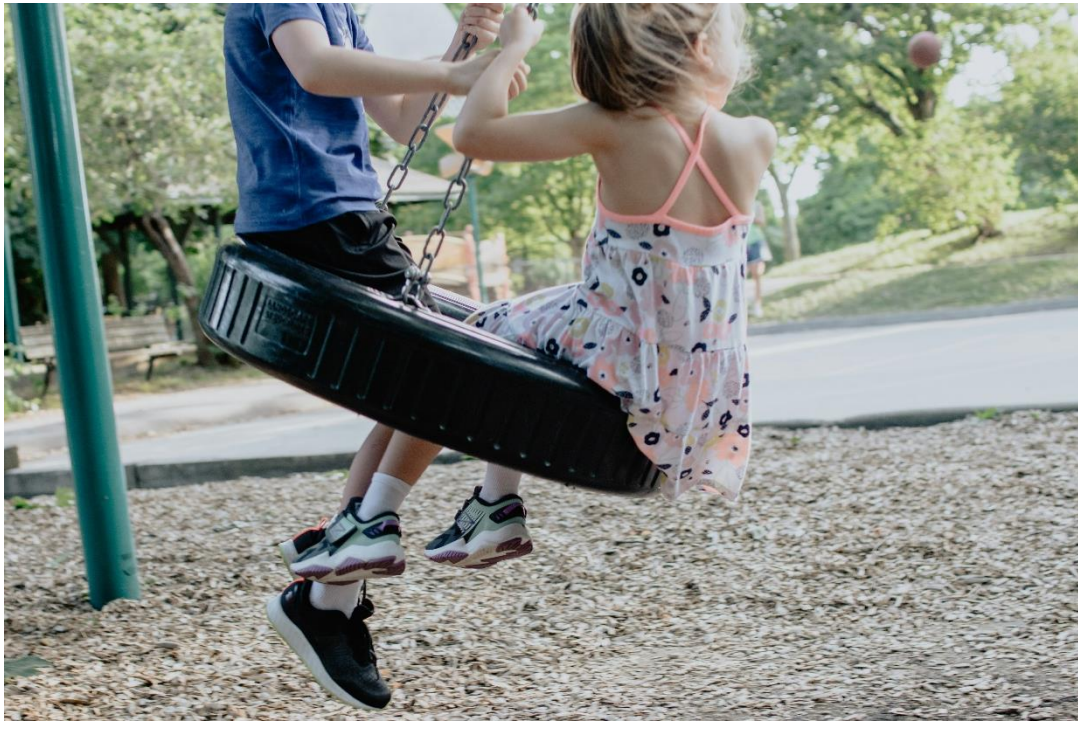




## CHILD DEATHS IN MICHIGAN



### **A Report on Case Reviews Conducted in 2023**

A report on the causes and trends of child deaths in Michigan based on findings from community-based Child Death Review teams.

*Published March 2026*



Our mission is to understand how and why children die in Michigan in order to take action to prevent other child deaths.



**Prepared By:**

The Center for Child and Family Health (CCFH) at the Michigan Public Health Institute (MPHI) on behalf of the Michigan Child Death State Advisory Team

Submitted To:

The Honorable Gretchen Whitmer, Governor, State of Michigan

The Honorable Winnie Brinks, Majority Leader, Michigan State Senate

The Honorable Matt Hall, Speaker of the House, Michigan House of Representatives

Dear Director Elizabeth Hertel,  
**Michigan Department of Health and Human Services**

The Michigan Child Death State Advisory Team is submitting this report on child deaths in 2023 in Michigan as required by law (1997 PA 167 MCL 722.627b). In 2023, 1,136 Michigan children birth through age 18 died.

The Child Death State Advisory Team identified multiple strategies to prevent child deaths, based, in part, on the information collected through Michigan's local Child Death Review (CDR) teams. The CDR process provides a critical opportunity to identify the causes of and circumstances surrounding children's deaths to prevent future fatalities, injuries and disabilities.

Childhood mortality is a crucial indicator of the overall health and welfare of a state. Reducing infant and child mortality will require sustained effort at the state and local levels. The Child Death State Advisory Team shares your commitment to making Michigan a safer, healthier place to raise a family.

# MICHIGAN CHILD DEATH STATE ADVISORY TEAM MEMBERSHIP — 2025

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Amy Zaagman

Executive Director, Michigan Council for Maternal and Child Health

# ACKNOWLEDGEMENTS

This report is written in memory of the Michigan children who have died and in honor of the families and communities impacted by the immeasurable loss. The Michigan Child Death State Advisory Team issues this report with the hope that it will encourage additional efforts, both in local communities and among our state leaders, to keep every child in Michigan safe and healthy.

We wish to acknowledge the dedication of the more than 1,400 volunteers throughout Michigan who serve our state and the children of Michigan by participating in their local Child Death Review (CDR) team. It is an act of courage to acknowledge that the death of a child is a shared responsibility. The willingness of these volunteers to step outside of their traditional professional roles to examine all the circumstances that lead to child deaths, to provide recommendations to prevent other deaths, has made this report possible. Many thanks to the local CDR team coordinators for volunteering their time to organize and facilitate review meetings, and to identify findings and recommendations from their reviews. This report would not be possible without their continued commitment to the CDR process.

The Michigan Department of Health and Human Services (MDHHS), Office of the State Registrar, Division for Vital Records and Health Statistics, has been especially helpful in providing child mortality data and in helping us to better understand and interpret the statistics on child deaths.

MDHHS Children's Services Administration provides funding and oversight for Michigan's CDR Program, which is managed through a contract with the Michigan Public Health Institute (MPHI).

Permission to quote or reproduce materials from this publication is granted when acknowledgment is made. This report is available electronically on the [Data, Reports, and Fact Sheets page on the Michigan Fatality Review & Prevention website](https://mifrp.org/publications/) (URL: <https://mifrp.org/publications/>).

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# INTRODUCTION

The death of a child is a profound loss that impacts not only the child’s parents, family and friends, but also the larger community. To reduce the number of these losses, we must first understand how and why these deaths occur.

## Michigan Child Death Review Program

The Child Death Review (CDR) Program was implemented in Michigan in 1995 to conduct in-depth reviews of child deaths and identify ways to prevent them. Currently, there are 73 local CDR teams covering 81 of Michigan’s 83 counties, with some teams serving a two-county jurisdiction. While not all counties have an active team, MPHI remains committed to statewide coverage and is continuously working with local officials to establish teams in the remaining counties.

CDR is a collaborative process that brings together local professionals from a variety of disciplines who volunteer their time to share and discuss comprehensive information about the circumstances surrounding the deaths of children.

**Local CDR team membership is comprised of six mandated members, which include:**



The health department



The medical examiner’s office



Law enforcement



Michigan Department of Health and Human Services



The prosecutor’s office



The court

Local CDR teams may add further membership or invite guests as necessary, including representatives from emergency medical services, hospitals and other medical facilities, schools, organizations providing mental health services, and organizations serving those impacted by domestic or sexual violence. In total, more than 1,400 professionals volunteered their time to serve on a local CDR team in Michigan.

Each team determines the agency or individual that will coordinate its activities. The coordinator's role includes identifying cases for review, identifying and ensuring diverse team membership, communicating with team members, scheduling and facilitating team meetings and leading prevention discussions. One person may perform all of these activities, or the responsibilities may be shared with a co-coordinator. There are no program funds that support the activities of the local CDR team coordinators.

Local CDR teams determine how often they will meet. Meeting frequency varies and is dependent on the number of deaths the team reviews each year. Teams serving rural counties with fewer deaths may meet once or twice per year, while teams serving mid-sized counties may meet on a quarterly or bimonthly basis. Teams for the most populous counties meet monthly.

Local CDR teams use what they learn during the review process to develop findings and recommendations, which they share with other local entities to help inform prevention initiatives that address needs specific to their communities. It is important to note that CDR is not about assigning blame, determining the cause or manner of death, or prosecuting cases, as the teams have no official authority in any of these areas.

## **The Michigan Child Death State Advisory Team**

The Michigan Child Death State Advisory Team was established by Public Act 167 of 1997 (MCL 722.627b) to "identify and make recommendations on policy and statutory changes pertaining to child fatalities and to guide statewide prevention, education and training efforts." The State Advisory Team provides support to local CDR teams, recommends improvements in protocols and procedures for the Michigan CDR Program, and reviews Michigan's child mortality data as well as local CDR team findings and recommendations to identify causes, risk factors, and trends in child deaths. MDHHS has administrative responsibility for the State Advisory Team; a membership list can be found on [pages 5-6 of this report](#).

The law also requires the State Advisory Team to publish these annual reports on child fatalities. The present report includes information pertaining to the 619 children whose deaths were reviewed by Michigan's local CDR teams in 2023 as well as the 1,136 Michigan children who died in 2023.

## Michigan Public Health Institute Program Support

MDHHS established a contract with MPHI to manage the CDR Program. The contract requires MPHI to:

- Assist local CDR teams with case identification and provide guidance on team functioning.
- Facilitate the activities of the Child Death State Advisory Team.
- Provide an annual training for team members, as well as trainings on other topics pertinent to the investigation and prevention of child fatalities, including infant safe sleep for child welfare professionals.
- Develop program support materials, including resource guides for effective reviews, investigative protocols, and the [Michigan Fatality Review & Prevention website](https://mifrp.org/) (URL: <https://mifrp.org/>).
- Compile and disseminate information and resources on specific causes of death and promising prevention initiatives.
- Maintain Michigan's CDR Program data, including providing guidance on how to access necessary records, ensuring data are complete and accurate, and analyzing county-specific and cause of death-specific data.
- Represent the Michigan CDR Program at local, state, and national levels.
- Provide other types of technical assistance and support as needed.

The Michigan CDR Program has established working relationships with a wide array of organizations throughout the state to promote child health and safety. The program also maintains a productive working relationship with MDHHS, leading to the implementation of innovative strategies to better protect children and prevent deaths.

# CHILD DEATH REVIEW DATA OVERVIEW

The information presented in this report is based on data gathered through Michigan's local CDR process by using a standardized data reporting tool developed by the National Center for Fatality Review and Prevention (NCFRP). Data are then entered into the National Fatality Review-Case Reporting System (NFR-CRS). This web-based reporting tool was developed with input from many states through their CDR programs. The NCFRP regularly updates the data collection instrument, which can be viewed on the [NCFRP website](http://bit.ly/452yhWF) (URL: <http://bit.ly/452yhWF>).

## Case Selection

Local CDR teams select cases to review based on the number of deaths that occur, the resources available in the county, and the team's ability to access case information. More populous counties typically limit their reviews to those cases that fall under the jurisdiction of the county medical examiner, which are primarily non-natural deaths. In some instances, typically when the incident or death occurred in a jurisdiction other than the child's county of residence, a second or third local CDR team may also review the case. When this occurs, data associated with duplicate reviews was excluded from the analyses depicted in this report, with the exception of the table in Appendix B. Local CDR teams typically choose to review the deaths of children from birth through age 18. Not all child deaths in the state are reviewed, and local CDR teams may choose to review the deaths of non-Michigan residents when the death and/or incident occurred in their jurisdiction.

While the CDR data presented in this report provides rich contextual details about the circumstances surrounding children's deaths, it does not encompass information about every child death in the state. Through examination of the case information on deaths that were reviewed, the resulting data assists in the identification of emerging issues, problematic trends, and key risk and protective factors that can be used to prevent deaths.

Please contact the Michigan CDR Program at the Center for Child and Family Health at MPHI at [MichiganCDR@mphi.org](mailto:MichiganCDR@mphi.org) with any questions or requests for additional data.

## Data Sources

When text in this report refers to “deaths reviewed,” data was derived from the information entered into the NFR-CRS and collected through the local CDR team process. Data about deaths reviewed are presented by year of review by the local CDR team, which may not be the same as the year in which the child died.

When text in this report refers to “total deaths,” data was derived from official mortality statistics for the state, which are based on death records obtained from MDHHS, Office of the State Registrar, Division for Vital Records and Health Statistics. Data about total deaths are presented by the year of the child’s death.

## Data Limitations

As not every child death is reviewed, Michigan’s CDR Program dataset is not population-based and should not be directly compared with vital statistics data, nor should it be used to compute mortality rates. It is recommended that complementary data sources are examined alongside the CDR Program data when making prevention, policy or practice decisions. These complementary data sources may include, but are not limited to, Michigan Vital Records and Health Statistics, Children’s Protective Services data, emergency department or hospitalization data, Kids Count, county health rankings or data gathered through Michigan’s Pregnancy Risk Assessment Monitoring System.

Like most data collection systems, the NFR-CRS has been modified over time to reflect emerging issues, such as trends in substance use or products that are no longer recommended for infant sleep. When questions are added or modified, these changes are noted in the NFR-CRS codebook along with the version number in which the change was made. As a result of these changes over time, every data field may not be available for all years during which the NFR-CRS has been in use. In addition, some data elements have been modified to such a degree over the years that they cannot be recoded into a newer version, which may limit the availability of data from before or after the modification was made.

Completeness of the data entered into the NFR-CRS is dependent upon the depth and breadth of information available during the case review process. As a result, some variables will be marked missing or unknown for some case entries.

**Note:** Tables and charts throughout this report may not sum to 100% due to rounding.

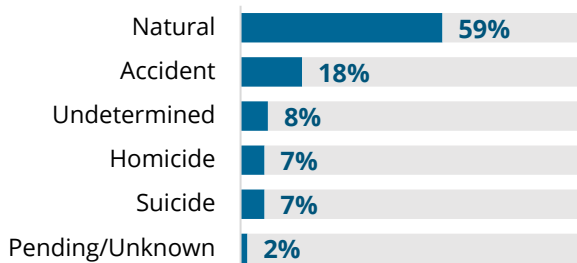
## Infographic Overview



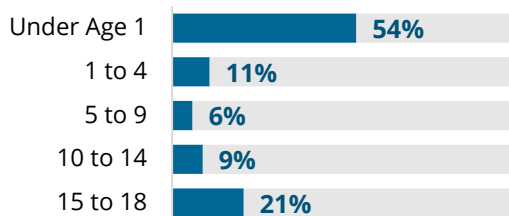
A total of  
**1,136**

Michigan children  
died in 2023.

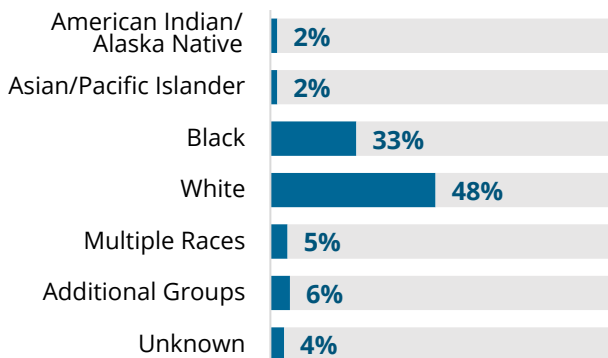
### Manner of Death Determination for Michigan Resident Children (2023)



### Michigan Resident Child Deaths by Child's Age Group (2023)



### Michigan Resident Child Deaths by Child's Race (2023)



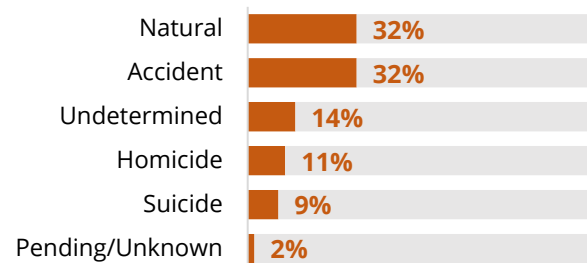
**Notes:** American Indian children are those who were identified as American Indian, alone or in combination with other races, on the child's death certificate. This definition is inclusive of ancestry and Tribal affiliation identified on the death record. Multiple Races does not include children who were identified as American Indian in combination with other races. Additional groups include children of all other races.



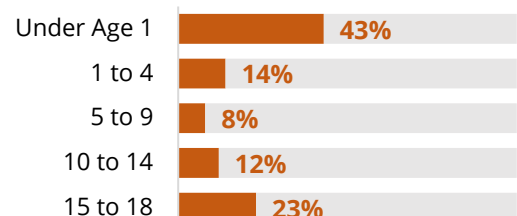
A total of  
**619**

Deaths were reviewed by  
local CDR teams in 2023.\*

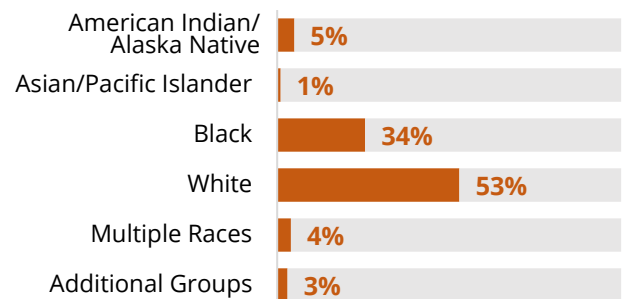
### Manner of Death Determination for Deaths Reviewed by Local CDR Teams (2023)



### Deaths Reviewed by Local CDR Teams by Child's Age Group (2023)



### Deaths Reviewed by Local CDR Teams by Child's Race (2023)



**Notes:** \*Not all deaths reviewed in 2023 occurred in 2023. Data about deaths reviewed are presented by year of review by the local CDR team, which may not be the same as the year in which the child died.

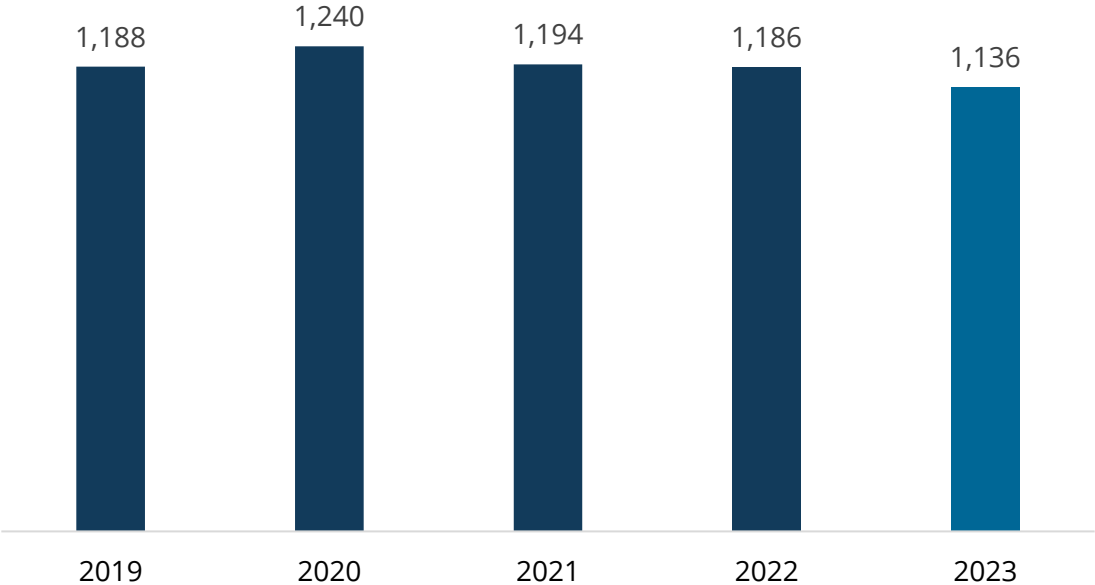
American Indian children are those who were identified as American Indian, alone or in combination with other races, on the child's death certificate. This definition is inclusive of ancestry and Tribal affiliation identified on the death record. Multiple races do not include children who were identified as American Indian in combination with other races. Additional groups include children of races that could not be documented based on the response options available in the NFR-CRS.

# CHILD MORTALITY & DEATHS REVIEWED BY LOCAL CHILD DEATH REVIEW TEAMS

From 2019 to 2023, a total of 5,944 Michigan children from birth through age 18 died.<sup>1</sup> In 2023, 1,136 Michigan children died. Please see [Appendix A](#) for the total number of child deaths by county of residence and the year in which the child died.



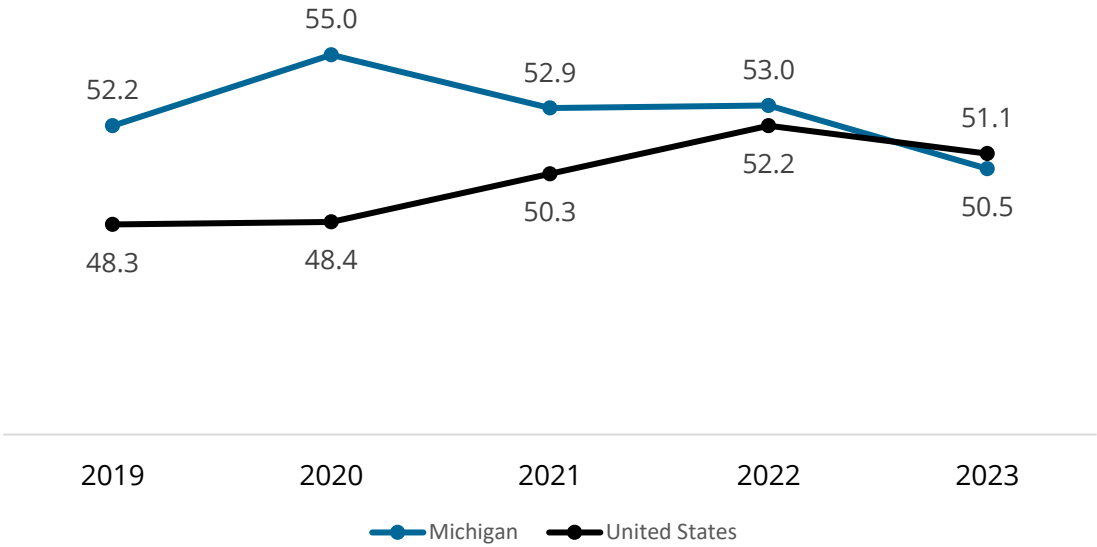
**Chart 1.** Number of Michigan Resident Child Deaths by Year of Death (2019-2023)




Between 2019 and 2022, Michigan’s rate of child death was higher than the average rate of child death for the United States. However, in 2023, the Michigan rate dropped slightly below the United States rate.<sup>2</sup>

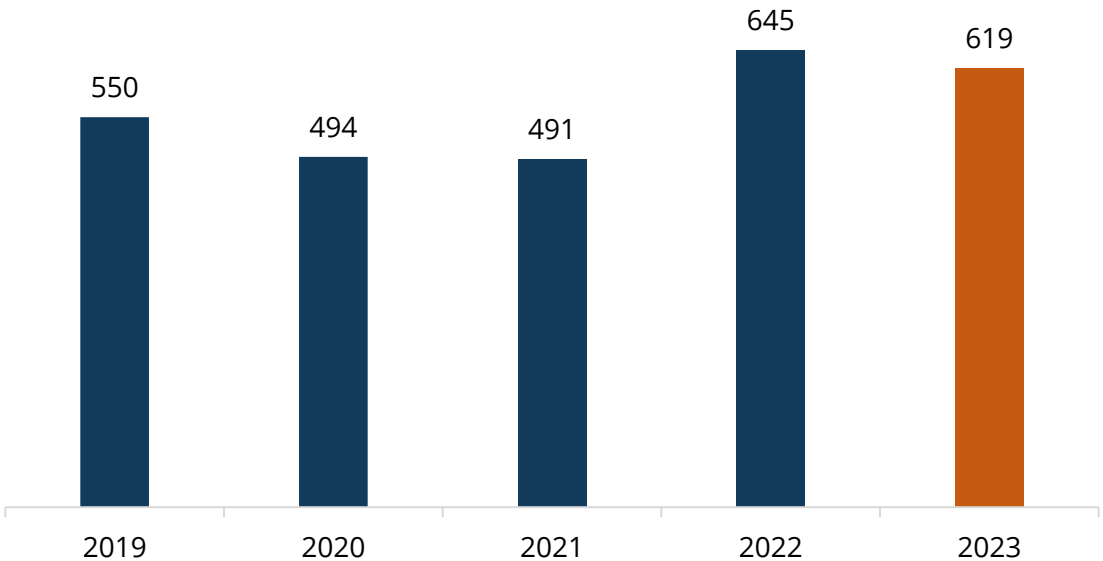


**Chart 2.** Rate of Resident Child Deaths per 100,000 Children Birth through Age 18 by Year of Death, Michigan and the United States (2019-2023)



Local CDR teams reviewed the deaths of 619 children in 2023. Please see [Appendix B](#) for the number of reviews conducted by county of review and the year in which the child’s death was reviewed by the local CDR team. As some children’s deaths were reviewed by more than one local CDR team, the total of 635 reviews conducted is higher than the total number of children whose deaths were reviewed.

 **Chart 3.** Number of Child Deaths Reviewed by Local CDR Teams by Year of Review (2019-2023)



In 2023, a total of 5 children birth through age 17 died while they were placed in foster care. Local CDR teams reviewed four of these children’s deaths (80%) by the time of this report’s publication. To learn more about the deaths reported to Children’s Protective Services, please visit the [MDHHS Child Fatality Registry website](https://bit.ly/3jkvL5O) (URL: <https://bit.ly/3jkvL5O>).

## Manner and Cause of Death

Two types of death determination are reported on death certificates: manner and cause.

Manner refers to the circumstances of the death. There are five possible manners: natural, accident, suicide, homicide and undetermined, which may also be referred to as indeterminate. The National Association of Medical Examiners<sup>3</sup> provides the following definitions for each of the five manners of death:

**Natural:** Due solely or nearly totally to disease and/or the aging process.

**Accident:** An injury or poisoning causes death, and there is little or no evidence that the injury or poisoning occurred with intent to harm or cause death. In essence, the fatal outcome was unintentional.

**Suicide:** An injury or poisoning as a result of an intentional, self-inflicted act committed to do self-harm or cause the death of oneself.

**Homicide:** A volitional act committed by another person to cause fear, harm or death. Intent to cause death is a common element but is not required for classification as homicide. It is to be emphasized that the classification of Homicide for the purposes of death certification is a "neutral" term and neither indicates nor implies criminal intent, which remains a determination within the province of legal processes.

**Undetermined:** The information pointing to one manner of death is no more compelling than one or more other competing manners of death in thorough consideration of all available information.

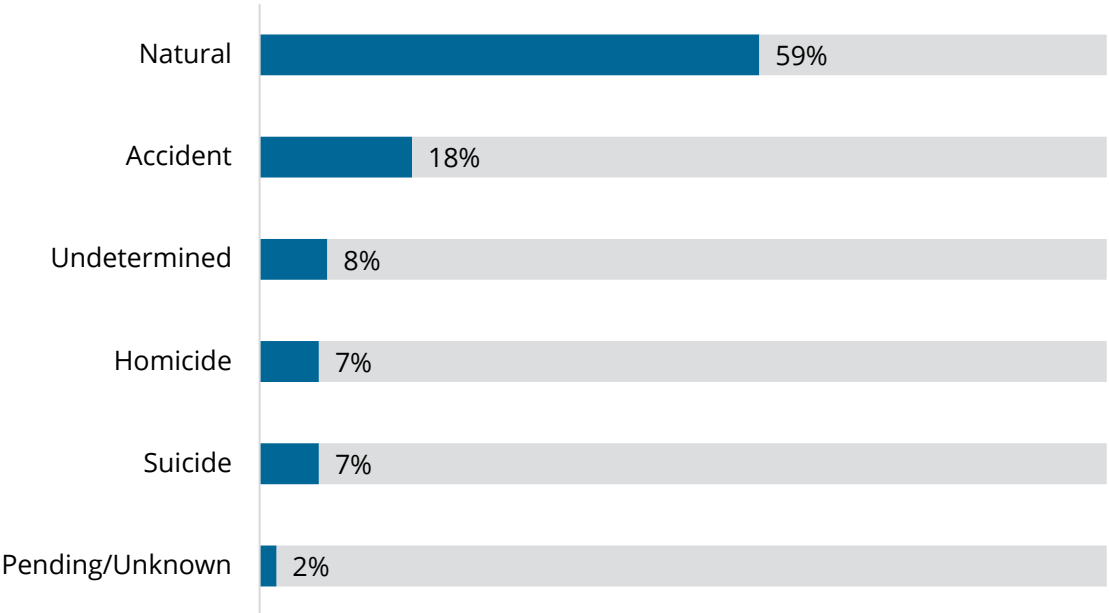
Within each of the five manners of death, there can be multiple causes of death. Cause refers to the actual disease, injury or complications that directly resulted in the death. Natural deaths can include causes such as cancer, birth defects or prematurity. Accidents can include transportation-related fatalities, drownings, suffocations, and fires. Homicides can include causes such as blunt force trauma or multiple gunshot wounds. An undetermined manner of death may include instances where the intent of the decedent or others involved in the death was unknown or it was not clear how the child's underlying medical conditions may have interacted with the external environment.

"Pending/Unknown" in the charts in this report indicates that the official manner of death was not yet available at the time of data analysis.

The manner of death determination for the 1,136 total Michigan children who died in 2023 was most often natural (59%), followed by accident (18%), undetermined (8%), homicide (7%), and suicide (7%). Manner of death was not available at the time of data analysis for 2% of the children who died in 2023.<sup>1</sup>



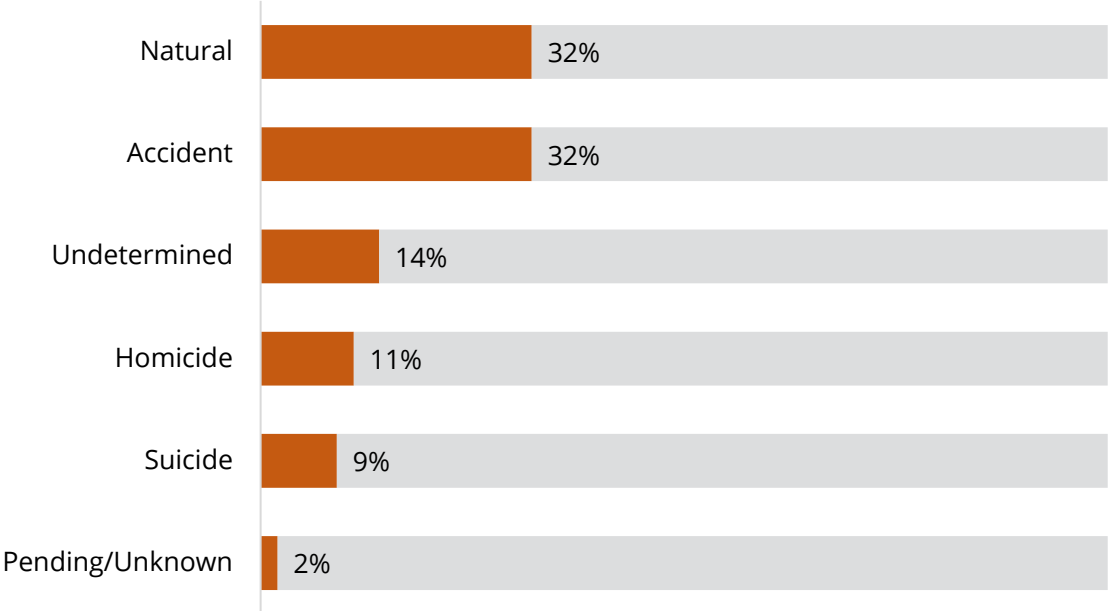
**Chart 4.** Manner of Death Determination for Michigan Resident Children (2023)



Of the 619 deaths reviewed by local CDR teams in 2023, the manner of death determination was most often natural (32%) or accident (32%), followed by undetermined (14%), homicide (11%), and suicide (9%). Manner of death was not available at the time of data analysis for 2% of the cases reviewed in 2023. More populous counties typically limit their reviews to those cases that fall under the jurisdiction of the county medical examiner, which are primarily non-natural deaths. As a result, a relatively lower percentage of the total number of natural deaths were reviewed by local CDR teams.



**Chart 5.** Manner of Death Determination for Deaths Reviewed by Local CDR Teams (2023)





## Child's Demographic Information


In order to more effectively reduce adverse outcomes at the population level, differences in burden across populations are better understood within the context of community circumstances and support systems rather than by examining data only by individuals, namely individual behavior or their biology.<sup>4</sup> To make meaningful progress in preventing these tragic outcomes, it's crucial to examine broader community factors and support systems.

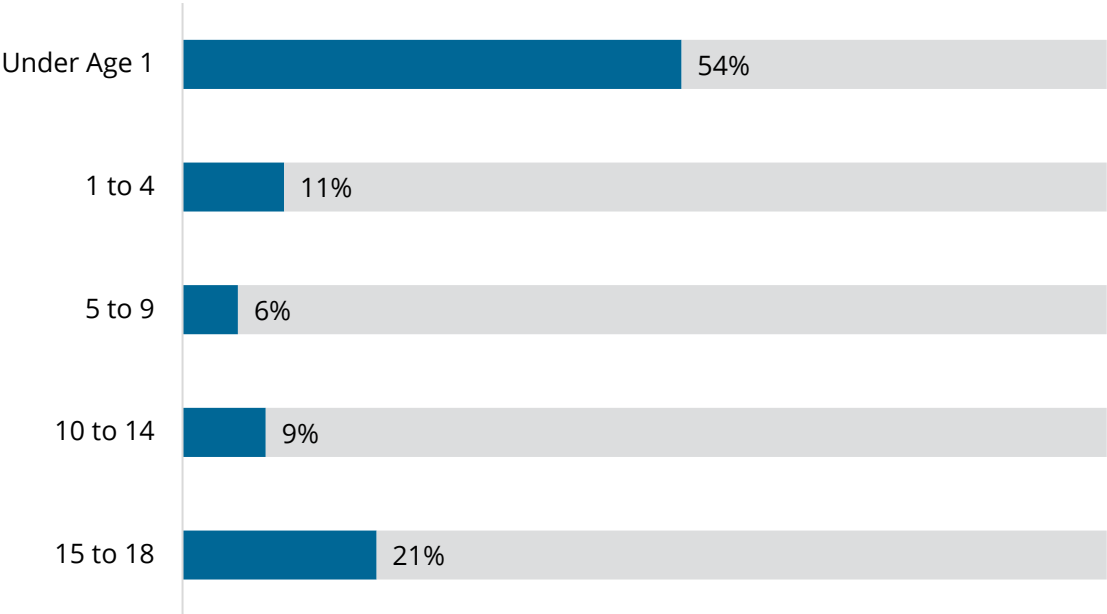
The following sections provide details about the age, sex, and race of the total number of Michigan children who died and about the age, sex, race, and disability status of those children whose deaths were reviewed by a local CDR team. We hope that highlighting these differences across population groups will encourage local CDR teams to work to identify impactful prevention strategies and equip policymakers with the information they need to plan family- and community-strengthening initiatives that promote safety, resilience and well-being.

For more information about integrating strategies for reducing differences in burden across population groups into the conceptualization and implementation of prevention initiatives, please visit the [Children's Safety Network Planner to Implement and Spread Child Safety Strategies in Communities](https://bit.ly/3LUFJHt) (URL: <https://bit.ly/3LUFJHt>).

## CHILD'S AGE

In 2023, 54% of the 1,136 total Michigan children who died from birth through age 18 were infants (children under the age of one). Adolescents (children ages 15 to 18) accounted for an additional 21% of all child deaths, followed by children ages 1 to 4 (11%), children ages 10 to 14 (9%), and children ages 5 to 9 (6%).<sup>1</sup> Infant mortality accounts for the largest proportion of child deaths nationwide<sup>5</sup> and is addressed in further detail on [pages 26-29](#).

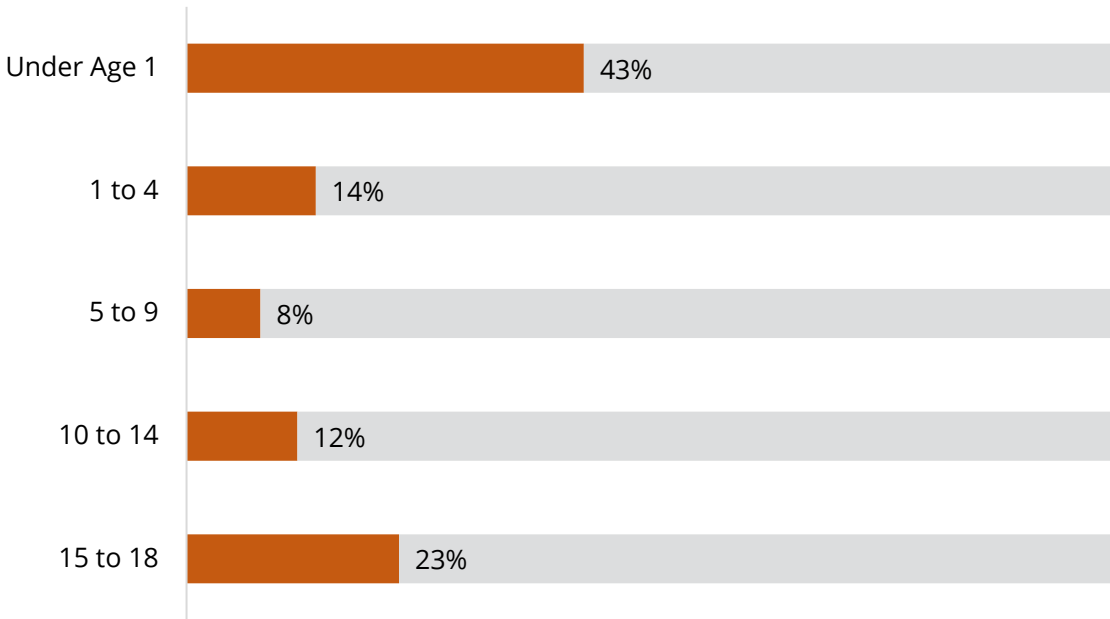
 **Chart 6.** Michigan Resident Child Deaths by Child's Age Group (2023)



Of the 619 deaths reviewed by local CDR teams in 2023, 43% were infants. Adolescents ages 15 through 18 accounted for another 23% of deaths reviewed, followed by children ages 1 to 4 (14%), children ages 10 to 14 (12%), and children ages 5 to 9 (8%).




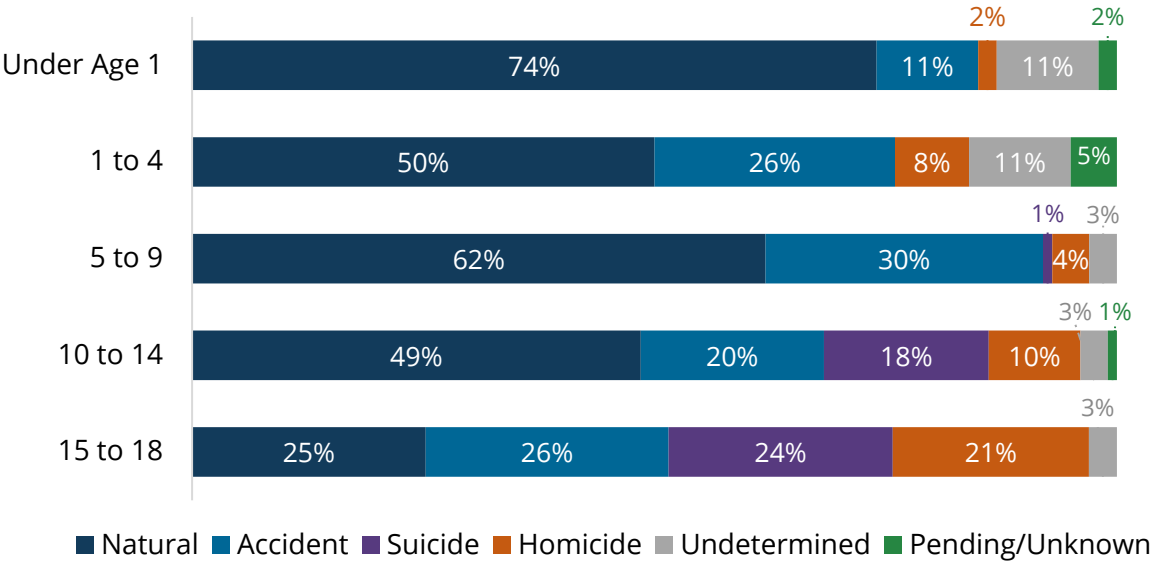
**Chart 7.** Deaths Reviewed by Local CDR Teams by Child’s Age Group (2023)




### Child’s Age at Death and Manner of Death Determination

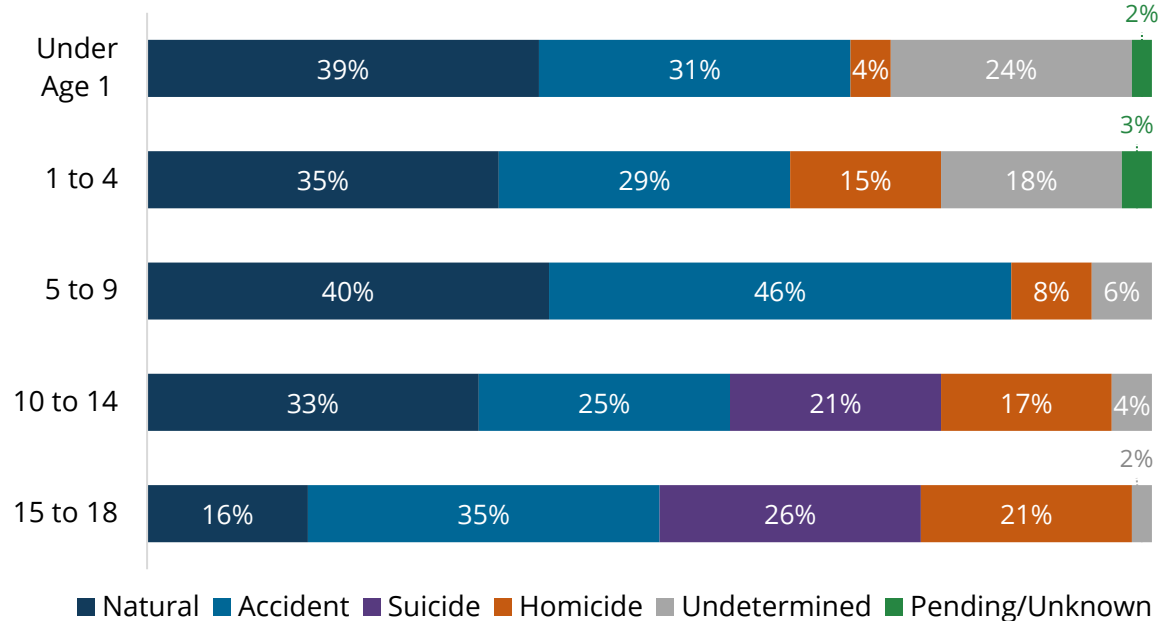
The most common manner of death determination for the Michigan infants who died in 2023 was natural (74%), followed by accident (11%) and undetermined (11%). The manner of death determination for children ages 1 to 4 and children ages 5 to 9 who died was most likely to be natural (50% and 62%, respectively), followed by accident (26% and 30%, respectively). For children ages 10 to 14 who died, the manner of death determination was most likely to be natural (49%), followed by accident (20%) and suicide (18%). The manner of death determination for adolescents ages 15 to 18 who died was most likely to be accident (26%), closely followed by natural (25%) and suicide (24%).<sup>1</sup>

 **Chart 8.** Michigan Resident Child Deaths by Manner of Death Determination and Child’s Age Group (2023)



As some CDR teams primarily review deaths that fall under the jurisdiction of the county medical examiner, local CDR teams reviewed a relatively lower percentage of the natural infant deaths that occurred in 2023. Of the infant deaths reviewed by local CDR teams, the manner of death determination was most likely to be natural (39%), followed by accident (31%) and undetermined (24%). For children ages 1 to 4, the manner of death determination was most likely to be natural (35%), followed by accident (29%) and undetermined (18%). For children ages 5 to 9, the manner of death determination was most likely to be natural (40%), followed by accident (46%). For children ages 10 to 14, the manner of death determination was most likely to be natural (33%), followed by accident (25%) and suicide (21%). For adolescents ages 15 to 18, the manner of death determination was most likely to be accident (35%), followed by suicide (26%) and homicide (21%).

 **Chart 9.** Manner of Death Determination for Deaths Reviewed by Local CDR Teams by Child's Age Group (2023)

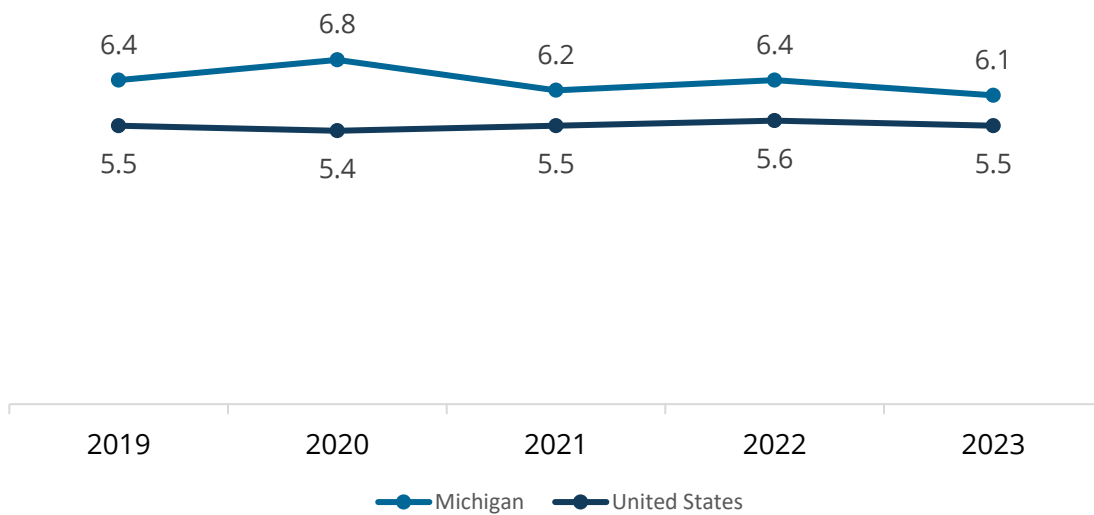


## Infant Mortality

Infant mortality is defined as the death of a child before their first birthday. In 2023, 5.5 infants died for every 1,000 live births in the United States. This mortality rate is more than 10 times greater than it is for adolescents ages 15 to 18, who represent the age group with the next highest mortality rate (.52 deaths per 1,000 population).<sup>5</sup> For each year from 2019 to 2023, the mortality rate per 1,000 live births for Michigan infants remained consistently higher than the rate of infant mortality in the United States.<sup>6</sup>



**Chart 10.** Infant Mortality Rate per 1,000 Live Births by Year of Death, Michigan and the United States (2019-2023)





Some Michigan infants are significantly more likely to die before their first birthday. In 2023, Black infants were nearly three times more likely to die than white infants (11.9 deaths per 1,000 live births compared to 4.1 deaths per 1,000 live births).<sup>7</sup> The infant mortality rate for Black and white infants is based on race as calculated by MDHHS, Division for Vital Records and Health Statistics and should not be compared to any other tables or charts in this report that present the child's race.

The most common causes of infant mortality were prematurity and related conditions, sleep-related infant deaths, and congenital anomalies. To learn more about infant mortality in Michigan, please visit:

- [The Data, Reports, and Fact Sheets page on the Michigan Fatality Review & Prevention website](https://mifrp.org/publications/) for details about sleep-related infant deaths (URL: <https://mifrp.org/publications/>).

**The Sudden Unexpected Infant Death (SUID) Case Registry** builds on the efforts of local CDR teams to compile information about the circumstances associated with sleep-related infant deaths as well as information about investigations into these deaths to develop strategies to prevent future fatalities.

Identification of sleep-related infant deaths requires a multi-pronged approach as the terminology used to classify infant deaths that occur in the sleep environment continues to evolve and remains inconsistent.<sup>9</sup> There has been a diagnostic shift away from the

use of the term “Sudden Infant Death Syndrome” (SIDS) when an infant is found unresponsive in a sleep environment. Consistent with national trends, medical examiners in Michigan are more frequently referring to a death under these circumstances as “Sudden Unexpected Infant Death” (SUID) or “Unexplained Sudden Death” with the manner of death classified as undetermined if there is not enough evidence or detailed information regarding the sleep environment to officially classify the manner of death as an accident. Intrinsic<sup>a</sup> and/or extrinsic<sup>b</sup> factors may be identified as potential contributors to the death.<sup>9</sup>

- [The Michigan Fetal Infant Mortality Review \(FIMR\) website](https://bit.ly/3E5ntIN) (URL: <https://bit.ly/3E5ntIN>).

**FIMR** is an evidence-based process, which identifies and analyzes factors contributing to fetal and infant deaths through case reviews and family interviews. FIMR uses a two-tiered system that engages a multi-disciplinary Case Review Team and a Community Action Team to implement a continuous quality improvement process. There are currently 13 active FIMR teams in Michigan. FIMR’s main goals are to:

- Identify social, economic, cultural, safety, health, and systems factors that contribute to mortality.
  - Craft recommendations to forward to their respective Community Action Teams based on case review findings.
- [The Michigan Department of Health and Human Services Maternal and Child Health Epidemiology Section website](https://bit.ly/3JAVgdV) (URL: <https://bit.ly/3JAVgdV>).
  - [The Michigan Department of Health and Human Services Division of Maternal and Infant Health website](http://www.michigan.gov/miheip) (URL: [www.michigan.gov/miheip](http://www.michigan.gov/miheip)).
  - [The Michigan Department of Health and Human Services Division for Vital Records and Health Statistics Infant Mortality website](https://rb.gy/g5oqiz) (URL: <https://rb.gy/g5oqiz>).


**a. Intrinsic factors are:** natural conditions or risk factors associated with abnormal physiology or anatomy that are concerning as contributors to death but are insufficient as a cause (e.g., low birth weight, preterm birth, small for gestational age, concurrent non-lethal illness, history of febrile seizures), or natural conditions of unknown significance (e.g., cardiac channelopathy or seizure gene variants of unknown significance).

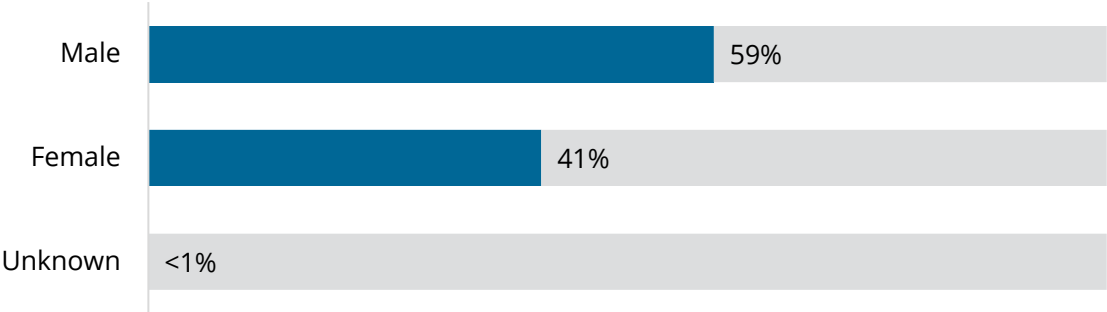
**b. Extrinsic factors are:** conditions in the child’s immediate environment that are a potential threat to life but cannot be deemed the cause of death with reasonable certainty (e.g., side or prone sleep if unable to roll to supine, over-bundling without documented hyperthermia, objects in immediate sleep environment, sleep environment not specifically designed for infant sleep, soft or excessive bedding, and sleep surface sharing), injuries or toxicologic findings that are either non-lethal or of unknown lethality, or circumstances/findings otherwise concerning for unnatural death.

## CHILD'S SEX


The nationwide mortality rate for male children is substantially higher than the mortality rate for female children at every age. In 2023, the largest percentage difference was among adolescents ages 15 to 18. In this age group, males were almost two and a half times more likely to die than females of the same age (73 and 30 deaths per 100,000 population, respectively).<sup>2</sup>

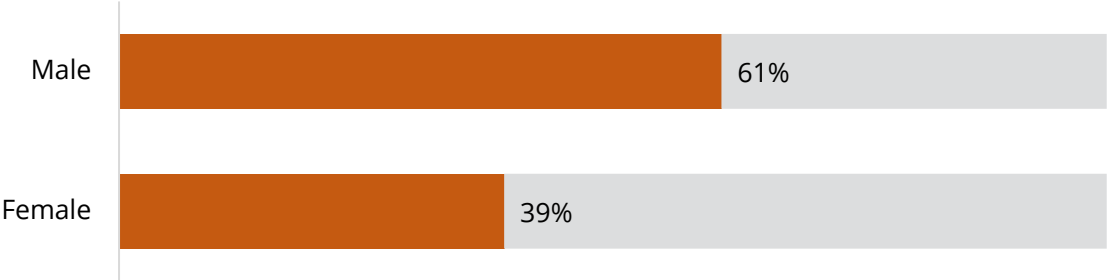
Based on the information reported on the child's death certificate, males accounted for 59% and females accounted for 41% of all Michigan child deaths from birth through age 18 in 2023.<sup>1</sup>

 **Chart 11.** Michigan Resident Child Deaths by Child's Sex (2023)



In 2023, 61% of the 619 children whose deaths were reviewed by local CDR teams were male.

 **Chart 12.** Deaths Reviewed by Local CDR Teams by Child's Sex (2023)

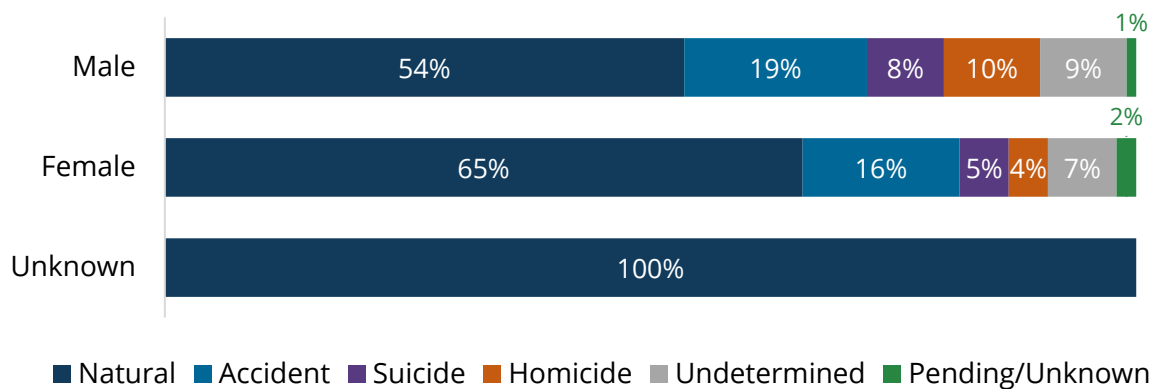


### Child's Sex and Manner of Death Determination


The manner of death determination for male children who died in 2023 was most often natural (54%), followed by accident (19%). For female children who died during the same time period, the manner of death determination was also most often natural (65%), followed by accident (16%).<sup>1</sup>

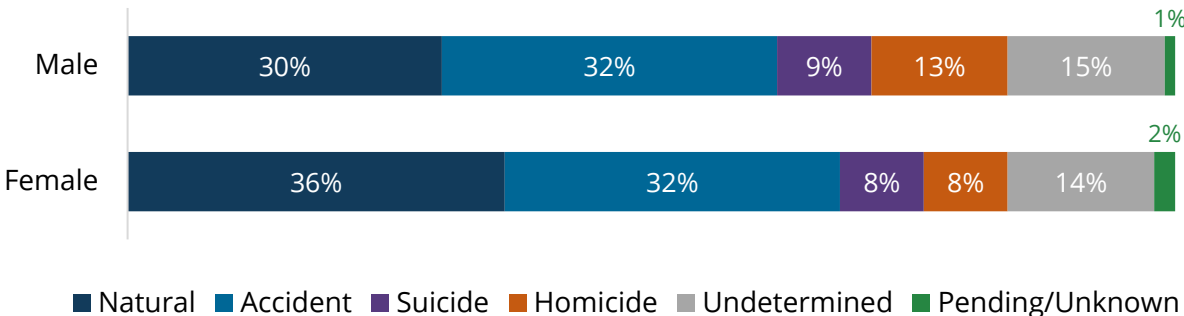


**Chart 13.** Michigan Resident Child Deaths by Manner of Death Determination and Child's Sex (2023)



Of the 619 deaths reviewed by local CDR teams in 2023, the manner of death determination was most likely to be natural or accident, followed by undetermined, for both male and female children. Suicide and homicide accounted for a larger proportion of deaths reviewed by local CDR teams for male children (13% and 9%, respectively) compared to female children (8% and 8%, respectively).

 **Chart 14.** Manner of Death Determination for Deaths Reviewed by Local CDR Teams by Child's Sex (2023)



## CHILD'S RACE

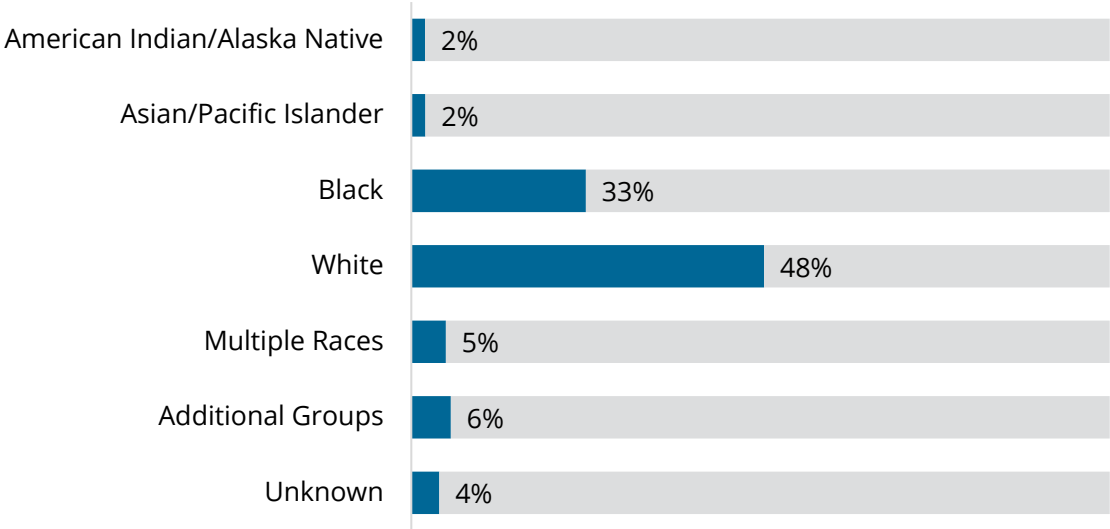
Marked differences in child mortality rates across racial groups remain persistent. Differences in burden across populations stem from a complex interplay of social environments, economic conditions, and the accessibility of community and individual support systems.

In this report, we use the race category "Black" for consistency with how race data are recorded in the National Fatality Review-Case Reporting System.<sup>11</sup> Current standard data collection and analysis practices often misclassify American Indian and Alaska Native (AIAN) populations, leading to an underestimation and suppression of data due to small numbers. In alignment with the Urban Indian Health Institute's recommendations, American Indian children in this report are those who were identified as American Indian, alone or in combination with other races, on the child's death certificate.<sup>11</sup> This definition is inclusive of ancestry and Tribal affiliation identified on the death record.

In 2023, Michigan resident children who died were most likely to be white (48%). Black children accounted for 33% of all child deaths, 6% of the children who died were from additional groups, 5% were of multiple races, 2% were American Indian or Alaska Native, and 2% were Asian/Pacific Islander.<sup>1</sup>



**Chart 15.** Michigan Resident Child Deaths by Child's Race (2023)



**Notes:** American Indian children are those who were identified as American Indian, alone or in combination with other races, on the child's death certificate. This definition is inclusive of ancestry and Tribal affiliation identified on the death record. Multiple races do not include children who were identified as American Indian in combination with other races. Additional

groups include children of all other races. Black children were significantly more likely to die compared to children of other races. Nationwide, Black children had the highest rate of death among children ages 0-18.<sup>2</sup> While 17% of the population of Michigan children was Black, 33% of the children who died were Black. In 2023, the rate of death among Black children was almost three times greater than the rate of death among white children.<sup>2</sup>

**Table 1.** Rate of Death for Michigan Children by Child’s Race (2023)

Child’s Race	# of Deaths	Total Child Population	Rate of Death per 100,000 Children
American Indian or Alaska Native	Suppressed	18,624	Suppressed
Black or African American	388	377,047	102.9
White	655	1,630,383	40.2
Multiple Races	46	131,513	35.0

**Notes:** National, state, and county population estimates are July 1 resident population estimates from the [Vintage 2023 six single race postcensal series](#) released by the Census Bureau on [June 27, 2024](#). The population files have estimates for six single race categories: American Indian or Alaska Native (AIAN); Asian; Black or African American; More than one race; Native Hawaiian or Other Pacific Islander (NHOPI); white.

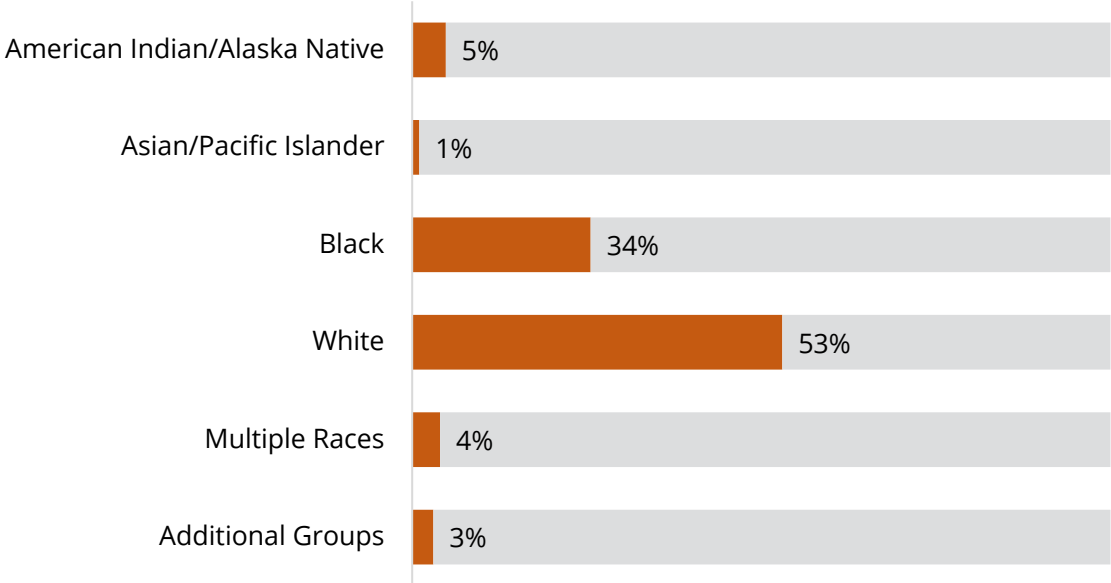
The rates and population figures published on CDC WONDER by single race for 2023 are based on the Modified Blended Base produced by the U.S. Census Bureau in lieu of the April 1, 2020 decennial population count. The Modified Blended Base consists of the blend of Vintage 2020 postcensal population estimates, 2020 Demographic Analysis Estimates, and 2020 Census data from the internal Census Edited File ([see 2020-2023 Population Estimates Methodology](#)).

As a result, the number of deaths reported for each race in Table 3 may not align with and should not be compared to any other tables or charts in this report that present the child’s race. Categories with fewer than six children are suppressed. Rates are marked as "unreliable" when the number of deaths is less than 20.

In 2023, 34% of the children whose deaths were reviewed by local CDR teams were Black and 53% were white. An additional 5% of the children whose deaths were reviewed by local CDR teams were American Indian or Alaska Native, 4% were of multiple races, 3% were from additional groups, and 1% were Asian/Pacific Islander.



**Chart 16.** Deaths Reviewed by Local CDR Teams by Child’s Race (2023)



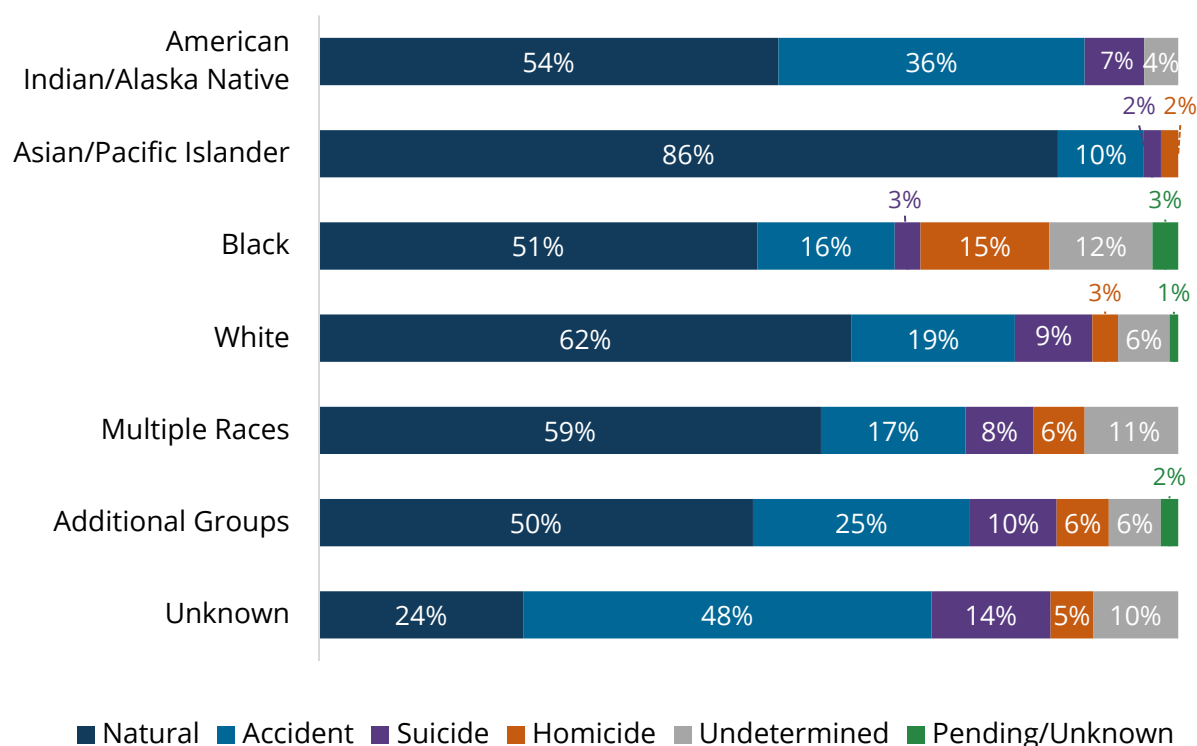
**Notes:** American Indian children are those who were identified as American Indian, alone or in combination with other races, on the child’s death certificate. This definition is inclusive of ancestry and Tribal affiliation identified on the death record. Multiple races do not include children who were identified as American Indian in combination with other races. Additional groups include children of races that could not be documented based on the response options available in the NFR-CRS.

## Child's Race and Manner of Death Determination

The manner of death determination for children of all races was most likely to be natural, followed by accident, aside from children of unknown race where the manner of death determination was most likely to be accident, followed by natural.<sup>1</sup>




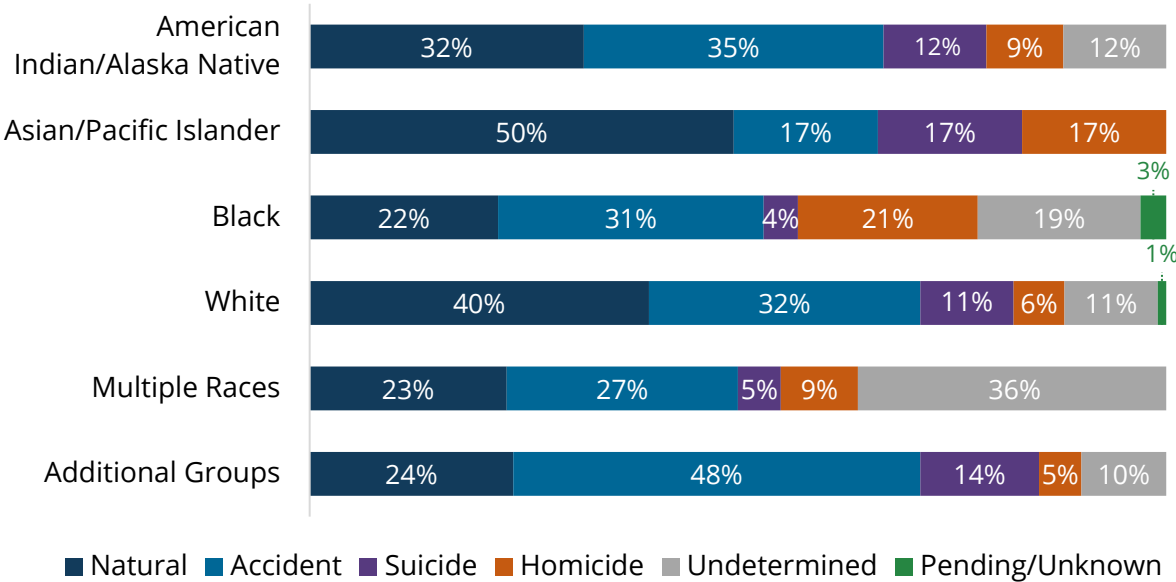
**Chart 17.** Michigan Resident Child Deaths by Manner of Death Determination and Child's Race (2023)



**Notes:** American Indian children are those who were identified as American Indian, alone or in combination with other races, on the child's death certificate. This definition is inclusive of ancestry and Tribal affiliation identified on the death record. Multiple races do not include children who were identified as American Indian in combination with other races. Additional groups include children of all other races.

Of the children whose deaths were reviewed by a local CDR team in 2023, the manner of death determination for Black children was most often accident (31%), followed by natural (22%) and homicide (21%). The manner of death determination for white children whose deaths were reviewed by a local CDR team was most often natural (40%), followed by accident (32%) and suicide (11%). The manner of death determination for American Indian or Alaska Native children and children of additional groups whose deaths were reviewed by a local CDR team was most often accident (35% and 48%, respectively), followed by natural (32% and 24%, respectively), and suicide (12% and 14%, respectively). The manner of death determination for Asian or Pacific Islander children was most often natural (50%), followed by accident (17%), suicide (17%), and homicide (17%). The manner of death determination for children of multiple races whose deaths were reviewed by a local CDR team was most often undetermined (36%), followed by accident (27%) and natural (23%).

 **Chart 18.** Manner of Death Determination for Deaths Reviewed by Local CDR Teams by Child’s Race (2023)



**Notes:** American Indian children are those who were identified as American Indian, alone or in combination with other races, on the child’s death certificate. This definition is inclusive of ancestry and Tribal affiliation identified on the death record. Multiple races do not include children who were identified as American Indian in combination with other races. Additional groups include children of races that could not be documented based on the response options available in the NFR-CRS.

## CHILD'S DISABILITY STATUS OR PRESENCE OF CHRONIC ILLNESS

Historically, the fields of medicine and public health have viewed disability as “a defect within the individual,” which must be “cured, fixed, or completely eliminated.”<sup>12</sup> Since the 1960s, the social model of disability has been gaining traction, particularly within the disability community. The social model states that “environmental factors - physical barriers, negative societal attitudes, and inadequate public policies - fail to accommodate different types of disability.”<sup>13</sup>

As a result of these barriers, people with disabilities can experience discrimination that may be compounded by persistent isolation, unequal access to care, and a systematic “disregard for the health disparities experienced by some groups as a natural consequence of being categorized together,” such as the pervasive myth that disability automatically equates to poor health “rather than a distinction that needs to be addressed through tailored and multiple approaches.”<sup>13</sup> Considering the full spectrum of abilities, we need to include people with disabilities in the design and implementation of prevention initiatives, and create accessible prevention programming.

According to findings from the 2023 American Community Survey, almost 3.5 million children under the age of 18 in the United States have a disability. Of the children living in the United States and in Michigan, 7.2% and 7.9%, respectively, reported having any type of disability.<sup>14</sup>

The American Community Survey defines disability as “various physical, mental, or emotional conditions that pose limitations to certain activities or tasks,” and includes the following types of disabilities.<sup>c</sup>

- **Vision difficulty:** Blindness or serious difficulty seeing, even when wearing glasses.
- **Hearing difficulty:** Deafness or serious difficulty hearing.
- **Cognitive difficulty (aged five and older):** Serious difficulty concentrating, remembering, or making decisions because of a physical, mental or emotional condition.
- **Ambulatory difficulty (aged five and older):** Serious difficulty walking or climbing stairs.
- **Self-care difficulty (aged five and older):** Difficulty dressing or bathing.
- **Independent living difficulty (aged 15 and older):** Difficulty doing errands alone, such as visiting a doctor’s office or shopping.<sup>14</sup>

c. The American Community Survey uses the term “difficulty” to describe each type of disability.

For all children under the age of 18 living in the United States and in Michigan, the most commonly reported disability type was cognitive difficulty (5.1% and 5.8%, respectively). For children ages four and younger, 0.5% of children in the United States and 0.6% of children in Michigan were reported to have a hearing difficulty, and 0.4% of children in the United States and 0.3% of children in Michigan were reported to have a vision difficulty.<sup>c, 14</sup> Vision and hearing difficulties were the only two areas assessed through the American Community Survey for this age group. Some children under the age of 18 were reported to have two or more types of disability, including 1.5% of children under the age of 18 in the United States and 1.8% of the children under 18 in Michigan.

Children of some races were more likely to report having a disability than others, including American Indian and Alaska Native children (5.7% in the United States and 4.9% in Michigan), Black children (5.7% in the United States and 6% in Michigan), and children of multiple races (5.5 % in the United States and 6.5% in Michigan). In comparison, white children (4.9% in the United States and 5% in Michigan), Asian children (3.0% in the US and 3.4% in Michigan), and children of some other race alone (5.0% in US, and 5.6% in Michigan) were less likely to report having a disability.<sup>14</sup>

While children with disabilities were more likely to live in poverty,<sup>14</sup> some reports find that an increasing number of children from advantaged backgrounds may be diagnosed with neurodevelopmental and mental health conditions due to these families having “greater resources for seeking diagnoses and services for their children.”<sup>13</sup>

Disability or chronic illness is defined in the National Fatality Review-Case Reporting System (NFR-CRS) more broadly than the definition of disability utilized by the American Community Survey and may include the following types of disability or chronic illness:



**Physical or orthopedic conditions**



**Mental health or substance use disorders**




**Cognitive or intellectual limitations**

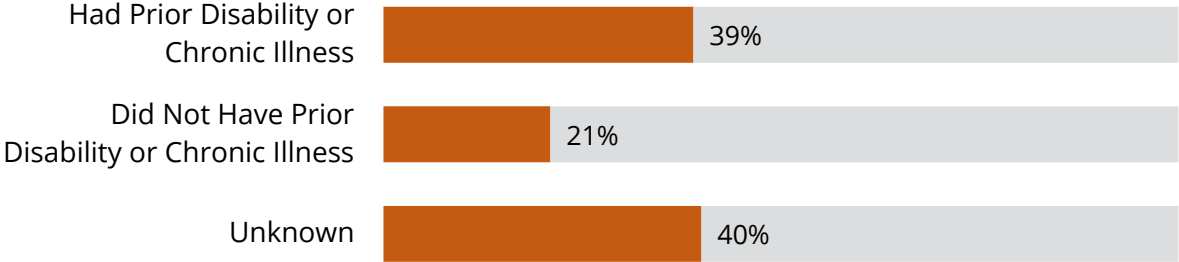


**Sensory impairments, including those related to vision and hearing**

A child may be reported to have had a disability or chronic illness in the NFR-CRS if the child “had a disability or chronic illness prior to the time of incident (leading to the child’s death). Chronic implies an impairment or illness that has a substantial long-term effect on the child’s day-to-day function or health.”

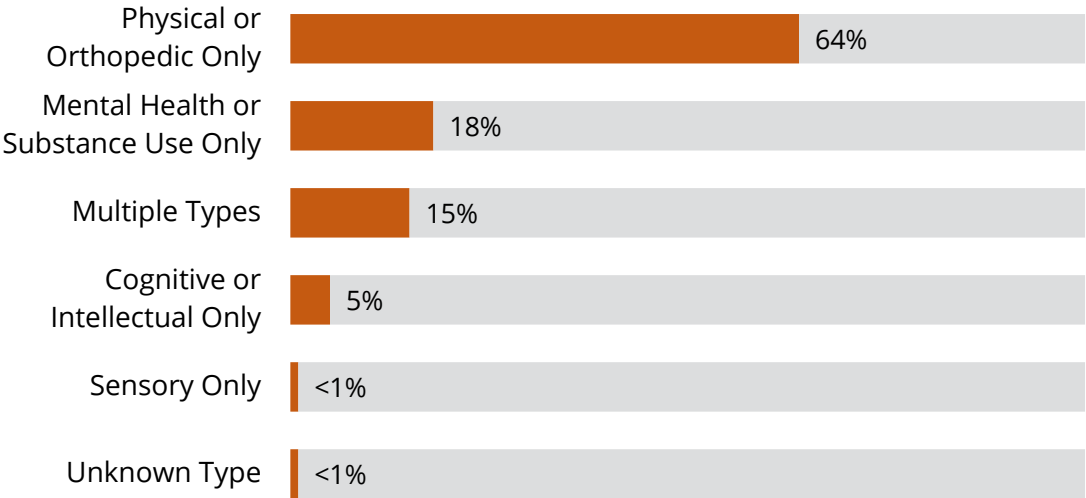
In 2023, 39% of the children whose deaths were reviewed by local CDR teams were known to have had a prior disability or chronic illness. It was not known if 40% of the children whose deaths were reviewed by a local CDR team had a prior disability or chronic illness.

 **Chart 19.** Deaths Reviewed by Local CDR Teams by Child’s Disability Status or Presence of Chronic Illness (2023)




When it was known that the child had a prior disability or chronic illness, the child was most likely to have a physical or orthopedic disability or chronic illness only (64%), followed by a mental health or substance use disorder only (18%), and multiple types of disability (15%).

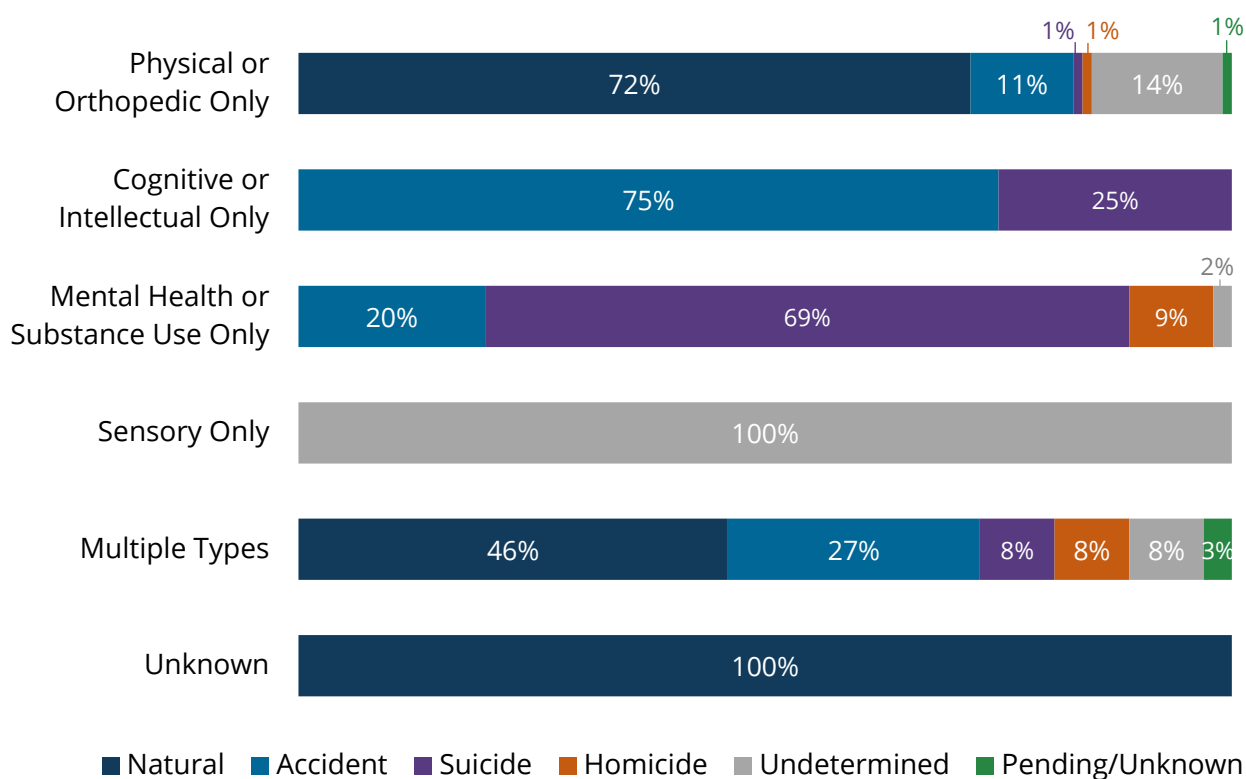
 **Chart 20.** Deaths Reviewed by Local CDR Teams by Type of Child’s Disability or Chronic Illness (2023)



## Child's Type of Disability or Chronic Illness and Manner of Death Determination

Of the children whose deaths were reviewed by a local CDR team in 2023, the manner of death determination for children with a physical or orthopedic disability or chronic illness only was most often natural (72%). The manner of death determination for children with a cognitive or intellectual disability only was most often accident (75%). The manner of death determination for children with a mental health or substance use disorder only was most often suicide (69%). The manner of death determination for children with a sensory disability only was undetermined for all deaths reviewed. The manner of death determination for children with more than one type of disability or chronic illness was most often natural (46%), followed by accident (27%). The manner of death determination for children with an unknown type of disability or chronic illness only was natural for all deaths reviewed.

 **Chart 21.** Manner of Death Determination for Deaths Reviewed by Local CDR Teams by Child's Type of Disability or Chronic Illness (2023)



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# APPENDICES

## APPENDIX A. Total Number of Child Deaths by Year and by County of Residence

County	2019	2020	2021	2022	2023
Alcona	1	1	0	0	1
Alger	1	0	0	1	2
Allegan	17	16	3	14	15
Alpena	4	3	2	1	6
Antrim	0	1	1	3	3
Arenac	0	2	3	3	2
Baraga	0	1	1	3	1
Barry	7	9	8	5	4
Bay	6	8	10	8	14
Benzie	1	3	1	1	1
Berrien	18	21	22	25	35
Branch	5	4	5	7	4
Calhoun	9	21	12	21	18
Cass	5	3	6	6	6
Charlevoix	1	3	0	1	2
Cheboygan	4	8	4	6	9
Chippewa	4	4	3	2	3
Clare	1	4	6	2	6
Clinton	3	6	6	3	12
Crawford	1	3	1	0	2
Delta	4	9	2	0	0
Dickinson	1	3	3	2	0
Eaton	20	14	11	11	10
Emmet	1	3	5	2	2
Genesee	61	67	58	72	62
Gladwin	3	2	3	3	1

**APPENDIX A. Total Number of Child Deaths by Year and by County of Residence**  
*(Continued)*

<b>County</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
<b>Gogebic</b>	3	1	1	2	3
<b>Grand Traverse</b>	8	8	9	7	4
<b>Gratiot</b>	3	4	8	5	4
<b>Hillsdale</b>	12	6	4	2	6
<b>Houghton</b>	1	3	4	5	4
<b>Huron</b>	2	5	1	3	1
<b>Ingham</b>	35	43	33	34	28
<b>Ionia</b>	5	5	7	7	7
<b>Iosco</b>	4	4	4	3	1
<b>Iron</b>	2	1	1	0	1
<b>Isabella</b>	8	9	6	10	6
<b>Jackson</b>	14	25	26	22	23
<b>Kalamazoo</b>	29	21	23	27	23
<b>Kalkaska</b>	1	0	2	2	1
<b>Kent</b>	81	94	73	80	73
<b>Keweenaw</b>	1	0	0	0	0
<b>Lake</b>	3	2	0	0	1
<b>Lapeer</b>	14	5	13	13	6
<b>Leelanau</b>	0	4	1	0	1
<b>Lenawee</b>	7	6	12	9	3
<b>Livingston</b>	14	6	15	17	12
<b>Luce</b>	4	1	1	0	2
<b>Mackinac</b>	2	0	0	2	1
<b>Macomb</b>	94	72	83	73	79
<b>Manistee</b>	0	6	2	2	2
<b>Marquette</b>	5	5	5	6	2
<b>Mason</b>	4	2	3	1	4
<b>Mecosta</b>	5	6	4	5	6
<b>Menominee</b>	3	2	2	4	1
<b>Midland</b>	4	8	4	6	8

**APPENDIX A. Total Number of Child Deaths by Year and by County of Residence**  
*(Continued)*

<b>County</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Missaukee	1	0	1	1	0
Monroe	17	22	15	12	14
Montcalm	13	5	9	9	7
Montmorency	0	3	0	1	3
Muskegon	18	21	23	24	27
Newaygo	10	10	4	1	1
Oakland	96	104	106	75	84
Oceana	4	3	2	5	2
Ogemaw	1	3	3	3	4
Ontonagon	0	0	2	0	0
Osceola	5	1	1	5	3
Oscoda	0	0	3	0	0
Otsego	3	2	1	4	2
Ottawa	25	25	19	28	20
Presque Isle	1	2	1	1	2
Roscommon	2	3	4	2	2
Saginaw	27	40	25	31	39
St. Clair	20	20	16	21	18
St. Joseph	9	9	11	9	8
Sanilac	2	4	6	2	5
Schoolcraft	0	3	0	1	2
Shiawassee	7	2	9	5	5
Tuscola	5	8	5	3	10
Van Buren	5	6	10	6	7
Washtenaw	34	25	46	39	20
Wayne	330	337	345	343	304
Wexford	3	9	4	4	7
Unknown	4	0	0	2	6

**APPENDIX B. Total Number of Child Deaths Reviewed by Year and by County of Review**

County	2019	2020	2021	2022	2023
Alcona	0	0	0	2	0
Alger	0	0	0	0	3
Allegan	0	0	0	33	18
Alpena	1	0	2	5	0
Antrim	0	0	0	4	4
Arenac	0	0	2	3	4
Baraga	0	0	0	3	0
Barry	8	6	10	6	2
Bay	2	0	4	0	17
Benzie	3	0	0	0	6
Berrien	10	4	24	18	17
Branch	5	0	0	8	0
Calhoun	2	0	0	16	18
Cass	9	3	5	4	4
Charlevoix	0	0	0	0	0
Cheboygan	1	1	7	0	4
Chippewa	5	2	5	1	0
Clare	6	0	7	0	3
Clinton	3	7	4	0	1
Crawford	3	1	0	3	0
Delta	0	4	4	3	0
Dickinson	0	1	0	1	0
Eaton	17	11	8	12	8
Emmet	0	0	0	0	0
Genesee	20	22	43	27	25
Gladwin	4	3	0	4	1
Gogebic	0	5	0	2	1
Grand Traverse	14	7	20	5	4

**APPENDIX B. Total Number of Child Deaths Reviewed by Year and by County of Review (Continued)**

County	2019	2020	2021	2022	2023
Gratiot	3	0	7	9	3
Hillsdale	7	6	4	4	6
Houghton	0	0	0	3	2
Huron	0	0	0	6	0
Ingham	23	25	25	11	14
Ionia	6	5	8	9	7
Iosco	2	1	0	5	3
Iron	1	2	0	0	0
Isabella	6	9	2	12	7
Jackson	12	14	11	9	17
Kalamazoo	9	22	10	16	22
Kalkaska	0	0	0	0	0
Kent	23	20	26	25	25
Keweenaw	0	0	0	0	0
Lake	2	0	0	3	0
Lapeer	9	2	0	7	8
Leelanau	0	1	0	0	0
Lenawee	9	0	0	0	0
Livingston	7	10	9	10	10
Luce	0	0	0	0	0
Mackinac	0	0	0	0	5
Macomb	0	0	0	0	0
Manistee	0	0	0	0	11
Marquette	3	3	4	5	4
Mason	7	0	0	0	0
Mecosta	3	8	3	5	2
Menominee	0	1	0	3	0
Midland	0	4	0	7	5
Missaukee	0	0	0	0	0
Monroe	13	16	11	10	15

**APPENDIX B. Total Number of Child Deaths Reviewed by Year and by County of Review (Continued)**

County	2019	2020	2021	2022	2023
Montcalm	15	0	10	11	3
Montmorency	0	0	1	2	2
Muskegon	5	16	12	15	11
Newaygo	3	1	3	0	3
Oakland	24	31	33	30	47
Oceana	4	3	2	3	5
Ogemaw	2	1	3	0	0
Ontonagon	1	0	0	2	1
Osceola	5	2	0	5	1
Oscoda	0	3	2	1	0
Otsego	6	0	0	7	0
Ottawa	4	13	9	8	12
Presque Isle	0	0	0	3	0
Roscommon	0	1	0	2	3
Saginaw	43	17	5	20	40
St. Clair	24	13	16	23	19
St. Joseph	9	8	7	7	5
Sanilac	1	0	2	4	5
Schoolcraft	0	0	0	0	3
Shiawassee	7	6	7	9	5
Tuscola	6	0	0	9	7
Van Buren	6	6	6	11	7
Washtenaw	8	8	14	13	12
Wayne	121	141	100	154	133
Wexford	3	3	0	0	5

