD WELFARE PROFESSIONALS

Kansas DCF should continue to develop and provide enhanced training for both their employees as well as employees of all contracted agencies. It is imperative that every employee of each agency charged with the investigation of abuse and neglect or assessing the continued risk of children under their supervision or custody have current, high quality training regarding child abuse and neglect as well as other topics related to safety assessment.

Through privatization of many components of the state child welfare system, additional issues have developed regarding the flow of information to all persons involved with decision-making for the children and families being served. In reviewing DCF records in situations where children and their families were receiving services, it is apparent that workers who had frequent interaction with the families were unaware of additional information DCF had regarding a particular family. Each report should be looked at not as an individual incident, but with all available information reviewed in its entirety to look for repeated reports of similar or other concerns prior to developing case plans or making recommendations regarding a child.

Kansas DCF cannot address allegations and concerns of abuse or neglect without thorough historical and investigative information that is comprehensive and easily accessible. Medical histories and law enforcement investigative information about the child is critical for DCF assessments regarding the safety and well-being of a child. Medical providers who report suspicions of abuse or neglect must provide medical information and records appropriate to the case investigation.

IMPROVE REPORTING OF CHILD ABUSE AND NEGLECT

In Kansas, mandated reporters are required to report child abuse or neglect as directed by Kansas law (K.S.A. 38-2223). Concerned citizens who suspect child abuse or neglect are strongly encouraged to report concerns to DCF.

Public policy campaigns should be launched to educate all Kansans on when, how, and why they must report concerns of child abuse or neglect. Additionally, mandated reporters need continued trainings regarding reporting laws and the process to report concerns accurately, appropriately and in a timely manner. There are several instances each year where mandated reporters and concerned citizens had information that could have saved the life of a child had the information been reported prior to the death.

INCREASE ACCESSIBILITY TO CRISIS SERVICES AND MENTAL HEALTH SERVICES FOR YOUTH WITHIN KANSAS COMMUNITIES

Community Mental Health Centers should continue to increase outreach to raise awareness of available mental health services for children and youth, and to ensure parents, caregivers, educators, and other community members are aware of the resources in their community and the state.

The Board is pleased to recognize steps taken to address the accessibility of crisis and mental health services for all Kansans. In 2022, the Special Committee on Mental Health recognized the need for additional beds and services for individuals who require inpatient care for mental health crisis treatment. Multiple recommendations were made and include opening a new state hospital, opening additional mental health locations in Sedgwick County, the review of Mental Health provider certifications and workforce protocol, hospital reimbursement pilot programs and the review and evaluation of mental health care provided through telehealth technology.[35]

In 2023, the same committee reviewed several programs and topics which included: The K-12 Mental Health Intervention Team (MHIT) Program, certified community behavioral health clinics, 988 and suicide prevention program, behavioral health workforce, and the potential to create mental health hubs across the state. One committee recommendation made for DCF was to connect children in foster care to MHITs in school buildings which foster children are enrolled, and to provide a report on how the communication plan will be maintained between the MHIT liaison and the foster care contractor for children in foster care. [38]

INCREASE THE DEPTH OF SUICIDE INVESTIGATIONS

Law enforcement should increase the depth of suicide investigations to include social, mental health and medical histories of the child. Information regarding family stressors, history of past physical and emotional trauma, previous suicide attempts, involvement in mental health services, and relevant social media information should be included. The Board recommends initiating a policy of standardized training for law enforcement and coroner investigators that includes the use of a protocol for suicide investigations and a suicide death scene investigation form to assist in collecting all pertinent information, including cell phone and social media communications, interviews with family and friends and with other witnesses such as school resource officers, coaches and employers. By better understanding the contributing factors and precipitating events leading to youth suicide, Kansas will be better equipped to determine the best approaches to prevention.

ENSURE TRAINING OF PROFESSIONALS REGARDING THE PREVENTION, ASSESSMENT, INTERVENTION AND POSTVENTION OF SUICIDE

All public-school personnel must comply with required annual training that provides practical guidance and best practices on the proactive development and implementation of programs to assess risk of suicide and intervene effectively. Educators and school personnel are in a position to best identify at-risk children as well as support peers when a suicide occurs. This is particularly crucial as deaths due to suicide have increased and include more children of younger ages.

Training should also be targeted to a broader range of individuals and groups who play critical roles in

supporting mental health. This can include mental health professionals, medical professionals, school personnel, emergency responders, community organizations and volunteers, family members and caregivers. Targeting these groups ensures those who interact with those at risk of suicide are well prepared to handle such situations effectively. Suicide prevention training should be approached through a multifaceted educational framework. It should begin with a thorough understanding of risk factors, warning signs, best practices, current data and research.
An essential component of mental health care and crisis management is postvention, the support and interventions provided to individuals and communities affected by a suicide. Postvention helps reduce the risk of additional suicides, provides grief support, and can help manage the associated trauma. It also reduces the stigma of suicide and promotes open conversations about mental health and suicide prevention.

PROMOTE SAFE REPORTING AND MESSAGING ABOUT YOUTH SUICIDE

Through multiple coordination and communication efforts, the Youth Suicide Prevention Coordinator of Kansas should continue to engage with schools, communities and state agencies to promote Kansas - A Friend AsKS, a youth suicide prevention app, as well as 988, the national suicide prevention lifeline. The familiarity with and use of these two resources among youth, and those that work with them, can effectively ensure that Kansas youth have a safe and effective way to report suicidal thoughts or intent for themselves or their peers.

House Bill 2144 became effective on July 1, 2023, and builds on KSA 21-5407 by defining the crime of "assisting suicide" more explicitly. It criminalizes any action taken to intentionally help or facilitate another person's attempt to end their life. This bill outlines specific criteria for what constitutes assistance, including nearly any form of aid, whether direct or indirect, that supports or enables a person to commit suicide. It sets out penalties for those found guilty of assisting suicide, reflecting a clear stance on preventing and prosecuting such actions.

RECOMMENDATIONS TO PREVENT MOTOR VEHICLE DEATHS

STRENGTHEN ALL-TERRAIN VEHICLE (ATV) USAGE LAWS

Citizens and lawmakers should support efforts to impose a minimum age requirement of 16 years to operate an ATV. Furthermore, requirements that both operators and passengers wear a helmet and be properly restrained should be explored.

ATV use in Kansas continues to increase, as does the risk for serious injury and death when operated by children. According to the 2023 Report of Deaths and Injuries Involving Off-Highway Vehicles with More than Two Wheels, published by the U.S. Consumer Product Safety Commission, there were 288 ATV-related fatalities of children under the age of 16 between January 1, 2018, and December 31, 2020. Nearly half (47%) of all under-age-16 child fatalities occurred to children 12 and under.[14] There were two ATV-related child deaths in 2022 with 10 such deaths in the last 5 reporting years.

INCREASE SEAT BELT AND CHILD RESTRAINT USAGE

Citizens and lawmakers should support efforts in Kansas that aim to increase the use of seat belts and proper restraints by drivers and child passengers. Two considerations being requested are:

- Children from birth to two years of age must be secured in a rear-facing child passenger restraint

system that meets federal standards, in the rear vehicle seat until the child exceeds the height or weight limit allowed by the manufacturer of the child restraint being used.
- Children who are younger than 13 must be transported in the rear seat of the vehicle, when available. Between 2018-2022, there were 14 children who were front seat passengers age 12 or younger who died as a result of an MVC.

Between 2018 and 2022, 46% of the children who died due to motor vehicle crashes were unrestrained. According to the State of Kansas Triennial Highway Safety Plan Federal Fiscal Year (FFY) 2024-2026, "Children are much more likely to be buckled up if the driver is also belted. If the driver is belted, about 96.5% of the children in the vehicle are also belted. If the driver is not belted, only about 28% of the observed children were also belted."[30] Efforts to increase the number of drivers who are properly restrained will also increase the likelihood that our children will be properly restrained. In 2017, legislation passed in Kansas increased the fine for those who are unrestrained. The Board is hopeful that additional legislation will help decrease the number of Kansas children who are unrestrained.

DECREASE DISTRACTED DRIVING

Citizens and lawmakers should support efforts in Kansas to promote and encourage individuals to reduce the use of hand-held devices while operating a motor vehicle. According to the State of Kansas Triennial Highway Safety Plan Federal Fiscal Year (FFY) 2024-2026 "Distracted or inattentive driving is listed as a contributing circumstance for about 25% of all reported crashes in the state."[30] Furthermore, according to the State of Kansas Triennial Highway Safety Plan 2024-2026, teen drivers are involved in 20% of fatal and serious injury crashes related to distracted driving. This rate is three times higher than anticipated for a demographic that constitutes only 5% of all drivers in Kansas.[30] Ordinances, promotional materials, public service announcements and enforcement of current laws can all be effective ways to encourage Kansas drivers to avoid distractions while driving.

IMPROVE INVESTIGATIONS AND STRENGTHEN PENALTIES FOR PROVIDING ALCOHOL TO MINORS

Five decedents were teen drivers under the influence of drugs and/or alcohol at the time of their crash (2018-2022). Four of these fatalities occurred in 2022. Thorough investigations of social hosting, as well as increased penalties for providing alcohol to children and teens will help deter adults from providing alcohol to children and decrease alcohol-related motor vehicle crashes and deaths. The public should be aware of the dangers of teen drinking.

INCREASE PUBLIC AWARENESS REGARDING PEDESTRIAN DEATHS

Between 2018 and 2022, Kansas experienced 29 pedestrian deaths of children, nine of which were backover deaths. According to KidsAndCars.org, at least 50 children are backed over every week in the United States because a driver did not see the child.[13] Public campaigns to encourage drivers to "look before you leave" should be promoted and drivers should be encouraged to walk completely around their vehicle and ensure children are secured prior to moving their vehicle.

Other efforts that could reduce the number of pedestrian deaths in Kansas include education of children of all ages about the dangers of walking while distracted. According to the Safe Kids Worldwide publication, Alarming Dangers in School Zones, published in October 2016, there are five

teen pedestrian deaths every week in the United States.[34] Walking while distracted by technology, such as cell phones, earbuds, and headphones, increases the risk of pedestrian injury and should be avoided. Furthermore, reminders to children and youth to look both ways before crossing a road, and to avoid foot or bike travel at night could aid in preventing pedestrian deaths.

RECOMMENDATIONS TO PREVENT SLEEP-RELATED DEATHS

INCREASE EDUCATION ON SAFE SLEEP FOR PARENTS AND CAREGIVERS

Hospitals with obstetrical services in Kansas have adopted policies regarding safe sleep of infants while hospitalized, and education of all parents prior to discharge from the hospital. The board supports these policies and practices, and encourages hospitals to include statistics on sleep-related deaths and provide regular monitoring of practices and messaging in the hospitals to assure accuracy and consistency in supporting the **ABC**s of safe sleep: **A**lone on their **B**acks in a **C**rib.

Professionals should use sleep-related suffocation language to clarify for parents that in many cases of sleep-related deaths, children do not die from unexplained reasons but due to overlay, positional asphyxia and other forms of suffocation/strangulation. Parents and caregivers should always comply with the ABCs of safe sleep at every sleep time and place. Enhanced education and provision of consistent messages about safe sleep is critical for primary care physicians, child care providers and at-risk populations in the state, including low-income and adolescent parents.

Required training for DCF investigators and support workers regarding safe sleep should be considered since home visits are an additional educational opportunity for at risk parents. The Board is encouraged that DCF continues to take steps to train workers in safe sleep practices.

In FY 2024, seven employees from DCF attended the Safe Sleep Certification Training to become certified Safe Sleep Instructors (SSI). This brought the number of active SSIs at DCF to 30. Also in FY 24, DCF provided 14 two-hour, virtual “Wrestling with Safe Sleep” sessions with participants that included 122 DCF staff and the 62 Child Welfare Case Management Providers.

For all prevention and protection service assessments involving a child under the age of one, DCF policy requires the child protection service assess the infant’s sleep environment and provide information and resources if indicated. The agency goal is to train all DCF staff in safe sleep practices, partner with other community agencies to host Community Baby Showers and provide Crib Clinic sessions to families served by the agency. Families receiving DCF services in need of additional resources may be eligible to receive free portable cribs, wearable blankets, and/or other supplies to provide safe sleep environments for their infants.

INCREASE EDUCATION AND ENFORCEMENT OF SAFE SLEEP PRACTICES IN LICENSED CHILD CARE SETTINGS

While reviewing child fatalities each year, the Board has found instances of children dying in the care of unlicensed child care providers or providers that are not current on their license requirements. K.S.A. 65-501 requires persons maintaining a child care facility for children under 16 to be licensed. If someone is found to be out of compliance after remedial measures have been attempted, the current Kansas statute authorizes the person to be prosecuted by the County Attorney for an unclassified misdemeanor. If the provider is found guilty, the current penalty is between $5 and $50 per day they

are out of compliance. Through enhanced monitoring, enforcement, higher fines and increased prosecution, the Board hopes that the quality of child care available to Kansas children will be improved.

RECOMMENDATIONS TO PREVENT UNINTENTIONAL INJURY DEATHS

STRENGTHEN REQUIREMENTS FOR PERSONAL FLOTATION DEVICE USE IN PUBLIC WATERS

Citizens and lawmakers should support efforts to establish a minimum requirement that any person age 12 or under who is on board any watercraft in the waters of Kansas or who is wading or swimming in navigable public waters shall wear a personal flotation device that is approved by the United States Coast Guard. Between the years of 2018 and 2022, 40% (16) of the drowning deaths of children in Kansas occurred in open water. Personal flotation devices were not used in 88% of open water drowning deaths. Ensuring that Kansas children are able to swim and are properly outfitted with personal flotation devices will save lives.

PROMOTE THE USE OF STANDARDIZED DROWNING INVESTIGATION TOOL

In 2022, the Kansas Child Death Review Board entered into agreement with the National Center for Fatality Review and Prevention to become one of the seven pilot states participating in the Drowning Case Registry Project. This project seeks to standardize drowning death scene investigations by creating an easy-to-use tool referred to as the DSI or Drowning Death Scene Investigation form. Kansas's participation will require collaboration between law enforcement and coroners to collect information using the DSI form. From there, the SCDRB will ensure a timely review of the death and work towards providing feedback for prevention efforts. The project goals are to address the lack of a nationally standardized drowning investigation process and to collect data to help lower the poor outcomes overall and the disparities that have been observed in past reviews. Use of the DSI form should be used in all drowning deaths of children.

RECOMMENDATIONS TO IMPROVE THE QUALITY OF INVESTIGATIONS AND PROSECUTION OF CHILD DEATHS AND NEAR FATALITIES

IMPROVE THE QUALITY OF LAW ENFORCEMENT INVESTIGATIONS FOR INFANT DEATHS

Referrals made to law enforcement regarding child abuse and neglect should be investigated by trained and experienced investigators. Law enforcement and other death investigators should expand their knowledge of child fatality investigations through high quality training including implementation of the Center for Disease Control's Sudden Unexpected Infant Death Investigation Reporting Form (SUIDI) and Sudden Death in the Young (SDY) protocols, and the use of scene recreation and photography. Each year the Board reviews deaths of infants in which law enforcement did not collect adequate information in the investigation for the Board to determine a cause of death.

The Board recommends that Kansas law enforcement adopt procedures based upon best practices regarding the investigation of child abuse or neglect and child death investigations and that a portion of each law enforcement officer's annual training include training on child physical abuse and neglect and sexual abuse. Once adopted, training should be conducted with all law enforcement officers to

ensure they understand the scope and extent of the investigation necessary in all infant deaths. Those standards for investigation should be carried out consistently among officers in all jurisdictions.

IMPROVE THE QUALITY OF PROSECUTORIAL DECISION-MAKING REGARDING INFANT DEATHS

All prosecutors tasked with reviewing infant death cases should have specialized knowledge and experience in child death investigations and child abuse/neglect or should consult with other prosecutors with such specialized knowledge and experience to assist in reviewing evidence in cases where criminal conduct is suspected. Particularly, child abuse homicide cases require a heightened level of knowledge and experience in order to reach informed, well-reasoned decisions that are consistent throughout the state.

Prosecutors should also work with local law enforcement agencies, DCF, and child advocacy centers to assure a coordinated effort toward using a best practices approach to the investigation of all allegations of abuse and neglect.

IMPROVE COORDINATION AND COMMUNICATION BETWEEN DCF AND LAW ENFORCEMENT

Kansas DCF should immediately notify law enforcement for investigation in instances where the reported abuse may be criminal in nature. K.S.A. 38-2226 requires a joint investigation if there is a report of child abuse or neglect that indicates serious physical harm or sexual abuse and that action may be required to protect the child. Law enforcement receiving a report of abuse or neglect should assure that a DCF intake is made and that a visual inspection of the child is performed by an investigator with experience in injury assessment, including a CARE referral for children ages 5 and under.

DCF and health care providers, including hospitals, should report any unwitnessed, unexplained or suspicious death or near death of a child to law enforcement for investigation. The Board has reviewed many cases in which law enforcement was either not contacted, or not notified in a timely manner, thus impeding the ability of law enforcement to conduct a thorough investigation. The investigations should be a coordinated effort by DCF and law enforcement to ensure thorough investigations and the safety of surviving children.

IMPROVE THE QUALITY OF FORENSIC INVESTIGATIONS AND AUTOPSIES OF CHILD DEATHS

Forensic investigation currently occurs at the county level, which often leads to inconsistency in the way cases are investigated and autopsied. Kansas should consider coordinated oversight of forensic investigations at a state level. Until that capacity is established, the Kansas State Child Death Review Board recommends new and existing coroners be required to receive adequate continuing education regarding the capacity of their duties and to ensure consistency in investigations and declarations of child death determinations.

Forensic pathologists who perform autopsies of children should continue to use the most up-to-date best practices as established by accreditation agencies, such as the standards published by the National Association of Medical Examiners. Thorough and complete investigations and autopsies are essential for proper death certification and eventual review and analysis of the circumstances of

infant, child and adolescent deaths. Coroners and/or medicolegal death investigators should respond to all unexpected child death scenes and coordinate their investigation with law enforcement. A doll re-enactment with appropriate photo documentation should be completed for sleep-related deaths. Natural unexpected child deaths should proceed to autopsy unless the child has a known terminal condition or the death was not unexpected due to a known chronic debilitating condition. An external examination may be sufficient in select cases of obvious fatal unintentional injury.

The Coroner/Medical Examiner should investigate all:

- Known or suspected non-natural deaths, including those due to violence, trauma, drugs or associated with police action;
- Unexpected or unexplained deaths of infants and children, including those with underlying or chronic illness;
- Deaths occurring under unusual or suspicious circumstances;
- Deaths of children or youth in custody;
- Deaths known or suspected to involve diseases constituting a threat to public health; or
- Deaths of persons not under the care of a physician.

A forensic pathologist should perform the autopsy when the:

- Death is known or suspected to have been caused by violence, trauma, drugs or associated with police action;
- Death occurs in custody of a local, state, or federal institution;
- Death is unexpected and unexplained in an infant or child;
- Death is due to acute workplace injury;
- Death is the result of a motor vehicle crash. Clinical judgment is recommended in the case of delayed deaths;
- Death is caused by or involves apparent injury, including but not limited to electrocution, fire, chemical exposure, intoxication by alcohol, drugs, or poison, unwitnessed or suspected drowning or fall;
- Body is unidentified and the autopsy may aid in identification; or
- Death is unexpected, including those that are sports related, suicides, possible cardiac related and motor vehicle crashes.

GOALS AND HISTORY

The Kansas State Child Death Review Board (SCDRB) 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 findings. The information collected is maintained confidentially and is used to review and analyze the circumstances of each child's death. This review 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 of protecting Kansas children.

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; and
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, the Department for Children and Families, the Kansas Department of Health and Environment, and the Department of Education; four members appointed by the Board of Healing Arts: a district coroner, a pathologist, and two pediatricians; 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.

This multi-disciplinary volunteer Board meets monthly to examine circumstances surrounding the deaths of Kansas children. 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 agencies around the state, the SCDRB is given necessary information needed to examine the circumstances that 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.

METHODOLOGY

PROCESS – KANSAS STATE CHILD DEATH REVIEW BOARD

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 as well as Kansas specific birth and death records as available for deaths occurring in Kansas. For deaths occurring out of state, The Kansas Office of Vital Statistics works with the Missouri Vital Records office to provide birth and death records to the SCDRB for deaths occurring in Missouri. For all other out-of-state deaths, the SCDRB is reliant on each individual state to report the death to the Board and share birth and death records as allowed. The reporting of all deaths of Kansas residents, whether occurring in Kansas or in another state is essential for cases to be consistently reviewed by the SCDRB.

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 that 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 relevant documents. Information obtained by the SCDRB is confidential, with exceptions outlined in K.S.A 22a-243(j).

After all records have been collected, cases are assigned for review and assessment. During the SCDRB's monthly meetings, members present their completed cases orally and discuss the circumstances leading to the death. 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.

RATES OF DEATH

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 that determined by the coroner or what was listed on the death certificate.

The current reporting of data 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 population.

Several figures throughout this report contain data based on small numbers. Rates and percentages based on small numbers can be unreliable due to random error and should be used with caution.

RACE AND ETHNICITY

During the 2022 legislative session, it was requested from members of the Legislature that information related to race and ethnicity be included in future reports when appropriate. Figures throughout the report will refer to the following race/ethnicity groups: American Indian, Asian, Black, Hispanic, and White. However, note that American Indian includes Alaska Native, Asian includes Pacific Islander, Black includes African American, White includes Caucasian and Hispanic includes Latino. Multiple Race indicates two or more races that were Non-Hispanic. Rate of death for some race/ethnicity groups have been suppressed based on small numbers that can be unreliable.

Racial Disparities: While sections of the report show progress in reducing child deaths in Kansas overall, racial disparities in the death data presented still remain, or in some cases have increased in recent years. Further investigation of these disparities can lead to evidence-based interventions to improve death rates for children.

GENDER IDENTITY AND SEXUAL ORIENTATION

During the 2022 legislative session, it was also requested from members of the Legislature that information related to gender identity and sexual orientation be included in future reports where appropriate. While the Board has included this information within the Suicide Deaths section of the report, it should be noted that sexual orientation and gender identity are not consistently reported or provided within the records that are reviewed by the Board. Identifying accurate information on a youth's sexual orientation and gender identity can be challenging. Adolescence is a time of significant self-discovery and identity formation. They may be exploring or developing an understanding of their sexual orientation and gender identity, making it difficult to capture a stable or complete picture. In addition, youth may be reluctant to share information due to fear of judgment or potential repercussions from peers and family. Youth may not have the vocabulary or framework to fully articulate their sexual orientation or gender identity leading to misunderstandings or misclassification. Given that this information can often be kept confidential, unknown, or assumed incorrectly, the information provided in this annual report should be used with caution. More information related to gender identity and sexual orientation as self-reported through the Kansas Communities that Care (KCTC) student survey and can be found at: www.kctcdata.org.

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.

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

APPENDIX A - RESIDENT COUNTY OF DEATH, 2018-2022, N=1877

County	Population Ages 0-17, 2018-2022	Total Deaths, Ages 0-17, 2018-2022	Natural	Unintentional Injury	Homicide	Suicide	Undetermined
Allen	13864	14	9	2	0	0	2
Anderson	10002	6	2	2	0	1	1
Atchison	18252	11	5	0	0	3	3
Barber	4973	2	2	0	0	0	0
Barton	30383	17	8	3	2	1	3
Bourbon	18687	8	3	2	0	1	2
Brown	12093	3	0	2	1	0	0
Butler	84456	31	14	5	2	4	5
Chase	2595	2	1	0	0	0	1
Chautauqua	3474	2	1	1	0	0	0
Cherokee	22391	17	11	4	0	0	2
Cheyenne	2780	2	0	1	0	1	0
Clark	2432	2	0	1	1	0	0
Clay	9411	4	2	1	0	1	0
Cloud	10174	6	3	1	0	0	2
Coffey	8877	4	0	3	0	1	0
Comanche	1973	1	1	0	0	0	0
Cowley	40751	22	10	4	1	4	3
Crawford	42551	19	13	2	0	1	3
Decatur	2787	0	0	0	0	0	0
Dickinson	21304	15	7	4	0	1	3
Doniphan	7954	4	4	0	0	0	0
Douglas	107908	43	23	9	1	2	7
Edwards	3184	4	3	0	0	1	0
Elk	2823	3	2	1	0	0	0
Ellis	30070	8	5	1	0	2	0
Ellsworth	5543	1	1	0	0	0	0
Finney	55335	29	13	9	1	2	4
Ford	50337	35	22	4	1	4	3
Franklin	30156	17	10	6	0	1	0

County	Population Ages 0-17, 2018-2022	Total Deaths, Ages 0-17, 2018-2022	Natural	Unintentional Injury	Homicide	Suicide	Undetermined
Geary	52428	32	21	3	0	4	4
Gove	3307	1	0	0	0	1	0
Graham	2517	1	0	0	0	0	1
Grant	10826	7	3	1	2	0	1
Gray	8441	5	4	1	0	0	0
Greeley	1676	2	1	0	0	0	1
Greenwood	6421	7	5	1	0	1	0
Hamilton	3459	1	0	1	0	0	0
Harper	6717	2	0	0	0	1	1
Harvey	40752	24	16	1	1	0	5
Haskell	5259	2	1	1	0	0	0
Hodgeman	2043	3	2	0	0	0	1
Jackson	16551	19	12	5	0	0	2
Jefferson	20988	9	4	4	0	1	0
Jewell	2924	1	0	0	0	0	1
Johnson	723500	237	152	32	10	29	14
Kearny	5569	3	2	0	0	1	0
Kingman	7943	20	12	3	2	2	1
Kiowa	2855	3	2	0	1	0	0
Labette	23887	8	2	4	1	0	1
Lane	1756	1	1	0	0	0	0
Leavenworth	96572	41	24	5	5	2	5
Lincoln	3251	2	1	0	1	0	0
Linn	10657	6	3	1	0	0	2
Logan	3379	1	0	1	0	0	0
Lyon	36223	19	10	6	0	0	2
Marion	12436	8	5	3	0	0	0
Marshall	11761	6	2	2	0	1	1
McPherson	32717	7	2	3	0	2	0
Meade	5192	4	4	0	0	0	0
Miami	41317	16	6	10	0	0	0

County	Population Ages 0-17, 2018-2022	Total Deaths, Ages 0-17, 2018-2022	Natural	Unintentional Injury	Homicide	Suicide	Undetermined
Mitchell	6895	0	0	0	0	0	0
Montgomery	37229	18	6	5	0	3	4
Morris	5677	2	2	0	0	0	0
Morton	3208	4	2	0	0	1	1
Nemaha	13542	7	1	4	1	1	0
Neosho	19415	17	10	4	0	0	3
Ness	2969	1	1	0	0	0	0
Norton	5099	2	1	1	0	0	0
Osage	18240	10	6	3	1	0	0
Osborne	3741	2	0	1	0	0	1
Ottawa	6523	7	3	1	0	1	2
Pawnee	4964	5	4	0	1	0	0
Phillips	5665	4	4	0	0	0	0
Pottawatomie	36338	17	12	2	0	0	3
Pratt	11073	15	7	6	0	0	1
Rawlins	2792	3	0	3	0	0	0
Reno	68347	37	20	9	0	5	4
Republic	4938	7	1	5	0	0	1
Rice	10747	12	6	2	0	0	4
Riley	59646	28	20	5	2	1	0
Rooks	5383	3	1	1	0	1	0
Rush	3030	5	5	0	0	0	0
Russell	7482	1	0	1	0	0	0
Saline	61962	27	20	4	1	1	1
Scott	6495	3	2	1	0	0	0
Sedgwick	656210	382	220	50	39	24	48
Seward	33611	12	8	1	1	0	2
Shawnee	206063	125	71	22	9	10	13
Sheridan	3086	1	0	1	0	0	0
Sherman	7049	5	2	0	1	1	1
Smith	3634	1	1	0	0	0	0

County	Population Ages 0-17, 2018-2022	Total Deaths, Ages 0-17, 2018-2022	Natural	Unintentional Injury	Homicide	Suicide	Undetermined
Stafford	4868	3	1	2	0	0	0
Stanton	2773	2	1	1	0	0	0
Stevens	7706	8	4	2	1	1	0
Sumner	27471	19	14	1	2	2	0
Thomas	9252	8	5	1	0	1	1
Trego	2537	0	0	0	0	0	0
Wabaunsee	7969	6	4	1	0	0	0
Wallace	1977	2	1	0	0	0	1
Washington	6334	3	0	1	0	1	1
Wichita	2776	2	1	1	0	0	0
Wilson	10207	4	1	2	0	0	1
Woodson	3187	2	2	0	0	0	0
Wyandotte	227899	166	81	31	22	6	26
Out of State		67	36	22	5	2	2
Total	**3496853**	**1877**	**1059**	**353**	**119**	**138**	**208**

REFERENCES

1. Commission to Eliminate Child Abuse and Neglect Fatalities. (2016). *Within our reach: A national strategy to eliminate child abuse and neglect fatalities*. Washington, DC: Government Printing Office. Retrieved September 4, 2024, from https://www.acf.hhs.gov/sites/default/files/documents/cb/cecanf_final_report.pdf

2. Office of Disease Prevention and Health Promotion. (n.d.). *Healthy People 2030, Browse objectives: Infants*. U.S. Department of Health and Human Services. Retrieved September 9, 2024, from https://health.gov/healthypeople/objectives-and-data/browse-objectives/infants

3. Kansas Department of Health and Environment. (n.d.). *2021 Annual Summary of Vital Statistics*. Retrieved September 9, 2024, from https://www.kdhe.ks.gov/DocumentCenter/View/25772/2021-Annual-Summary-Full-Report-?bidId=

4. Beacham, B. L., & Deatrick, J. A. (2014). *Children with chronic conditions: Perspectives on condition management.* Journal of Pediatric Nursing. U.S. National Library of Medicine. https://pubmed.ncbi.nlm.nih.gov/25458105/ Retrieved July 26, 2024.

5. Donovan, E. F., Ammerman, R. T., Besl, J., Atherton, H., Khoury, J. C., Altaye, M., Putnam, F. W., & Van Ginkel, J. B. (2007). *Intensive home visiting is associated with decreased risk of infant death. Pediatrics*. U.S. National Library of Medicine. https://pubmed.ncbi.nlm.nih.gov/17545382/ Retrieved September 3, 2024.

6. Moon, R. Y., Carlin, F.R., & Hand, I. (2022). *Sleep-related infant deaths: Updated 2022 recommendations for reducing infant deaths in the sleep environment*. Pediatrics. American Academy of Pediatrics. https://publications.aap.org/pediatrics/article/150/1/e2022057990/188304/Sleep-Related-Infant-Deaths-Updated-2022 Retrieved September 9, 2024.

7. Centers for Disease Control and Prevention. (2018, February 8). *Vital signs: Asthma in children - United States, 2001–2016*. https://www.cdc.gov/mmwr/volumes/67/wr/mm6705e1.htm Retrieved July 23, 2024.

8. National Heart, Lung, and Blood Institute. (2012). *Guidelines for the diagnosis and management of asthma 2007 (EPR-3)*. U.S. Department of Health and Human Services. Retrieved August 27, 2024, from https://www.nhlbi.nih.gov/health-topics/guidelines-for-diagnosis-management-of-asthma

9. Centers for Disease Control and Prevention. (2023, May 23). *About SUID and SIDS.* Retrieved September, 2024 from https://www.cdc.gov/sudden-infant-death/about/index.html

10. Centers for Disease Control and Prevention. (2023, April 27). *Youth risk behavior surveillance system (YRBSS).* https://www.cdc.gov/healthyyouth/data/yrbs/index.htm Retrieved August 14, 2024.

11. United States Congress. (2022). *The Safe Sleep for Babies Act of 2021 Public Law 117–126 117th Congress*. Retrieved August 27, 2024, from https://www.congress.gov/117/plaws/publ126/PLAW-117publ126.pdf

12. United States Department of Agriculture. (2020, September). *Reducing the risk of choking in young children at mealtimes*.https://wicworks.fns.usda.gov/sites/default/files/media/document/English_ReducingRiskofChokinginYoungChildren.pdf Retrieved August 29, 2024.

13. KidsAndCars.org. (2022, August 25). *Backovers*. https://www.kidsandcars.org/how-kids-get-hurt/backovers/ Retrieved August 29, 2024.

14. U.S. Consumer Product Safety Commission. (May, 2024). 2023 *Report of deaths and injuries involving off-highway vehicles with more than two wheels*. Retrieved August 14, 2024, from https://www.cpsc.gov/s3fs-public/2023_Report_of_Deaths_and_Injuries_Involving_Off-Highway_Vehicles_with_More_than_Two_Wheels%20%28002%29.pdf

15. National Highway Traffic Safety Administration. (n.d.). *Seat belts*. National Highway Traffic Safety Administration. Retrieved August 2, 2024, from https://www.nhtsa.gov/risky-driving/seat-belts

16. National Highway Traffic Safety Administration. (n.d.). *Distracted driving*. National Highway Traffic Safety Administration. Retrieved August 2, 2024, from https://www.nhtsa.gov/risky-driving/distracted-driving

17. National Highway Traffic Safety Administration. (n.d.). *Teen driving*. National Highway Traffic Safety Administration. Retrieved July 29, 2024, from http://www.nhtsa.gov/road-safety/teen-driving

18. The National Center for Fatality Review and Prevention. (2023, June 1). *Drowning case registry*. NCFRP. Retrieved July 26, 2024, from https://ncfrp.org/cdr/drowning-case-registry/

19. HealthyChildren.org. (2020, July 13). *Pool dangers and drowning prevention—When it's not swimming time*. Healthy Children. Retrieved August 12, 2024, from https://www.healthychildren.org/English/safety-prevention/at-play/Pages/Pool-Dangers-Drowning-Prevention-When-Not-Swimming-Time.aspx

20. HealthyChildren.org. (2019, November 5). *Infant water safety: Protect your new baby from drowning*. Healthy Children. Retrieved July 16, 2024, from https://www.healthychildren.org/English/safety-prevention/at-play/Pages/Infant-Water-Safety.aspx

21. National Agricultural Statistics Service. (2022). *Kansas state-level data* (Vol. 1, Chap. 1). U.S. Department of Agriculture. Retrieved September 10, 2024, from https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_1_State_Level/Kansas/st20_1_001_001.pdf

22. Kansas Farm Bureau. (2023, May 23). *2023 State safety poster program results*. KFB. Retrieved August 18, 2024, from https://www.kfb.org/Article/2023-State-Safety-Poster-Program-Results

23. Wilson, R.F, Fortson, B. L., Zhou, H., Lyons, B. H., Sheats, K.J., Betz, C.J., Blair, J.M., Self-Brown, S., (2022, December, 19). *Trends in homicide rates for US children aged 0 to 17 years, 1999 to 2020. JAMA Pediatrics*, *177*(5), 456-464. Retrieved on September 23, 2024, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9856621/

24. Centers for Disease Control and Prevention, National Center for Health Statistics. *National Vital Statistics System, Mortality 2018-2022 on CDC WONDER Online Database, released in 2024.* Data are from the Multiple Cause of Death Files, 2018-2022, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at https://wonder.cdc.gov/ucd-icd10-expanded.htmlon Sep 10, 2024

25. Kansas Communities That Care. (2024, April). *2023 SOGI demographics summary*. Retrieved September 9, 2024, from https://kctcdata.org/wp-content/uploads/2024/04/2023-SOGI-Demographics-Summary.pdf

26. World Health Organization. (2018). *Preventing suicide: a community engagement toolkit*. World Health Organization. Retrieved September 13, 2024 from https://www.who.int/publications/i/item/9789241513791 License: CC BY-NC-SA 3.0 IGO

27. Centers for Disease Control and Prevention. (2024). *Drug Overdose deaths in the United States, 2002-2022* (NCHS Data Brief No. 491). Retrieved August 29, 2024, from https://www.cdc.gov/nchs/data/databriefs/db491.pdf

28. National Institute on Drug Abuse. (2023). *Fentanyl drug facts*. U.S. Department of Health and Human Services. Retrieved August 16, 2024, from https://nida.nih.gov/publications/drugfacts/fentanyl

29. Kansas Department of Health and Environment. (2019, January). *Kansas power of the positive*. KDHE. Retrieved August 28, 2024, from https://www.kdhe.ks.gov/1211/kansas-power-of-the-positive

30. Kansas Department of Transportation (2024)"*Triennial Highway Safety Plan FFY 2024-2026*.Retrieved September 10, 2024 from www.ksdot.gov/Assets/wwwksdotorg/bureaus/burTrafficSaf/reports/reportspdf/KS_3HSP_2024-2026.pdf.

31. U.S. Department of Health and Human Services. (n.d.). *Parents under pressure: The U.S. Surgeon General's Advisory on the Mental Health & Well-Being of Parents*. Retrieved September 13, 2024 from https://www.hhs.gov/sites/default/files/parents-under-pressure.pdf

32. United States Drug Enforcement Administration. (n.d.). *DEA one pill can kill social media campaign*. DEA.gov. Retrieved August 4, 2024, from https://www.dea.gov/onepill/social-media

33. Centers for Disease Control and Prevention, National Center for Health Statistics. (2024). *National Vital Statistics System, Mortality 2018-2022 on CDC WONDER Online Database*. Data compiled from the Multiple Cause of Death Files, 2018-2022, provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved September 6, 2024, from http://wonder.cdc.gov/ucd-icd10-expanded.html

34. Safe Kids Worldwide. (2016, October). *Alarming dangers in school zones*. Retrieved July 15, 2024, from www.safekids.org/sites/default/files/alarming_dangers_in_school_zones.pdf

35. Kansas Legislative Research Department. (2022). *Mental health beds committee report*. Kansas Legislative Research Department. Retrieved August 8, 2024 from https://www.kslegresearch.org/KLRD-web/Committees/Committees-Spc-2022-Mental-Health-Beds.html.

36. Kansas Communities That Care. (2023). *KCTC student survey*. Retrieved September 9, 2024, from www.kctcdata.org

37. U.S. Department of Health and Human Services. (2023). *Our Epidemic of Loneliness and Isolation: The U.S. Surgeon General's advisory on social connection and community*. Retrieved September 13, 2024 from https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf

38. Kansas Legislature. (2024). *2023 Special Committee on Mental Health to the 2024 Kansas Legislature*. Retrieved September 13, 2024 from https://www.kslegislature.gov/li/b2023_24/measures/documents/ctte_spc_2023_special_committee_on_mental_health_1_2024_interim_ctte_report.pdf

39. Connect with IRIS. (n.d.). *CARE Program Kansas*. Retrieved September 13, 2024 from https://connectwithiris.org/knowledgebase/care-program-kansas

40. Kansas Department for Children and Families. (2023, November 3). *Kansas TITLE IV-B Family Services Plan Annual Progress and Services Report (APSR) 2024.* Retrieved September 13, 2024 from https://www.dcf.ks.gov/services/PPS/Documents/FY2024DataReports/Public%20Website%20Documents/Kansas%20TITLE%20IV-B%20APSR%202024%2011.3.23%20accessible.pdf

State Child Death Review Board
120 SW 10th Ave, 2nd Floor
Topeka, KS 66612-1597
(785) 368-7376
(785) 296-7796 (Fax)
www.ag.ks.gov/scdrb