Arizona Child Fatality Review Team

32nd Annual Report
November 15, 2025

Mission: To reduce preventable child fatalities in Arizona through a systematic, multi-disciplinary, multi-agency, and multi-modular review process. Prevention strategies, interdisciplinary training, community-based education, and data-driven recommendations and are derived from this report to aid legislation and public policy.

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Dedication:

We dedicate this report to the memory of the children and families represented within these pages. Their stories inspire us to continue working to improve the health of all children in Arizona.

Acknowledgements:

The Arizona Department of Health Services (ADHS) would like to acknowledge Dr. Mary Rimsza, MD, founding member and Chair of the Arizona Child Fatality Review Program (CFRP), and Susan Newberry, MEd, founding member and Arizona CFRP Contractor.

ADHS would also like to acknowledge the ten local CFRP teams and their coordinators in Arizona, whose persistent efforts resulted in 100% of child fatality reviews being conducted, aiding in the development of prevention recommendations. Additionally, ADHS would like to acknowledge the Sudden Unexpected Infant Death (SUID) and Neglect/Abuse deaths second-level review teams, who review cases that are classified as SUID or Neglect/Abuse deaths by the local CFRP teams to ensure proper classification. Second-level reviews of SUID and Neglect/Abuse deaths are done at the state level by subcommittees of the State Team. A complete list of second-level and local CFRP review members is in Appendix C. Because of their dedicated time and volunteer commitment to the program, all child deaths in Arizona are reviewed to determine steps, if any, that could have prevented the child's death from occurring. It is due to their expertise and extensive experience with the program that this report is made possible.

Lastly, the CFRP acknowledges the 22 Tribal Nations who have stewarded this land since time immemorial, recognizing their people, culture, and history.

ADHS aspires to present data humbly, recognizing that numbers never tell the whole story. We strive to work with individuals and communities to learn from and share their stories, thereby improving collective understanding. Recognizing that people across diverse life circumstances face inequitable opportunities to achieve optimal health, we commit to pairing numbers and stories to inform policy and systems change, ultimately improving health for all.

Photo Credit:

Philippe Hugonnard took the image on the front cover and section covers. The photo is available here: https://www.photowall.com/us/black-arizona-cactus-forest-wallpaper.

Submitted To:

The Honorable Katie Hobbs, Governor, State of Arizona
The Honorable Warren Petersen, President, Arizona State Senate
The Honorable Steve Montenegro, Speaker, Arizona State House of Representatives
This report is provided as required by A.R.S. §36-3501. C.3.

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Intended Audience:

This is a technical report on the analysis of the incidence and causes of infant and child deaths in Arizona. This report is primarily aimed at those actively improving child and infant health, including healthcare providers, policymakers, participating agencies, schools, community-based organizations, researchers, families, caregivers, and other relevant stakeholders. The key findings presented in this report should assist in the identification of future targets for intervention and guide effective and evidence-based efforts toward the reduction of preventable deaths for our Arizona children.

This publication can be made available in alternative formats. Contact the CFRP at (602) 542-1875 (voice) or individuals with hearing or speech challenges, call 711 for Relay. For questions, contact aeval@azdhs.gov.

Disclaimers to the Annual Report:

Public Health and Vital Statistics:

This report's data may differ from that published by the Business Intelligence Office (BIO). BIO only reports data on Arizona residents, whereas the CFRP investigates and reports on the deaths of all children who die in Arizona, regardless of state residency.

Department of Child Safety (DCS) / Child Protective Services (CPS):

This report's data may differ from those published by the Department of Child Safety (DCS) / Child Protective Services (CPS), as the CFRP and DCS/CPS have different definitions of child Neglect/Abuse. The CFRP works closely with DCS/CPS to further improve our surveillance of child Neglect/Abuse. A more detailed explanation, including the DCS definition of neglect and abuse, can be found in Appendix A.

Race/Ethnicity Referencing:

The variables for race and ethnicity are based on specifications established by the Federal Office of Management and Budget (OMB) and the Arizona State Demographer, with specifications developed by the ADHS Vital Statistics. Consistent with the OMB methodology, the web-based reporting system allows multiple race categorizations consistent with the U.S. Census enumerations.[1] For instance, individuals were asked to provide their ethnicity (i.e., Hispanic or Latino and/or Non-Hispanic or non-Latino) and race according to standard race categories (i.e., White, Black/African American, American Indian/Alaska Native, Asian/Pacific Islander). Additionally, if one of the OMB categories does not apply, selecting "Other" allows providers to input specific race designations [1]

This year's report continues by combining, or bridging, race/ethnicity for individuals identified as Hispanic and one other race, which was introduced in the 2012 Arizona Health Status and Vital Statistics Report.[161] In this method, individuals identified as Hispanic plus another race are included in the race/ethnicity category with the lowest population in the state. This approach to bridging is defined as the smallest group deterministic whole method.[2] In this method, individuals identified as both White and Hispanic are classified as Hispanic. In contrast, individuals identified as Hispanic and any other race (Black or African American, American Indian or Alaska Native, and Asian or Pacific Islander) are categorized by their racial identification. This method allows us to match the categories of race/ethnicity used by the Arizona Department of Administration to create the population projections used as denominators in this report, as well as to create more meaningful racial/ethnic categories by placing individuals identified with both race and ethnicity into the group representing a smaller proportion of Arizona's population.

Due to spacing issues, figures throughout the report will refer to the following race/ethnicity groups: American Indian, Asian, Black, Hispanic, and White. However, please note that American Indians include Alaska Natives, Asians include Pacific Islanders, Blacks include African Americans, and Hispanics include Latinos. All text accompanying the figures will be inclusive.

Data Suppression:

To protect the identities of individuals and their families, non-zero counts of fewer than six are suppressed. Percentages are not calculated for these suppressed values.

Prevention Recommendations:

The prevention recommendations developed by the CFRP State Team do not necessarily reflect the official views of ADHS or the State of Arizona. The recommendations presented in this report are based on input from the local review team and a literature review conducted by the CFRP. The top five recommendations in each section reflect those prioritized by the State CFRP Team at various State CFRP Team Meetings. The recommendations prioritized here were based on whether the action would drive significant systematic improvements in child fatality prevention, if it would benefit a broad group of people, and if it would help reduce health inequalities and lead to better health results.

Urban and Rural Area Designation:

For this report, the following areas in Arizona were classified as urban: the Phoenix-Scottsdale-Mesa Metropolitan Statistical Area (comprising Maricopa and Pinal Counties), the Tucson Metropolitan Statistical Area (Pima County), and the Yuma Metropolitan Statistical Area (Yuma County). The remaining counties (Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Mohave, Navajo, Santa Cruz, and Yavapai) were considered rural. This designation was introduced in the 2012 Arizona Health Status and Vital Statistics Report.[2]

Infant Mortality Rate & Sudden Unexpected Infant Death Mortality Rate Reporting:

In previous reports, the population denominator used to calculate infant mortality rates and sudden unexpected infant death (SUID) mortality rates included the number of live births in Arizona among Arizona residents in the reported year. However, as determined by Arizona State statute (§ 36-3501), CFRP investigates and reports the deaths of all children who die in Arizona regardless of state residency. To ensure rates were calculated correctly, the population denominator was recalculated to include live births in Arizona, regardless of the state of residency. This has resulted in changes to both infant mortality rates and SUID mortality rates from 2014 onward. As such, the infant and SUID mortality rates reported here may not align with previously reported numbers. Using the correct population denominator gives a more accurate representation of both infant mortality and SUID mortality rates.

Prematurity Mortality Rate Reporting:

In previous reports, the population denominator used to calculate the prematurity mortality rate included the number of premature births among Arizona residents. However, as determined by Arizona State statute (§ 36-3501), CFRP investigates and reports the deaths of all children who die in Arizona regardless of state residency. To ensure accurate rate calculations, the population denominator was recalculated to include all premature births in Arizona, regardless of the state of residency. This change has affected prematurity mortality rates since 2015. As a result, the prematurity rates presented in this report will differ from those published in earlier reports. Using the correct population denominator gives a more accurate representation of the prematurity mortality rates in Arizona.

Congenital Syphilis Rate Reporting:

The syphilis and STD data in this report may differ from those published by the Sexually Transmitted Infection Control Team at ADHS. This team conducts surveillance and monitors sexually transmitted diseases in Arizona using the ADHS STDCP surveillance system PRISM (Patient Reporting Investigation Surveillance Manager). In contrast, the CFRP investigates all child deaths identified through vital records and records submitted by the local teams. Due to these differing methodologies, the syphilis and STD data are not directly comparable.

Acronyms:

AAP – American Academy of Pediatrics

ACEs – Adverse Childhood Experiences

ADES – Arizona Department of Economic Security

ADHS – Arizona Department of Health Services

AHCCCS – Arizona Health Care Cost Containment System

AMCB – American Midwifery Certification Board

ASHLine – Arizona Smokers Helpline

ATV – All-Terrain Vehicle

CFR – Child Fatality Review

CFRP – Child Fatality Review Program

CMs – Certified Midwives

CNMs – Certified Nurse-Midwives

CPMs – Certified Professional Midwives

CPR – Cardiopulmonary Resuscitation

CPS – Child Protective Services

DCS – Arizona Department of Child Safety

IHS – Indian Health Services

MVC – Motor Vehicle Crash

NARM – North American Registry of Midwives

NHTSA – National Highway Traffic Safety Administration

OAR Line – Opioid Assistance Referral Line

PROM – Premature Rupture of Membrane

RSV – Respiratory Syncytial Virus

SEN – Substance Exposed Newborn

SUID – Sudden Unexpected Infant Death

SUV – Sports Utility Vehicle

TANF – Temporary Assistance for Needy Families

USA – United States of America

Glossary:

Accidental Injury – An injury that occurs without intent to cause harm or death, also known as an unintentional injury.

Adverse Childhood Experiences (ACEs) – Potentially traumatic events (i.e., abuse, neglect, household dysfunction) that occur before the age of 18. ACEs can include violence, abuse, and growing up in a family affected by mental health or substance use problems. The toxic stress caused by ACEs can disrupt brain development and affect how the body responds to stress.

Cause of Death – The illness, disease, or injury responsible for the death. Examples of natural causes include heart defects, asthma, and cancer. Injury-related causes include blunt force impact, burns, and drowning.

CFRP Data Form – A standardized form approved by the State CFRP Team, required for collecting data on all child fatality reviews.

Child Fatality Review Program (CFRP) – Established within ADHS, the CFRP provides administrative and clerical support to the State Team, offers training and technical assistance to Local Teams, and develops and maintains the data system.

Child Protective Service (CPS) History with Family – Review teams consider a family as having previous involvement with a CPS agency (including tribal DCS) if the agency investigated a report of Neglect/Abuse for any child in the family before the incident leading to the child's death.

Child Relationship Issues – Child relationship issues are identified as a factor when records show concerns about isolation, arguments, or discord with family, friends, significant others, and social discord.

Child's Chronic Condition – An illness that has a substantial long-term effect on the child's day-to-day function or health, including medical, orthopedic, cognitive, sensory, mental health, and substance use disorder.

Choking – The inability to breathe due to blockage, constriction, or swelling of the trachea (airway).

Confidentiality Statement – A form that all review process participants must sign, containing statutory information regarding the confidentiality of data reviewed by local child fatality teams.

Congenital Syphilis – A disease occurring when a mother with syphilis, a sexually transmitted infection, passes the infection to her baby during pregnancy or at childbirth.

COVID-19 – A disease caused by the SARS-CoV-2 virus. A COVID-19 death is one where COVID-19 is identified as the immediate or underlying cause of death.

Death of a Loved One – Identified as a factor when documentation reveals concern about the death of a close peer, friend, or family member of the child.

Drowning Death – Death from an accidental or intentional submersion in a body of water.

Firearm Injury Death – Death caused by an injury resulting from the penetrating force of a bullet or other projectile fired from a powder-charged gun.

Fire/Flame Death – Death caused by injury from severe exposure to flames or fire heat, leading to tissue damage or smoke inhalation in the upper airway, lower airway, or lungs.

History of Trauma/Violence – Refers to the child being a victim of physical or emotional abuse or experiencing family violence, domestic violence, social violence, or peer violence, including being a victim of rape.

Homicide – Death resulting from injuries inflicted by another person with the intent to cause fear, harm, or death.

Infant – A child under one year of age.

Infectious Disease-Related Death – Death in which an infectious disease caused or contributed to the death. Infectious diseases are caused by organisms (such as bacteria, viruses, and fungi) that can be transmitted, directly or indirectly, from person to person, making them contagious (communicable).

Intentional Injury – An injury resulting from the deliberate use of force or purposeful action against oneself or others. Intentional injuries include interpersonal acts of violence intended to cause harm, criminal negligence or neglect (i.e., homicide), and self-directed behavior with intent to kill oneself (i.e., suicide).

Local CFRP Team – A multi-disciplinary team authorized by the State CFRP Team to conduct reviews of child deaths within a specific geographic area, i.e., county, reservation, or other geographic area.

Manner of Death – The circumstances of the death as determined by CFRP teams through postmortem examinations, death scene investigations, police reports, medical records, or other reports. Categories include natural, accident (i.e., unintentional injury), homicide (i.e., intentional injury), suicide (i.e., deliberate injury), and undetermined.

Maternal Infection – Any infection in the mother during pregnancy, childbirth, or breastfeeding that can be vertically transmitted to her baby and cause disease.

Medical Error – An unintentional act, either an omission or commission, that deviates from the accepted standard of care or intended plan of action.

Motor Vehicle Crash-Related Death (MVC) – Death caused by injuries from a motor vehicle incident, including injuries to motor vehicle occupant(s), pedestrian(s), pedal cyclist(s), or others.

Natural Death – A death classified as a natural death when caused by a medical condition.

Near Death/ Near Fatality – Defined by DCS as a death caused by abuse, abandonment, or neglect if:

- The perpetrator is charged with an offence related to the incident;
- A superior court finds a child dependent based on the allegations of abuse or neglect leading to the near-death; or
- DCS, through its own internal review and administrative appeal process, substantiates findings linking the allegations of abuse or neglect to the near-death experience.
- Further, if the posting is on a near-death, a medical professional must determine that the child was in a serious or critical condition.

Neglect – Failure to provide appropriate and safe supervision, food, clothing, shelter, or medical care that causes or contributes to a child's death.

Neglect/Abuse-Related Death – A death in which an act of neglect, physical abuse, sexual abuse, or emotional abuse contributed to a child's death as determined by the Second Level Neglect and Abuse Team.

Neonatal Infants – A baby within the first 28 days (four weeks of life).

Parental Substance Use History – Identified as a risk factor when available documentation shows current, past use of, or in addition to, alcohol or other drugs.

Perinatal Conditions – Health issues occurring during the perinatal period, defined by the World Health Organization as the time between 22 weeks of gestation and seven days after birth.

Perpetrator – Individual identified as a possible perpetrator of physical, sexual, or emotional abuse or neglect. Caregivers may include individuals supervising the child, such as parents, parents' partners, friends, neighbors, childcare providers, or household members.

Physical Abuse – The infliction of bodily harm, whether the inflictor planned to carry out the act or inflicted harm. This includes abuse occurring on or around the time of death or any prior abuse contributing to the child's death. Note: Firearm injury deaths inflicted by a parent, guardian, or caregiver are included under this category of abuse and neglect.

Poverty –Identified as a risk factor when documentation shows the child's family has limited financial resources and may live below the federal poverty level. This includes, but is not limited to, recipients of Temporary Assistance for Needy Families (TANF), Medicaid, Food Stamps, and Section 8 Housing.

Postneonatal Infants – A baby in the period between 28 days and one year of age.

Premature Rupture of Membrane (PROM) – The rupture or breaking open of the membranes (amniotic sac) before labor begins, in a patient beyond 37 weeks' gestation.

Prematurity Death – A death resulting from premature birth (less than 37 weeks of gestation) in an infant without underlying medical conditions that would otherwise cause death. Perinatal conditions are included if the birth was premature.

Preventable Death – A child's death is considered preventable if actions by the community or an individual could have altered the circumstances leading to the death. This includes reasonable medical, educational, social, legal, or psychological interventions that could have prevented the death from occurring. The actions or inactions of the community, family, and individual's actions (or inactions) are considered when making this determination.

Record Request Forms – The form required to request records for conducting a team review.

Rural Counties in Arizona – As defined by the 2012 Arizona Health Status and Vital Statistics Report,[2] Arizona's rural areas include Apache, Cochise, Coconino, Gila, Graham, Greenlee, La Paz, Mohave, Navajo, Santa Cruz, and Yavapai counties.

School Issues – Identified as a factor when documentation shows concerns related to school failure, pressure to succeed, issues with extracurricular activities, issues with being in a new school, or other school-related problems.

Sleep-Related Death – A unique category of infant injury deaths that includes select injury causes (accidental suffocation in bed, unspecified threat to breathing, and undetermined causes), where the infant was last known to be asleep when last seen alive.

Substance Use – Defined by CFRP as deaths in which substance use was found as a direct or contributing factor. The substances used could include illegal drugs, prescription drugs, or alcohol. To identify substance use as a factor, each case was reviewed to determine if any individual involved in the death of a child used substances such as illegal drugs, prescription drugs, or alcohol. The individual could have been the child's parent or caretaker, an acquaintance, a stranger, or the child, and the substance use occurred proximate to the time of the incident leading to the death.

Suffocation – Oxygen deprivation caused by mechanical obstruction of air passage into the lungs, usually at the level of the nose or mouth.

State CFRP Team – Established under A.R.S. 36-3501 et seq., the State CFRP Team oversees Local CFRP teams, prepares an annual report of review findings, and develops recommendations to reduce preventable child deaths.

Strangulation – The mechanical constriction of structures in the neck, restricting airflow or blood flow.

Substance Exposed Newborn (SEN) – A newborn who was exposed to alcohol and/or a controlled substance (illicit or prescribed) while in the womb. This exposure can be determined by the childbearing parent's history, the newborn's clinical presentation, and laboratory testing of biological specimens (i.e., urine, blood, oral fluid, sweat, hair, and breast milk), neonatal matrices (i.e., urine, meconium, hair, and umbilical cord blood and tissue), and matrices from both the childbearing parent and neonate (i.e., placenta and amniotic fluid).

Sudden Unexpected Infant Death (SUID) – Death of a healthy infant for which no underlying medical condition was identified as a cause of death. This includes deaths formerly categorized as "crib deaths" if the death occurred during sleep. However, not all these deaths are sleep-related. Most SUIDs are associated with suffocation and unsafe sleep environments.

Suicide – A death resulting from a self-directed, intentional behavior where the intent is to die because of that behavior.

Tribal CPS – Child protective services (CPS) agencies and programs operated by Native American tribes, responsible for protecting tribal members, particularly children, from abuse, neglect, or exploitation.

Undetermined – A classification used when the CFRP Team cannot determine the manner of death, whether natural, accident, homicide, or suicide. Death may be listed as undetermined because there is insufficient information available for review.

Urban Counties in Arizona – As defined by the 2012 Arizona Health Status and Vital Statistics Report,[2] Arizona's urban areas include the Phoenix-Scottsdale-Mesa Metropolitan Statistical Area (comprising Maricopa and Pinal Counties), the Tucson Metropolitan Statistical Area (Pima County), and the Yuma Metropolitan Statistical Area (Yuma County).

Letter from the Chair of the CFRP Team:

The report summarizes the findings from the CFRP review of all 791 child deaths that occurred in Arizona in 2024. The child mortality rate decreased from 2023. The mission of the CFRP is to systematically review every child death in our state annually to make recommendations on how to prevent child deaths. The local CFRP review teams determined that 48% (380) of these deaths were preventable. The most common causes of these preventable deaths were motor vehicle crash injuries, suffocation, firearm injuries, and drownings. Some of the risk factors for these deaths identified by CFRP included poverty, substance use, unsafe sleep environments, and access to firearms.

Deaths due to homicides, suicides, and prematurity decreased from 2023 to 2024. Deaths due to infectious diseases, drowning, and heat exposure increased in 2024. There were 109 infectious disease deaths, and 36% of these deaths were potentially preventable. Many of these deaths could have been prevented by immunizations. To prevent these deaths, the CFRP recommends that health departments and healthcare providers promote vaccination and vaccine confidence through ongoing, proactive messaging and increase the availability of vaccines in healthcare settings.

There were 202 child deaths due to accidental injury deaths, a 5.5% decline from 2023. The five most common causes of accidental injury death were motor vehicle crashes, suffocation, drowning, poisoning, and heat exposure. Drowning deaths increased in 2024. Lack of pool barriers, inability to swim, and lack of supervision were the most common risk factors in these deaths. To prevent these deaths, CFRP recommends increasing the availability of swimming lessons, improving pool barriers in public and private settings, and increasing the availability of drowning prevention programs for children who are at increased risk of drowning due to medical, behavioral, or linguistic challenges. Deaths due to heat exposure also increased.

In 2024, a firearm injury was the most common cause of death for teens 15-17 years of age. Sixty-one percent of all homicides and 49% of all suicides were due to firearms in 2024, and access to guns was a common risk factor. To prevent these deaths, the CFRP recommends multiple ways we can reduce youth access to guns.

Substance use caused or contributed to 118 child deaths in 2024. However, the mortality rate for substance use-related deaths has continued to decline. Marijuana was the most common substance used, followed by alcohol and opiates. Fentanyl was responsible for 11 of the opiate poisonings, and naloxone was known to have been administered in less than 6 of these poisonings. These findings emphasized the importance of naloxone availability and the need to prevent these deaths. The CFRP recommends co-prescribing of naloxone by all healthcare providers and educating pharmacists on the need to offer naloxone to all patients who have been prescribed drugs that can result in an overdose that is reversible with naloxone.

Parental substance use history was a risk factor in 67% of the 113 neglect/abuse deaths. To reduce these deaths, the CFRP recommends increasing the availability of home visiting, mental health, and substance abuse treatment programs throughout the state. For the first time, the CFRP was also able to obtain records on children who nearly died as a result of abuse or neglect by a parent or caregiver. Based on this review, one of the CFRP recommendations is that Arizona should ensure DCS and tribal CPS services have the necessary funding to provide comprehensive investigations, monitoring, and anticipatory guidance to families.

Sudden Unexpected Infant Death (SUID) is the death of a healthy infant who is not initially found to have any underlying medical condition that could have caused their death. Most of these deaths are due to suffocation and occur in unsafe environments. There were 66 SUID deaths in 2024, and 94% of these deaths occurred in an unsafe sleep environment. These tragic deaths can be prevented by always putting infants to sleep Alone, on their Back, in a Crib, and avoiding the use of sleep products not explicitly marked for infant sleep, such as rocking sleepers, nursing pillows, and infant loungers.

I want to thank the Arizona Department of Health Services, Arizona Chapter, American Academy of Pediatrics, and all our local and state fatality team volunteers for their support of the CFRP and its mission to prevent child deaths in Arizona.

Sincerely,

Mary Ellen Rimsza, MD, FAAP
Chair, Arizona Child Fatality State Team

Executive Summary

The Arizona CFRP provides an annual comprehensive review of every child less than 18 years of age who died in Arizona, including all deaths due to injuries and medical conditions. While most deaths due to medical conditions are not preventable, deaths due to intentional (suicides, homicides) and unintentional injuries (drowning, suffocation, motor vehicle crash-related) are preventable and vary by age. Historical data show that infants are most often injured by suffocation resulting from an unsafe sleep environment, toddlers are more likely to drown, and older children are more vulnerable to motor vehicle-related or firearm injury. Analyzing risk factors allows injuries to be anticipated and thus prevented when the appropriate protective measures are in place.

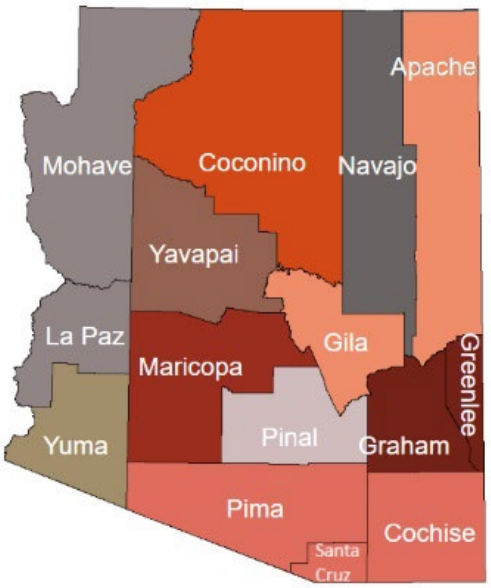
The CFRP was established to review all possible factors surrounding a child's death. The program aims to identify ways to reduce preventable fatalities. Legislation was passed in 1993 (A.R.S. § 36-342, 36- 3501) authorizing the creation of the CFRP. In 1994, the review process and data collection began. Today, ten local teams conduct initial reviews with oversight from the State Team and its two subcommittees (Neglect/Abuse and SUID/Undetermined Subcommittees).

This report utilizes descriptive statistics and trend analyses to present summary information about child fatalities as well as the leading causes under each manner of death by factors such as age, sex, and race/ethnicity. This report's demographic and prevention information is used to help broadly inform public health initiatives and the community. Recommendations for prevention are decided by both state and local review teams based on the information collected and reviewed on each child's death. The top five recommendations in each section reflect the priorities of the State CFRP Team at various State Team Meetings.

The CFRP follows the National Center for Fatality Review and Prevention steps to conduct practical review meetings: [3]

Review Process

Arizona has ten local CFRP Teams that complete reviews at the community level. Second-level reviews of SUID and Neglect/Abuse deaths are done at the state level by subcommittees of the State Team. The review process begins when the death of a child less than 18 years old is identified through a vital records report. The CFRP sends a copy of the death certificate to a local CFRP team based in the county where the deceased child lived. If the child was not a resident of Arizona, the local team in the county where the death occurred will conduct the review. Information collected during the review is then entered into the National Child Death Review Database, which is managed by the National Child Fatality Review and Prevention (National Center) in the Michigan Public Health Institute. The resulting dataset is used to produce the statistics found in this annual report.



*Same color in map = Same review team

Local Team Membership

The CFRP partners with local county health departments, academia, and non-profit organizations to establish review teams. These teams are located throughout the state, and membership includes (A.R.S. § 36-3502):

- County attorney's office
- County health department
- County medical examiner's office
- Department of Child Safety (DCS)
- Domestic violence specialist
- Mental health specialist
- Local law enforcement
- Parent
- Pediatrician or family physician

Report Statistics

The descriptive statistics in this report summarize the information about child deaths by manner, cause, age, sex, race/ethnicity, and risk factors. Frequency percentages, rates, and cross-tabulation tables are shown throughout the report. The rate measures the frequency of an event (i.e., death) in a population unit during a specified period, such as a year; events in the numerator of the year occur to individuals in the denominator. Rates express the likelihood (or risk) of the event occurring in the specified population during a particular time. They are generally described as population units in the denominators (per 1,000, 10,000, 100,000, and so forth). The rates were calculated using the following denominators: the number of live births (specific to infant mortality and SUID), the number of premature live births (specific to prematurity mortality), and the population of children (birth to 17 years) from the Arizona Office of Economic Opportunity for all other groups. This report's demographic and prevention information is primarily used to help broadly inform public health initiatives and the community.

Manner of Death vs. Cause of Death

In this report, the manner of death includes natural (i.e., cancer), accident (i.e., unintentional car crash), homicide (i.e., assault), suicide (i.e., self-inflicted intentional firearm injury), and undetermined. The cause of death refers to the injury or medical condition that resulted in death (i.e., firearm injury, pneumonia, cancer). The manner of death is not the same as the cause of death, but specifically refers to the intentionality of the reason. For example, if the cause of death was a firearm injury, then the manner of death may have been deliberate or accidental. If it was deliberate, then the manner of death was suicide or homicide. If the injury was unintentional, then the manner of death was an accident. In some cases, there was insufficient information to determine the manner of death, even though the cause was known. For example, it may not have been clear that a firearm injury was due to an accident, suicide, or homicide, and in these cases, the manner of death was listed as undetermined.

Limitations

It is important to note that the report has certain limitations. While every child's death is important, the small numbers in some areas of preventable deaths reduce the ability to examine some trends in detail. The numbers are used to inform public health efforts in a broader sense. Still, the sample size reduces the ability to make accurate statements about statistical significance in any differences or causal relationships. It is also noteworthy that much of the collected data is obtained through qualitative methods, such as the collection of witness reports on child injury deaths. This means there is always the potential for bias when the information is taken. Other variables that may not be captured on the death certificate or other typical records may include family dynamics, mental health challenges, or other hazards.

Additionally, the data is based on vital records information and data from local jurisdictions. Arizona has a medical examiner system, with each county having its own authority. Law enforcement also varies around the state. Arizona has 22 American Indian tribes, each with sovereign laws and protocols. Jurisdiction and records sharing for each tribal government vary. These intricate relationships and individual jurisdictions mean that sources and information may differ when reviewing each case.

Thirty-Second Annual Report Highlights

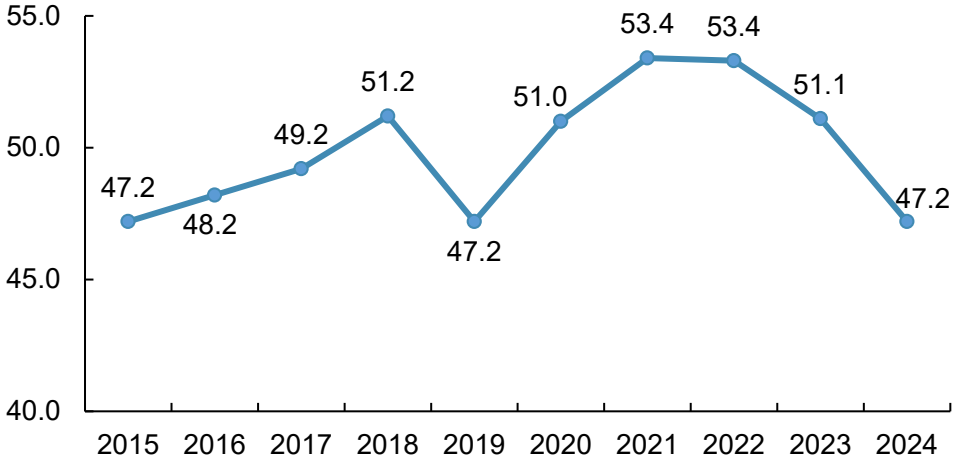
Total Deaths
791
(Out of State Residents: 32)

Preventable Deaths
380
(48% of all deaths)

Deaths Under 1 Year
419
(53% of all deaths)

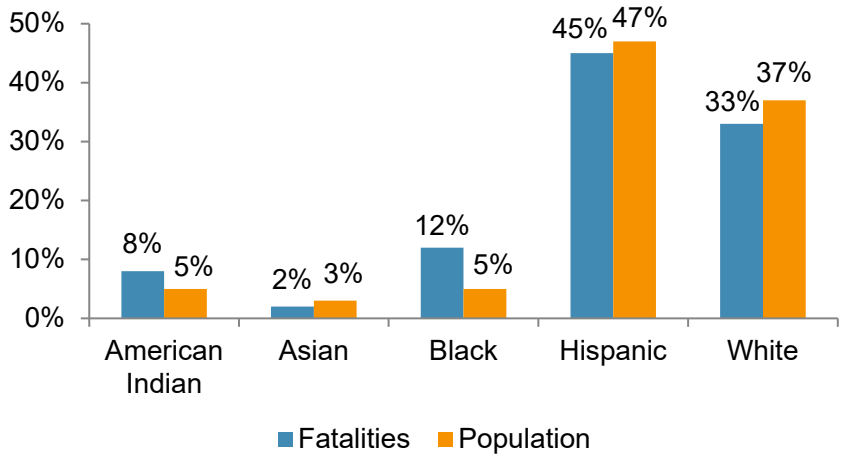
Neglect/Abuse Deaths
113
(14% of all deaths)

Mortality Rate per 100,000 Children, Ages Birth to 17 Years, Arizona, 2015-2024[4-13]



Natural Causes	Accidental Injuries	Homicides	Suicides	Undetermined
60%	**26%**	**6%**	**5%**	**3%**
471 child deaths	202 child deaths	51 child deaths	43 child deaths	24 child deaths

Percentage of Deaths among Children by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years (n=791)[4]



Top 5 Leading Causes of Death:

1. Prematurity (n=177)
2. Congenital Anomaly (n=98)
3. MVC (n=82)
4. Suffocation (n=55)
5. Firearm Injury (n=55)

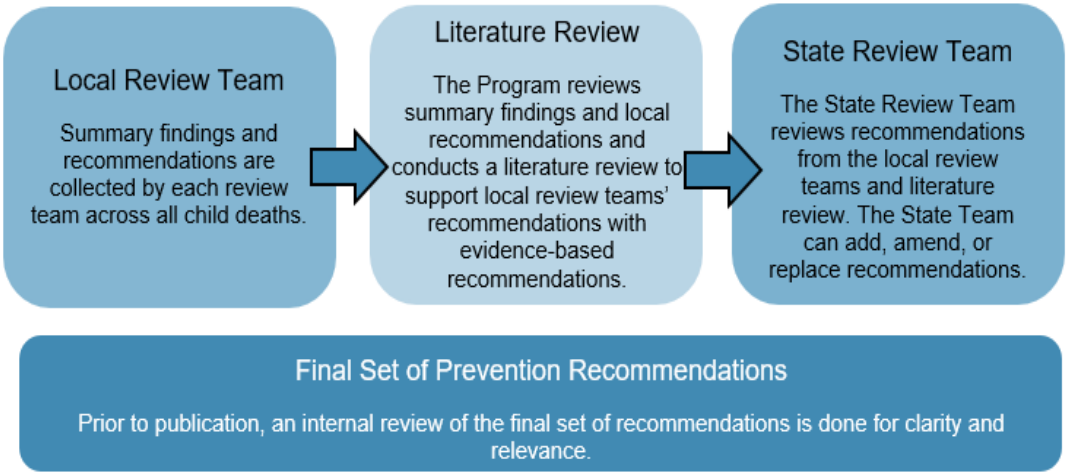
Substance Use was involved in
15%
of child fatalities

Males were victims of
80%
of firearm injury deaths

72% of children who died of Neglect/Abuse were **less than five years of age**

94% of the Sudden Unexpected Infant Deaths (SUIDs) occurred in an **unsafe sleep environment**

Prevention Recommendation:

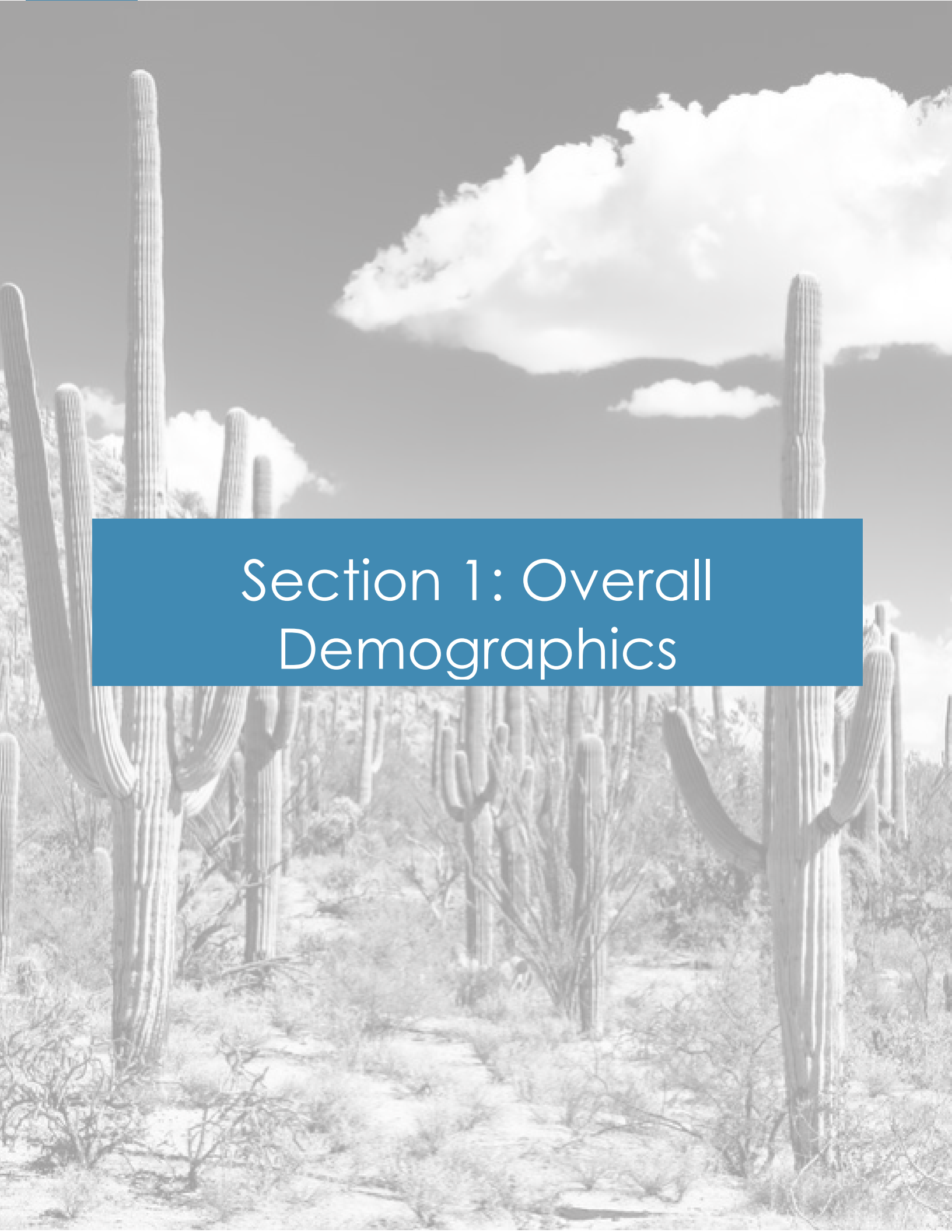


Given the outcomes, the State Team and the local review teams identified recommendations to prevent these outcomes. These were initially derived from the recommendations made during the local review team's case reviews. CFRP staff completed qualitative analysis on all recommendations for 2024 deaths and presented the initial synthesized recommendations to the State Team. Following presentations of aggregate CFR data, the State Team added to and adjusted the list of recommendations based on overarching findings and observations from literature reviews. The top five recommendations in each section reflect the priorities of the State CFRP Team at various meetings. These priorities are based on whether the action would drive significant systematic improvements in child fatality prevention, if it would benefit a broad group of people, and if it would help reduce health inequalities and lead to better health results. Prioritizing the prevention recommendations helped identify areas to focus on. It is also important to note that while some data associated with this recommendation may be suppressed in Sections 1-4 due to numbers being less than six, the recommendations are not suppressed in the prevention recommendation section.

These recommendations are intended to be widely disseminated so that partners and key stakeholders across the state will consider them for implementation. In some cases, the recommendations may currently be in practice. This is particularly true for some policy or practice recommendations geared toward payers, such as the Arizona Health Care Cost Containment System (AHCCCS), which has already implemented several of the models included in these recommendations.

Below are highlighted recommendations from the manners/causes of deaths that report an increase in child deaths between 2023 and 2024.

- **Drowning death** prevention recommendations include ensuring the availability and accessibility of CPR training, ensuring public pools and businesses (including rental properties) with pools have a proper pool enclosure, ensure proper supervision of children under four years of age around water including during bath time, ensure availability and accessibility of affordable swim lessons, and increasing drowning education and rescue signage in multiple languages, specifically for children with medical/developmental concerns.
- **Infectious disease-related death** prevention recommendations include promoting vaccine confidence, ensuring that infants are around those who are vaccinated against vaccine-preventable diseases, increasing education on proper infection prevention (especially in daycare agencies), increasing education on concerning signs/symptoms of illness and when to seek care, and increasing community awareness and education on current outbreaks and support rapid assessment, prevention, and control of these infectious diseases.

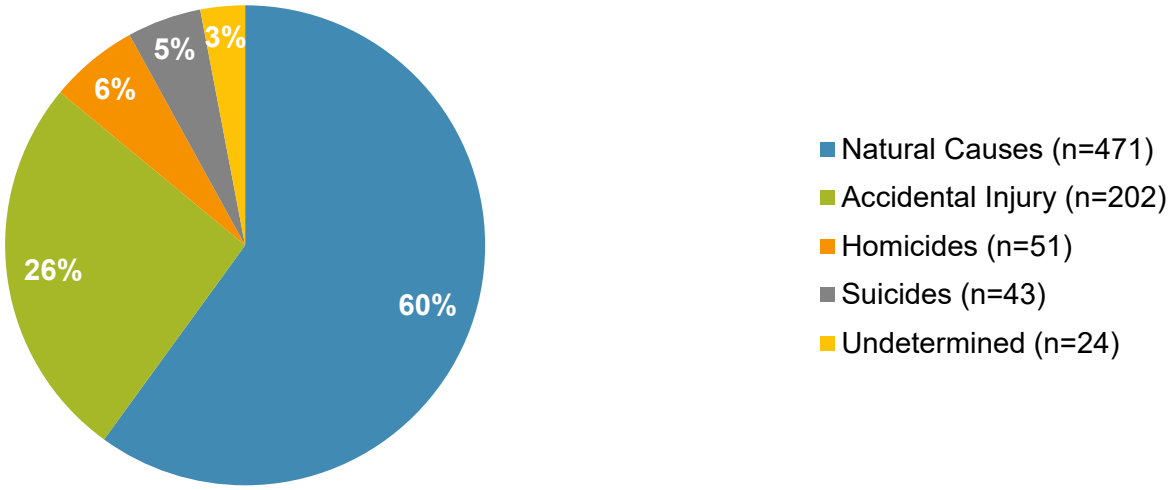


Section 1: Overall Demographics

Overall Child Mortality (Birth to 17 Years of Age)

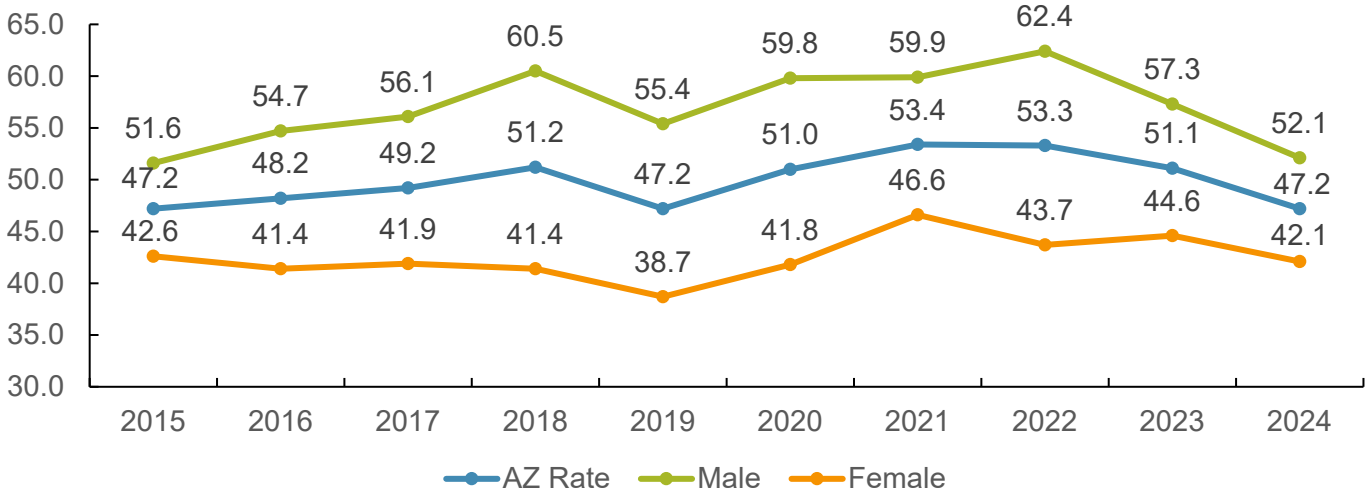
The majority of child deaths were from natural causes (60%), followed by accidental injury deaths (26%) (Figure 1).

Figure 1. Number and Percentage of Deaths by Manner of Death, Ages Birth to 17 Years, Arizona, 2024 (n=791)



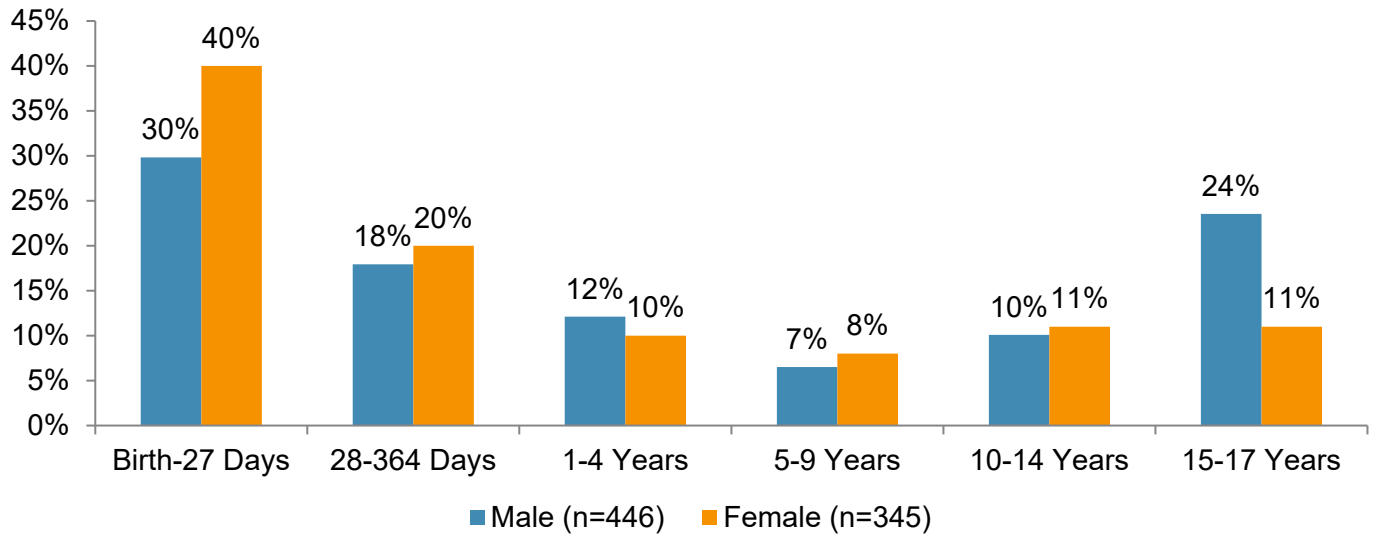
Arizona's child mortality rate has remained relatively stable since 2015. It decreased by 7.6% from 51.1 deaths per 100,000 children in 2023 to 47.2 deaths per 100,000 children in 2024. From 2015, the male child mortality rate has been generally higher than females. From 2023 to 2024, both male and female mortality rates decreased by 9.1% and 5.7%, respectively (Figure 2).

Figure 2. Mortality Rate per 100,000 Children, Ages Birth to 17 Years, Arizona, 2015-2024 (n=791)[4-13, 34-43]



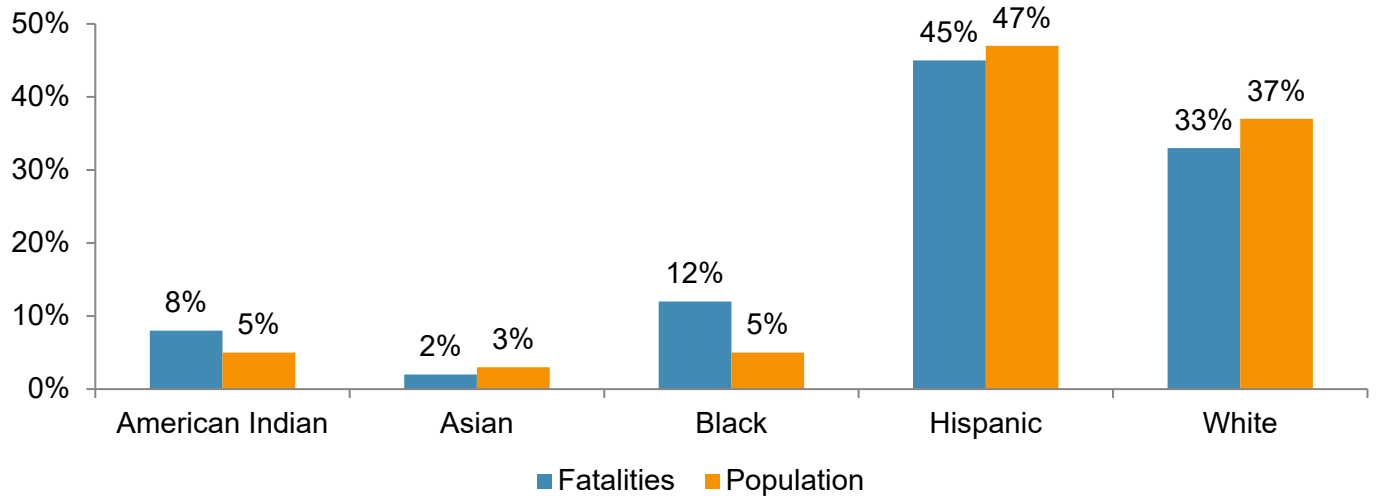
Among child deaths by sex, 56% of deaths were males, while 44% were females. Among males, the highest percentage of deaths occurred among children younger than 27 days old (30%) and those aged 15 to 17 years (24%). Among females, the highest percentage of deaths occurred in children younger than 27 days old (40%) and those aged 28 to 364 days (20%) (Figure 3).

Figure 3. Percentage of Deaths by Age Group and Sex, Ages Birth to 17 Years, Arizona, 2024 (n=791)



American Indian and Black children accounted for 8% and 12% of child deaths, respectively, despite each group comprising only 5% of the total child population. Hispanic children represented the largest proportion of child deaths (45%), followed by White children at 33% (Figure 4).

Figure 4. Percentage of Child Deaths by Race/Ethnicity, Compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=791)[4]



In 2024, the majority of child deaths occurred in Arizona's urban counties (83%), with a mortality rate of 44.9 deaths per 100,000 children (Table 1). Additionally, 32 deaths (4%) were reported among children who resided outside the state but died inside the state of Arizona. For further details, see the glossary.

Table 1. Number, Percentage, and Rate (per 100,000 children) of Deaths among Children by Residency, Ages Birth to 17 Years, Arizona and Out of State, 2024 (n=791)[4]

Residency	Number	Percent	Rate
Urban Counties	655	83%	44.9 deaths per 100,000 children
Rural Counties	104	13%	47.7 deaths per 100,000 children
Out of State	32	4%	N/A*

*Total number of children is not available for out of state residents

Overall, prematurity was the leading cause of death across all age groups, followed by congenital anomaly, motor vehicle crash, suffocation, and firearm injury. Prematurity was the leading cause of death among infants from birth to 27 days of age, while suffocation was the leading cause of death among infants from 28 days to less than one year. Among children aged 1-4 years, drowning was the leading cause of death. For children aged 5-9 and 10-14 years, motor vehicle crash-related deaths were the leading cause of death. Among children aged 15-17 years, firearm injury was the leading cause of death (Table 2).

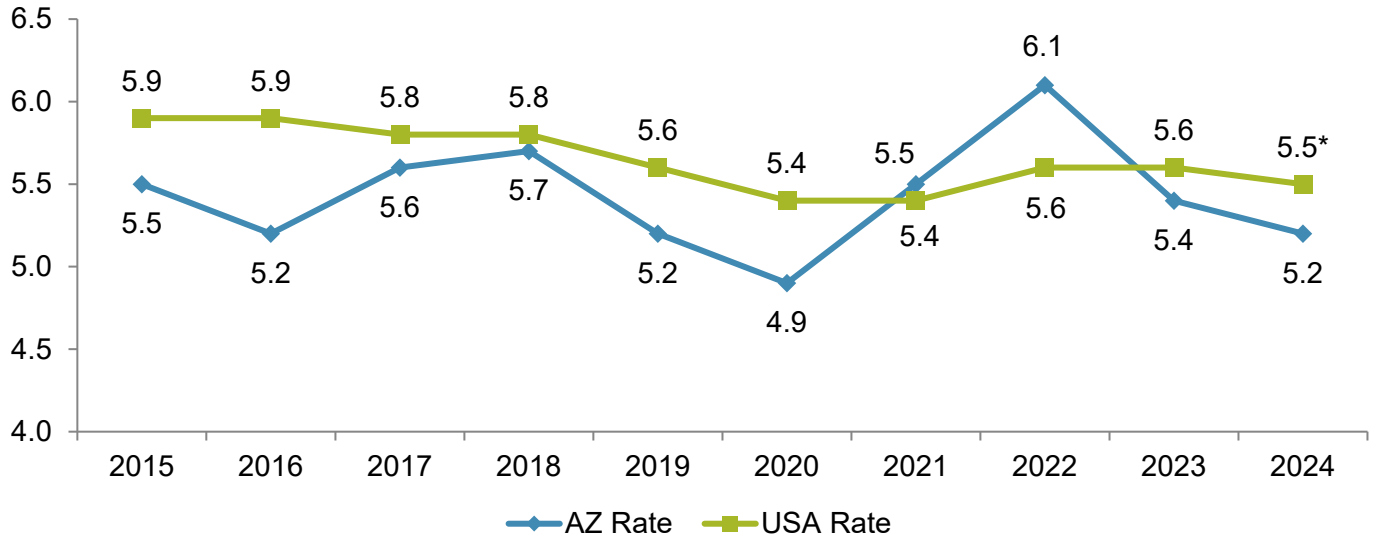
Table 2. Top 5 Leading Causes of Child Death by Age Group, Arizona, 2024

Age Group	Leading Causes of Child Death				
	1	2	3	4	5
Birth to 27 Days (n = 270)	Prematurity (n = 156)	Congenital Anomaly (n = 62)	Cardiovascular (n = 12)	Perinatal Conditions (n = 11)	Neurological/ Seizure Disorder (n = 8)
28 Days - <1 Year (n = 149)	Suffocation (n = 48)	Prematurity (n = 19)	Congenital Anomaly (n = 16)	Undetermined (n = 15)	Cardiovascular (n = 13)
1-4 Years (n = 56)	Drowning (n = 26)	Congenital Anomaly (n = 9)	MVC-Related (n = 8)	Cancer (n = 6)	Blunt Force Injury (n < 6)
5-9 Years (n = 56)	MVC-Related (n = 11)	Cancer (n = 11)	Drowning (n = 6)	Congenital Anomaly (n < 6)	Neurological/ Seizure Disorder (n < 6)
10-14 Years (n = 84)	MVC-Related (n = 22)	Cancer (n = 12)	Firearm Injury (n = 10)	Neurological/ Seizure Disorder (n = 10)	Strangulation (n < 6)
15-17 Years (n = 144)	Firearm Injury (n = 41)	MVC-Related (n = 36)	Cancer (n = 13)	Neurological/ Seizure Disorder (n = 9)	Poisoning (n = 9)
All Deaths (N = 791)	**Prematurity (n = 177)**	**Congenital Anomaly (n = 98)**	**MVC-Related (n = 82)**	**Suffocation (n = 55)**	**Firearm Injury (n = 55)**

Infant Mortality (Less than 1 Year of Age)

The infant mortality rate in Arizona has fluctuated since 2015. From 2015 to 2020, and again from 2023 to 2024, Arizona's infant mortality rate has been trending below the national rate. From 2023 to 2024, the infant mortality rate decreased by 3.7%, dropping from 5.4 to 5.2 deaths per 1,000 live births. (Figure 5).

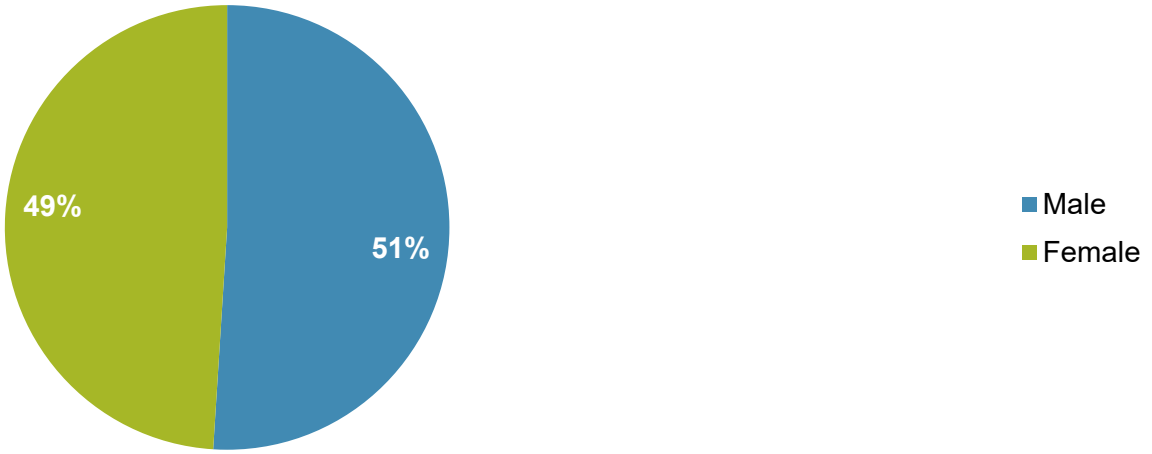
Figure 5. Infant Mortality Rate per 1,000 Live Births, Less than 1 Year of Age, Arizona & USA, 2015-2024[14-33]



*Preliminary infant mortality rate as reported by the National Center for Health Statistics, National Vital Statistics System[21].

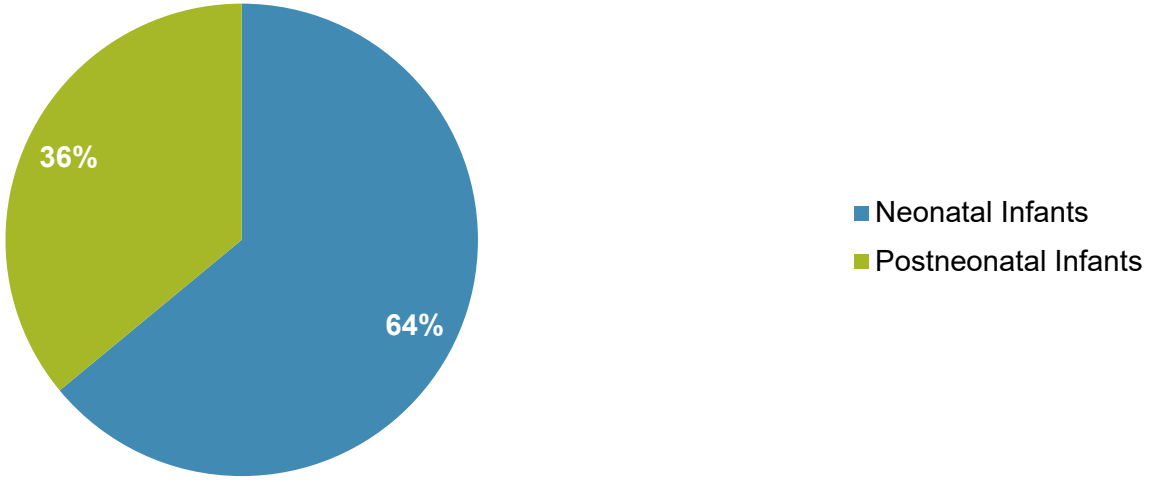
The majority of infant deaths were male (51%) (Figure 6).

Figure 6. Percentage of Deaths by Sex, Less than 1 Year of Age, Arizona, 2024 (n=419)



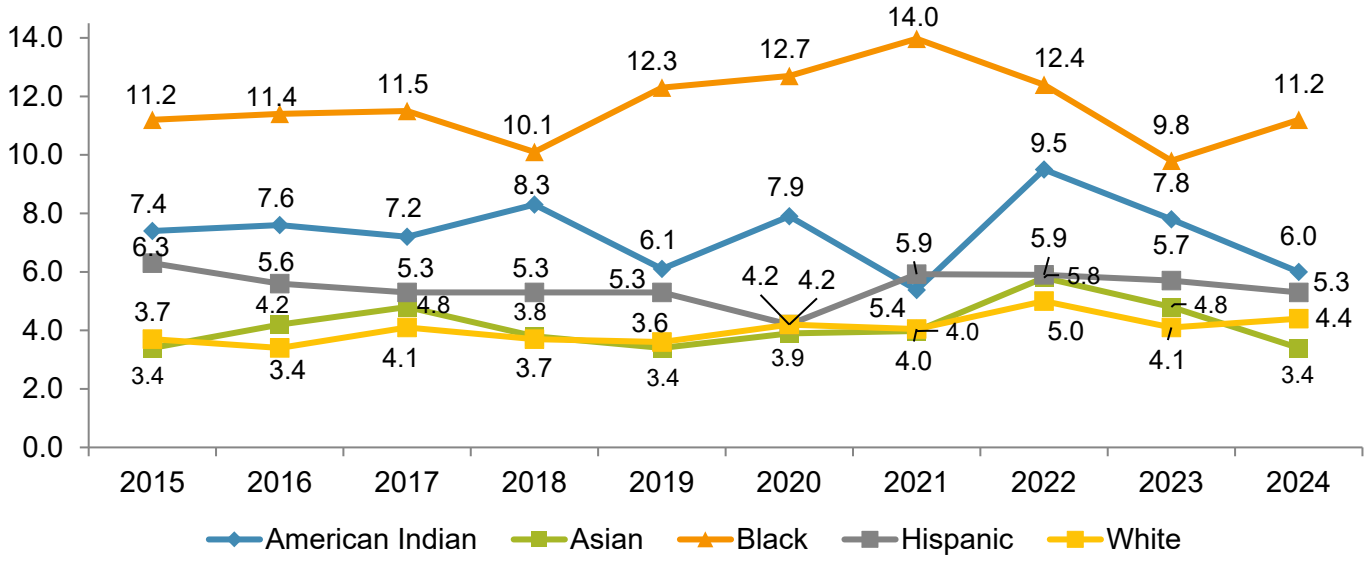
The majority of infant deaths occurred in neonatal infants (birth to 27 days) (64%) (Figure 7).

Figure 7. Percentage of Deaths by Age Group, Less than 1 Year of Age, Arizona, 2024 (n=419)



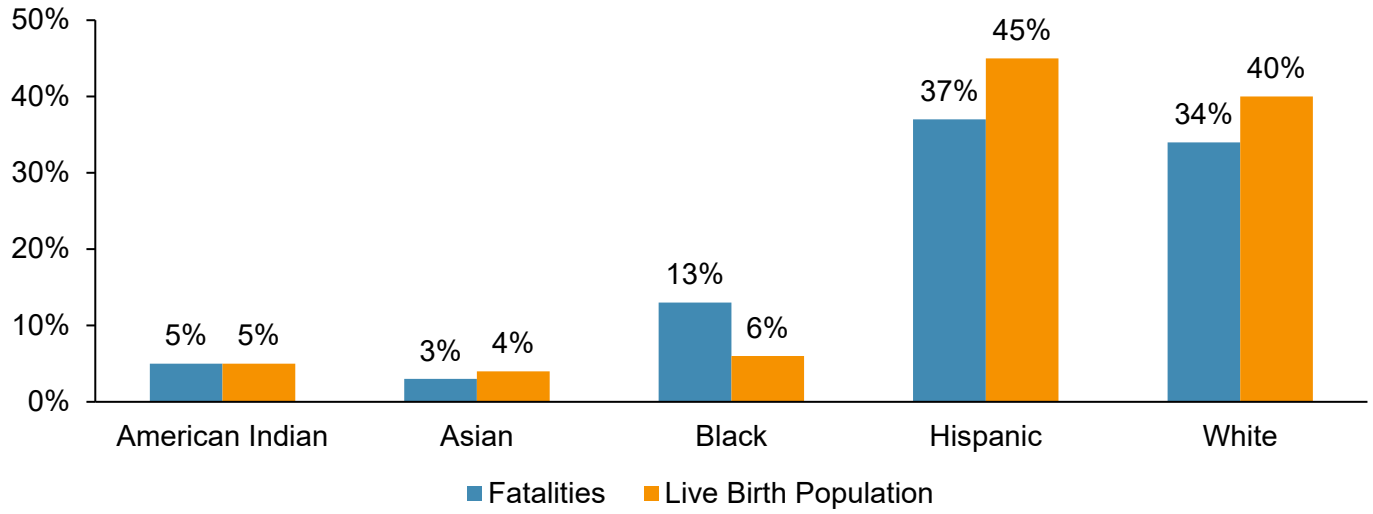
American Indian and Black infants have consistently had higher rates of infant mortality since 2015. In 2024, the infant mortality rates for Black and American Indians were 11.2 and 6.0 deaths per 1,000 live births, respectively. In comparison, the infant mortality rates for Hispanic and White infants were 5.3 and 4.4 deaths per 1,000 live births. From 2023 to 2024, the greatest decrease in infant mortality was observed among Asian infants (29.2%), followed by American Indian (23.1%) and Hispanic infants (7.1%). In contrast, infant mortality rates increased for both Black (14.3%) and White (7.3%) infants (Figure 8).

Figure 8. Infant Mortality Rates per 1,000 Live Births by Race/Ethnicity, Less than 1 Year of Age, Arizona, 2015-2024[24-33]



Black infants accounted for 13% of all infant deaths, but only 6% of live births in Arizona. The largest percentage of infant deaths occurred among Hispanic infants (37%), followed by White infants (34%) (Figure 9).

Figure 9. Percentage of Infant Deaths per 1,000 Live Births by Race/Ethnicity, compared to the Live Birth Population, Less than 1 Year of Age, Arizona, 2024 (n=419)[33]



Overall, low birth weight was the leading risk factor in 60% of infant deaths (Table 3). Low birth weight (62%), followed by poverty (57%), were the leading risk factors of deaths among infants residing in urban counties in Arizona. In Rural counties, poverty (50%) was the leading risk factor for infant death, followed by low birth weight (44%).

Table 3. Leading Risk Factors of Infant Death by Urban/Rural, Less than 1 Year of Age, Arizona, 2024*

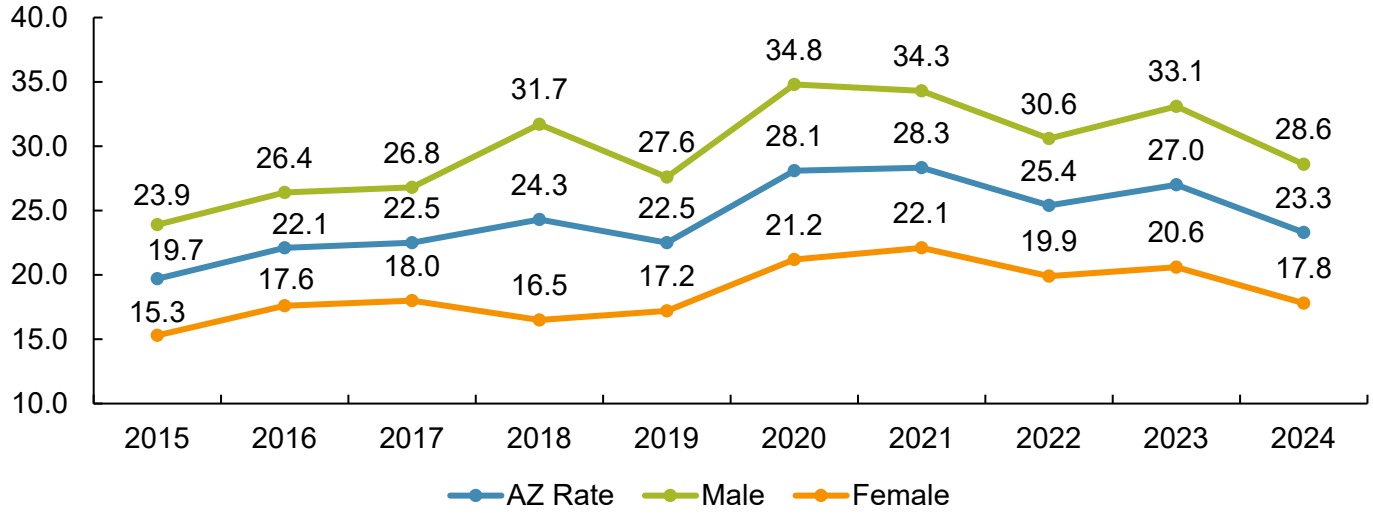
Location	Leading Risk Factors of Infant Death, Less than 1 Year of Age				
	1	2	3	4	5
Urban (n = 359)	Low Birth Weight (n = 224)	Poverty (n = 205)	Child's Chronic Condition (n = 124)	Parental Substance Use History (n = 74)	CPS History with Family (n = 58)
Rural (n = 54)	Poverty (n = 27)	Low Birth Weight (n = 24)	Parental Substance Use History (n = 19)	Child's Chronic Condition (n = 13)	CPS History with Family (n = 13)
Infant Deaths (n = 419)	**Low Birth Weight (n = 251)**	**Poverty (n = 234)**	**Child's Chronic Condition (n = 137)**	**Parental Substance Use History (n = 94)**	**CPS History with Family (n = 72)**

*More than one risk factor may have been identified for each death.

Child Mortality (1-17 Years of Age)

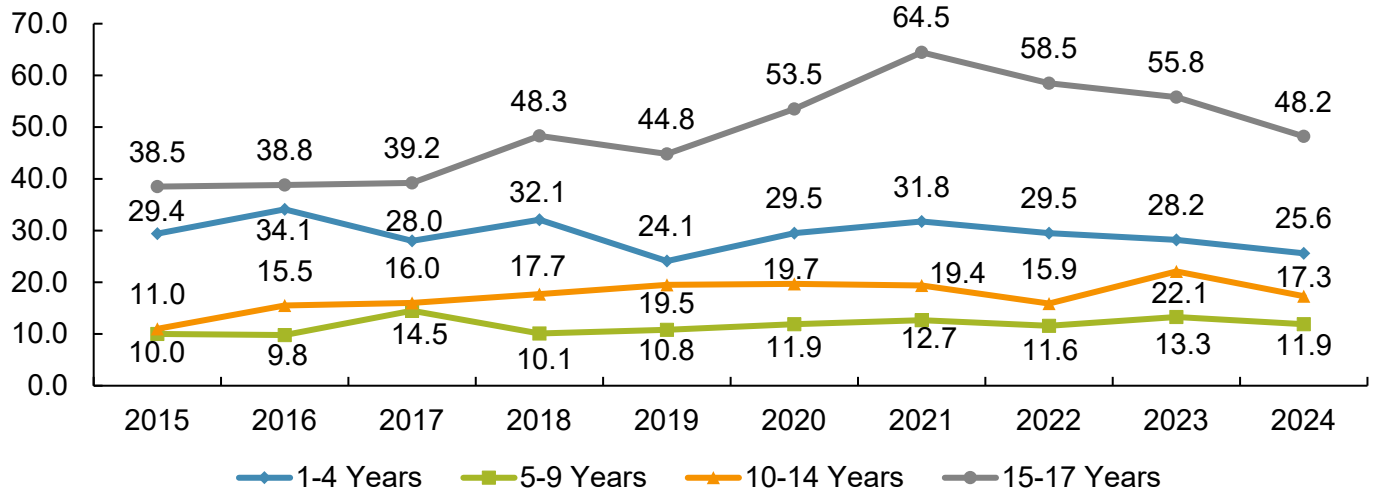
From 2023 to 2024, Arizona's child mortality rate decreased 13.7% from 27.0 deaths to 23.3 deaths per 100,000 children. Males have generally had a higher child mortality rate than females since 2015. Male and female child mortality rates both decreased by 13.6% from 2023 to 2024 (Figure 10).

Figure 10. Mortality Rates per 100,000 Children, Ages 1-17 Years, Arizona, 2015-2024[34-43]



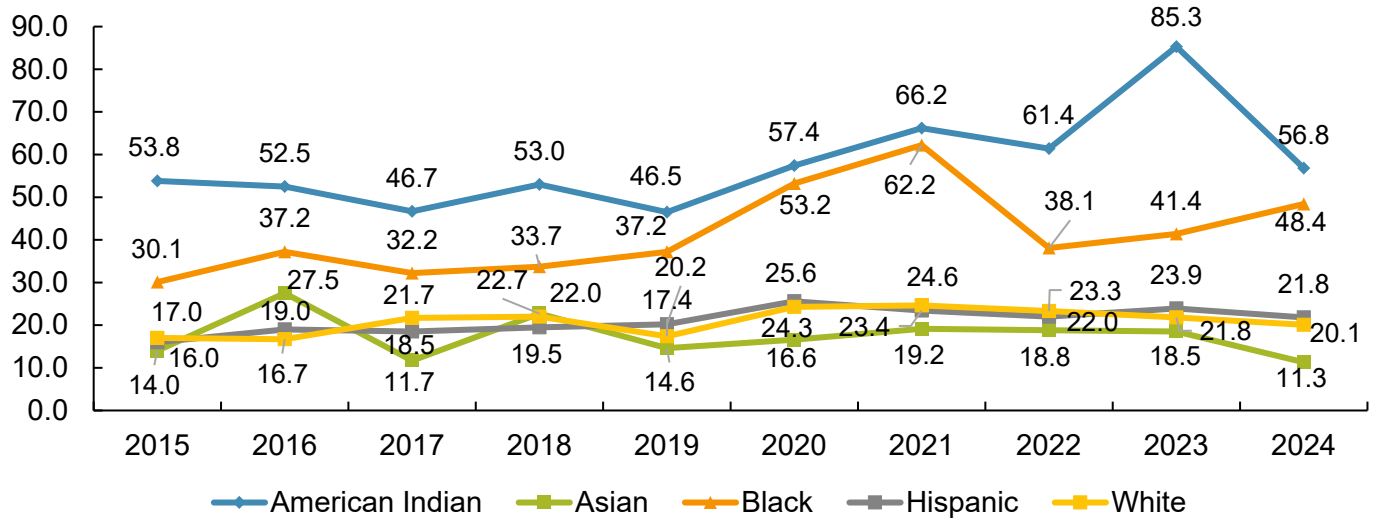
Mortality rates across all age groups, with the most significant decrease observed among 10-14-year-olds, at 21.7%, from 22.1 deaths per 100,000 children in 2023 to 17.3 deaths per 100,000 children in 2024. This was followed by a 13.6% decrease among adolescents aged 15-17 years, from 55.8 to 48.2 deaths per 100,000 children (Figure 11).

Figure 11. Mortality Rates per 100,000 Children by Age Group, Ages 1-17 Years, Arizona, 2015-2024[34-43]



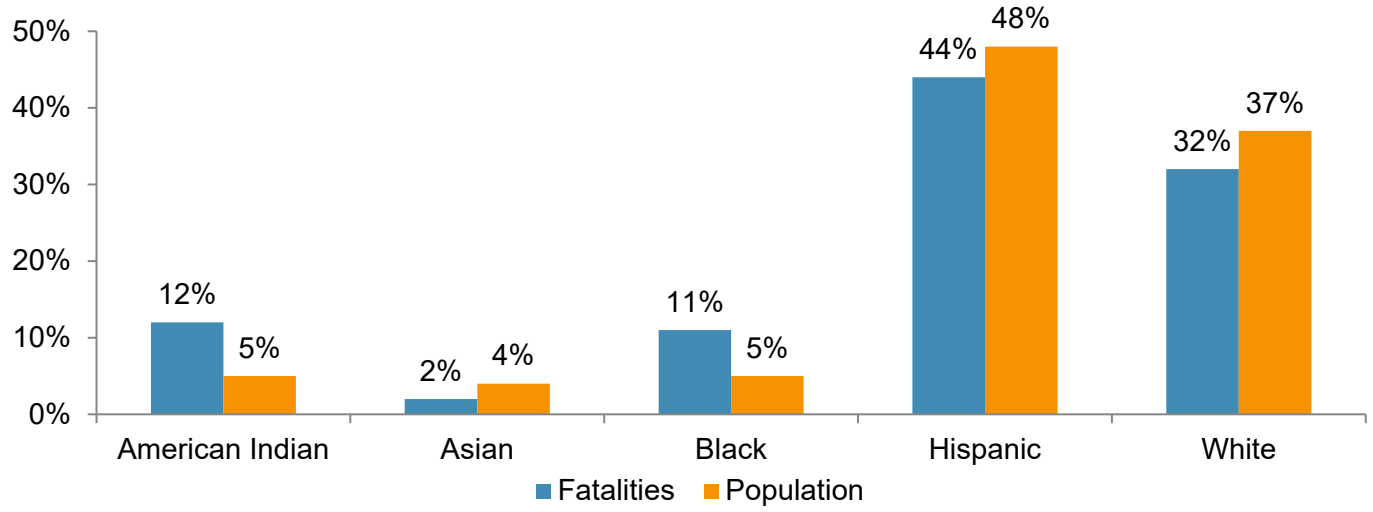
American Indian and Black children have generally had higher child mortality rates since 2015. However, these two groups showed divergent trends between 2023 and 2024. The mortality rate for Black children increased by 16.9%, from 41.4 to 48.4 deaths per 100,000 children. In contrast, the mortality rate for American Indian children decreased by 33.4% from 85.3 to 56.8 per 100,000 children. Mortality rates among Asian, Hispanic, and White children also showed a decline during this period (Figure 12).

Figure 12. Mortality Rates per 100,000 Children by Race/Ethnicity, Ages 1-17 Years, Arizona, 2015-2024[34-43]



American Indian and Black children each accounted for a disproportionate share of child deaths in 2024, representing 12% and 11% of deaths among children aged 1-17 years. Still, they make up only 5% of the total population in that age group. In contrast, the majority of deaths occurred among Hispanic (44%) and White (32%) children (Figure 13).

Figure 13. Percentage of Deaths by Race/Ethnicity, compared to the Population, Ages 1-17 Years, Arizona, 2024[43]

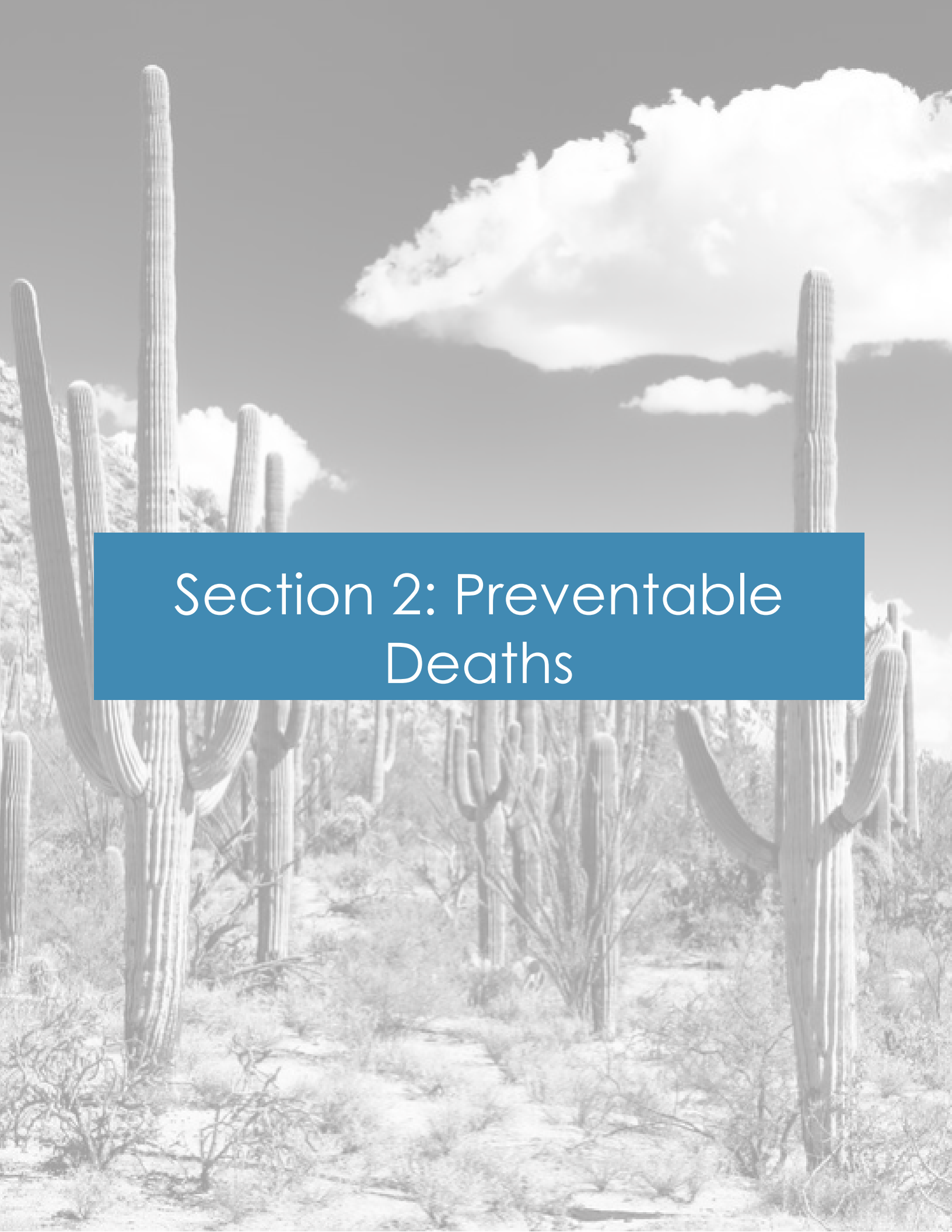


A child's chronic condition (42%) was the leading risk factor for death among children aged 1-17 years, irrespective of county of residence (Table 4).

Table 4. Leading Risk Factors of Child Death by Urban/Rural Residence, Ages 1-17 Years, Arizona, 2024*

Residence	Leading Risk Factors of Child Death*, Ages 1-17				
	1	2	3	4	5
Urban (n = 296)	Child's Chronic Condition (n = 128)	CPS History with the Family (n = 119)	Poverty (n = 99)	History of Trauma/ Violence (n = 79)	Parental Substance Use History (n = 68)
Rural (n = 50)	Child's Chronic Condition (n = 20)	CPS History with the Family (n = 16)	Child Relationship Issues (n = 15)	Substance Use (n = 14)	Parental Substance Use History (n = 13)
Ages 1-17 Deaths (n = 372)	**Child's Chronic Condition (n = 156)**	**CPS History with the Family (n = 136)**	**Poverty (n = 114)**	**History of Trauma/ Violence (n = 90)**	**Child Relationship Issues (n = 88)**

*More than one risk factor may have been identified for each death.



Section 2: Preventable Deaths

The primary purpose of the CFRP is to identify preventable factors in a child's death. Throughout the report, the term "preventable death" is used. Each multi-disciplinary team is composed of professionals who review the circumstances of a child's death by reviewing records ranging from autopsies to law enforcement reports. The team then determines whether any preventable factors were present prior to the death. They used one of the following three labels to determine preventability: 1) Yes, probably, 2) No, probably not, and 3) Team could not determine. A determination is based on the program's operational definition of preventability in a child's death.

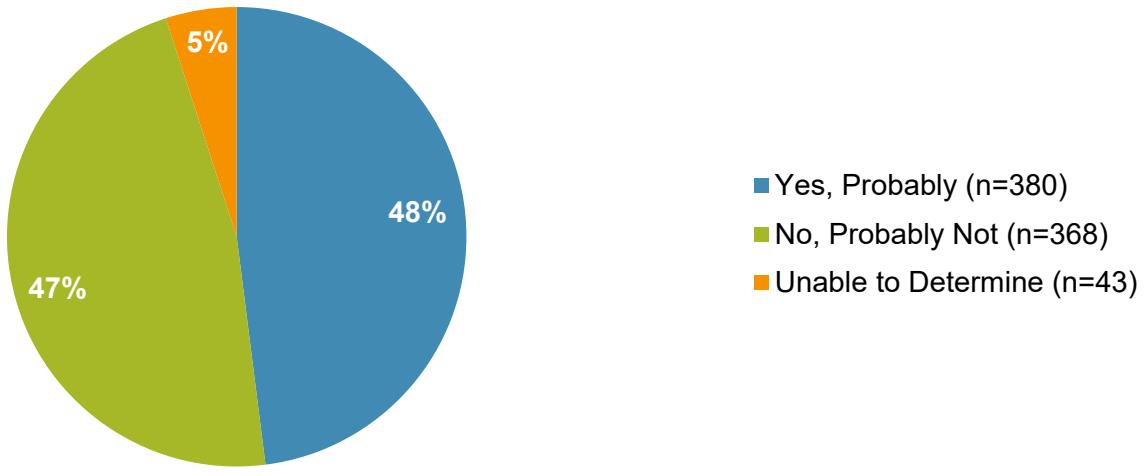
A child's death is considered preventable if the community (education, legislation, etc.) or an individual could reasonably have done something that would have changed the circumstances that led to the child's death.

- "Yes, probably" means that some circumstance or factor related to the death could have been prevented.
- "No, probably not" indicates that everything reasonable was most likely done to prevent the death, but the child would still have died.
- A designation of "Team could not determine" means that there was insufficient information for the team to decide upon preventability.

The report discusses all 791 child deaths that occurred in 2024. Much of the data discussed in this report is based on fatalities deemed as preventable by the teams. This is important so that efforts are targeted to the areas where prevention initiatives will be most effective.

In 2024, local review teams determined that 380 child deaths were preventable (48%), 368 child deaths were probably not preventable (47%), and the teams could not determine the preventability in 43 (5%) of the deaths (Figure 14).

Figure 14. Number and Percentage of Deaths by Preventability, Ages Birth to 17 Years, Arizona, 2024 (n=791)



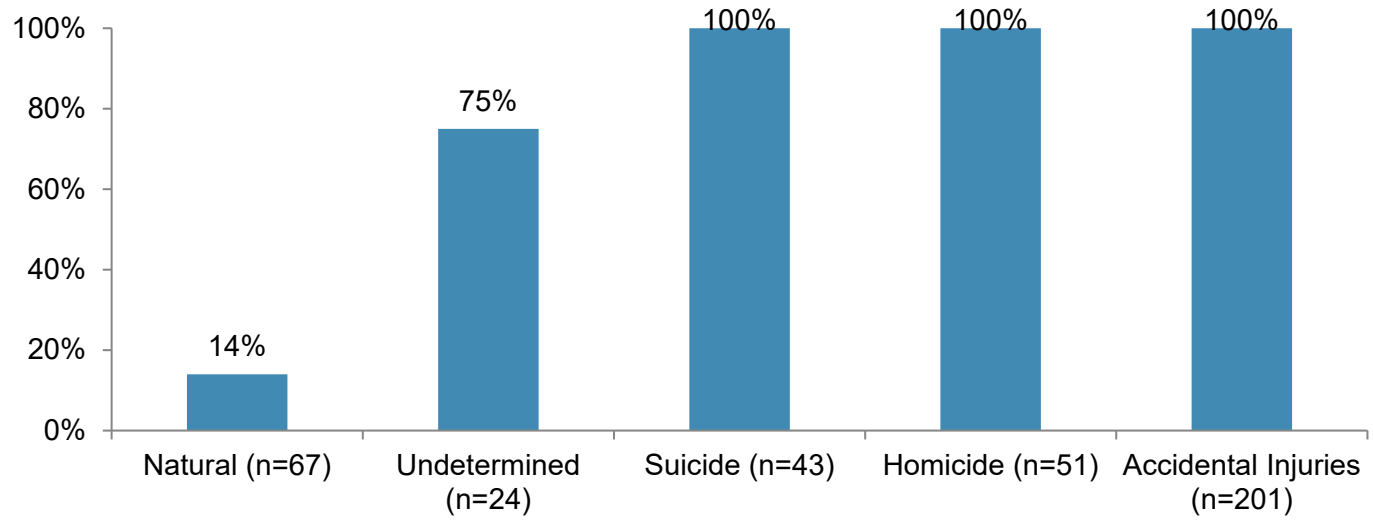
Motor Vehicle Crashes were the leading cause of preventable deaths among children (22%), followed by suffocation (14%) and firearm injuries (14%) (Table 5).

Table 5. Top 5 Leading Causes of Preventable Deaths, Ages Birth to 17 Years, Arizona, 2024

Top 5 Leading Causes of Death	Number	Percent
Motor Vehicle Crash-Related	82	22%
Suffocation	55	14%
Firearm Injury	55	14%
Drowning	36	9%
Prematurity	19	5%

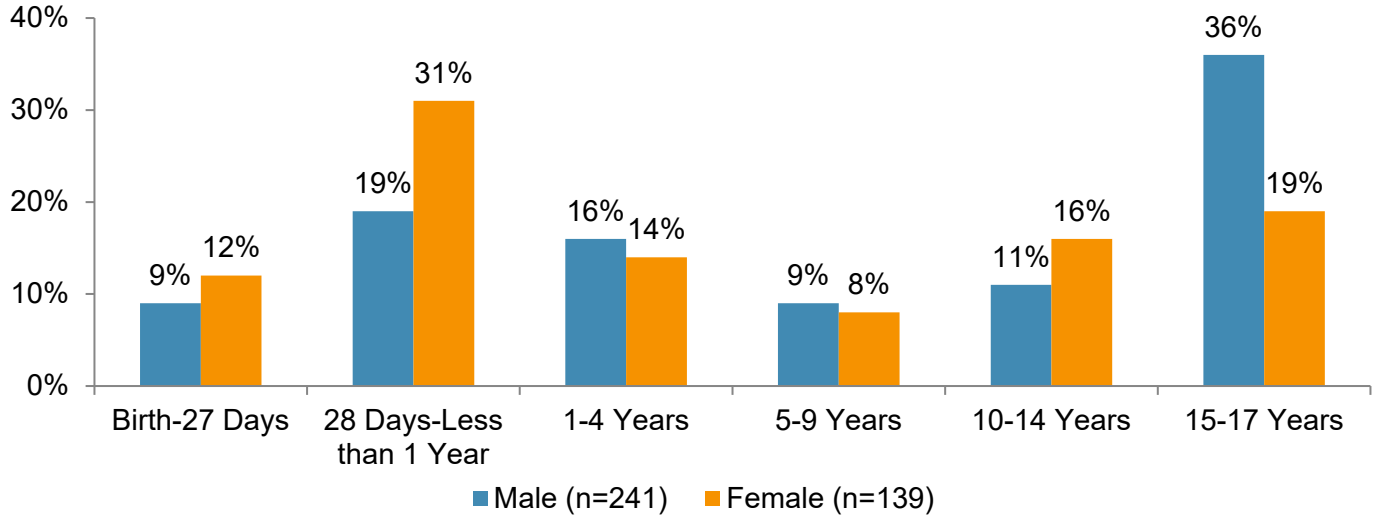
When classifying manner of deaths as preventable deaths, the local review teams determined that 14% of natural deaths, 75% of the undetermined manner of deaths, 100% of suicides, 100% of homicides, and 100% of accidental injury deaths were preventable (Figure 15).

Figure 15. Number and Percentage of Preventable Deaths by Manner of Death, Ages Birth to 17 Years, Arizona, 2024 (n=380)



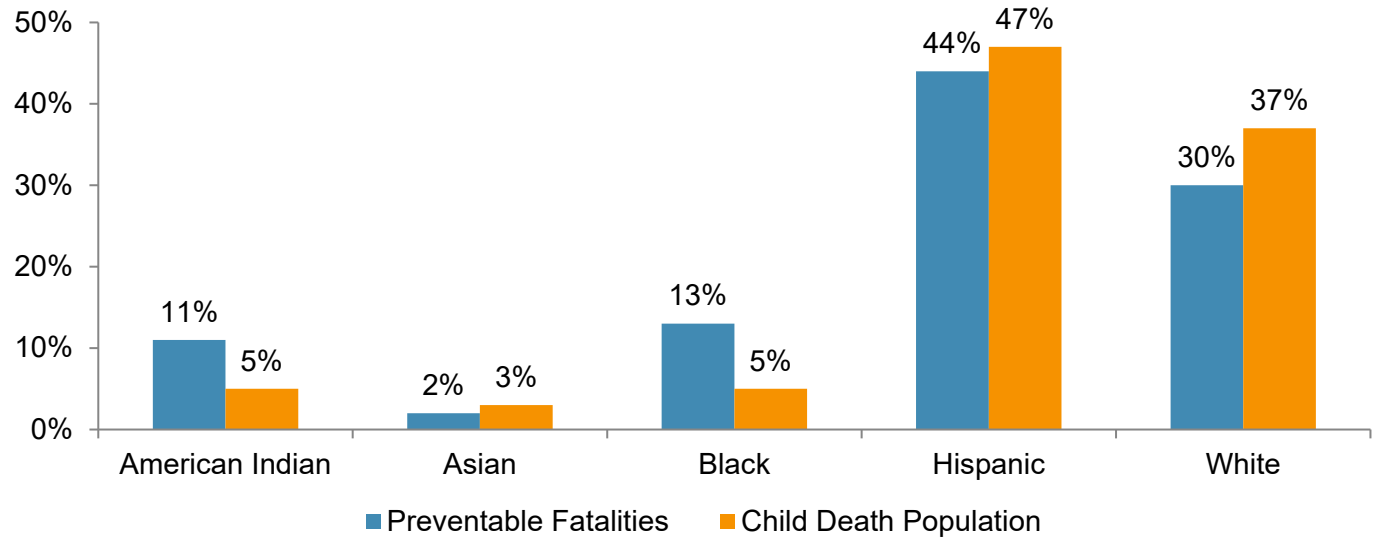
Male children aged 15-17 years accounted for the largest proportion of preventable deaths among males (36%). Among females, the highest percentage of preventable deaths occurred in children aged 28 days to less than one year (31%), followed by those aged 15-17 years (19%) (Figure 16). The most noticeable percentage of preventable deaths occurred in children aged 15-17 years (30%), followed by children aged 28 days to less than one year of age (23%) (not shown).

Figure 16. Percentage of Preventable Deaths by Age Group and Sex Among Children, Ages Birth to 17 Years, Arizona, 2024 (n=380)



American Indian and Black children made up 11% and 13% of preventable child deaths, respectively, despite each comprising only 5% of the overall child death population. The majority of preventable child deaths occurred among Hispanic (44%) and White (30%) children (Figure 17).

Figure 17. Percentage of Preventable Deaths by Race/Ethnicity, Compared to Total Child Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=380)[4]



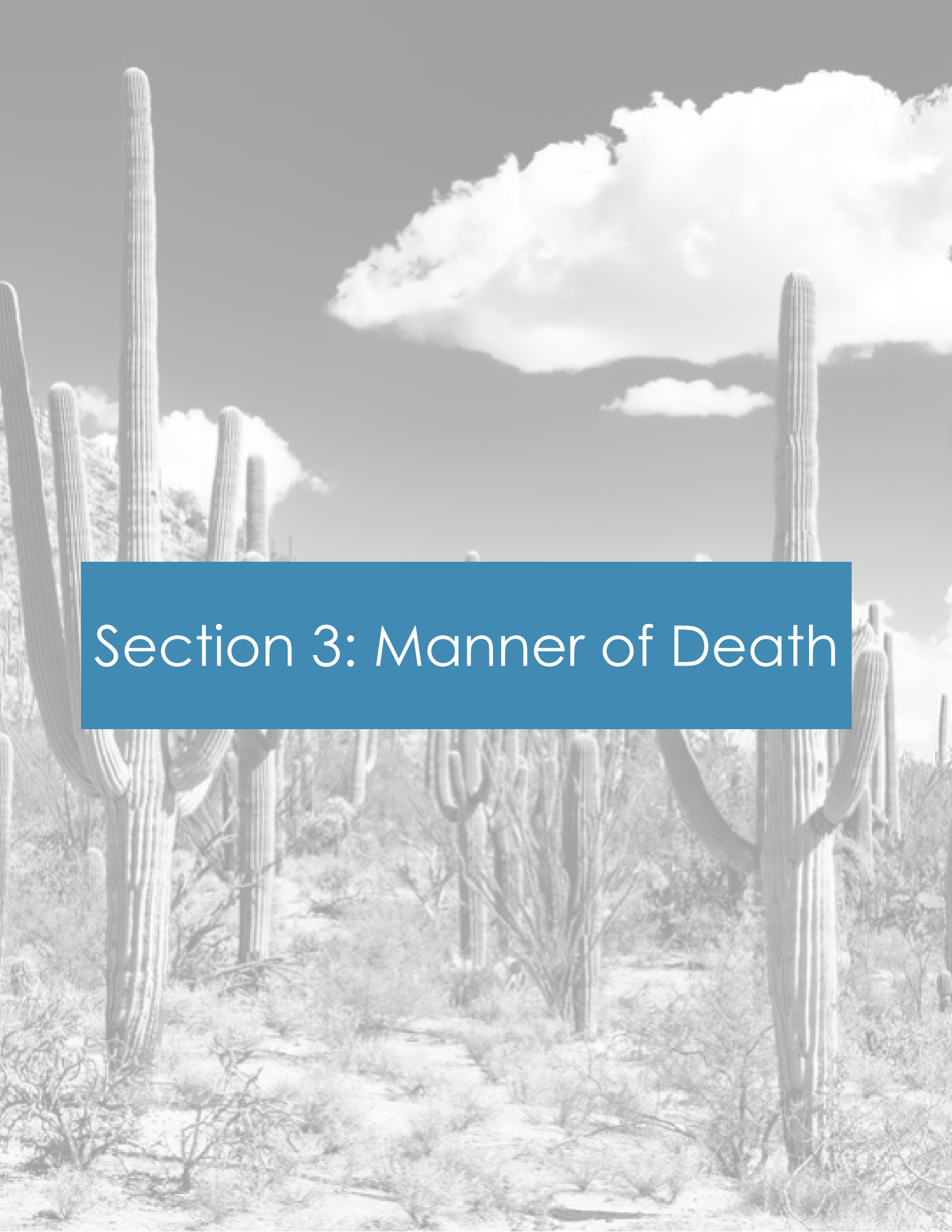
Overall, the most frequently identified risk factor for preventable deaths across all ages was CPS history with the family (47%), followed by poverty (40%) (Table 6). It is essential to note that multiple risk factors may have contributed to each death.

The leading risk factor for preventable deaths varied by age group. Poverty was the leading risk factor for preventable deaths among infants from birth to 27 days and those aged 28 days to less than one year (Table 6). Among children aged 1-4 and 5-9 years, lack of supervision was the primary risk factor. Among children aged 10-14 and 15-17 years, CPS history with the family was the leading risk factor.

Table 6. Leading Risk Factors of Preventable Deaths among Children by Age Group, Arizona, 2024*

Age Group	Leading Risk Factors of Preventable Child Deaths*				
	1	2	3	4	5
Birth-27 Days (n = 38)	Poverty (n = 28)	No Prenatal Care (n = 19)	Parental Substance Use History (n = 18)	CPS History with Family (n = 13)	Substance Use (n = 12)
28 Days - <1 Year (n = 88)	Poverty (n = 62)	Unsafe Sleep Environment (n = 56)	Parental Substance Use History (n = 51)	CPS History with the Family (n = 49)	Substance Use (n = 23)
1-4 Years (n = 59)	Lack of Supervision (n = 34)	CPS History with Family (n = 25)	Inability to Swim (n = 23)	Lack of Pool Barrier (n = 23)	Poverty (n = 23)
5-9 Years (n = 32)	Lack of Supervision (n = 12)	CPS History with Family (n = 12)	History of Trauma/ Violence (n = 11)	Child's Chronic Condition (n = 8)	Parental Substance Use History (n = 7)
10-14 Years (n = 49)	CPS History with Family (n = 23)	Child Relationship Issues (n = 18)	School Issues (n = 18)	Substance Use (n = 15)	History of Trauma/ Violence (n = 12)
15-17 Years (n = 114)	CPS History with Family (n = 56)	Child Relationship Issues (n = 50)	Substance Use (n = 49)	History of Trauma/ Violence (n = 49)	Firearm Access (under 18 years) (n = 29)
Preventable Deaths (N = 380)	**CPS History with the Family (n = 178)**	**Poverty (n = 151)**	**Parental Substance Use History (n = 137)**	**Substance Use (n = 116)**	**Child Relationship Issues (n = 98)**

*More than one risk factor may have been identified for each death.



Section 3: Manner of Death

Accidental Injury Deaths

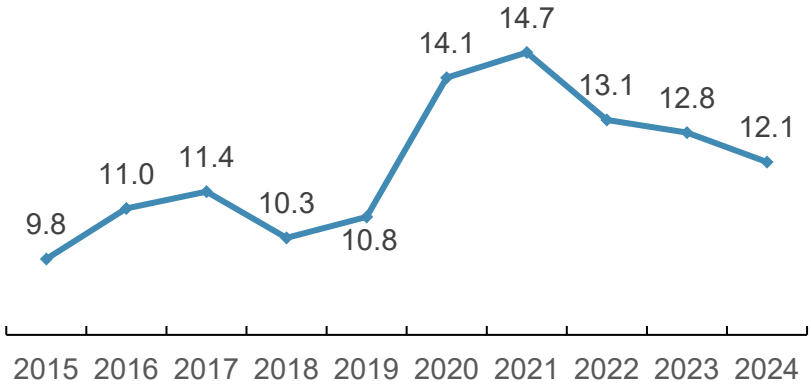
An injury that occurred when there was no intent to cause harm or death is an unintentional injury. See the Glossary for further explanation.

Total Accidental Injury Deaths
202
(26% of all child deaths)

5.4% decrease
in mortality rate from 2023
(12.1 deaths per 100,000 children in 2024)

100%
of Accidental Injury Deaths were Preventable

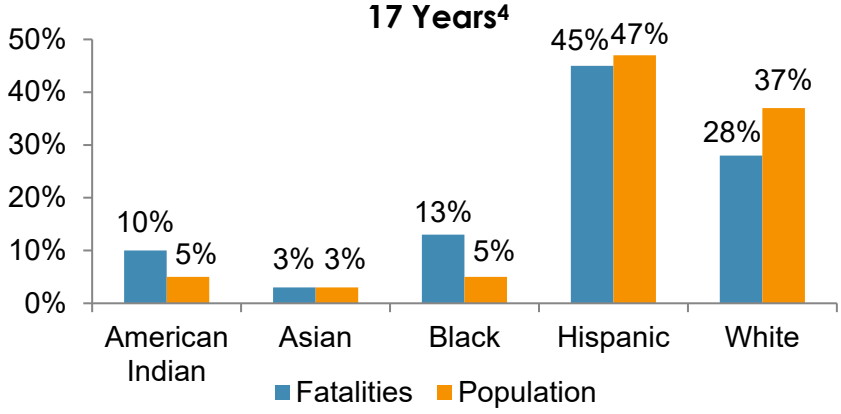
Mortality Rate per 100,000 Children Due to Accidental Injury, Ages Birth to 17 Years[4-13]



Top Causes of Accidental Injury Deaths:

MVC	Suffocation	Drowning	Poisoning	Environmental Heat Exposure
39% (78 deaths)	27% (54 deaths)	17% (35 deaths)	6% (12 deaths)	3% (7 deaths)

Percentage of Accidental Injury Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[4]



31% of accidental injury deaths occurred in **infants (less than one year of age)**

63% of accidental injury deaths were among **males**

Leading Risk Factors of Accidental Injury Deaths*:

CPS History with Family	Parental Substance Use History	Poverty	Lack of Supervision	Substance Use
47%	40%	38%	35%	29%

*More than one risk factor may have been identified for each death.

Accidental Injury Death Prevention Recommendations:

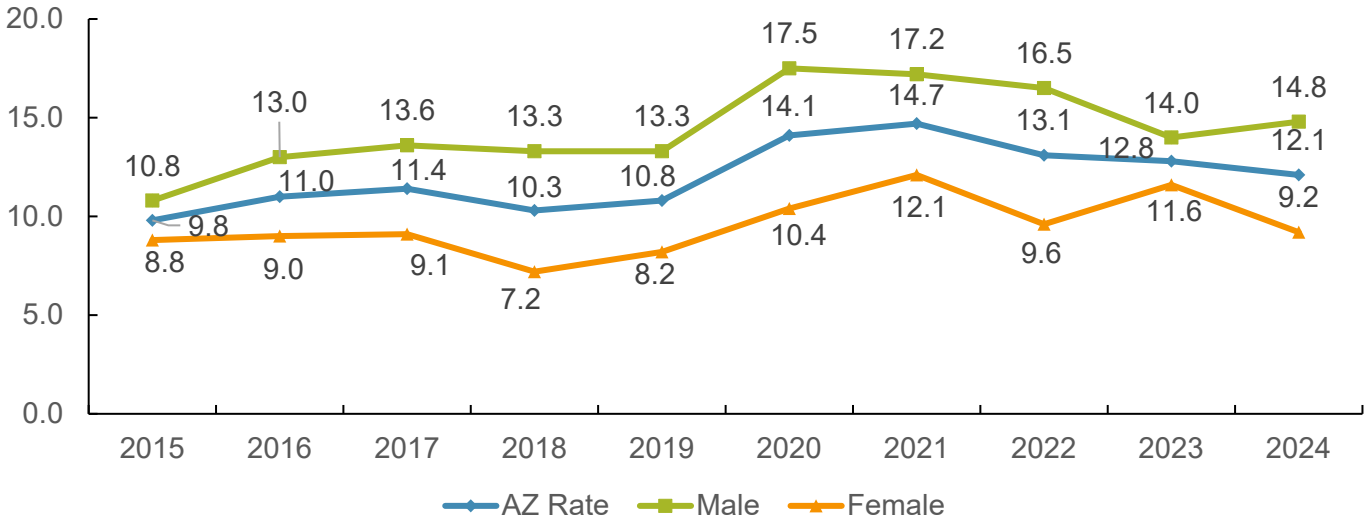
(1) Increase parents'/caregivers' understanding of children's susceptibility to heat stroke and how to recognize the signs of it and prevent it, including limiting outdoor activities in hot weather and keeping children well hydrated. [44]

(2) Parents and caregivers should ensure that children are never left unattended in a vehicle, even briefly. Always lock car doors and trunks to prevent children from entering unattended vehicles. Be extra vigilant when your routine is shifted, and place items like your phone or purse in the back seat as a reminder to check for children before entering the vehicle. [45]

(3) Cities and park departments should continue to expand hiking trail closures during high-temperature days and increase public awareness campaigns on the dangers of extreme heat. [46, 47]

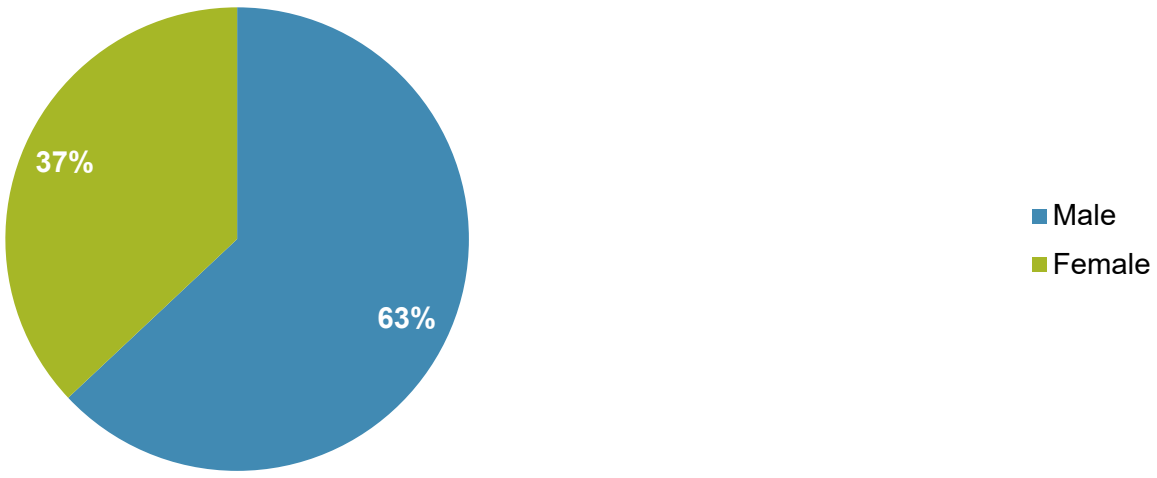
Overall, Arizona's accidental injury mortality rate decreased by 5.4%, from 12.8 deaths per 100,000 children in 2023 to 12.1 deaths per 100,000 children in 2024. Males have generally had a higher accidental injury mortality rate than females. From 2023 to 2024, the male mortality rate increased by 5.7% while the female mortality rate decreased by 20.7% (Figure 18).

Figure 18. Mortality Rate per 100,000 Children due to Accidental Injury by Sex, Ages Birth to 17 Years, Arizona, 2015-2024[4-13]



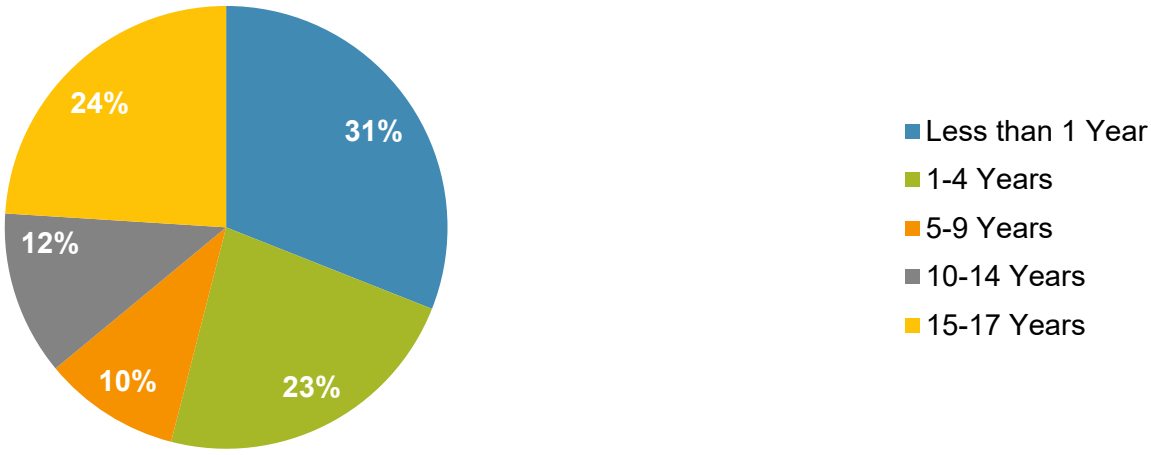
The majority of accidental injury deaths occurred among males (63%) (Figure 19).

Figure 19. Percentage of Accidental Injury Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=202)



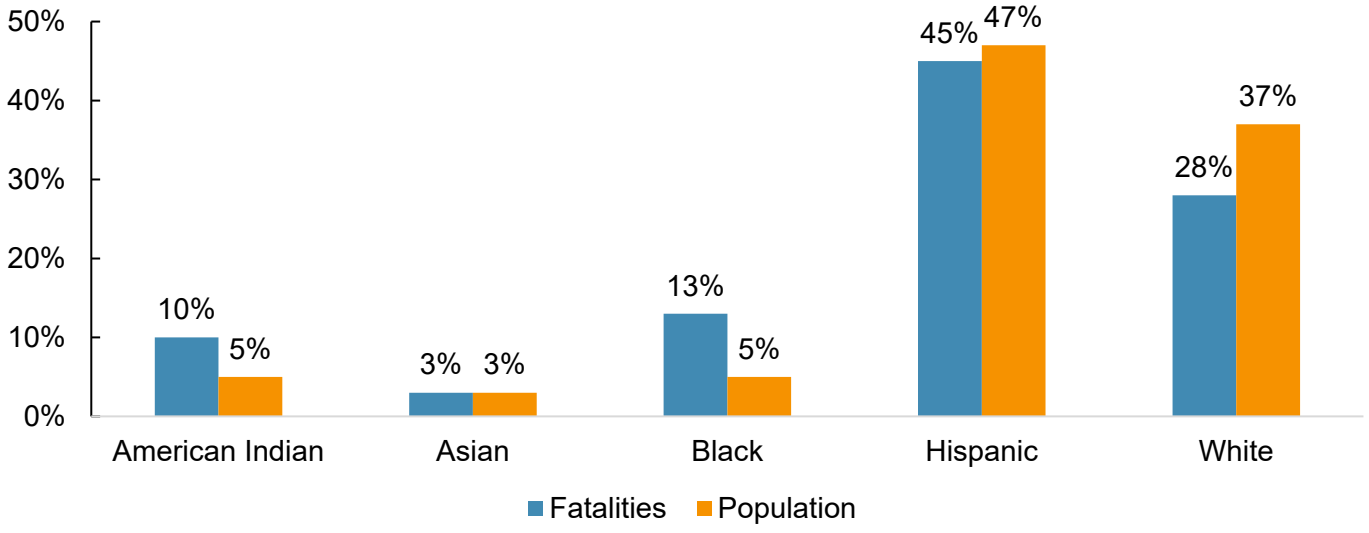
The highest percentage of accidental injury deaths occurred among children less than one year of age (31%), followed by children aged 15-17 years (24%) (Figure 20).

Figure 20. Percentage of Accidental Injury Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=202)



American Indian and Black children accounted for 10% and 13% of accidental injury deaths, respectively, despite each representing only 5% of the total child population. The majority of accidental injury deaths occurred among Hispanic (45%) and White (28%) children (Figure 21).

Figure 21. Percentage of Accidental Injury Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=202)[4]



Among accidental injury deaths, motor vehicle crash-related (39%) were the leading cause of death for children aged birth to 17 years (Table 7).

Table 7. Cause of Accidental Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=202)

Causes of Death	Number	Percent
Motor Vehicle Crash-Related	78	39%
Suffocation	54	27%
Drowning	35	17%
Poisoning	12	6%
Environmental Heat Exposure	7	3%
Fall/Crush	7	3%
Firearm Injury	*	*
Other Injury (i.e., Dog Bites)	*	*
Fire/Burn Injury	*	*
Choking	*	*
Undetermined Cause	*	*
*Number/Percentage suppressed due to count less than 6.		

While numerous preventable risk factors contribute to accidental injury deaths, CPS history with the family (47%) was the most frequently identified risk factor, followed by parental substance use history (40%) and poverty (38%) (Table 8).

Table 8. Risk Factors of Accidental Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=202)

Risk Factors*	Number	Percent
CPS History with the Family	95	47%
Parental Substance Use History	80	40%
Poverty	76	38%
Lack of Supervision	71	35%
Substance Use	59	29%
Unsafe Sleep Environment	51	25%
History of Trauma/ Violence	37	18%
Lack of Seat Restraint	35	17%
Housing Insecurity	32	16%
Child Relationship Issues	30	15%
Inability to Swim	29	14%
Reckless Driving	28	14%
Lack of Pool Barrier	27	13%
Family Discord	25	12%
Child's Chronic Condition	23	11%
*More than one risk factor may have been identified in each death.		

Homicides

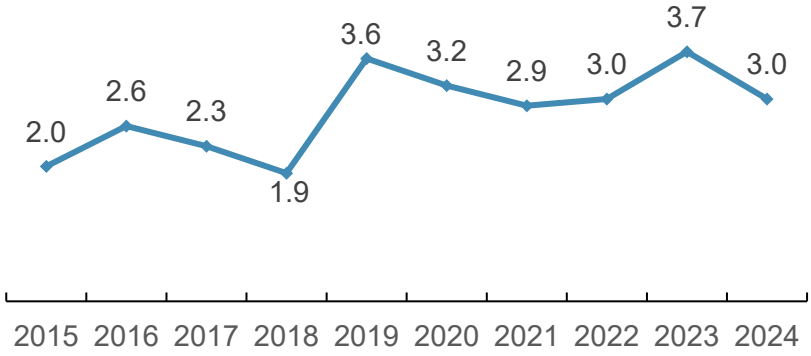
Death resulting from injuries inflicted by another person with the intent to cause fear, harm, or death. See the Glossary for further explanation.

Total Homicides
51
(6% of all child deaths)

18.9% decrease
in mortality rate from 2023
(3.0 deaths per 100,000 children in 2024)

100%
of Homicides were Preventable

Mortality Rate per 100,000 Children Due to Homicides, Ages Birth to 17 Years[4-13]

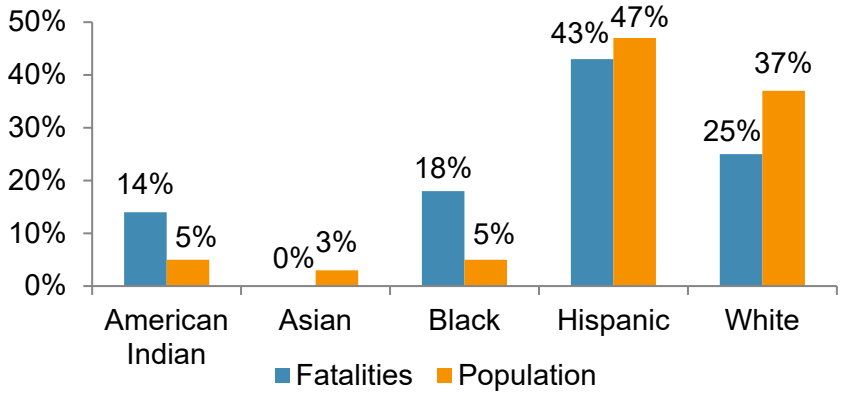


Top Causes of Homicides:

Firearm Injury	Blunt Force Injury	Stabbing	MVC	Environmental Heat Exposure
61%	27%	*	*	*
(31 deaths)	(14 deaths)	(<6 deaths)	(<6 deaths)	(<6 deaths)

*Number/Percentage suppressed due to count less than 6.

Percentage of Homicides by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[4]



51% of homicides occurred in **children aged 15-17 years**

75% of homicides were among **males**

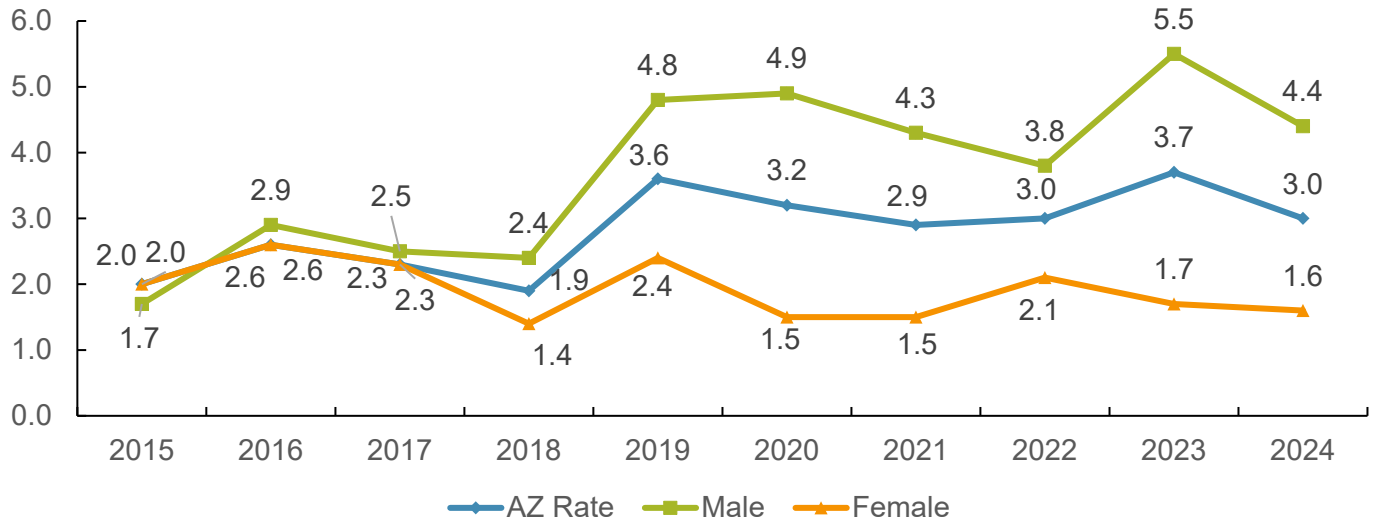
Leading Risk Factors of Homicides*:

CPS History with the Family	History of Trauma/ Violence	Child Relationship Issues	Substance Use	Criminal Activity
69%	57%	55%	53%	47%

*More than one risk factor may have been identified for each death.

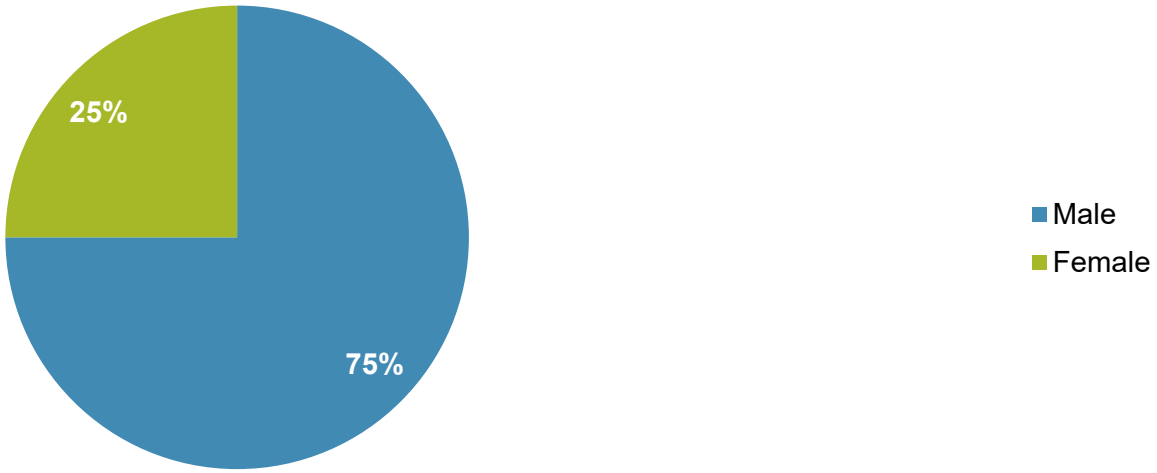
Arizona's child homicide rate decreased by 18.9% from 3.7 deaths per 100,000 children in 2023 to 3.0 deaths per 100,000 children in 2024. Since 2016, males have generally had a higher homicide rate compared to females. From 2023 to 2024, male and female homicide mortality rates decreased by 20% and 5.9%, respectively (Figure 22).

Figure 22. Mortality Rate per 100,000 Children due to Homicide by Sex, Ages Birth to 17 Years, Arizona, 2015-2024[4-13]



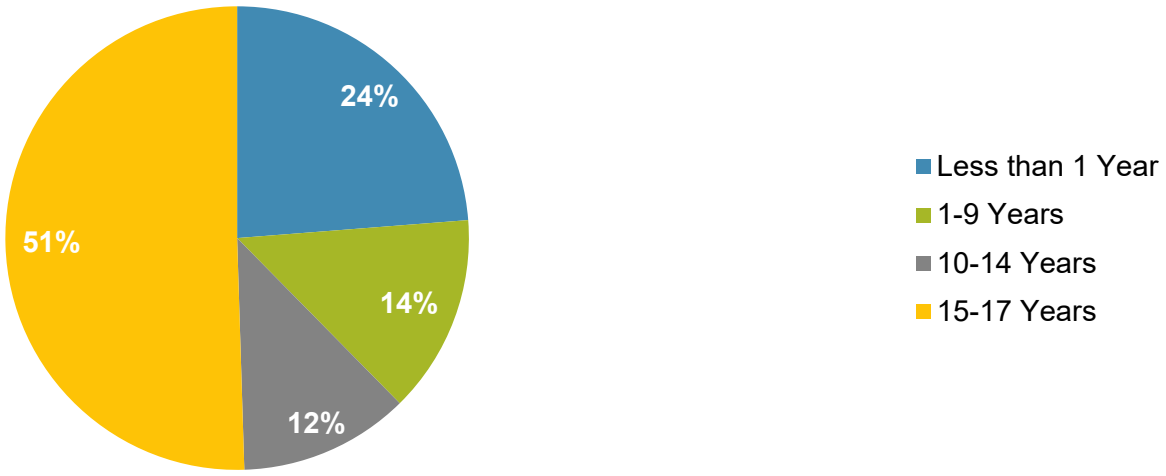
The majority of homicide deaths occurred among males (75%) (Figure 23).

Figure 23. Percentage of Homicides by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=51)



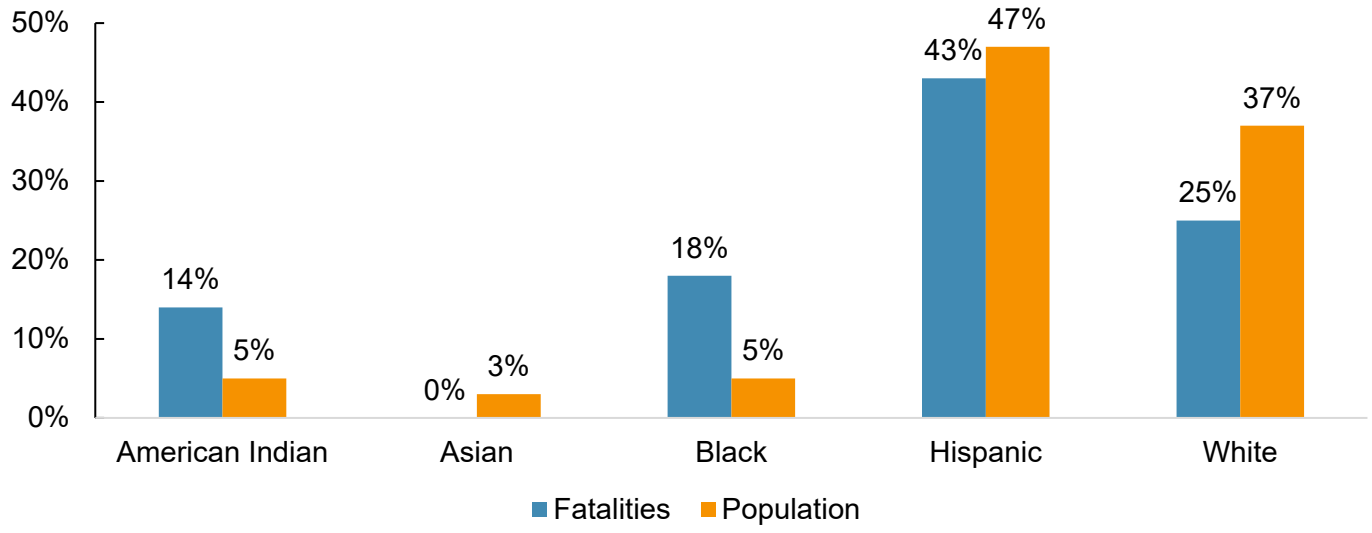
The majority of homicide deaths among children were observed among those aged 15-17 years (51%), followed by infants (24%) (Figure 24).

Figure 24. Percentage of Homicides by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=51)



In 2024, American Indian and Black children accounted for 14% and 18% of homicides, respectively, despite each representing only 5% of the total child population. Hispanic children experienced the largest percentage of homicides (43%), while no Asian children died by homicide (Figure 25).

Figure 25. Percentage of Homicides by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=51)[4]



Among homicides, firearm injury (61%) was the leading cause of death for children aged birth to 17 years, followed by blunt force injury (27%) and other injuries (Table 9).

Table 9. Cause of Homicides, Ages Birth to 17 Years, Arizona, 2024 (n=51)

Cause of Death	Number	Percent
Firearm Injury	31	61%
Blunt Force Injury	14	27%
Stabbing	*	*
Motor Vehicle Crash-Related	*	*
Environmental Heat Exposure	*	*
Poisoning	*	*
*Number/Percentage suppressed due to count less than 6.		

Acquaintances (31%) were the most commonly identified perpetrators of child homicides (Table 10). It is important to note that some homicides may involve more than one perpetrator.

Table 10. Number and Percentage of Homicides by Perpetrator, Ages Birth to 17 Years, Arizona, 2024 (n=51)

Perpetrator**	Number	Percent
Acquaintance	16	31%
Mother	11	22%
Stranger	10	20%
Father	8	16%
Other (i.e., Other Relative, Parent's Partner, Babysitter, Stepparent, Unknown)	8	16%
*Number/Percentage suppressed due to count less than 6.		
**There may be more than one perpetrator in each death.		

While numerous preventable risk factors contribute to child homicides, CPS history with the family was the most commonly identified risk factor (69%) (Table 11).

Table 11. Risk Factors of Homicides, Ages Birth to 17 Years, Arizona, 2024 (n=51)

Risk Factors*	Number	Percent
CPS History with the Family	35	69%
History of Trauma/ Violence	29	57%
Child Relationship Issues	28	55%
Substance Use	27	53%
Criminal Activity	24	47%
Parental Substance Use History	21	41%
Poverty	21	41%
Access to Firearm (User less than 18 years)	16	31%
Family Discord	15	29%
*More than one risk factor may have been identified in each death.		

Natural Deaths

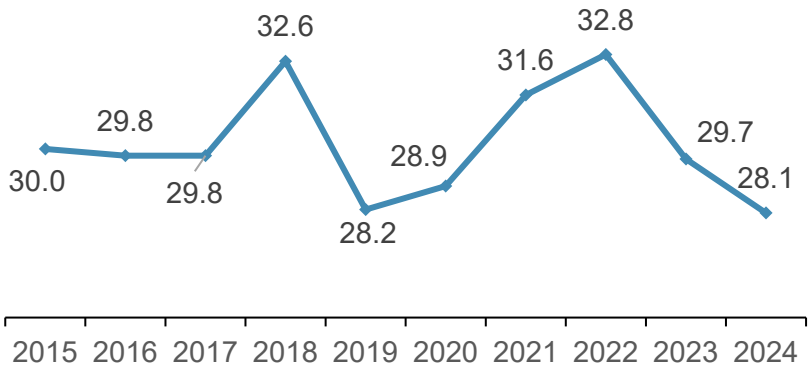
In Arizona and nationwide, deaths classified as natural deaths due to a medical condition account for the largest percentage of child deaths every year. See the Glossary for further explanation.

Total Natural Deaths
471
(60% of all child deaths)

5.4% decrease
in mortality rate from 2023
(28.8 deaths per 100,000 children in 2024)

14%
of Natural Deaths were Preventable

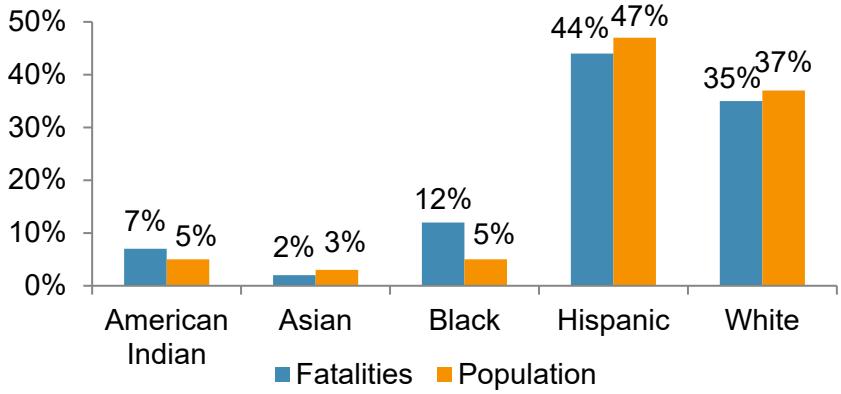
Mortality Rate per 100,000 Children Due to Natural Deaths, Ages Birth to 17 Years[4-13]



Top Causes of Natural Deaths:

Prematurity	Congenital Anomaly	Cancer	Cardiovascular	Neurological/Seizure Disorder
38% (177 deaths)	21% (98 deaths)	9% (42 deaths)	8% (39 deaths)	8% (38 deaths)

Percentage of Natural Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[4]



69% of natural deaths occurred in **infants (less than one year of age)**

50% of natural deaths were among **males**

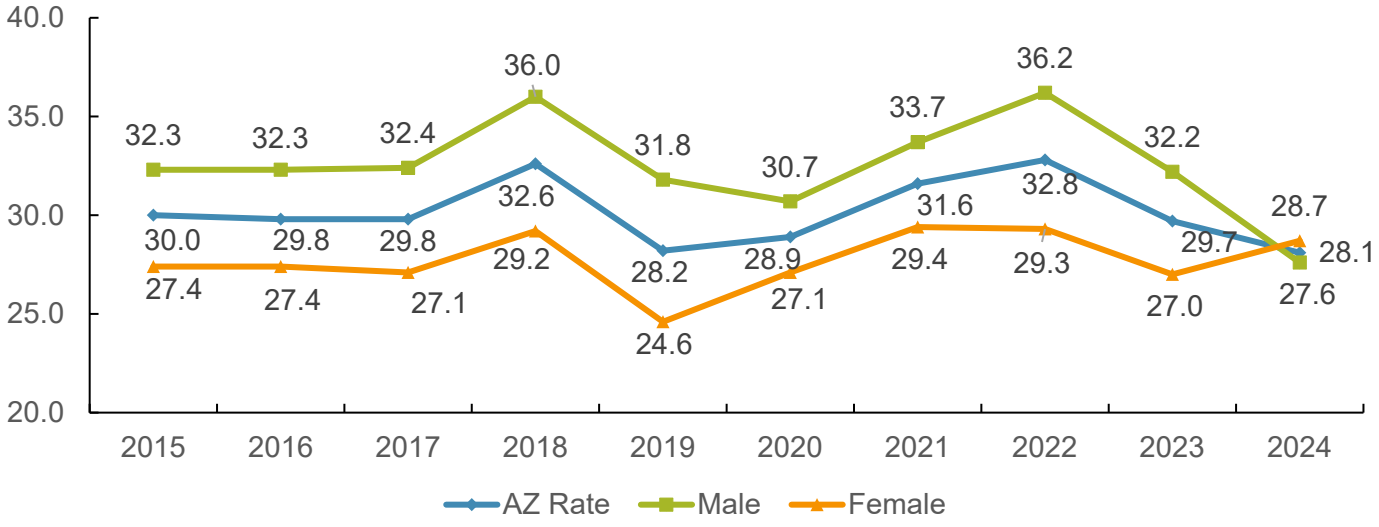
Leading Risk Factors of Natural Deaths*:

Child's Chronic Condition	Poverty	CPS History with the Family	Maternal Infection	Inadequate Medical Treatment
54%	49%	11%	11%	8%

*More than one risk factor may have been identified for each death.

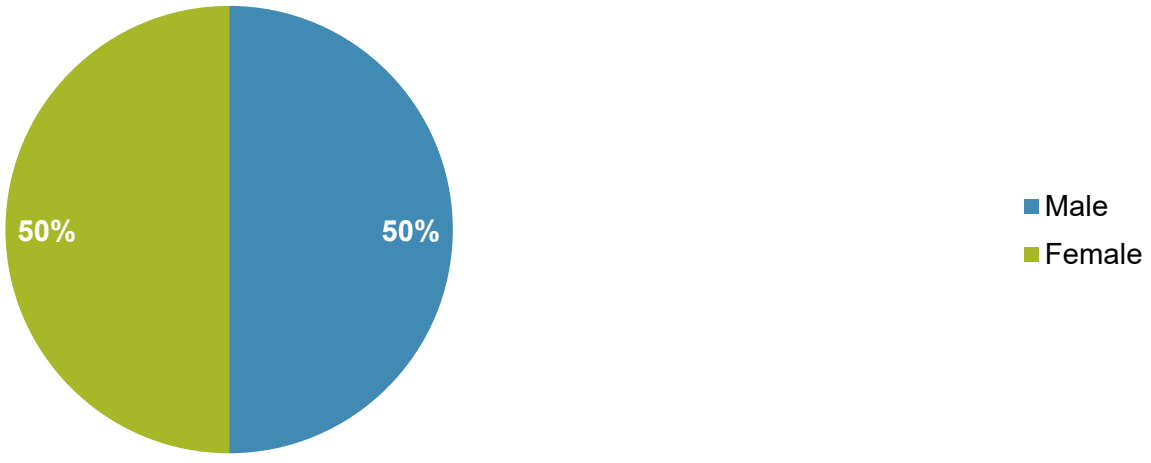
Child mortality rate from natural causes in Arizona decreased by 5.4% from 29.7 deaths per 100,000 children in 2023 to 28.1 deaths in 2024. Since 2015, males consistently had a higher mortality rate from natural causes than females until 2024, when female mortality rate surpassed that of males (Figure 26). While the male mortality rate from natural causes decreased by 14.3%, the female mortality rate increased slightly by 6.3%

Figure 26. Mortality Rate per 100,000 Children due to Natural Causes by Sex, Ages Birth to 17 Years, Arizona, 2015-2024[4-13]



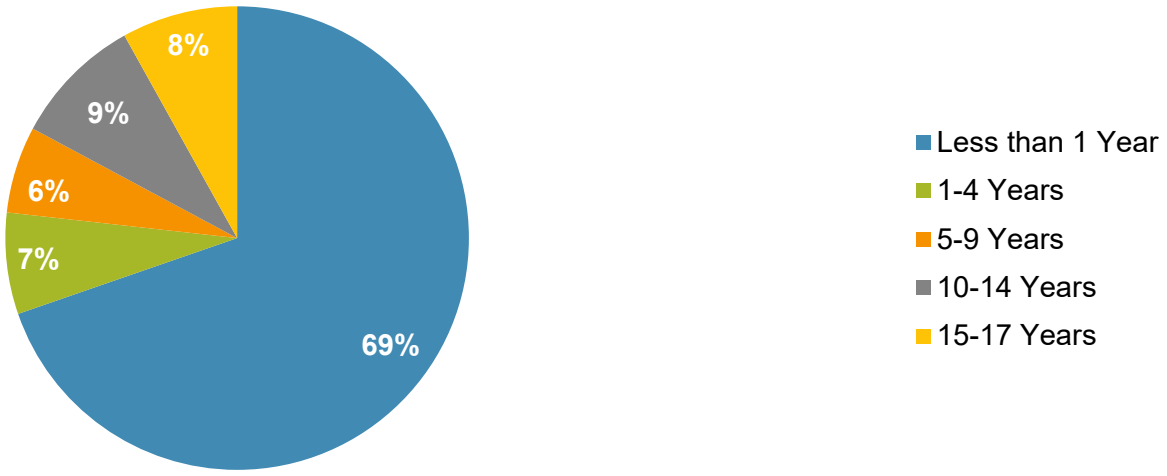
Natural deaths occurred at an even rate between males and females (50% each, respectively) (Figure 27).

Figure 27. Percentage of Natural Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=471)



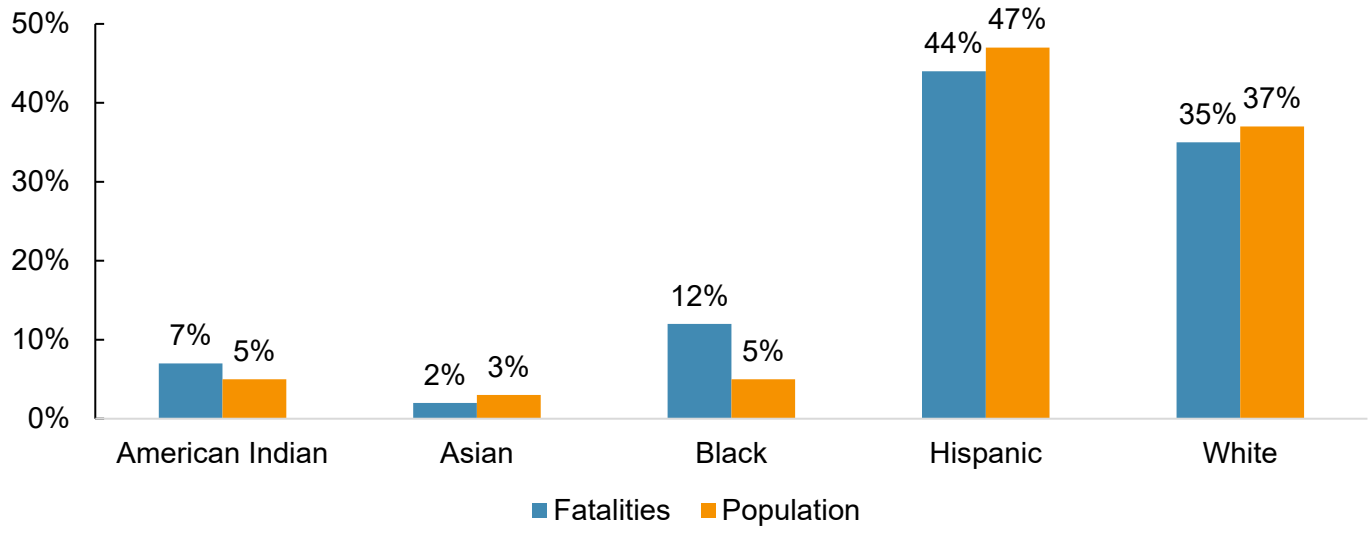
The majority of natural deaths occurred among infants less than one year of age (69%), followed by children aged 10-14 years (9%) (Figure 28).

Figure 28. Percentage of Natural Deaths among Children by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=471)



Black children comprised 12% of natural deaths despite representing only 5% of the total child population. Similarly, American Indians made up 7% of natural deaths but also comprised just 5% of the total child population. The majority of natural deaths occurred among Hispanic (44%) and White (35%) children (Figure 29).

Figure 29. Percentage of Natural Deaths among Children by Race/Ethnicity, Compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=471)[4]



Among natural deaths, prematurity (38%) was the leading cause of death for children aged birth to 17 years, followed by congenital anomaly (21%) and cancer (9%) (Table 12).

Table 12. Cause of Natural Deaths among Children, Ages Birth to 17 Years, Arizona, 2024 (n=471)

Causes of Death	Number	Percent
Prematurity	177	38%
Congenital Anomaly	98	21%
Cancer	42	9%
Cardiovascular	39	8%
Neurological/Seizure Disorder	38	8%
Other Viral Infections (does not include influenza or COVID-19)	16	3%
Other Bacterial Infections (does not include pneumonia)	13	3%
Perinatal Condition	12	3%
Pneumonia	11	2%
Asthma/Respiratory	7	1%
Hematologic Disease	*	*
Gastrointestinal Disease	*	*
COVID-19	*	*
Diabetes	*	*
Influenza	*	*
Other Medical Cause	*	*
Undetermined Medical Cause	*	*
Renal Disease	*	*
Metabolic Disease	*	*
*Number/Percentage suppressed due to count less than 6.		

The most commonly identified risk factor for natural deaths among children aged birth to 17 years was the child's chronic conditions (54%), followed by poverty (49%) (Table 13).

Table 13. Leading Risk Factors of Natural Deaths among Children, Ages Birth to 17 Years, Arizona, 2024 (n=471)

Risk Factors*	Number	Percent
Child's Chronic Conditions	252	54%
Poverty	232	49%
CPS History with the Family	53	11%
Maternal Infection	50	11%
Inadequate Medical Treatment	40	8%
Lack of Prenatal Care	40	8%
Uninsured Status	19	4%
Substance Use	18	4%
Medical Error	8	2%
*More than one risk factor may have been identified in each death.		

Suicides

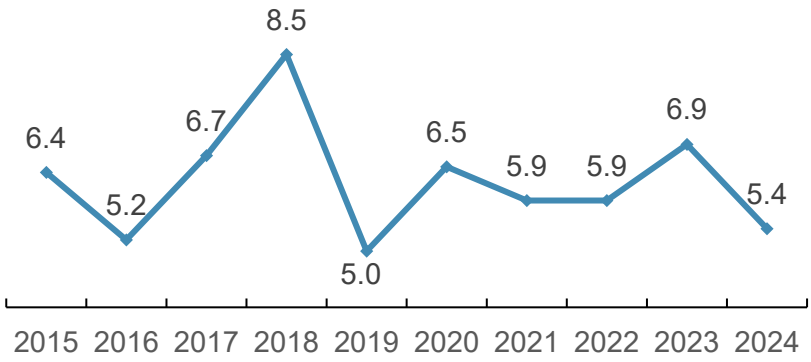
A death is due to a self-directed intentional behavior where the intent is to die because of that behavior. See the Glossary for further explanation.

Total Suicides
43
(5% of all child deaths)

21.7% decrease^
in mortality rate from 2023
(5.4 deaths per 100,000 children, aged 10-17 years, in 2024)

100%
of Suicides were Preventable

Mortality Rate per 100,000 Children Due to Suicides, Ages 10-17 Years^[34-43]

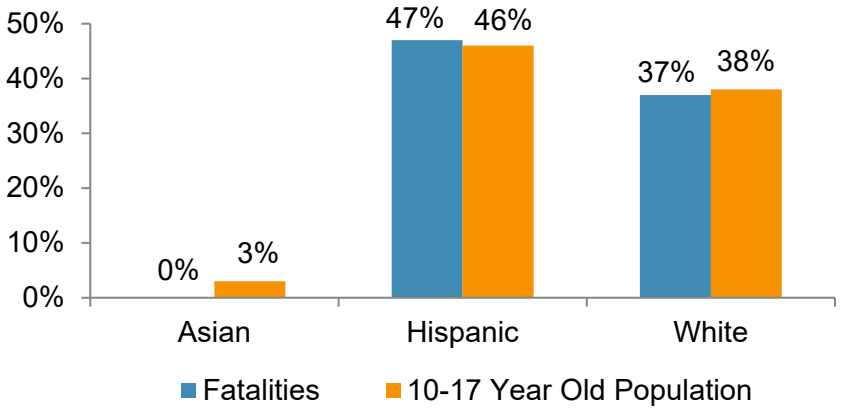


Top Causes of Suicides:

Firearm Injuries	Strangulation	MVC	Poisoning	Stabbing
49%	33%	*	*	*
(21 deaths)	(14 deaths)	(<6 deaths)	(<6 deaths)	(<6 deaths)

*Number/Percentage suppressed due to count less than 6.

Percentage of Suicides by Race/Ethnicity, compared to the 10-17 Year Old Population, Ages 10-17 Years^[43]**



67% of suicides occurred in **ages 15-17 years.**

71% of suicides were among **males**

**Data for American Indian and Black children are suppressed due to counts less than 6.
^Data for children under the age of 10 was suppressed due to counts less than 6.

Leading Risk Factors of Suicides*:

Recent Suicide Warning	Child Relationship Issues	School Issues	Prior Suicide Attempt	Mental Health/ Substance Use Disorder
79%	74%	60%	53%	51%

*More than one risk factor may have been identified for each death.

Top 5 Suicide Prevention Recommendations:

(1) Increase access to effective mental health care for Arizonans by adopting the Zero Suicide model statewide. Implement communication strategies using traditional and news media for school personnel that promote suicide prevention, emotional well-being, and mental health to increase public awareness of risk factors and warning signs for suicide and connect people in crisis to care. Increase awareness of the 988 hotline, which anyone can call, text, or chat with online at 988lifeline.org if they are worried about a loved one who may need crisis support [48-50].

(2) Ensure the availability and accessibility of coordinated counseling, therapy, grief, crisis, behavioral, and mental health services that meet the needs of all Arizonians[51].

(3) Pediatricians and all pediatric healthcare providers should conduct universal screening for mental health issues during health care visits, as well as have education on prescribing and managing medications to treat mental health concerns [52,53].

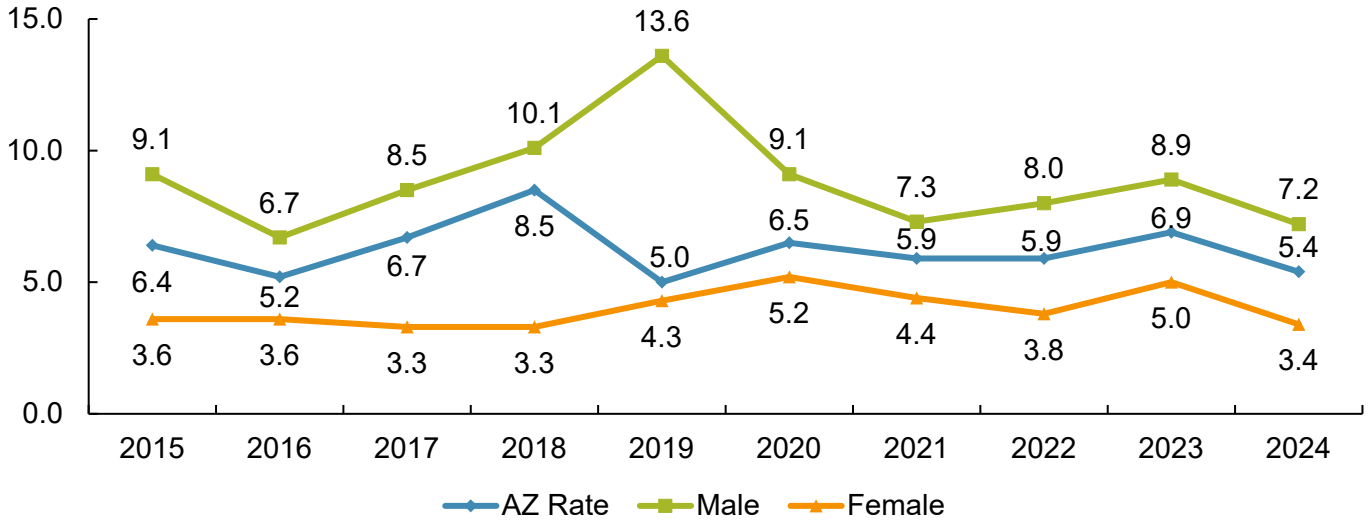
(4) Public and Private Schools should have the resources to [49, 51, 54-60]:

a. Have a suicide management protocol and be aware of resources like the suicide prevention toolkits developed by the Substance Abuse and Mental Health Services Administration and the American Foundation for Suicide Prevention.
b. Provide appropriate mental health services for students at risk for suicide. If the school cannot provide the services, it should identify mental health providers to whom students can be referred for support.
c. Educate staff members on the effects that suicide contagion can have on a student population. Adolescents are vulnerable to suicide contagion, and it is essential for schools not to glamorize, simplify, or romanticize the death of a student.
d. Use simultaneous complementary strategies. Simultaneous interventions involving parents, changing the school environment, and improving students' skills have been effective.
e. Increase the availability of suicide prevention and bullying prevention programming and educate youth on how to report concerns of suicide ideation, threats, abuse, and/or neglect.

(5) Encourage responsible firearm access and ownership, including educating parents/families/caregivers that the presence of a firearm in the house increases the risk of suicide for adolescents [56,61].

Suicide rate among children aged 10 to 17 years decreased by 21.7% from 6.9 deaths per 100,000 children in 2023 to 5.4 deaths per 100,000 children in 2024. Males have generally had a higher suicide rate compared to females. The male and female mortality rates from suicide decreased by 19.1% and 32.0% from 2023 to 2024 (Figure 30).

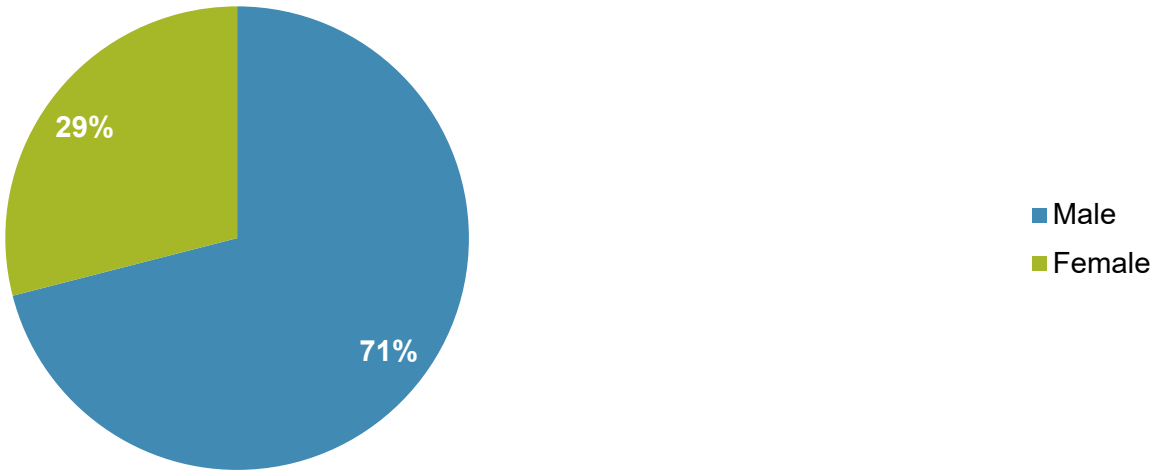
Figure 30. Mortality Rate per 100,000 Children due to Suicide by Sex, Ages 10-17 Years, Arizona, 2015-2024* [34-43]



*Data for children under the age of 10 was suppressed due to counts less than 6.

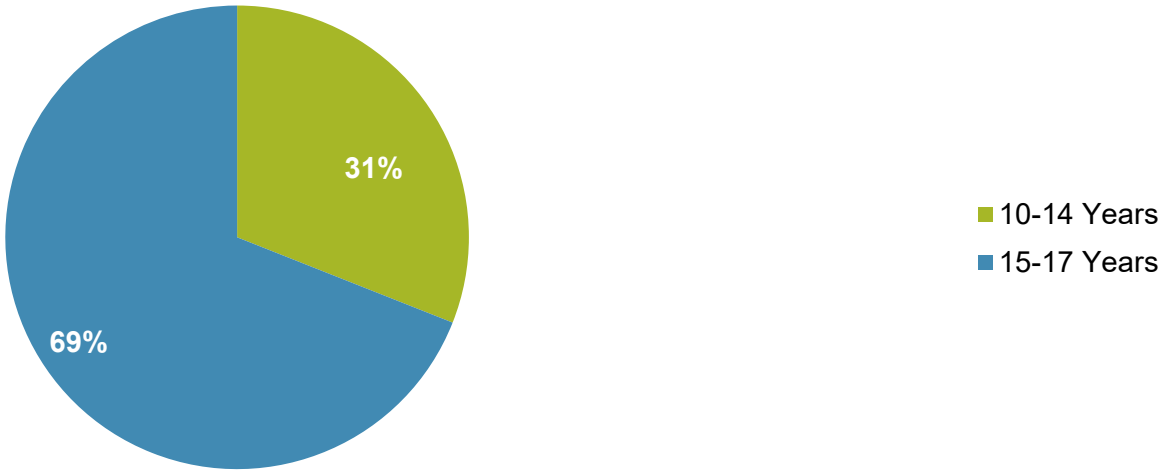
The majority of suicide deaths in children aged 5 to 17 years occurred among males (71%) (Figure 31).

Figure 31. Percentage of Suicides by Sex in Children, Ages 5 to 17 Years, Arizona, 2024 (n=43)



The majority of suicides occurred among children aged 15-17 years (69%) (Figure 32).

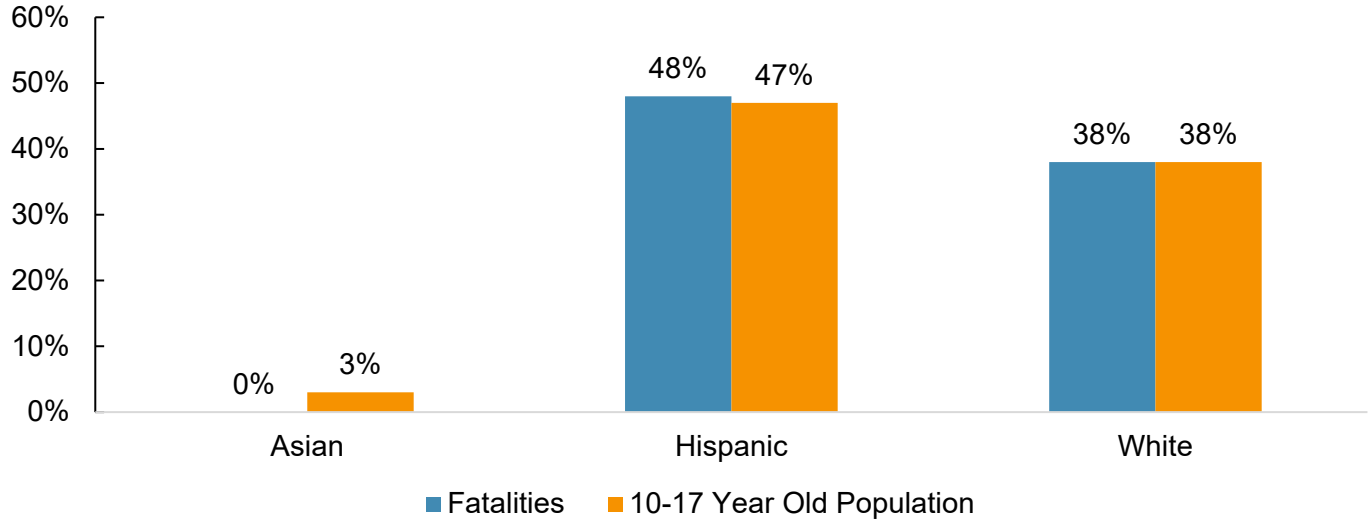
Figure 32. Percentage of Suicides by Age Group in Children, Ages 10-17 Years, Arizona, 2024 (n=42)*



*Data for children under the age of 10 was suppressed due to counts less than 6.

Hispanic children, aged 10-17 years, made up 48% of suicides but only 47% of the 10-17-year-old population. They also had the largest percentage of suicides in 2024. In contrast, Asian children experienced no suicides in 2024 (Figure 33).

Figure 33. Percentage of Suicides by Race/Ethnicity, compared to the 10-17 Year Old Population, Ages 10-17 Years, Arizona, 2024 (n=42)*, [43]**



*Data for children under the age of 10 was suppressed due to counts less than 6.
**Data for American Indian and Black children are suppressed due to counts less than 6.

Among suicides of children aged 5-17 years, firearm injury (49%) was the leading cause of death, followed by strangulation (33%) (Table 14).

Table 14. Cause of Suicides, Ages 5-17 Years, Arizona, 2024 (n=43)

Cause of Death	Number	Percent
Firearm Injury	21	49%
Strangulation	14	33%
Motor Vehicle Crash-Related	*	*
Poisoning	*	*
Stabbing	*	*
Environmental Heat Exposure	*	*
Drowning	*	*
*Number/Percentage suppressed due to count less than 6.		

While several risk factors can contribute to suicide, the most commonly identified were a recent (within 30 days of the child's death) suicide warning (79%), child relationship issues (74%), and school (60%) (Table 15).

Table 15. Risk Factors of Suicides, Ages 5-17 Years, Arizona, 2024 (n=43)

Risk Factors**	Number	Percent
Recent Suicide Warning	34	79%
Child Relationship Issues	32	74%
School Issues	26	60%
Prior Suicide Attempt	23	53%
Mental Health/ Substance Use Disorder	22	51%
Access to Firearm (User less than 18 years)	21	49%
Recent Crisis	20	47%
History of Trauma/Violence	17	40%
CPS History with Family	15	35%
Death of a Loved One (i.e., peer, friend, or family member)	13	30%
Substance Use	9	21%
Parental Substance Use History	6	14%
Isolation	6	14%
Poverty	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one risk factor may have been identified in each death.		

Undetermined Manner Deaths

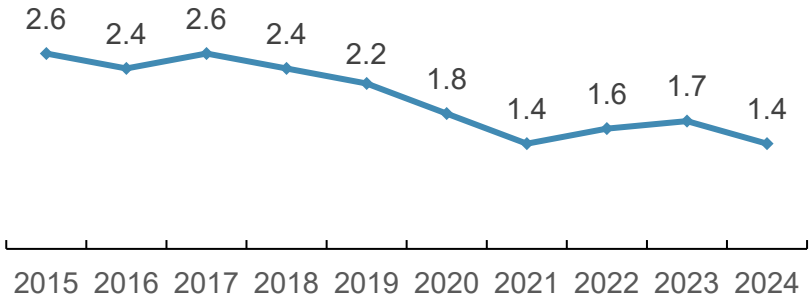
A death that the CFR State Team, after review of all available documents, is unable to decide whether the manner of death was natural, accidental, homicide, or suicide. See the Glossary for further explanation.

Total Undetermined Deaths
24
(3% of all child deaths)

17.6% decrease
in mortality rate from 2023
(1.4 deaths per 100,000 children in 2024)

75%
of Undetermined Manner Deaths were Preventable

Mortality Rate per 100,000 Children Due to Undetermined Manner Deaths, Ages Birth to 17 Years[4-13]

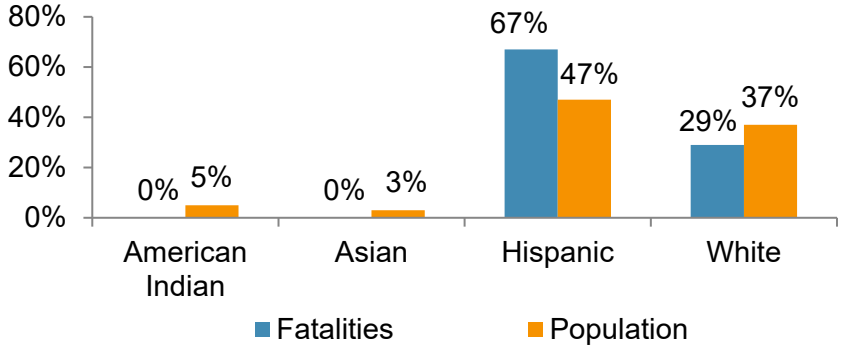


Top Causes of Undetermined Manner Deaths:

Undetermined	Fire	Suffocation	Poisoning
83%	*	*	*

*Number/Percentage suppressed due to count less than 6.

Percentage of Undetermined Manner Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[**4]**



**Data for Black children suppressed due to counts less than 6.

75% of undetermined manner deaths occurred in **infants (less than one year of age)**

63% of undetermined manner deaths were among **males**

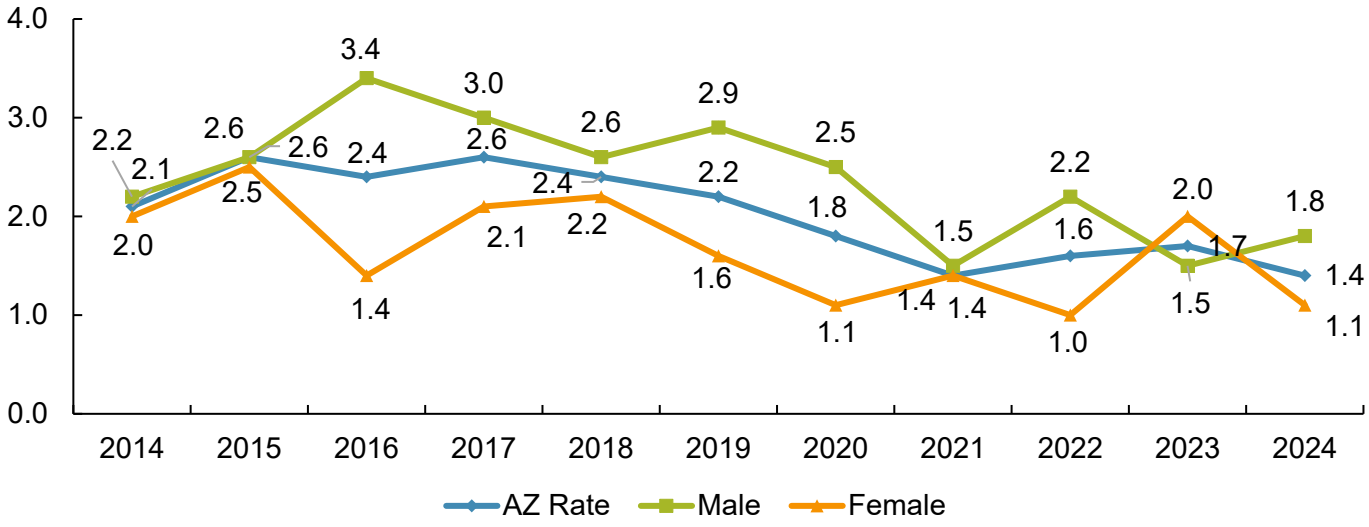
Leading Risk Factors of Undetermined Manner Deaths*:

Poverty	Parental Substance Use History	Unsafe Sleep Environment	CPS History with Family	History of Trauma/ Violence
63%	50%	46%	42%	33%

*More than one risk factor may have been identified for each death.

Arizona's rate of undetermined manner of death has decreased by 17.6% from 1.7 deaths per 100,000 children in 2023 to 1.4 in 2024. Historically, males had a higher undetermined manner of death compared to females until 2023, when females surpassed the male mortality rate. In 2024, however, the female mortality rate dropped below the male mortality rate by 38.9% (Figure 34).

Figure 34. Mortality Rate per 100,000 Children due to Undetermined Death by Sex, Ages Birth to 17 Years, Arizona, 2015-2024 [4-13]



The majority of undetermined manner of deaths occurred among males (63%) (Figure 35) and among infants less than one year of age (75%) (Figure 36).

Figure 35. Percentage of Undetermined Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=24)

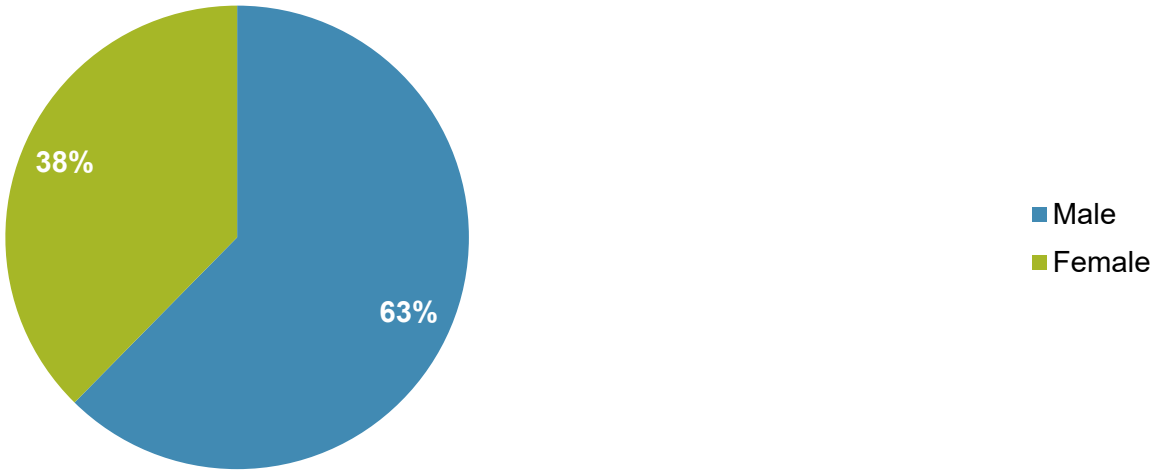
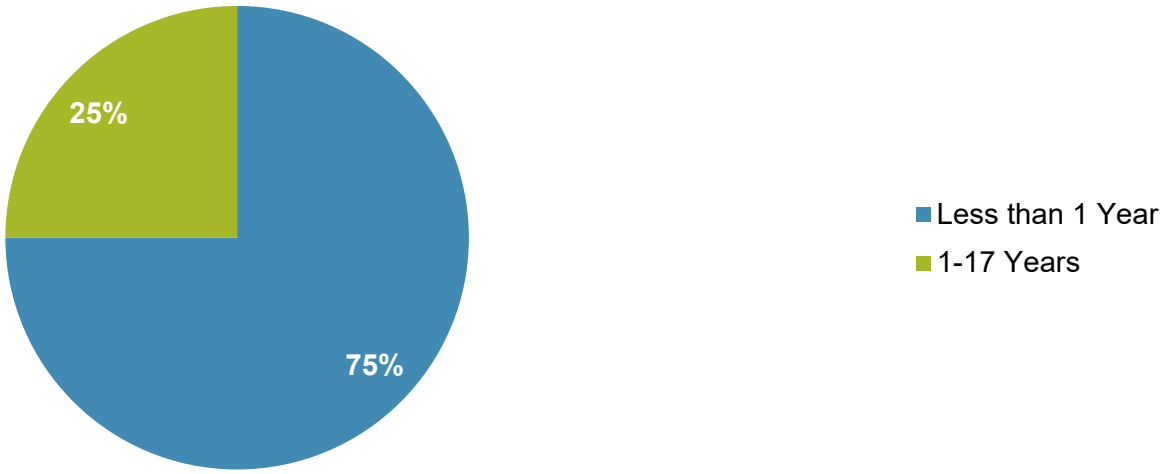
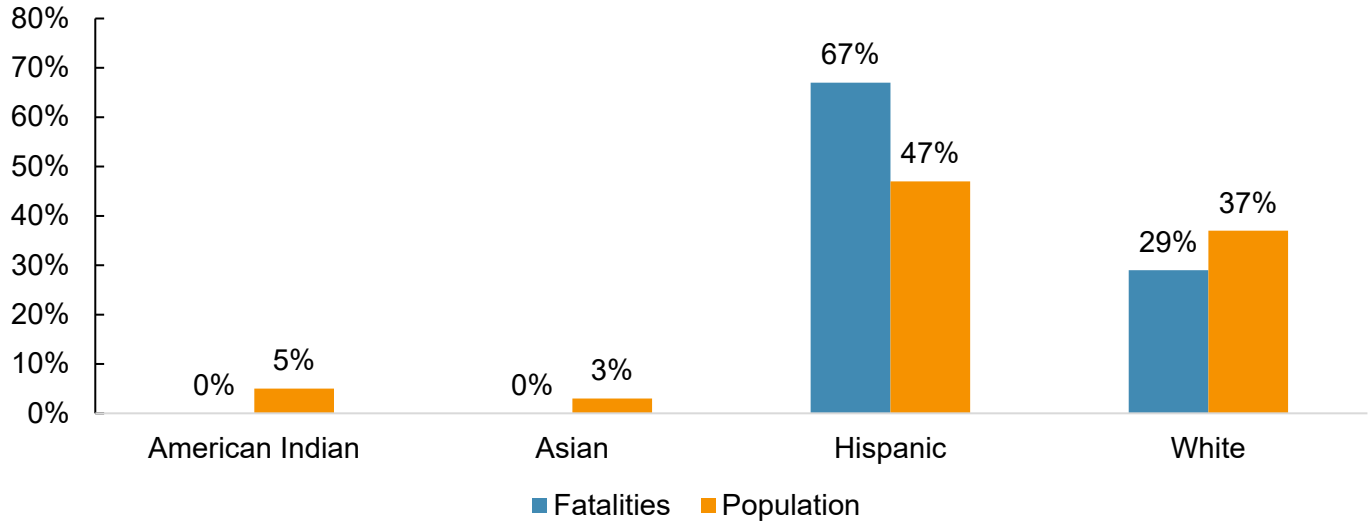


Figure 36. Percentage of Undetermined Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2023 (n=24)



Hispanic children accounted for 67% of undetermined manner of deaths, but only comprise 47% of the total child population. They also had the largest percentage of undetermined manner of deaths in 2024. American Indian and Asian children experienced no undetermined manner of deaths in 2024 in Arizona (Figure 37).

Figure 37. Percentage of Undetermined Deaths by Race/Ethnicity, Compared to the population, Ages Birth to 17 Years, Arizona, 2024 (n=24)*[4]



*Data for Black children suppressed due to counts less than 6.

Among undetermined manner deaths, undetermined (83%) was the leading cause of death for children aged birth to 17 years (Table 16).

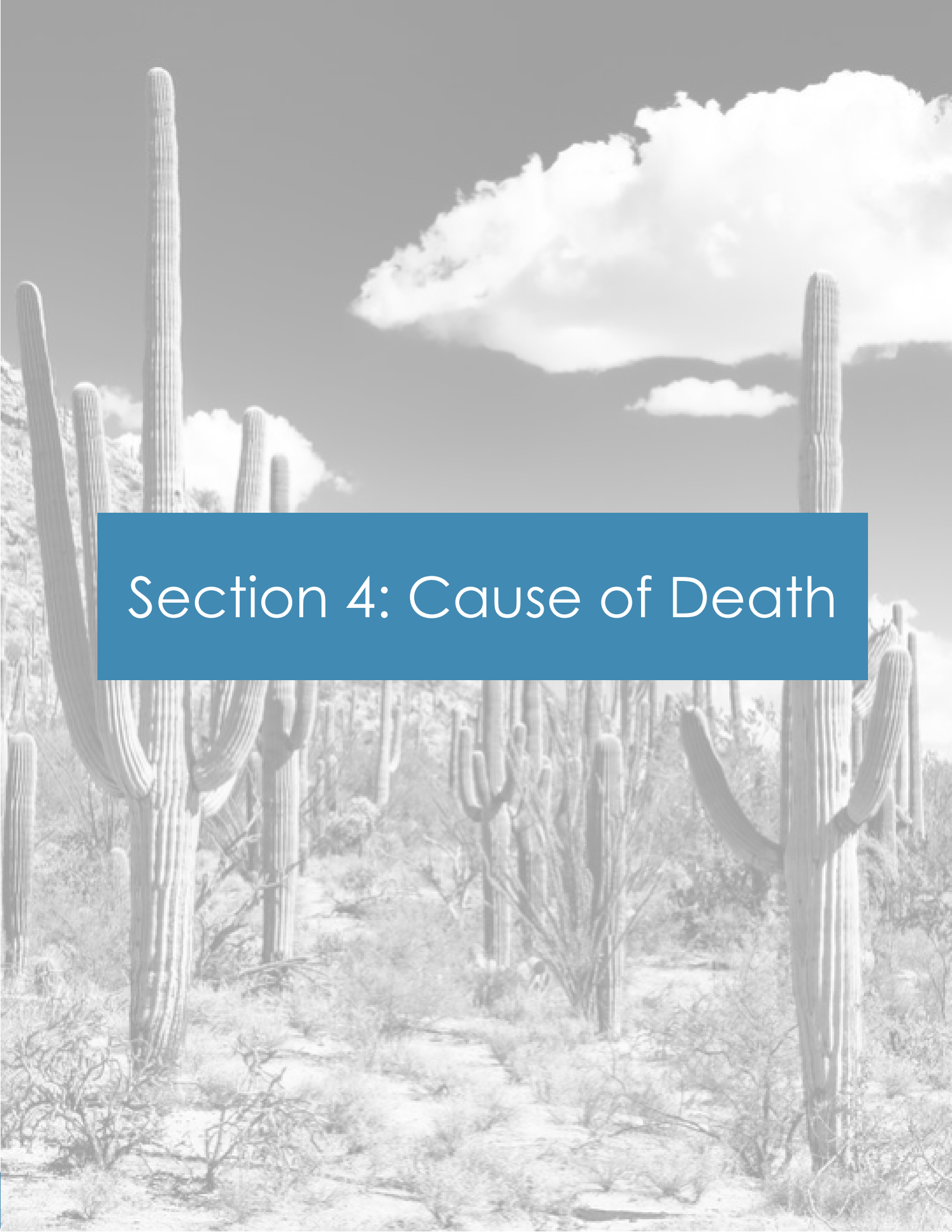
Table 16. Cause of Undetermined Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=24)

Cause of Death	Number	Percent
Undetermined	20	83%
Fire Related	*	*
Suffocation	*	*
Poisoning	*	*
*Number/Percentage suppressed due to count less than 6.		

The most commonly identified risk factors for an undetermined manner of death were poverty (63%) and parents' substance use history (50%) (Table 17).

Table 17. Risk Factors of Undetermined Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=24)

Risk Factors**	Number	Percent
Poverty	15	63%
Parental Substance Use History	12	50%
Unsafe Sleep Environment	11	46%
CPS History with Family	10	42%
History of Trauma/Violence	8	33%
Substance Use	*	*
Housing Insecurity	*	*
Child's Chronic Condition	*	*
Child Relationship Issues	*	*
Family Discord	*	*
No Crib Present	*	*
Lack of Supervision	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one risk factor may have been identified in each death.		



Section 4: Cause of Death

Drowning Deaths

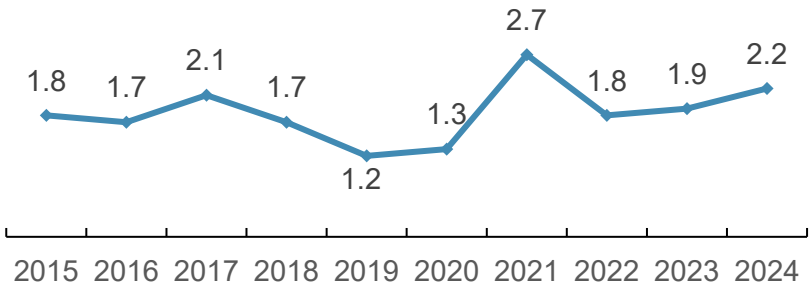
Death from an accidental or intentional submersion in a body of water. See the Glossary for further explanation.

Total Drowning Deaths
36
(5% of all child deaths)

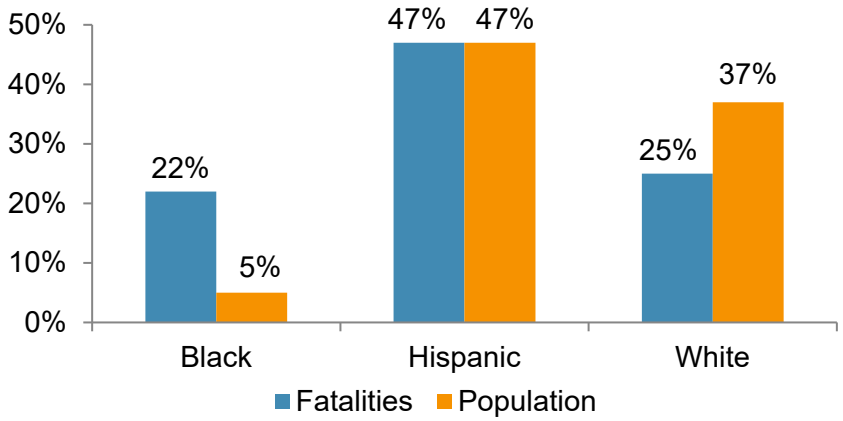
15.8% increase
in mortality rate from 2023
(2.2 deaths per 100,000 children in 2024)

100%
of Drowning Deaths were Preventable

Mortality Rate per 100,000 Children Due to Drowning, Ages Birth to 17 Years[4-13]



Percentage of Drowning Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[**4]**



75% of drowning deaths occurred in **children less than five years of age**

78% of drowning deaths were among **males**

**Data for American Indian and Asian children are suppressed due to counts less than 6.

Leading Risk Factors of Drowning Deaths*:

Inability to Swim	Lack of Supervision	Lack of Pool Barrier	Child's Chronic Condition	Poverty
83%	81%	75%	31%	22%

*More than one risk factor may have been identified for each death.

Top 5 Drowning Death Prevention Recommendations:

(1) Increase drowning education and family outreach to promote water safety in multiple languages, especially for children with medical, behavioral, and developmental concerns. [62-67]

(2) Ensure public pools, businesses (including rental properties) with pools, and privately-owned pools (including existing homes) have proper enclosures and are up to code. Additionally, a state fund should be created to assist families with such safety mechanisms and safety devices if they cannot afford them. [63-66]

   a. Pools must be enclosed on all four sides by a wall, fence, or barrier to restrict young children's access. Pool enclosures must be at least 5 feet tall and 20 inches from the water's edge and have a gate at least 54 inches above the floor that swings away from the pool. The gate should have a self-closing/latching mechanism. There should be no openings in pool enclosures wide enough for a child to get through or under. There should be no protrusions, like handholds, which can be used to climb the enclosure.

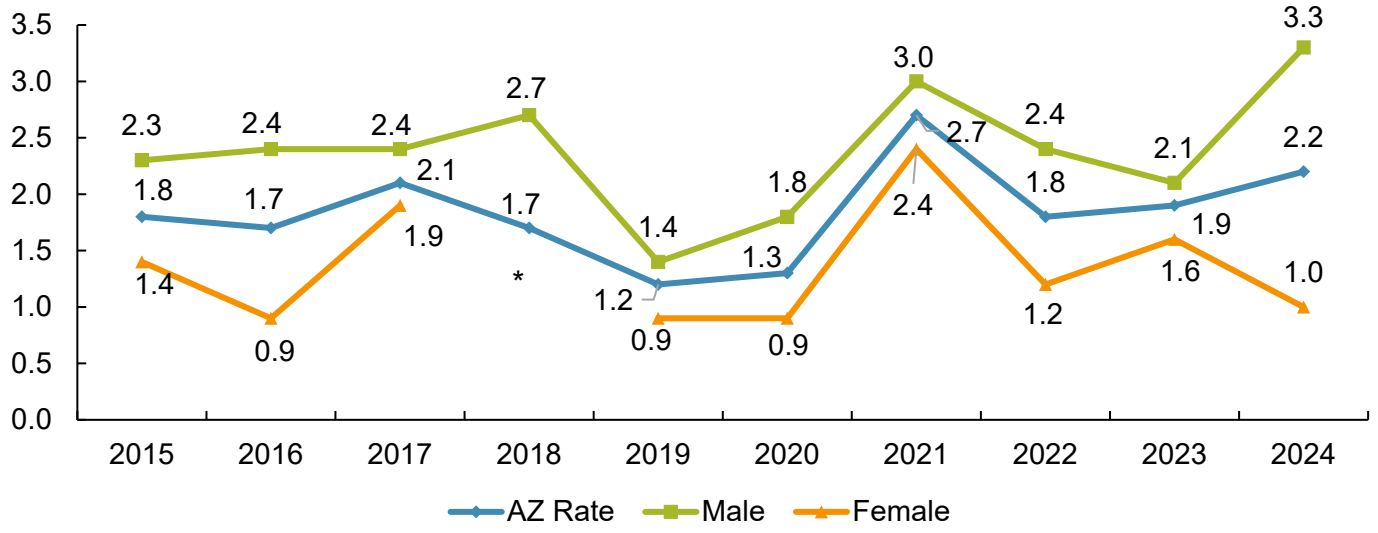
(3) Ensure the availability and accessibility of affordable swim lessons that are developmentally appropriate and available for all children, especially for children older than one year of age. [63,65]

(4) Ensure availability and accessibility of CPR training for parents/caregivers. [68]

(5) Educate parents and caregivers about the need for constant supervision around water of children less than four years of age, including during bath time. [62-67]

Overall, Arizona's child drowning rate has fluctuated since 2015. From 2023 to 2024, the drowning mortality rate increased by 15.8% from 1.9 deaths to 2.2 deaths per 100,000 children. Males have generally had a higher drowning rate than females. Between 2023 and 2024, the drowning mortality rate increased by 57.1% among males, while it decreased by 47.4% among females (Figure 38).

Figure 38. Mortality Rate per 100,000 Children due to Drowning by Sex, Ages Birth to 17 Years, Arizona, 2015-2024*[4-13]



*2018 data on female children were not included due to a small sample size.

The majority of drowning deaths occurred among males (78%) (Figure 39) and among children less than five years old (75%) (Figure 40).

Figure 39. Percentage of Drowning Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=36)

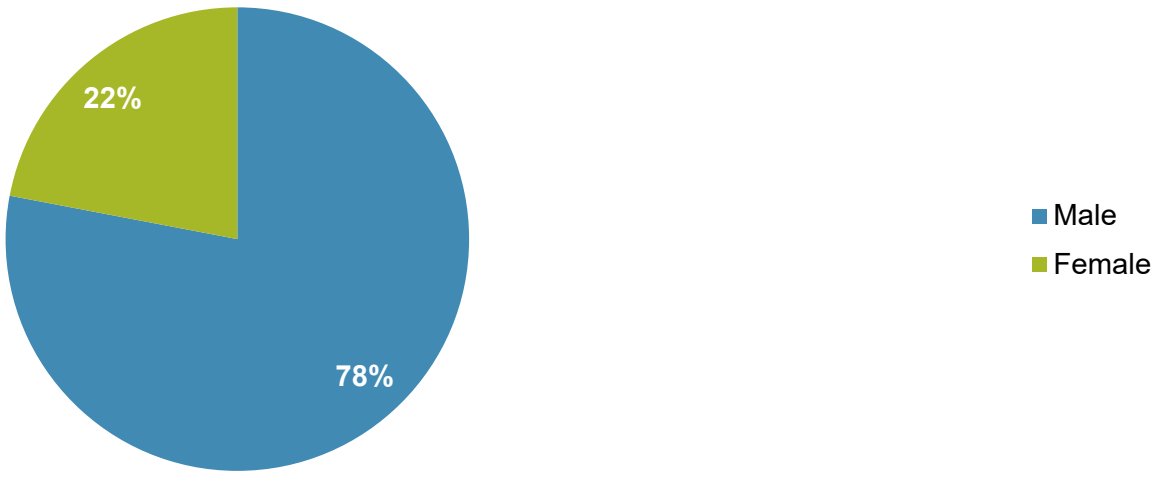
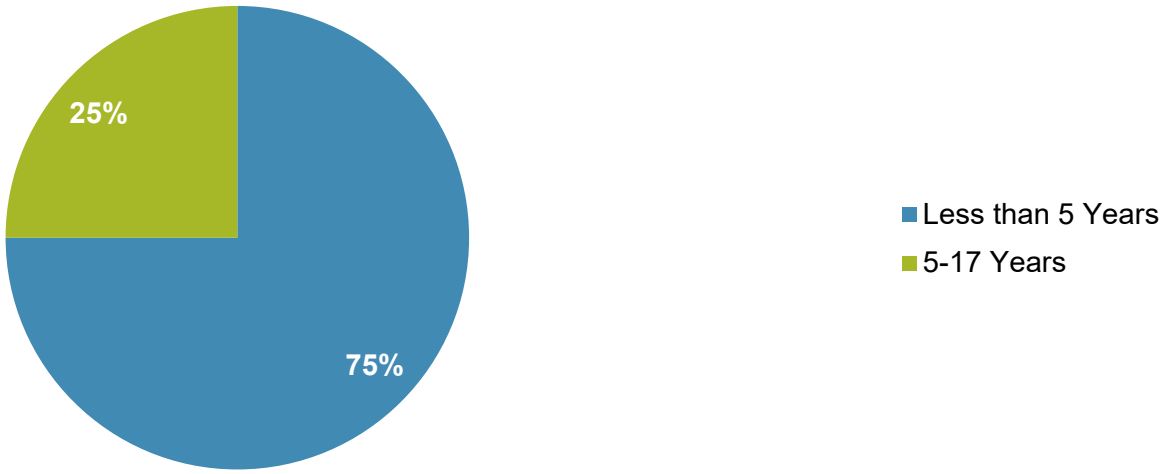
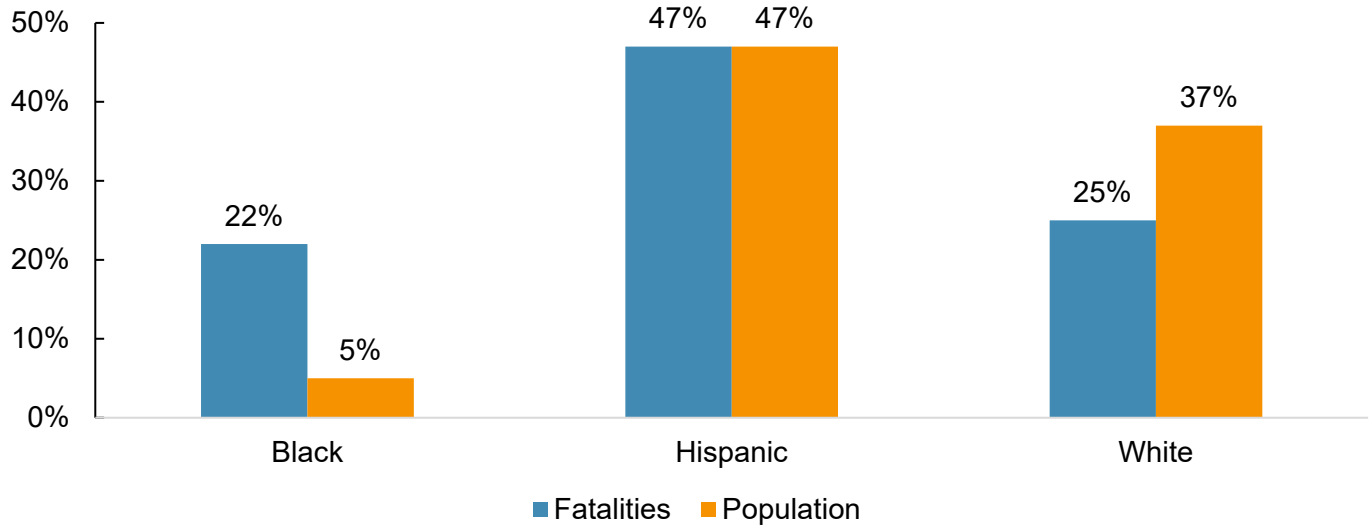


Figure 40. Percentage of Drowning Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=36)



Black children made up 22% of drowning deaths, but only comprised 5% of the total child population. Hispanic children made up the largest percentage of drowning deaths (47%) (Figure 41).

Figure 41. Percentage of Drowning Deaths by Race/Ethnicity, Compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=36) *[4]



*Data for American Indian and Asian children are suppressed due to counts less than 6.

The majority of drowning deaths occurred in pools, hot tubs, or spas (75%) (Table 18).

Table 18. Number and Percentage of Drowning Deaths by Location, Ages Birth to 17 Years, Arizona, 2024 (n=36)

Location	Number	Percent
Pool, Hot Tub, Spa	27	75%
Open Water/Pond	7	19%
Bathtub	*	*
*Number/Percentage suppressed due to count less than 6.		

Among drowning cases where a pool barrier was in place, the most frequently breached barriers were the fences (69%) and doors (64%) (Table 19). Forty-four percent of deaths involved a broken lock, and 17% occurred through a pet door. For fence breaches, 64% of the cases involved the complete absence of a fence (not shown).

Table 19. Number and Percentage of Drowning Deaths by Breach Location, Ages Birth to 17 Years, Arizona, 2024 (n=36)

Breach Location**	Number	Percent
Fence (i.e., no fence, climbed, broken, gap)	25	69%
Door (i.e., left open, lock broken, pet door)	23	64%
Gate (i.e., left open, unlocked, broken)	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one breach location may have been identified in each death.		

While numerous preventable risk factors contribute to drowning, the inability to swim (83%) was the most commonly identified (Table 20). Among the 30 deaths where inability to swim was a risk factor, poverty was also identified as a contributing risk. Additionally, 11 drowning deaths involved a child with a chronic or developmental condition, of which 8 were on the autism spectrum (not shown).

Table 20. Risk Factors of Drowning Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=36)

Risk Factors**	Number	Percent
Inability to Swim	30	83%
Lack of Supervision	29	81%
Lack of Pool Barrier	27	75%
Child's Chronic Condition	11	31%
Poverty	8	22%
CPS History with Family	7	19%
Parental Substance Use History	*	*
Substance Use	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one risk factor may have been identified in each death.		

Of the 34 drowning incidents that needed supervision, the parent was responsible for supervising the child in 85% of the cases (Table 21).

Table 21. Responsible Supervisor during Drowning Incidents Requiring Supervision, Ages Birth to 17 Years, Arizona, 2024 (n=34)

Responsible Supervisor	Number	Percent
Parent	29	85%
Other (i.e., Other Relative, Other)	*	*

*Number/Percentage suppressed due to count less than 6.

Firearm Injury Deaths

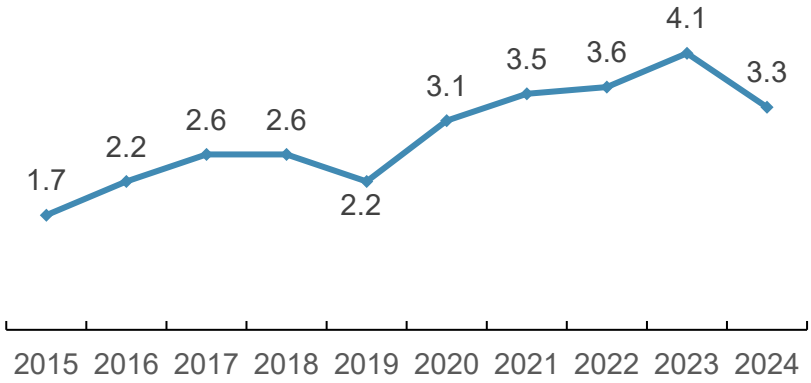
Death caused by an injury resulting from the penetrating force of a bullet or other projectile shot from a powder-charged gun. See the Glossary for further explanation.

Total Firearm Injury Deaths
55
(7% of all child deaths)

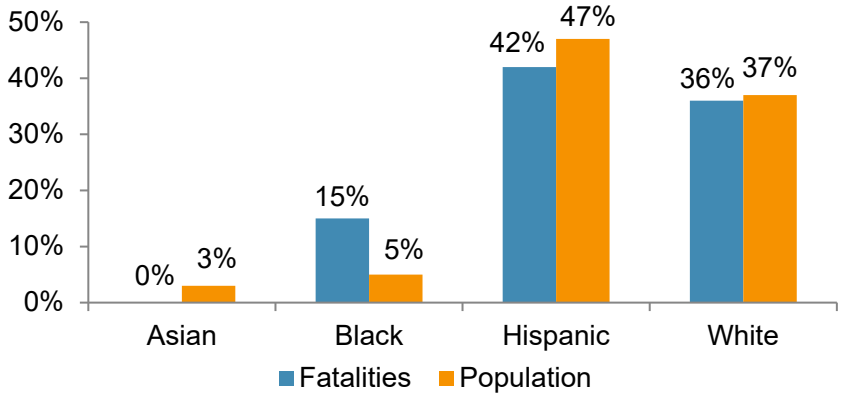
19.5% decrease
in mortality rate from 2023
(3.3 deaths per 100,000 children in 2024)

100%
of Firearm Injury Deaths were Preventable

Mortality Rate per 100,000 Children Due to Firearm Injury, Ages Birth to 17 Years[4-13]



Percentage of Firearm Injury Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[**4]**



75% of firearm injury deaths occurred in **children aged 15-17 years**

80% of firearm injury deaths were among **males**

**Data for American Indian children is suppressed due to counts less than 6.

Leading Risk Factors of Firearm Injury Deaths*:

Child Relationship Issues	Access to Firearm (User Less Than 18 years)	History of Trauma/ Violence	CPS History with Family	Substance Use
73%	67%	53%	51%	49%

*More than one risk factor may have been identified for each death.

Top 5 Firearm Injury Death Prevention Recommendations:

(1) Implement education, campaigns, and initiatives for gun owners to reduce firearm deaths, including: [52, 69-73]
   a. Promoting safe storage of firearms, which requires keeping the gun unloaded and locked in a safe separate from the ammunition
   b. Distributing lock boxes to promote safe storage and limit access
   c. Providing trigger locks when firearms are purchased
   d. Reporting stolen or lost firearms
   e. Increasing the purchasing age limit
   f. Require safety classes for all firearm purchases
   g. Enforcement of ARS 13-3102a to reduce "straw" purchases of guns to be sold later

(2) Arizona should invest in local communities to strengthen connections and support systems for children and youth. By expanding diversion and mentorship programs and offering more extracurricular activities, the state can help reduce gang violence and foster more positive relationships among kids and teens. [70, 73, 74]

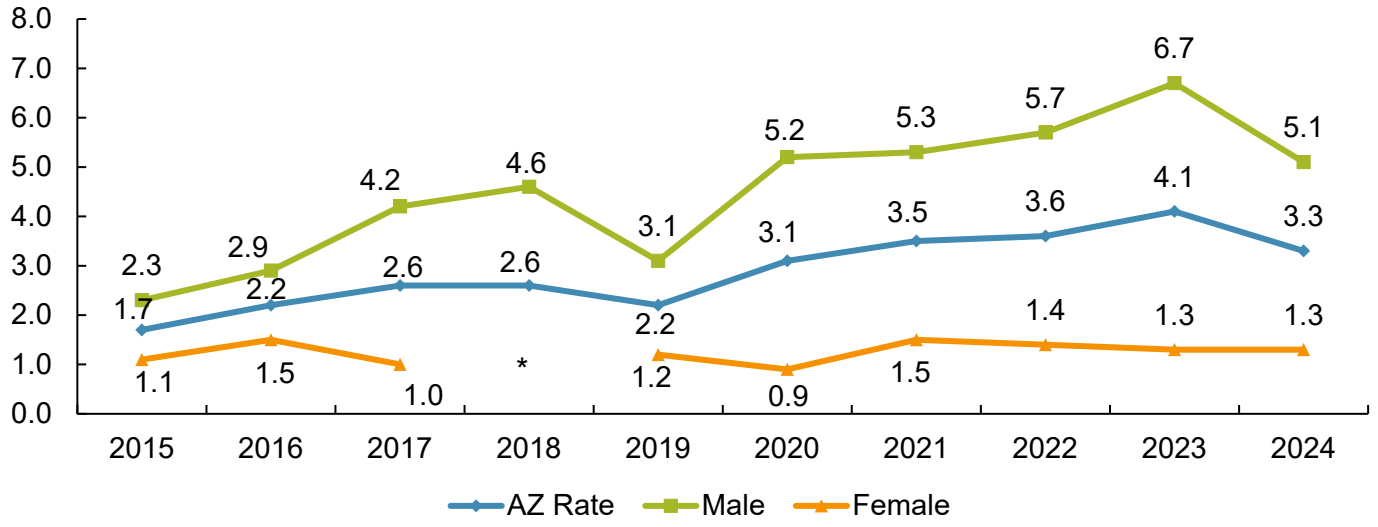
(3) Ensure the availability and accessibility of coordinated counseling, therapy, grief, crisis, behavioral, and mental health services that meet the needs of all Arizonians. [51]

(4) Increase availability of services for victims of domestic and interpersonal violence, raise awareness about available resources and support, and how and where to find help. [75]

(5) Community agencies that work with families with children and teens should provide parental education, including but not limited to: [75-77]
   a. Appropriate supervision of teenagers
   b. Monitoring social media/technology use
   c. Talking about drug/alcohol use
   d. Talking about healthy relationships and Intimate Partner Violence
   e. Addressing/assessing behavioral concerns

Since 2015, Arizona's firearm injury mortality rate increased by 94.1%. Males have generally had a higher firearm injury mortality rate than females. From 2023 to 2024, Arizona's firearm injury mortality rate decreased by 19.5% from 4.1 to 3.3 deaths per 100,000 children. During this period, the firearm injury mortality rate remained the same for females, but decreased for males by 23.9% (Figure 42).

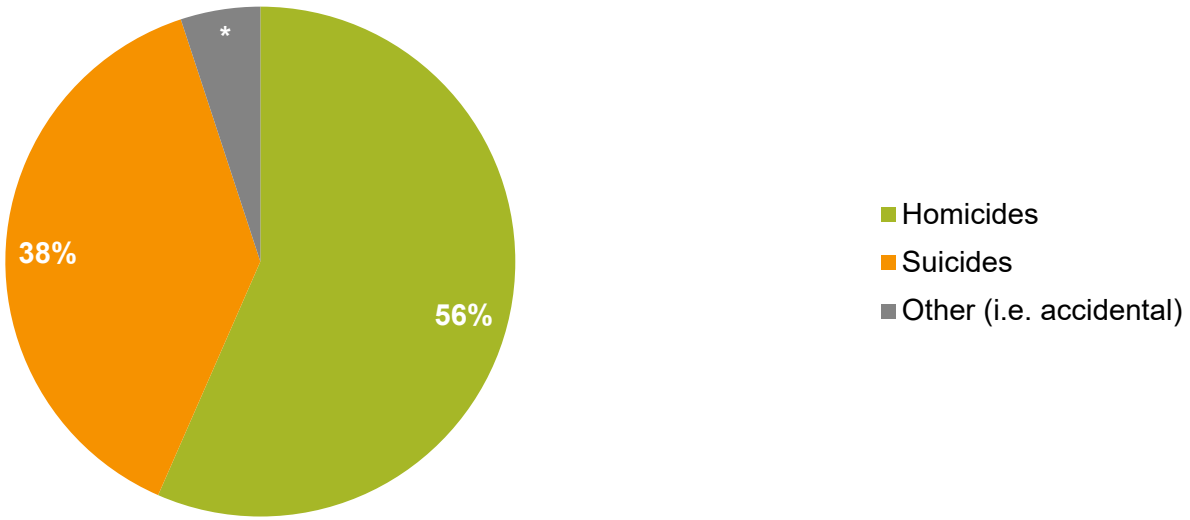
Figure 42. Mortality Rate per 100,000 Children due to Firearm Injury by Sex, Ages Birth to 17 Years, Arizona, 2015-2024*[4-13]



*2018 data on female children were not included due to the small sample size.

The majority of firearm injury deaths were due to homicides (56%), followed by suicides (38%) (Figure 43).

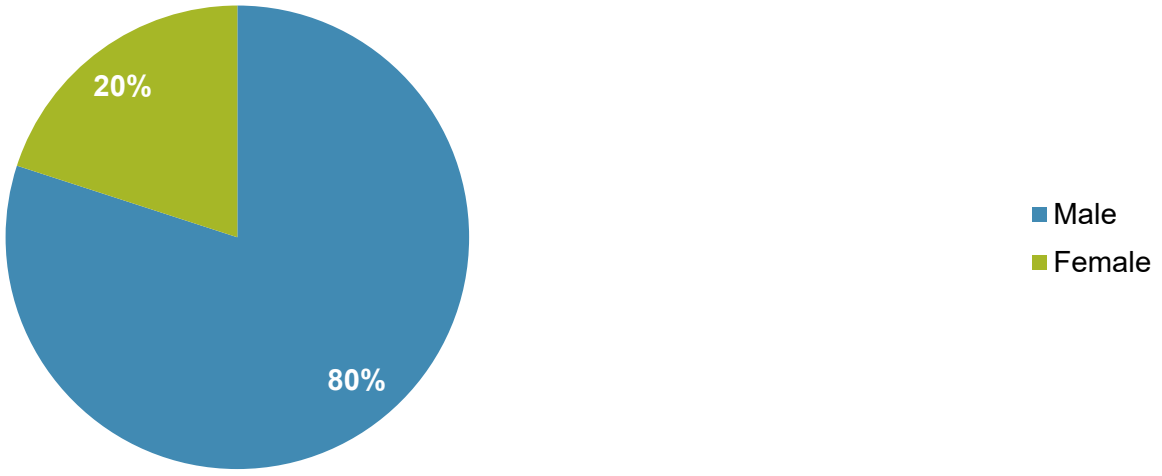
Figure 43. Percentage of Firearm Injury Deaths by Manner of Death, Ages Birth to 17 Years, Arizona, 2024 (n=55)



*Percentage suppressed due to count less than 6.

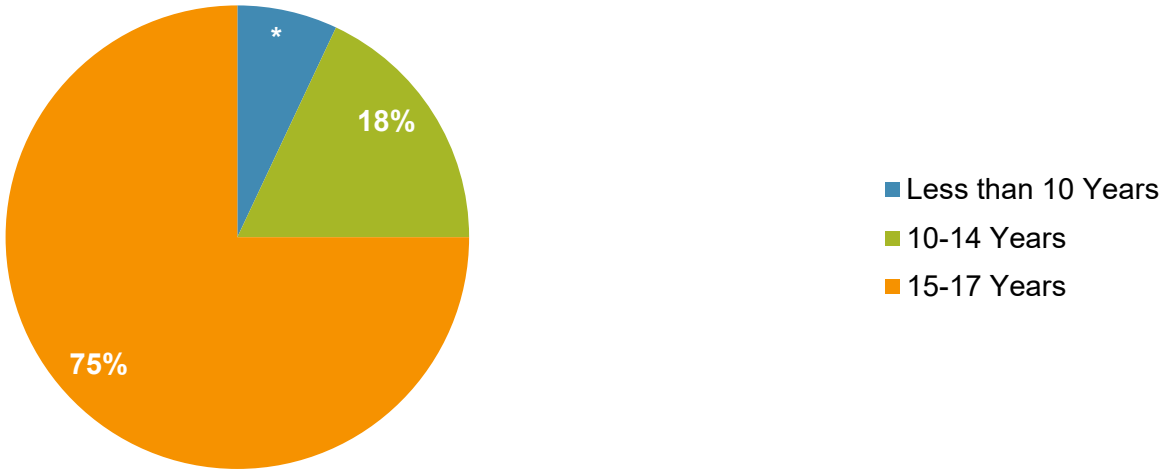
The majority of firearm injury deaths occurred among males (80%) (Figure 44).

Figure 44. Percentage of Firearm Injury Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=55)



The majority of firearm injury deaths occurred among children aged 15 to 17 years (75%), followed by those aged 10 to 14 years (18%) (Figure 45).

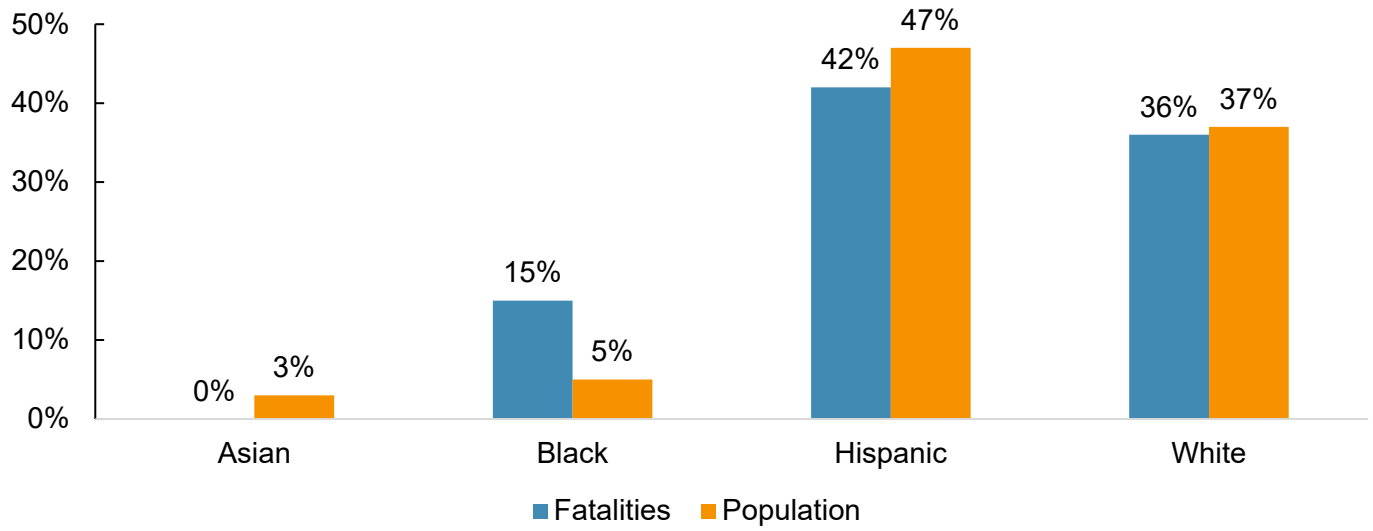
Figure 45. Percentage of Firearm Injury Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=55)



*Percentage suppressed due to count less than 6.

Black children accounted for 15% of firearm injury deaths, but only represented 5% of the total child population. Hispanic children had the highest percentage of firearm injury deaths (42%), while Asian children experienced none (Figure 46).

Figure 46. Percentage of Firearm Injury Deaths by Race/Ethnicity, Compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=55)*[4]



*Data for American Indian children is suppressed due to counts less than 6.

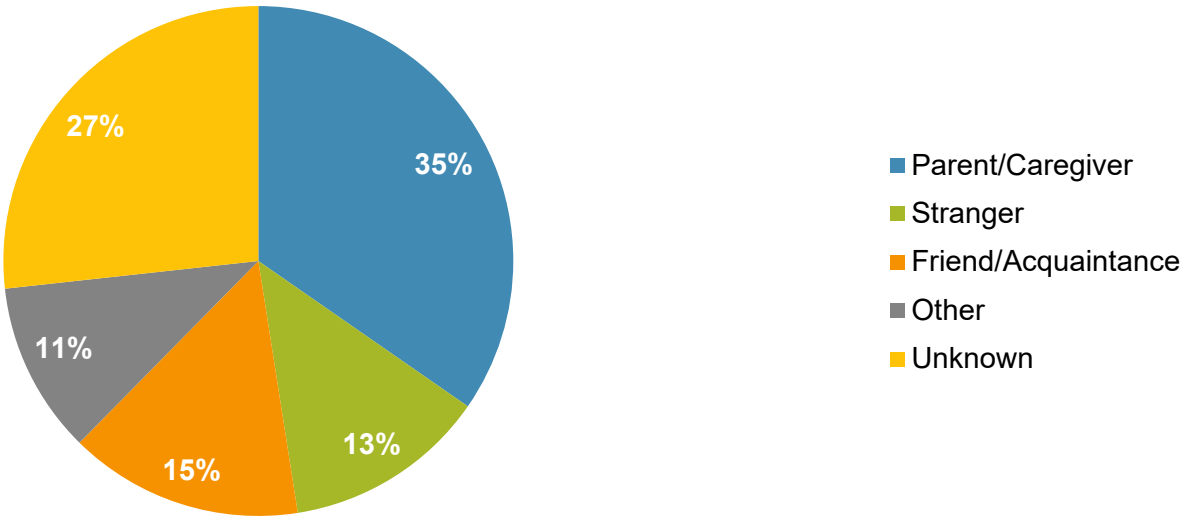
While numerous preventable risk factors contribute to firearm injury deaths, child relationship issues (73%) were the most frequently identified factor. This is followed by access to firearms among users less than 18 years of age (67%) and a history of trauma/violence (53%) (Table 22).

Table 22. Risk Factors of Firearm Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=55)

Risk Factors*	Number	Percent
Child Relationship Issues	40	73%
Access to Firearm (User less than 18 years)	37	67%
History of Trauma/Violence	29	53%
CPS History with Family	28	51%
Substance Use	27	49%
Unlocked Firearm	26	47%
Criminal Activity	19	35%
Parental Substance Use History	13	24%
Lack of Supervision	10	18%
Poverty	10	18%
Child's Chronic Condition	6	11%
*More than one risk factor may have been identified in each death.		

In 27% of firearm injury deaths, the owner of the firearm was unknown. The child's parent/caregiver, as the owner, accounted for 35% of the firearm injury deaths (Figure 47).

Figure 47. Percentage of Owners Involved in Firearm Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=55)



In 42% of firearm injury deaths, the firearm user was the child decedent (Table 23).

Table 23. Firearm User Involved in Firearm Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=55)

Person Using Firearm**	Number	Percent
Self	23	42%
Friend/Acquaintance	17	31%
Stranger	8	15%
Relative (i.e., Parent, Sibling, Other Relatives)	6	11%
Unknown	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one person may be using a firearm.		

Of the firearm injury deaths, 91% involved a handgun (Table 24).

Table 24. Types of Firearms Used in Firearm Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=55)

Type of Firearm	Number	Percent
Handgun	50	91%
Rifle	*	*
Shotgun	*	*
Unknown	*	*
*Number/Percentage suppressed due to count less than 6.		

When examining the location of firearm injury deaths, most occurred in the child's home (47%), followed by a friend/relative's home (18%) (Table 25).

Table 25. Number and Percentage of Firearm Injury Deaths by Location, Ages Birth to 17 Years, Arizona, 2024 (n=55)

Location**	Number	Percent
Child's Home	26	47%
Friend/Relative's Home	10	18%
Sidewalk	6	11%
Recreational Area (i.e., Parks)	*	*
Road	*	*
Indian Reservation	*	*
Parking Lot or Driveway	*	*
Other (i.e., Stranger's Home)	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one location may have been identified for each death.		

The majority of firearm injury deaths occurred in urban counties in Arizona (87%) (Table 26).

Table 26. Number and Percentage of Firearm Injury Deaths by Residency, Ages Birth to 17 Years, Arizona, 2024 (n=55)

Residency	Number	Percent
Arizona Urban Counties	48	87%
Arizona Rural Counties	7	13%

In 45% of firearm injury deaths, the firearm was used for self-harm (Table 27).

Table 27. Uses of Firearm Involved in Firearm Injury Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=55)

Use of Firearm**	Number	Percent
Self-Harm	25	45%
Drug Deal/Criminal Activity	17	31%
Playing with a Firearm	7	13%
Argument	6	11%
Gang Violence	6	11%
Child Abuse	*	*
Showing to Others	*	*
Self Defense	*	*
Child was a Bystander	*	*
Jealousy	*	*
Intimate Partner Violence	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one use may have been identified in each death.		

Infectious Disease-Related Deaths

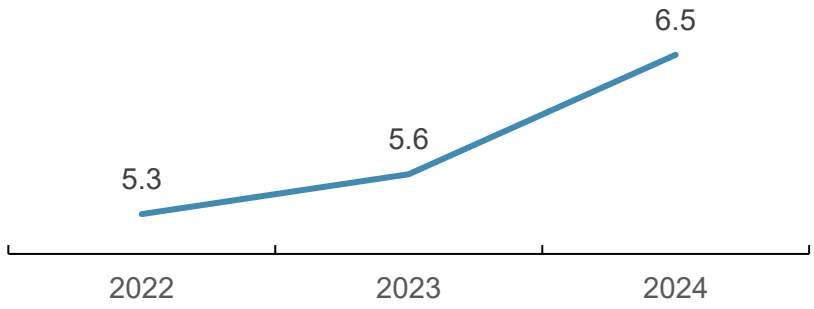
Infectious disease-related deaths are deaths in which an infectious disease caused or contributed to the death. See the Glossary for further explanation.

Total Infectious Disease-Related Deaths
109
(14% of all child deaths)

16.1% increase
in mortality rate from 2023
(6.5 deaths per 100,000 children in 2024)

36%
of Infectious Disease-Related Deaths were Preventable

Mortality Rate per 100,000 Children Due to Infectious Disease-Related Deaths, Ages Birth to 17 Years^[4-6]

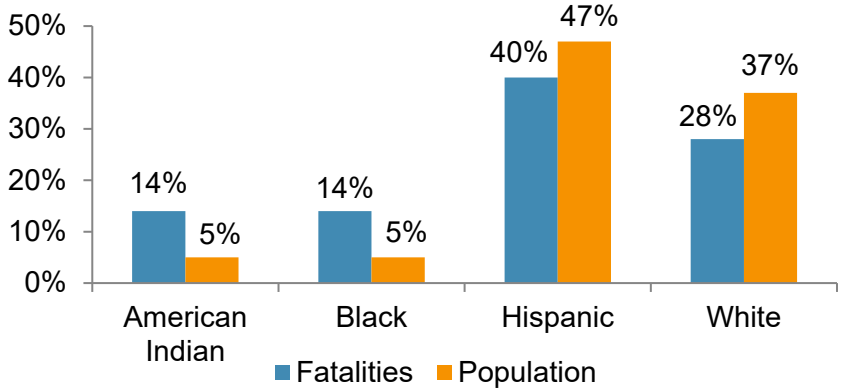


^Data prior to 2022 were excluded as this section was created in 2022.

Top Causes of Infectious Disease-Related Deaths:

Prematurity	Other Viral Infections	Other Bacterial Infections	Pneumonia	Congenital Anomaly
39% (43 deaths)	15% (16 deaths)	12% (13 deaths)	9% (10 deaths)	6% (6 deaths)

Percentage of Infectious Disease-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[**4]**



**Data for Asian children is suppressed due to counts less than 6.

65% of infectious disease-related deaths occurred in **infants (less than one year of age)**

52% of infectious disease-related deaths were among **males**

Leading Risk Factors of Infectious Disease-Related Deaths*:

Poverty	Maternal Infection	Child's Chronic Condition	CPS History with Family	Parental Substance Use History
59%	39%	30%	24%	21%

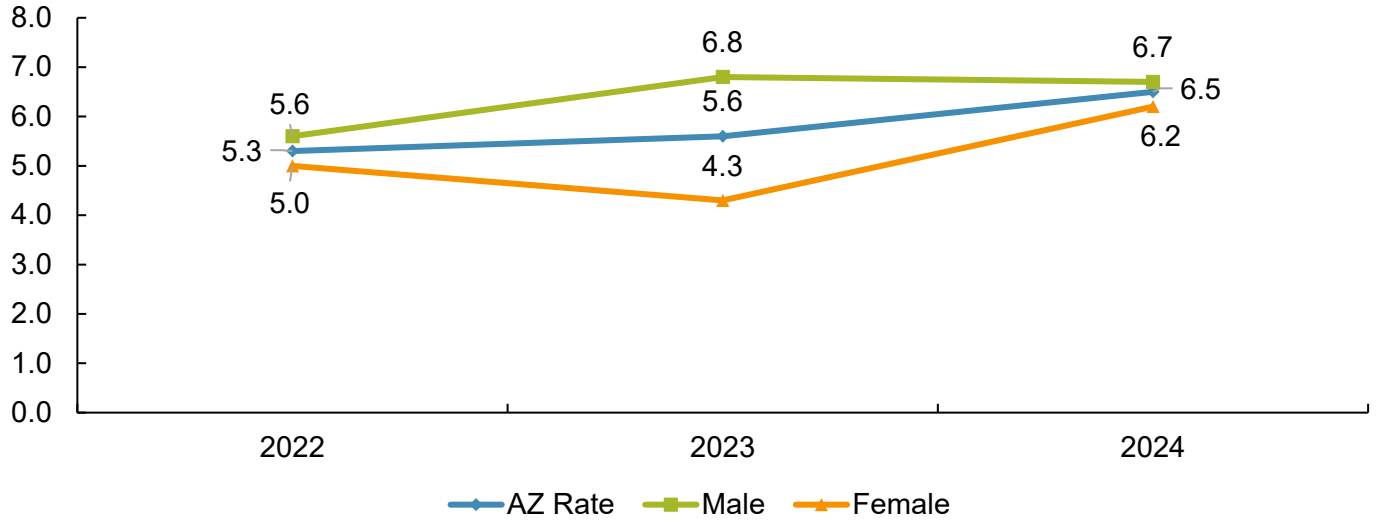
*More than one risk factor may have been identified for each death.

Top 5 Infectious Disease-Related Death Prevention Recommendations:

(1) State and local health departments and health care providers should promote vaccination and vaccine confidence through ongoing, proactive messaging and strategies to increase vaccination rates, such as sending vaccine reminders, setting up vaccine clinics, and providing vaccine education and administration at all health care visits, including urgent care and emergency room visits. [78-80]
(2) Parents and caregivers are strongly encouraged to ensure that their infants are not exposed to vaccine-preventable disease by unvaccinated individuals or anyone who has a potentially contagious illness such as influenza, measles, varicella, pertussis (whooping cough), COVID-19, or RSV. [81, 82]
(3) Increase education and daycare agency oversight on infection prevention and control in day care settings and primary residences. [83]
(4) Educate parents/caregivers on when to urgently seek medical care for the child, and when they should immediately call 911. [84]
(5) County and state health departments should increase community awareness and education on current outbreaks and support rapid assessment, prevention, and control of these infectious diseases. [85]

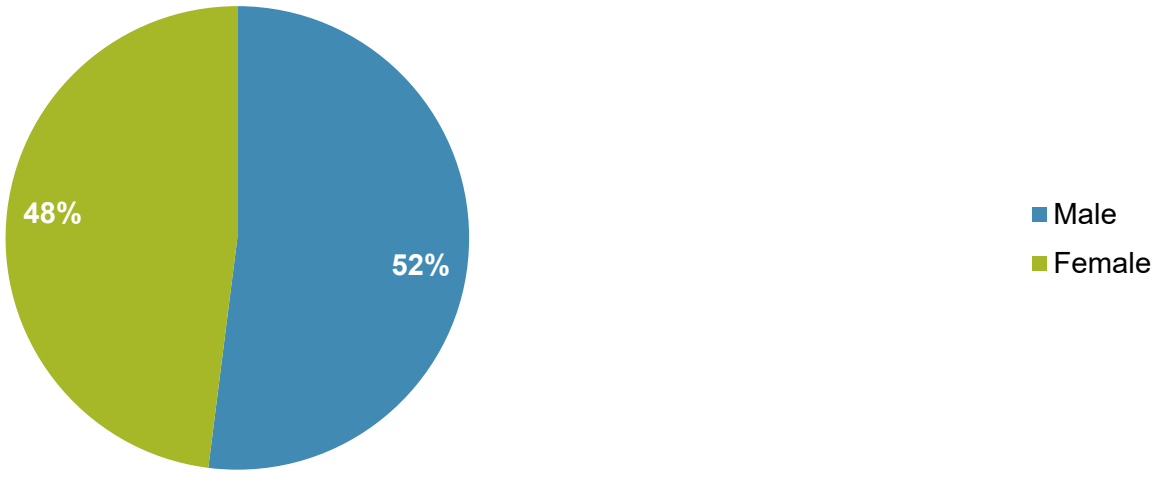
Between 2023 and 2024, Arizona's infectious disease-related death rate increased by 16.1% from 5.6 to 6.5 deaths per 100,000 children. Since the start of collecting infectious disease-related deaths, males have generally had a higher mortality rate than females. Between 2023 and 2024, the male mortality rate from infectious disease-related deaths decreased slightly (1.5%), and the female mortality rate increased by 44.2% (Figure 48).

Figure 48. Mortality Rate per 100,000 Children due to Infectious Disease-Related Deaths by Sex, Ages Birth to 17 Years, Arizona, 2022-2024[4-6]



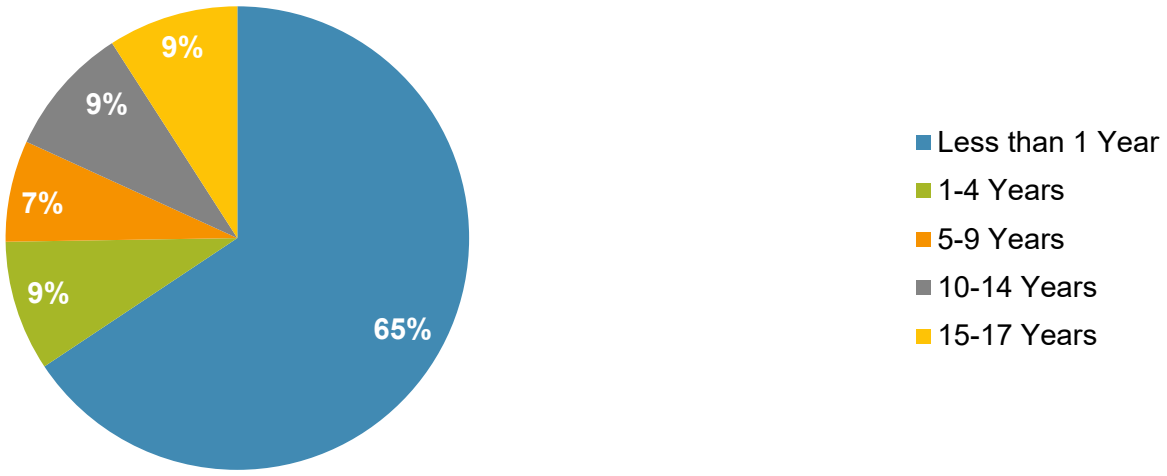
The majority of infectious disease-related deaths occurred among males (52%) (Figure 49).

Figure 49. Percentage of Infectious Disease-Related Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=109)



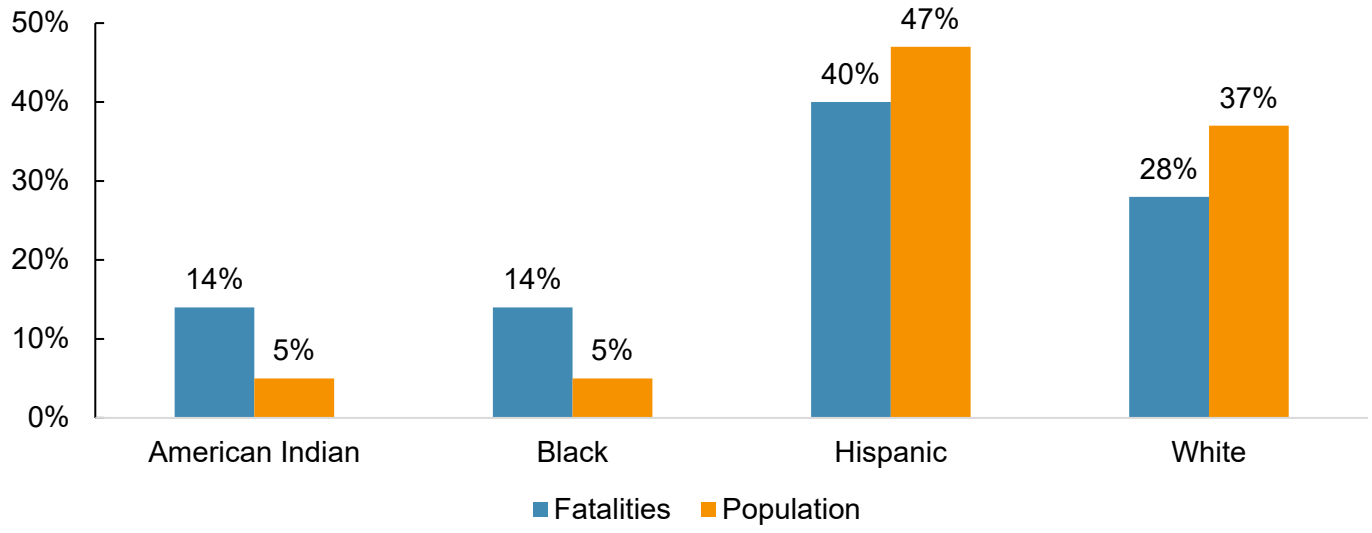
The majority of infectious disease-related deaths occurred among children less than one year of age (65%) (Figure 50).

Figure 50. Percentage of Infectious Disease-Related Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=109)



American Indian and Black children each accounted for 14% of infectious disease-related deaths, despite each group representing only 5% of the total child population. The majority of infectious disease-related deaths occurred among Hispanic (40%) and White (28%) children (Figure 51).

Figure 51. Percentage of Infectious Disease-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=109)*[4]



*Data for Asian children is suppressed due to counts less than 6.

Among infectious disease-related deaths in children aged birth to 17 years, the leading causes were prematurity (40%), other viral infections (not including influenza or COVID-19) (15%), and other bacterial infections (not including pneumonia) (12%) (Table 28). In this context, prematurity as a cause of death refers to the infection that contributed to the prematurity.

Table 28. Cause of Infectious Disease-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=109)

Cause of Death	Number	Percent
Prematurity**	43	40%
Other Viral Infections (does not include influenza or COVID-19)	16	15%
Other Bacterial Infections (does not include pneumonia)	13	12%
Pneumonia	10	9%
Congenital Anomaly	*	*
Suffocation	*	*
COVID-19	*	*
Undetermined	*	*
Influenza	*	*
Hematologic Disease	*	*
Cardiovascular	*	*
Neurological	*	*
Poisoning	*	*
Cancer	*	*
Undetermined Medical Condition	*	*
*Number/Percentage suppressed due to count less than 6.		
**Prematurity as a cause of death refers to the infection that contributed to the prematurity		

While numerous preventable risk factors contribute to infectious disease-related deaths among children aged birth to 17, poverty (59%) was the most commonly identified risk factor. In 40% of the cases, the child's mothers had an infection that adversely affected the child's health. Additionally, among the 15 deaths where inadequate treatment was noted as a preventable risk factor, 12 were identified as vaccine-preventable (Table 29).

Table 29. Risk Factors of Infectious Disease-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=109)

Risk Factors*	Number	Percent
Poverty	64	59%
Maternal Infection	43	40%
Child's Chronic Condition	33	31%
CPS History with Family	26	24%
Parental Substance Use History	23	21%
Inadequate Treatment, including vaccine-preventable diseases	15	14%
Substance Use	8	7%
*More than one use may have been identified in each death.		

Motor Vehicle Crash (MVC)-Related Deaths

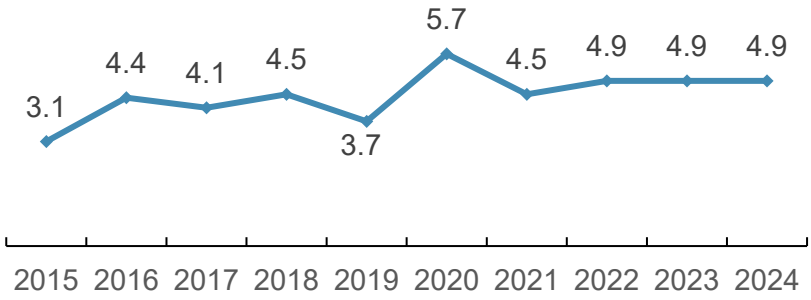
Death caused by injuries from a motor vehicle incident, including injuries to motor vehicle occupant(s), pedestrian(s), pedal cyclist(s), or another person. See the Glossary for further explanation.

Total MVC-Related Deaths
82
(10% of all child deaths)

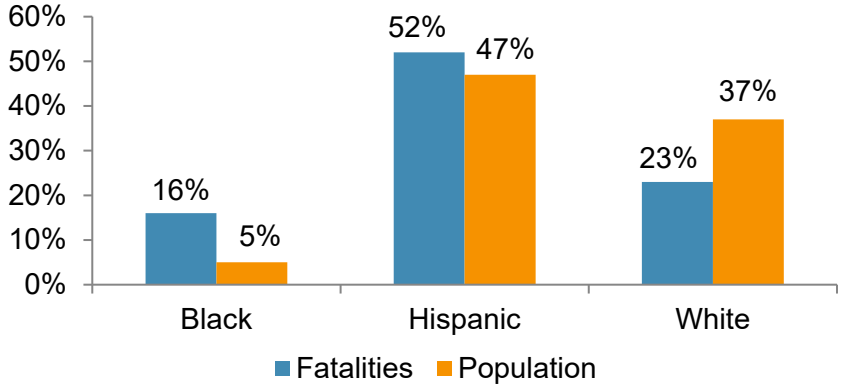
No Change
in mortality rate from 2023
(4.9 deaths per 100,000 children in 2024)

100%
of MVC-Related Deaths were Preventable

Mortality Rate per 100,000 Children Due to MVC-Related Deaths, Ages Birth to 17 Years[4-13]



Percentage of MVC-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[**4]**



44% of MVC-related deaths occurred in **children aged 15-17 years**

61% of MVC-related deaths were among **males**

**Data for American Indian and Asian children are suppressed due to counts less than 6.

Leading Risk Factors of MVC-Related Deaths*:

CPS History with Family	Lack of Restraint	Reckless Driving	Inexperienced Driver	Excess Speed
45%	44%	35%	32%	32%

*More than one risk factor may have been identified for each death.

Top 5 Motor Vehicle Crash-Related Death Prevention Recommendations:

(1) Implement education, campaigns, and initiatives to promote safe, sober, distraction-free defensive driving for young drivers and their parents/caregivers with a focus on education on the risks of driving while intoxicated/under the influence (youth and adults). [86, 87]

(2) Encourage families to follow the four evidence-based recommendations provided by the American Academy of Pediatrics (AAP), healthychildren.org, and National Highway Traffic Safety Administration (NHTSA) for best practices in the choice of a child restraint system to optimize safety in passenger vehicles for children, and how to access affordable and proper restraint systems. [88]

a. Birth-12 Months: Your child under age one should always ride in a rear-facing car seat. There are different types of rear-facing car seats:
    i. Infant-only seats can only be used in a rear-facing position.
    ii. Convertible and all-in-one car seats typically have higher height and weight limits for the rear-facing position, allowing you to keep your child rear-facing for longer.
b. 1-3 Years: Your child should remain in a rear-facing seat until they reach the height or weight limit your car seat's manufacturer allows. Once your child outgrows the rear-facing car seat, your child is ready to travel in a forward-facing car seat with a harness and tether.
c. 4-7 Years: Keep your child in a forward-facing car seat with a harness and tether until they reach the height or weight limit your car seat's manufacturer allows. Once your child outgrows the forward-facing seat with a harness, it's time to travel in a booster seat, but still in the back seat.
d. 8-12 Years: Keep your child in a booster seat until they are big enough to fit in a seat belt properly. For a seat belt to fit properly, the lap belt must lie snugly across the upper thighs, not the stomach. The shoulder belt should lie snugly across the shoulder and chest and not cross the neck or face. Remember: your child should still ride in the back seat because it's safer there.
e. 12+ Years: Lap and shoulder seat belts are recommended for children with outgrown booster seats. All children (especially those younger than 13) should ride in the rear seats of vehicles.

(3) Increase the safety features of roadways, including: [89, 90]

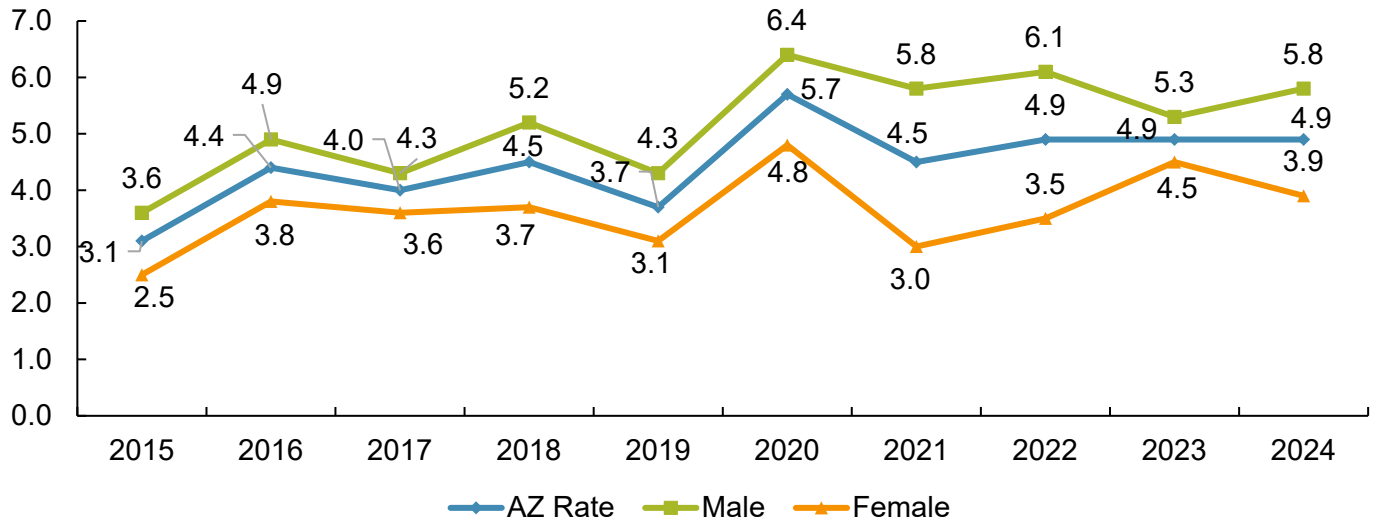
a. Automated speed enforcement systems
b. Warnings of upcoming accidents, traffic flow changes, and traffic delays
c. Cable barriers to prevent the use of unsafe roadways
d. Rumble strips
e. Lighted stop signs
f. Widening roadways to allow for added lanes with a barrier between
g. Increased lighting of roadways
h. Additional regulations for passing zones in areas where visibility of oncoming traffic is limited
i. Adding guard rails to roadways where the risk of driving off the roadway is dangerous
j. Slow strips/speed bumps for roadways where vehicles are driven at unsafe speeds

(4) Increase community awareness and practice of motorcycle safety, including sufficient training before licensing, and consider raising the age limit of motorcycle licensing. [91]

(5) Increase awareness of the importance of wearing a helmet while operating bicycles, skateboards, scooters, etc. [92]

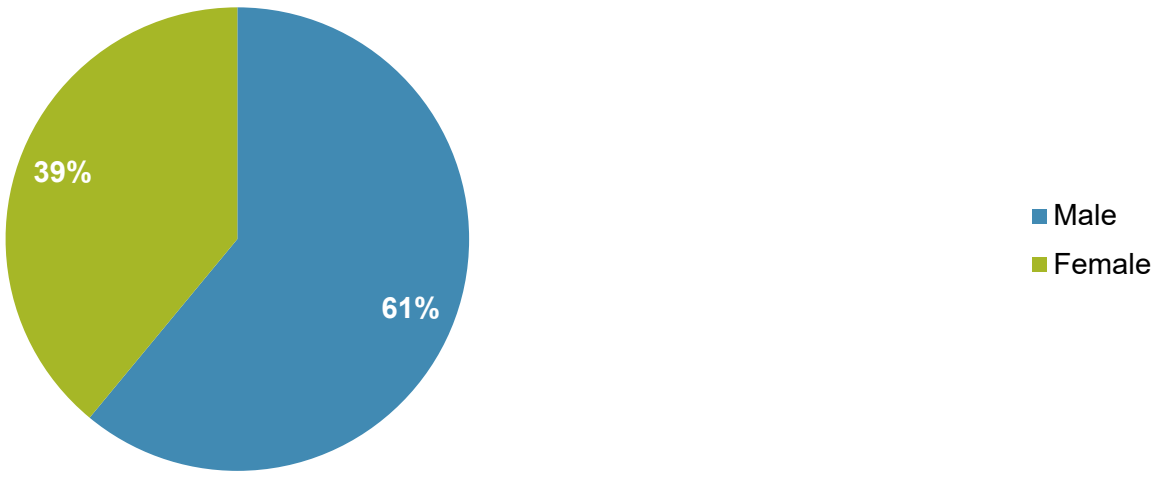
The MVC-related mortality rate has fluctuated since 2015 but has remained relatively consistent since 2022. Between 2023 and 2024, the MVC-related mortality rate in males increased by 9.4% and decreased by 13.3% in females. However, males have generally had a higher MVC-related mortality rate than females since 2015 (Figure 52).

Figure 52. Mortality Rate per 100,000 Children due to Motor Vehicle Crash-Related Deaths by Sex, Ages Birth to 17 Years, Arizona, 2015-2024 [4-13]



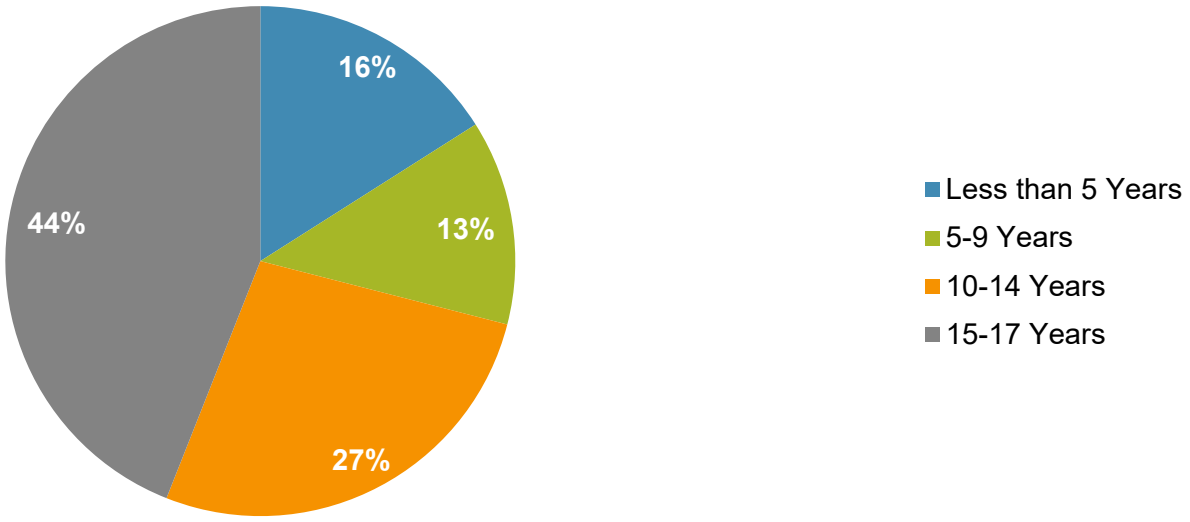
The majority of MVC-related deaths occurred among males (61%) (Figure 53).

Figure 53. Percentage of Motor Vehicle Crash-Related Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=82)



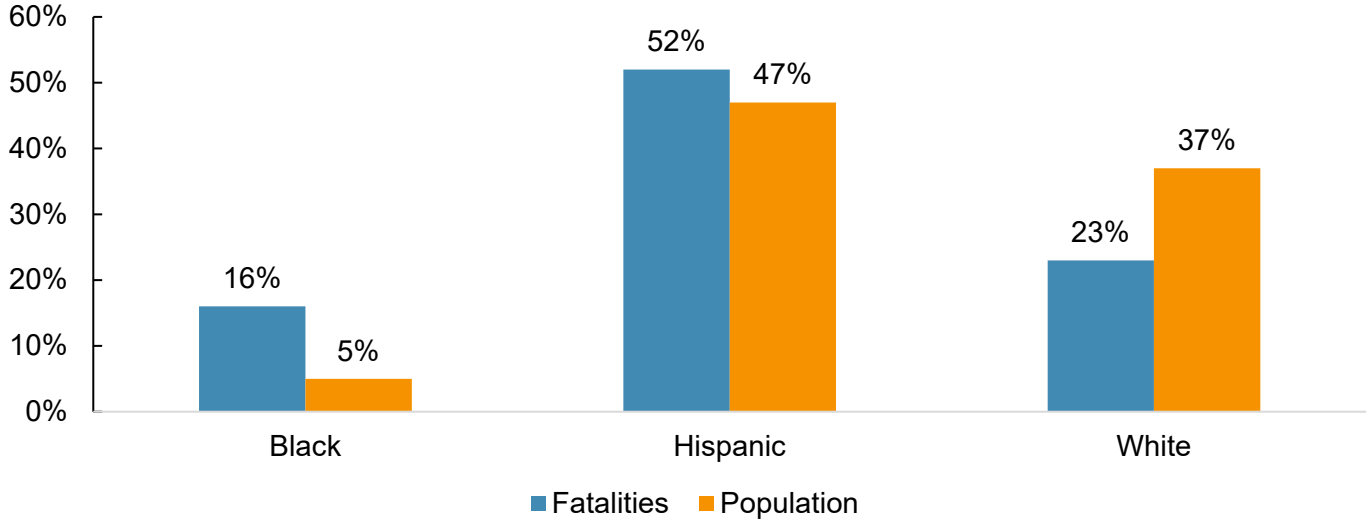
The highest number of MVC deaths occurred among children aged 15 to 17 years (44%), followed by children aged 10 to 14 years (27%) (Figure 54).

Figure 54. Percentage of Motor Vehicle Crash-Related Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=82)



Black children made up 16% of MVC-related deaths, but only comprised 5% of the total child population. Additionally, Hispanic children made up 52% of MVC-related deaths but only comprised 47% of the total child population. The largest percentage of MVC deaths occurred among Hispanic (52%) children (Figure 55).

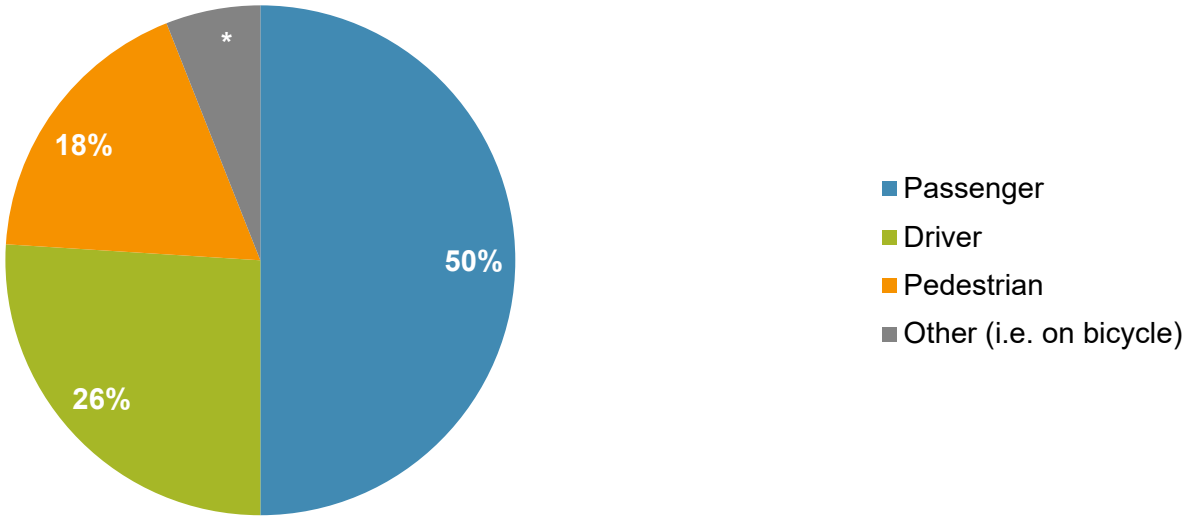
Figure 55. Percentage of Motor Vehicle Crash-Related Deaths by Race/Ethnicity, Compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=82)*[4]



*Data for American Indian and Asian children are suppressed due to counts less than 6.

In most of the MVC-related deaths, the child was the passenger (50%) (Figure 56).

Figure 56. Percentage of Motor Vehicle Crash-Related Deaths by Location of Child in Accident, Ages Birth to 17 Years, Arizona, 2024 (n=82)



*Percentage suppressed due to count less than 6.

The largest percentage of MVC-related deaths among children occurred while the child was in a car (34%), followed by those in a sport utility vehicle (SUV) (20%) and as pedestrians (18%). Fewer than six deaths involved children riding an All-Terrain Vehicle (ATV) (Table 30).

Table 30. Number and Percentage of Motor Vehicle Crash-Related Deaths by Type of Vehicle, Ages Birth to 17 Years, Arizona, 2024 (n=82)

Type of Vehicle	Number	Percent
Car	28	34%
Sport Utility Vehicle (SUV)	16	20%
Pedestrian	15	18%
Truck	6	7%
Motorcycle	*	*
All-Terrain Vehicle (ATV)	*	*
Bicycle	*	*
Van	*	*
Airplane	*	*
*Number/Percentage suppressed due to count less than 6.		

Regarding the location of the MVC-related deaths, 34% occurred on the highway, followed by city streets (33%), rural roads (11%), and driveway or parking lots (9%) (Table 31).

Table 31. Location of Motor Vehicle Crash-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=82)

Location**	Number	Percent
Highway	28	34%
City Street	27	33%
Rural Road	9	11%
Driveway or Parking Lot	7	9%
Residential Street	6	7%
Off-Road	*	*
Other (i.e., Railroad Tracks, Airplane Runway, Dirt Road)	*	*
Intersection	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one location may have been identified for each death.		

Among drivers involved in MVC-related deaths (including ATVs), 46% were aged 19 and older, 32% were aged 16 to 18, and 9% were aged 13 to 15 (Table 32). In 6 cases, there was no responsible driver. Additionally, 20 of the teen drivers also had teen passengers (not shown).

Table 32. Age of Driver in Motor Vehicle Crash-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=82)

Age of Responsible Driver	Number	Percent
19 years or more	38	46%
16 to 18 years	26	32%
13 to 15 years	7	9%
Unknown	*	*
*Number/Percentage suppressed due to count less than 6.		

While numerous risk factors contribute to MVC deaths, the most commonly identified risk factors were CPS history with family (45%), lack of restraint (44%), reckless driving (35%), and inexperienced driver (32%) (Table 33). Of the 14 MVC-related deaths that required a helmet, 72% of the children were not wearing a helmet (not shown).

Table 33. Risk Factors of Motor Vehicle Crash-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=82)

Risk Factors*	Number	Percent
CPS History with Family	37	45%
Lack of Restraint	36	44%
Reckless Driving	29	35%
Inexperienced Driver	26	32%
Excess Speed	26	32%
Substance Use	23	28%
Careless Driving	23	28%
Rollover	22	27%
Lack of Supervision	20	24%
Distracted Driver	13	16%
Criminal Activity	11	13%
No Helmet	10	12%
Backover/ Frontover	7	9%
Poor Visibility	7	9%
Running a Red Light	*	*
Weather Conditions	*	*
Poor Visibility	*	*
Road Hazard	*	*
*Number/Percentage suppressed due to count less than 6.		
*More than one risk factor may have been identified in each death.		

Neglect/Abuse-Related Deaths

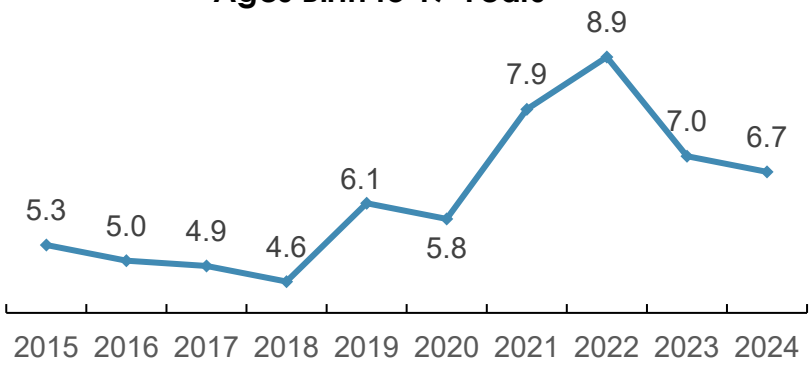
An act of neglect or physical, emotional, or sexual abuse against a child as determined by the Second Level Neglect and Abuse Team. See the Glossary for further explanation.

Total Neglect/Abuse-Related Deaths
113
(14% of all child deaths)

4.3% decrease
in mortality rate from 2023
(6.7 deaths per 100,000 children in 2024)

100%
of Neglect/Abuse-Related Deaths were Preventable

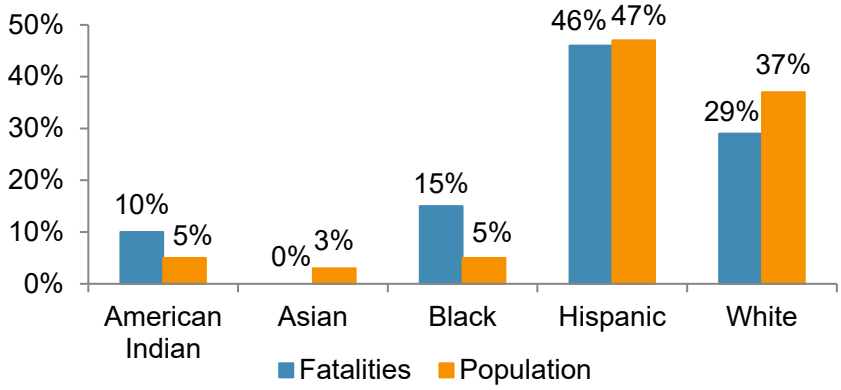
Mortality Rate per 100,000 Children Due to Neglect/Abuse-Related Deaths, Ages Birth to 17 Years[4-13]



Top Causes of Neglect/Abuse-Related Deaths:

Suffocation	MVC	Blunt Force Injury	Drowning	Poisoning
21%	12%	12%	10%	9%
(24 deaths)	(14 deaths)	(14 deaths)	(11 deaths)	(10 deaths)

Percentage of Neglect/Abuse-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[4]



47% of neglect/abuse-related deaths occurred in **infants (less than one year of age).**

56% of neglect/abuse-related deaths were among **males**

81% of all Neglect/Abuse-related deaths involved **neglect,** and **24%** involved **abuse**.

Leading Risk Factors of Neglect/Abuse-Related Deaths*:

CPS History with Family	Parental Substance Use History	Poverty	Substance Use	Lack of Supervision
69%	67%	58%	51%	30%

*More than one risk factor may have been identified for each death.

Top 5 Neglect/Abuse-Related Death Prevention Recommendations:

(1) Increase the availability and accessibility of affordable, quality mental health and substance use treatment services. [93]

(2) Increasing the availability of home visiting programs throughout the state. [78]

(3) Encourage Arizona policymakers to invest in families' financial well-being, including increasing access to concerted support for healthcare, food, housing, employment, and childcare. [94, 95]

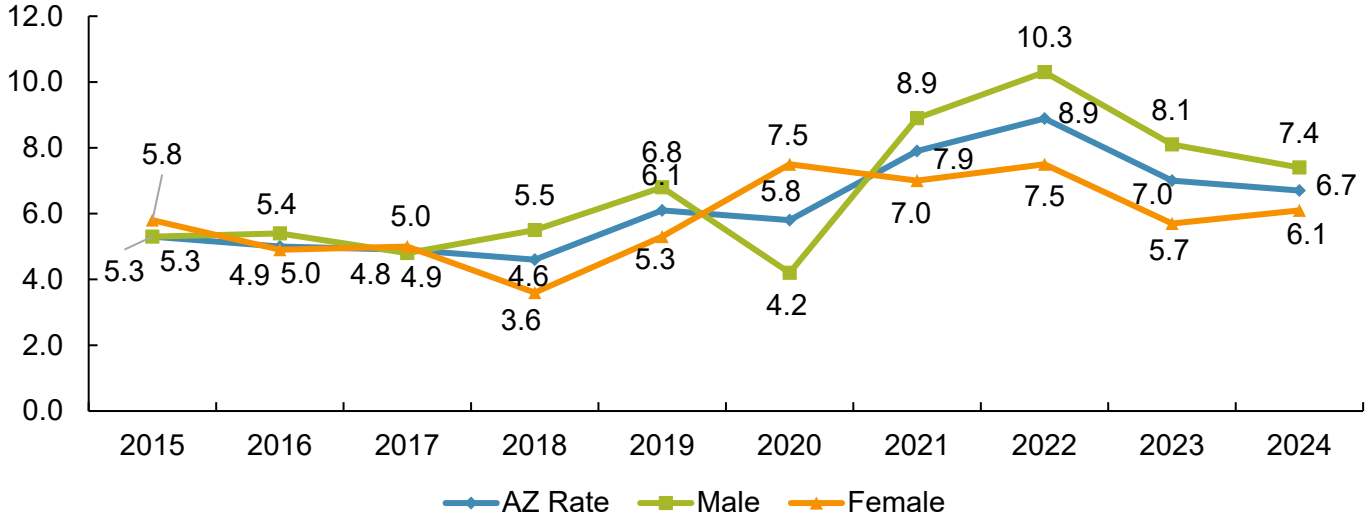
(4) Provide parents with education, support, and information on parenting strategies, including information and guidance on: [96-99]

a. The Centers for Disease Control's positive parenting tips
b. Proper and constant supervision of infants and children, and awareness of the dangers of caring for children and infants while under the influence of alcohol, marijuana, sedatives, and any medication that impairs alertness.
    i. Parents should be referred to the Arizona Smokers Helpline (ASHLine / 1-800-556-6222).
c. Understanding typical developmental milestones and appropriate expectations for their child's behavior
d. The importance of remaining drug and alcohol-free when supervising infants and children

(5) Increase awareness on how and when to report suspected child neglect or abuse so that any individual who knows about a child who is being neglected or abused can act by calling 911 in an emergency or, in non-emergency cases, call the Arizona Child Abuse hotline (1-888-SOS-CHILD). [100]

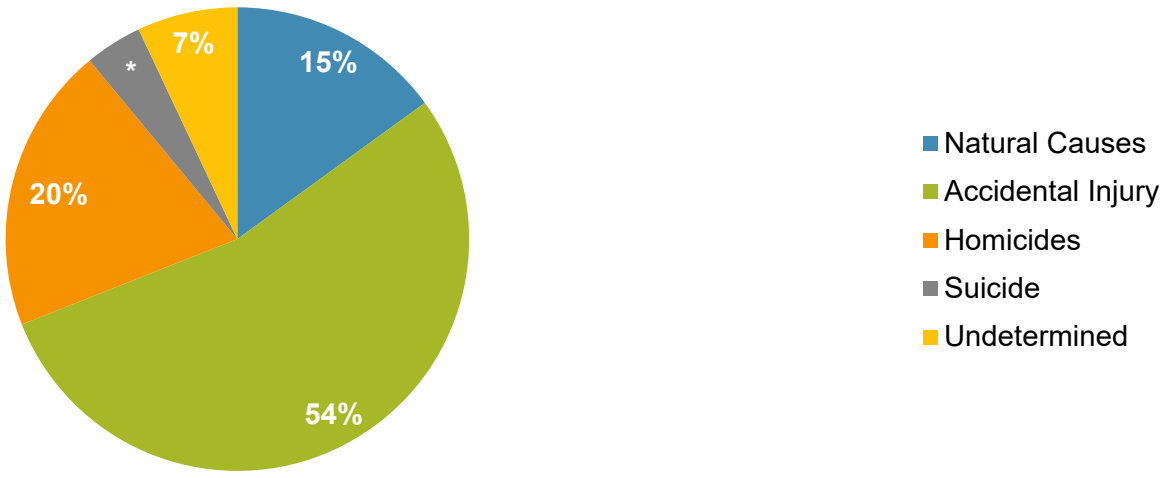
Overall, Arizona's neglect/abuse-related mortality rate increased from 2015 to 2022. In 2023, however, the rate declined by 21.4%, followed by a further 4.3% decrease from 7.0 deaths per 100,000 children in 2023 to 6.7 deaths per 100,000 children in 2024 (Figure 57).

Figure 57. Mortality Rate per 100,000 Children due to Neglect/Abuse-Related Death by Sex, Ages Birth to 17 Years, Arizona, 2015-2024 [4-13]



The most common manner of death classification of neglect/abuse-related deaths was accidental injuries (54%), followed by homicides (20%) and natural causes (15%) (Figure 58).

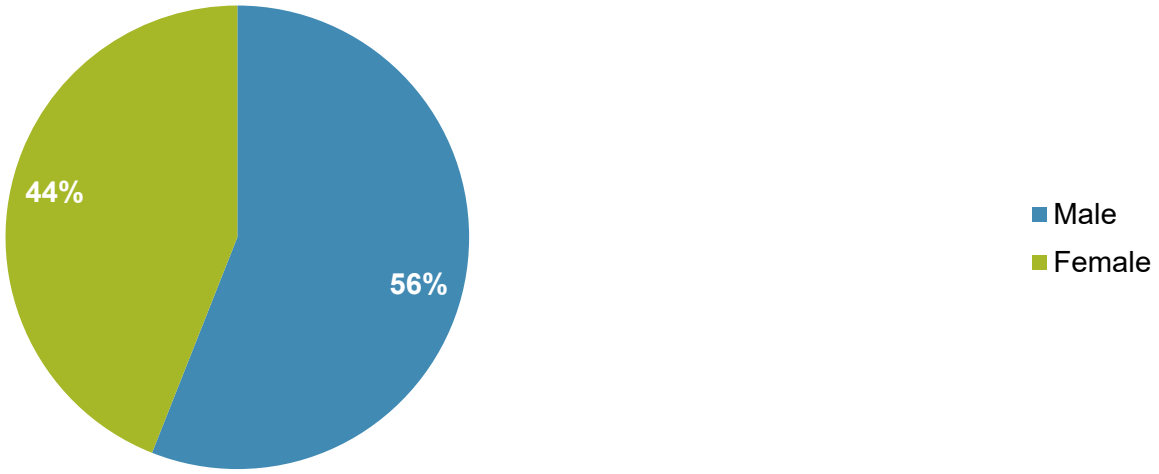
Figure 58. Percentage of Neglect/Abuse-Related Deaths by Manner of Death, Ages Birth to 17 Years, Arizona, 2024 (n=113)



*Percentage suppressed due to count less than 6.

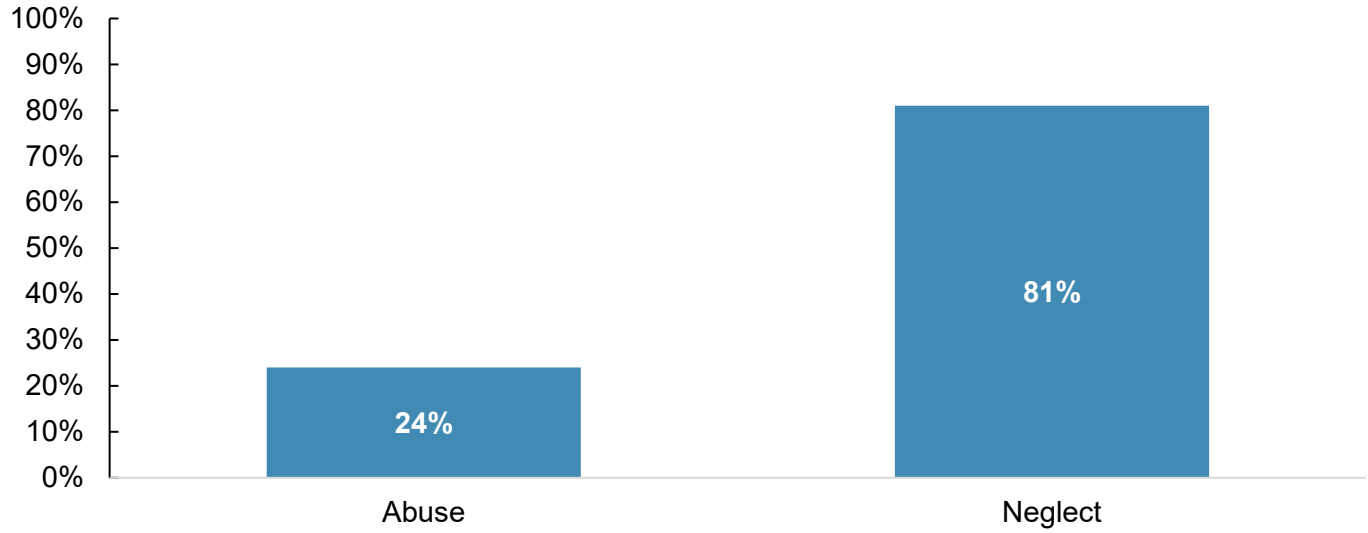
The majority of neglect/abuse-related deaths occurred among male children (56%) (Figure 59).

Figure 59. Percentage of Neglect/Abuse-Related Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=113)



In 2024, 81% of all neglect/abuse-related deaths involved neglect, and 24% involved abuse. In some deaths, the child was a victim of both neglect and abuse (Figure 60).

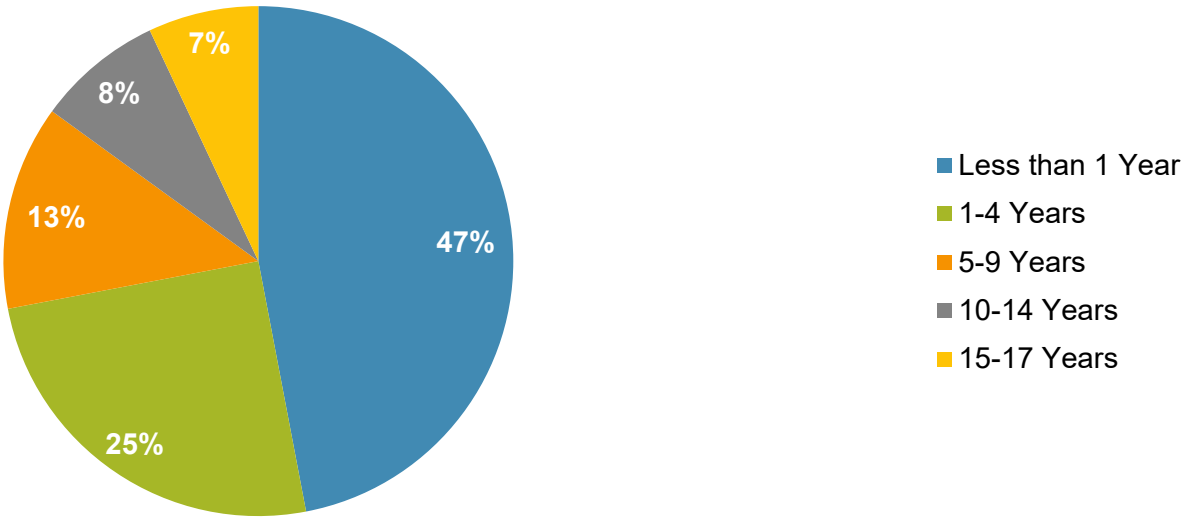
Figure 60. Percentage of Neglect/Abuse-Related Deaths by Abuse and Neglect, Ages Birth to 17 Years, Arizona, 2024 (n=113) *



*Totals do not equal 100%, as abuse and neglect may have both been involved.

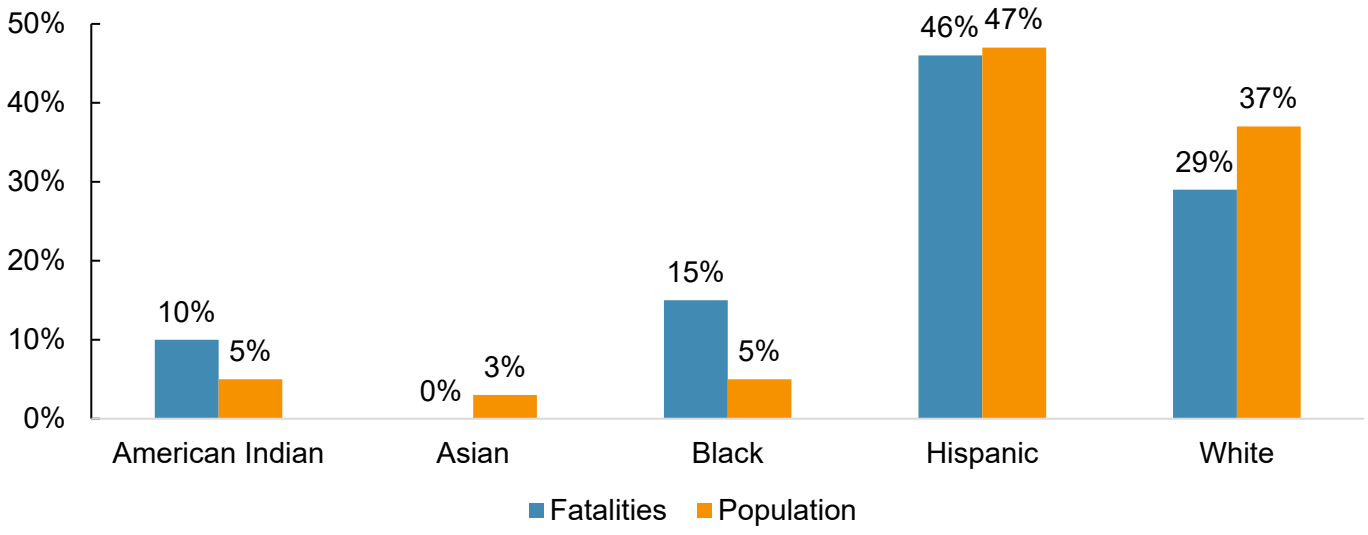
Neglect/abuse-related deaths occurred primarily among infants less than one year of age (47%), followed by children aged 1-4 years (25%) (Figure 61).

Figure 61. Percentage of Neglect/Abuse-Related Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=113)



American Indian and Black children made up 10% and 15% of neglect/abuse-related deaths, respectively, but each group only comprised 5% of the total child population. In 2024, Hispanic children experienced the highest percentage of neglect/abuse-related deaths (47%), while Asian children experienced none (Figure 62).

Figure 62. Percentage of Neglect/Abuse-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=113)*[4]



The child's mother was a perpetrator in 73% of neglect/abuse-related deaths, while the father was a perpetrator in 36% of deaths (Table 34).

Table 34. Number and Percentage of Neglect/Abuse-Related Deaths by Perpetrator, Ages Birth to 17 Years, Arizona, 2024 (n=113)

Perpetrator*	Number	Percent
Mother	82	73%
Father	41	36%
Other (i.e., Parent's Partner, Stepparent, Child Care, Foster Parent, Other)	11	10%
Other Relative (i.e., Grandparents, Siblings)	6	5%
*There may be more than one perpetrator in each death.		

Among neglect/abuse-related deaths, suffocation was the leading cause of death for children aged birth to 17 years (21%) (Table 35).

Table 35. Causes of Neglect/Abuse-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=113)

Cause of Death	Number	Percent
Suffocation	24	21%
Motor Vehicle Crash-Related	14	12%
Blunt Force Injury	14	12%
Drowning	11	10%
Poisoning	10	9%
Environmental Heat Exposure	6	5%
Firearm Injury	6	5%
Prematurity	*	*
Undetermined	*	*
Bacterial Infection	*	*
Fire/Burn/Electrocution	*	*
Asthma/Respiratory	*	*
Neurological/Seizure Disorder	*	*
Strangulation	*	*
Gastrointestinal Disease	*	*
Fall/Crush	*	*
Other Medical Condition	*	*
Other Perinatal Condition	*	*
Stabbing	*	*
*Number/Percentage suppressed due to count less than 6.		

Although numerous preventable risk factors contribute to neglect/abuse-related deaths among children aged birth to 17 years, family history with a Child Protective Service (CPS) was the most commonly identified risk factor (69%) (Table 36).

Table 36. Risk Factors of Neglect/Abuse-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=113)

Risk Factors*	Number	Percent
CPS History with Family	78	69%
Parental Substance Use History	76	67%
Poverty	65	58%
Substance Use	58	51%
Lack of Supervision	34	30%
Unsafe Sleep Environment	24	21%
History of Violence/Trauma	23	20%
Child's Chronic Condition	22	19%
Substance Exposed Newborn (SEN)	22	19%
Open CPS Case (applies only to the decedent)	21	19%
Housing Insecurity	20	18%
Family Discord	20	18%
*More than one risk factor may have been identified in each death.		

Substance abuse was involved in 51% (58 cases) of neglect/abuse-related deaths. Marijuana was the most commonly identified substance, contributing to 19% of child neglect/abuse-related deaths, followed by alcohol (18%) (Table 37).

Table 37. Number and Percentage of Substance Type Identified in Neglect/Abuse-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=113)

Substance Type**	Number	Percent of A/N Cases
Marijuana	21	19%
Alcohol	20	18%
Opiate	17	15%
Methamphetamine	14	12%
Other (i.e., Cocaine, Prescription Drugs, Over the Counter)	11	10%
**More than one substance may have contributed to each death.		

In 86% of the neglect/abuse-related deaths involving substance use, the substance user was the parent (Table 38).

Table 38. Number and Percentage of Substance Users Identified in Neglect/Abuse-Related Deaths Involving Substance Use, Ages Birth to 17 Years, Arizona, 2024 (n=58)

Substance User**	Number	Percent
Parent	50	86%
Child	7	12%
Another Caregiver/Supervisor	*	*
*Number/Percentage suppressed due to count less than 6.		
**More than one person may have been using a substance.		

Prematurity Deaths

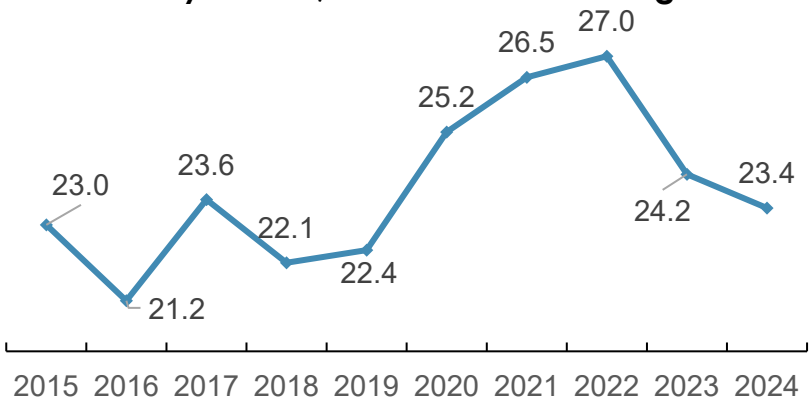
Death of an infant born before 37 weeks' gestation and the cause of death was related to premature birth. See the glossary for further explanation.

Total Prematurity Deaths
177
(22% of all child deaths)

3.3% decrease
in mortality rate from 2023
(23.4 deaths per 1,000 premature births in 2024)

11%
of Prematurity Deaths were Preventable

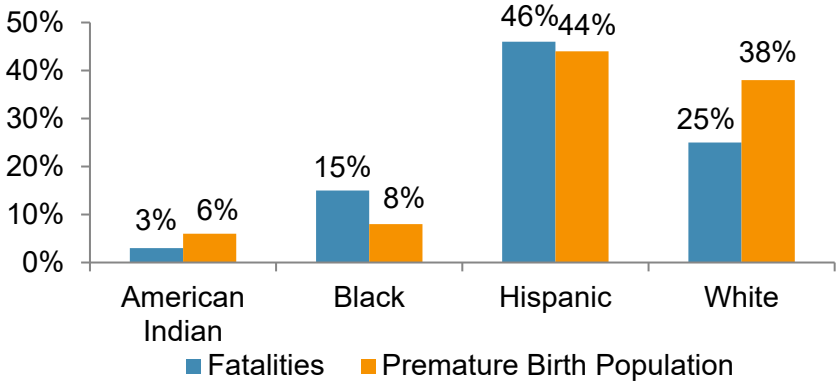
Mortality Rate per 1,000 Premature Births Due to Prematurity Deaths, Less than 1 Year of Age[104-113]



Top Causes of Prematurity Deaths:

Prematurity	Perinatal Condition
92% (162 deaths)	**8%** (15 deaths)

Percentage of Prematurity Deaths by Race/Ethnicity, compared to the Premature Birth Population, Less than 1 Year of Age[113]



****Data for Asian children is suppressed due to counts less than 6.**

51% of prematurity deaths were among **males**

18% of prematurity deaths had **no prenatal care**

Leading Risk Factors of Prematurity Deaths*:

Poverty	Premature Rupture of Membrane (PROM)	Preterm Labor	Multiple Births	Hypertension
51%	48%	24%	22%	19%

*More than one risk factor may have been identified for each death.

Top 5 Prematurity Death Prevention Recommendations:

(1) Increase accessibility to prenatal care, which can help prevent complications and inform women about necessary steps they can take to protect their infant and ensure a healthy pregnancy, especially for pregnant women who use substances. [101]

(2) Increase education and community awareness of the risks of smoking nicotine, drinking alcohol, and using marijuana and illicit drugs during pregnancy because these substances increase the risk of preterm birth or other complications. [102]

   a. Pregnant women who smoke tobacco should be referred to the Arizona Smokers Helpline (ASHLine / 1-800-556-6222)
   b. Pregnant women with substance use disorder should be referred to the Opioid Assistance Referral Line (OAR Line).

(3) Increase availability and accessibility of affordable, quality family planning and parenting services/support. [103]

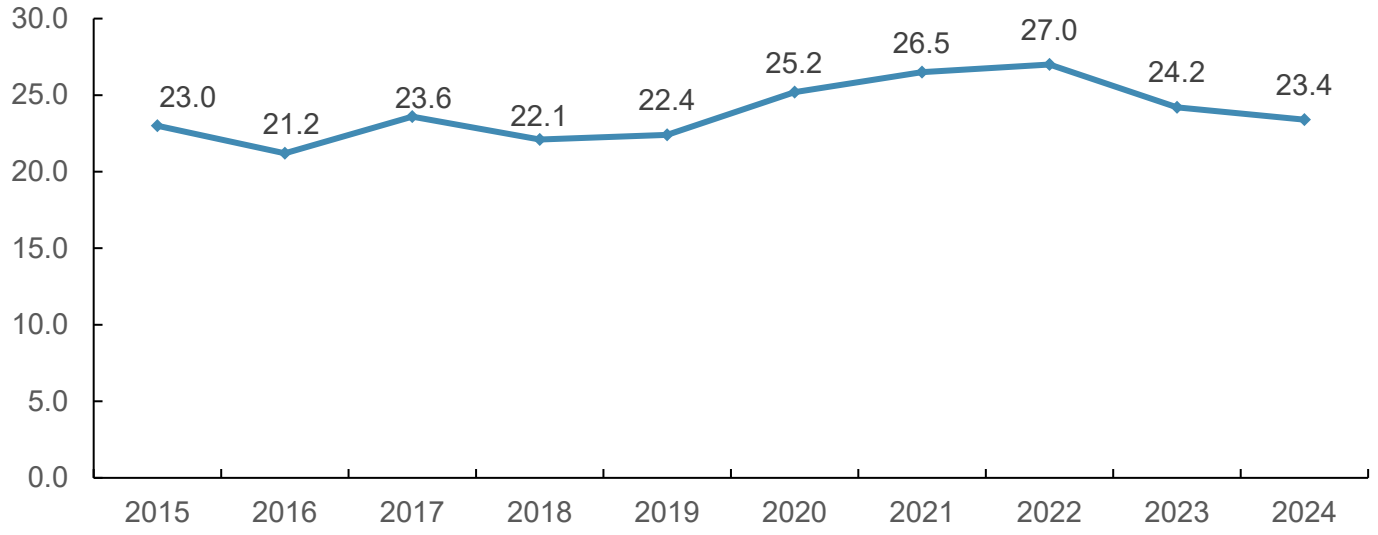
   a. Sustain family planning programs in Arizona to continue to emphasize the importance of a reproductive life plan and increase access to effective contraceptive methods throughout the state.

(4) The American Midwifery Certification Board (AMCB) and the North American Registry of Midwives (NARM) should ensure that Certified Nurse-Midwives (CNMs), Certified Midwives (CMs), and Certified Professional Midwives (CPMs) receive education on recognizing obstetric emergencies and understanding when to call 911.

(5) Increase the availability and accessibility of affordable, quality mental health and substance use treatment services for pregnant women, including coordination of care so that those who need mental health and substance use treatment get appropriate follow-up after delivery. [93, 101]

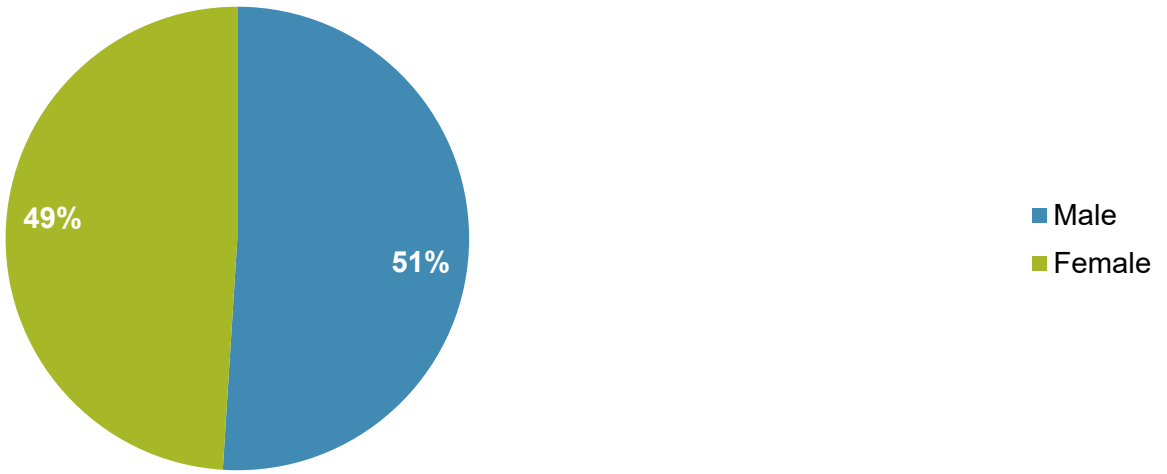
The prematurity mortality rate includes those who were identified as dying of prematurity (<37 weeks' gestation) but also includes children who died of other perinatal conditions that lead to premature births. The prematurity mortality rates in Arizona fluctuated between 2015 and 2019, followed by a gradual increase through 2022. Since then, the prematurity mortality rates have declined. Between 2023 and 2024, Arizona's prematurity mortality rate decreased 3.3% from 24.2 deaths per 1,000 premature births in 2023 to 23.4 deaths per 1,000 premature births in 2024 (Figure 63).

Figure 63. Mortality Rate per 1,000 Premature Births, Less than 1 Year of Age, Arizona, 2015-2024 [104-113]



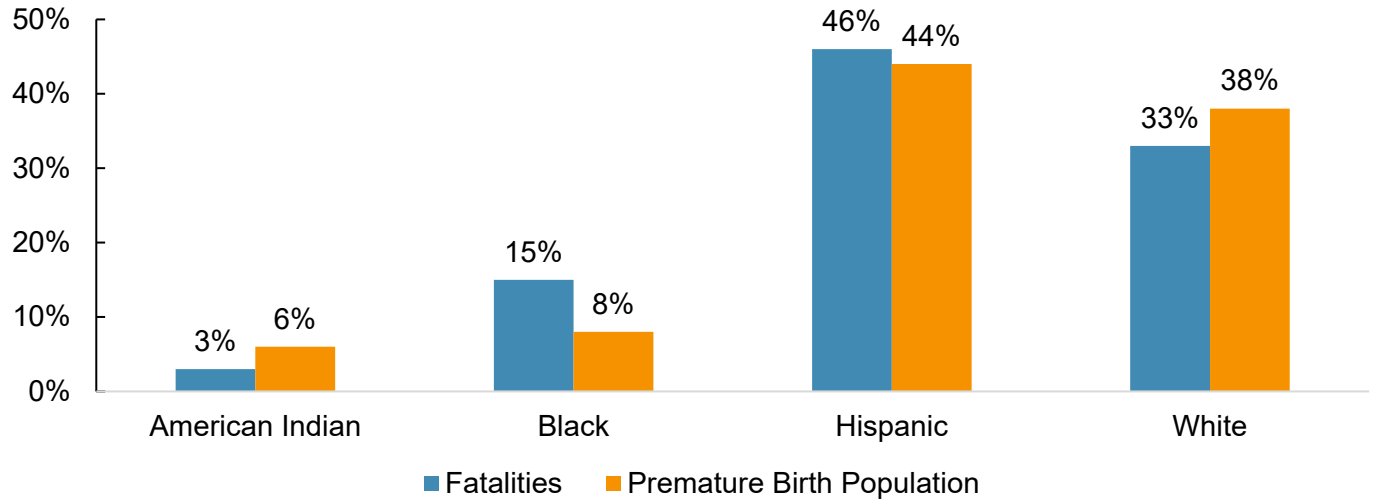
The majority of prematurity deaths occurred among males (51%) (Figure 64).

Figure 64. Percentage of Prematurity Deaths among Infants by Sex, Less than 1 Year of Age, Arizona, 2024 (n=177)



Black and Hispanic infants made up 15% and 46% of prematurity deaths, respectively, but only represent 8% and 44% of premature births (Figure 65).

Figure 65. Percentage of Prematurity Deaths among Infants by Race/Ethnicity, compared to the Premature Birth Population, Less than 1 Year of Age, Arizona, 2024 (n=177) [113]



*Data for Asian children suppressed due to counts less than 6.

While numerous risk factors can contribute to prematurity deaths, the most commonly identified risk factors were poverty (51%), premature rupture of membrane (PROM) (48%), and preterm labor (24%) (Table 39).

Table 39. Risk Factors for Prematurity Deaths among Infants, Less than 1 Year of Age, Arizona, 2024 (n=177)

Risk Factors*	Number	Percent
Poverty	90	51%
Premature Rupture of Membrane (PROM)	85	48%
Preterm Labor	42	24%
Multiple Births (i.e., Twins, Triplets, etc.)	39	22%
Hypertension	34	19%
Previous Preterm Birth	33	19%
Maternal Infection	32	18%
No Prenatal Care	31	18%
Parental Substance Use History	26	15%
Advanced Maternal Age (35+)	22	12%
Eclampsia/ Pre-eclampsia	16	9%
Diabetes	15	8%
Placental Abruption	13	7%
Substance Exposed Newborn (SEN)	12	7%
Smoking during Pregnancy	12	7%
Obesity	10	6%
Incompetent Cervix	10	6%
*More than one risk factor may have been identified in each death.		

Substance Use-Related Deaths

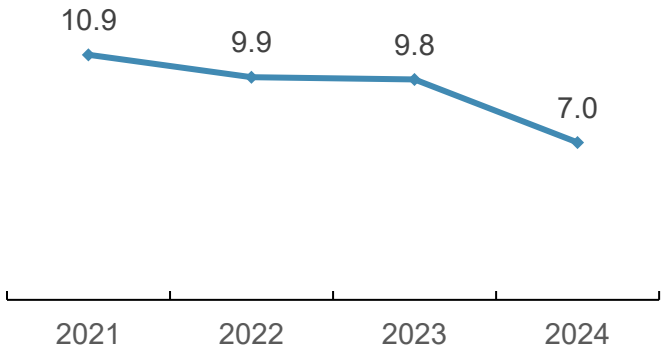
Death where the child or any individual involved in the death of the child used or abused substances, such as alcohol, illegal drugs, and/or prescription drugs, and this substance use was a direct or contributing factor in the child's death. See the glossary for further explanation.

Total Substance Use-Related Deaths
118
(15% of all child deaths)

28.6% decrease
in mortality rate from 2023
(7.0 deaths per 100,000 children in 2024)

98%
of Substance Use-Related Deaths were Preventable

Mortality Rate per 100,000 Children Due to Substance Use-Related Deaths, Ages Birth to 17 Years[4-7]

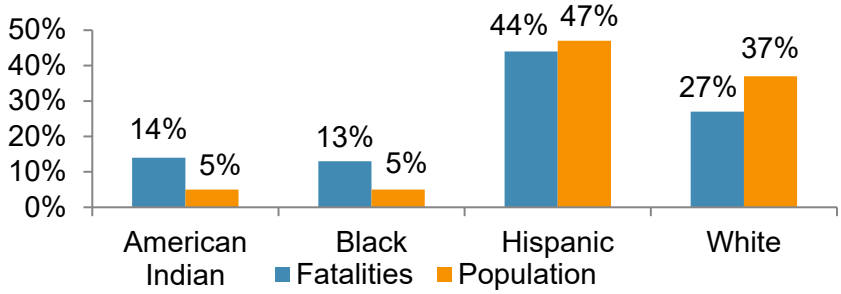


Top Causes of Substance Use-Related Deaths:

Firearm Injuries	MVC	Poisoning	Suffocation	Prematurity
23% (27 deaths)	19% (23 deaths)	14% (16 deaths^)	12% (14 deaths)	8% (9 deaths)

^Of the 16 poisoning deaths, 12 were opiate overdoses. Fentanyl was responsible for 11 of the opiate poisonings. Less than 6 of these poisonings were known to have been administered Naloxone to reverse opioid overdose.

Percentage of Substance Use-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years[**4]**



**Data for Asian children suppressed due to counts less than 6.

42% of substance use-related deaths occurred in the **ages of 15-17 years.**

63% of substance use-related deaths were among **males**

Leading Risk Factors of Substance Use-Related Deaths*:

CPS History with Family	Parental Substance Use History	Poverty	History of Trauma/Violence	Child Relationship Issues
67%	66%	45%	36%	36%

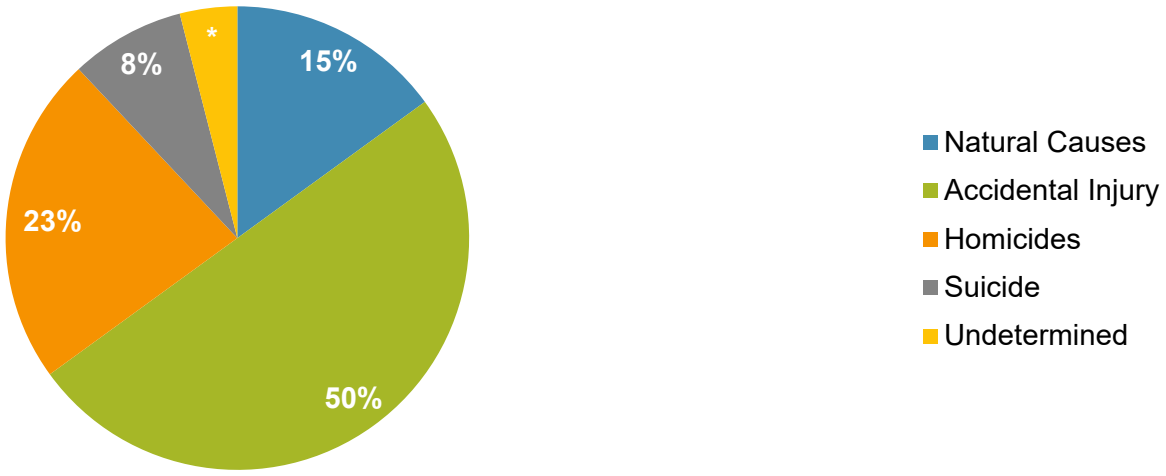
*More than one risk factor may have been identified for each death.

Top 5 Substance Use-Related Death Prevention Recommendations:

(1) Increase the availability and accessibility of affordable, quality mental health and substance use treatment services. Including co-prescribing of naloxone by all healthcare providers and educating pharmacists on the need to offer naloxone to all patients who have been prescribed drugs that can result in an overdose that is reversible with naloxone. [93, 114-117]
(2) Increase community awareness of the risks of operating vehicles while under the influence of drugs and/or alcohol. [118]
(3) Increase access to home visiting programs throughout the state. [78]
(4) Increase youth and parent/caregiver knowledge of risks of underage alcohol and drug use, including marijuana, and the importance of having access to naloxone and knowing how to use it in an overdose situation. [116, 117]
(5) Encourage Arizona policymakers to invest in families' financial well-being, including increasing access to concrete support like healthcare, food, housing, employment, and childcare. [94, 95]

The most common manner of death classification for substance use-related deaths was accidental injuries (50%), followed by homicides (23%) and natural causes (15%) (Figure 66).

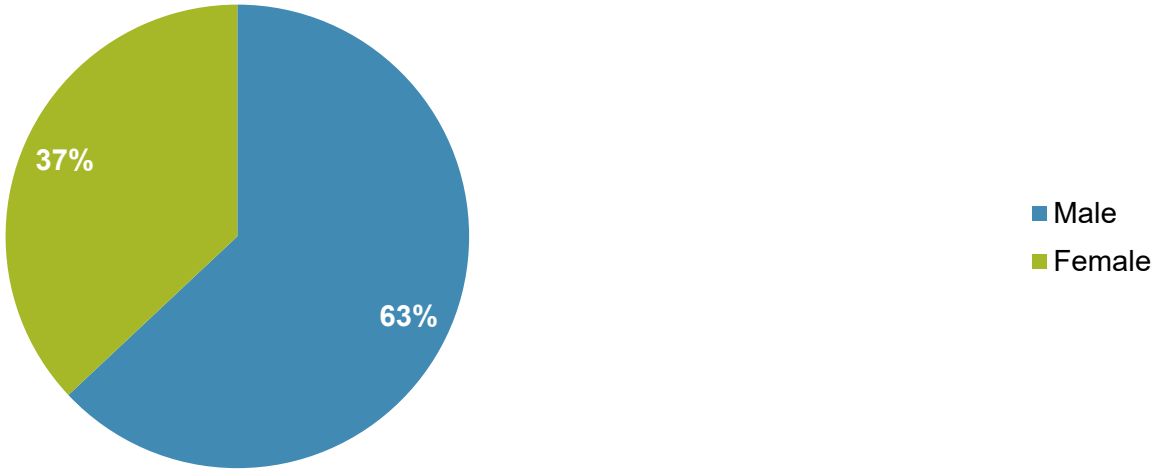
Figure 66. Percentage of Substance Use-Related Deaths by Manner of Death, Ages Birth to 17 Years, Arizona, 2024 (n=118)



*Percentage suppressed due to count less than 6.

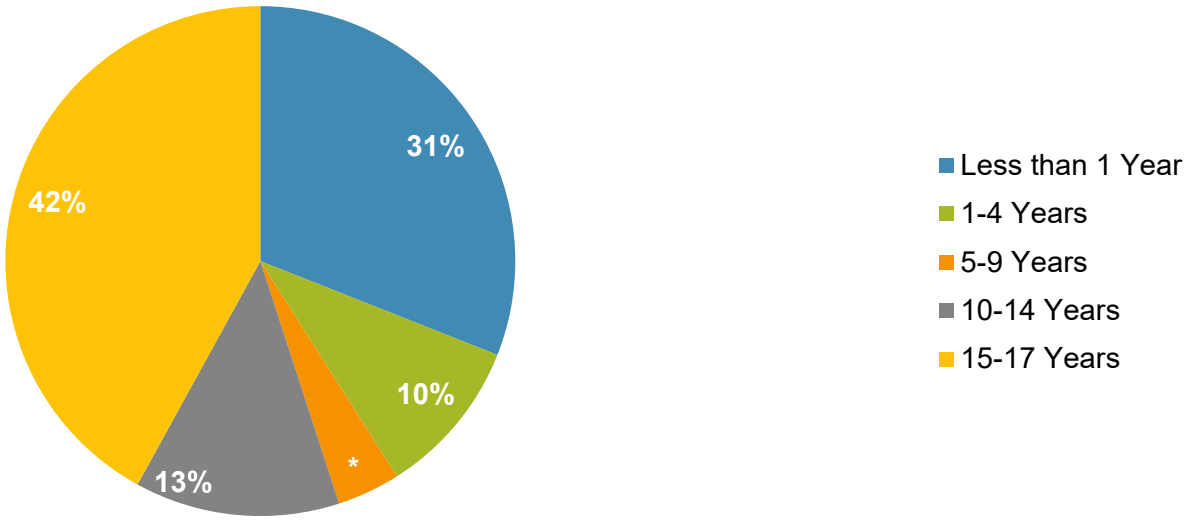
The majority of substance use-related deaths occurred among males (63%) (Figure 67).

Figure 67. Percentage of Substance Use-Related Deaths by Sex, Ages Birth to 17 Years, Arizona, 2024 (n=118)



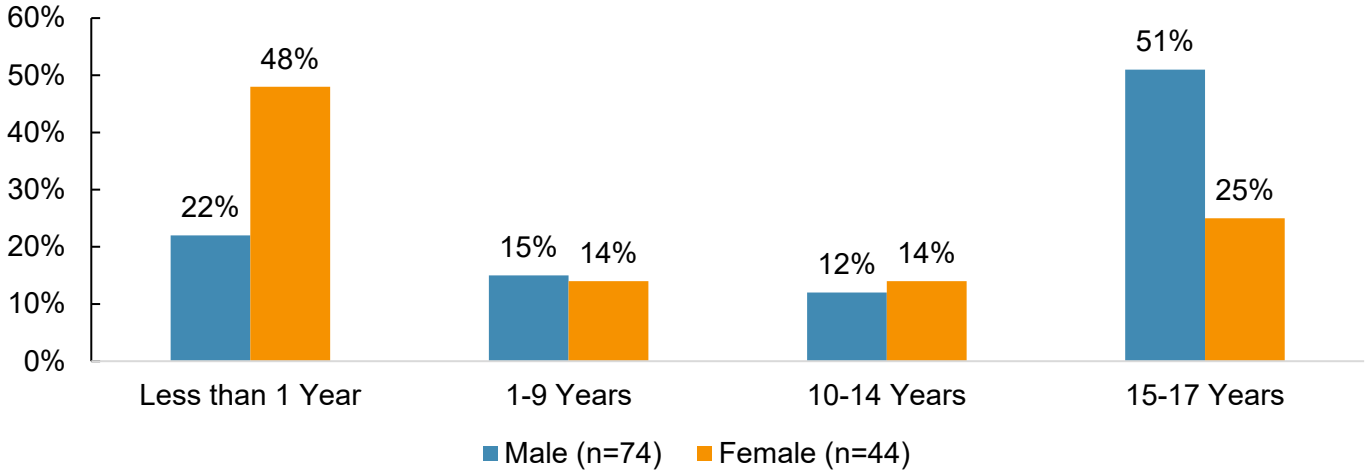
The largest percentage of substance use-related deaths occurred among children aged 15 to 17 years (42%), followed by infants less than one year of age (31%) (Figure 68).

Figure 68. Percentage of Substance Use-Related Deaths by Age Group, Ages Birth to 17 Years, Arizona, 2024 (n=118)



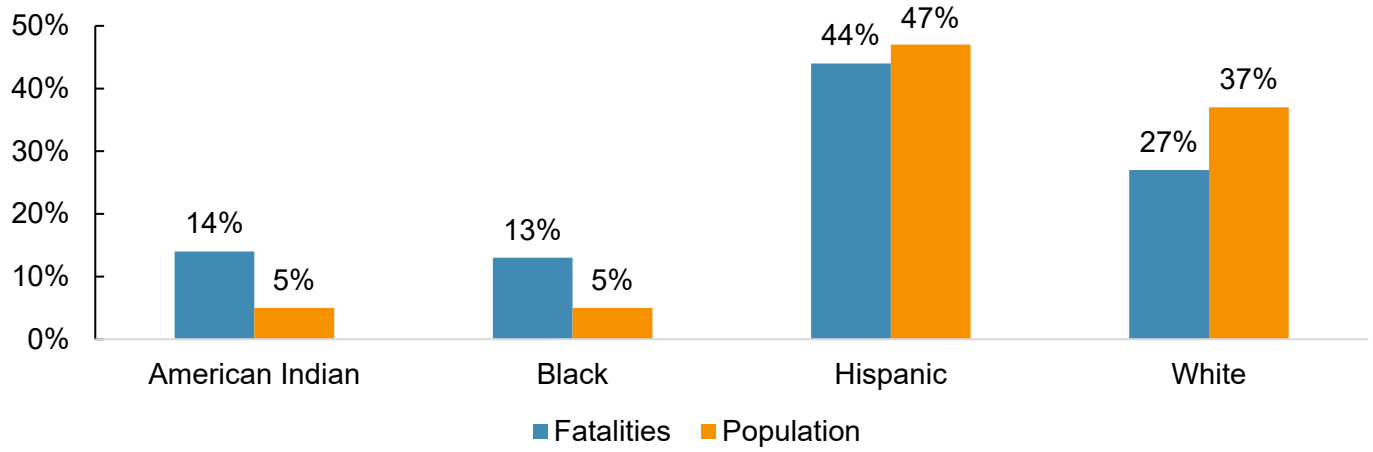
The majority of substance use deaths among males occurred in the 15-17 age group (51%). Among females, most substance use deaths occurred in infants under one year old (48%), followed by those aged 15-17 years (25%) (Figure 69).

Figure 69. Percentage of Substance Use Related Deaths by Age Group and Sex, Ages Birth to 17 Years, Compared to the Population, Arizona, 2024 (n=118)



American Indian and Black children made up 14% and 13% of substance use-related deaths, respectively, despite each group representing only 5% of the total child population. The majority of substance use-related deaths occurred among Hispanic (44%) and White (27%) children (Figure 70).

Figure 70. Percentage of Substance Use-Related Deaths by Race/Ethnicity, compared to the Population, Ages Birth to 17 Years, Arizona, 2024 (n=118)*[4]



*Data for Asian children suppressed due to counts less than 6.

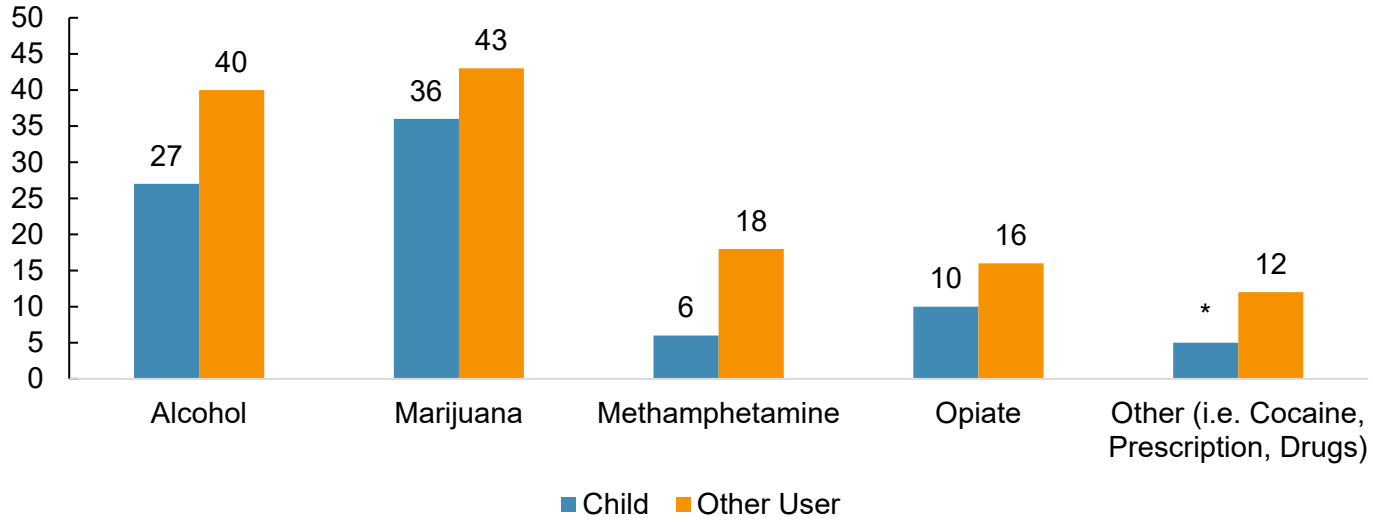
Among substance use-related deaths, firearm injuries (23%) were the leading factor that caused or contributed to the death, followed by motor vehicle crashes. Poisoning contributed to or caused 14% of the deaths (Table 40). Of the 16 poisoning deaths, 12 were opiate overdoses, and fentanyl was responsible for 11 of the opiate poisonings. Fewer than 6 of the poisonings were administered Naloxone to reverse opioid overdose (not shown).

Table 40. Cause of Death where Substance Use was a Direct or Contributing Factor among Children, Ages Birth to 17 Years, Arizona, 2024 (n=118)

Cause of Death	Number	Percent
Firearm Injuries	27	23%
Motor Vehicle Crash-Related	23	19%
Poisoning	16	14%
Suffocation	14	12%
Prematurity	9	8%
Blunt Force Injury	*	*
Environmental Heat Exposure	*	*
Drowning	*	*
Bacterial Infection	*	*
Fire	*	*
Perinatal Condition	*	*
Stabbing	*	*
Undetermined	*	*
Asthma	*	*
Gastrointestinal Disease	*	*
Neurological	*	*
Other Medical Condition	*	*
*Number/Percentage suppressed due to count less than 6.		

Local review teams identified the type of substances used by the child or by other individuals contributing to the death. Overall, Marijuana was the most common substance used, followed by alcohol and opiates (Figure 71). As a note, in poisoning deaths of infants/toddlers, the child is not identified as the user. Additionally, there may be more than one substance and more than one individual using a substance in a death.

Figure 71. Number of Substances Identified as Causing or Contributing to Child Deaths, by the Child or Other User, Ages Birth to 17 Years, Arizona, 2024 (n=118)**



*Number suppressed due to count less than 6.
**More than one substance may have been identified for each death.

While numerous risk factors can contribute to substance use-related deaths, the most commonly identified risk factors were CPS history with family (67%), parental substance use history (66%), and poverty (45%) (Table 41).

Table 41. Risk Factors of Substance Use-Related Deaths, Ages Birth to 17 Years, Arizona, 2024 (n=118)

Risk Factors*	Number	Percent
CPS History with Family	79	67%
Parental Substance Use History	78	66%
Poverty	53	45%
History of Trauma/Violence	43	36%
Child Relationship Issues	43	36%
Lack of Supervision	33	28%
Criminal Activity	23	19%
Child's Chronic Condition	22	19%
Child's Inadequate Treatment	11	9%
Mental Health/Substance Use Disorder	7	6%

*More than one risk factor may have been identified in each death.

Sudden Unexpected Infant Death (SUID)

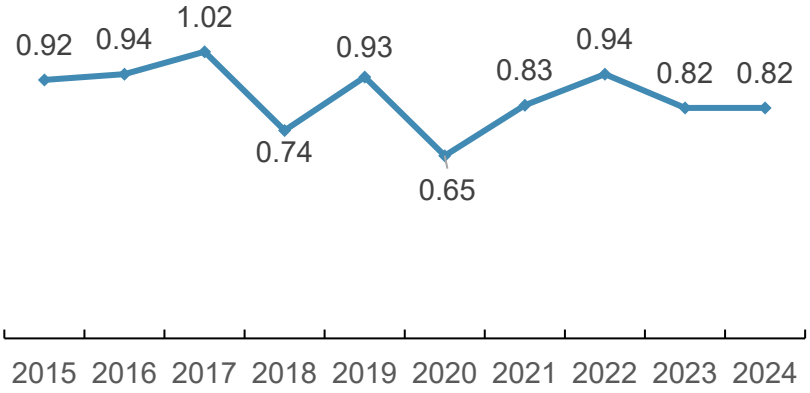
Death of an infant (less than one year of age) where the cause of death was not apparent before a death investigation. Most of the SUIDs are due to suffocation and unsafe sleep environments, but not all SUIDs are unsafe sleep-related. See the glossary for further explanation.

Total SUIDs
66
(8% of all child deaths)

No Change
in mortality rate from 2023
(0.82 deaths per 1,000 live births in 2024)

94%
of SUIDs were Preventable

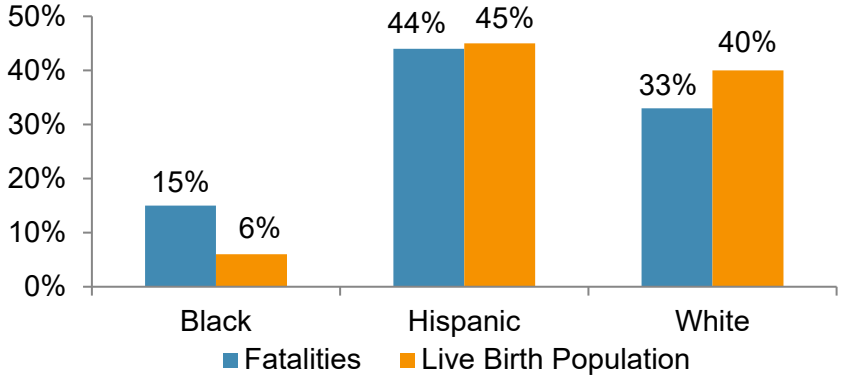
Mortality Rate per 1,000 Live Births Due to SUIDs, Less than 1 Year of Age[24-33]



Top Causes of SUIDs:

Suffocation	Undetermined
79% (52 deaths)	**21%** (14 deaths)

Percentage of SUIDs by Race/Ethnicity, compared to the Live Birth Population, Less than 1 Year of Age[**33]**



91% of SUIDs occurred in **post-neonates (infants 28 days and older but less than one year of age).**

55% of SUIDs were among **males**

**Data for American Indian and Asian children are suppressed due to counts less than 6.

Leading Risk Factors of SUIDs*:

Unsafe Sleep Environment	Objects in Sleep Environment	Poverty	Unsafe Sleep Location	Parental Substance Use History
94%	**89%**	**71%**	**68%**	**62%**

*More than one risk factor may have been identified for each death.

Top 5 Sudden Unexpected Infant Death Prevention Recommendations:

(1) Educate parents on safe sleeping environments in multiple languages, including: [119-121]
   a. Infants should be placed on their backs to sleep on a firm, flat, non-inclined sleep surface until they are one year old.
   b. An infant's ideal safe sleep environment requires a firm sleeping surface with only a fitted sheet and no additional bedding or items.
   c. The dangers of using sleep products not explicitly marked for infants include rocking sleepers, nursing pillows, and infant loungers.

(2) Increase home visiting programs throughout the state for infants following birth for up to one year, and educate home visitors on the importance of discussing safe sleep at every visit. [78, 119-121]

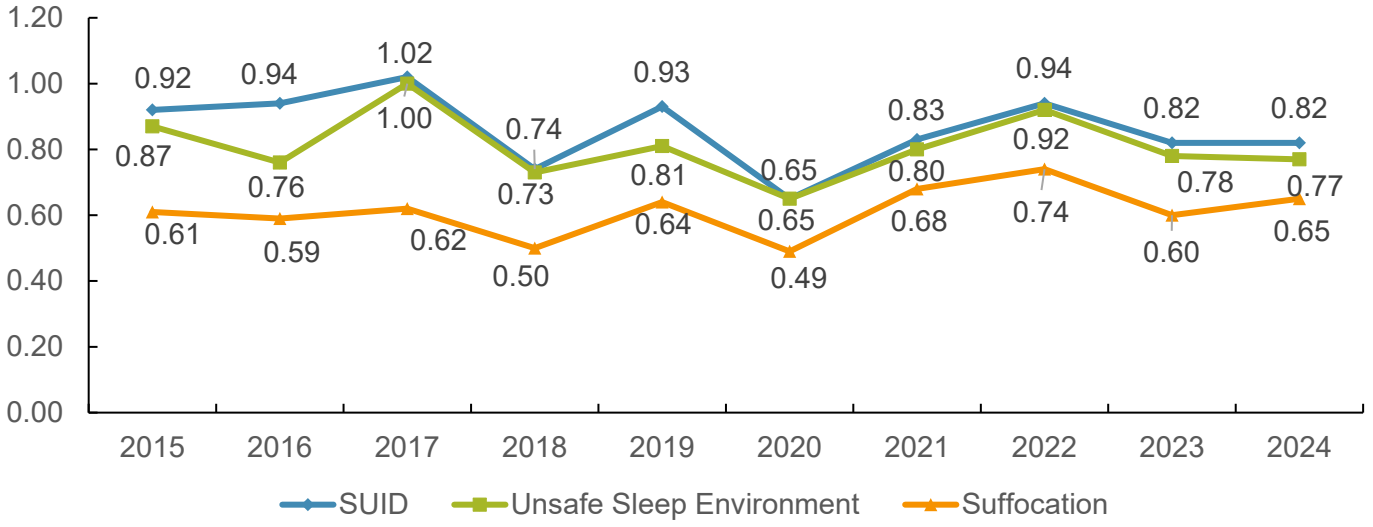
(3) Encourage Arizona policymakers to invest in families' financial well-being, including increasing access to concrete support like healthcare, food, housing, employment, and childcare. [94, 95]

(4) Increase the availability and accessibility of affordable, quality mental health and substance use treatment services.[93]

(5) Provide parents with education, support, and information on parenting strategies, including information and guidance on: [96-99]
   a. The Centers for Disease Control's Positive Parenting Tips
   b. Proper and constant supervision of infants and children, and awareness of the dangers of caring for children and infants while under the influence of alcohol, marijuana, sedatives, and any medication that impairs alertness.
      i. Parents should be referred to the Arizona Smokers Helpline (ASHLine / 1-800-556-6222)
   c. Understanding typical developmental milestones and appropriate expectations for their child's behavior
   d. The importance of remaining drug and alcohol free when supervising infants and children

Arizona's SUID mortality rate has fluctuated between 2015 and 2020, increased until 2022, and then decreased or remained stable thereafter. The SUID mortality rate remained unchanged from 2023 to 2024. The current 2024 mortality rate is 0.82 deaths per 1,000 live births. Additionally, the unsafe sleep environment mortality rate decreased by 1.3% since 2023; however, the suffocation mortality rate increased by 8.3% from 2023 to 2024 (Figure 72).

Figure 72. Mortality Rate per 1,000 Live Births due to Sudden Unexpected Infant Death, Unsafe Sleep Environment, and Suffocation, Less than 1 Year of Age, Arizona, 2015-2024 [24-33]



A greater percentage of SUIDs occurred in males (55%) (Figure 73), and among infants aged between 28 days to less than one year (91%) (Figure 74).

Figure 73. Percentage of Sudden Unexpected Infant Deaths by Sex, Less than 1 Year of Age, Arizona, 2024 (n=66)

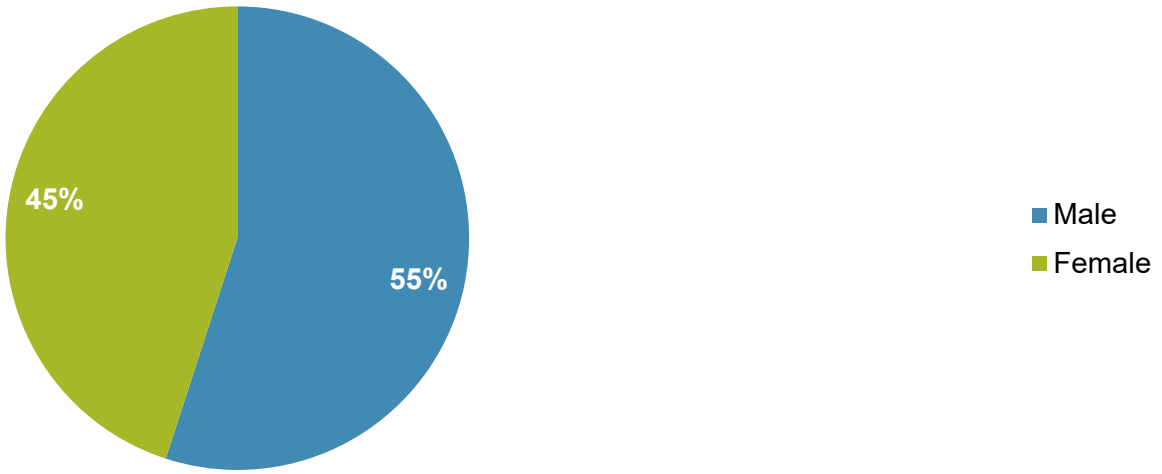
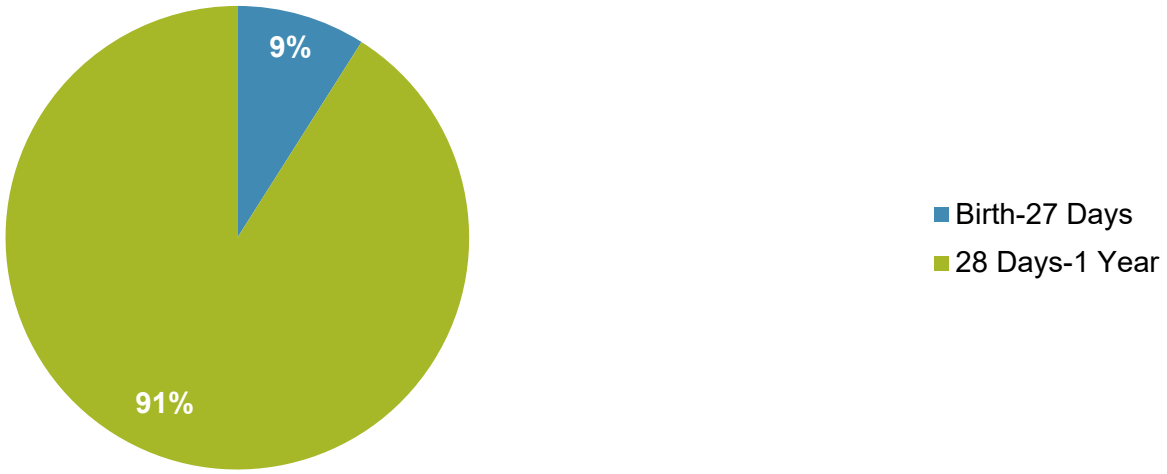
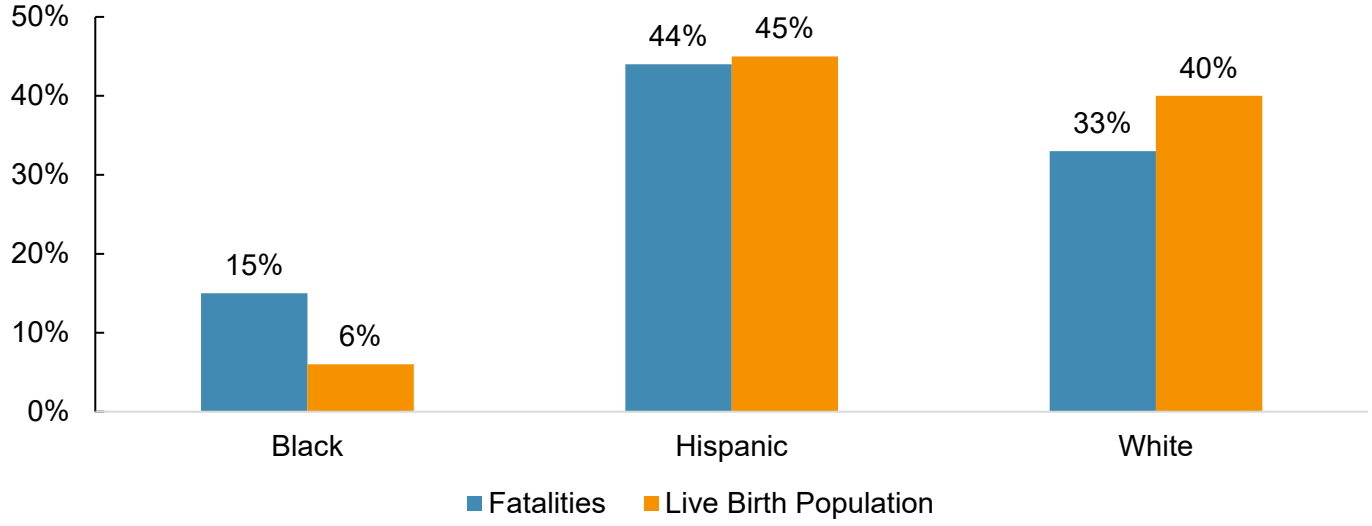


Figure 74. Percentage of Sudden Unexpected Infant Deaths by Age, Less than 1 Year of Age, Arizona, 2024 (n=66)



Black children made up 15% of SUIDs, but only represented 6% of the total live birth population. Hispanic children (44%) had the highest percentage of SUIDs (Figure 75).

Figure 75. Percentage of Sudden Unexpected Infant Death by Race/ Ethnicity, compared to the Live Birth Population, Less than 1 Year of Age, Arizona, 2024 (n=66) *[33]



*Data for American Indian and Asian children are suppressed due to counts less than 6.

Of the 66 SUIDs in 2024, 79% were due to suffocation (Table 42).

Table 42. Cause of Sudden Unexpected Infant Death, Less than 1 Year of Age, Arizona, 2024 (n=66)

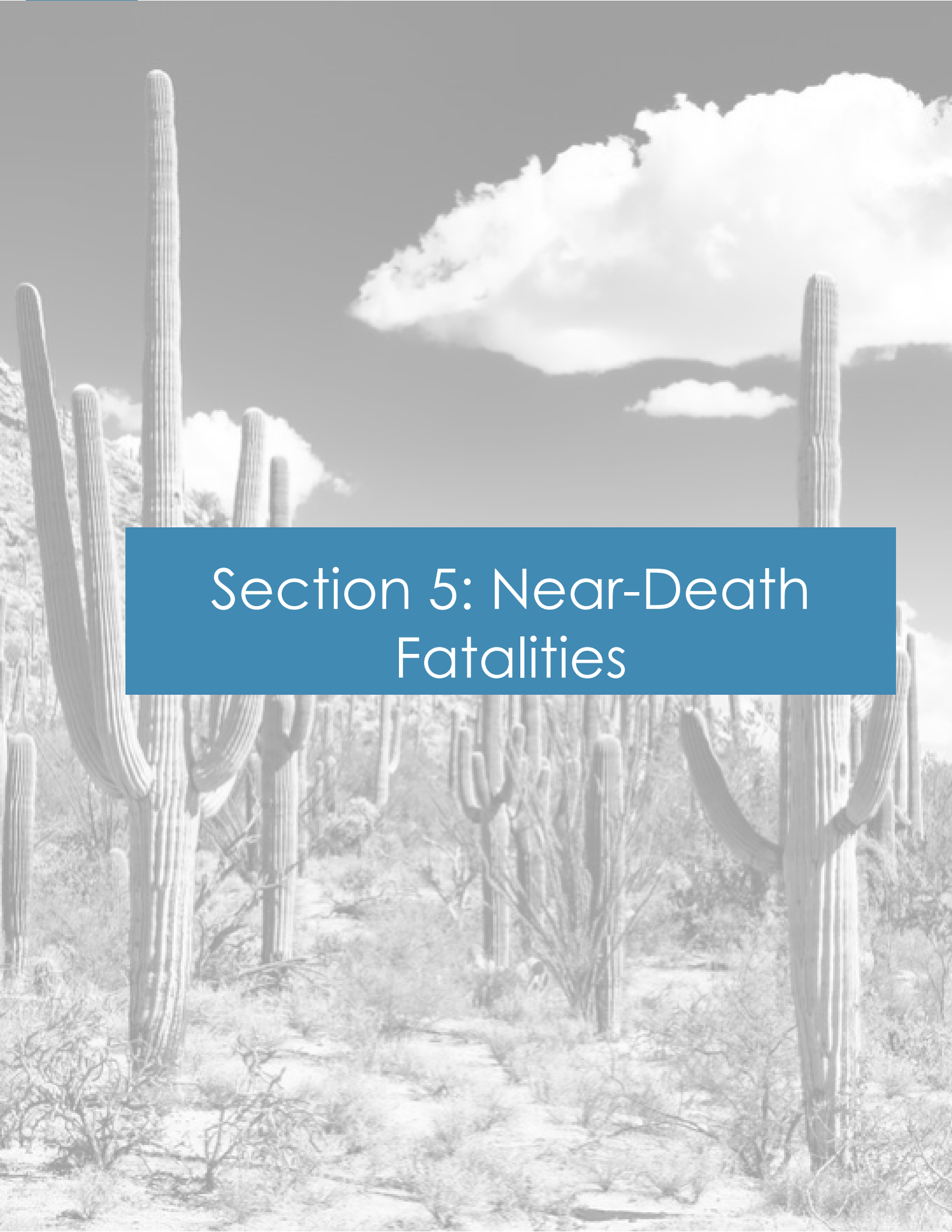
Cause of Death	Number	Percent
Suffocation	52	79%
Undetermined Cause	14	21%

While numerous risk factors can contribute to SUID, the leading risk factors were an unsafe sleep environment (94%), followed by objects in the sleep environment (89%), and poverty (71%) (Table 43).

Table 43. Risk Factors for Sudden Unexpected Infant Deaths, Less than 1 Year of Age, Arizona, 2024 (n=66)

Risk Factors*	Number	Percent
Unsafe Sleep Environment	62	94%
Objects in Sleep Environment	59	89%
Poverty	47	71%
Unsafe Sleep Location	45	68%
Parental Substance Use History	41	62%
Bedsharing	35	53%
CPS History with Family	34	52%
Unsafe Sleep Position	21	32%
Substance Use	15	23%
Smoking during Pregnancy	14	21%
Lack of Supervision	7	11%
*More than one risk factor may have been identified in each death.		

Of the 66 SUID cases, 16 were linked to the use of a consumer product not meant for sleep. Of these, 12 cases involved using a U-shaped nursing pillow for sleep (not shown).



Section 5: Near-Death Fatalities

Near-Death Fatality Cases

New to the 2025 Annual report is the inclusion of near fatality case reviews, as required by statute (§) 36-3501-12: “Beginning January 1, 2025, conduct an annual statistical report on the incidence and causes of child fatalities and near fatalities identified by the department of child safety pursuant to section 8-807.01 for the past year.” Near fatality cases are identified using information published on the Arizona DCS Information Release webpage[126], where DCS reports cases determined to meet the statutory definition of near fatality ARS 8-807.01 following a comprehensive investigation. Because DCS investigations are extensive and may take six months to two years to complete before cases are publicly released, the Child Fatality Review Program is only able to include near fatality cases that have been fully investigated and officially designated as such by DCS at the time of data collection. As a result, not all near fatality cases for a given review year may be captured. For 2024, 7 near-fatality cases were identified by the June 30th deadline for case reviews.

How DCS identifies near-fatality cases:

- State law mandates the Arizona Department of Child Safety to release information in cases where children have died or nearly died as a result of abuse, abandonment, or neglect by a parent or caregiver.
- If DCS receives a report that a child has died or nearly died as a result of abuse, abandonment, or neglect, the preliminary information will be posted online.
- While DCS strives to provide timely information regarding child deaths and near deaths, state law prohibits the department from releasing information until it is determined that a child died or nearly died because of abuse, abandonment, or neglect by a parent, guardian, or caregiver.
- DCS may only post on a death or near-death if it has been determined that it was caused by abuse, abandonment, or neglect, if:
    - 1) the perpetrator is charged with an offense related to the incident;
    - 2) a superior court finds a child dependent based on the allegations of abuse or neglect leading to the death or near-death; or
    - 3) DCS, through its own internal review and administrative appeal process, substantiates findings linking the allegations of abuse or neglect to the death or near-death.
    - Further, if the posting is on a near-death, a medical professional must determine that the child was in serious or critical condition.

DCS defines a near-death as a case that was caused by abuse, abandonment, or neglect if:

1. The perpetrator is charged with an offense related to the incident;
2. A superior court finds a child dependent based on the allegations of abuse or neglect leading to the near-death; or
3. DCS, through its own internal review and administrative appeal process, substantiates findings linking the allegations of abuse or neglect to the near-death experience.
4. Further, if the posting is on a near-death, a medical professional must determine that the child was in serious or critical condition.

Near Fatalities

Defined by DCS as a case that was caused by abuse, abandonment, or neglect. See the glossary for further explanation.

Total Near Fatalities^
7
100% of Near Fatalities were Preventable
100% of Near Fatalities occurred in children < 9 Years of Age

^7 near-fatality cases were identified by the June 30th deadline for case reviews using the Arizona DCS information release webpage.

Leading Causes of Near Fatalities:

Poisoning	Motor Vehicle Crash	Suffocation	Malnutrition/ Dehydration	Firearm Injury
*%	*%	*%	*%	*%

*Percentage suppressed due to count less than 6.

Leading Risk Factors of Near Fatalities:**

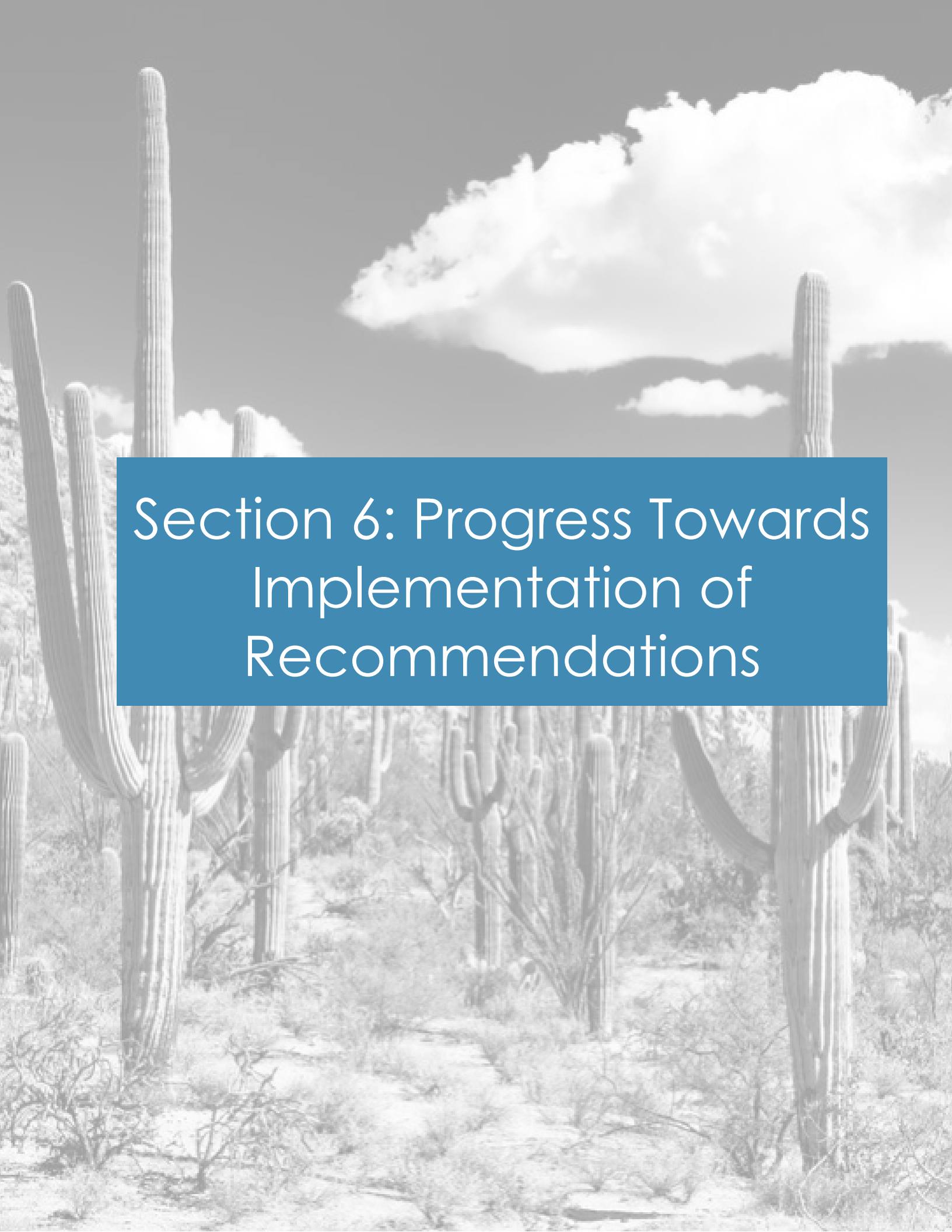
CPS History with Family	Poverty	Parental Substance Use History	Lack of Supervision	Substance Use
100%	86%	86%	*%	*%

*Percentage suppressed due to count less than 6.
**More than one risk factor may have been identified for each death.

Near-Fatalities Prevention Recommendations:

Arizona should ensure DCS and tribal CPS services have the funding necessary to provide comprehensive investigations, monitoring, and necessary anticipatory guidance to families, including, but not limited to:

- Providing safe sleep education and ensuring families have a safe sleep environment [119-122]
- Asking parents and caregivers about firearm ownership and counselling on the risks of firearms in households with children, and how to secure firearms properly. [53, 69-73]
- Assessing consistent child restraint use by parents in vehicles. [88]
- Connecting families with children with complex medical needs to support services like the Division of Developmental Disabilities, the Arizona Early Intervention Program, and their community's home visiting program. [78, 123, 124]
- Providing pregnant women and all parents who need substance use treatment services with appropriate referrals, the importance of keeping their drugs secured and out of their child's reach, and the need to have naloxone available in the home. [101, 116, 117, 125]
- Encourage Arizona policymakers to invest in families' financial well-being, including increasing access to concrete support like healthcare, food, housing, employment, and childcare. [94, 95]



Section 6: Progress Towards Implementation of Recommendations

Progress Towards Implementation of Recommendations

In accordance with A.R.S. § 36-3501(C)(12), beginning in January 2025, this section provides information regarding progress toward implementation of recommendations made by the Arizona Child Fatality Review Program. These recommendations are developed to address preventable factors identified through the review of child deaths in Arizona.

This section highlights actions taken by the Arizona Department of Health Services (ADHS) to support the implementation of these recommendations. The summaries below describe ADHS initiatives, policy developments, and programmatic activities that align with identified prevention priorities and demonstrate ongoing efforts to reduce child fatalities and improve child well-being across the state.

Accidental Recommendation Implementation:

Utilize social media platforms to remind caregivers about the dangers of heat exposure for children. Messages emphasize the importance of never leaving a child unattended in a vehicle, even for a short time.
Collaborate with first responders to raise awareness about the dangers of leaving children in hot vehicles.

Suicide Recommendation Implementation

The Bureau of Chronic Disease and Health Promotion (BCDHP) promotes the “Hope Always Answers” 988 awareness campaign and maintains an online 988 information page to connect individuals with crisis support services. https://www.azdhs.gov/prevention/chronic-disease/suicide-prevention/988-lifeline/index.php
Partner with the Arizona Department of Education (ADE) through a subcontract to implement the Bright Futures Project in Cochise County schools, focusing on suicide prevention through universal screening and staff training. The project supports prevention efforts.
Leads the Youth Mental Health Steering Committee in partnership with ADE and AHCCCS to coordinate programs, practices, and procedures that build resiliency and improve mental health outcomes among youth, adolescents, and young adults.
Provides Youth Mental Health First Aid training across the state in all 15 counties and tribal nations to strengthen community capacity in supporting youth mental health.
Facilitates the Adolescent and Young Adult (<25) suicide prevention workgroup that functions as a community of practice for staff serving this population, as well as an implementation body supporting ADHS efforts
Digital media toolkit for parents/caregivers to empower parents/caregivers to take intentional, supportive actions that positively impact youth mental health and wellbeing.
Improvement of the youth mental health website to provide more comprehensive information and resources for parents, caregivers, schools, and youth, and to offer conversation cards to help parents engage in supportive discussions after training.
Bureau of Chronic Disease and Health Promotion awarded $1,000,000 through RFGA 2025-008 to Jewish Family & Children’s Services of Southern Arizona to provide suicide prevention and postvention services in Pima County and promote the School and Behavioral Health Partnership resource for schools.

Drowning Recommendation Implementation
Bureau of Assessment and Evaluation supports drowning prevention initiatives through the Drowning Prevention Coalition of Arizona, which hosts free swim lessons, distributes life jackets, and provides educational materials to promote water safety.
BCDHP convenes quarterly Injury Prevention Advisory Council meetings to coordinate state and local efforts, share data, and disseminate prevention recommendations, priorities, awareness campaigns, and resources on a range of injury prevention issues, including motor vehicle crashes and drowning.

Firearm Recommendation Implementation
BCDHP assisted in the distribution of Lethal Means Safety Kits through the Veteran Suicide Mortality Review Grant administered by the Department of Veterans Affairs.
BCDHP awarded suicide prevention funding RFGA (2024–2026) to multiple agencies, supporting youth-focused programs that promote positive child and teen relationships and strengthen protective factors.
Partner with ADE through a subcontract to implement the Bright Futures Project in Cochise County schools, focusing on suicide prevention through universal screening and staff training. The project supports prevention efforts.
Participates in the Arizona State Agencies Coordinating Team, which comprises multiple state agencies that collaborate to assess and develop plans to enhance crime victim services throughout Arizona. These agencies include the Governor's Office of Youth, Faith and Family (GOYFF), the Office of the Attorney General (AGO), the Department of Economic Security (DES), the Department of Housing (ADOH), the Department of Public Safety (DPS) and the Arizona Criminal Justice Commission (ACJC). The focus on crime victims includes victims of sexual violence and domestic violence, and many of the participating agencies administer funds to sexual violence and domestic violence survivors.
Collaborates with the Arizona Coalition to End Sexual and Domestic Violence (ACESDV) to support sexual and domestic violence prevention efforts.
BCDHP convenes quarterly Injury Prevention Advisory Council meetings to coordinate state and local efforts, share data, and disseminate prevention recommendations, priorities, awareness campaigns, and resources on a range of injury prevention issues, including motor vehicle crashes and drowning.
BCDHP participates in virtual meetings of the Substance Abuse Coalition Leaders of Arizona (SACLAz) to hear from community coalitions and programs that are delivering Substance Use awareness and prevention events and outreach to youth and families

Infectious Disease Recommendation Implementation
Bureau of Infectious Disease and Services (BIDS) aims to maintain and enhance surveillance activities, outbreak response, laboratory capacity, and collaborations with stakeholders to continue providing comprehensive vaccine-preventable and respiratory disease surveillance, statewide situational awareness, the ability to detect and respond to outbreaks or novel events, and to mitigate the public health impact of vaccine-preventable and respiratory disease and related conditions in Arizona.
BIDS worked closely with the Bureau of Immunizations (BIZS), local/tribal and community partners (TAPI) to promote vaccinations and vaccine confidence. This is accomplished through various

strategies, including trend and data analysis, collaborative vaccine communications, evaluation and approval of relevant materials (e.g., flyers, Ask the Experts Newsletter), and consistent message dissemination to providers, communities, and stakeholders for further distribution.
In the event of an outbreak, BIDS has provided outbreak response and subject matter expertise to assist local health jurisdictions in implementing mitigation and prevention measures, such as non-pharmaceutical interventions (NPIs), as well as vaccine and prophylaxis advice. BIDS also revised the flu/COVID/RSV dashboard to increase community awareness of respiratory disease burden.
BIDS also conducts frequent educational outreach at various events to enhance knowledge about various infectious diseases. For instance, BIDS conducts a Valley Fever Poster Contest for students, as well as a Healthy Swimming Educational Campaign that includes a poster contest and site visits to pools to provide healthy swimming education. BIDS also participates in the Game and Fish Expo to provide information on infectious disease prevention, focusing on rabies prevention, mosquito-borne disease prevention, and food- and waterborne disease prevention.

Motor Vehicle Crash Recommendation Implementation

BCDHP provides car seat training & certifications, car seat community checks, the Battle of the Belt, and media campaigns.
Facilitates the Injury Prevention Advisory Council's quarterly meetings, which provide a platform for state and local agencies, community partners, and other stakeholders to share resources and data on various injury prevention issues, including motor vehicle crashes, firearm injuries, and drowning.
The Injury Prevention Advisory Council disseminates prevention recommendations and priorities, awareness campaigns, and resources.

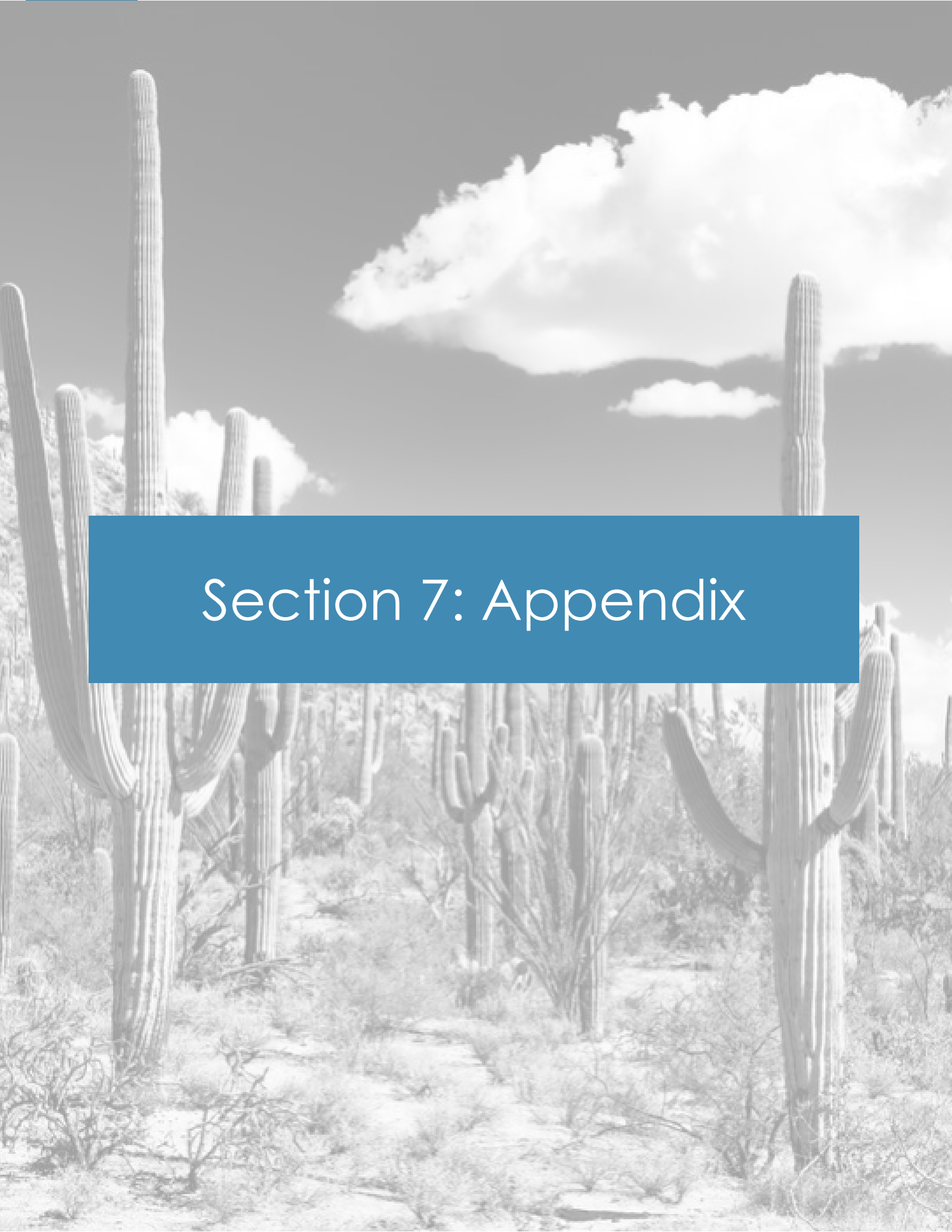
Neglect and Abuse Recommendation Implementation

BCDHP conducts the legislatively mandated Treatment Capacity Survey to document the number of available beds in Arizona's substance use treatment facilities. Survey results are published quarterly on the ADHS website.
BCDHP overdose prevention programs promote the AHCCCS Opioid Service Locator tool as a resource to improve public awareness of mental health and substance use treatment services across Arizona.
BCDHP collaborates with Prevent Child Abuse and the "*All Babies Cry*" to provide parents with education, support, and information on parenting strategies
Fund and implement evidence-based and evidence-informed home visiting programs that provide parent education and support to pregnant women and families with children under age five. These programs promote healthy child development, strengthen parent–child relationships, and support emotional well-being. Families receive education on child development, positive parenting, social and emotional regulation for both parents and children, and injury prevention, while also completing screenings and assessments related to parental mental health, substance use, and child development.
Home visitors are mandatory reporters who receive training from the Department of Child Safety on how and when to report suspected child abuse and neglect.

Prematurity and Other Perinatal Conditions Recommendation Implementation
Linkages to Care activities at the state and county levels, as well as the Linkages to Care workgroup, meet quarterly.
Implementation of the Count the Kicks campaign to prevent stillbirth.
Implementation of family planning programs through nine county health department clinics and Valleywise Health Medical System.
Promote social media campaign and resources through the Know the Signs campaign to educate about warning signs for postpartum depression.
Supports the implementation of the AIM Safety Bundles on Substance Use Disorder and Perinatal Mental Health Conditions in 40 of 42 birthing hospitals.
Supports the Arizona Perinatal Access Line (APAL) by providing consultations, training, and clinical toolkits for healthcare providers.
HB2332 establishes an Advisory Committee on Obstetrics, Gynecology, and Maternal Mental Health in Rural Communities to develop recommendations ensuring the availability of obstetrics, gynecology, and maternal mental health services in low-volume, high-risk rural communities.
HB2332 requires ADHS to identify and compile educational materials and information for health care professionals and patients regarding maternal mental health conditions, including postpartum depression, with information on screenings, symptoms, and methods of coping with postpartum depression and treatment options and resources.

Substance Use Recommendation Implementation
Participates in the Substance Abuse Coalition Leaders of Arizona (SACLAz) meetings to hear from community coalitions and programs that are delivering substance use awareness and prevention events and outreach to youth and families.
Provides naloxone to ADE to give to schools in Arizona. The STOP-IT toolkit includes sample parent communication materials, such as "What Every Parent and Caregiver Needs to Know about Fake Pills" and "Emoji Drug Code | Decoded".

SUID Recommendation Implementation
The Safe Sleep Taskforce meets to provide resources and connect to partner organizations when needed.
Home visiting programs offer ongoing parent education on safe sleep practices, starting during prenatal visits and continuing through the child's first birthday. Home visitors educate on safe sleep environments, reinforce key messages, and support families in creating safe sleep spaces at home.
The Strong Families AZ Safe Sleep website offers education on safe sleep, including a quiz families can complete to receive a free sleep sack. The platform helps families increase their knowledge and confidence in practicing safe sleep every day.
The Parenting Brief podcast featured an episode dedicated to safe sleep that remains the most frequently streamed. The episode helps parents understand the importance of safe sleep environments, validates the challenges families face, and provides tools on how to implement best practices to prevent sleep-related infant deaths.



Section 7: Appendix

Appendix A: Neglect/Abuse Data Disclaimers

Disclaimer for the Department of Child Safety (DCS)/ Child Protective Services (CPS):

- Local CFRP teams attempt to obtain records from child protective services (CPS) agencies, including the Department of Child Safety (DCS) and CPS agencies in other jurisdictions, such as tribal authorities and agencies in different states.
- Review teams consider a family as having previous involvement with a CPS agency if the agency investigated a report of Neglect/Abuse for any child in the family before the incident leading to the child's death.
- Unsubstantiated reports of Neglect/Abuse are also included in this definition; however, calls to DCS that did not meet the criteria to be made into a report and were taken as "information only" are not included in the CFRP annual report.

Department of Child Safety (DCS) Definition of Neglect/Abuse:

Definitions of abuse and neglect observed by DCS are set in the Arizona Revised Statutes Title 8. Child Safety 8-201; Section 2 and Section 25:

- Section 2: "Abuse" means the infliction or allowing of physical injury, impairment of bodily function or disfigurement, or the infliction of or allowing another person to cause serious emotional damage as evidenced by severe anxiety, depression, withdrawal or untoward aggressive behavior and which emotional damage is diagnosed by a medical doctor or psychologist and is caused by the acts or omissions of an individual who has the care, custody, and control of a child. Abuse includes:
    - (a) Inflicting or allowing sexual abuse under §13-1404, sexual conduct with a minor under §13-1405, sexual assault under §13-1406, molestation of a child under §13-1410, commercial sexual exploitation of a minor under §13-3552, sexual exploitation of a minor under §13-3553, incest under §13-3608 or child sex trafficking under §13-3212.
    - (b) Physical injury that results from permitting a child to enter or remain in any structure or vehicle in which volatile, toxic, or flammable chemicals are found, or any person possesses the equipment to manufacture a dangerous drug as defined in §13-3401.
    - (c) Unreasonable confinement of a child.
- Section 25: "Neglect" or "neglected" means:
    - (a) The inability or unwillingness of a parent, guardian, or custodian of a child to provide that child with supervision, food, clothing, shelter, or medical care if that inability or unwillingness causes unreasonable risk of harm to the child's health or welfare, except if the inability of a parent, guardian or custodian to provide services to meet the needs of a child with a disability or chronic illness is solely the result of the unavailability of reasonable services.
    - (b) Permitting a child to enter or remain in any structure or vehicle where volatile, toxic, or flammable chemicals are found or any person possesses equipment to manufacture a dangerous drug as defined in §13-3401.
    - (c) A health professional determined that a newborn infant was exposed prenatally to a drug or substance listed in §13-3401 and that this exposure was not the result of a medical treatment administered to the mother or the newborn infant by a health professional. This subdivision does not expand a health professional's duty to report neglect based on prenatal exposure to a drug or substance listed in §13-3401 beyond the requirements prescribed under §13-3620, subsection E. The determination by the health professional shall be based on one or more of the following:

        - (i) Clinical indicators in the prenatal period, including maternal and newborn presentation.
        - (ii) History of substance use or abuse.
        - (iii) Medical history.
        - (iv) Results of a toxicology or other laboratory test on the mother or the newborn infant.
    - (d) Diagnosis by a health professional of an infant under one year of age with clinical findings consistent with fetal alcohol syndrome or fetal alcohol effects.
    - (e) Deliberate exposure of a child by a parent, guardian, or custodian to sexual conduct as defined in §13-3551 or to sexual contact, oral sexual contact, or sexual intercourse as defined in §13-1401, bestiality as prescribed in §13-1411, or explicit sexual materials as defined in §13-3507.
    - (f) Any of the following acts committed by the child's parent, guardian, or custodian with reckless disregard as to whether the child is physically present:
        - (i) Sexual contact as defined in §13-1401.
        - (ii) Oral sexual contact as defined in §13-1401.
        - (iii) Sexual intercourse as defined in §13-1401.
        - (iv) Bestiality as prescribed in §13-1411.

Appendix B: State and Local CFRP Teams

State Team:

Chairperson:
Mary Ellen Rimsza, MD, FAAP
American Academy of Pediatrics

Members:

Amber-Rose Begay
Navajo Maternal and Child Health Projects at Diné College

Laura Luna Bellucci, MBA
Chief, Bureau of Women's and Children's Health, Arizona Department of Health Services
Arizona MCH & CSHCN Director

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Dyanne Greer
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Amy Peep (Proxy)
Governor's Office for Youth, Faith, and Family

Verna Johnson
InterTribal Council of Arizona

Rebecca Krumm
Julia Leight (Proxy)
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Lily Marsden, MD
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Charles "Chuck" Miller
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Leanne Murphy
Director of Child Welfare & Juvenile Justice Policy, Children's Action Alliance

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Douglas Sargent
Dr. Grant Phillips (Proxy)
Katie Lenhart (Proxy)
Arizona Department of Juvenile Corrections

Nicola Winkel, MPA
Arizona Coalition for Military Families

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Michelle Cervantes
Phoenix Police Homicide Detective

Kathleen Collett, MSW
Arizona Department of Child Safety

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Anndrea Kawamura
Protective Services
Child & Family Protective Division
Office of the Attorney General

April King
Family Involvement Center

Karin Kline, MSW
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Laura Prefling
Parent

Leah Reach, MSW
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Courtney Thedford
Arizona Department of Child Safety

Ashley Warner, DPT
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Stephanie Zimmerman, MD
Attending Physician, Emergency Department
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State Subcommittee SUID:

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Phoenix Police Homicide Detective

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Mayo Clinic

Courtney Thedford
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Director of Operations, Time Out Shelter

Coordinator:
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Susan Campbell, Counselor,
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Pima County ME
Pima County Forensic Pathologist

Kristin Crowley
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Sharon Dalby
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Tanya Dean
Investigator, Child Protective Services

Suzi Dodt
Medicolegal Investigator, Pima County

Pattie Dremler
CASA Coordinators

Donald Engler
Payson Chief of Police

Tom Fife
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Joshua George
San Carlos Apache
Health Care Nurse Manager

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Injury Prevention Program Manager
Coconino County Health & Human Services

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Medical Examiner

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Gerrit Boeck
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Shawn Bowker
Flagstaff Medical Center

Tracilynn Carl
Health Educator
Coconino County Public Health Services District

Shannon Claw
Tuba City
Regional Medical Center Trauma

Deborah Fresquez
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Diana Hu, MD
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Regional Health Care Corporation

James Mapp
Coconino County Attorney

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Flagstaff Medical Center NICU

James Steng, Detective
Flagstaff Police Department

Zeke Ziegler, Major
Arizona Department of Public Safety

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County Attorney Graham
County Attorney's Office

Brian Douglas
Health Director
Graham County Health Department

Misty Gregory, RN
Greenlee County Health Department

Dr. Richard Keith
Pediatrician
Gila Valley Clinic

Melissa Lunt, RN
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Jason Stein
Department of Child Safety Program Manager

Melissa Loy
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EMT, Lifeline

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Appendix C: References

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