Child Death Review

2016 Annual Report

Tennessee Department of Children's Services| CDR Annual Report | 2016

Contents

Acknowledgement

The Tennessee Department of Children's Services Office of Child Health wishes to acknowledge the many professionals, volunteers, and community partners whose commitment and support to Child Death Review has made this process possible.

It is important to note the CDR process does not exist to identify individual culpability in any death or near death event. The CDR process exists to best explain the inherently complex nature of child welfare work and the many factors which influence decision-making. These decisions alone are rarely direct causal factors in a child's death or near death; however, these decisions may affect the overall trajectory of well-being for a child or family and be an influence, among many influences, of poor outcomes. The CDR process makes every effort to be a safe and supportive environment for staff to process, share, and learn from child deaths and near deaths in an effort to best support quality case management practices and influence increasingly safe outcomes for children.

Executive Summary

A comprehensive and thorough child death review process is a critical component of any child welfare agency. The review provides an opportunity for agencies to examine their systems of safety. While typically there are assumptions deaths and near deaths are caused by isolated failures of people or processes, it is largely not the case. Rather these tragic and usually unforeseeable events emerge from a complex social system comprised of society, communities, health agencies, cultures, public agencies, and families working to support safe outcomes.

The Department of Children's Services (DCS or the Department) is charged with providing supports to vulnerable children and families in this complex social system affected by significantly challenging issues such as poverty and substance use. Child welfare agencies, such as DCS, are critical interfaces with vulnerable children and families; thus, it is imperative the child death review process they implement thoroughly investigate such agencies' interventions with children and families prior to and following deaths and near deaths in order to learn and ultimately improve their ability to support safe outcomes. It is for this reason DCS designed a comprehensive system to examine and learn from the tragedy of the deaths and near deaths of Tennessee children who fall under the responsibility of DCS. With the input of many critical partners, DCS developed the Child Death Response and Review process (CDR process or Child Death Review process), which was implemented on August 29, 2013, and revised January 1, 2015.

This is the fourth Annual Report of the CDR process (the Report). The audience for this Report is broad, including DCS leaders and its many public and private partners. Tennessee's Child Death Review process applies a Safety Science approach, which is a pioneering methodology used successfully in other industries such as aviation, nuclear power, and health care to improve safety. This approach was recently featured in a federal report from the Commission to Eliminate Child Abuse and Neglect Fatalities (Appendix A). The Child Death Review Process section of this Report briefly explains the current CDR process. The remainder of the Report explains the findings of the CDR process, what was recommended, and what action has been taken or will be taken to address those recommendations.

Beginning in 2014, DCS began posting information on custody and non-custody deaths to its website generally within two business days of notification of a child's death. Once a case is

closed, the full case file is added. Information on near deaths is posted to the website quarterly as it becomes available. This increased transparency means information that typically might be included in an Annual Report is made available to the public on an ongoing basis and before this Annual Report is complete and would be published. Therefore, the focus of this Report is less on a compilation of demographic and descriptive data and instead emphasizes what was learned and how the understanding and knowledge can and does inform DCS practice.

DCS has demonstrated an ongoing commitment to the principles of Safety Science and has sought new ways to use the strategies of Safety Science to further learning at all levels of the Department. First, Spaced Education has been used since 2015. Spaced Education is a learning system designed to communicate important information from CDRs to DCS employees to ultimately increase favorable outcomes for children and families served by DCS. Spaced Education was administered to DCS Case Managers in four regions in 2016, and it is being administered to all regions in 2017. Second, in 2016, Safety Notices began to be utilized by the Department. These notices serve as a prompt response to provide safety-critical information to DCS employees following CDRs. Third, the CDR process was used by the Department in 2016 to foster learning and craft strategic improvements surrounding tragic events other than child death, such as the commercial exploitation of minors. This was a worthwhile review with positive outcomes. The Department intends to continue expanding the use of the CDR process for other types of critical incident reviews. Fourth, leaders of the CDR process have begun facilitating Safety and Risk trainings for Child Protective Service professionals. These trainings focus on the same detection, response, and collaboration strategies found in the field of Safety Science and supported through learning opportunities in CDR.

It is important to note a death or near death of a child/youth that occurred in 2016 may not be reviewed until 2017 as a result of the timelines and operational requirements established in the CDR process. Factors influencing when a death is actually reviewed include the time required to investigate and determine if an allegation of abuse or neglect was substantiated[1]. In addition, near deaths require additional time to establish since a physician must review medical records to determine whether the child was in critical or serious medical condition after a case

[1] To be more timely with release of the Child Death Review Annual Report, the Department elected to provide this report a month after the end of the first quarter of the calendar year following. The alternative would have been to significantly delay the Annual Report to include all cases from the previous calendar year.

has been closed and substantiated. Further, not all deaths and near deaths meet criteria for review.

This report covers deaths and near deaths reviewed in Calendar Year 2016. A total of 136 deaths were reviewed. This includes: 126 non-custody deaths and 10 custody deaths. During this review period, 34 near death cases were also reviewed. This includes no custody near deaths; all were non-custody. Based on the 170 cases reviewed, 5 key areas of improvement were identified and acted on.

Key Areas of Improvement

- Increasing the availability, consistency, and use of strategic tools in substance abuse assessment
- Implementing strategies to improve the quality and expedience of professional communications during child welfare cases
- Creating a statewide protocol regarding "safe sleep" education and service array
- Improving ease of access to external documentation (e.g., medical records, parenting assessments, psychological evaluations) for families served by the Department
- Establishing an efficient, consistent process for accessing language interpretation services for non-English speaking families served by the Department through non-custodial programs

Introduction

As Tennessee's public child welfare agency, DCS is responsible for serving some of the state's most vulnerable citizens. It is estimated nationally 1,640 children died as a result of abuse or neglect in 2012 (U.S. Department of Health and Human Services, 2013). An important DCS responsibility is to review and learn from the tragedy of child deaths and near deaths in Tennessee. By understanding the complex interplay of human factors and system factors we strive to learn from deaths and near deaths to improve safety for all of Tennessee's children.

Responsibility for review of all child deaths in Tennessee belongs to the Department of Health. DCS has a narrower focus and reviews the death or near death of any child in state custody, any child whose family had history with the Department within three years prior to the death or near death, and any child whose death or near death was the result of maltreatment. A near death is a condition which results from abuse that, as certified by a physician, places the child in serious or critical medical condition. [See TCA §37-5-107(c) (4)].

Moreover, data captured elsewhere are not duplicated here. The federal Child Abuse and Prevention Act (CAPTA) requires states to report certain information on a case of abuse or neglect which results in a death or near death. With the posting of child death and near death information, including full case files on the DCS website[2], information beyond what is mandated by CAPTA is now provided publicly at: http://www.tennessee.gov/youth/childsafety/publicnotifications.html.

[2] When the Child Death Review process was developed, the Department did not envision providing CAPTA case information online. By providing this information online, the Department is able to more completely and quickly provide the public this information than would be available in an annual report.

Definitions

Custody Death: any child in the state of Tennessee who is in the custody of DCS at the time of his or her death.

Custody Near Death: any child in the state of Tennessee who is in DCS custody who has a serious or critical medical condition resulting from child abuse or child sexual abuse, as reported by a physician who has examined the child subsequent to the abuse. This is defined in TCA 37-5-107. The Department has elected to exceed the statutory definition to include more situations as near deaths. As such, the Department will record a near death for a child in custody if the allegation of abuse or neglect is substantiated and a physician reviews the case and determines the child was in a serious or critical medical condition.

Non-Custody Death: any child in the state of Tennessee who is not in DCS custody at the time of death and his or her death is investigated as an allegation of abuse or neglect by DCS.

Non-Custody Near Death: any child in the state of Tennessee who is not in DCS custody who has a serious or critical medical condition resulting from child abuse or child sexual abuse, as reported by a physician who has examined the child subsequent to the abuse. This is defined in TCA 37-5-107. The Department has elected to exceed the statutory definition to include more situations as near deaths. As such, the Department will record a near death for a child not in custody if the allegation of abuse or neglect is substantiated and a physician reviews the case and determines the child was in a serious or critical medical condition.

Previous History: any Tennessee DCS contact with a child or family occurring within 3 years of the child's death or near death, as documented in the Department's Statewide Automated Child Welfare Information System.

Child Death Review Process

Review of a child death or near death begins with a report to the Child Abuse Hotline. This report initiates the Rapid Response process to ensure DCS takes immediate action to maintain the safety of other children and family members, notifies appropriate staff, and initiates the process of collecting and protecting the integrity of information. As additional information becomes available throughout the investigation, actions or immediate adjustments to existing procedures or protocols may occur to ensure the safety of other children and family members. Specifically, the Department shall immediately take any necessary action so as to assure children's safety is never taken for granted. Parallel to the rapid response process, the case is tracked to determine if it meets criteria for a death review.

The review process includes both a central office review and a "systems analysis" review that occurs in the field. The central office review occurs within 30 days after a child death or near death is recommended for review by the Office of Child Safety. The Central Office Review Team identifies any additional immediate concerns and determines which cases meet criteria for further review with systems analysis. If recommended for systems analysis, the case receives a systemic review by a regional multidisciplinary team within 90 days. This review includes debriefings with internal and external professionals assigned the case.

Staff debriefings are facilitated opportunities for staff involved in death or near death cases to share, process, and learn. Debriefing opportunities typically include frontline staff and supervisors, but may include other positions as needed. During debriefings, staff share and process their experiences working the death or near death case and/or historical information specific to the child or family associated with the death or near death case. Debriefings explore critical decisions and interactions throughout the department's history with the subject child or their family (e.g., removal decisions, service provision, teamwork opportunities, record acquisition, etc.) and create a safe environment for staff to identify opportunities for learning and improvement. The debriefing information is provided to the regional systems analysis teams.

Regional systems analysis teams are comprised of representatives from different disciplines within DCS (e.g., frontline staff, frontline supervisors, health representatives, regional leadership) and from partner agencies (e.g., law enforcement, Child Advocacy Centers, health providers). The team is supported to review the case using a systems analysis model. The systems analysis model challenges team members to analyze cases to identify systemic vulnerabilities (e.g., teamwork, staffing ratios, service array) and identify any case specific concerns.

In addition to the direct benefits of an improved system for tracking, reporting, and reviewing child deaths and near deaths, the Child Death Review Process is also a vehicle for identifying and analyzing systems issues and generating improvements. Gathered information and recommendations from reviews are provided monthly to the Safety Action Group[3] consisting of the DCS Commissioner, Deputy Commissioner of Child Programs, Deputy Commissioner of Child Health; Deputy Commissioner of Child Safety, Deputy Commissioner of Juvenile Justice, Assistant Commissioner of Quality Control, General Counsel, Assistant Commissioner of Finance and Budget, Court Monitor, Director of Quality Improvement, and Director of Safety Analysis. This group reviews information generated by the Child Death Review, as well as the Confidential Safety Reporting System and other Continuous Quality Improvement (CQI) activities, in order to develop and implement system improvements.

[3] The CO Safety Action Group is a team comprised of Central Office leadership. This group meets monthly to review considerations derived from CDR findings and other safety-related sources with the goal of developing and tracking recommendations.

Cases Reviewed

Child Death Review Criteria

The Department has established criteria for review of child deaths and near deaths. As such, not all child deaths and near deaths receive a review. The Child Death Review Team (CDRT) reviews deaths when:

a. A child was in DCS custody at the time of death;
b. DCS had contact with the child or family within three (3) years preceding the child's date of death;
c. The child's death has been substantiated for abuse; OR
d. The Commissioner or Deputy Commissioner of the Office of Child Safety requests a review.

The CDRT reviews all confirmed near deaths. The near death confirmation process is outlined below:
All potential near death cases are considered preliminary until confirmed as a near death. When a Preliminary Near Death (PND) report is received, the Child Abuse Hotline marks the case with a PND indicator. Cases with a PND indicator are confirmed or excluded as near deaths following the closure of the case.

A case can be confirmed as a near death in two ways:

a. By meeting the statutory definition of a near death, or
b. By meeting criteria established by the Department of Children's Services (DCS).

A case meets the statutory definition of a near death if the child "has a serious or critical medical condition resulting from child abuse or child sexual abuse as reported by a physician who has examined the child subsequent to the abuse." (TCA 37-5-107).

If a case does not meet the statutory definition of a near death, it will be confirmed as a near death only if it meets ALL of the following DCS criteria:

a. The case receives a Substantiated classification,
b. The child did not pass away prior to case closure, AND
c. A physician reviewer answers Yes or Unable to Determine as to the question of whether the child was in a serious or critical medical condition.

All other cases with a PND indicator are excluded as near deaths.

Cases Reviewed

In this review period, a total of 170 deaths and near deaths were reviewed. This includes: 126 non-custody deaths, 34 non-custody near deaths, and 10 custody deaths. There were no custody near deaths. Cases are reviewed contingent upon meeting criteria for review.

Table 1: Custody Status

Custody Status (n=170)	n	%
Deaths		
Custody	10	7
Non-Custody	126	93
Near Deaths		
Custody	0	0
Non-Custody	34	100

There were 136 total child deaths reviewed in 2016. Ten children (7%) were in DCS custody at the time of their death and immediately met criteria for review.

Of the 10 custodial children, 3 died as a result of medical causes. A one-year-old child died of pneumonia; she had recently been diagnosed with Respiratory Syncytial Virus, further complicated by a heart valve issue at birth. A 17-year-old youth with complex medical and mental health concerns was on an outing with his peers and residential staff when he began to inexperience involuntary movements and later died. The cause of death was "probable hyperthermia," based on autopsy findings, and the manner of death was accidental. No one from the residential facility was substantiated for abuse or neglect. Lastly, an infant died of reported hypoxic brain injury, possibly from a tracheostomy tube being clogged. Autopsy results have not yet been received, but the infant was being monitored by a home health nurse when he stopped breathing. The investigation into this child's death is ongoing.

Two children died as a result of drowning. Of these youth, one ran away from his father's home and died in a motor vehicle accident when the vehicle overturned into a lake, and one youth was swimming in a lake with family members. Both youth were on trial home visits at the time of their deaths.

Two children died from blunt force trauma. A six-year-old was assaulted by a 14-year-old babysitter; the foster mother left the child in the care of her grandson, who abused the child.

The grandson and foster mother were substantiated and charged with First Degree Murder. Another infant was injured while in the care of mother's paramour. This case was initially received as a possible near death incident, and the child was placed into the Department's custody due to safety concerns. The child later succumbed as a result of injuries.

An infant was at daycare when she was placed on her stomach and later found unresponsive. She died from Sudden Unexpected Infant Death associated with mild upper respiratory infection and unsafe sleep surface. Another infant with a history of medical issues and drug-exposure expired from unknown causes. Though unknown causes of infant death are sometimes associated with unsafe sleep environments, it was not true in this case. Lastly, an infant died from an acute life threatening event noted as Sudden Unexplained Infant Death associated with respiratory infection, possible asphyxiation, and accompanied by several congenital medical issues. The infant died during a trial home visit with the birth parents.

Among the deaths of children in DCS custody, only one case was substantiated at the time of this report, though 4 others are pending. This was the case of the six-year-old who was abused by a 14-year-old babysitter.

There were 34 total near deaths reviewed in 2016. All were children not in DCS custody at the time of their near death.

Note: Due to rounding, percentages in some tables and graphs below do not add up to 100%.

Table 2: History Status of Non-Custody Cases

History Status of Non-Custody Cases (n=160)		
	n	%
Deaths		
History	114	90
No History	12	10
Near Deaths		
History	19	56
No History	15	44

Most reviewed deaths (126 children) involved children not in DCS custody and met criteria because of recent Departmental history. Of the 126 non-custodial child deaths reviewed, 90% (114 children) had either personal or family history within the 3 years preceding their death. The remaining 10% (12 children) had no personal or family DCS history within the 3 years

preceding their death. These cases met criteria solely due to the child's death being substantiated for abuse.

Of the 34 non-custodial child near deaths reviewed, 56% (19 children) had either personal or family history with DCS within the 3 years preceding their near death. The remaining 44% (15 children) had no personal or family DCS history within the 3 years preceding their near death.

Regional Information

CDRTs are located within 4 regional groups: West, Middle, Plateau and East. Each regional group consists of 3 DCS regions. Cases are reviewed in the regional group where the child/family was being served. Regional groups are as follows:

1. **West**- Shelby, Northwest, Southwest
2. **Middle**- Mid Cumberland, Davidson, South Central
3. **Plateau**- Upper Cumberland, Tennessee Valley, East
4. **East**- Smoky Mountain, Knox, Northeast

Below are the cases reviewed by regional grouping:

Table 3: Regional Group Information

Regional Group Information (n=170)		
	n	%
Reviews Per CDR Regional Group		
West	41	24
Middle	58	34
Plateau	31	18
East	40	24

Middle held the most cases, with 58 cases (34%). West had 41 cases (24%), and East held 40 cases (24%). Plateau had 31 cases (18%). The appropriate Regional Group was determined based on the location where the Office of Child Safety (OCS) investigation was assigned.

Below are the cases reviewed by Region:

Table 4: Cases Reviewed by Region

Regional Information (n=170)	n	%
Reviews Per Region		
Davidson	25	15
East	10	6
Knox	7	4
Mid-Cumberland	22	13
Northeast	20	12
Northwest	10	6
Shelby	25	15
South Central	11	6
Southwest	6	4
Smoky Mountain	13	8
Tennessee Valley	8	5
Upper Cumberland	13	8

Of the 170 reviewed child deaths and near deaths, Davidson and Shelby Counties had the largest number and percentage of cases reviewed (25 children each, 15%). Mid-Cumberland had 13% (22 children). Northeast had the 3rd highest number of cases reviewed (12%, 20 children). Both Upper Cumberland and Smoky Mountain had 8% (13 children). Southwest had the fewest number, with 6 children (4%). For the purposes of this report, the appropriate region was selected based on the location where the Office of Child Safety (OCS) investigation was assigned.

Demographic Information

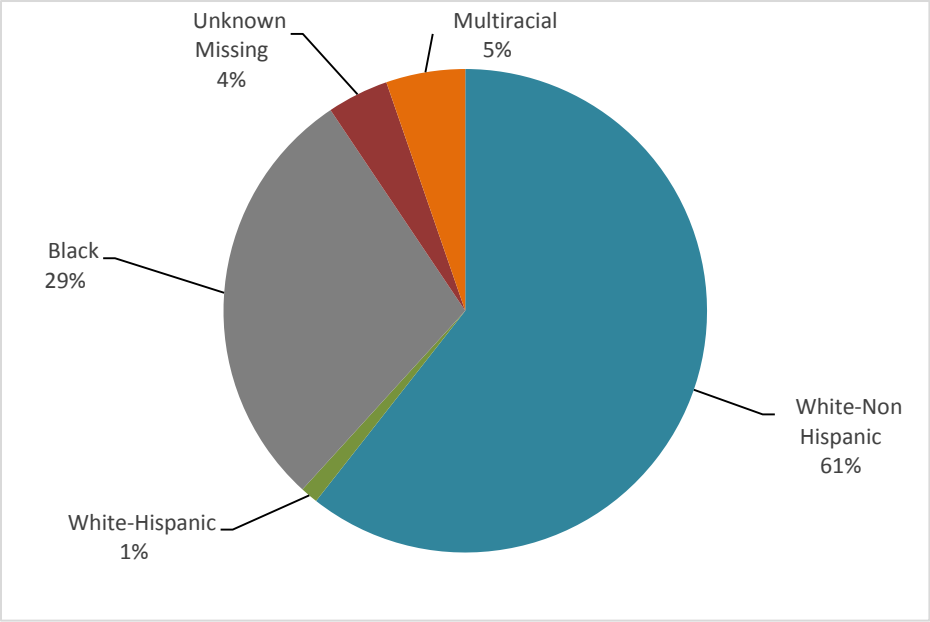
Demographic information is collected from children who have met criteria for a Child Death Review. This demographic information includes race, gender, and age. The following table provides demographic information for all cases reviewed within 2016.

Table 5: Demographics

Demographics (n=170)	n	%
Race		
White-Non Hispanic	103	61
White-Hispanic	2	1
Black	49	29
Unknown/Missing	7	4
Multiracial	9	5
Asian	0	0
Native American	0	0
Pacific Islander	0	0
Gender		
Male	100	59
Female	70	41
Age		
<6 months	91	53.5
6 to 11 months	15	8.8
1 to 5 yrs	40	23.5
6 to 12 yrs	13	7.6
≥13 yrs	11	6.5

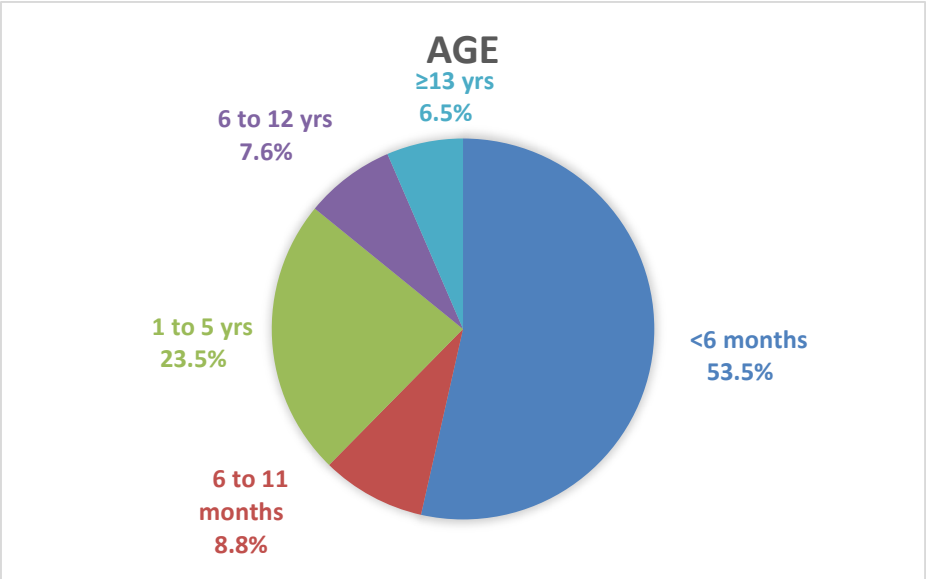
In addition to the demographic information listed above, the department publicly releases all elements designated by the Child Abuse Prevention and Treatment Act (CAPTA) for the child death and near death cases included in this report and can be found at the DCS website at the following link: http://www.tn.gov/youth/childsafety/publicnotifications.html.

Figure 1: Race



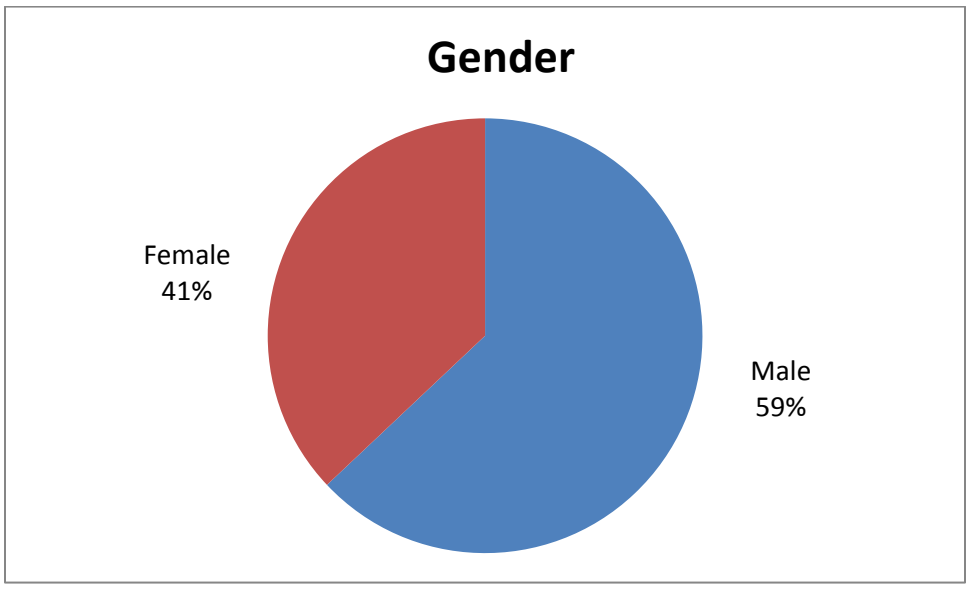
Of the 170 child deaths and near deaths, the primary identified race was White-Non Hispanic (103 children; 61% of total). Black was the next most common race, with 49 children (29%). Seven children (4%) did not have their race documented in medical records or CPS case documentation. This could be due to a lack of autopsy, extreme prematurity, inability to locate the parent for interview, etc. Nine children (5%) were identified as multiracial. Of the remaining 1%, 2 children were Hispanic.

Figure 2: Age



Of the 170 reviewed child deaths and near deaths, 91 children (53.5%) were less than 6 months old. Another 15 children (8.8%) were between 6-11 months of age. Forty children (23.5%) were between the ages of 1-5 years old. Thirteen children (7.6%) were between the ages of 6 and 12; 11 children (6.5%) were 13 and older.

Figure 3: Gender



Of the 170 reviewed child deaths and near deaths, 100 children (59%) were male; 70 children (41%) were female.

Table 6: Cause of Death

Cause of Death (n=136)	n	%
Medical	17	13
Child abuse/Non-accidental trauma	2	1
Motorized vehicle	5	4
Weapon	6	4
Drowning	3	2
Blunt Force trauma	17	13
Poisoning/Overdose	7	5
Fire/Burn	1	1
Inadequate care/Neglect	1	1
Acute Life threatening event	1	1
Suffocation/Strangulation/Asphyxiation infants	30	22
Suffocation/Strangulation/Asphyxiation age 1-18 years	4	6
Fall Injury	0	0
Other	11	5
Unable to determine	31	23
	136	

Of the 136 reviewed deaths, 17 children (13% of cases) died from medical causes (e.g., prematurity, genetic disease, etc.). Another 30 children (22%) were infants who died as a result of asphyxiation, often from unsafe sleep environments. Seventeen children (13%) died as a result of blunt force trauma. Seven children died from poisoning/overdose, and another 4 children (age 1-18 years) died from asphyxiation. Five children died as a result of injuries sustained in motor vehicle accidents, and another 6 children died from either the accidental or intentional use of a weapon. One child died as a result of injuries sustained in a fire, and 3 children drowned.

Thirty-one children (23%) died as a result of undeterminable cause. A child's cause of death may be undeterminable for a number of reasons, but often complex factors (e.g., drug-exposure, dehydration, prematurity, viral infections, unsafe sleep) prevent medical personnel from being able to identify a central cause of death.

The remaining 11 children (5% of total cases) died as a result of "other" causes not well-captured in existing data selections. Each of these children received an autopsy. Four of the children's cause of death was Sudden Unexplained Death of an Infant (SUDI), and 4 other children's cause of death was Sudden Unexplained Infant Death (SUID). Unsafe sleep was a

contributing factor in the death of 3 of these 8 infants. Of the remaining 3 children, 2 infants died from prematurity due to placental abruption associated with substance abuse by mother. Lastly, 1 child died due to probable dehydration. The toddler's caregiver passed away unexpectedly, and the caregiver's death was unknown to others for an extended period of time.

While only 2 children died specifically from medically-documented child abuse/non-accidental trauma, it should be noted autopsy information rarely identifies "non-accidental trauma" as a cause of death. When children die as a result of abuse, the cause may be more accurately captured as blunt force trauma, gunshot wound (e.g., weapon), etc. While these designations do not often hamper CPS classification, this report captured "cause of death" in a manner consistent with the autopsy findings whenever possible.

Table 7: Manner of Death

Manner of Death (n=136)	n	%
Natural	14	10
Accident	42	31
Homicide	24	18
Suicide	3	2
Unable to Determine	53	39

Of the 136 child deaths reviewed, the majority of the children died undeterminable (53 children; 39% of cases) or accidental (42 children; 31% of cases) manners of death. Twenty-four children (18%) died as a result of homicide and 14 children (10%) died as a result of natural causes. Three children (2%) died as a result of suicide. In most cases, the manner of death is determined specifically from autopsy findings.

Table 8: Cause of Near Death

Cause of Near Death (n=34)	n	%
Medical	0	0
Child abuse/Non-accidental trauma	12	35
Motorized vehicle	7	21
Weapon	4	12
Near drowning	2	6
Blunt Force trauma	1	3
Poisoning/Overdose	1	3
Fire/Burn	0	0
Inadequate care/Neglect	2	6
Acute Life threatening event	0	0
Near Suffocation/Strangulation/Asphyxiation infants	0	0
Near Suffocation/Strangulation/Asphyxiation age 1-18 years	0	0
Fall Injury	0	0
Other	2	6
Unable to determine	3	9
	34	

Of the 34 near deaths reviewed, 12 children (35%) nearly died as a result of non-accidental trauma. Seven children (21%) nearly died from motor vehicle accidents. Four children (12%) nearly died as a result of an intentional or unintentional use of a weapon. Two children (6%) nearly drowned. One child nearly died as a result of blunt force trauma. One child nearly died as a result of accidental or intentional poisoning/overdose. Two children nearly died as a result of inadequate care/neglect. Three children's near death was undeterminable in cause, and 2 children's near death was classified as "other" due to a lack of available evidence. Of these 2, 1 child nearly died as a result of the mother's attempt to self-abort her pregnancy, causing fetal distress, and the other child was born prematurely and suffered NAS and infection. The mother was a polysubstance abuser.

Table 9: Cause of Death by Custody Status

Cause of Death by Custody Status (n=136)

	Custody	Non-Custody	Total
Medical	3	14	17
Child abuse/Non-accidental trauma	0	2	2
Motorized vehicle	0	5	5
Weapon	0	6	6
Drowning	2	1	3
Blunt Force trauma	2	15	17
Poisoning/Overdose	0	7	7
Fire/Burn	0	1	1
Inadequate care/Neglect	0	1	1
Acute Life threatening event	1	0	1
Suffocation/Strangulation/Asphyxiation infants	0	30	30
Suffocation/Strangulation/Asphyxiation age 1-18 years	0	4	4
Fall Injury	0	0	0
Other	1	10	11
Unable to determine	1	30	31

Table 10: Manner of Death by Custody Status

Manner by Custody Status (n=136)

Age	Custody	Non-Custody	Total
Natural	2	12	14
Accident	3	39	42
Homicide	2	22	24
Suicide	0	3	3
Unable to Determine	3	50	53

Table 11: Cause of Death by Age

Cause of Death by Age (n=136)

	<6 months	6 to 11 months	1 to 5 yrs	6 to 12 yrs	≥13 yrs
Medical	10	2	3	1	1
Child abuse/Non-accidental trauma	1	0	1	0	0
Motorized vehicle	0	0	3	2	0
Weapon	0	0	2	3	1
Drowning	0	0	1	0	2
Blunt Force trauma	7	0	8	2	0
Poisoning/Overdose	2	0	1	1	3
Fire/Burn	0	0	1	0	0
Inadequate care/Neglect	1	0	0	0	0
Acute Life threatening event	1	0	0	0	0
Suffocation/Strangulation/Asphyxiation infants	26	4	0	0	0
Suffocation/Strangulation/Asphyxiation age 1-18 years	0	0	1	1	2
Fall Injury	0	0	0	0	0
Other	9	1	1	0	0
Unable to determine	25	3	2	1	0

Table 12: Manner of Death by Age

Manner of Death by Age (n=136)

Age	Natural	Accident	Homicide	Suicide	Unable to Determine	Total
<6 months	8	21	10	0	43	82
6 to 11 months	2	2	1	0	5	10
1 to 5 yrs	2	10	9	0	3	24
6 to 12 yrs	2	3	3	1	2	11
≥13 yrs	0	6	1	2	0	9
Total	14	42	24	3	53	136

Table 13: Cause of Death by Manner of Death

Cause of Death by Manner of Death (n=136)

	Natural	Homicide	Suicide	Accident	Unable to Determine
Medical	12	1	0	1	3
Child abuse/Non-accidental trauma	0	2	0	0	0
Motorized vehicle	0	0	0	5	0
Weapon	0	4	0	1	1
Drowning	0	0	0	3	0
Blunt Force trauma	0	13	0	3	1
Poisoning/Overdose	0	0	1	4	2
Fire/Burn	0	0	0	0	1
Inadequate care/Neglect	0	1	0	0	0
Acute Life threatening event	0	0	0	0	1
Suffocation/Strangulation/Asphyxiation infants	0	2	0	21	7
Suffocation/Strangulation/Asphyxiation age 1-18 years	0	0	2	2	0
Fall Injury	0	0	0	0	0
Other	0	1	0	2	8
Unable to determine	2	0	0	0	29
Total	14	24	3	42	53

Debriefings

In addition to the factual data collected specific to the case being reviewed, debriefings are conducted with frontline staff and supervisors involved with the subject case. These debriefings are intended to explain actions, understand decisions, and provide a comprehensive assessment of case context. Additionally, debriefings promote a safe environment for staff to revisit cases and review their cases with Safety Analysts. This provides critical learning opportunities for all staff involved.

Debriefings are conducted by the Safety Analysts to help reconstruct the situation that surrounded frontline professionals while trying to provide accurate assessment and services to children and families (Dekker, 2006). Gary Klein developed a method of interviewing (as cited in Dekker, 2006, pp. 94-95) outlined below:

1. Have the participant tell the story from their point of view, without the Safety Analyst presenting any additional information that may distort memory.
2. The Safety Analyst tells the story back to the participant, in an attempt to gain common ground.
3. The Safety Analyst along with the participant identify critical junctures in the sequence of events (this includes issues identified from technical data) if anything additional is detected.
4. The Safety Analyst progressively probes critical junctures to show how the situation was understood from the perspective of the participant; at this critical time, it may be appropriate to provide any necessary technical data to the participant.

At the critical junctures identified in numbers 3 and 4 above, the Safety Analyst identifies:

1. What cues may have prompted decisions or actions from the participant's perspective.
2. What knowledge (e.g., training, previous learning, experience) was utilized to inform these decisions or actions.
3. What the expectations were about how a particular plan was going to develop.
4. What other influences or constraints (e.g., situational, operational, organizational) may have influenced their perception of a situation and subsequent actions.

In 2016, 193 debriefings were conducted. During these robust debriefings, 271 different findings were discussed. Each debriefing usually lasts an hour or more; therefore, approximately 193 hours of discussion with frontline workers and supervisors contributed to the Department's evaluation and analysis of practice through the Child Death Review in 2016.

Findings

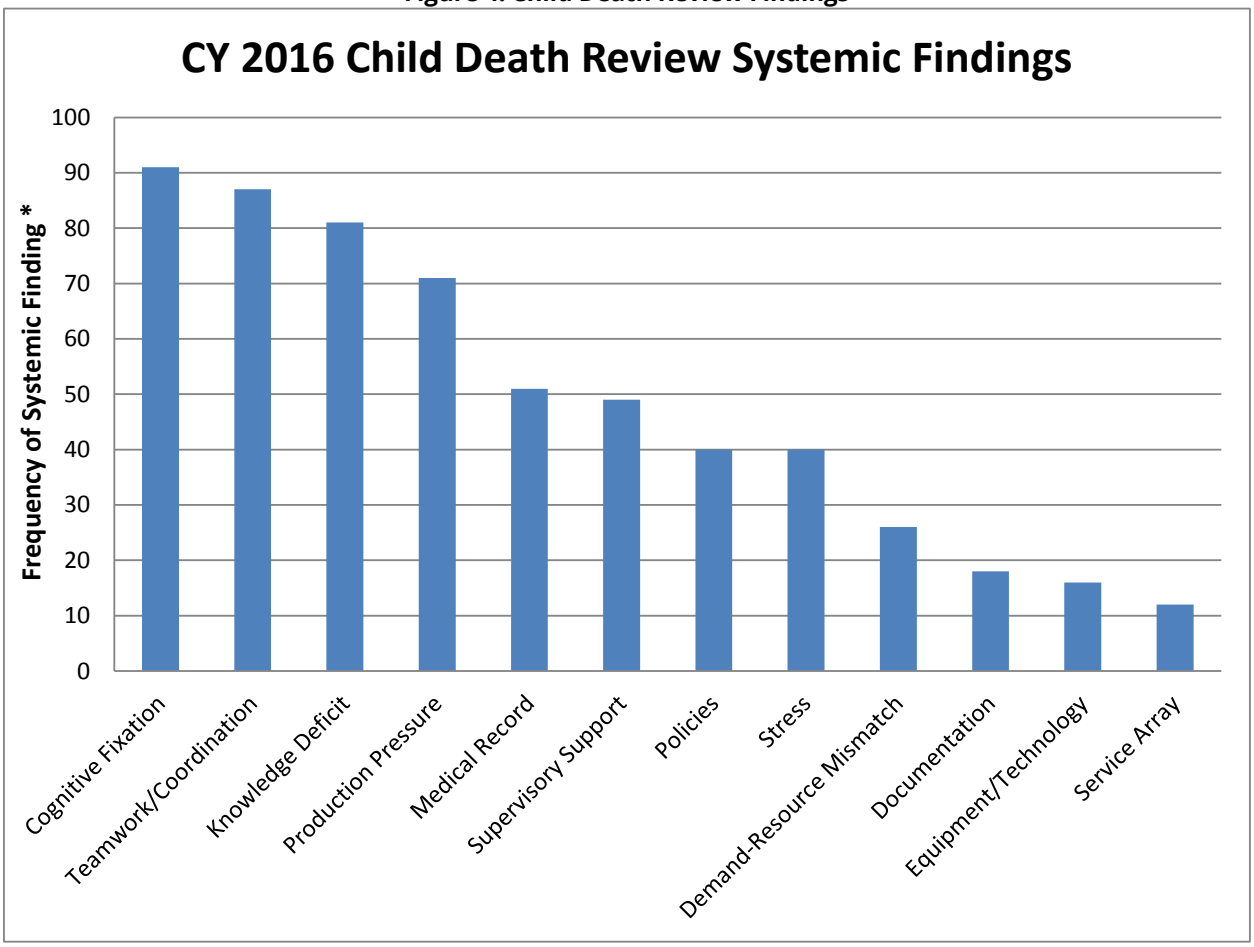
Represented below is this year's distribution of systemic findings. Systemic findings have specific definitions developed from relevant safety science literature. Using these definitions, systemic findings are identified within and across cases. The frequency of the systemic finding is determined by the amount of times it is identified across cases. The frequency of systemic findings informs further analysis designed to identify specific learning points. Below is the list of systemic findings with corresponding definitions.

Cognitive Fixation: A faulty understanding of a situation due to biases (e.g., confirmation bias, focusing effect, transference).
Demand-Resource Mismatch: A lack of resources (e.g., human, capital) to carry out safe work practices.
Documentation: Absent or ineffective documentation in connection with a particular case.
Equipment/Technology: An absence or deficiency in the equipment and technology utilized to carry out work practices.
Knowledge Deficit: An absence of knowledge or difficulties activating knowledge (i.e., putting it into practice).
Medical Records: Difficulties in obtaining, understanding and utilizing medical record or autopsy information.
Policies: The absence or ineffectiveness of a policy.
Production Pressure: Demands to increase efficiency, which are incompatible with safety assurance.
Service Array: The availability of a particular service which could support safe environments for children and families.
Stress: Unsafe work practices influenced by stress.
Supervisory Support: Ineffective support or knowledge transfer from a supervisor to those supervised.
Teamwork/Coordination: Ineffective collaboration between two or more entities (e.g., agencies, people, teams).

These systemic findings are identified within and across reviewed cases with the use of the Systems Analysis Tool. The Systems Analysis Tool is a multi-purpose information integration tool that supports a culture of safety, improvement, and resilience. Completion of the instrument is accomplished in order to allow for the effective quantifiable communication of influencing factors on a case at all levels of the system. Systemic findings found within cases are scored. These scores reflect whether a finding was present in a case and supported by evidence, which is captured by the label "actionable."

Below are findings from all cases:

Figure 4: Child Death Review Findings



*The frequency of each system level finding is determined by the amount of times it is identified as "actionable" across Child Death Review cases. A systemic finding cannot be counted more than once for any single case.

Learning and improving DCS' systems are a primary focus of the Child Death Review. DCS conducts reviews in order to understand how children and families can be better supported to eliminate or reduce the likelihood of these tragic outcomes. Through this understanding, the

Department learns how it can support children and families in the future to keep children safe, healthy, and back on track. The following were significant learning points from the review of deaths and near deaths in this review period:

1) Struggles to effectively assess and collect evidence of substance use were a common theme in reviewed cases. There was substantial variation in how these allegations were handled, and while this was likely necessary due to the variations in judicial districts, case managers (CMs) may need more support to make crucial decisions. For example, some CMs conducted "pill counts" routinely in their work. Some counted the pills personally while others asked the owner of the prescription to handle the medications. Other CMs did not conduct pill counts at all, as this method is not articulated in any DCS policy. CMs appeared to heavily rely on urine drug screening as an assessment strategy. CMs were not well-equipped, through their formal training, to utilize verbal strategies (e.g., mnemonic screening tool CAGE-AID) alongside this. Assessing safety and collecting evidence of misuse and impairment was described as a complex process; CMs greatly benefit from any objective, reliable tool to aide their assessment, such as the Controlled Substance Monitoring Database. Specifically in East Tennessee, buprenorphine was a commonly used and misused substance, and CMs did not consistently understand this drug, its various forms, or how to assess for misuse.

Supports: Cognitive Fixation; Knowledge Deficit; Medical Record; Policies

2) Safe sleep furniture was consistently supplied to families, but safe sleep education was administered multiple ways across the state. Some CMs provided safe sleep education to all possible caregivers in a household, while other CMs only provided this education to the primary caregiver. Some CMs provided education verbally, in writing, and through demonstrations or active coaching, and other CMs provided this education through only 1-2 mediums. On occasion, CMs elaborated on safe sleep practices only when the infant was a family member or alleged child victim within the case. Current statewide initiatives to address safe sleep have been successfully implemented, such as improving the process to acquire safe sleep furniture for families, but CMs may need further direction in supporting families to address safe sleep education comprehensively and beyond the presence of safe sleep furniture.

Supports: Knowledge Deficit; Policies

3) Cases under review sometimes had substantial history with the Department. While formal assessments (e.g., psychological evaluations, parenting assessments, substance abuse assessments) and other tools had been completed in the past and sometimes

quite recently, these records were not easily retrievable by CMs and were inconsistently reviewed during the course of current cases. This affected the quality and efficiency of casework and likely resulted in increased costs as well.

Supports: Equipment/Technology; Teamwork/Coordination; Production Pressures

4) Communication between CMs was fragmented during several cases, with safety-relevant information lost during case transfers and high-volume moments (e.g., removals of children into DCS custody). There are no tools or protocols to assist CMs in speaking directly and strategically with one another when planning important case milestones. Supervisors often take it upon themselves to share information and coordinate tasks, but critical information can be lost when CMs do not communicate consistently, personally, and efficiently with one another.

Supports: Cognitive Fixation; Knowledge Deficit; Teamwork/Coordination; Supervisory Support

5) Guidance on how to access interpreter services may be inadequate to supporting CMs. During case reviews, CMs expressed difficulty accessing interpreter services and displayed varying knowledge of when these services were needed. The development of protocol and expectations may help fill this current knowledge gap.

Supports: Knowledge Deficit; Policies; Service Array

Recommendations

Recommendations are informed by what is learned from the Child Death Review process. With the support of the Safety Action Group, recommendations are developed and tracked. Based on the findings, recommendations for improved practice are as follows:

1) Implement the use of verbal drug screening tools coupled with region-specific drug identification training. Improve upon the consistency of substance abuse assessment strategies through formal policy, and seek access to the Controlled Substance Monitoring Database.

2) Consider the development of a statewide safe sleep protocol.

3) Create a process for consistent storage of assessments, treatment notes, and screening tools in a single, easily-retrievable place within the electronic family case record.

4) Utilize a method for internal and professional case teaming, with special interest on thorough communication during case “milestones,” such as case transfers, multiple allegations on an open case, and situations involving several community partners.

5) Develop improved access, protocols, and expectations specific to the use of interpreter services.

Department Actions

The development of action plans for recommendations are completed outside of the Safety Action Group. Recommendations are presented to CQI teams comprised of content experts specific to the recommendation. These specific teams identify actions to be implemented and tracked. These actions include:

1) To address recommendation 1, a workgroup has been developed to research best practices regarding drug testing in child welfare agencies. This workgroup involves CMs, legal, fiscal, training, medical, mental health, and external agency representation. A drug testing policy is being created, along with a supplemental protocol and training. The workgroup intends to identify additional drug testing methods as well as increased services for cost-effective laboratory analysis of concerning drug test results.

2) To address recommendation 2, all regional protocols for Safe Sleep Assessment were gathered and cross-walked for similarities and distinctions. A workgroup has been formed and involves representation from the child health unit, training, and non-custodial program areas. The workgroup is creating a safe sleep protocol to address when, how, and to whom safe sleep education is given to families served by the Department. The protocol will additionally address the timeframes and method for access to safe sleep furniture for families.

3) To address recommendation 3, a project has been formed around document management within Tennessee's electronic case management system, TFACTS. Presently, there are over a dozen places to store scanned records in TFACTS, but the current project is intended to create a streamlined, efficient, filing system, where the CM indicates an appropriate description of the item (e.g., parenting assessment, mental health intake), and it is automatically scanned into a single case file location. This will make assessments and other documents provided by treatment providers and external agencies readily accessible to current and future CMs.

4) To address recommendation 4, structured communication and teaming strategies were embedded into the framework of the Breakthrough Series Collaborative (BSC) "Advancing a Safety Culture in DCS to Support a Trauma-Informed, Resilient Workforce." Through the BSC, CMs in multiple program areas from across the state have learned about communication strategies consistent with a safety science approach (e.g., huddles, briefs, debriefs). A specific mnemonic, SBAR (i.e., Summary, Background, Assessment, Recommendation), was taught to assist specifically during the case transfer process. Several teams have begun implementing huddles as a part of their daily, safety-critical work. These improvements are ongoing; and the Department is committed to identifying sustainable, systematic, teaming-focused practices as an outcome of the BSC's work.

5) To address recommendation 5, the Office of Child Safety's (OCS) leadership spoke to DCS personnel statewide, to better understand their ease of access to language interpretation services. Every region is able to access interpreter services, though there are notable barriers and variations in how and when these services are utilized. In response, the Department is updating the language of the Delegated Purchase Authority (DPA) contract to include the use of federal funding for language interpretation services for families served in non-custodial programs. This language is slated to take effect during the next fiscal year, on July 1, 2017.

Ongoing Improvement Efforts

Based on findings and recommendations from the Child Death Review process, which are noted in Annual Reports published in previous years and with the support of Continuous Quality Improvement, the Department has made considerable progress. This progress includes the implementation and management for system wide changes that address underlying issues affecting the ability of the Department to provide safe and reliable care to Tennessee's children and families. Below are notable updates:

"Advancing a Safety Culture in DCS to Support and Trauma-Informed, Resilient Workforce" Breakthrough Series Collaborative (BSC)

Through an ongoing commitment to safety science, a new statewide strategic goal includes cultivating "safe and engaged teams" throughout the Department. In 2016, planning was underway to create a successful BSC aimed at embedding safety science strategies in new and innovative ways. In partnership with Casey Family Programs and with the assistance of academic partners, over sixty DCS employees and community partners formed multi-disciplinary teams and began participating in the BSC. Throughout 2017, the BSC aims to meet the following goals:

- Improve organizational learning
- Decrease burnout
- Increase compassion satisfaction
- Decrease secondary traumatic stress (STS)
- Decrease employee turnover (i.e., attrition)
- Improve organizational health
- Improve child and family outcomes

The Department anticipates many positive outcomes from the BSC and will capture progress in future iterations of this report.

Comprehensive Assessment in CPS Investigations and Assessment

Throughout the years, the CDR process has noted instances of fragmented teaming and inconsistent assessment strategies across non-custodial program areas, specifically within CPS Assessment and CPS Investigations. While this multi-response approach allows an increased number of at-risk families to be served by the Department and, therefore, lessens the risk of future maltreatment, the two program areas will benefit from enhanced assessment, teaming,

and coordination strategies. In 2016, the Department committed to forming a single, comprehensive Child Protective Service Academy for CMs in both program areas. The content areas for this curriculum were initially outlined in 2016 and are focused on evidence-based investigation, trauma-informed care, evidence-based assessment, and safe teaming practices. Innovative simulation environments will be utilized to assist CMs in practicing the safety-critical strategies taught in the Academy. These content areas were informed by the Department's commitment to the safety sciences and in collaboration with academic partners and external agencies, most notably the Tennessee Bureau of Investigations.

Satellite Devices

In 2015, the Department began evaluating opportunities for CMs in rural areas to access alternative communication devices, such as satellite devices or digital radio equipment. The CDR process indicated several rural areas where cellular reception was limited to non-existent, and further studies by statewide workgroups revealed the concern was pervasive and long-standing in several rural areas. A statewide workgroup evaluated state contracts and identified non-cellular-frequency communication devices utilized by other state agencies, such as the Tennessee Emergency Management Agency (TEMA). As of the writing of this report, two DCS regions with rural demographics are piloting the use of satellite devices. These are the same devices utilized by TEMA, and the Department is hopeful this pilot will be successful and deploy to needed areas, across the state, by the end of 2017.

Transportation Safety

In 2015, DCS made improvements to policy 31.15, "Guidelines for Transportation of Child/Youth by Regional Employees." The CDR process, as well as the Confidential Safety Reporting System, uncovered instances where CMs worked extended hours prior to, during, and after transporting children, resulting in fatigue-related unsafe driving conditions. Under the revisions, CMs are given the option to request a co-driver when child-specific safety concerns are present and/or when work time extends beyond 11 hours in a single shift. CMs are also afforded the option of renting a direct bill hotel room under specific circumstances without the direct approval of a supervisor.

In 2016, DCS made additional revisions to policy 31.15 to further address fatigue and associated risk factors. The additions encouraged intentional dialogue between CMs and supervisors as it pertains to fatigue. Under the newest provisions, a CM who transports a child without a co-

driver and works more than 14 hours in a single shift, should be offered a minimum of 8 consecutive hours off-work whenever possible, especially if the upcoming work shift involves face-to-face oversight of a child.

Appendix A: Commission to Eliminate Child Abuse and Neglect Fatalities

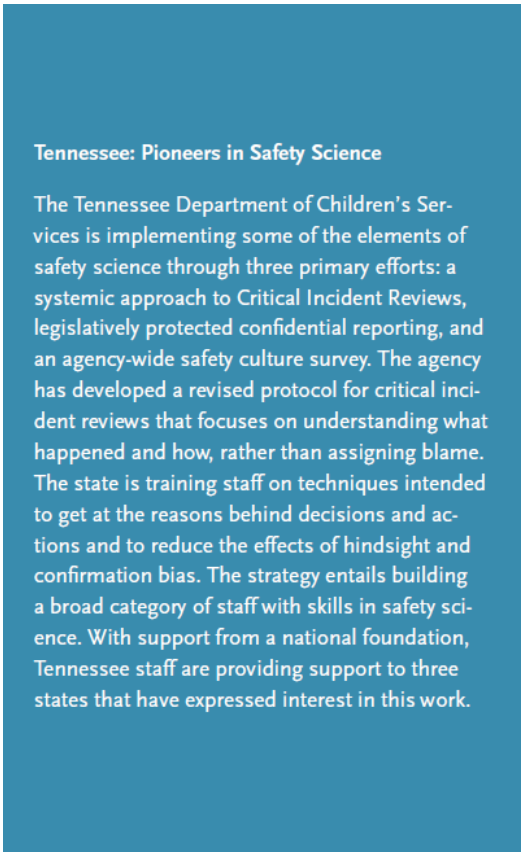
The federal Commission to Eliminate Child Abuse and Neglect Fatalities was established by Public Law 112-275, the Protect Our Kids Act of 2012, to develop a national strategy and recommendations for reducing fatalities across the country resulting from child abuse and neglect.[4] The Tennessee Department of Children's Services was asked to present to the commission on the Child Death Review Process and how Safety Science has been successfully applied. Based on the Department's input, the Commission developed the following Recommendation:

"Fund pilot programs to test the effectiveness of applying principles of safety science to improve CPS practice" (CECANF, 2016, p.78).

[4] The report can be found online at: http://www.acf.hhs.gov/programs/cb/resource/cecanf-final-report

In addition to making a recommendation based on the Department's contributions, DCS was recognized as "Pioneers in Safety Science" (CECANF, 2016, p. 78). The excerpt is included below.

"The Tennessee Department of Children's Services is implementing some of the elements of safety science through three primary efforts: a systemic approach to Critical Incident Reviews, legislatively protected confidential reporting, and an agency-wide safety culture survey. The agency has developed a revised protocol for critical incident reviews that focuses on understanding what happened and how, rather than assigning blame. The state is training staff on techniques intended to get at the reasons behind decisions and actions and to reduce the effects of hindsight and confirmation bias. The strategy entails building a broad category of staff with skills in safety science. With support from a national foundation, Tennessee staff are providing support to three states that have expressed interest in this work" (CECANF, 2016, p. 149).



Tennessee: Pioneers in Safety Science

The Tennessee Department of Children's Services is implementing some of the elements of safety science through three primary efforts: a systemic approach to Critical Incident Reviews, legislatively protected confidential reporting, and an agency-wide safety culture survey. The agency has developed a revised protocol for critical incident reviews that focuses on understanding what happened and how, rather than assigning blame. The state is training staff on techniques intended to get at the reasons behind decisions and actions and to reduce the effects of hindsight and confirmation bias. The strategy entails building a broad category of staff with skills in safety science. With support from a national foundation, Tennessee staff are providing support to three states that have expressed interest in this work.

References

Commission to Eliminate Child Abuse and Neglect Fatalities. (2016). *Within our reach: A national strategy to eliminate child abuse and neglect fatalities*. Washington, DC: Government Printing Office.

Dekker, S. (2006). *The field guide to understanding human error*. Burlington, Vermont: Ashgate Publishing Company.

U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2013). *Child maltreatment 2012*. Retrieved from http://www.acf.hhs.gov/programs/cb/research-data-technology/statistics-research/child-maltreatment.