MAGGIE ANDERSON, EXECUTIVE DIRECTOR

NORTH DAKOTA CHILD FATALITY REVIEW PANEL (CFRP)

ANNUAL REPORT

2010 & 2011

(With historical data 2000-2011)

January 2014

CHILDREN AND FAMILY SERVICES DIVISION
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THE NORTH DAKOTA CHILD FATALITY REVIEW PANEL

Child Deaths in North Dakota, CY 2010 & 2011

	2010	2011
Total Child Deaths	93	95
Deaths that are not unexpected (i.e., long term illness) and/or deaths due to natural causes	40	42
Deaths that are sudden, unexpected, or unexplained	53	53
The 'death-causing' event occurs outside of North Dakota	5	3
In-State Child Deaths (in-Depth Reviews)	**48**	**50**

History

The North Dakota Child Fatality Review Panel (CFRP) was established by North Dakota Century Code (NDCC) 50-25.1 and began reviewing child deaths in 1996. The CFRP's charge is to "protect the health and welfare of children by identifying the cause of children's deaths, when possible; the 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."

According to NDCC 50-25.1-04.3, the Panel is to 'meet at least semiannually 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.' More in-depth reviews are conducted on child deaths in the state that were sudden, unexpected, or unexplained. The CFRP met quarterly in 2010 & 2011.

The annual report of the North Dakota CFRP is mandated by statute (NDCC 50-25-04.5) to report the following on child abuse and neglect deaths:

> **50-25.1-04.5. CFRP - Confidentiality of meetings, documentation, and reports.**
> 1. Notwithstanding section 44-04-19, all meetings of the panel are closed to the public. Notwithstanding section 44-04-18, all documentation and reports of the panel are confidential, except for annual reports. The annual report involving child abuse and neglect deaths and near deaths must include the following:
>
> a. The cause of and circumstances regarding the death or near death;
> b. The age and gender of the child;
> c. 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;
> d. The result of any such assessments; and
> e. The services provided in accordance with section 50-25.1-06, unless disclosure is otherwise prohibited by law.

2. The panel shall make available to the persons designated in section 50-25.1-11 the documentation and reports of the panel. The Panel presents all of these issues to the public for attention through this report.

50-25.1-11. Confidentiality of records - Authorized disclosures.

1. A report made under this chapter, as well as any other information obtained, is confidential and must be made available to:

a. A physician who has before the physician a child whom the physician reasonably suspects may have been abused or neglected.
b. A person who is authorized to place a child in protective custody and has before the person a child whom the person reasonably suspects may have been abused or neglected and the person requires the information to determine whether to place the child in protective custody.
c. Authorized staff of the department and its authorized agents, children's advocacy centers, and appropriate state and local child protection team members, and citizen review committee members.
d. Any person who is the subject of the report; provided, however, that the identity of persons reporting or supplying information under this chapter is protected until the information is needed for use in an administrative proceeding arising out of the report.
e. Public officials and their authorized agents who require the information in connection with the discharge of their official duties.
f. A court, including an administrative hearing office, whenever the court determines that the information is necessary for the determination of an issue before the court.
g. A person engaged in a bona fide research purpose approved by the department's institutional review board; provided, however, that no individually identifiable information as defined in section 50-06-15 is made available to the researcher unless the information is absolutely essential to the research purpose and the department gives prior approval.
h. A person who is identified in subsection 1 of section 50-25.1-03, and who has made a report of suspected child abuse or neglect, if the child is likely to or continues to come before the reporter in the reporter's official or professional capacity.
i. A parent or a legally appointed guardian of the child identified in the report as suspected of being, or having been, abused or neglected, provided the identity of persons making the report or supplying information under this chapter is protected. Unless the information is confidential under section 44-04-18.7, when a decision is made under section 50-25.1-05.1 that services are required to provide for the protection and treatment of an abused or neglected child, the department shall make a good-faith effort to provide written notice of the decision to persons identified in this subsection. The department shall consider any known domestic violence when providing notification under this section.

Purpose

The North Dakota CFRP 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.

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.

Duties

The following duties are assigned to the North Dakota CFRP by state law.

50-25.1-04.3. CFRP - Duties

The panel shall promote:

1. Interagency communication for the management of child death cases and for the management of future nonfatal cases.
2. Effective criminal, civil, and social intervention for families with fatalities.
3. Intervention and counseling of surviving and at-risk siblings, and offer the same.
4. Interagency use of cases to audit the total health and social service systems and to minimize misclassification of cause of death.
5. Evaluation of the impact of specific risk factors including substance abuse, domestic violence, and prior child abuse.
6. Interagency services to high-risk families.
7. Data collection for surveillance of deaths and the study of categories of causes of death.
8. The use of media to educate the public about child abuse prevention.
9. Inter-county and interstate communications regarding child death.
10. Use of local child protection team members as local child fatality review panelists.
11. Information that apprises a parent or guardian of the parent's or guardian's rights and the procedures taken after the death of a child.

75-03-19.1-03. Duties.

1. The panel shall review death certificates of all children whose deaths occurred in North Dakota. Deaths of children which are sudden, unexpected, or unexplained shall receive an in depth review.
2. The department of human services and the state department of health shall collaborate in the review of child deaths. The vital records division of the state department of health shall provide death certificates for children under the age of eighteen to the panel.
3. The panel shall provide an in depth review of child deaths identified on the death certificate as:
    a. Accident;
    b. Suicide;
    c. Homicide;
    d. Natural; or
    e. Could not be determined.
4. When a child's manner of death is identified as "natural" or no manner of death is identified on the death certificate, the panel will determine whether the cause or condition of death was sudden, unexpected, or unexplained.
5. The panel shall review only the death certificate when a child's death is identified as "natural" and does not fall within the criteria identified in 2 subsection 4, unless a panel member specifically requests an in depth review.
6. A decision reached by the panel represents the consensus of the panel, but not necessarily the opinion of an individual member. A decision of the panel may not be considered as an expert opinion in a criminal or civil case.

Goals

Duties of the CFRP include:

- To promote the accurate identification and documentation of the cause of every child death.

- To promote the identification of social and family circumstances which contribute to child deaths.
- To promote the identification of public health issues related to child deaths.
- To promote training for agencies and individuals who share a responsibility in responding to a child death.
- To promote interagency communication for the management of child death cases and for the management of future nonfatal cases.
- To promote effective criminal, civil, and social intervention for families with fatalities.
- To promote and to provide intervention and counseling of surviving and at-risk siblings.
- To promote interagency use of cases to audit the total health and human service systems.
- To minimize misclassification of cause of death.
- To promote evaluation of the impact of specific risk factors including substance abuse, domestic violence, and prior child abuse on child fatalities.
- To promote interagency services to high risk families.
- To provide data collection for surveillance of deaths and the study of categories of causes of death.
- To promote the use of media to educate the public about child abuse prevention.
- To promote inter-county and interstate communications regarding child deaths.
- To promote the use of local child protection team members as local child fatality review panels.
- To promote the provision of information that apprises a parent or guardian of the procedures taken after the death of a child.

Strategies

Strategies have been identified in North Dakota, and nationally, that will improve reporting of child deaths, death certification, and training for professionals responding to child fatalities. The following are areas of strategy development:

1. Law Enforcement – Support uniform child death scene investigation protocols.
2. State Forensic Examiner/Coroners – Improve access to technical assistance, and thorough autopsies on all child deaths.

3. Public Health – Implement primary prevention programs focused on education and awareness campaigns such as 'Back to Sleep,' and 'Never Shake a Baby;' and safety programs for firearms, seat belts, child restraint, child abuse prevention; and fire and poison prevention.
4. Social and Mental Health Services – Provide supportive services for surviving family members and communities.

General Procedures and Release of information

The North Dakota Department of Health provides vital statistic records for each child who has died in North Dakota. North Dakota Century Code Health Statistics Act (NDCC 23-02.1) allows for the release of a certified copy of the complete death record to the CFRP (23-02.1-27 'Disclosure of records').

The CFRP Presiding Officer is allowed under NDCC 50-25.1-04.4 to request and receive records from any hospital, physician, medical professional, medical facility, mental health professional, mental health facility, law enforcement or social services. These entities are required to disclose all records requested by the CFRP.

Case specific information is requested by the presiding officer and prepared for review by the Administrator of the CFRP. The CFRP meets quarterly. The compiled case information is presented to Panel members for discussion. 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. A data form is maintained for each case reviewed by the Panel to document the findings and recommendations. This data form is used in compiling non-identifying, death related information that serves as the basis for this annual report. 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 CFRP 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.

Panel Membership

The CFRP 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

CFRP 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 improve agency and community responses to child deaths and to identify prevention initiatives.

Members of the State Child Protection Team serve as the core members of the CFRP. The core members include:

- designee of the Department of Human Services who serves as the presiding officer,
- representative of a child placing agency,
- representative of the North Dakota Department of Health,

- representative of the North Dakota Attorney General's Office,
- representative of the North Dakota Department of Public Instruction,
- representative of the North Dakota Department of Corrections, and
- representative of the lay community.

Other appointed members include:

- the State Forensic Medical Examiner,
- a North Dakota licensed peace officer,
- a mental health professional,
- a physician,
- a representative of North Dakota Injury Prevention, Department of Health,
- a representative of Emergency Medical Services, Department of Health, and
- consultants invited to assist in review of specific cases.

Panel Members

Marlys Baker – CFRP Presiding Officer
Child Protection Services, ND Department of Human Services

Tracy Miller – CFRP Administrator
Children and Family Services, ND Department of Human Services

Dr. Terry Dwelle, State Health Officer
ND Department of Health

Dr. William Massello, State Forensic Medical Examiner
ND Department of Health

Kathey Wilson
Indian Health Services

Diana Read, Injury Prevention
ND Department of Health

JoAnne Hoesel, Director MHSAS
ND Department of Human Services

Jonathan Byers, Assistant Attorney General
ND Attorney General's Office

Tom Dahl
ND Bureau of Criminal Investigation

Dr. Ron H. Miller
MeritCare Children's Hospital

Shelly Arnold - Emergency Medical Services
Trauma Services – MedCenter One

Dr. Gordon Leingang - Emergency Trauma
St. Alexius Medical Center

Dr. Mary Ann Sens, Department of Pathology
UND School of Medicine and Health Services

Steve Kukowski, Sheriff
Ward County

Carol Meidinger, Citizen member

CPT Lisa Bjergaard, Director
Division of Juvenile Justice

CPT Karen Eisenhardt, Educator
State Child Protection Team , Citizen member

CPT Carla Pine
State Child Protection Team, Citizen member

CPT Alison Dollar, Special Education
ND Department of Public Instruction

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, annual reports are delayed due to a pending criminal investigation regarding a death. An exception has been made with this report. This report does not include 3 cases from 2011 due to pending investigations. Ttherefore, they have not been reviewed.

Collapsing and Suppressing Data

Annual counts for child fatalities by manner of death, age, gender, race and other identifying information are consistently low. With counts so low and margin of errors high, trends cannot be established. The descriptive data in this report are offered for two time periods. The first is the 12-year period, 2000-2011, and the second covers the annual counts for 2010 and 2011. Even with 12 years of information, data had to be collapsed in some cases. In combining the 2010 and 2011 data, the detail of information could be somewhat better than by individual years. For individual years, most data would need to be suppressed due to such low counts (fewer than 10).

Caution Regarding Data Interpretation

Throughout this report the data shows relatively small numbers. Caution should be used when interpreting or representing the data. Small numbers that are standardized as percentages may be viewed as a table (small numbers) and a figure (%s). Considering both the number and percent will ensure a more accurate interpretation of the data.

Case Status

Each death certificate received from the Department of Health is reviewed by a CFRP subcommittee. Each death is identified as a Status A case or a Status B case (Table 1). Status A cases 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 in this report.

Table 1. Child Deaths by Status, CY 2010, 2011

	2010	2011
Status A	53	53
Status B	40	42
Total	93	95

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 CFRP 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 (Table 2). Child deaths with North Dakota death certificates are considered in-state child deaths and are reviewed by the CFRP. Compared to the 43 child deaths reviewed in 2009, the number of in-state sudden, unexpected, or unexplained deaths increased to 48 (11.6%) in 2010 and to 50 (16.3%) in 2011 (Table 2).

Table 2. Status 'A' Child Deaths by In- and Out-of-State, CY 2010 & 2011

	2010	2011
In-State	53	53
Out-of-State	5	3
Total	48	50

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

North Dakota Death Certificates list the following five manners of death:

1. Natural;
2. Accident;
3. Suicide;
4. Homicide; or
5. Could Not Be Determined.

From 2000 to 2011, about 34.7% of child deaths were natural and 32.7% were accidents. Of the deaths that received an in-depth review, those attributed to suicide, homicide, or 'could not be determined' accounted for 32.7% of the child deaths.

There were no deaths reclassified by the Panel in 2010. In 2011, the Panel reclassified 4 deaths, changing each of them from SIDS to 'could not be determined.'

Unintentional injury deaths are commonly referred to as 'accidents,' both by the general public and by manner of death as recorded on death certificates. However, the term 'accident' implies that the fatal injury/event could not have been prevented. Therefore, the CFRP prefers the term 'unintentional injury' to replace the term 'accident' because child deaths in this category are predictable, understandable, and preventable.

Cause of Death in Cases that Received an In-Depth Review (2000-2011)

In the years 2000-2011, the highest number and percentage of child fatalities with in-depth reviews were motor vehicle accidents (174, 46%), followed by SIDS (90, 24%) (Figure 1 and Table 3). Suicide and homicide child deaths accounted for 22% (84) of those reviewed.

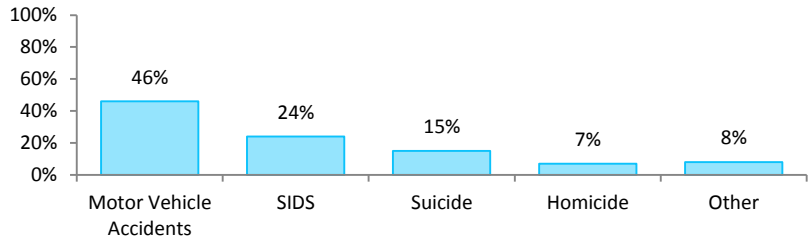


Figure 1. Five-Year Percentages of Cause of Death in 210 Child Fatalities Receiving In-Depth Reviews, 2007-2011

Table 3. Twelve Year Count of Cause of Death in 216 Child Fatalities Receiving In-Depth Reviews, 2000-2011

Motor Vehicle Accident	SIDS	Suicide	Homicide	Other
174	90	57	27	30

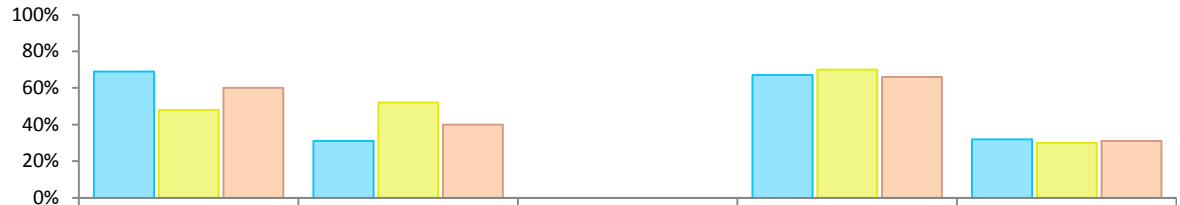
Gender and Race of Child in Cases that Received an In-Depth Review (2010 & 2011; and 2000-2011)

The child population in North Dakota is evenly matched with half male (49.9%) and half female (50.1%) (U.S. Census Current Population Survey, Annual Social and Economic Supplement). The number and percent of male (33, 68.8%) child fatalities reviews in 2010 was more than double that of females (15, 31.6%). In 2011 child fatalities reviewed were close to even for males (24, 48.0%) and females (26, 52.0%) (Table 4).

Table 4. Number of Child Deaths by Gender and Race in Child Fatality Cases that Received an In-Depth Review, CY 2010 & 2011

	2010	2011	2000-2011
Male	33	24	300
Female	15	26	204
White	32	35	335
American Indian	15	15	158

About one in 12 (8.5%) of children in North Dakota are American Indian. They are over-represented in the child deaths in North Dakota. In 2010 and 2011, and from 2000-2011, about one in three child fatality deaths that received in-depth reviews were American Indian (Figure 2).



	Male	Female		White	American Indian
2010	69%	31%		67%	32%
2011	48%	52%		70%	30%
2000-2011	60%	40%		66%	31%

Figure 2. Gender and Race of Child Deaths in Child Fatality Cases that Received an In-Depth Review, CY 2010 & 2011; and 2000-2011

Age of Child in Cases that Received an In-Depth Review (2000-2011)

- About 38% of child deaths occurred in the very young ages 0 to 2, and about 37% occurred in older youth ages 15 to 17 (Figure 3).
- Combined, the youngest and oldest accounted for 75% of all child fatalities receiving in-depth reviews.

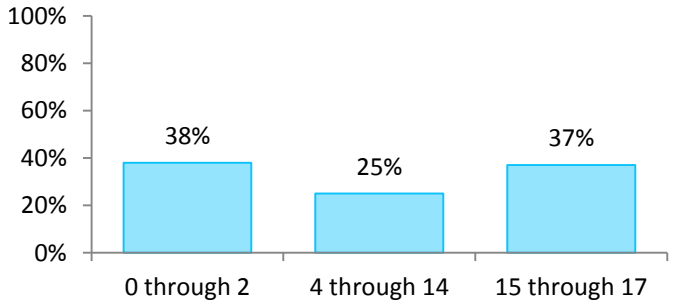


Figure 3. Deaths in Child Fatality Cases that Received an In-Depth Review, by Age Group, CY 2000-2011

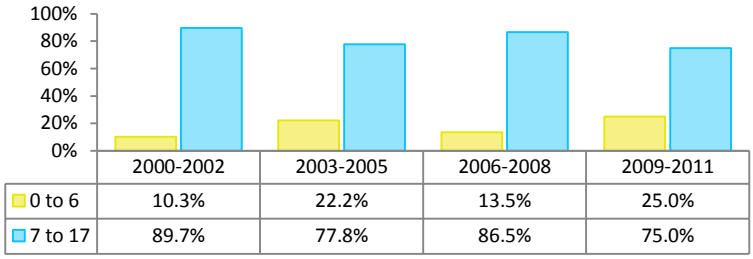
UNINTENTIONAL CHILD FATALITIES

VEHICULAR CHILD FATALITIES (Unintentional)

History of Child Fatalities from Motor Vehicle Accidents (2000-2011)[1]

There were 174 vehicular child fatalities from 2000 through 2011. There were 35 vehicular child fatalities for children ages 0-6 and 139 for youth ages 7-17.

The range of deaths for children ages 0-6 was 1 to 5 deaths per year. Youth ages 7-17 deaths ranged from 8 to 24 deaths per year. Excluding an outlying year with 24 deaths, the number of deaths for youth ages 7-17 hovered around 10 (8 to 14). It is unrealistic, due to small numbers and fluctuations of deaths by year to discern a noticeable trend. Figure 4 shows percent of deaths by 3-year groups.



	2000-2002	2003-2005	2006-2008	2009-2011
0 to 6	10.3%	22.2%	13.5%	25.0%
7 to 17	89.7%	77.8%	86.5%	75.0%

Figure 4. The Percent of Child Fatalities from Motor Vehicle Accidents for Age Groups 0 – 6 and 7 – 17, by Three-Year Groups, 2000 to 2011

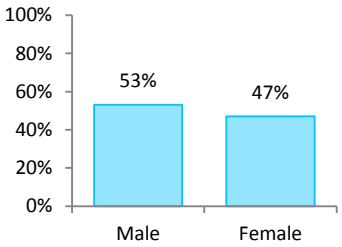


Figure 5. Percent of Total Vehicular Child Fatalities for Years 2000-2011, by Gender

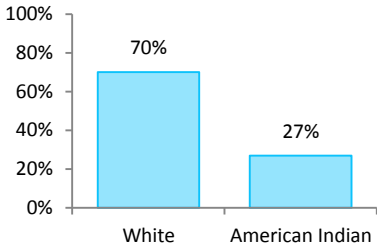


Figure 6 . Percent of Total Vehicular Child Fatalities for Years 2000-2011, by Race

During the 12-year period, the number of male to female victims was close to a ratio of 1 to 1 (Figure 5). About 1 in 3 victims (27%) were American Indian (Figure 6). American Indians are vastly over represented in vehicular child fatalities. In the North Dakota, about 8.5% of children are American Indian.

On average for years 2000-2011, the number of child fatalities for ages 7-17 was almost 6 times higher than the average for ages 0-6. In 24 (55.9%) of the 35 child fatalities ages 0-6 due to MVAs, the child was a passenger in a vehicle (car, pickup, van, SUV). Fifteen included accidents on ATVs, bikes and getting run over/pedestrian.

Of 24 fatalities where the child ages 0-6 was a passenger in a moving vehicle (car, pickup, van, SUV):

- 54% (13) were ejected from the vehicle;
- 21% (5) were known to have been restrained in a child safety seat, 2 were ejected;
- 42% (10) were not restrained, 7 were ejected; and
- 21% (5) safety restraints, unknown, 2 were ejected.

[1] MVA data also include non-motorized vehicles such as bicycles and skateboards. It also includes pedestrians.

Table 5 and Figure 7 show patterns to time of day and MVA child fatalities. Late afternoon and evening hours have the most. About 46% (77) occur from 3:00 p.m. to 10:00 p.m. About 51% (37) with victims as drivers occurred during the same time period.

Table 5. All MVA Fatalities and Victim as Driver Fatalities by Time of Day 2000-2011				
	All MVAs		Victim Driver	
	Number	Percent	Number	Percent
Morning (6:00 a.m. to noon)	36	22%	13	18%
Afternoon (noon to 6:00 p.m.)	54	33%	28	38%
Evening (6:00 p.m. to 10:00 p.m.)	41	25%	17	23%
Night (10:00 p.m. to 6:00 a.m.)	35	21%	15	21%
TOTAL	166	100%	73	100%

All MVAs

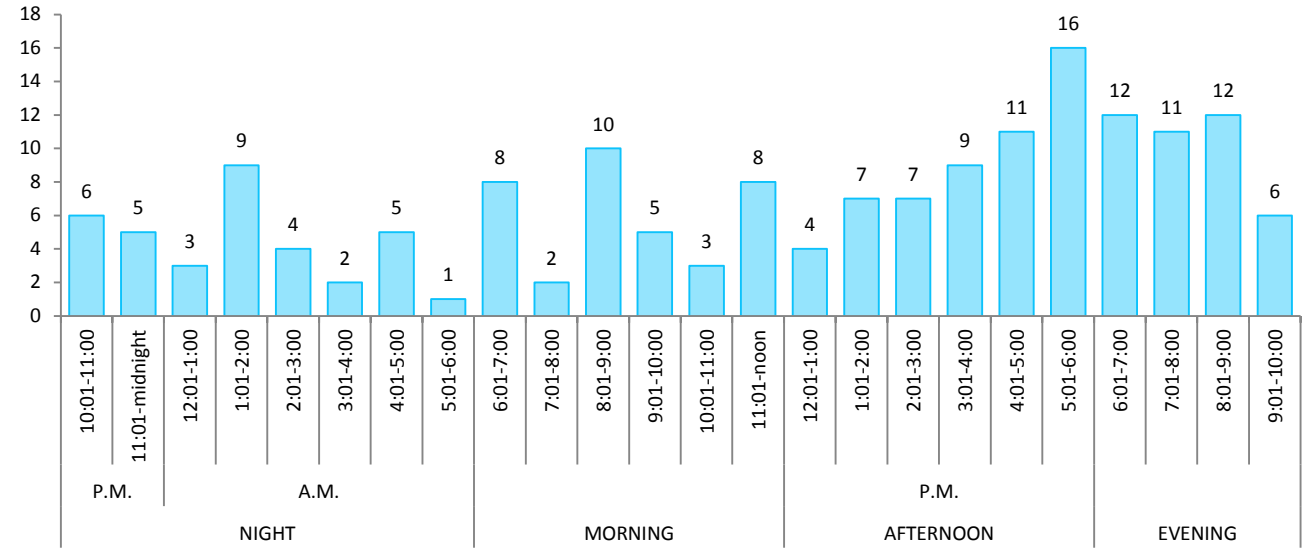


Figure 7. All MVA Fatalities by Time of Day 2000-2011

Victim as Driver

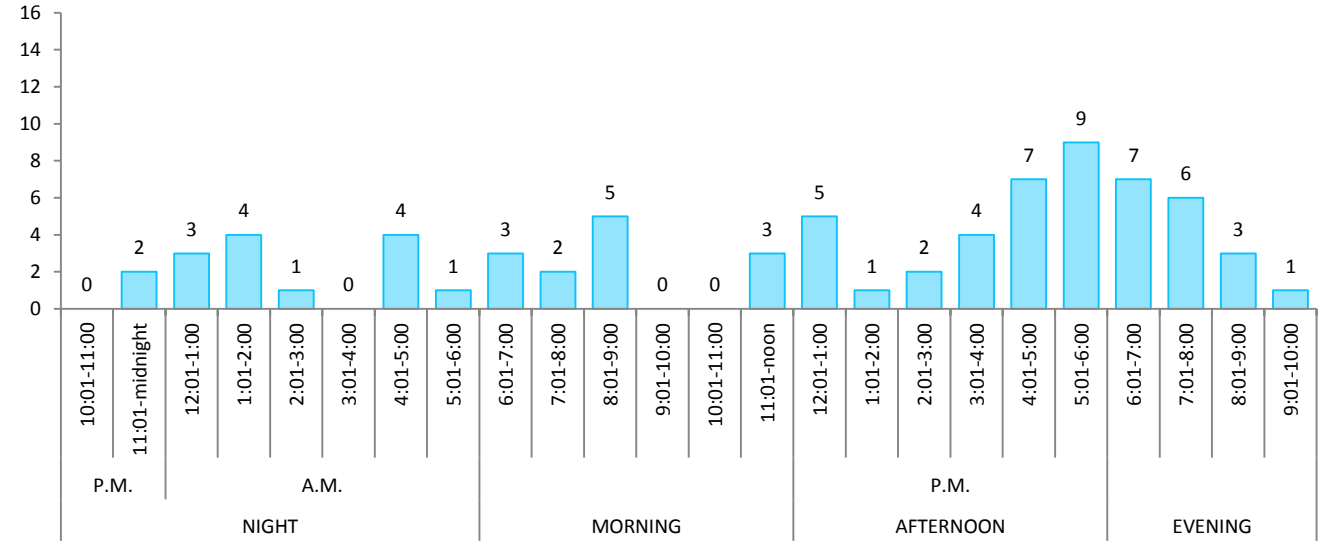


Figure 8. MVA Fatalities with Victim as Driver 2000-2011

Since 2000, 38 of the 176 MVA child fatalities occurred where the victim was not a passenger or driver in a car or truck.

- 12 involved ATVs: the child lost control, hit a car, or was ATV trick driving;
- 14 occurred when the child was run over or struck by a vehicle: the child not seen in the vicinity of the vehicle or as a pedestrian being hit by a vehicle; and
- 12 occurred when a child was riding bike, motorcycles, snowmobiles or the child fell off a moving vehicle.

Seat Belts/Safety Restraints

Of the child death reviews known use of seat belts/safety restraints is quite low at 4.4% (6). The total number of unknown seat belt/safety restraint use is quite high (83, 61.5%).

- A total of 74 (55%) ejections occurred in 135 fatalities
- It was noted that in 32 (24%) of the 135 cases, the child had been in a seat belt or child safety seat. 3 (9%) in child safety seats were ejected.
- The data showed that in 86 (64%) cases out of 135, seat belts or child safety seat were not used. 62 (72%) were ejected.
- In 12 (9%) of the 135 cases, it was unknown if a seat belt or child safety seat was used. 7 (58%) were ejected.

Further information from the ND Department of Health describes problems related to child restraints. In a car safety checkup sponsored by the ND Department of Health throughout the state in 2011, data entered on 922 restraints showed that

- "83.9% of the restraints were misused.
- 14.2% of the restraints were not appropriate for the age, weight, or height of the child riding in them.
- 71.4% of the children were not secured correctly in the harness system of the car seat or were improperly buckled in the seat belt.
- 68.7% of the car seats were installed incorrectly[2]."

Without more complete data about child safety seat and seat belts, a more accurate assessment of their use in child fatalities cannot be made.

[2] Welle, T., F. Ziegler, D. Mayer, C Meidinger, C Rongen. 2011. Child Passengers at Risk: North Dakota 2011 Car Seat Checkup Summary, 2009-2011 Comparison. North Dakota Department of Health.

Type of Vehicle

Of 135 vehicular child fatalities from 2000 to 2011, the most predominate type of vehicle involved was cars (75, 43%) , followed by pickups (21, 12%) and SUVs (21,12%). The 'other' category includes 11 pedestrians (Figure 9).

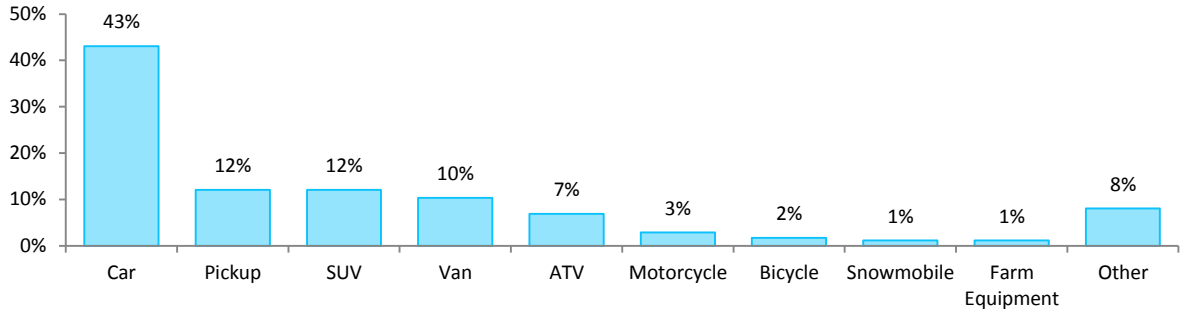


Figure 9. Percent of Vehicular Child Deaths by Type of Vehicle, 2007-2011

From 2000 to 2011, 120 fatalities involved one vehicle.

Road Conditions

From 2000 to 2011, 120 fatalities involved one vehicle.

Of 117 crashes with road condition data:

- 63% (74) occurred under normal road conditions;
- 18% (21) happened on loose gravel;
- 9% (10) happened on snowy or icy roads: and
- 10% (12) were the result of other scene descriptions of when the driver lost control (e.g., curves in the road and intersections).

Vehicular Child Fatalities (Unintentional) (2010 & 2011)

There were 11 vehicular child fatalities in 2010 and 13 in 2011. Of the 24 deaths,

- there were an equal number of females (12) and males (12);
- 54.2% were ages 15-17;
- 71% were White;
- 42% were not using safety restraints;;
- 50% were ejected; and
- 29% were drivers.

SUDDEN INFANT DEATH SYNDROME (SIDS) (Unintentional)

History of SIDS Deaths in North Dakota by Year, Age, Gender and Race 2000 to 2011

SIDS is the third leading cause of death in infants in the United States. Each year in the United States, more than 4,500 infants die suddenly of no immediately, obvious cause. Sudden Infant Death Syndrome (SIDS) is the leading cause of death among infants aged 1–12 months, and is the third leading cause overall of infant mortality in the United States.

The goal of the 2010 Healthy People Objective, established by the National Health Resources and Services Administration (HRSA), is that no more than 0.25 SIDS deaths occur per 1,000 live births. Numerous risk factors for SIDS continue to occur in too many of these cases, even though data show that SIDS has declined dramatically since 1995, following the 'Back to Sleep' campaign that began in 1994. In this campaign parents were advised to put their babies on their backs to sleep. The most recent published document (January 2013), the *National Vital Statistics Report*, "Infant Mortality Statistics from the 2009 Period Linked Birth/Infant Death Data Set," vol. 61, #8, reported that following this national campaign, the SIDS death rate for the United States declined 55.6%, from 0.9 SIDS deaths per 1,000 live births in 1994 to 0.5 per 1,000 live births in 2009.

A standardized reporting form, Sudden Unexplained Infant Death Investigation Report Form (SUIDIRF) was developed by the US Center for Disease Control to aid in the determination of cause of death. For a medical examiner or coroner to determine the cause of the death, a thorough case investigation including examination of the death scene and a review of the infant's clinical history must be conducted. A complete autopsy needs to be performed, ideally using information gathered from the scene investigation. Even when a thorough investigation is conducted, it may be difficult to separate SIDS from other types of sudden unexpected infant deaths (SUIDS), such as accidental suffocation in bed. (http://www.cdc.gov/sids/SUIDAbout.htm).

According to the North Dakota Century Codes, the term "sudden infant death syndrome" may be entered on the death certificate as the principal cause of death only if the child is under the age of one year and the death remains unexplained after a case investigation that includes a complete autopsy of the infant at the state's expense, examination of the death scene, and a review of the clinical history of the infant (NDCC 11-19.1-13. Cause of death – Determination).

According to the CDC SUID Initiative Team (2009), sudden unexplained infant deaths (SUIDS) are coded as sudden infant death (SIDS)
http://www.childdeathreview.org/Symposium2009/KKA_Symp_Wed_CSM_LC.pdf

The Child Fatalities Review Panel reviewed 90 deaths attributed to SIDS/SUIDS from 2000 to 2011.

Figure 10 shows that the percent reviewed each year as a percent of total SIDS deaths for the 12 year period fluctuated. The number of deaths averaged about 8 per year. With the fluctuation and relatively small numbers and large margin of errors, it is unrealistic to conclude a trend pattern.

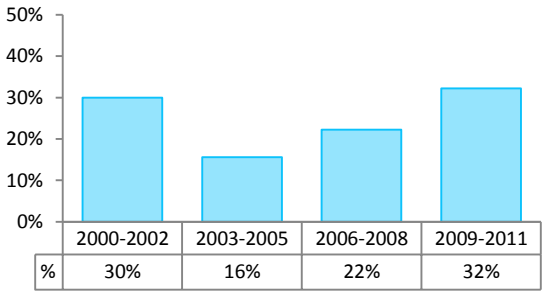


Figure 10. Percent of Total Child Fatalities from SIDS by Three-Year Groups 2000-2011

The age where the percent of SIDS deaths peaked was 3 months (26%) (Figure 11). Months 1 through 5 had 88% of all SIDS deaths.

The male to female ratio of death by SIDS was about 1.8 to 1. In ND, while about 10% of children under age 1 are American Indian, 37% of SIDS deaths in infants were American Indian (Figures 12 and 13).

Figure 14 shows the percent of different risk factors present in 106 of the SIDS deaths Data are collected for 14 factors. In 61% of the cases, the infant was male. Half of the infants were exposed to mother's who smoked during pregnancy and/or to second hand smoke. Mother's use of alcohol/drugs was noted in 12% of the cases.

Figure 11 shows co-sleeping and sleeping position risk factors for which campaigns have been designed to educate parents and ultimately reduce SIDS deaths occurred in 29% of the cases. These campaigns and education programs have warned parents and caregivers against putting infants down to sleep on their stomachs. In the 106 SIDS cases, 44% of the infants were put down on their stomachs to sleep (Figures 14 and 15).

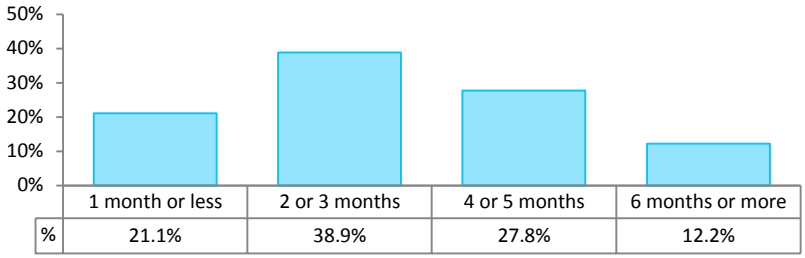


Figure 11. Percent of Total Child Fatalities from SIDS for Years 2000-2011, by Age

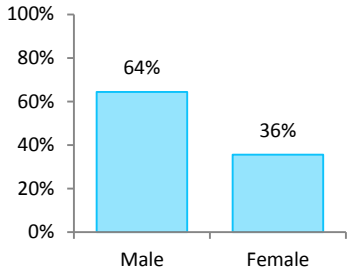


Figure 12 Percent of Total Child Fatalities from SIDS for Years 2000-2011, by Gender

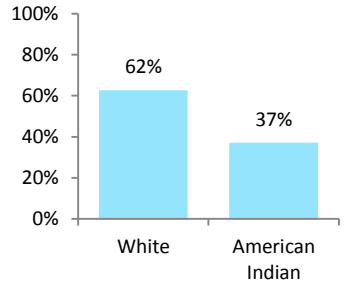


Figure 13. Percent of Total Child Fatalities from SIDS for Years 2000-2011, by Race

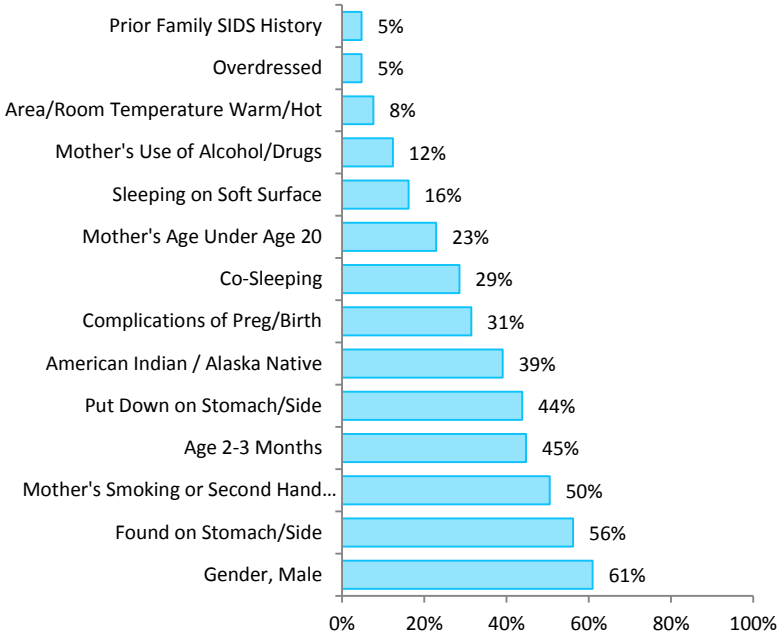


Figure 14 . The Percent of 105 Cases by Potential Risk Factors for SIDS, 2000-2011

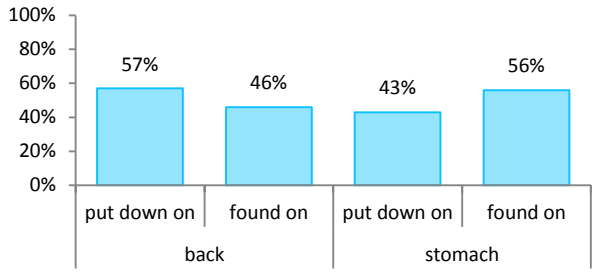


Figure 15. The Percent of SIDS Deaths by Positions When Put Down and the Position When Found, 2000-2011

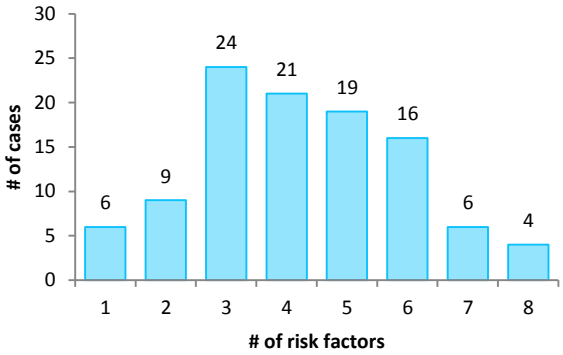


Figure 16. Number of Risk Factors Present by Number of SIDS Deaths, 2000-2011

Fifteen infant deaths due to SIDS had either 1 or 2 risk factors present (Figure 16). About a fourth (24) of the infant deaths had 3 risk factors present. Over half (56) had anywhere from 4 to 6 risk factors present. Of the 14 risk factors listed, 10 infant deaths had as many as 7 or 8 risk factors present.

The panel did not agree with the cause of death listed on the death certificate in 9 SIDS cases over the 12-year period. They were changed to 'undetermined.'

Sudden Infant Death Syndrome (2010 & 2011)

In 2010 and 2011 combined, the cause of 12 infant deaths was identified as sudden infant death syndrome (SIDS). Thirteen were identified as sudden unexpected infant death syndrome (SUIDS). In this report, in line with CDC guidelines, SUIDS deaths are compiled as SIDS. In the 25 SIDS cases:

- the gender mix was almost equal, 13 males and 12 females;
- the ratio of White (66%) to American Indian (33%) was 1.5 to 1 (In the general population, American Indian infants are about 10% of all infants.); and
- two of the most common risk factors which made up 60% of SIDS cases in 2010 and 2011 were:
  - Found sleeping on their stomachs (32%).
  - Co-sleeping (28%)

OTHER INJURIES (Unintentional/Preventable)

Other injuries resulting in child fatalities in 2010 and 2011 were attributed to asphyxia, blunt head injury, drowning, drug overdose, and shotgun wound.

Of the 12 fatalities due to other injuries,

- the manner of death was recorded as accident and preventable in all 12 cases
- 66.7% were male;
- 91.6% were White; and
- 50% involved negligence.

OTHER CONDITIONS INCLUDING MEDICAL (Unintentional)

Of the 504 child fatality deaths reviewed from 2000-2011, about 3.5% (18) of the deaths were due to other conditions including medical:

- 50% (9) were under age 2;
- 50% (9) were male; and
- over 33% (7) were American Indian.

Of these deaths:

- 61% (11) were natural and unpreventable;
- 17% (3) were preventable; and
- 22% (4) were 'not determined'

INTENTIONAL CHILD FATALITIES

History of Homicides (2000-2011)

Between 2000 and 2011, there were 27 homicides (average just over 2 per year).

Homicides were results of firearms, blunt head injury, battered child syndrome, starvation and dehydration, shaken baby syndrome and exposure.

History of Child Fatalities from Suicides (2000-2011)

The Child Fatalities Review Panel reviewed 57 deaths attributed to suicides from 2000 to 2011.

Figure 17 shows the percent reviewed each year as a percent of total suicide deaths for the 12-year period. The number of deaths averaged about 5 per year. Over one-third (35%) of child deaths by suicide occurred in the last three years (2009-2011).

- 79% were over age 14;
- 81% were male;
- 70% were White;
- 56% were by hanging; and
- 42% were by gunshot wound.
    - 35% by handgun
    - 26% by rifle
    - 39% by shotgun

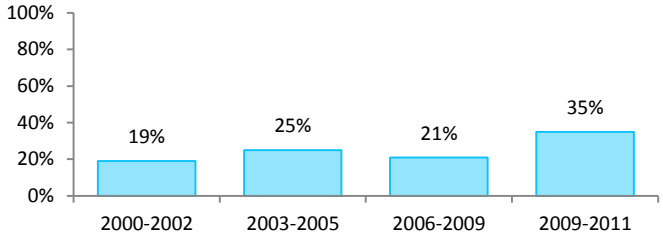


Figure 17. Percent of Total Child Fatalities from SUICIDES for Years 2000-2011, by 3-Year Groups

Suicides (2010 & 2011)

There were 16 victims of suicides in 2010 and 2011. In almost 30%, there was previous involvement with child protection services (CPS).

- 100% were over age 14;
- 75% were male;
- 75% were White;
- 82% were by hanging; and
- 19% were by gunshot wound.
- 54% of the victims of suicide had alcohol levels of .02% to .23%
- 67% of the victims of suicide had positive drug toxicology

Four Themes Emerged from the Suicide Data

1. *Relationships.* Boyfriend/girlfriend breakups had influence on young person's decision to commit suicide.
2. *Social media.* In recent years, up to 40% of victims of suicide had emailed, spoken by phone to friend(s), or posted on Facebook just minutes before committing suicide. For friends or family who responded by taking action, trying to locate the person, they were too late.
3. *Previous attempts.* Up to about 18% of victims of suicide had made previous attempts, some multiple times.
4. Data show that 10 youth had *behavior problems, psychological/emotional problems*, or a combination of the two.

Alcohol and Drug Use Among all Victims

Evidence of Alcohol and Drug Use in the 48 Child Fatalities in 2010 and the 50 in 2011. Just over 27% (26) child fatalities involved alcohol, drugs, or both. Of the 26,

- 54% involved drugs alone
- 21% involved alcohol alone
- 25% involved both alcohol and drugs

CPS REPORTS RECEIVED/ACCEPTED AS RESULT OF DEATH, 2000-2011

In response to the Scene History report item, 'reports received/accepted as result of death':

- In 88 (18%) cases it was unknown if a CPS report was received/accepted as a result of death. About 84% (74) were American Indian youth.
- In 346 cases, there was no CPS report received/accepted as result of death.
- In 42 cases a CPS report as a result of death was received/accepted.
- At least 1 service required determination was found in 21 cases.

Risk factors included: physical neglect, physical abuse, lack of supervision, and psychological maltreatment.

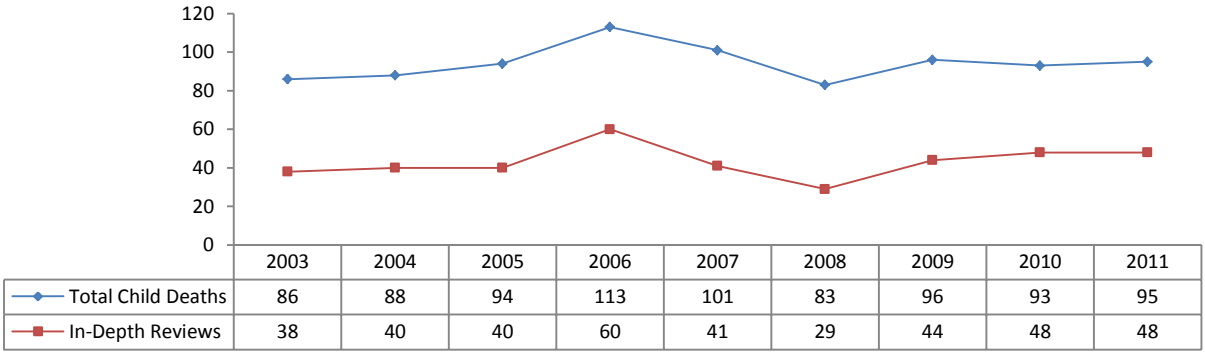
LONG TERM TRENDS IN CASES REVIEWED (2000-2011)

Table 6. Child Deaths by Status, CY 2003-2011

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Status A Deaths[1]	43	47	46	63	45	36	53	53	53
Status B Deaths[2]	43	41	48	50	56	47	43	40	42
Total Child Deaths[3]	86	88	94	113	101	83	96	93	95
In-State Child Deaths[4]	**38**	**40**	**40**	**60**	**41**	**29**	**44**	**48**	**50**
Out-of-State Child Deaths[5]	5	7	6	3	4	7	9	5	3

[1]Status A cases consist of all cases of children whose death is sudden, unexpected, and/or unexplained.
[2]Status 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)
[3]From all causes.
[4]Child deaths with North Dakota death certificates that were reviewed in depth by the CFRP and are the subject of this report.
[5]The 'death-causing' event/injury is identified as occurring outside of North Dakota. They were not reviewed in depth by the CFRP.
SOURCE: CFRP

Tables 6 and Figure 18 traces the number of total child deaths and the number of cases that received an in-depth review by the Panel from the years 2003 through 2011. Since 2000, the percent of in-depth reviews by the CFRP to the total child deaths by year ranged from 35% to 53% (Figure 17). Overall, of 1,167 total child deaths between 2000 and 2011, about 46% were reviewed in depth.



	2003	2004	2005	2006	2007	2008	2009	2010	2011
Total Child Deaths	86	88	94	113	101	83	96	93	95
In-Depth Reviews	38	40	40	60	41	29	44	48	48

Figure 18. Number of Total Child Deaths and In-Depth Reviews, CY 2003-2011

The changes in child population in North Dakota and the child fatalities from 2007 to 2011 demonstrate that there does not appear to be any correlation between the two (Table 7).

Table 7. Changes in North Dakota Child Population (under age 18) and Child Deaths from 2007 to 2011

	Population Under age 18	Difference From Previous Year	Child Deaths	Difference in Child Deaths from Previous Year
2007	146,898		101	
2008	146,950	52	83	-18
2009	147,903	953	95	12
2010	149,771	1,868	93	-2
2011	151,156	1,385	95	2

Source of Population Data: U.S. Census, Population Division.

Types of deaths are tracked by year. The distributions of deaths attributed to vehicular, SIDS, suicide, and homicide are shown in Figure 19 for the years 2000 to 2011. This graph demonstrates a perspective of deaths by cause, but does not include percentages or counts because the counts are too low.

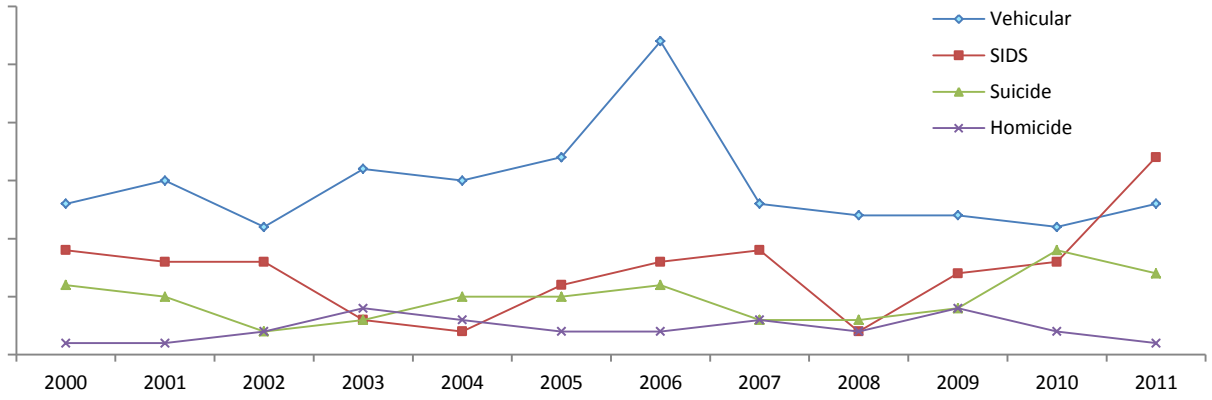


Figure 19. An Illustration of the Distribution of Child Fatalities from Vehicular, SIDS, Suicide, and Homicide from 2000 -2011.

Table 8 shows the number of child fatality reviews in counties, from the years 2000 through 2011. The sixteen counties shown have had 10 or more sudden, unexpected, or unexplained child fatality reviews since 2000. Five counties had over 30 reviews in the 12-year period. Ward County, with the largest number, averaged almost 4 child fatality reviews per year.

Table 8. Child Fatalities that Received an In-Depth Review, by County of Residence, 2000-2011

County	2000 to 2011
Ward	46
Rolette	42
Cass	39
Burleigh	37
Benson	31
Grand Forks	28
Morton	24
Sioux	21
Williams	20
Stutsman	15
McLean	13
Stark	13
Mountrail	12
Ramsey	12
Barnes	11
McKenzie	10

PREVENTABLE DEATHS

The most important lesson learned from the Panel's reviews is that many child deaths each year are preventable and that every citizen can play a role in reducing child fatalities.

The Panel uses the determination of preventability for the purpose of systemic changes. To the Panel the word preventability does not imply negligence. The Panel looks at what systematic changes can be made to prevent these deaths, for instance changes in policy, practice and law. The majority of preventable child deaths reviewed by the Panel in 2010, and 2011 occurred as a result of injuries. The majority of these deaths (41.7%) occurred among children ages 12 to 17. More than 70% of the preventable deaths are motor vehicle related deaths. Currently, laws are in effect which put some restrictions on minors with a license and safety restraint use for youth. Safety and seat belt campaigns have been provided. However, driver education courses offered in the public schools have decreased as schools struggle with resource concerns. Societal issues such as alcohol/drug involvement, excessive speed, and failure to use seat belts contributed to the vehicle related deaths in 2010 and 2011. The North Dakota Safety Council provides the Alive at 25 Program which is a defensive driving course for teens and young adults which addresses inexperience, distractions, peer pressure and how to reduce risk. The course also has a parent component. The North Dakota Department of Transportation offers ongoing traffic safety events, education and tips for teen drivers and parents. These and other effective social marketing and education courses focus on distracted driving, safety concepts and injury prevention which benefit both parents and teens

Deaths due to Sudden Infant Death Syndrome, continue to be the second largest number of North Dakota children, after MVAs. SIDS is still largely considered non-preventable. However, putting prevention information, including information about risk factors, in the hands of parents, childcare providers and family caregivers has the potential to impact the number of SIDS deaths in the state.

The number of teen suicide deaths in the state continues to be concerning with 16 in 2010 and 2011. These suicides highlight the need for more accessible mental health care for adolescents. Strategies for prevention include education for 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 teens from suicide. Education needs to include information on how to access community mental health resources if someone is concerned about an adolescent. The North Dakota Department of Health hired a Suicide Prevention Program Director with the goal of reducing the number of attempted and completed suicides across all ages and races of North Dakota residents. The Suicide Prevention Director provides grant dollars to schools, agencies, medical professionals and tribal entities to provide training and outreach opportunities.

CONCLUSIONS

Ongoing challenges remain regarding the Panel's ability to accomplish its goals. They are discussed below.

#1 ***The Panel recommends that all child deaths receive a thorough, 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, abuse, violence, 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.

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

The Panel has also become concerned that child victims of motor vehicle crashes too often are not identified as coroner cases and an autopsy is not performed. According to state law, any person who acquires the 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 17 vehicular deaths in 2010 and 2011. The coroner was not contacted in 7 of the deaths. Other cases in 2010 and 2011 that did not have an autopsy included 1 drowning, 2 suicides, and 6 medical.

#3 ***The Panel, with interagency support, must continue to find ways to promote increased cooperation among professional disciplines across all jurisdictions.***

Access to Records

The Panel's ability to access relevant records for review remained of concern in 2010 and 2011. In over 12% of the cases in which the Panel requested information from the appropriate agencies, their requests went unheeded.

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, or mental health facility 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 in possession of 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.

An additional barrier identified by the Panel concerns governmental entities such as Federal Bureau of Investigation, the Bureau of Indian Affairs, and tribal entities that are outside the jurisdiction of state statutes. Tribal governmental bodies are not required to share information with the Panel. It is a concern of the Panel that these records remain inaccessible. The lack of access to investigation records was identified as an obstacle to effective child fatality reviews in 46.7% of the cases with American Indian child victims in 2010 and 2011.

The CFRP Recommends:

Standardized Protocol for Death Scene Investigations

- develop a standardized statewide protocol for scene investigations of all suicide deaths;
- that graduated drivers licensing be implemented;
- that all children involved in a motor vehicle/ATV fatality receive an autopsy;
- alcohol and drug testing in all child fatalities;
- a suicide investigation protocol be developed along with gatekeeper training;
- establishing standards for lifeguard to swimmer ratios and pool safety needs;
- education on scene investigations involving firearms;
- that physicians receive education about the importance of scene investigation information so they can adequately complete death scene forms;
- a better team effort for the provision of services to families (a critical incident process is needed);

Education and Counseling

- education needs to include information on how to access community mental health resources if someone is concerned about an adolescent;
- education to teens about boyfriend/girlfriend relationships and impacts of break-ups possibly leading to teen suicide;
- counseling for siblings of youth who commit suicide;
- education about bullying and how it may lead to suicide;
- culturally specific farm safety information;
- mental health screening for youth involved in drug court;
- that education on child abuse and neglect extend to WIC, child care and law enforcement;
- education for parents on knowing when to call emergency medical services (EMS);

- trauma counseling for youth who survive an accident in which another is killed and for youth who witness such an accident;
- more education about the asphyxial game being played by children;
- more grief counseling resources; and
- more education on risk factors for SIDS for parents, child care providers, small hospitals, and other entities. (NICU babies' parents should be given "safe sleep" information from the hospital.)