

NORTH DAKOTA CHILD FATALITY REVIEW PANEL DETAILED ANNUAL REPORT 2020 & 2021

August 2024

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TABLE OF CONTENTS

THE NORTH DAKOTA CHILD FATALITY REVIEW PANEL	1
History	1
Purpose	1
Panel Membership	2
Panel Members	3
Panel Recommendations	4
CHILD FATALITY CASES THAT RECEIVED AN IN-DEPTH REVIEW	9
Case Status	9
In-State and Out-of-State Child Deaths	9
North Dakota Child Population and Mortality Rate	10
Manner of Death of Child in Cases that Received an In-Depth Review	12
Cause of Death in Cases that Received an In-Depth Review	14
Gender and Race of Child in Cases that Received an In-Depth Review	14
Age of Child in Cases that Received an In-Depth Review	16
Leading Causes of Children's Deaths	16
Long Term Trends	17
CAUSES AND MANNERS OF CHIILD FATALITY	18
Vehicular	18
ND Rate of Motor Vehicle Child Fatalities	19
Child Motor Vehicle Fatality Death Scene Investigations	20
Vehicular Fatality Autopsy and Toxicological Testing	20
Seat Belt Use	21
Position of Decedent in Vehicle	22
Type of Vehicle	22
Road Type	23
Factors that Contributed to the Motor Vehicle Accident	23
Sudden Unexpected Infant Death (SUID)	25
SUID Scene Investigations	27
SUID Autopsy and Toxicology Completed	27
Extrinsic Factors, Sleep Environment	28
Other Injuries	29
Other Conditions Including Medical	29
Homicides	31
Suicides	31
Rate of Suicide Fatalities	32

Youth Suicide Scene Investigations	33
Suicide Autopsy and Toxicological Testing	34
Behavioral Health Services	
Firearms	39
PREVENTABLE DEATHS	41
CHILD ABUSE AND NEGLECT DEATHS AND NEAR DEATHS	43
CONTINUED EFFORTS	48

LIST OF TABLES

1.	Child Deaths by In North Dakota, CY 2020-2021	8
2.	Child Deaths by Status, CY 2020-2021	9
3.	Status 'A' Child Deaths by In State and Out-of-State, CY 2020-2021	9
4.	Child Deaths by Status, CY 2012-2021	10
5.	Changes in ND Child Population and Deaths by Year 2020-2021	10
6.	Manner of Death Accident by Year 2012-2021	. 12
7.	Manner of Death Undetermined for Years 2012-2021	. 13
8.	Vehicular Child Fatalities by Gender, Age, and Race, CY 2020-2021	. 18
9.	Ages 15-17 Years Vehicular Child Fatalities for Last 10 Years	. 18
10.	Seat Belt Use, CY 2020-2021	. 21
11.	Motor Vehicle Fatalities, Position of Decedent, CY 2020-2021	. 22
12.	Vehicular Child Deaths by Type of Vehicle, CY 2020-2021	. 22
13.	Vehicular Child Deaths by Type of Road, CY 2020-2021	. 23
14.	SUID Fatalities by Gender and Race, CY 2020-2021	. 25
15.	Infant Fatalities from SIDS/SUID by Year 2012-2021	. 26
16.	SUID by Age, CY 2020-2021	. 26
17.	SUID by Sleep Location, CY 2020-2021	. 28
18.	Child Fatalities due to Injury / Medical by Year 2012-2021	. 29
19.	Child Fatalities due to Other / Medical by Gender, Race, Age, CY 2020-2021	. 30
20.	Child Fatalities by Suicide and Homicide by Gender, Age and Race, CY 2020-2021	. 31
21.	Child Fatalities by Homicide / Suicide by Year 2012-2021	. 31
22.	Child Fatalities by Firearm and Manner of Death, CY 2020-2021	. 39
23.	Type of Firearm Used, CY 2020-2021	. 40
24.	Storage of Firearm Used, CY 2020-2021	. 40
25.	Panel Determination of Preventability and Intentionality per Cause, CY 2020-2021	42
	LIST OF FIGURES	
1.	Number of Child Fatalities by Manner of Death, CY 2020-2021	.12
2.	Count of Child Fatalities Receiving an In-Depth Review, CY 2020-2021	. 14
3.	Gender and Race of Child Fatality Cases that Received an In-Depth Review, CY 2020-2021	. 15
4.	Count by Age in Child Fatality Cases that Received an In-Depth Review, CY 2020-2021	. 16
5.	In-Depth Reviews by Selected Manner of Death for Years 2002-2021	.17
6.	Motor Vehicle Deaths with Completed Death Scene Investigations, CY 2020-2021	. 20
7.	Motor Vehicle Deaths Receiving an Autopsy, CY 2020-2021	. 20
8.	Motor Vehicle Deaths with Toxicological Testing, CY 2020-2021	. 20

9. Top 5 Contributing Factors of Child MVA Fatalities, CY 2020	23
10. Percentage of Child Fatalities in Traffic Crashes by State, CY 2021	19
11. Top 5 Contributing Factors of Child MVA Fatalities, CY 2021	24
12. SUID Scene Investigations, CY 2020-2021	27
13. Suicide / Homicide Child Mortality Rate per 100,000, CY 2010-2021	33
14. Youth Suicide, Death Scene Investigation, CY 2020-2021	33
15. Youth Suicide, Completed Autopsy, CY 2020-2021	34
16. Youth Suicide, Toxicological Testing, CY 2020-2021	34
17. Youth Suicide, Mental Health Diagnosis, CY 2020-2021	34
18. Youth Suicide, Receiving Mental Health Services, CY 2020-2021	35
19. Youth Suicide, Prescribed Medication for Mental Health, CY 2020-2021	35
20. Youth Suicide, Emergency Room Visit in Past 12 Months, CY 2020-2021	36
21. Youth Suicide, Last Contact with a Health Care Provider, CY 2020-2021	36
22. Youth Suicide, History of Substance Use or Abuse, CY 2020-2021	36
23. Youth Suicide, Crisis in Past 30 Days, CY 2020-2021	37
24. Youth Suicide, Exhibited Warning Signs, CY 2020-2021	
25. Youth Suicide, Life Stressors, CY 2020-2021	
26. National Child (1-19 Years) Fatality Rate per 100,000 Children per Cause of Death	

THE NORTH DAKOTA CHILD FATALITY REVIEW PANEL

History

The North Dakota Child Fatality Review Panel (NDCFRP) was established by North Dakota Century Code (NDCC) 50-25.1 and began reviewing child deaths in 1996. The NDCFRP's charge is to "protect the health and welfare of children by identifying the cause of children's deaths, when possible; identifying of those circumstances that contribute to children's deaths; and the recommending of changes in policy, practices, and law to prevent children's deaths."

Purpose

The North Dakota Child Fatality Review Panel reviews deaths of all children (under 18 years of age), which occur in the state. The Panel

- identifies the cause of children's deaths,
- identifies circumstances that contribute to children's deaths, and
- recommends changes in policy, practices, and law to prevent children's deaths.

Their careful review process results in a thorough description of the factors related to child deaths. The reviews make a difference. These collaborations, partnerships and activities are proof that communities are aware that knowledge of the facts about a child death is not sufficient to prevent future deaths. The knowledge must be put into action. By sharing information and reviewing data, panel members review the circumstances surrounding the deaths and look for patterns or trends to identify possible prevention strategies.

The Panel began utilizing the National Fatality Review-Case Reporting System (NFR-CRS), a web-based standardized case reporting system, when reviewing deaths occurring since 2020. The NFR-CRS collects comprehensive case data, review team recommendations, summarizes findings, organizes, and assists in creating standardized reports. A determination of the Panel's agreement with the manner of death indicated on the death certificate and the preventability of death is made by a consensus of the Panel members. Meetings are closed to the public and all case discussions and documents, except for this annual report, are confidential by law (NDCC 50-25.1-04.5).

After an in-depth review, the Child Fatality Review Panel either agrees or disagrees with the manner of death indicated on each death certificate. When the Panel does not agree with the manner of death indicated on a death certificate, the Panel reclassifies the manner of death for its own purposes. It does not change the classification on the death certificate, but the Panel's decisions regarding manner of death serve as the basis of this report.

This Child Fatality Review Annual Report was compiled in July 2024 and presents information from the in-depth reviews of child deaths that occurred in calendar years 2020 and 2021. This report is intended for the public audience.

Nationally, approximately 37,000 children die each year. Every child's death is a tragic loss for the family and community. Especially tragic is the child death that could have been prevented. Through careful review of child deaths and a better understanding of identified inequities, risk, and protective factors we are better prepared to prevent future deaths. The Child Fatality Review Panel members acknowledge that the circumstances involved in most child deaths are too complex and multidimensional for responsibility to rest with a single individual or agency. The child death review process has raised the collective awareness of all participants and has led to a clearer understanding of community and responsibilities and possibilities for collaboration on all efforts addressing child health and safety. It is only through continued collaborative work that we can hope to protect the health and lives of our children.

Panel Membership

The Child Fatality Review Panel is a multidisciplinary, multi-agency, appointed panel (NDCC 50-25.1-04.2). Each panel member serves as a liaison to their professional counterparts, provides definitions of their profession's terminology, and interprets the procedures and policies for their agency. Additionally, each member assists in carrying the recommendations of the Panel.

Child Fatality Review Panel members agree that no single agency or group working alone can determine how and why a child has died. The shared commitment is to work together to better understand child injury inequity factors, to improve agency and community responses to child deaths and to identify prevention initiatives.

The members include a representative of the Department of Health and Human Services from Child Protection Services / Prevention and Protection who serves as the presiding officer; State Forensic Medical Examiner, physicians, a licensed peace officer, a mental health professional, DHHS Injury Prevention, a representative of each of the following: Attorney General's Office, Department of Public Instruction, DHHS Epidemiology, Department of Corrections, emergency medical services, a medical representative from a federally recognized Indian tribe, the lay community, and a designated tribal representative, as an ad hoc member, acting for each federally recognized Indian tribe in the state. Consultants may also be invited to assist in the review of specific cases. It is noted the Department of Health and Human Services were operating as separate divisions and merged into the Department of Health and Human Services in September 2022.

Panel Members 2020 - Current

Jenn Grabar, CFRP Presiding Officer Children and Family Services ND DHHS

Kirsten Hansen, Prevention and Protection, CFS ND DHHS

Dr. William Massello, State Medical Examiner ND DHHS

Dr. Barrie Miller, (-2023) State Medical Examiner ND DHHS

Bobbi Peltier, Health Specialist Indian Health Services

Jeremy Ensrud, ND Attorney General's Office

Kelly Dillon, (-2022) ND Attorney General's Office

Dr. Shauna Eberhardt, ND DHHS Behavioral Health

Melissa Markegard, Suicide Prevention ND DHHS Behavioral Health

Todd Porter, EMS Metro Ambulance

Robin Lang, Department of Public Instruction Duane Stanley, Special Agent (-2023) ND Bureau of Criminal Investigation

Karmen Brosten, Special Agent ND Bureau of Criminal Investigation

Dr. Melissa Seibel, Pediatrician Sanford Health

Dr. Mary Ann Sens, Forensic Pathologist, UND School of Medicine & Health Services

Dr. Selly Strauch, Forensic Pathologist, UND School of Medicine & Health Services

Dr Jada Ingalls, Child Abuse Pediatrician, Sanford CARE

Elizabeth Oestreich, Injury Prevention, ND DHHS

Dr. Tracy Miller, Epidemiologist ND DHHS

Lisa Bjergaard, DOCR, Division of Juvenile Justice

Karen Eisenhardt, Educator Citizen Member

Danielle Hendricks, Licensed Peace Officer Williston Police Department

North Dakota Child Fatality Review Panel (NDCFRP) Recommendations

Sudden Unexpected Infant Death (SUID)

- Consistent and uniform statewide reporting of the sudden and unexpected death of infant; utilizing the completion of a SUIDI reporting form with the family / caregiver after the death of an infant.
- Complete and thorough death scene investigations that include a death scene investigation, scene photographs, collection of evidence, a recorded doll re-enactment with those providing care (placing, last known alive, and finding), individual and witness interviews and a review of the medical and Child Protection Services history.
- 3. Continue to get safe sleep information and education into the hands of parents and caregivers. The information should include the dangers of placing an infant on their stomach for sleep; the dangers of infants sleeping in car seats outside of the vehicle without the approved car seat base; the dangers of bed, couch and recliner sharing, particularly when the caregiver may be impacted by exhaustion or sedating substances as well as the dangers to infants prenatally or environmentally exposed to alcohol or controlled substances, particularly how it increases their vulnerability to sudden infant death.
- 4. The safe sleep education should also include information about adequate supervision of infants during feeding, including the dangers of bottle propping as well as adequate supervision during sleep hours, such as having the infant in the same room but on a separate sleep surface, use of monitors, importance of caregiver / infant interaction, and limits on infant's time spent alone in cribs.
- 5. The distribution of infant sleep sacks by safe sleep resource providers and hospitals shall only include those without the wings for swaddling. Infant safe sleep education should include the dangers of swaddling infants after they have shown signs of attempting to roll over.
- 6. Continued education and promotion of referring eligible families for the distribution of safe sleep resources, including proper utilization education for caregivers by the distributers of safe sleep resources and the promotion of caregiver preparation ensuring infants have a portable crib when spending the night away from home.

Motor Vehicle Crashes

- 7. Address the societal issues of seat belts, distracted driving, and alcohol/drug usage of teens by continuing education and media campaigns that target not just new drivers but also those caregivers of new drivers that act as role models for appropriate driving behavior.
- 8. Education and promotion of safe driving practices including the dangers of activities that take attention away from drivers, such as operating a cell phone, texting, eating, turning the radio, or talking with passenger and the dangers of alcohol and drug usage by those operating a motor vehicle, with specific attention to community-wide education about never drinking and driving and never driving while impaired by other drugs or substances.

- 9. Educate the public regarding the dangers of children riding on or operating recreational vehicles including snowmobiles, All-Terrain Vehicles (ATVs), Utility Terrain Vehicles (UTVs), and dirt bikes. Safety messaging includes always wearing appropriate safety gear including a helmet, long sleeves, pants, gloves, and belt and utilizing a seat belt.
- 10. Promotion and enforcement of the state law which requires youth ages 12-16 years complete the state OHV Safety Course before operating an ATV on public land and ride an ATV that is safe for the child's age, ride only on designated areas and at safe speeds and that no child under the age of 12 years operate an ATV / OHV. safety messaging includes always wearing appropriate safety gear including a helmet, long sleeves, pants, gloves, and belt and utilizing a seat belt.
- 11. As part of the death investigation, obtain cell phone records of the child to see if the child was using the phone (i.e., talking or texting) while driving.
- 12. Continue to promote child safety seat inspection programs and free or low-cost car seat distribution.
- 13. Educate the public to increase booster seat usage for children fewer than 4 feet 9 inches.
- 14. Educate the public about safety in and around vehicles with an emphasis on performing a walk-around the vehicle before placing it in reverse.
- 15. All children involved in a motor or recreational vehicle fatality receive an autopsy and toxicological testing.

Medical/Reporting

- 16. Continue to train and educate the medical field on timely notification to child protective services when a child presents with trauma and where child abuse or neglect may reasonably be suspected.
- 17. Increase awareness of TEN4FACES-P to identify nonaccidental trauma.
- 18. Hospitals continue to use peer review as a means to examine trauma processes and protocols in regard to child injuries and death.
- 19. Mandatory cross reporting / notification of child deaths between medical (ER), law enforcement, coroners / Medical Examiners, and child protection services. All child death investigations shall include a review of the child protection services history.

Suicide

- 20. Continue suicide prevention strategies to educate school personnel, parents, friends, and family members of adolescents on the signs and symptoms of depression, the risk factors for suicide, and the factors that may protect children from suicide.
- 21. Continued suicide prevention education and training statewide that includes all medical providers, including ancillary providers, educators (including those who home school), coaches, and students, specifically starting in elementary school as waiting until high school or even middle school is too late.
- 22. Increase frequency of mental health screenings, including those in schools, to identify students with problems that could be related to suicide, depression and impulsive or aggressive behaviors.

- 23. All suicide deaths of children receive an autopsy and toxicological testing.
- 24. Completion of the standardized statewide protocol for suicide deaths which includes the completion of the state's developed Suicide Comprehensive Risk Assessment Profile (SCRAP) and the SCRAP be shared with the forensic pathologist certifying the death.
- 25. Increase statewide awareness and promotion of the suicide and crisis lifeline, 988, call, text or chat for crisis intervention and suicide prevention.
- 26. Develop public awareness for all gun owners with an emphasis on suicide preventability through the utilization of safe gun storage, whereas firearms are always stored unloaded and locked with the ammunition stored and locked in a separate location and the keys or passcode are hidden and not accessible to children, and addresses the need for supervision, education and that caregivers are ensuring gun safety is part of every conversation about hunting and firearms, in addition, caregivers are teaching children about proper safe gun handling and storage.
- 27. Alternative methods for responding to negative youth behaviors that do not result in removing positive social emotional connections from the youth such as extra-curricular activities as the removal of such activities in a child's life further results in negative outcomes. A suicide risk assessment be completed by a mental health professional at the school every time a youth is suspended from academics or athletic events.
- 28. Suicide prevention training for medical providers completing sports physicals with closer examination into marked changes and responses provided by youth on the PHQ-4, asking follow-up questions and critical follow up and referrals. Include a suicide screen, not just a depression screen, as part of the sports physical.
- 29. The Panel recommends suicide risk assessment training for law enforcement responding to youth delinquency.
- 30. Increased awareness and statewide access to 24/7 mobile crisis units for children experiencing suicidal / self-harm thoughts or behaviors.
- 31. Education and resources for parents and caregivers on the importance of open communication / transparency between them and their children regarding the topic of mental health self-advocacy that includes how and where to access behavioral health services in times of crisis.

Other

- 32. Public awareness to recognize drowning risks with emphasis on constant supervision of young children near water, the use of life preservers, not swimming alone or without adult supervision, the presence of a CPR trained person and how to recognize and respond to a swimmer in trouble.
- 33. Increase community awareness and develop public information (materials and social media posts) regarding the importance of keeping eyes on infants and toddlers near water. Specifically, that infants and young children must be supervised (eyes on) at all times when they are near water. Prepare all bathing materials prior to placing the child in the water. If you have to leave the bathroom do not leave without first removing the infant from the water.
- 34. Increase access to prenatal care for those that are homeless.
- 35. Increase statewide awareness of the Baby Safe Haven Program
- 36. All newborns prenatally exposed to controlled substances be monitored for no less than 48 hours prior to hospital discharge.

- 37. Educate the public regarding fire prevention including proper maintenance and regular testing of smoke alarms, possession of working fire extinguishers and training on how to properly use them; utilization of appropriate extension cords as directed; safe storage of smoking materials, lighters and matches in a location that children cannot access and teaching children never to play with these items. As well as community-wide education and promotion of fire escape plans to be created with all families / household occupants, and that the fire escape plan is regularly practiced and includes two ways of escape from every room in the home and education on what to do if a fire occurs in the home.
- 38. Statewide access to home health nursing services for all families with a child under the age of one year, all children with insulin dependent diabetes and all children with asthma so that these identified vulnerable populations receive access to timely health assessment, treatment, referrals, and services, especially those in rural communities.
- 39. Abusive head trauma evidence-based prevention program, the Period of Purple Crying, to be provided to all parents and caregivers of newborns through the birthing hospital, healthcare providers, home visitation programs, parenting resource centers, child welfare and private and public providers, emphasis on the inclusion of fathers.
- 40. Increase statewide awareness, access, and education of Naloxone.

Table 1. Child Deaths in North Dakota, CY 2020-2021

	2020	2021
Total Child Deaths	105	92
Status B: deaths due to natural causes or that are not unexpected (i.e., long term illness).	43	45
Status A: Deaths that are sudden, unexpected, or unexplained	55	40
Status A: The 'death-causing' event occurred outside of North Dakota	7	7
Status A: In-State Child Deaths (in-Depth Reviews)	55	40

CHILD FATALITY CASES THAT RECEIVED AN IN-DEPTH REVIEW

Annual reports of the Child Fatality Review Panel (CFRP) are based on cases reviewed by the panel for deaths that occurred during a calendar year. In some cases, death reviews are delayed due to delay in certification of the death certificate by the certifier, inability to obtain records needed for a comprehensive review, or a pending criminal investigation and/or prosecution regarding a death. The CFRP completes the reviews following the completion of the judicial process. In addition, the North Dakota Child Fatality Review Panel, as described in Section IV "Citizen Review Panel", serves as the state's Citizen Review Panel as allowed by CAPTA Section 106 (c). The CFRP reviews deaths of all children that receive a North Dakota death certificate.

Case Status

Each death certificate received from the Department of Health Vital Records is reviewed by a Child Fatality Review Panel (CFRP) subcommittee. Each death is identified as a Status A case or a Status B case (Table 2).

Table 2. Child Deaths by Status, CY 2020 - 2021 2020

	2020	2021
Status A	62	47
Status B	43	45
Total	105	92

Status A are all cases of children whose death is sudden, unexpected, and/or unexplained, including natural deaths. Status A cases receive an in-depth, comprehensive review and are included in the analysis of this report.

Status B cases are deaths that are not unexpected (i.e., long-term illness) and/or deaths that are due to other natural causes. Status B cases may only be presented for review by the Child Fatality Review Panel in a brief, general format in order to give all panel members an opportunity to request that the case be changed from Status B to Status A.

In-State and Out-of-State Child Deaths

When the 'death-causing' event/injury is identified as occurring outside of the state, the death is considered an out-of-state child death. All other child deaths with North Dakota death certificates are considered in-state child deaths and are reviewed by the CFRP. When the 'death-causing' event/injury is identified as occurring in North Dakota, however the child was transferred out of state for treatment and died out of state, the death is then categorized as a Status A or Status B case.

Table 3. Status 'A' Child Deaths by In State and Out-of-State, CY 2020 -2021

	2020	2021
In-State	55	40
Out-of-	7	7
State		
Total	62	47

The Child Fatality Review Panel conducts in-depth reviews of Status A deaths, those that are sudden, unexpected, or unexplained. Compared to the 102 child deaths reviewed in 2018 and 2019, the number of in-state sudden, unexpected, or unexplained deaths decreased by 7% in 2020 and 2021. Child deaths reviewed decreased by 27% from 2020 to 2021 (Table 4).

Table 4. Child Deaths by Status, CY 2012-2021

	•									
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Status A Deaths ¹	55	40	46	44	42	35	53	54	62	47
Status B Deaths ²	44	61	40	57	56	55	42	61	43	45
Total Child Deaths ³	99	101	86	101	98	90	95	115	105	92
In-State Child Deaths ⁴	53	53	44	42	42	35	51	51	55	40
Out-of-State Child Deaths ⁵	2	3	2	2	0	0	2	3	7	7

¹Status A cases consist of all cases of children whose death is sudden, unexpected, and/or unexplained.

North Dakota Child Population and Mortality Rate

The child population in North Dakota has continued to grow each year. From 2017 to 2021, there was a 5% increase in the child population (Table 5). Those under 18 years made up 23.5% of the state's overall population in 2020.

Table 5. Changes in North Dakota Child Population and Child Deaths by Year 2017 to 2021

	Population Under age 18	Difference from Previous Year	% Difference of Child Population from Previous year	Child Deaths	Difference in Child Deaths from Previous Year	% Difference of Child Deaths from Previous year
2017	175,390	1,206	0.69%	90	-8	-8.16%
2018	176,337	947	0.54%	95	5	5.56%
2019	178,055	1,718	0.97%	115	20	17.39%
2020	183,001	4,946	2.70%	105	-10	-8.70%
2021	185,037	2,036	1.10%	92	-13	-12.38%

Source of Population Data: CDC1 U.S. Census Bureau, Decennial Census and Population Estimates. https://data.census.gov/

In 2019, there was a sharp increase in child deaths and the difference of child deaths between 2018 and 2019 increased by 17.39%.

²Status B cases are deaths that are not unexpected (i.e., long term illness) and/or deaths that are due to natural causes. (Review of death certificate only)

³From all causes.

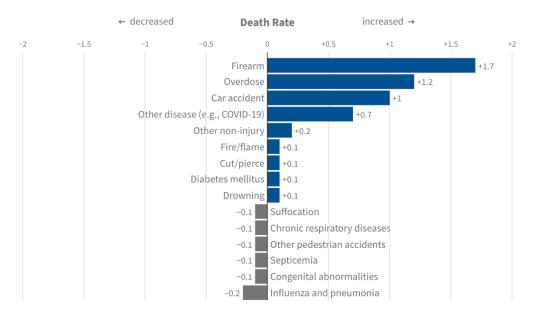
⁴Child deaths with North Dakota death certificates that were reviewed in depth by the NDCFRP.

⁵The 'death-causing' event/injury is identified as occurring outside of North Dakota. They were not reviewed in depth by the NDCFRP. SOURCE: Child Fatality Review Panel

Nationally, the number of children who die each year had declined for nearly three decades, until 2020, when the rate began to increase. By 2021, the child mortality rate had reached its highest rate since 2008 at 29.5 per 100,000. Notably, the national increase in children's deaths coincided with the COVID-19 pandemic, however, the virus itself made a minimal impact in this increase. According to data from the Centers for Disease Control and Prevention (CDC), the increase in national childhood death rates between 2019 and 2021 were primarily due to motor vehicle accidents, firearm injuries and drug overdose. The figure below depicts the change in death rate by cause of death per 100,000 children, ages 1-19 years, between 2019 and 2021.

Gun deaths, overdoses, and car accidents caused childhood deaths to rise during the pandemic.

Change in death rate by cause of death per 100K children, ages 1 through 19, between 2019 and 2021



Sources: Centers for Disease Control and Prevention

Note: Data shows "injury mechanisms and all other leading causes." Any underlying cause of death where the death rate remained unchanged between 2019 and 2021 is not displayed.

Injury-related deaths shown combine homicide, suicide, and unintentional deaths

North Dakota's child mortality rate for 2020 was 57.38 per 100,000 and although this decreased to 49.72 per 100,000 in 2021, it was still 40% greater than the national rate, when the national rate was at its highest in 13 years.

Although there was a decrease in the number of child deaths in North Dakota in 2020 and 2021, there was an increase in the percentage of Status A deaths in 2020 (Table 4). Particularly, North Dakota experienced the same increases seen across the nation in firearm injuries, drug overdose and motor vehicle accidents as detailed further in this report.

Manner of Death of Child in Cases that Received an In-Depth Review

North Dakota Death Certificates list the following five manners of death (Figure 1).



Figure 1.

The largest category for manner of child death in 2020 and 2021 was Accidents, which claimed the lives of 18 children each year and made up 33% of child deaths reviewed in 2020 and 45% in 2021. There was over a 60% increase in child deaths by accident from 2016-2021 (Table 6). This increase was seen in motor vehicle crashes, overdose, and firearm related injuries. Unintentional injury deaths are commonly referred to as 'accidents' both by the general public and by manner of death as recorded on death certificates. The term accident implies that the death could not have been prevented. The NDCFRP prefers the term 'unintentional' because these deaths are predictable, understandable, and preventable.

Table 6. Manner of Death Accident for Years 2012-2021

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
18	13	14	16	13	14	11	12	18	18	
33.96%	34.21%	31.82%	23.81%	14.29%	40%	21.57%	23.53%	32.72%	45%	

In 2020, deaths where the manner was 'undetermined' (16, 29%) was the second leading cause of death.

Intentional deaths, those by suicide (12, 22%) and homicide (5, 9%), nearly surpassed accidental deaths in 2020.

In 2020, the Panel reclassified 5 deaths:

- changing 2 from 'natural' to 'undetermined'.
- 1 'undetermined' to 'suicide'.
- 1 'accident' to 'undetermined' and
- 1 'accident' to 'homicide'.

In 2021, the Panel reclassified 3 deaths:

- changing 1 from 'natural' to 'undetermined'.
- 1 'undetermined' to 'suicide' and
- one 'accident' to 'suicide'.

The number of child deaths where the manner of death could not be determined made up approximately a third of the cases reviewed in 2019 and 2020, however this dropped to 10% in 2021 (Table 7).

Table 7. Manner of Death Not Determined for Years 2012–2021

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
11	13	15	10	6	8	9	19	16	4
20.75%	34.21%	34.09%	23.81%	14.29%	22.86%	17.64%	37.25%	29.09%	10%

The majority of child deaths with a classified manner of 'undetermined' were infants and the cause of death was Sudden Unexpected Infant Death with intrinsic and/or extrinsic factors. The most common factor identified was related to hazards present in the infant's sleep environment.

Notably, in 2019, the National Association of Medical Examiners (NAME) Panel on Sudden Unexpected Death in Pediatrics¹, made a recommendation that death certifiers discontinue the use of the term "sudden infant death syndrome" (SIDS) and use the term "unexplained sudden death" specifying whether intrinsic² and extrinsic³ risk factors were identified as contributing factors to the death; the manner of death in these situations is then classified as 'Undetermined'. The increase in 'undetermined' deaths in 2019 and 2020 is likely due to the change in classification of sudden infant deaths from the manner of natural to undetermined.

National Association of Medical Examiners. (2022) A Guide for Manner of Death Classification. <u>More on Manner of death (memberclicks.net)</u>

¹

² Intrinsic Factors: Natural conditions or risk factors associated with abnormal physiology or anatomy that are concerning as contributors to death but are insufficient as a cause (for example: low birth weight, prematurity, small for gestational age, concurrent non-lethal illness, history of febrile seizures), or natural conditions of unknown significance (for example: cardiac channelopathy or seizure gene variants of unknown significance)."

³ Extrinsic Factors: 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 (for example: 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 or findings otherwise concerning for unnatural death.

Cause of Death in Cases that Received an In-Depth Review

In 2020, the highest number of child fatalities with in-depth reviews had causes of death of unintentional injuries (23.6%) and suicide (21.8%), followed by deaths from Sudden Unexpected Infant Death (SUID)(20%).

In 2021, the largest percentage of reviewed child deaths were resulting from motor vehicle accidents (35%), followed by suicide (20%) and those by medical causes (20%) (Figure 2).

Unintentional injury child deaths accounted for 60% of those reviewed in 2020 and 55% in 2021.

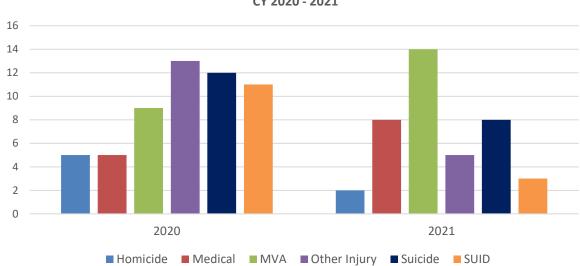


Figure 2. Count of Child Fatalities Receiving In-Depth Reviews

CY 2020 - 2021

Gender and Race of Child in Cases that Received an In-Depth Review

According to the US Census Bureau, males made up 51.7% of the ND population under age 18 in 2020 and 51.1% in 2021.

Population under age 18 by gender

North Dakota, 1990-2023

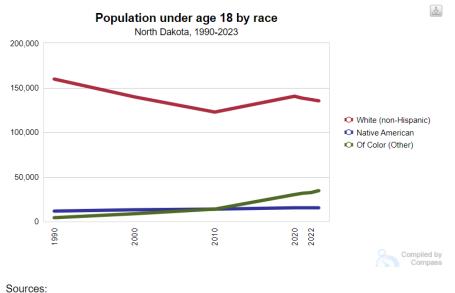
	1990	2000	2010	2020	2021	2022	2023
0-17, Male	90,048	82,571	76,788	93,634	94,638	94,168	94,178
0-17, Female	85,337	78,278	73,083	89,367	90,399	90,177	90,556
Total population	638,800	642,200	672,591	779,094	777,982	778,912	783,926

Sources:

1990 and prior years: U.S. Census Bureau, Decennial Census, retrieved via IPUMS NHGIS, University of Minnesota. https://www.nhgis.org/

U.S. Census Bureau, Decennial Census and Population Estimates. https://data.census.gov/

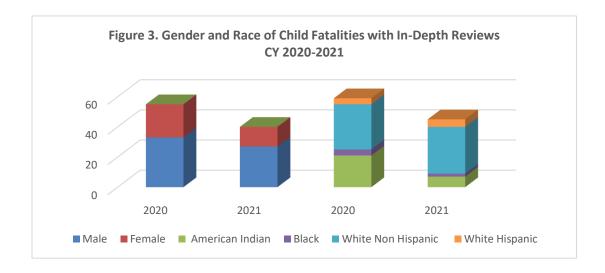
The graph below provides the ND child population by race per the US Census Bureau. American Indian children comprised 8% and children of color (other races) made up 16% of the child population in 2020.



Couroco.

U.S. Census Bureau, Decennial Census and Population Estimates.

In 2020 and 2021, there were more male child fatalities than female. In 2020, child fatalities among males comprised 60% (33) of deaths reviewed as compared to females (22, 40%). In 2021, child fatalities among males (27, 67.5%) were double that of females (13, 32.5%) (Figure 3).



In 2020 and 2021 American Indian children were over-represented in the deaths reviewed. In 2020, over one third (38.1%) of child deaths reviewed were American Indian. In 2021, 17.5% of deaths reviewed were American Indian children (Figure 3).

Age of Child in Cases that Received an In-Depth Review

Historically, the majority of child deaths occur with the very young, those under one year of age. This pattern continued in 2020 when 33% of the deaths reviewed were infants, those under one year of age. In 2021, adolescent youth, those 13-15 years of age, accounted for 40% of deaths receiving in-depth reviews, while those under one year of age made up only 22.5% of deaths reviewed (Figure 4).

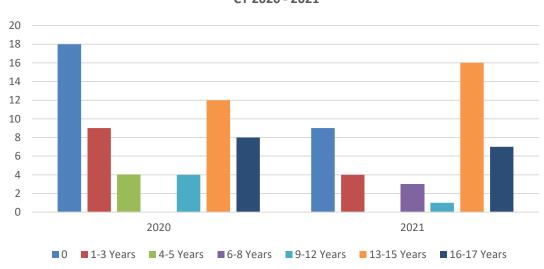


Figure 4. Count by Age in Child Fatality Receiving an In-Depth Review CY 2020 - 2021

Leading Causes of Children's Deaths

During 2020, Sudden Unexplained Infant Death (SUID) was the leading cause of death in infants ages 0-1.

In 2020, the leading causes of death for young children, age 1-5 years was motor vehicle accidents (4, 31%), fire (3, 23%) and abusive blunt force trauma (3, 23%).

The leading cause of death for children ages 6-12 years in 2020 and 2021 was motor vehicle accidents (70%). The child was the driver in 40% of these deaths.

In 2020 and 2021, the leading causes of death for youth ages 13 to 15 was suicide (7, 58.3%; 7, 43.7%), motor vehicle accidents (1, 8.3%; 4, 25%), and firearm injuries (2, 16.7%; 2, 12.5%).

In 2020 the leading causes of death for children ages 16-17 was suicide (3, 33.3%), motor vehicle accidents (2, 22.2%) and drug overdose (2, 2.22%). In 2021 the leading cause of death for children 16-17 was motor vehicle accidents (57.1%).

Long Term Trends

The number of child fatalities attributed to vehicular, SIDS/SUID, suicide, and homicide are shown for the years 2002 to 2021 in Figure 5. The year 2006 saw a dramatic spike in vehicular child deaths (27). Motor vehicle fatalities contributed to the highest number of total child deaths a year from 2000 to 2013, with the exception of 2011. Motor vehicle fatalities increased in 2021, once again accounting for the highest number of child deaths. Child fatalities due to SIDS/SUID decreased by half in 2017 and had been increasing until a decrease was seen in 2021. In 2016, deaths by suicide doubled and steadily increased through 2020, when intentional deaths surpassed unintentional death by motor vehicle and sudden unexpected infant death (SUID)(Figure 5).

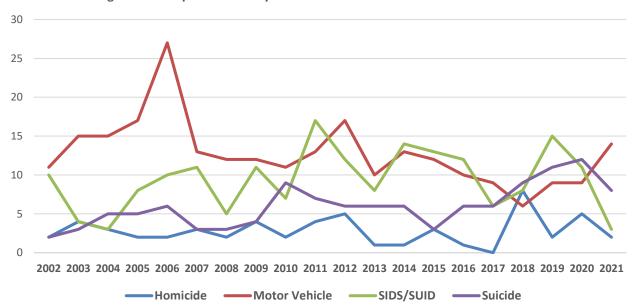


Figure 5. In-Depth Reviews by Selected Manner of Death for Years 2002-2021

CAUSES AND MANNERS OF CHILD FATALITY

VEHICULAR DEATHS

There were 23 vehicular child fatalities in 2020 and 2021: 9 in 2020 and 14 in 2021. Males represented 69.5% of the vehicular child fatalities (Table 8).

Youth ages 13 to 17 continue to be the largest age group involved in vehicular fatalities (Table 8).

Table 9 shows the number and percent of vehicular child fatalities for the age group 15 to 17, by year since 2012.

Table 8. Vehicular Child Fatalities by Gender, Age and Race
CY 2020-2021

	2020	2021	Total
Female	3	4	7
Male	6	10	16
< 1 Year	0	1	1
1-3	3	1	4
4-5	1	0	1
6-8	0	3	3
9-12	2	1	3
13-15	1	4	5
16-17	2	4	6
American Indian	2	5	7
White	7	8	15
Total	9	14	23

Table 9. Ages 15 to 17 Vehicular Child Fatalities for last 10 years

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-yr Total
15 to 17	11	6	8	8	2	2	2	6	3	8	56
0-14	6	4	8	4	8	7	4	3	6	6	56

North Dakota Rate of Motor Vehicle Child Fatality

Nationally, child traffic fatalities increased by 8 percent from 2020 (1,101) to 2021 (1,184). An average of 3 children were killed and an estimated 445 children were injured every day in traffic crashes in the United States. The national percentage of child traffic fatalities in 2021 was 2.8 percent. Figure 10 below provides a color-coded map of the percentage of child fatalities by State in 2021.

North Dakota had the highest percentage of child traffic fatalities in the nation (5.9%).

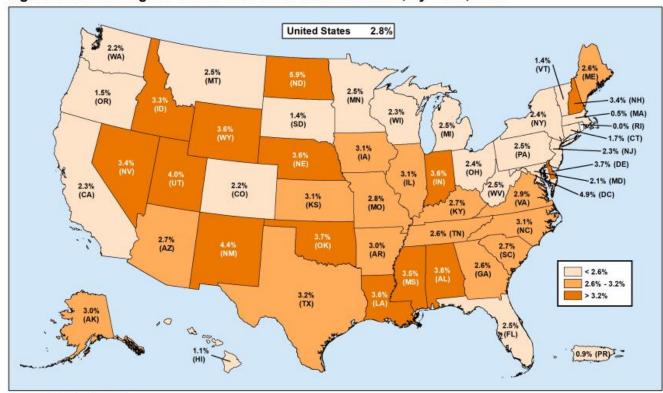


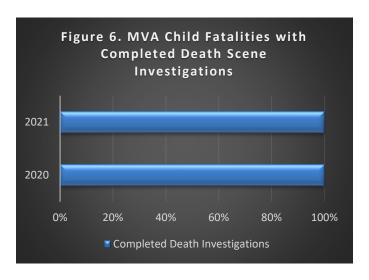
Figure 10. Percentage of Child Fatalities in Traffic Crashes, by State, 2021

Source: FARS 2021 ARF

SOURCE: Centers for Disease Control and Prevention (2021), Mortality Multiple Cause-of-Death, FARS

Child Motor Vehicle Fatality Death Scene Investigations

All 23 of the motor vehicle child fatalities occurring in 2020 and 2021 received a completed death investigation at the scene of the child's death (Figure 6).



Vehicular Fatality / Autopsy and Toxicological Testing

An autopsy was completed in 74% of the motor vehicle fatalities; 56% in 2020 and 86% in 2021 (Figure 7). Most often the reason for the lack of autopsy was unknown to the CFRP.

Figure 7. MVA Child Fatalities Receiving an Autopsy, CY 2020-2021

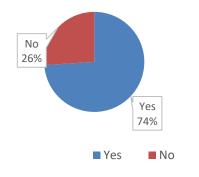
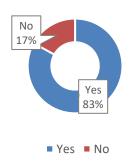


Figure 8. MVA Child Fatalities with Toxicology Testing, CY 2020-2021



Toxicological testing was completed in 83% of the child motor vehicle deaths occurring in 2020 /2021 (Figure 8). More than 90% of the time the results were negative. Substances detected when the results were positive include alcohol and marijuana.

Seat Belt Use / Safety Restraints

Of the 23 vehicular deaths, 18 (78%) involved child victims inside a moving vehicle. Of these 6 (33%) were wearing a seat belt / safety restraint. Of note, in 2020, all child motor vehicle deaths involved those not wearing seat belts and not properly restrained in car safety seats (Table 10).

Research has shown that lap/shoulder seat belts, when used correctly, reduce the risk of fatal injury to front seat occupants ages 5 and older of passenger cars by 45 percent, and the risk of moderate-to-critical injury by 50 percent. For truck occupants, seat belts reduce the risk of fatal injury by 60 percent and the risk of moderate to-critical injury by 65%.

SOURCE: Kahane, C. J. (2000, December). Fatality reduction by safety belts for front-seat occupants of cars and light trucks (Report No. DOT HS 809 199). National Highway Traffic Safety Administration. https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/809199)

Table 10. Seat Belt Use, CY 2020-2021

	2020	2021	2-Yr
			Total
Wearing seat belt	0	6	6
Not wearing seat belt	5	7	12
Seat belt not applicable	4	1	5
Total	9	14	23

'Seat Belt use not applicable' includes recreational vehicles (i.e., snowmobiles and dirt bikes), school bus passengers, farm equipment, motorcycles, watercraft,

(i.e., boats, jet-skis, inflatables), and pedestrians and bicycles.

This does not include ATV and OHVs which have seatbelts and are included with vehicles.

There were 5 'seat belt use not applicable' deaths, accounting for (23%) of the vehicular deaths in 2020-2021 (Table 10).

Position of Decedent In or Out of the Vehicle

In 9 of the 23 vehicular deaths (39%) the youth were the operators of the vehicle (Table 11).

The average age of the driver was 14.44 years old.

Table 11. Position of Decedent, CY 2020-2021

	2020	2021
Driver	4	5
Passenger	1	8
Pedestrian	4	1
Total	9	14

Victims outside of the moving vehicle included:

- A 16-year-old pedestrian struck by a vehicle on a city street.
- A 1-year-old pedestrian struck by a vehicle pulling forward in a driveway.
- A 5-year-old pedestrian struck by a vehicle pulling forward in a driveway.
- A 2-year-old pedestrian struck by a vehicle pulling forward in a driveway.
- An 8-year-old pedestrian struck by a vehicle while crossing the highway.

Type of Vehicle

The most predominate type of motor vehicle involved in child vehicle deaths in 2020 and 2021 was a car (60%). SUVs comprised 27% of the motor vehicle accidents, followed by trucks (13%) (Table 12).

Recreational vehicles such as All-Terrain vehicles (ATVs) and Off Highway Vehicles (OHVs) were involved in 14% of vehicular fatalities. The average age of the operator was 10 years.

Of the five pedestrian fatalities, three children were struck in their driveway by motor vehicles. All were raised trucks pulling forward.

Table 12. Vehicular Deaths by Type of Vehicle

	2020	2021
Motor Vehicle	3	12
Car	1	8
SUV	2	2
Truck	0	2
Recreational Vehicle	2	1
Pedestrian	4	1

Road Type

The most common road type surface for motor vehicle fatalities in 2020-2021 was rural county roads (9, 39%), followed by two-lane highways (7, 30%) and driveways (3, 13%) (Table 13).

Table 13. Vehicular Deaths by Type of Road

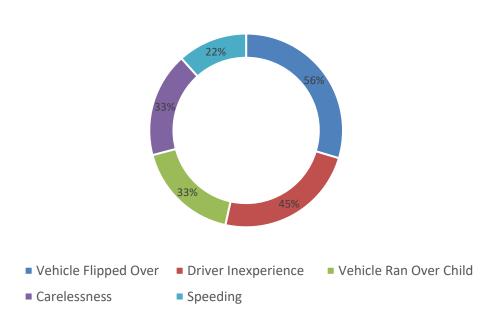
	2020	2021
City Street	1	1
Driveway	3	0
Interstate	0	2
Rural / County Road	4	5
Two-lane Highway	1	6

Factors that Contributed to the Motor Vehicle Accident:

The top five factors that contributed to child deaths resulting from motor vehicle accidents in 2020 included (Figure 9):

- o vehicle flipped over (present in 56% of MVA deaths),
- o driver inexperience (45%), vehicle ran over child (33%),
- o carelessness (33%),
- o and speeding (22%).

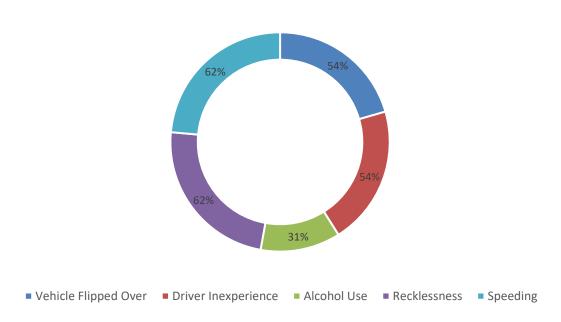
Figure 9. Top 5 Contributing Factors of Child Motor Vehicle Fatalities CY 2020



The top five factors that contributed to child deaths resulting from motor vehicle accidents in 2021 included (Figure 11):

- speeding over the limit (present in 62% of MVA deaths),
- recklessness (62%),
- vehicle flipped over (54%),
- driver inexperience (54%),
- and alcohol use (31%).

Figure 11. Top 5 Contributing Factors of Child Motor Vehicle Fatalities CY 2021

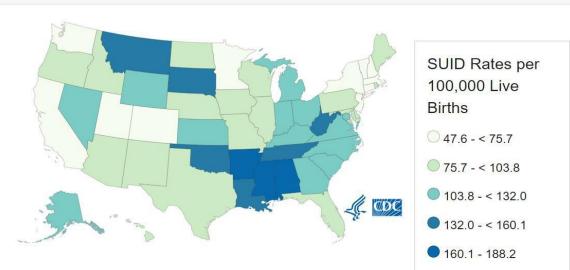


Although North Dakota's winter weather can cause hazardous road conditions for drivers the majority of child motor vehcile fatailities occurred in the summer months of May, June, July and August (73%), when the roads were dry and clear. The road was noted to be snow or ice covered in only 18% of these deaths.

SUDDEN UNEXPECTED INFANT DEATH (SUID)

SUID Rates by State, 2016-2020

According to the Centers of Disease Control and Prevention (CDC⁵), each year there are about 3,400 sudden unexpected infant deaths in the United States, of these 2,500 had an unknown cause and about 900 deaths were due to accidental suffocation and strangulation in bed. SUID with extrinsic factors is the leading cause of preventable death among infants aged 1-12 months. The national SUID rate for 2020 was 92.9 per 100,000 live births., North Dakota's SUID rate was 93.9 per 100,000 live births. There were 10,050 live births in ND in 2020.



⁵ CDC/NCHS, National Vital Statistics System, Mortality Files. Rates calculated via <u>CDC WONDER</u>.

In 2020-2021 there were a total of 14 infant deaths identified as SUID.

An additional two infant deaths were due to accidental asphyxia with hazards present in the sleeping environment.

Ta	Table 14. Child Fatalities due to SUID by Gender and Race						
		SUID					

	SUID					
	2020	2021	Total			
Males	5	2	7			
Females	6	1	7			
White	7	2	9			
American Indian	4	0	4			
Black	0	1	1			
Total	11	3	14			

Males and females were equally represented in the 2020 and 2021 SUID deaths. Of these 14 deaths, 64% were White, 29% were American Indian, and 7% were African American/Black. (Table 14). The number of child fatalities due to SUID among American Indian children over represent the total population; 497 deaths per 100,000.

Over the past five-year period (2017-2021), 43 child fatalities were due to sudden unexpected infant death. The number of infants dying suddenly and unexpectedly decreased in 2021 as compared to previous years. (Table 15).

Table 15. Child Fatalities from SIDS/SUID by Year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	10-yr Total
SIDS	4	0	3	4	5	0	0	0	0	0	16
SUID	7	8	11	9	7	6	8	15	11	3	85

Per the recommendations of the National Association of Medical Examiners, the term Sudden Infant Death Syndrome (SIDS) is no longer used to certify child deaths in North Dakota. In 2022 there was a statutory change removing the terminology of Sudden Infant Death Syndrome as a cause of death and replacing it with Unexplained Sudden Death in Infant or Child with or without Intrinsic or Extrinsic factors, or both.

Intrinsic Factors are defined as those natural conditions or risk factors associated with abnormal physiology or anatomy that are concerning as contributors to death but are insufficient as a cause (for example, low birth weight, prematurity, small for gestational size, concurrent non-lethal illness, history of febrile seizures). These can also include natural conditions of unknown significance (for example, cardiac or neurological).

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 (for example, side or prone sleep, over-bundling, objects in the sleep environment, sleep environment not specifically designed for infant sleep, soft or excessive bedding, and sleep surface sharing), injuries or toxicological findings, or circumstances or findings otherwise concerning for unnatural death.

Unexpected sudden infant deaths, occur most often amongst the youngest and most vulnerable, those three months and younger, accounted for 57% of the SUID deaths in 2020 / 2021 (Table 16). The average age for SUID was two months old.

Table 16. SUID by Age

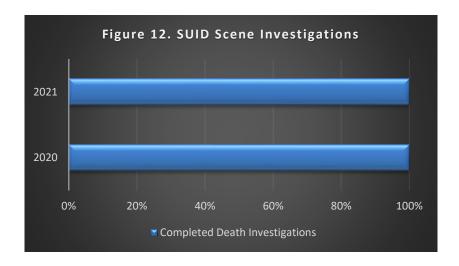
1								
	2020	2021	Total					
0-1 Month	6	1	7					
2-3 Mo	1	0	1					
4-5 Mo	3	2	5					
6-12 Mo	1	0	1					
Total	11	3	14					

SUID Scene Investigations

A comprehensive case investigation is crucial to accurately determine cause and manner of sudden unexpected infant deaths. These investigations should include an examination of the death scene, ideally with doll re-enactment, documentation of the circumstances of the death, a review of the infant's medical history, radiographic examination, and a complete autopsy with lab testing including histology, neuropathology, toxicology, and microbiologic studies.

Forensic Sci Med Pathology. Author manuscript; available in PMC 2021 March 01.
Protocols, practices, and needs for investigating sudden unexpected infant deaths.
Cottengim, Parks, Rhoda, Andrew, Nolte, Fudenberg, Sens, Brustrom, Payn, Shapiro-Mendoza

Death scene investigations are critical to understanding the environmental factors that may have contributed to the death. All 14 cases of SUID had a completed death scene investigation (Figure 12). However, only 5 (36%) included a doll re-enactment to better understand the conditions of the infant's sleeping environment (i.e. how the infant was placed/found, hazards present).



SUID / Autopsy and Toxicology Completed

An autopsy with radiographic imaging, lab testing, and toxicology was completed in a 100% of the sudden unexpected infant deaths in 2020 and 2021.

Extrinsic Factors - Sleep Environment

All 14 sudden unexpected infant deaths in 2020 and 2021 occurred when there were hazards present in the infant's sleep environment. An unsafe sleep environment may include one or more of the following whereby the infant was: placed on their side or stomach, swaddled/bundled, objects in the sleep environment, sleep environment not specifically designed for infant sleep, sleeping on a soft surface or with blanket(s) and/or pillow(s), and sleep surface sharing.

The most commonly identified sleep environment factor was sleeping on a soft surface or with blankets and/or pillows (86%).

The most frequent infant sleep location identified in SUID in 2020 and 2021 was an adult bed (8, 57%), followed by a couch or recliner chair (3, 21%) (Table 17).

The infant was sharing a sleep surface with an adult in 57% of the SUIDs in 2020 / 2021.

Although the infant's caregivers had access to a crib or portable crib and a sleep environment designed for infant sleep was present in 71% of these deaths, the infant was utilizing this location for sleep in only 21% of these deaths.

Table 17. SUID Fatalities by Sleep Location by Year

	2020	2021
Adult Bed	7	1
Bassinet	0	1
Couch / Chair	2	1
Portable Crib	2	0

Although a majority (64%) of the infant's had been placed to sleep on their back. Most were discovered on their stomach or side (71%). Notably, 50% of the SUID in 2020 and 2021 had been swaddled in a blanket.

The CFRP also identified the following risk factors present in the Sudden Unexpected Infant Deaths that occurred in 2020-2021:

- 71% were exposed to second-hand smoke
- 43% were prenatally exposed to alcohol and/or controlled substances
- 21% were born premature

The top five most common Life Stressors present in the lives of infant's who died of SUID in 2020-2021, identified by the CFRP: financial problems (43%), caregiver is unskilled in providing care (36%), parent divorce / separation (29%), witnessing violence (29%), and job problems (29%).

OTHER INJURIES (Unintentional / Preventable)

Child fatalities in 2020 and 2021, reviewed by the NDCFRP with death due to other injuries were attributed to asphyxia (25%), drowning (19%), fire (19%), firearm injuries (19%), a fall, ingestion of foreign material, and overdose.

Two of the asphyxia deaths were related to hazards in the infant's sleep environment resulting in the infant becoming wedged and suffocating.

Two of the drowning victims were under age two, one occurred in a bathtub. In each of these deaths the child was left unattended near water.

All three fire victims were under the age of 5 years.

All three of the adolescents that died by accidental discharge of a firearm resided on the western side of the state.

Of the 16 fatalities due to other injuries in 2020-2021; the manner of death was recorded as accident and preventable in 10 (71%) of the deaths.

Table 18. Child Fatalities Due to Injury/Medical by Year, 2012 - 2021

								-		
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Other Injury	6	6	7	4	3	6	6	6	12	4
Other /Medical	8	7	3	7	10	8	14	8	6	9

OTHER CONDITIONS INCLUDING MEDICAL (Unintentional)

Of the 95 child deaths that occurred in 2020 and 2021 that received an in-depth review, 16% (15) were due to other conditions including medical reasons.

Of these, 40% were identified as natural deaths and unpreventable.

Preventability could not be determined in 60% of the child deaths due to other medical conditions.

Of the 15 child fatalities in 2020-2021 where the death was due to other conditions, including medical; 53% of the children were male; 53% were less than 3 years of age; 53% were White and 27% were American Indian (Table 19).

Table 19. Child Fatalities Due to Other Medical by Gender, Race and Age

	2020	2021
Males	4	4
Females	2	5
< 1 Year	1	5
1 to 3	1	1
4 to 5	1	0
6 to 8	0	0
9 to 12	1	0
13 to 15	1	2
16 to 17	1	1
White	1	7
American Indian	3	1
Black / African American	1	0
Hispanic	0	1
Total	6	9

HOMICIDES AND SUICIDES

The number of child fatalities due to homicide for 2020 was five. In 2021, two children died by homicide.

Homicides were the result of firearms (2), blunt force head trauma (2), asphyxia (1), starvation (1) and poisoning (1).

The number of child fatalities due to suicide for 2020 and 2021 was 20 (21%); 12 in 2020 (22%) and 8 in 2021 (20%).

Of the 20 suicides, 55% were by firearm, 30% were by hanging, 10% were by overdose / toxic ingestion of medication , and another

Table 20. Child Fatalities by Suicide and Homicide by Gender,
Age, and Race

	Н	omicide	Suicide	
	2020	2021	2020	2021
Males	2	1	8	7
Females	3	1	4	1
< 1 Year	1	0	0	0
1-3	2	0	0	0
4 - 5	0	0	0	0
6 - 8	0	0	0	0
9 - 12	0	0	2	0
13 - 15	1	1	7	7
16 - 17	1	1	2	1
White	1	1	6	6
Hispanic	0	0	1	1
American Indian	4	1	4	1
Black or African American	0	0	1	0
Total	5	2	12	8

was the result of injuries from a fall from height. Of the suicides from firearm, the youth was male 82% of the time. Of the suicides by overdose of medication, the youth was always female.

Of note, 75% (15) of the suicide victims were male compared to female 25% (5) (Table 20).

The age at which most of the suicides occurred was 14 and 15 years old (65%). The average age for youth suicide in 2020-2021 was 14 years old. Notably, the youngest age ever reported by the CFRP.

The NDCFRP determined all of the homicide and suicide deaths were preventable.

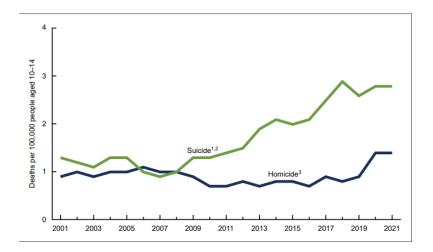
In 2018, suicide deaths increased by 30% and increases were seen in 2019 (18%) and again in 2020 (Table 21). Twelve children died by suicide in 2020, the highest number ever reported by the CFRP. In 2021, there was a decrease, the number of suicides decreased by half, marking the year as the lowest for child suicide since 2008.

Table 21. Child Fatalities by Homicide/Suicide by Year 2012-2020

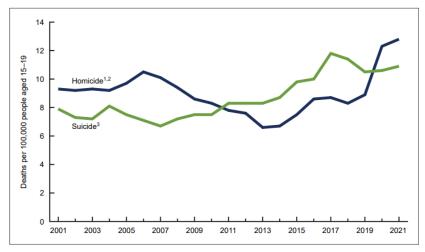
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Suicide	6	6	6	3	6	6	9	11	12	8
Homicide	5	1	1	3	6	0	8	2	5	2

Rate of Suicide Fatalities

According to the CDC, the national suicide rate for children ages 10-14 years tripled from 2007 through 2018 (from 0.9 to 2.9 per 100,000). There were no significant changes through 2021. The national suicide rate for children ages 10-14 years was 2.8 deaths per 100,000 each year.



The suicide rate for those aged 15–19 increased 57% from 2009 through 2017 (from 7.5 deaths per 100,000 to 11.8) and has remained consistent (10.6 per 100,000 in 2020 and 10.9 deaths per 100,000 people in 2021).

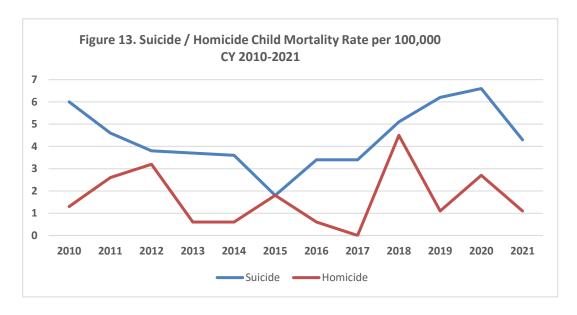


SOURCE

NCHS Data Brief, Number 471, June 2023 (cdc.gov)

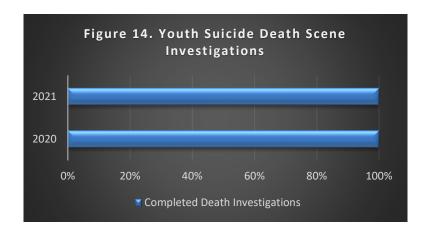
North Dakota's suicide rate for children ages 10-17 years in 2020 was 6.6 deaths per 100,000. Of note, ND reviews the deaths of children up to age 18, thus the child suicide rate comprises children, under the age of 18 years, whereas the national data includes individuals to age 19 years.

In 2021, the suicide rate was 4.3 per 100,000 (Figure 13).



Youth Suicide Death Scene Investigations

Of the 20 child suicide victims in 2020 and 2021, a death scene investigation was completed every time (Figure 14). The investigations varied greatly across the state, in that the CFRP noted 80% of the suicide investigations were missing crucial information to better understand the circumstances of the children's death.



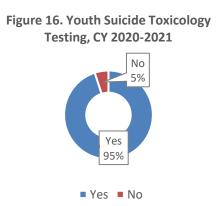
Although the Department of Health and Human Services has created a Suicide Comprehensive Risk Assessment Profile (SCRAP) to be completed by coroners at the scene of a suspected suicide, the SCRAP is not yet consistently utilized by death investigators as an information gathering tool.

Suicide / Autopsy and Toxicological Testing

An autopsy was completed in 70% of the suicide fatalities; 50% in 2020 and 100% in 2021 (Figure 15). Most often the reason for the lack of autopsy was unknown.

Figure 15. Youth Suicide Received an Autopsy, CY 2020-2021

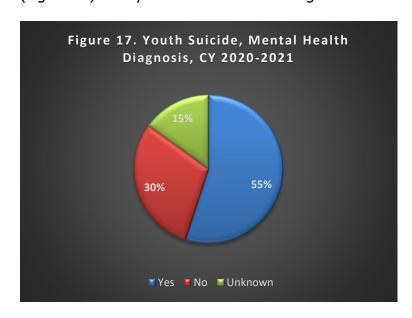
No
30%
Yes
70%



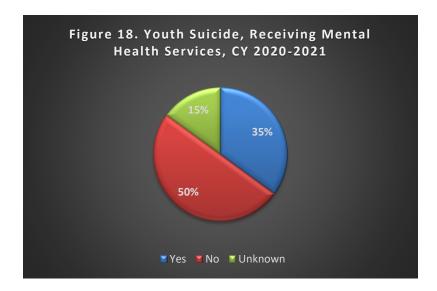
Toxicological testing was completed in 95% of the suicide deaths occurring in 2020-2021 (Figure 16). More than 50% of the toxicology testing results were positive for either alcohol (18%), controlled substance; marijuana (27%), prescription or over the counter medication.

Behavioral Health Services

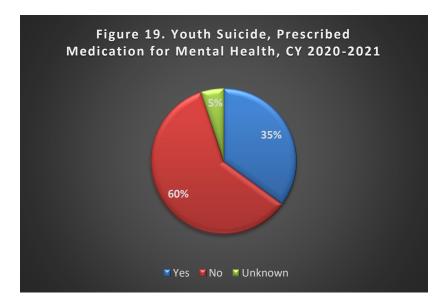
Of the 20 youth that died by suicide in 2020-2021, 55% had a documented mental health diagnosis (i.e. Major Depressive Disorder, Generalized Anxiety Disorder, Mood Disorder) (Figure 17). The youth's mental health diagnosis was unknown in 15% of suicides.



In half of the suicides in 2020-2021, the youth was a recipient of mental health services at the time of their death (Figure 18).

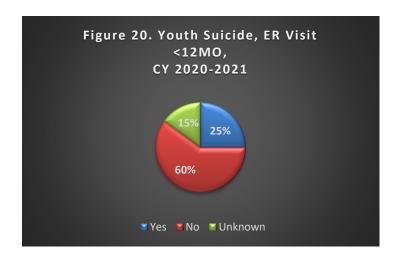


Additionally, 35% of the children were taking prescribed medication for their mental health (Figure 19).

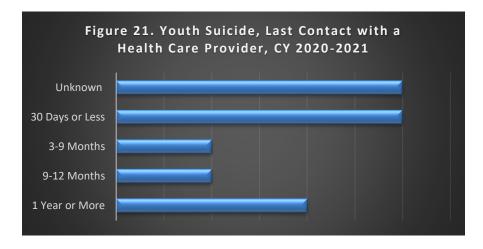


There were issues preventing the youth from receiving mental health services in 45% of the 2020 – 2021 suicides reviewed by the CFRP; these included limited or lack of medical insurance (56%), long wait for appointment / lack of services available in area (56%) and lack of transportation (33%).

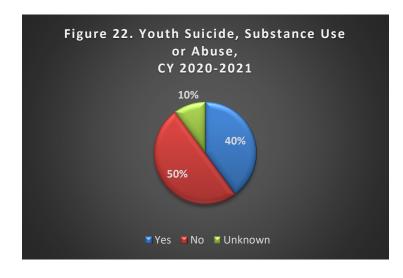
A quarter of the children that died by suicide in 2020-2021 had visited an Emergency Room related to suicidal thoughts and/or behaviors in the 12 months prior to their death (Figure 20). Each of the youth had received inpatient mental health services.



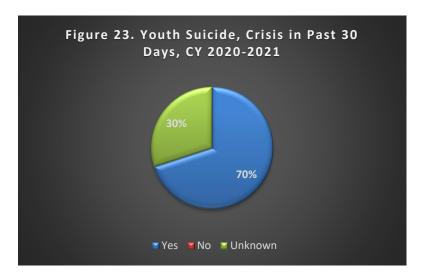
In 30% of the suicide deaths in 2020 and 2021, the youth had been seen by a health care provider the month of their death. While 20% had not seen a medical professional in over a year (Figure 21).



A history of substance use or abuse was indicated for 40% of the youth suicides, most commonly alcohol and marijuana (Figure 22).



The CFRP identified 70% of youth had experienced a crisis within 30 days of their death (Figure 23). This percentage is likely higher, however in 30% of the suicide deaths this factor was unknown as this information was not collected and/or documented in the death investigation record.

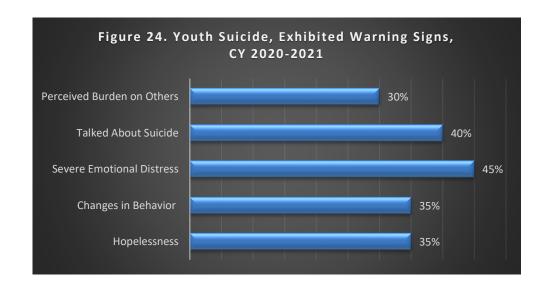


The most commonly identified crisis situations were:

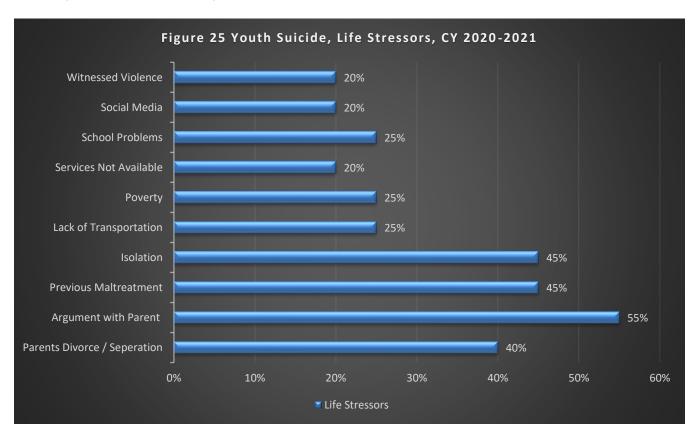
- argument with parent (30%),
- breakup with significant other (30%),
- school suspension (25%)
- removal of access to technology (20%)

The CFRP identified the following warning signs of suicidal behavior that were exhibited by those youth that died by suicide in 2020-2021 within 30 days prior to their death (Figure 24).

- Talked about or made plans for suicide
- Expressed hopelessness about the future
- Displayed severe/overwhelming emotional pain or distress that interfered with daily functioning
- Expressed perceived burden on others; saw themselves as a problem or a drain on those around them
- Showed worrisome behavioral cues or marked changes in behavior; dramatic change
 in behavior such as withdrawal from or change in social connections or situations, changes
 in sleep (increased or decreased), anger or hostility that was out of character,
 or recent mood changes



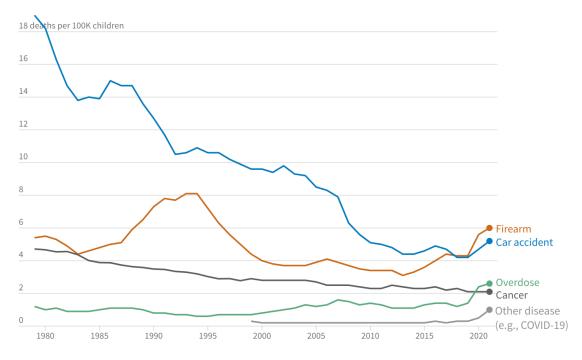
Children can be impacted by factors of their environment. Figure 25 provides the most commonly identified Life Stressors that were present in child death reviews of suicides in 2020-2021. Argument with a parent or caregiver was identified in 55% of these deaths, followed by a history of child abuse and neglect (45%) and isolation (45%); isolation resulting from the COVID-19 pandemic was identified in 25% of the suicide deaths in 2020-2021.



Firearms

According to the CDC, in 2020, firearms surpassed car accidents as the leading cause of death for children and teens ages 1-19 years (Figure 26). Nationally, deaths due to firearm-related injuries, including death by homicide, suicide, or accident made up 20% of all child and teen deaths in 2020 and 2021, the largest proportion in at least four decades.

Figure 26. National Child (1-19 Years) Fatality Rate per 100,000 Children per Cause of Death



Sources: Centers for Disease Control and Prevention

Note: Data shows "Injury mechanisms and all other leading causes." The categorizations of diseases, including the category that eventually would include COVID-19, changed in 1998. Only data categorized via the most recent definition is displayed.

Injury-related deaths shown combine homicide, suicide, and unintentional deaths

USAFACTS

In North Dakota, during 2020 and 2021, there were 16 (17%) child fatalities resulting from gunshot wounds, 11 were suicides (69%), 3 (18.5%) were accidents, and 2 were homicides (12.5%) (Table 22).

Table 22. Child Fatalities by Firearm and Manner of Death

	2020	2021		
Homicide	1	1		
Suicide	7	4		
Accident	1	2		

The firearm used most often was a handgun (11, 69%) followed by a rifle (3, 18.5%) and shotgun (2, 12.5%), (Table23).

Table 23. Type of Firearm Used

	2020	2021
Handgun	8	3
Rifle	1	2
Shotgun	0	2

When a child died as a result of gunshot wounds in 2020 and 2021, the manner in which the firearm was most often stored was unlocked and loaded (38%). In only one death was the firearm locked and unloaded (Table 24).

The storage of the firearm used was unknown to the CFRP in 25% of the suicide deaths as information about where and how the firearm was stored was not gathered by death investigators. The CFRP noted several of the youth had direct access to the firearm and stored the gun in their own bedrooms.

Table 24. Storage of Firearm Used

	2020	2021
Locked / Loaded	1	0
Locked / Unloaded	1	0
Unlocked / Loaded	3	3
Unlocked / Unloaded	3	1
Unknown	1	3

PREVENTABLE DEATHS

The Panel uses the determination of preventability for the identification of systems issues. To the Panel the word preventability does not imply negligence. The Panel looks at what systemic changes can be made to prevent these deaths, for instance changes in policy, practice, and law. Preventable deaths accounted for 73% of the child deaths that occurred in 2020 (67%) and 2021 (80%) and were reviewed by the Panel. Sudden Unexpected Infant Death (SUID) was the leading cause of death for infants in 2020 and accounted for 15% of deaths reviewed by the Panel in 2020/2021. Since these deaths are classified as 'undetermined', the Panel concluded the preventability for all the sudden unexplained infant deaths to be undetermined but did identify extrinsic factors which can increase the risk. A third of the preventable deaths were motor vehicle related (33%), followed by deaths by firearm (23%) (Table 25).

Table 25. Panel Determination of Preventability and Intentionality per Cause, 2020-2021

Table 25. Panel Determination of Preventability and Intentionality per Cause, 2020-2021							
			Pre Intentional	ventable Unintentional	Non- Preventable	Preventability Undetermined	Total
		Abusive Head Trauma	2	0	0	0	2
		Asphyxia	3	2	0	0	5
	_	Drowning	0	3	0	0	3
		Fire / Burns	0	3	0	0	3
	Cause of Death	Firearms	8	1	0	0	9
2020	of	Motor Vehicle	0	9	0	0	9
7	anse	Other Medical	1	0	3	1	5
	Ca	Overdose	3	1	0	0	4
		Starvation	1	0	0	0	1
		SUID	0	0	0	11	11
		Undetermined	0	0	0	3	3
	Cause of Death	Abusive Head Trauma	0	0	0	0	0
		Asphyxia	4	2	0	0	6
		Drowning	0	0	0	0	0
		Fall	1	0	0	0	1
77		Fire / Burns	0	0	0	0	0
2021		Firearms	5	2	0	0	7
		Motor Vehicle	0	14	0	0	14
		Other Medical	0	4	2	2	8
		Overdose	0	0	0	0	0
		SUID	0	0	0	3	3
		Undetermined	0	0	0	1	1

CHILD ABUSE AND NEGLECT DEATHS AND NEAR DEATHS

According to 50-25.1-04.5 the annual report involving child abuse and neglect deaths and near deaths must include the following: the cause of and circumstances regarding the death or near death; the age and gender of the child; information describing any previous child abuse and neglect reports or assessments that pertain to the child abuse or neglect that led to the death or near death; the result of any such assessments; and the services provided in accordance with section 50-25.1-06, unless disclosure is otherwise prohibited by law.

Deaths due to Child Abuse and Neglect

There were four child maltreatment fatalities in 2020 and three in 2021.

2020

A fifteen-year-old male died of Homicide; the cause of his death was a perforating gunshot wound of the torso. There were two previous reports of child abuse and neglect that pertained to the death. A report of child abuse and neglect was received as a result of the youth's death. An assessment determination of "Services Required" was made for fatal abuse. Foster care case management, safety planning and mental health services were provided.

A female neonate died while sleeping on a recliner chair. The cause and manner of death were Undetermined. There was one prior report of child abuse and neglect that pertained to the death. Two reports of child abuse and neglect were received as a result of the baby's death. An assessment determination of "Services Required" was made for fatal neglect. In-home case management, safety planning, and behavioral health services were provided.

A one-year-old female died due to complications of Blunt Force Injuries of the head, trunk, and extremities and the death was classified as Homicide. There were three prior reports of child abuse and neglect that pertained to the death. Four reports of child abuse and neglect were received as a result of the toddler's death. An assessment determination of "Services Required" was made for fatal abuse. Foster care case management services were provided.

A five-month-old male died due to Asphyxia as a consequence of airway obstruction by adult bedding. The death was classified as an Accident. There were no previous reports of child abuse and neglect that pertained to the death. A report of child abuse and neglect was received as a result of the infant's death. An assessment determination of "Services Required" was made for fatal neglect. In-home case management, kinship, safety planning services were provided.

2021

A male newborn died from Extreme Prematurity and the manner of death was classified as Natural. There were four previous reports of child abuse and neglect that pertained to the death. A report of child abuse and neglect was received as a result of neonate's death. An assessment determination of "Confirmed" was made for fatal neglect. Foster care case management and adoption services were provided.

A female neonate died from Failure to Thrive as a consequence of Fetal Alcohol Spectrum Disorder. The manner of death was classified as Undetermined. There were four previous reports of child abuse and neglect that pertained to the death. One report of child abuse and neglect was received as a result of the child's death. An assessment determination of "Confirmed" was made for fatal neglect. No services were offered or provided.

A one-year-old male died of Hanging and the manner of death was classified as Accident. There were two previous reports of child abuse and neglect that pertained to the death. One report of child abuse and neglect was received as a result of the child's death. An assessment determination of "Confirmed" was made for fatal neglect. In-home case management, foster care, and parent aide services were provided.

Near Deaths due to Child Abuse and Neglect

In 2020, Child Protection Services determined five(5) children were near death resulting from child abuse and neglect, and there were seven(7) children with this determination in 2021.

2020

A two-month-old female presented to the hospital with multisystem trauma, including subdural hematomas, a fractured leg, and retinal hemorrhages. There were no previous reports of child abuse and neglect that pertained to the near death. A report of child abuse and neglect was received regarding the near death. An assessment determination of this report was "Services Required" for physical abuse. Foster care case management, in-home case management, Developmental Disabilities program management, infant development services, transportation assistance, behavioral health, parenting education, and parent aide services were provided.

A one-month-old male presented to the hospital with multiple cerebral hemorrhages, spinal ligament injury and retinal hemorrhages. There were no previous reports of child abuse and neglect that pertained to the near death. A report of child abuse and neglect was received regarding the near death. An assessment determination of this report was "Services Required" for physical abuse. In-home case management, infant development services, and parenting education services were provided.

A fourteen-year-old male overdosed from medication containing opiates. There was one previous report of child abuse and neglect that pertained to the near death. Three reports of child abuse and neglect were received regarding the near death. An assessment determination of this report was "Services Required" for neglect; failure to protect. In-home case management services and a family centered engagement meeting were provided.

A three-month-old female presented to the hospital with seizures. Imaging revealed bilateral brain bleeds, a skull fracture, rib fractures, neck ligament injury and retinal hemorrhages. There were no previous reports of child abuse and neglect that pertained to the near death. Three reports of child abuse and neglect were received regarding the near death. An assessment determination of this report was "Services Required" for physical abuse and medical neglect. Foster care and in-home case management services, supervised visitation, infant development services, Developmental Disabilities program management, parent aide services, parental capacity, behavioral health, and parenting education services were provided.

A three-month-old male presented to the hospital with a skull fracture and subdural hematomas resulting from non-accidental head trauma. There were no previous reports of child abuse and neglect that pertained to the near death. Four reports of child abuse and neglect were received regarding the near death. An assessment determination of these reports was "Services Required" for physical abuse. In-home case management, safety planning, parental capacity, parenting education, behavioral health and infant development services were provided.

2021

A nine-month-old male went unresponsive and was brought to the hospital. Respiratory distress and near fatality resulting from marijuana (THC) toxicity. There was one previous report of child abuse and neglect that pertained to the near death. One report of child abuse and neglect was received regarding the near death. An assessment determination of the report was "Services Required" for neglect, environmental exposure to a controlled substance. Infant development services were provided.

A twenty-two-month-old female was brought to the hospital unresponsive and without a pulse. She was resuscitated and testing revealed she had ingested a toxic amount of unattended prescription medication. There were six previous reports of child abuse and neglect that pertained to the near death. Two reports of child abuse and neglect were received regarding the near death. An assessment determination of these reports was "Services Required" for medical neglect. Foster care case management, in-home case management, safety planning, supervised visitation, parental capacity, parenting education, infant development, respite care, behavioral health and adoption services were provided.

A four-year-old male was admitted to the hospital with internal bleeding, broken ribs, brain bleeds, and injuries consistent with blunt force trauma. There were three previous reports of child abuse and neglect that pertained to the near death. Seven reports of child abuse and neglect were received regarding the child's injuries and near death. An assessment determination of these reports was "Services Required" for physical abuse. Services provided included foster care case management, in-home case management, Developmental Disabilities program management, child developmental services, parental capacity, behavioral health, supervised visitation, and parenting education services.

A three-month-old male was brought to the hospital unresponsive and seizing following an episode of airway obstruction resulting from an unsafe sleeping environment. There were seven prior reports of child abuse and neglect that pertained to the near death. Two reports of child abuse and neglect were received regarding the near death. An assessment determination of these reports was "Services Required" for neglect, inadequate supervision. Foster care case management, in-home case management, parenting education, parent aide, supervised visitation, infant development, home visiting, parental capacity, and behavioral health services were provided.

A ten-month-old male went unresponsive and was brought to the hospital. His numerous injuries included brain bleeds, neck artery dissection, retinal hemorrhages, bruises, and contusions consistent with being violently shaken and abusive head trauma. There were no previous reports of child abuse and neglect that pertained to the near death. One report of child abuse and neglect was received regarding the near death. An assessment determination of the report was "Confirmed" for physical abuse and neglect; failure to protect. Foster care case management, in-home case management, infant developmental disabilities services, Developmental Disabilities program management, supervised visitation, parental capacity, behavioral health, and parenting education services were provided.

A five-month-old female presented to the hospital with an altered level of consciousness. Bilateral subdural hematomas, a neck ligament sprain and bruises were consistent with non-accidental head trauma and being shaken. There were two previous reports of child abuse and neglect received that pertained to the near death. Eight reports of child abuse and neglect were received regarding the near death. An assessment determination of these reports was "Confirmed" for physical abuse and medical neglect. Infant development services were provided.

A five-month-old female was brought to the hospital for seizures. Imaging revealed skull fractures and a broken leg. There was one previous report of child abuse and neglect that pertained to the near death. Three reports of child abuse and neglect were received regarding the near death. An assessment determination of this report was "Confirmed" for physical abuse. Foster care case management, in-home case management, supervised visitation, infant development services, parental capacity, behavioral health and parenting education services were provided.

CONTINUED EFFORTS

Many child deaths are preventable, and every citizen can play a role in reducing child fatalities.

The majority of child deaths occurring in 2020 and 2021 reviewed by the Panel were preventable. In 2020, Sudden Unexplained Infant Death claimed the largest number of North Dakota children. While SUID preventability is considered undetermined, there are extrinsic factors, such as placing an infant on an adult bed, sleep surface sharing, the use of blankets and pillows in the sleeping area, and placing an infant to sleep on their stomach, that increase the risk. As these risk factors are eliminated, the number of sudden unexpected infant deaths decline. Infant safe sleep education, resources, and tools in the hands of parents, childcare providers and family caregivers has the potential to impact the number of infant deaths in the state. A vast majority of the preventable child deaths are motor vehicle related deaths. Societal issues such as excessive speed, alcohol and drug involvement, distracted driving, and failure to use seat belts and safety restraints as intended contributed to the vehicle related deaths in 2020-2021. Issues such as young drivers operating recreational vehicles, adolescent drinking and driving and lack of seatbelt were noted. Effective social marketing and education focused on injury prevention, safety concepts and role modeling safe driving practices may positively benefit parents and North Dakota youth.

The number of child suicide deaths in the state is concerning and the age of the youth are notably younger than in the past. Each death highlights the need for continued education and prevention. This includes statewide promotion and awareness of 988, the suicide and crisis lifeline, call text or chat for crisis intervention and suicide prevention. Strategies for prevention include education and resources for medical providers, law enforcement, school personnel, parents, friends, and family members of children on the signs and symptoms of depression, the risk factors and warning signs for suicide, and the factors that may protect youth from suicide. This education must include information on how to access community mental health resources and what to do if someone is concerned. Suicide prevention should begin in elementary school as waiting until high school or even middle school is too late. The increasing number of fatalities by firearm and the manner in which the weapon was stored also highlights an opportunity for prevention regarding youth's access to lethal means, especially when experiencing suicidal thoughts, feelings, or behaviors.

The Panel, with interagency support, must continue to find a way to promote increased cooperation and access to records across all jurisdictions.

The Panel's ability to access relevant records for review remained a challenge in 2020 and 2021. In 20% of the cases in which the Panel requested information from the appropriate agencies, their requests went unheeded. Progress has been made within regards to this effort and continues with increased cooperation.

North Dakota law (NDCC 50-25.1-04.4) provides that, 'Upon the request of a coroner or the presiding officer of a CFRP, any hospital, physician, medical professional, medical facility, mental health professional, mental health facility, school counselor, or division of juvenile services employee shall disclose all records of that entity with respect to any child who has or is eligible to receive a certificate of live birth and who has died'. This statute also states, 'All law enforcement officials, courts of competent jurisdiction, and appropriate state agencies shall cooperate in fulfillment of the purposes of this chapter' (NDCC 50-25.1-12).

Regardless of these mandates, information is too often not forthcoming in response to Panel requests. When this occurs, the Panel's statutory mandate to "review the deaths of all minors which occurred in the state during the preceding six months and to identify trends or patterns in the deaths of minors" (NDCC 50-25.1-04.3) is hindered. The Panel has no investigatory authority of its own and is completely dependent on the work and cooperation of the agencies with this authority.

There are also other entities such as the Federal Bureau of Investigation, the Bureau of Indian Affairs, and tribal entities that are outside the jurisdiction of state statutes. These entities possess detailed and valuable information about a given child, whose records are not addressed in state law. If not provided by request, these records remain inaccessible to the Panel.

The Panel continues to strive to ensure all child deaths receive a thorough and comprehensive investigation.

Even though there has been an observable increase in the quality of scene investigation in cases of infant death since the inception of the Panel, the Panel continues to be concerned about the quality of all child death scene investigations. Many child death investigations do not include interviews with the parents and others who live in the home or who were present in the home at the time of the death.

The investigations of some child deaths continue to be minimal. Investigations do not always explore circumstances leading up to the death or are not comprehensive enough to uncover information vital to identifying the cause and manner of death or in identifying risk factors and formulating effective interventions. The thoroughness of child death investigations varies greatly. Information regarding the child and family history, alcohol and drug use, mental health issues, domestic violence and other such issues are vital to understanding the circumstances surrounding the deaths of children and for planning to prevent future deaths, yet this is the very information that is often not gathered or not recorded in an investigation.

The Panel has become concerned that child victims of vehicle fatalities and suicides, including deaths by firearm are not always identified as a coroner case and as a result an autopsy is not performed.

According to state law, any person who acquires first knowledge of the death of any minor, when the minor died suddenly when in apparent good health, shall immediately notify law enforcement and the office of coroner of the known facts concerning the time, place, manner, and circumstances of the death (NDCC 11-19.1-07).

There were 13 deaths in 2020-2021 that were classified as either 'accident' or 'suicide by firearm' and did not receive an autopsy.

The Panel will continue to promote increased statewide quality of child death investigations and interagency communication.