

CHILD FATALITIES IN TENNESSEE 2007



**Tennessee Department of Health
Bureau of Health Services
Maternal and Child Health Section**

Acknowledgements

The Tennessee Department of Health, Maternal and Child Health Section (MCH), dedicates this report in memory of the children and their families who are sadly represented in the content of these pages. Each child death represents a tragic loss for the family as well as the community.

This report is made possible due to the partnership and professional assistance of The University of Tennessee Extension (UT) and the Tennessee Department of Health, Division of Health Statistics.

Because of the support, commitment, and dedication of the community professionals and leaders who serve on the local Child Fatality Review Teams (CFRT) throughout the State of Tennessee, we are gaining a better understanding of how and why children die. These teams are driven by a passion to promote, protect and improve the lives of children in Tennessee, and we thank them for having the courage to use their professional expertise in preventing future child deaths.

We extend our gratitude, as well, to the State Child Fatality Prevention Team members, whose input and support have led to continued program improvements and prevention initiatives.

We acknowledge the generous contributions of the following Tennessee agencies in facilitating the CFR program: the Department of Health, the Commission on Children and Youth, the Department of Children's Services, the Center for Forensic Medicine, the Professional Society on Abuse of Children, the Office of the Attorney General, the Tennessee Bureau of Investigation, the Department of Mental Health & Developmental Disabilities, the American Medical Association, the Department of Education, the Select Committee on Children and Youth,

Middle Tennessee Mental Health Institute, TN Suicide Prevention Network, state and local vital statistics registrars, TN regional and local Health Departments and the National Center for Child Death Review.

The collaborative efforts of these individuals and organizations ensure Tennessee children can look forward to a safer, healthier future.

For additional copies or questions concerning this report, contact:

Martha Keel, Ph.D.
Professor
The University of Tennessee Extension
119 Morgan Hall
2621 Morgan Circle
Knoxville, TN 37996-4501
(865) 974-8197
mkeel@utk.edu

This report is also available on the Internet:
<http://health.state.tn.us/MCH/CFR.htm>

Table of Contents

EXECUTIVE SUMMARY	1
STATE CHILD FATALITY PREVENTION TEAM RECOMMENDATIONS	4
TENNESSEE CHILD FATALITY REVIEW PROCESS	6
2007 TENNESSEE CHILD FATALITY REVIEW FINDINGS	9
Prevention Analysis	9
Infant Mortality	10
Infant Deaths by County	11
Infant Manner of Death	12
Summary of Infant Deaths and SIDS	13
Infant Primary Cause of Death	14
Contributing Factors and Circumstances in Infant Sleep Environment Deaths	15
Infant Sleep Environment Risk Factors	16
Manner of Death	17
Manner of Death and Age	17
Manner of Death and Gender	18
Manner of Death and Race	19
Manner of Death and Ethnicity	19
Manner of Death by Age, Gender and Race	20
Manner of Death Violence Related	20
Manner of Death Violence Related Homicide	21
Manner of Death Violence Related Suicide	21
Ranking of Counties with 15 or More Fatalities	22
Manner of Death for All Counties	23
Primary Cause of Death	25
Medical Causes of Deaths	26
External Causes of Deaths	27
External Cause of Death by Age	28
External Cause of Death by Gender	29
External Cause of Death by Race	30
External Deaths	31
Motor Vehicle Deaths	31
Asphyxia Deaths	32
Deaths Due to Weapons	32

Deaths Due to Drowning	33
Deaths Due to Fire/Burns	33
Deaths Due to Falls	34
Deaths Due to Poisoning	34
Deaths Due to Exposure	35
Deaths Due to Undetermined Causes	35
APPENDIX	36
Appendix A – Glossary	37
Appendix B – State Child Fatality Prevention Team	39
Appendix C – Local Child Fatality Review Teams	40
Appendix D – Child Fatality Review and Prevention Act	44
Appendix E – Sudden, Unexplained Child Death Act	48
Appendix F – Index of Tables	50
Appendix G – Index of Figures	51

Executive Summary

2007 Tennessee Child Fatality Review

This report includes information from the reviews of deaths that occurred in 2007. The local Child Fatality Review Teams (CFRT) reviewed children's deaths by Manner of Death and Cause of Death. During 2007, a total of 1,061 child deaths were reported from Tennessee Vital Statistics. Of these, 1,026 reviews were completed. This represents 96.7 percent of all 1,061 child deaths for 2007. While some states do not routinely review all deaths, it is Tennessee's policy to do so inasmuch as is possible. Those deaths that are not reviewed fall into one of several categories: fetal deaths of less than 22 weeks' gestation and less than 500 grams' weight, Tennessee residents whose deaths occurred out of state, and cases that are still under investigation at the time of publication. CFRTs are active in all judicial districts, covering every county and metropolitan area in the state of Tennessee. Department of Health team leaders provide administration and coordination of the teams.

Key Findings

- African American children and boys died at disproportionately higher rates than white children and girls for most causes of death, especially in infants.
- 65.8 percent (675) of the deaths reviewed were to infants less than 1 year of age. Of these deaths reviewed, 423 were premature infant deaths.
- 3.5 percent (36) of the total deaths reviewed were from Sudden Infant Death Syndrome (SIDS). While the number of reviews for SIDS has decreased, the number of sleep-related deaths has increased. Sleep-related deaths accounted for 105 deaths (not including SIDS deaths) to infants less than 1 year old.
- Of the deaths reviewed, 112 children died in a motor vehicle accident.

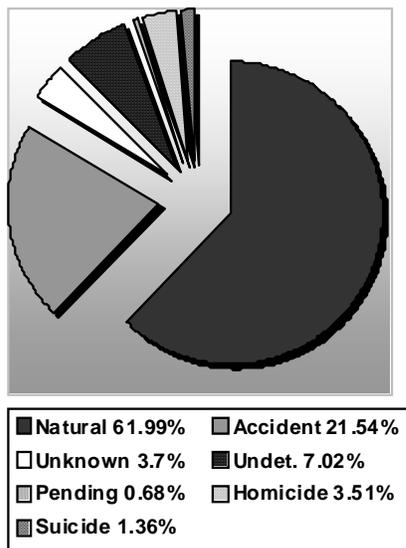
**Table 1 - Counties with
15 or More Fatalities**

County	Total
Shelby	230
Davidson	106
Hamilton	50
Knox	36
Montgomery	34
Rutherford	25
Madison	23
Blount	22
Sullivan	22
Bradley	18
Mauy	17
Washington	17
Wilson	17
Sevier	16
Sumner	16
TOTAL	649

Table 2 - Manner of Death Summary

	Natural	Accident	Suicide	Homicide	Undetermined	Unknown	Pending	Missing	Total
Age									
<1	512	47	0	10	67	31	6	2	675
1-4	49	45	0	6	5	2	0	0	107
5-9	21	16	1	0	0	0	0	0	38
10-14	30	32	3	3	0	1	0	0	69
15-17	24	81	10	17	0	4	1	0	137
Race									
White	350	167	10	16	43	25	6	2	619
African American	244	48	4	18	26	11	0	0	351
Asian	6	1	0	0	0	0	0	0	7
Multi-racial	3	2	0	0	0	0	0	0	5
Missing	25	2	0	2	2	0	2	0	33
Unknown	8	1	0	0	1	0	1	0	11
Gender									
Male	369	134	12	25	42	25	3	2	612
Female	266	86	2	11	30	12	4	0	411
Unknown/Missing	1	1	0	0	0	1	0	0	3
TOTAL	636	221	14	36	72	38	7	2	1026

Figure 1 - Manner of Death Summary



Manner of Death

Manner of Death describes the broad categories of death under which specific causes of death are organized. The manner of death categories are natural, accident, homicide, suicide, pending, undetermined and unknown (See Appendix A for definition). For deaths being reviewed, the CFRTs report the manner of death as indicated on the death certificate.

The overall rate of child fatalities for 2007 was 73.4 per 100,000¹ in the population of children less than 18 years of age. Fatality rates identified in this report are based on population counts supplied by the Tennessee Department of Health Office of Policy Planning and Assessment, Division of Health Statistics (<http://www.kidscount.org/cgi-bin/clicks.cgi>).

For a Manner of Death summary, refer to Table 2.

¹ All rates in this report based upon the number of child fatalities actually reviewed (1,026), rather than total deaths. This may result in an underestimation.

Medical/ External Causes of Death

The CFR case report tool classifies causes of death by medical causes and external causes. Medical causes are further specified by particular disease entities, while external causes are further specified by the nature of the injury. Of the 1,026 deaths reviewed by the CFRT in 2007:

- Sixty-nine percent (712) of the deaths reviewed were due to medical causes.
- Twenty-seven percent (276) of the deaths reviewed were due to external causes.
- Four percent (38) of cases were pending or unknown and could not be determined as a medical cause or external cause.

Table 3 displays medical and external causes as they relate to age, race, and gender.

Table 3 –Medical/ External Causes of Death Summaries					
	External Cause of Injury	Medical Condition	Undetermined if Injury or Natural	Unknown	Total
Age					
<1	58	581	28	8	675
1-4	50	55	1	1	107
5-9	17	21	0	0	38
10-14	39	30	0	0	69
15-17	112	25	0	0	137
TOTAL	276	712	29	9	1026
Race					
White	196	400	16	7	619
African American	70	269	11	1	351
Asian	1	6	0	0	7
Multi-racial	2	2	1	0	5
Unknown	2	8	0	1	11
Missing data	5	27	1	0	33
TOTAL	276	712	29	9	1026
Gender					
Male	173	415	18	6	612
Female	102	295	11	3	411
Unknown/Missing	1	2	0	0	3
TOTAL	276	712	29	9	1026

State Child Fatality Prevention Team Recommendations

CAUSE of DEATH: SIDS/Sleep-Related/Undetermined

- Develop an ongoing, statewide campaign on safe sleeping for infants.
- Provide, upon hospital discharge, a crib to those families who do not have/ cannot afford one.
An existing program modeled along these lines is “Cribs for Kids,” originally designed by the Pennsylvania SIDS Campaign. Full information: <http://www.cribsforkids.org>.
- Require Death Scene Investigation responders to complete the Sudden Unexplained Infant Death Investigation Report form (SUIDI) on all sleep-related deaths.
Form available online: <http://health.state.tn.us/MCH/SIDS/DSI.htm>.

CAUSE of DEATH: Vehicular

- Monitor the national evidence/best practices recommendations for requiring the use of rear-facing positioning until a child reaches 24 months of age.
*Current Child Restraint Law (per T.C.A. 55-9-602): “Children age one through age three, and weighing more than 20 pounds, must be secured in a child safety seat in a **forward** facing position in the rear seat, if available”*
- Support compliance with T.C.A. 55-9-602, requiring those children under 57 inches in height (4 feet, 9 inches) to be restrained in an age-appropriate car or booster seat.
- Require all recreational vehiclists to wear helmets and complete a safety training course at the time of purchase.
- Consider establishing a minimum age for the operation of ATVs.
- Implement community safety education programs on safe pedestrian practices, and enforce related laws. Encourage community adoption of programs such as “Safe Routes to School.”

CAUSE of DEATH: Prematurity/Congenital Anomaly

- Promote CDC recommendations for preconception health, especially encouraging all reproductive age citizens to have a reproductive life plan.
Detailed information on recommendations from the Centers for Disease Control and Prevention is available online at <http://www.cdc.gov/ncbddd/preconception/OandA.htm>.
- Promote early prenatal care, with emphasis on prenatal vitamins and folic acid.
- Implement programs to eliminate smoking and drug usage among expectant parents.

CAUSE of DEATH: Illness/Medical

- Encourage seasonal influenza vaccine for all persons.
- Continue maximum support to families with special needs children.

CAUSE of DEATH: Weapons

- Adopt legislation that places the burden for safe storage and/or control of a gun with the owner.
A report from the Children's Defense Fund shows that six states and the District of Columbia have child access prevention laws based on negligent storage, imposing criminal liability for allowing a child to gain access to a firearm regardless of whether or not the child used it or caused injury.

CAUSE of DEATH: Drowning

- Air public safety announcements regarding the dangers of leaving children unattended in bathtubs.

MANNER of DEATH: Suicide

- Encourage schools to activate Mobile Crisis intervention for any student threatening suicide.

Child Fatality Review Procedural Recommendations

- Create and require online continuing education training on correct completion of Tennessee birth and death certificates for providers, hospital staffers, and funeral directors.
- Explore means of determining maternal drug and alcohol use.
- Insist on accuracy on birth and death certificates. (Completion of birth certificates just prior to discharge would promote greater accuracy.)
- Schedule grand rounds at hospitals to discuss those cases that require an autopsy and/or cases that have been declined for autopsy by the Medical Examiner's Office.
- Grant Child Fatality Review Teams priority status for the receipt of autopsy and toxicology reports in order to avoid unnecessary delays in the review process.

Tennessee Child Fatality Review Process

Child deaths are often regarded as indicators of the health of a community. While mortality data provide us with an overall picture of child deaths by number and cause, it is from a careful study of each and every child's death that we can learn how best to respond to a death and how best to prevent future deaths.

Mission

The mission of the Child Fatality Review (CFR) Program is to review deaths in order to:

- Promote understanding of the causes of childhood deaths.
- Identify deficiencies in the delivery of services to children and families by public agencies.
- Make and carry out recommendations that will prevent future childhood deaths.

State Child Fatality Prevention Team

The State Child Fatality Prevention Team (see Appendix B) is composed of elected officials, commissioners, and other policy makers in the State of Tennessee as described in T.C.A. 68-142-103 (see Appendix D). This team reviews the reports from the local teams, analyzes statistics of the incidence and causes of child deaths, and makes recommendations to the Governor and General Assembly to promote the safety and well being of children. Tennessee is part of a national movement to identify why children are dying and what preventive measures can be taken. Members of the state team include:

- Department of Health Commissioner, team chairperson
- Attorney General
- Department of Children's Services Commissioner
- Tennessee Bureau of Investigation Director
- Physician (nominated by Tennessee Medical Association)
- Physician credentialed in forensic pathology
- Department of Mental Health and Developmental Disabilities Commissioner

- Judiciary member nominated by the Supreme Court Chief Justice
- The Executive Director of the Tennessee Commission on Children and Youth
- President of state professional society on the abuse of children
- Team coordinator appointed by the Commissioner of Health
- The chair of the Select Committee on Children and Youth
- Two members of the Senate
- Two members of the House of Representatives
- Department of Education Commissioner

Local Child Fatality Review Teams

The Child Fatality Review and Prevention Act of 1995 (T.C.A. 68-142-101-109 – see Appendix D) established a statewide network of child fatality review teams in the Judicial Districts of Tennessee (see Appendix C). The judicial districts cover all 95 counties of the State. Fourteen team leaders provide the administration and coordination of the multi-disciplinary, multi-agency teams. Team leaders are from Regional and Metropolitan Health offices across the State. The teams review all deaths of children 17 years of age or younger and make recommendations to the Child Fatality Prevention Team (State team) for reduction and prevention of child deaths statewide. Their careful review process results in a thorough description of the factors related to child deaths. Members of the local teams include:

- Department of Health Regional Health Officer
- Department of Children's Services Social Services Supervisor
- Medical examiner
- Employee of local educational agency, appointed by Director of Schools
- Prosecuting attorney appointed by the District Attorney General
- Local law enforcement officer
- Mental health professional
- Pediatrician or family practice physician
- Emergency medical services provider or firefighter
- Juvenile court representative

- Representatives of other community agencies serving children

Case Reporting Database

Tennessee's child fatality data is entered electronically into the National Center for Child Death Review (CDR) database. Our partnership with the National Center has allowed us to capture and analyze data more efficiently and comprehensively than in past years.

The CFR Process

After the State-level Prevention Team reviews the recommendations from the local CFRTs, the findings are incorporated into the Annual Child Fatalities in Tennessee report. The annual report is then presented to the Legislature for their consideration in implementing laws, policies and practices to prevent child deaths in Tennessee and to make improvements in protocols and procedures (see Figure 2 on page 8).

The CFR data included in this report represent thoughtful inquiry and discussion by a multi-disciplinary group of community leaders who consider all the circumstances surrounding the death of each child. Team members bring information to the case review from a variety of agencies and documents. Their careful review process

results in a thorough description of the factors related to child deaths.

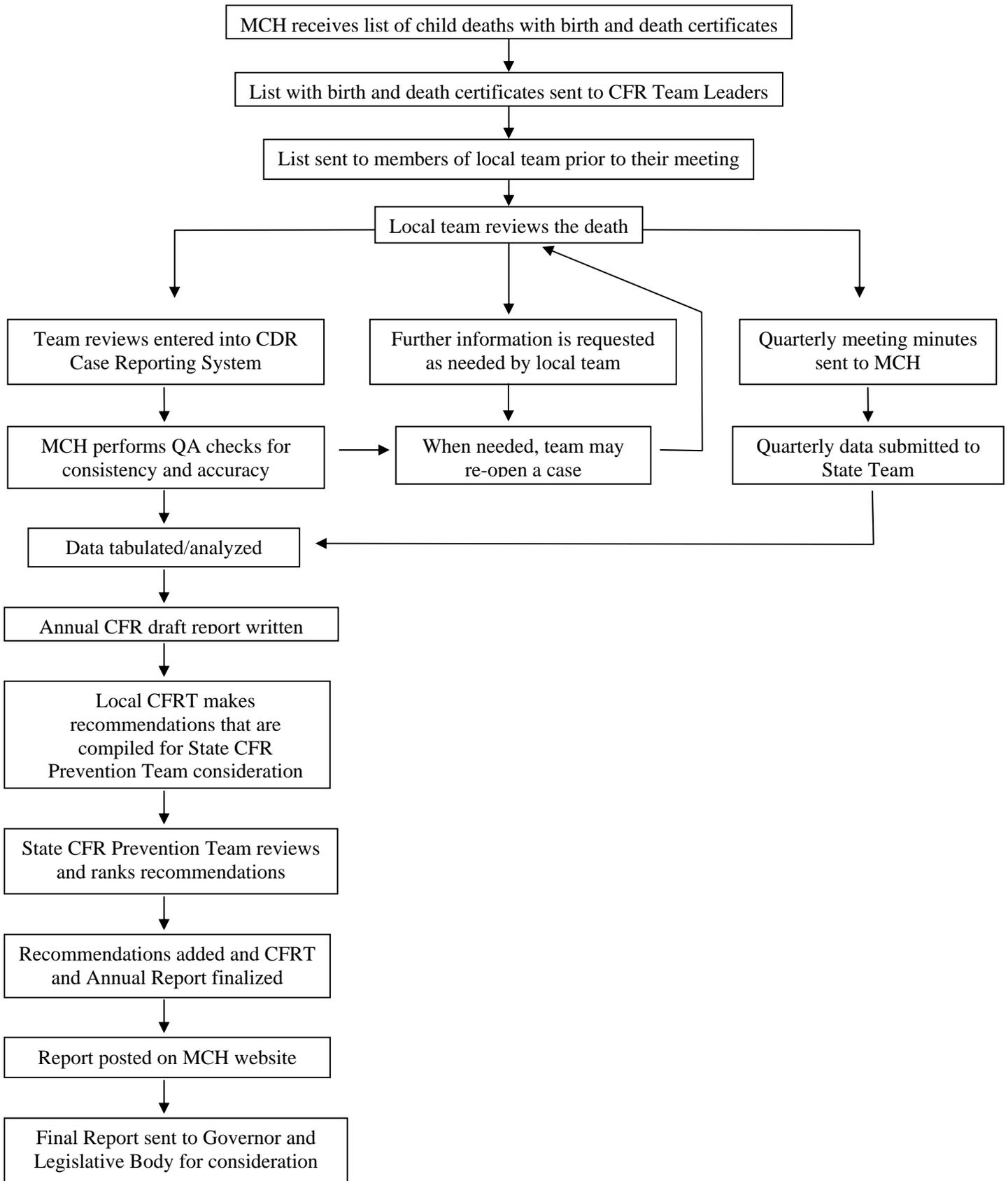
In spite of their best efforts, CFRTs are not able to review every child death. Some reviews must be delayed until all legal investigations, autopsies or prosecutions are completed. Some deaths occur outside the county of residence, resulting in long delays in notification for the CFRT. Fetal deaths of less than 22 weeks' gestation and less than 500 grams' weight are not reviewed. Because of these variables, it is usually impossible to find an exact number-for-number match between CFR data and data from other sources such as vital statistics. The unique role of CFR data is to provide a comprehensive depth of understanding to augment other, more one-dimensional data sources.

Conclusion

The CFR process has raised the collective awareness of all participants and has led to a clearer understanding of agency responsibilities and possibilities for collaboration on all efforts addressing child health and safety. It is only through continued collaborative work that we can hope to protect the health and lives of our children.

CFR Process Flow Chart

Figure 2 - CFR Process Flow Chart



2007 Tennessee Child Fatality Review Findings

Prevention Analysis

Since the establishment of the Child Fatality Review Program, numerous recommendations have been made for prevention of future deaths. The CFRTs' conclusions regarding the preventability of child deaths are included in Table 4. A child's death is considered to be preventable if an individual or the community could reasonably have done something that would have changed the circumstances that led to the child's death. To make this determination, teams look at all information brought to the case review. Of the 2007 deaths the CFRTs reviewed, the determination for preventability is:

- 588 (57.3%) - Deaths probably could **not** have been prevented
- 241 (23.5%) - Deaths probably **could** have been prevented
- 79 (7.8%) - Preventability could not be determined
- 118 (11.5%) - Preventability is unknown

Table 4 – Preventability of Child Deaths

Manner of Death	Probably Not Preventable	Probably Preventable	Could Not Determine	Unknown	Total
Natural	525	13	28	70	636
Accident	14	165	12	30	221
Suicide	1	10	1	2	14
Homicide	3	31	0	2	36
Undetermined	13	13	37	9	72
Pending	0	4	0	3	7
Unknown	32	5	0	1	38
Missing (no info)	0	0	1	1	2
TOTAL	588	241	79	118	1026

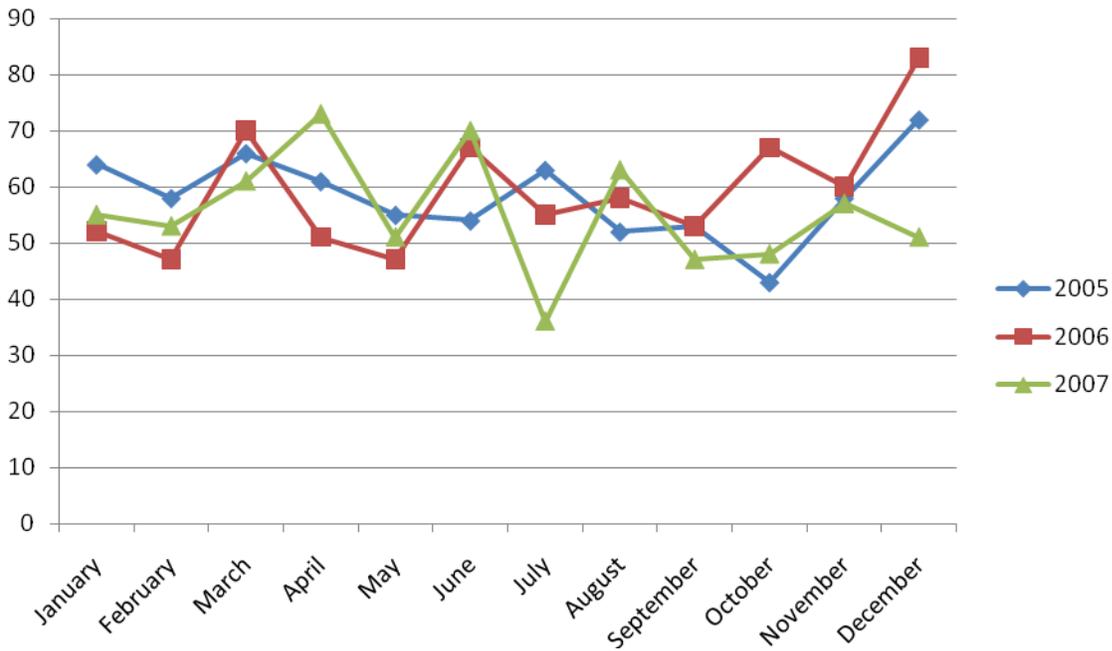
Infant Mortality

Infant mortality, death to a child before his or her first birthday, is a major focus of the Child Fatality Review process and of particular concern in Tennessee. In 2007, the state's infant mortality rate of 8.3 deaths per 1,000 live births¹ was significantly higher than the national rate of 6.8 deaths per 1,000 live births.²

Figure 3 documents the distribution of infant deaths by month, while Table 5 displays the number of deaths in each Tennessee county.

Infant Deaths by Month

Figure 3 - Infant Deaths by Month



¹ Tennessee Division of Health Statistics

² National Center for Health Statistics

Table 5 - Infant Deaths by County (cases reviewed)

County	2006	2007	County	2006	2007
Anderson	10	3	Lauderdale	0	4
Bedford	2	11	Lawrence	0	2
Benton	2	0	Lewis	0	1
Bledsoe	2	1	Lincoln	3	3
Blount	8	11	Loudon	3	1
Bradley	10	9	Macon	2	2
Campbell	2	4	Madison	13	18
Cannon	0	0	Marion	3	3
Carroll	6	4	Marshall	9	5
Carter	3	2	Maury	11	11
Cheatham	3	0	McMinn	1	6
Chester	1	0	McNairy	2	3
Claiborne	3	1	Meigs	0	1
Clay	0	1	Monroe	5	5
Cocke	3	5	Montgomery	28	22
Coffee	4	5	Moore	0	0
Crockett	0	1	Morgan	1	2
Cumberland	2	2	Obion	4	4
Davidson	91	78	Overton	3	0
Decatur	1	2	Perry	0	0
DeKalb	0	0	Pickett	0	0
Dickson	8	6	Polk	0	2
Dyer	7	10	Putnam	3	7
Fayette	1	2	Rhea	4	8
Fentress	1	4	Roane	3	6
Franklin	2	2	Robertson	4	8
Gibson	5	8	Rutherford	19	15
Giles	1	1	Scott	6	1
Grainger	1	0	Sequatchie	1	4
Greene	4	2	Sevier	4	9
Grundy	1	2	Shelby	199	171
Hamblen	6	2	Smith	3	2
Hamilton	47	34	Stewart	0	0
Hancock	0	0	Sullivan	9	19
Hardeman	2	0	Sumner	15	8
Hardin	4	2	Tipton	4	6
Hawkins	4	5	Trousdale	0	0
Haywood	1	7	Unicoi	2	3
Henderson	3	5	Union	0	1
Henry	3	1	VanBuren	1	1
Hickman	5	4	Warren	6	2
Houston	0	1	Washington	12	14
Humphreys	0	1	Wayne	1	1
Jackson	0	0	Weakley	3	3
Jefferson	5	6	White	0	2
Johnson	1	2	Williamson	6	9
Knox	34	24	Wilson	7	8
Lake	0	1			
			TOTAL	710	675

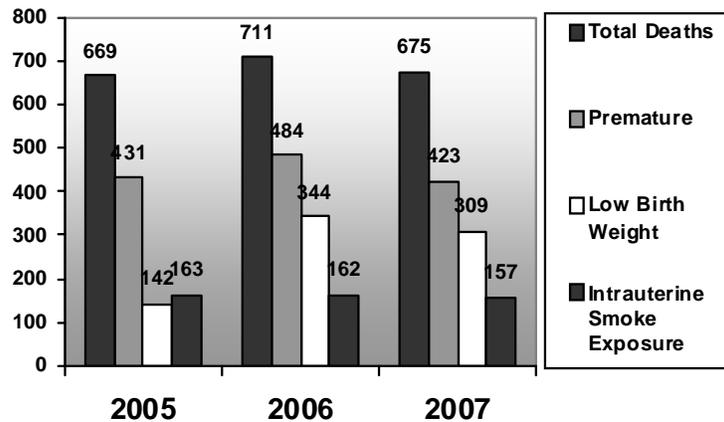
Factors Associated with Infant Manner of Death

Table 6 reveals those major factors contributing to infant death, including such categories as prematurity, birth weight, and maternal substance abuse. At least 75.8% (512) of the infant deaths were determined to be of natural manner, while the manner of death was unknown or could not be determined in 98 (14.5 percent) of the deaths.

Factors contributing to infant deaths are not mutually exclusive, in that a single death may have been impacted by one or more of the categories (for example: a low birth weight infant may be born to a mother who smoked throughout her pregnancy). Fully 23 percent (157) of the 2007 infant deaths were to mothers who smoked during the prenatal period.

	Natural	Accident	Homicide	Undetermined	Pending	Unknown	No info	Total
Deaths Reviewed	512	47	10	67	6	31	2	675
Premature (<37 weeks)	371	9	1	13	2	26	1	423
Low birth weight (<2500 grams)	256	10	2	14	2	24	1	309
Intrauterine Smoke Exposure	98	16	1	27	5	9	1	157
Intrauterine Drug Exposure	18	4	0	4	0	2	0	28
Intrauterine Alcohol Exposure	2	0	0	0	0	0	0	2

Figure 4 - Summary of Infant Deaths Reviewed



Summary of Infant Deaths and SIDS¹

SIDS is defined as sudden death of an infant less than one year old, which remains unexplained after a thorough investigation, complete autopsy, examination of the death scene, and review of medical history (excluding suffocation-related).

In October 2005 the American Academy of Pediatrics recognized nationwide inconsistencies in the diagnosis of sudden, unexpected infant deaths. Deaths with similar circumstances have been diagnosed as SIDS, accidental suffocation, positional asphyxia or as undetermined deaths. Training on death scene investigations in Tennessee is designed to promote clear, consistent reporting.

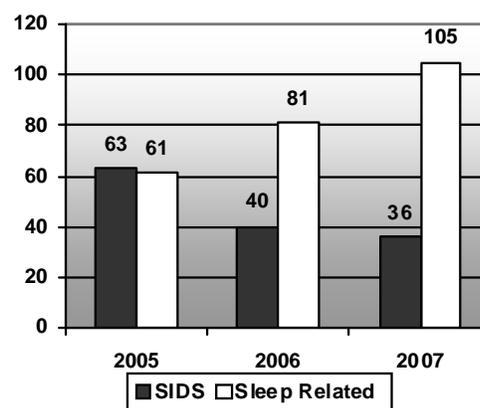
Because SIDS is a diagnosis of exclusion, all other probable causes of death must be eliminated through autopsy, death scene investigation and health history. Incomplete investigations, ambiguous findings and the presence of known risk factors for other causes of deaths result in many sudden infant deaths being diagnosed as “undetermined cause” rather than SIDS.

Sudden Infant Death Syndrome (SIDS) and Sleep-Related Deaths

In 2007, 36 deaths were reported as Sudden Infant Death Syndrome (SIDS) and an additional 105 infant deaths resulted from an unsafe sleep environment (see Figure 5).

- The 36 SIDS deaths represent 5.3% of infant deaths due to medical conditions and 3.5% of all childhood deaths in 2007.
- Of all fatalities due to SIDS, 26 (72%) occurred from birth through 4 months of age, with the most frequently occurring age of death being 2 to 3 months.
- SIDS deaths decreased 44% from 2005 to 2007; correspondingly, non-SIDS deaths occurring in the sleep environment *increased* 72% during that same period.
- There were 41 infant deaths in the sleep environment from asphyxia.

Figure 5 - SIDS and Infant Sleep Related Deaths



Data source: National MCH Center for Child Death Review

Infant Primary Cause of Death – Sleep Related

Table 7 - Sleep Related Deaths by Cause¹

	SIDS	Asphyxia	Medical Condition²	Undetermined³	All Other Causes	Total
0-1 Month	8	12	7	7	11	45
2-3 Months	18	15	5	5	8	51
4-5 Months	7	6	5	1	5	24
6-7 Months	3	5	4	2	0	14
8-11 Months	0	3	1	0	3	7
TOTAL	36	41	22	15	27	141

¹ Columns do not add up to total deaths because the factors are not mutually exclusive.

² Medical condition includes unknown medical causes.

³ Undetermined includes undetermined deaths from both medical and injury causes. All other causes include deaths from other unknown causes.

Circumstances in Infant Sleep Environment Deaths

Table 8 - Circumstances in Infant Sleep Environment Deaths⁴	2005	2006	2007
Infant not in a crib or bassinette	54	69	103
Infant sleeping with other people	45	60	72
Infant not sleeping on back	30	38	49
Unsafe bedding or toys in sleep area with infant	13	18	20
Obese adult sleeping with infant	3	9	8
Adult drug impaired sleeping with infant	0	2	4
Adult alcohol impaired sleeping with infant	1	2	1
Adult fell asleep bottle feeding	0	0	2
Adult fell asleep breast feeding	0	0	2

Table 9 - Circumstances of SIDS and Sleep-Related Deaths						
Age in Months	0-1	2-3	4-5	6-7	8-11	Total
Infant unobstructed by person or object	5	7	2	0	2	16
Infant on top of person	0	1	0	0	0	1
Infant on top of object	1	0	1	1	0	3
Infant under person	0	3	0	0	0	3
Infant under object	1	1	0	0	0	2
Infant between person	1	3	0	1	0	5
Infant between object ⁵	1	0	4	0	2	7
Infant wedged	6	0	1	3	1	11
Infant pressed	3	2	0	0	0	5
Infant fell or rolled onto object	0	3	0	0	0	3
Infant tangled in object	0	0	1	0	0	1
Other	2	3	2	0	0	7
Unknown	25	28	13	9	2	77
TOTAL	45	51	24	14	7	141

⁴ Because more than one contributing factor may have been present in a single death, the total number of contributing factors exceeds the number of sleep environment deaths.

⁵ Under and between objects includes animals.

Infant Sleep Environment Risk Factors

Although the cause and mechanism of SIDS remain unknown, several risk factors appear to put an infant at a higher risk for SIDS.

- Infants who sleep on their stomachs are more likely to die of SIDS than those who sleep on their backs.
- Infants whose mothers smoked during pregnancy and who are exposed to passive smoking after birth are at greater risk.
- Soft sleep surfaces, waterbeds, sofas, armchairs, excessive loose bedding and bed sharing increase the risk of sleep-related deaths.
- Bed sharing is more common among African-American mothers.

The National Infant Sleep Position study reported that teenage African-American mothers are four times more likely to routinely bed-share than are white mothers.

African-American infants who die from SIDS or sudden unexpected infant death are more likely to have shared a sleep surface.

- Multiple bed sharers increase the risk.
- When the bed-sharer has consumed alcohol, the risk for the infant escalates.
- When the bed-sharer is overly tired, an infant is at increased risk.
- When there are items in the sleep area that the infant can sink into or may fall on the infant, such as stuffed animals, toys, bumper pads and heavy blankets, the risk of sleep-related death increases.
- Where there is a pet in the sleep environment with the infant, a sleep-related fatality is more likely.

Infants need a safe sleep area. Prevention tips on how to create one include:

- Infants should sleep on a firm mattress covered with only a tight-fitting crib sheet.
- Using a wearable blanket or other type sleeper instead of blankets increases an infant's safety during sleep.
- Avoid the use of soft or pillow-like bumpers, wedges, or positioners in an infant's sleep area.
- Always place infants on their back for sleep.
- Make sure an infant has a safe place to sleep when visiting or traveling.

Manner of Death

Manner of death is a classification of deaths based on the circumstances surrounding a death. The manner of death categories used in this report are natural, accident, homicide, suicide, pending, undetermined and unknown. The CFRTs report the manner of death as indicated on the death certificate. **Causes** of death are discussed in Tables 21 and 22.

Among the 1,026 fatalities reviewed by the CFRTs, 62% (N=636) were due to medical causes; 21.5% (N=221) were accidental; 3.5% (N=36) were homicides; 1.4% (N=14), suicides; 7.0% (N=72), undetermined; and 4% were either pending or unknown (N=45) (Table 10).

The overall rate of child fatalities as reviewed by the CFRT was 71 per 100,000 in the population of children less than 18 years of age. Fatality rates identified in this report are based on population counts supplied by the Tennessee Department of Health Office of Policy Planning and Assessment, Division of Health Statistics.

Manner of Death	Number	Percent
Natural	636	62
Accident	221	21.5
Homicide	36	3.5
Suicide	14	1.4
Undetermined	72	7.0
Unknown	38	3.7
Pending	7	0.7
Missing data	2	0.2
TOTAL	1026	100

Manner of Death by Age

Across all age groups the most fatalities in 2007 (675 or 65.8%) occurred during the first year of life. The second highest percentage of fatalities was among youth aged 15-17 with 137 deaths (13.3%). The third highest was in the 1-4 year age group, with 107 deaths (10.4%), (Table 11).

Age	Natural	Accident	Homicide	Suicide	Undet.	Unknown	Pending	Missing	Total	Percent
<1	512	47	10	0	67	31	6	2	675	65.8%
1-4	49	45	6	0	5	2	0	0	107	10.4%
5-9	21	16	0	1	0	0	0	0	38	3.7%
10-14	30	32	3	3	0	1	0	0	69	6.7%
15-17	24	81	17	10	0	4	1	0	137	13.3%
TOTAL	636	221	14	36	72	38	7	2	1026	100%

Manner of Death by Gender

In 2007, 40.1% of child fatalities were female and 59.7% were male. The largest number of deaths for both genders was by natural manner (Table 12).

Manner	Female		Male	
	N	%	N	%
Natural	266	64.7%	369	60.3%
Accidental	86	21%	134	21.9%
Homicide	11	2.7%	25	4.0%
Suicide	2	0.5%	12	2.0%
Undetermined	30	7.3%	42	6.9%
Unknown	12	2.9%	25	4.0%
Pending	4	1.0%	3	0.5%
Missing data	0	0.0%	2	0.3%
TOTAL	411	100%	612	100%

Manner of Death by Race

Natural was the most frequent manner of death among all races (N=636 or 61.9%). The total number of natural fatalities for White children was 350 (34.1%), for African-American children 244 (23.8%), for Asian children 6 (0.6%) and 3 (0.3%) multi-racial children. Eight natural deaths (0.8%) were categorized as Unknown, and 25 deaths were lacking racial information.

Table 13 – Manner of Death by Race

Manner	White		Black		Asian		Multi		Unknown		Missing		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Natural	350	34.1%	244	23.8%	6	0.6%	3	0.3%	8	0.8%	25	2.4%	636	61.9%
Accident	167	16.3%	48	4.7%	1	0.1%	2	0.2%	1	0.1%	2	0.2%	221	21.5%
Homicide	16	1.6%	18	1.7%	0	0.0%	0	0.0%	0	0.0%	2	0.2%	36	3.5%
Suicide	10	1.0%	4	0.4%	0	0.0%	0	0.0%	0	0.0%	0	0.4%	14	1.4%
Undeter.	43	4.2%	26	2.5%	0	0.0%	0	0.0%	1	0.1%	2	0.2%	72	7.0%
Unknown	25	2.4%	11	1.1%	0	0.0%	0	0.0%	0	0.0%	2	0.2%	38	3.7%
Pending	6	0.6%	0	0.0%	0	0.0%	0	0.0%	1	0.1%	0	0.0%	7	0.7%
Missing	2	0.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.2%
TOTAL	619	60.4%	351	34.2%	7	0.7%	5	0.5%	11	1.1%	33	3.6%	1026	100%

Manner of Death by Ethnicity

Natural was the most frequent manner of death among all ethnicities (N=636 or 61.9%). The total number of natural fatalities for Hispanic children was 50 (0.5%) and for Non-Hispanic children was 580 (56.5%). Two natural deaths were categorized as Unknown (Table 14). There were 4 cases with missing ethnicity data.

Table 14 - Manner of Death by Ethnicity

Manner	Ethnicity				Total
	Hispanic	Non-Hispanic	Unknown	Missing	
Natural	50	580	2	4	636
Accident	8	213	0	0	221
Suicide	0	14	0	0	14
Homicide	6	28	2	0	36
Undetermined	6	63	3	0	72
Pending	0	7	0	0	7
Unknown	2	33	3	0	38
Missing	0	2	0	0	2
TOTAL	72	940	10	4	1026

In 2007, the highest number of fatalities occurred to those in the first year of life. Males suffered a higher incidence of fatalities than their female counterparts. Proportionately, African-Americans were at a significantly higher risk for death than other racial groups.

Age		Gender		Race	
	Number		Number		Number
<1	675	Male	612	White	619
1-4	107	Female	411	African-American	351
5-9	38	Unknown	3	Asian	7
10-14	69			Multi-Racial	5
15-17	137			Unknown / Missing	44
TOTAL	1026	TOTAL	1026	TOTAL	1026

Manner of Death: Violence Related

In 2007, there were 50 child fatalities due to violence-related injuries (Table 16). This represents 4.8% of all child fatalities. These injuries were the result of either homicide (N=36, Table 17) or suicide (N=14, Table 18).

The greatest number of violence-related fatalities occurred to teens in the 15-17 age group (N=27), with infants suffering the second highest incidence at 10 deaths. Males were more likely than females to die from violence-related injuries. Whites and African-Americans accounted for similar proportions of the 50 deaths, with no deaths occurring among other racial groups.

Age		Gender		Race	
	Number		Number		Number
<1	10	Male	37	White	26
1-4	6	Female	13	African-American	22
5-9	1			Asian	0
10-14	6			Other	0
15-17	27			Unknown / Missing	2
TOTAL	50	TOTAL	50	TOTAL	50

Manner of Death: Violence-Related (Homicide)

In 2007, there were 36 child fatalities due to homicide. This represents 72% of all violence-related deaths and 3.5% of all child fatalities and is an increase of 16% from 2006⁶. Males were more likely than females to die from homicides. African-American children died at a slightly higher number than White children (18 and 16 fatalities, respectively). Children ages 15-17 and less than one year of age had the highest incidences of death by homicide (Table 17).

Age		Gender		Race	
Number		Number		Number	
<1	10	Male	25	African-American	18
1-4	6	Female	11	White	16
5-9	0			Asian	0
10-14	3			Other	0
15-17	17			Unknown/ Missing	2
TOTAL	36	Total	36	TOTAL	36

Manner of Death: Violence-Related (Suicide)

During 2007, 14 young people committed suicide. This was a decrease in the number of suicides by 12%⁷ from 2006. Most of these deaths were in children in the 15-17 age group (N=10) and/or male (N=12). Ten White children and four African-American children died as a result of suicide (Table 18).

Age		Gender		Race	
Number		Number		Number	
<1	0	Male	12	White	10
1-4	0	Female	2	African-American	4
5-9	1			Asian	0
10-14	3			Other	0
15-17	10			Unknown/ Missing	0
TOTAL	14	TOTAL	14	TOTAL	14

⁶ Note: There were 31 homicides in 2006.

⁷ There were 16 suicides in 2006.

Manner of Death by County

Of the 1026 deaths in Tennessee:

- 649 (63.2%) of all child fatalities occurred in 15 counties with 15 or more deaths each (Table 19).
- Shelby County had the highest percentage of all childhood fatalities (N=230; 22.4%), followed by Davidson (N=106; 10.3%), Hamilton (N=50; 4.9%) and Knox (N=36; 3.5%).
- The highly populated counties of Shelby and Davidson reported a total of 336 fatalities and accounted for 32.7% of all child fatalities.
- For a list containing the data of all 95 counties, please refer to Table 20.

**Table 19 - Ranking of Counties with
15 or More Fatalities**

County	Total	Percent	Rank
Shelby	230	22.4%	1
Davidson	106	10.3%	2
Hamilton	50	4.9%	3
Knox	36	3.5%	4
Montgomery	34	3.3%	5
Rutherford	25	2.4%	6
Madison	23	2.2%	7
Blount	22	2.1%	8
Sullivan	22	2.1%	8
Bradley	18	1.7%	10
Maury	17	1.7%	11
Washington	17	1.7%	11
Wilson	17	1.7%	11
Sevier	16	1.6%	14
Sumner	16	1.6%	15
TOTAL	649	63.3%	

Manner of Death for All Counties

Table 20 - Manner of Death for All Counties									
County	Natural	Accident	Homicide	Suicide	Pending	Undet.	Unknown	Missing	Total
Anderson	2	5	1	0	0	0	0	0	8
Bedford	6	1	0	1	0	4	0	0	12
Benton	0	1	0	0	0	0	0	0	1
Bledsoe	1	0	0	0	0	1	0	0	2
Blount	14	7	1	0	0	0	0	0	22
Bradley	10	6	0	0	0	2	0	0	18
Campbell	5	2	0	0	0	0	0	0	7
Cannon	0	0	0	0	0	0	0	0	0
Carroll	4	0	0	0	0	0	0	0	4
Carter	1	3	0	0	0	0	2	0	6
Cheatham	1	1	0	0	0	0	0	0	2
Chester	0	2	0	0	0	0	0	0	2
Claiborne	0	2	0	0	0	0	0	0	2
Clay	1	2	0	0	0	0	0	0	3
Cocke	5	2	2	0	0	0	0	0	9
Coffee	5	3	0	0	0	0	0	0	8
Crockett	1	0	0	0	0	0	0	0	1
Cumberland	4	0	0	0	0	0	0	0	4
Davidson	67	17	7	2	0	11	2	0	106
Decatur	3	1	0	0	0	0	0	0	4
Dekalb	2	0	0	0	0	0	0	0	2
Dickson	5	5	1	1	0	0	0	0	12
Dyer	12	1	0	0	0	0	0	0	13
Fayette	3	1	0	0	0	0	0	0	4
Fentress	4	1	0	0	0	1	0	0	6
Franklin	1	2	0	0	0	0	0	0	3
Gibson	9	3	0	0	0	1	0	0	13
Giles	2	1	0	0	0	0	0	0	3
Grainger	1	0	0	0	0	0	0	0	1
Greene	1	1	1	0	1	0	1	0	5
Grundy	1	2	0	0	0	1	0	0	4
Hamblen	1	1	0	1	1	0	1	0	5
Hamilton	19	4	2	0	0	9	16	0	50
Hancock	0	0	0	0	0	0	0	0	0
Hardeman	1	1	0	0	0	0	0	0	2
Hardin	4	2	0	0	0	0	0	0	6
Hawkins	2	1	0	0	2	0	1	0	6
Haywood	6	0	0	1	0	1	0	0	8
Henderson	3	3	0	0	3	1	0	0	10
Henry	2	2	0	0	0	0	0	0	4
Hickman	4	2	0	0	0	1	0	0	7
Houston	1	1	0	0	0	0	0	0	2

Table 20 - Manner of Death for All Counties									
County	Natural	Accident	Homicide	Suicide	Pending	Undet.	Unknown	Missing	Total
Humphreys	1	0	0	0	0	0	0	0	1
Jackson	0	0	0	0	0	0	0	0	0
Jefferson	7	3	0	0	0	0	0	0	10
Johnson	4	0	0	0	0	0	1	0	5
Knox	25	6	2	2	0	1	0	0	36
Lake	0	1	0	0	0	0	0	0	1
Lauderdale	5	1	0	0	0	0	0	0	6
Lawrence	2	0	0	0	0	1	0	0	3
Lewis	2	1	0	0	0	0	0	0	3
Lincoln	3	1	0	0	0	0	0	0	4
Loudon	2	1	0	0	0	0	0	0	3
Macon	2	0	1	0	0	1	0	0	4
Madison	18	5	0	0	0	0	0	0	23
Marion	1	0	0	0	0	2	0	0	3
Marshall	3	4	0	0	0	0	0	0	7
Maury	11	1	2	1	0	2	0	0	17
McMinn	6	4	1	0	0	0	0	0	11
McNairy	4	3	0	0	0	0	0	0	7
Meigs	2	0	0	0	0	0	0	0	2
Monroe	3	5	0	0	0	1	0	0	9
Montgomery	18	8	2	1	0	5	0	0	34
Moore	0	1	0	0	0	0	0	0	1
Morgan	2	0	0	0	0	0	0	0	2
Obion	4	2	0	0	0	0	0	0	6
Overton	0	0	0	0	0	0	0	0	0
Perry	0	1	0	0	0	0	0	0	1
Pickett	0	1	0	0	0	0	0	0	1
Polk	1	1	0	0	0	0	0	0	2
Putnam	5	1	0	0	0	1	2	1	10
Rhea	9	2	0	0	0	0	0	0	11
Roane	6	4	0	0	0	0	0	0	10
Robertson	7	1	0	1	0	1	0	0	10
Rutherford	14	4	0	0	0	7	0	0	25
Scott	3	1	0	0	0	0	0	0	4
Sequatchie	4	1	0	0	0	0	0	0	5
Sevier	11	5	0	0	0	0	0	0	16
Shelby	174	37	12	1	0	6	0	0	230
Smith	0	2	0	0	0	1	0	0	3
Stewart	0	0	0	0	0	0	0	0	0
Sullivan	18	1	0	0	0	3	0	0	22
Sumner	9	3	0	1	0	3	0	0	16
Tipton	6	2	0	0	0	0	0	0	8
Trousdale	0	1	0	0	0	0	0	0	1

County	Natural	Accident	Homicide	Suicide	Pending	Undet.	Unknown	Missing	Total
Unicoi	3	0	0	0	0	0	1	0	4
Union	1	1	0	0	0	0	0	0	2
Van Buren	2	0	0	0	0	0	0	0	2
Warren	2	1	0	0	0	0	0	0	3
Washington	4	2	0	0	0	0	11	0	17
Wayne	0	1	0	0	0	1	0	0	2
Weakley	3	1	0	0	0	0	0	0	4
White	1	2	0	0	0	0	0	1	4
Williamson	8	2	0	0	0	1	0	0	11
Wilson	6	7	1	1	0	2	0	0	17
TOTAL	636	221	36	14	7	72	38	2	1026

Primary Cause of Death

The primary cause of death is defined as the effect or condition that brought about the cessation of life. The causes are broken down into two categories: medical causes and external causes. Many of the medical causes are not believed to be preventable. External causes are specified by type of injury and are discussed on page 26.

The percentages in the table represent the percentage of *total* (1,026) deaths reviewed.

Medical Causes of Deaths

A medical death can result from one of many serious health issues: from inherent conditions, existing conditions, congenital anomalies, prematurity, disease, other medical causes, SIDS, genetic disorders, cancers, heart and cerebral problems. Serious infections and respiratory disorders such as asthma can be fatal to children. With infant deaths it is important to note that, when SIDS and/or a Sudden Unexplained Infant Death is identified on a death certificate, it is classified under Manner of Death as “Natural” or “Undetermined.”

Table 21 - Cause of Death – Medical Causes

Cause of Death	All Deaths		Age					Gender			Race				Ethnic
	Total	Percent	<1	1 - 4	5 - 9	10 - 14	15 - 17	Female	Male	Unknown	White	Black	Asian	Other	Hispanic
Prematurity	264	25.7%	263	0	1	0	0	111	152	1	125	128	3	8	6
Other medical condition	131	12.8%	78	26	10	13	4	51	80	0	81	43	0	7	4
Congenital anomaly	107	10.4%	94	9	0	1	3	43	64	0	56	38	3	10	8
Other infection	41	4%	30	4	3	0	4	15	26	0	28	12	0	1	0
SIDS	40	3.9%	40	0	0	0	0	17	23	0	28	11	0	1	1
Cardiovascular	28	2.7%	18	2	2	0	6	10	17	1	14	11	0	3	2
Other perinatal condition	27	2.6%	27	0	0	0	0	10	17	0	17	8	0	2	2
Cancer	25	2.4%	1	6	4	11	3	13	12	0	19	4	0	2	2
Undetermined medical condition	17	1.7%	15	1	0	0	1	7	10	0	13	4	0	0	0
Pneumonia	16	1.6%	10	2	0	2	2	8	8	0	7	7	0	2	1
Neurological/ Seizure disorder	11	1.1%	3	4	0	2	2	5	6	0	9	2	0	0	0
Influenza	2	0.2%	0	0	1	1	0	2	0	0	2	0	0	0	0
Malnutrition/Dehydration	1	0.1%	1	0	0	0	0	1	0	0	0	1	0	0	0
Unknown	2	0.2%	1	1	0	0	0	2	0	0	1	0	0	1	1
TOTAL	712	69.4%	581	55	21	30	25	295	415	2	400	269	6	37	27

External Causes of Deaths

External deaths are categorized as: accident (a manner of death indicating non-intentional trauma); homicide (death at the hands of another); and suicide (death from a self-caused event). In 2007 the CFRTs reviewed 215 accidents (21.0% of cases reviewed), 36 homicides (3.5%), 14 suicides (1.4%) and 8 undetermined, pending or unknown cases (0.8%). Table 22 presents the external causes; Table 23 provides a summary of external causes by ages; Table 24 provides a summary of external causes by gender; and Table 25 presents a summary of external causes by race.

**Table 22 – Cause of Death – External Causes
(Percents are of total cases reviewed)**

Cause of Death	Total	Accident		Suicide		Homicide		Undetermined/ Pending/ Unknown	
	#	#	%	#	%	#	%	#	%
Motor Vehicle	112	109	10.6%	0	0%	0	0%	4	0.4%
Asphyxia	55	46	4.5%	4	.4%	3	0.2%	2	0.1%
Weapon	38	2	0.2%	8	0.8%	28	1.9%	0	0%
Drowning	24	23	2.4%	0	0%	0	0%	1	0%
Fire, Burn, or Electrocution	15	14	1.4%	0	0%	0	0%	1	0%
Poisoning, Overdose, Acute intoxication	12	10	1%	1	0.1%	1	0.1%	0	0%
Fall or crush	8	8	0.8%	0	0%	0	0%	0	0%
Other injury	6	2	0.2%	1	0.1%	3	0.3%	0	0%
Exposure	3	1	0.1%	0	0%	1	0.1%	1	0.3%
TOTAL	273	215	21%	14	1%	36	3.5%	9	0.8%

External Cause of Death by Age

Cause	Accident					Suicide					Homicide					
	Age	<1	1 - 4	5 - 9	10 - 14	15 - 17	<1	1 - 4	5 - 9	10 - 14	15 - 17	<1	1 - 4	5 - 9	10 - 14	15 - 17
Motor Vehicle	2	14	8	20	65	0	0	0	0	0	0	0	0	0	0	0
Asphyxia	39	5	0	2	0	0	0	1	0	3	2	0	0	0	0	1
Weapon	0	0	1	1	0	0	0	0	3	5	6	4	0	2	16	
Drowning	0	14	0	3	6	0	0	0	0	0	0	0	0	0	0	0
Fire, Burn, or Electrocution	0	3	5	4	2	0	0	0	0	0	0	0	0	0	0	0
Poisoning, Overdose, Acute intoxication	1	0	0	2	7	0	0	0	0	1	1	0	0	0	0	0
Fall or crush	1	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Other injury	0	1	1	0	0	0	0	0	0	1	1	1	0	1	0	0
Exposure	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Undetermined, pending, or unknown injury	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	43	43	16	32	81	0	0	1	3	10	10	6	0	3	17	

External Cause of Death by Gender

Table 24 – External Cause of Death by Gender						
Cause	Accident		Suicide		Homicide	
Gender	Female	Male	Female	Male	Female	Male
Motor Vehicle	48	61	0	0	0	0
Asphyxia	17	29	1	3	0	3
Weapon	1	1	0	8	8	20
Drowning	8	15	0	0	0	0
Fire, Burn, or Electrocution	5	9	0	0	0	0
Poisoning, Overdose, Acute intoxication	3	7	1	0	1	0
Fall or crush	4	4	0	0	1	0
Other injury	0	2	0	1	0	0
Exposure	0	1	0	0	0	0
Undetermined, pending, or unknown injury	0	0	0	0	1	2
TOTAL	86	129	2	12	11	25

External Cause of Death by Race

Table 25 – External Cause of Death by Race													
Cause	Race	Accident				Suicide				Homicide			
		White	African-American	Asian	Other	White	African-American	Asian	Other	White	African-American	Asian	Other
Motor Vehicle		88	17	1	1	0	0	0	0	0	0	1	0
Asphyxia		31	13	0	2	3	1	0	0	3	0	0	0
Weapon		2	0	0	0	0	3	0	0	10	16	0	0
Drowning		17	6	0	0	0	0	0	0	0	0	0	0
Fire, Burn, or Electrocution		8	6	0	0	0	0	0	0	0	0	0	0
Poisoning, Overdose, Acute intoxication		8	2	0	0	1	0	0	0	1	0	0	0
Fall or crush		6	2	0	0	0	0	0	0	0	0	0	0
Other injury		2	0	0	2	1	0	0	0	1	2	0	1
Exposure		1	0	0	0	0	0	0	0	1	0	0	0
TOTAL		163	46	1	5	10	4	0	0	16	18	1	1

External Causes of Deaths

The cause of death is defined as the effect or condition that brought about the cessation of life. The causes are broken down into medical causes and external causes. External causes are specified by injury and are believed to be preventable. 274 of the 1026 child fatalities were divided into the following injury related external causes of deaths:

- Motor Vehicle
- Asphyxia
- Weapons
- Drowning
- Other Injuries
- Undetermined
- Fire
- Falls
- Poisoning/Overdose⁸

Deaths Due to Injury:

Motor Vehicle Related Deaths

In 2007, 112 children died in vehicle-related incidents. “Other Transport” categories include unlicensed recreational vehicles, such as snowmobiles and bicycles, as well as tractors and other farm equipment.

The 112 deaths represent 40.6% of all injury-related deaths and 10.9% of all child fatalities for 2007. Children ages 15-17 were most likely to die as a result of a vehicle-related injury (N=69) and children 10-14 (N=19) were the second most likely to die in vehicular-related incident. Females (N=49) were less likely to die in a vehicle-related death than were males (N=63). Whites (N=92) had a higher incidence of death by vehicle than African-Americans (N=17) (Table 26).

Table 26 – Fatalities Due to Motor Vehicle and Other Transport					
Age		Gender		Race	
	#		#		#
<1	2	Male	63	White	92
1 – 4	14	Female	49	African-American	17
5 – 9	8			Asian	1
10 – 14	19			Other	0
15 – 17	69			Unknown / Missing	2
TOTAL	112		112		112

⁸ OD = Overdose

Asphyxia Deaths

In 2007 there were 55 asphyxia deaths due to suffocation or strangulation. This represents 19.9% of all injury-related deaths and 5.4% of all child fatalities for 2007. Among these deaths, 43 (78.2%) involved a child less than one year old and 34 (61.8%) of all asphyxia deaths were sleep related (Table 27). When an infant dies from asphyxiation and or suffocation, it is classified under Manner of Death as an Injury event (see Infant Mortality section on page 13).

Table 27 – Fatalities Due to Asphyxia				
Age		Gender		Race
	#		#	#
<1	43	Male	36	White 37
1 – 4	5	Female	19	African-American 15
5 – 9	1			Asian 0
10 – 14	2			Other 0
15 – 17	4			Unknown / Missing 3
TOTAL	55			

Deaths Due to Weapons

In 2007, 38 children died due to weapons injuries (this includes body parts used as weapons). This represents 13.8% of all injury-related deaths and 3.7% of all childhood fatalities. Males (N=29) were significantly more likely to die due to weapon injuries than females (N=9). Over 50% (N=21) of all weapon deaths occurred in the 15-17 age group (Table 28).

Table 28 – Fatalities Due to Weapons				
Age		Gender		Race
	#		#	#
<1	6	Male	29	White 17
1 – 4	4	Female	9	African-American 19
5 – 9	1			Asian 0
10 – 14	6			Other 0
15 – 17	21			Unknown / Missing 2
TOTAL	38			

Deaths Due to Drowning

In 2007, 24 children died from accidental drowning. This represents 8.7% of all injury-related deaths and 2.3% of all child fatalities for 2007. The highest number occurred in the age group of 1-4 years of age (N=14). White children suffered the highest number of drowning deaths (N=at 17. (Table 29).

Table 29 – Fatalities Due to Drowning					
Age		Gender		Race	
	#		#		#
<1	0	Male	16	White	17
1 – 4	14	Female	8	African-American	7
5 – 9	0			Asian	0
10 – 14	4			Other	0
15 – 17	6			Unknown / Missing	0
TOTAL	24		24		24

Deaths Due to Fire/Burns

In 2007, there were 15 child fatalities due to fire and/or burns. This represents 5.4% of all injury-related deaths and 1.5% of all child fatalities for 2007 (Table 30).

Table 30 – Fatalities Due to Fire / Burns					
Age		Gender		Race	
	#		#		#
<1	1	Male	10	White	9
1 – 4	3	Female	5	African-American	6
5 – 9	5			Asian	0
10 – 14	4			Other	0
15 – 17	2			Unknown / Missing	0
TOTAL	15		15		15

Deaths Due to Falls

In 2007, there were eight (8) child fatalities due to falls. This represents 2.9% of all injury-related deaths and 0.8% of all child fatalities for 2007 (Table 31).

Table 31 – Fatalities Due to Falls					
Age		Gender		Race	
	#		#		#
<1	1	Male	4	White	6
1 – 4	5	Female	4	African-American	2
5 – 9	1			Asian	0
10 – 14	0			Other	0
15 – 17	1			Unknown / Missing	0
TOTAL	8				8

Deaths Due to Poisoning

There were 12 child fatalities due to poisoning during 2007. This represents 4.3% of all injury-related deaths and 1.2% of all child fatalities for 2007. Most deaths occurred in the 15-17 age category (8) (Table 32).

Table 32 – Fatalities Due to Poisoning					
Age		Gender		Race	
	#		#		#
<1	2	Male	7	White	10
1 – 4	0	Female	5	African-American	2
5 – 9	0			Asian	0
10 – 14	2			Other	0
15 – 17	8			Unknown / Missing	0
TOTAL	12				12

Deaths Due to Exposure

In 2007, three children, all within the 1-4 year age group, died of exposure. This represents 1.1% of all injury-related deaths and 0.3% of all child fatalities for 2007 (Table 33).

Table 33 – Fatalities Due to Exposure					
Age		Gender		Race	
	#		#		#
<1	0	Female	2	White	3
1 – 4	3	Male	1	African-American	0
5 – 9	0			Asian	0
10 – 14	0			Other	0
15 – 17	0			Unknown / Missing	0
TOTAL	3		3		3

Deaths Due to Undetermined Causes

In 2007, there were two injury-related child fatalities for which the exact cause could not be determined. (Table 34).

Table 34 – Fatalities Due to Undetermined Causes					
Age		Gender		Race	
	#		#		#
<1	2	Male	2	White	0
1 – 4	0	Female	0	African-American	2
5 – 9	0			Asian	0
10 – 14	0			Other	0
15 – 17	0			Unknown / Missing	0
TOTAL	2		2		2

APPENDIX

Appendix A – Glossary

Asphyxia – Oxygen starvation of tissues. Asphyxia is a broad cause of death that may include more specific causes, such as strangulation, suffocation, or smothering.

Autopsy – Medical dissection of a deceased individual for the purpose of determining or confirming an official manner and cause of death.

Birth Certificate – Official documentation of human birth, filed with the Tennessee Office of Vital Records.

Cause of Death – The effect, illness, or condition leading to an individual's death. (A narrower, more specific classification than revealed by Manner of Death.)

CFRT (Child Fatality Review Team) – Tennessee's local/regional groups, comprised of such agencies as public health, law enforcement, social services, etc., that examine the deaths of children aged 17 and under with the ultimate goal of preventing future fatalities.

Child Maltreatment – Intentional injury of a child, involving one or more of the following: neglect, physical harm, sexual abuse or exploitation, or emotional abuse.

Circumstances – Situational findings.

Congenital anomaly – A medical or genetic defect at birth.

Contributing Factors – Behavioral actions that may elevate the potential risk of fatality.

Coroner – Jurisdictional official charged with determining the manner and cause of death for individuals perishing in sudden, violent, or suspicious circumstances. Performs much the same function as a Medical Examiner, but may or may not be a physician.

CPS (Child Protective Services) – Social service system engaged in protecting children from maltreatment.

CSS (Children's Special Services) – Tennessee Department of Health program that provides medical care and reinforcement to families with severely ill or disabled children under the age of 21.

Death Certificate – Official documentation of an individual's death, indicating the manner and cause of death.

Death Scene Investigation – Portion of the Child Fatality Review process that gathers relevant information and interviews at the site of a child's death for the purpose of determining or confirming the manner and cause of death.

Exposure – Cause of death directly related to environmental factors; typically death from hyper- or hypothermia.

External – Categorization of non-medical manners of death: i.e., accident, homicide, or suicide.

Full-term – A gestation of 37 or more weeks.

Homicide – Death perpetrated by another with the intent to kill or severely injure.

Hyperthermia – High body temperature.

Hypothermia – Low body temperature.

Infant – Child under one year of age.

Manner of Death – Official classification of death, as identified by one of several broad categories: Natural, Accident, Suicide, Homicide, or Undetermined.

Medical Examiner – Physician charged with determining the manner and cause of death for individuals perishing in sudden, violent, or suspicious circumstances.

Missing – Case information or data that has not been included on the Child Fatality Review reporting form.

Natural – Categorization of deaths indicating a medical cause, such as congenital conditions, illness, prematurity, or SIDS.

Neglect – Failure to provide basic needs, such as food, shelter, and medical care.

Pending – Indication that an official manner of death awaits further investigation.

Preterm – Live birth occurring at a gestation of less than 37 weeks.

Preventability – Indicates the likelihood that a death could have been averted with reasonable efforts on the part of an individual or community.

SIDS (Sudden Infant Death Syndrome) – An exclusionary manner of death for children under one year of age, indicating that all evidence (including an autopsy) has failed to yield the specific cause of a natural death.

Supervisor – Individual charged with the care of a child at the time of his or her death.

Undetermined – Default manner of death when circumstances and/or investigation fail to reveal a clear determination.

Unknown – Case information or data that is unattainable or unavailable after review by the CFRT.

Appendix B – State Child Fatality Prevention Team

Chair

Susan R. Cooper, MSN, RN
Commissioner
Tennessee Department of Health

Members

Karen Alexander
Tennessee Bureau of Investigation

Senator Charlotte Burks
Tennessee Senate

Howard Burley, MD
Tennessee Department of Mental Health and Developmental Disabilities

Judge Betty Adams Green
Juvenile Court

Marjahna Hart
Tennessee Department of Children's Services

Rachel Heitmann
Tennessee Department of Health

Mike Hermann
Tennessee Department of Education

Representative Sherry Jones
Tennessee House of Representatives

Linda O'Neal
Tennessee Commission on Children and Youth

Senator Doug Overbey
Tennessee Senate

Lisa Piercey, MD
American Medical Association

Sue Sheldon
Attorney General's Office

Appendix C – Local Child Fatality Review Teams

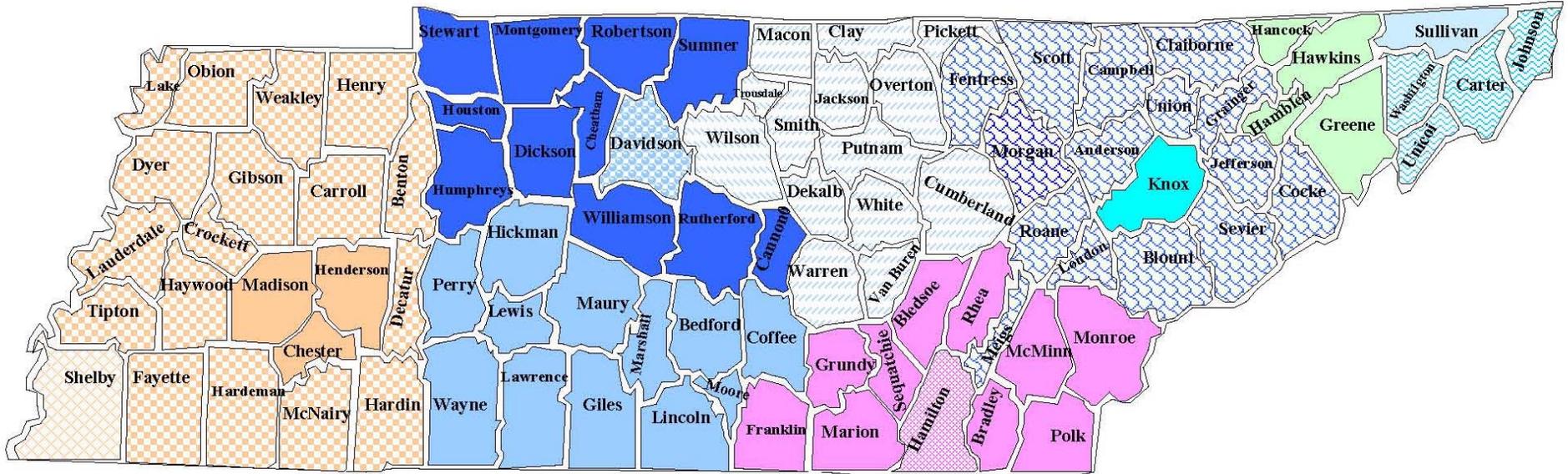
Local CFRT Team Leaders

Judicial Districts (JD) and Counties	CFRT Leader	Phone
JD 1: Carter, Johnson, Unicoi, and Washington Counties	Dr. Lawrence Moffatt/Pat Rash Child Fatality Review Team Coordinator Northeast TN Regional Health Office 1233 Southwest Ave. Ext. Johnson City, TN 37604	Phone: (423) 979-4625 Fax: (423) 979-3677
JD 2: Sullivan County	Dr. Stephen May Janice Miller Sullivan Co. Health Dept. PO Box 630, (154 Blountville Bypass) Blountville, TN 37617	Phone: (423) 279-2794 Fax: (423) 279-2797
JD 3: Greene, Hamblen, Hancock, and Hawkins Counties	Dr. Barbara Skelton/Pat Rash Child Fatality Review Team Coordinator Northeast TN Regional Health Office 1233 Southwest Ave. Ext. Johnson City, TN 37604	Phone: (423) 979-4625 Fax: (423) 979-3267
JD 4 – Dr. Ken Marmon Cocke, Grainger, Jefferson, and Sevier Counties JD 5 – Dr. Ken Marmon: Blount County JD 7 – Patti Campbell: Anderson County JD 8 – Kerri Byrd-Hamby: Campbell, Claiborne, Fentress, Scott, and Union Counties JD 9 – Dr. Bud Guider: Loudon, Meigs, Morgan, and Roane Counties	Paul Haug East TN Regional Health Office PO Box 59019 1522 Cherokee Trail Knoxville, TN 37950-9019	Phone: (865) 549-5373 Fax: (865) 594-5738
JD 6: Knox County	Dr. Kathy Brown Ph.D. Alicia Mastronardi Knox County Health Dept. 140 Dameron Ave. Knoxville, TN 37917	Phone: (865) 215-5170 Mary Campbell Linda Weber (ASA) (865) 215-5272
JD 10: Bradley, McMinn, Monroe, and Polk Counties JD 12: Bledsoe, Franklin, Grundy, Marion, Rhea, and Sequatchie Counties	Dr. Jan BeVile Southeast Regional Health Office State Office Building 540 McCallie Avenue Chattanooga, TN 37402	Phone: (423) 634-5887

Judicial Districts (JD) and Counties	CFRT Leader	Phone
JD 11: Hamilton County	Dr. Valerie Boaz Chattanooga/Hamilton Co. Health Dept. 921 East Third Street Chattanooga, TN 37403	Phone: (423) 209-8000
JD 13: Clay, Cumberland, DeKalb, Overton, Pickett, Putnam, and White Counties JD 15: Jackson, Macon, Smith, Trousdale, and Wilson Counties JD 31: Van Buren and Warren Counties	Dr. Fred Vossel/ Jean Coffee Upper Cumberland Reg. Health Office 200 West 10 th Street Cookeville, TN 38501-6067	Phone: (931) 520-4215 Infirmary (931) 372-3320 Jean Coffee (931) 646-7533
JD 14: Coffee County JD 17: Bedford, Lincoln, Marshall, and Moore Counties JD 2101: Hickman, Lewis, and Perry Counties JD 2201: Giles, Lawrence, and Wayne Counties JD 2202: Maury County	Dr. Langdon Smith/David Brumley South Central Regional Health Office 1216 Trotwood Avenue Columbia, TN 38401-4809	Phone: (931) 490-8388 Jan Winters (931) 490-8343 David Brumley (931) 490-8373 Fax: (931) 380-3364
JD 16: Cannon and Rutherford Counties JD 18: Sumner County JD 1901: Montgomery County JD 1902: Robertson County JD 2102: Williamson County JD 23: Cheatham, Dickson, Houston, Humphreys, and Stewart Counties	Dr. Alison Asaro/Sharon A. Woodard Mid Cumberland Reg. Health Office 710 Hart Lane Nashville, TN 37247-0801	Phone: (615) 650-7015 Fax: (615) 253-3178
JD 20: Davidson County	Dr. Kimberly Wyche-Etheridge/Brook McKelvey Metro/Davidson Co. Health Dept. 311 23 rd Ave. North Nashville, TN 37203	Phone: (615) 340-0474
JD 24: Benton, Carroll, Decatur, Hardin, and Henry Counties JD 25: Fayette, Hardeman, Lauderdale, McNairy, and Tipton Counties JD 27: Obion and Weakley Counties JD 28: Crockett, Gibson, and Haywood Counties JD 29: Dyer and Lake Counties	Dr. Shaveta Conner West TN Regional Health Office 295 Summar Street Jackson, TN 38301	Phone: (731) 423-6600 Kathy Smith

Judicial Districts (JD) and Counties	CFRT Leader	Phone
JD 26: Chester, Henderson, and Madison Counties	Dr. Tony Emison Jackson/Madison Co. Health Dept. 804 North Parkway Jackson, TN 38305	Phone: (731) 423-3020
JD 30: Shelby County	Dr. Helen Morrow Shelby County Health Department 814 Jefferson Avenue Memphis, TN 38105-5099	Phone: (901) 544-7380 (901) 544-7564

Tennessee Child Fatality Local Judicial District Map
 Figure 6 - TN Local Judicial Districts



Northeast 1	JD 1 Carter Johnson Unicoi Washington	East	JD 4 Cocke Grainger Jefferson Sevier	JD 5 Blount	JD 7 Anderson	JD 8 Campbell Claiborne Fentress Scott Union	JD 9 Loudon Meigs Morgan Roane	Upper Cumberland	JD 13 Clay Cumberland Dekalb Overton Pickett Putnam White	JD 15 Jackson Macon Smith Trousdale Wilson	JD 31 Van Buren Warren		
Northeast 3	JD 3 Green Hamblen Hancock Hawkins	Southeast	JD 10 Bradley McMinn Monroe Polk	JD 12 Bledsoe Franklin Grundy Marion Rhea Sequatchie				South Central	JD 14 Coffee	JD 17 Bedford Lincoln Marshall Moore	JD 2101 Hickman Lewis Perry	JD 2201 Giles Lawrence Wayne	JD 2202 Maury
Mid Cumberland	JD 16 Cannon Rutherford JD 23- Cheatham, Dickson, Houston, Humphreys, Stewart	JD 18 Sumner	JD 1901 Montgomery	JD 1902 Robertson	JD 2102 Williamson			West	JD 24 Benton Carroll Decatur Hardin Henry	JD 25 Fayette Hardeman Lauderdale McNairy Tipton	JD 27 Obion Weakley	JD 28 Crockett Gibson Haywood	JD 29 Dyer Lake
Sullivan	JD 2	Knox	JD 6	Hamilton	JD 11	Davidson	JD 20	Madison	JD 26- Chester, Henderson, Madison	Shelby	JD 30		

Appendix D – Child Fatality Review and Prevention Act

Section

68-142-101.	Short title
68-142-102.	Child fatality prevention team
68-142-103.	Composition
68-142-104.	Voting members -Vacancies.
68-142-105.	Duties of state team
68-142-106.	Local teams – Composition –Vacancy –Chair - Meetings.
68-142-107.	Duties of local teams
68-142-108.	Powers of local team –Limitations -Confidentiality of state and local team records
68-142-109.	Staff and consultants
68-142-110.	Immunity from civil and criminal liability
68-142-111.	Child death investigations and reviews

68-142-101. Short title

This part shall be known as and may be cited as the “Child Fatality Review and Prevention Act of 1995.”
[Acts 1995, ch. 511, § 1; 2007, ch. 588, § 2.]

68-142-102. Child fatality prevention team.

There is created the Tennessee child fatality prevention team, otherwise known as the state team. For administrative purposes only, the state team shall be attached to the department of health.

[Acts 1995, ch. 511, § 1.]

68-142-103. Composition

The state team shall be composed as provided in this section. Any ex officio member, other than the commissioner of health, may designate an agency representative to serve in such person's place.

Members of the state team shall be as follows:

- (1) The commissioner of health, who shall chair the state team;
- (2) The attorney general and reporter;
- (3) The commissioner of children's services;
- (4) The director of the Tennessee bureau of investigation;
- (5) A physician nominated by the state chapter of the American Medical Association;
- (6) A physician to be appointed by the commissioner of health who is credentialed in forensic pathology, preferably with experience in pediatric forensic pathology;
- (7) The commissioner of mental health and developmental disabilities;
- (8) A member of the judiciary selected from a list submitted by the chief justice of the Tennessee supreme court;
- (9) The executive director of the commission on children and youth;
- (10) The president of the state professional society on the abuse of children;
- (11) A team coordinator, to be appointed by the commissioner of health;
- (12) The chair of the select committee on children and youth;
- (13) Two (2) members of the house of representatives to be appointed by the speaker of the house of representatives, at least one (1) of whom shall be a member of the health and human resources committee;
- (14) Two (2) senators to be appointed by the speaker of the senate, at least one (1) of whom shall be a member of the general welfare, health and human resources committee; and
- (15) The commissioner of education or the commissioner's designee.

[Acts 1995, ch. 511, § 1; 1996, ch. 1079, § 152; 2007, ch. 588, § 3.]

68-142-104. Voting members - Vacancies

All members of the state team shall be voting members. All vacancies shall be filled by the appointing or designating authority in accordance with the requirements of § 68-142-103.

[Acts 1995, ch. 511, § 1.]

68-142-105. Duties of state team

The state team shall:

- (1) Review reports from the local child fatality review teams;
- (2) Report to the governor and the general assembly concerning the state team's activities and its recommendations for changes to any law, rule, and policy that would promote the safety and well-being of children;
- (3) Undertake annual statistical studies of the incidence and causes of child fatalities in this state. The studies shall include an analysis of community and public and private agency involvement with the decedents and their families prior to and subsequent to the deaths;
- (4) Provide training and written materials to the local teams established by this part to assist them in carrying out their duties. Such written materials may include model protocols for the operation of local teams;
- (5) Develop a protocol for the collection of data regarding child deaths;
- (6) Upon request of a local team, provide technical assistance to such team, including the authorization of another medical or legal opinion on a particular death; and
- (7) Periodically assess the operations of child fatality prevention efforts and make recommendations for changes as needed.

[Acts 1995, ch. 511, § 2; 2007, ch. 588, § 4.]

68-142-106. Local teams - Composition - Vacancy - Chair - Meetings

- (a) There shall be a minimum of one (1) local team in each judicial district.
- (b) Each local team shall include the following statutory members or their designees:
 - (1) A supervisor of social services in the department of children's services within the area served by the team;
 - (2) The regional health officer in the department of health in the area served by the team, who shall serve as interim chair pending the election by the local team;
 - (3) A medical examiner who provides services in the area served by the team;
 - (4) A prosecuting attorney appointed by the district attorney general;
 - (5) An employee of the local education agency, to be appointed by the director of schools; and
 - (6) The interim chair of the local team shall appoint the following members to the local team:
 - (A) A local law enforcement officer;
 - (B) A mental health professional;
 - (C) A pediatrician or family practice physician;
 - (D) An emergency medical service provider or firefighter; and
 - (E) A representative from a juvenile court.
- (c) Each local child fatality team may include representatives of public and nonpublic agencies in the community that provide services to children and their families.
- (d) The local team may include non-statutory members to assist them in carrying out their duties. Vacancies on a local team shall be filled by the original appointing authority.
- (e) A local team shall elect a member to serve as chair.
- (f) The chair of each local team shall schedule the time and place of the first meeting, and shall prepare the agenda. Thereafter, the team shall meet no less often than once per quarter and often enough to allow adequate review of the cases meeting the criteria for review.

[Acts 1995, ch. 511, § 3; 1996, ch. 1079, § 152; 2007, ch. 588, § 5.]

68-142-107. Duties of local teams

- (a) The local child fatality review teams shall:
 - (1) Be established to cover each judicial district in the state;
 - (2) Review, in accordance with the procedures established by the state team, all deaths of children seventeen (17) years of age or younger;
 - (3) Collect data according to the protocol developed by the state team;
 - (4) Submit data on child deaths quarterly to the state team;
 - (5) Submit annually to the state team recommendations, if any, and advocate for system improvements and resources where gaps and deficiencies may exist; and
 - (6) Participate in training provided by the state team.
- (b) Nothing in this part shall preclude a local team from providing consultation to any team member conducting an investigation.

- (c) Local child fatality review teams may request a second medical or legal opinion to be authorized by the state team in the event that a majority of the local team's statutory membership is in agreement that a second opinion is needed.
[Acts 1995, ch. 511, § 4; 2007, ch. 588, § 6.]

68-142-108. Powers of local team - Limitations - Confidentiality of state and local team records

- (a) The department of health, state team and local teams are public health authorities conducting public health activities pursuant to the federal Health Insurance Portability and Accountability Act (HIPAA), compiled in 42 U.S.C. § 1320d et seq.. Notwithstanding §§ 63-2-101(b) and 68-11-1502, and regardless of any express or implied contracts, agreements or covenants of confidentiality based upon those sections, the records of all health care facilities and providers shall be made available to the local team for inspection and copying as necessary to complete the review of a specific fatality and effectuate the intent of this part. The local team is authorized to inspect and copy any other records from any source as necessary to complete the review of a specific fatality and effectuate the intent of this part, including, but not limited to, police investigations data, medical examiner investigative data, vital records cause of death information, and social services records, including records of the department of children's services.
- (b) The local team shall not, as part of the review authorized under this part, contact, question or interview the parent of the deceased child or any other family member of the child whose death is being reviewed.
- (c) The local team may request that persons with direct knowledge of circumstances surrounding a particular fatality provide the local team with information necessary to complete the review of the particular fatality; such persons may include the person or persons who first responded to a report concerning the child.
- (d) Meetings of the state team and each local team shall not be subject to the provisions of title 8, chapter 44, part 1. Any minutes or other information generated during official meetings of state or local teams shall be sealed from public inspection. However, the state and local teams may periodically make available, in a general manner not revealing confidential information about children and families, the aggregate findings of their reviews and their recommendations for preventive actions.
- (e) (1) All otherwise confidential information and records acquired by the state team or any local child fatality review team in the exercise of the duties are confidential, are not subject to discovery or introduction into evidence in any proceedings, and may only be disclosed as necessary to carry out the purposes of the state team or local teams and for the purposes of the Sudden, Unexplained Child Death Act, pursuant to title 68, chapter 1, part 11.
(2) In addition, all otherwise confidential information and records created by a local team in the exercise of its duties are confidential, are not subject to discovery or introduction into evidence in any proceedings, and may only be disclosed as necessary to carry out the purposes of the state or local teams and for the purposes of the Sudden, Unexplained Child Death Act, pursuant to title 68, chapter 1, part 11. Release to the public or the news media of information discussed at official meetings is strictly prohibited. No member of the state team, a local team nor any person who attends an official meeting of the state team or a local team, may testify in any proceeding about what transpired at the meeting, about information presented at the meeting, or about opinions formed by the person as a result of the meeting.
(3) This subsection (e) shall not, however, prohibit a person from testifying in a civil or criminal action about matters within that person's independent knowledge.
- (f) Each statutory member of a local child fatality review team and each non-statutory member of a local team and each person otherwise attending a meeting of a local child fatality review team shall sign a statement indicating an understanding of and adherence to confidentiality requirements, including the possible civil or criminal consequences of any breach of confidentiality.
[Acts 1995, ch. 511, § 5; 2001, ch. 321, §§ 5, 6; 2007, ch. 588, §§ 7, 8.]

68-142-109. Staff and consultants

To the extent of funds available, the state team may hire staff or consultants to assist the state team and local teams in completing their duties.

[Acts 1995, ch. 511, § 6.]

68-142-110. Immunity from civil and criminal liability

Any person or facility acting in good faith in compliance with this part shall be immune from civil and criminal liability arising from such action.

[Acts 2007, ch. 588, § 9.]

68-142-111. Child death investigations and reviews

Nothing in this part shall preclude any child death investigations or reviews to the extent authorized by other laws.

[Acts 2007, ch. 588, § 10.]

Appendix E – Sudden, Unexplained Child Death Act

Section

68-1-1101. Short title – Legislative findings – Definitions

68-1-1102. Purpose – Training – Notice and Investigation – Autopsy

68-1-1103. Implementation

68-1-1101. Short title - Legislative findings - Definitions

- (a) This part shall be known and may be cited as the "Sudden, Unexplained Child Death Act."
- (b) The legislature hereby finds and declares that:
 - (1) Protection of the health and welfare of the children of this state is a goal of its people and the unexpected death of a child is an important public health concern that requires legislative action;
 - (2) The parents, guardians, and other persons legally responsible for the care of a child who dies unexpectedly have a need to know the cause of death;
 - (3) Collecting accurate data on the cause and manner of unexpected deaths will better enable the state to protect children from preventable deaths, and thus will help reduce the incidence of such deaths; and
 - (4) Identifying persons responsible for abuse or neglect resulting in unexpected death will better enable the state to protect other children who may be under the care of the same persons, and thus will help reduce the incidence of such deaths.
- (c) As used in this part and in § 68-3-502 and unless the context otherwise requires:
 - (1) "Sudden infant death syndrome" means the sudden death of an infant under one (1) year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the clinical history;
 - (2) "Certified child death pathologist" means a pathologist who is board certified or board eligible in forensic pathology and who has received training in, and agrees to follow, the autopsy protocol, policies and guidelines for child death investigation, as prescribed by the chief medical examiner for the state of Tennessee; and
 - (3) "Chief medical examiner" means the individual appointed pursuant to title 38, chapter 7, part 1. [Acts 2001, ch. 321, § 1.]

68-1-1102. Purpose - Training - Notice and Investigation - Autopsy

- (a) The purpose of this part is to help reduce the incidence of injury and death to infants by accurately identifying the cause and manner of death of infants under one (1) year of age. This shall be accomplished by requiring that a death investigation be performed in all cases of sudden, unexplained deaths of infants under one (1) year of age.
- (a) The chief medical examiner shall develop and implement a program for training of child death pathologists. The protocol and policies shall be based on nationally recognized standards.
- (b) All emergency medical technicians and professional firefighters shall receive training on the handling of cases of sudden, unexplained child death as a part of their basic and continuing training requirements. The training, which shall be developed jointly by the departments of health and children's services, shall include the importance of being sensitive to the grief of family members.
- (c) All law enforcement officers shall receive training on the investigation and handling of cases of sudden, unexplained child death as part of their basic training requirements. The training, which shall be developed jointly by the departments of health and children's services, shall include the importance of being sensitive to the grief of family members and shall be consistent with the death scene investigation protocol approved by the chief medical examiner. Additionally, whenever changes occur in policies or procedures pertaining to sudden infant death syndrome investigations, the department of health shall promptly notify the various law enforcement associations within the state. Such changes shall then be communicated in a timely manner to the respective law enforcement agencies for dissemination to their enforcement personnel.
- (d) In the case of every sudden, unexplained death of an infant under one (1) year of age, the attending physician or coroner shall notify the county medical examiner who shall coordinate the death investigation.
- (e) The county medical examiner shall inform the parent or parents or legal guardian of the child, if an autopsy is authorized.

- (f) The county medical examiner shall ensure that the body is sent for autopsy to a child death pathologist as defined in this part. Parents or legal guardians who refuse to allow an autopsy based on the grounds of religious exemption shall personally file a petition for an emergency court hearing in the general sessions court for the county in which the death occurred.
- (g) The county medical examiner shall contact the appropriate local law enforcement personnel to conduct a death scene investigation according to the protocol developed by the chief medical examiner. Such investigation shall be initiated within twenty-four (24) hours of the time the local law enforcement personnel are contacted by the county medical examiner.
- (h) The county medical examiner shall send a copy of the death scene investigation and the medical history of the child to the pathologist conducting the autopsy.
- (i) A copy of the completed autopsy, medical history, and death scene investigation shall be forwarded to the chief medical examiner.
- (j) The cause of death, as determined by the certified child death pathologist, may be reported to the parents or legal guardians of the child. A copy of the autopsy results, when available, may be furnished to the parent or parents or legal guardian of the child, upon request, within forty-eight (48) hours of such request, except where the cause of death may reasonably be attributed to child abuse or neglect, in the judgment of the certified child death pathologist.
- (k) Sudden infant death syndrome shall not be listed as the cause of death of a child, unless the death involves an infant under one (1) year of age which remains unexplained after a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the child's clinical history.
- (l) Any individual or entity providing information pertinent to the investigation and related autopsy in a suspected case of sudden, unexplained infant death syndrome shall not be civilly liable for breach of confidentiality concerning the release of such information.
[Acts 2001, ch. 321, § 2; 2002, ch. 591, §§ 1, 2.]

68-1-1103. Implementation

In order to implement the provisions of this part, the commissioner of health shall:

- (1) Promulgate rules and regulations in accordance with the Uniform Administrative Procedures Act, compiled in title 4, chapter 5, as may be necessary to obtain in proper form all information relating to the occurrence of a sudden unexplained child death which is relevant and appropriate for the establishment of a reliable statistical index of the incidence, distribution and characteristics of cases of sudden, unexplained child death;
- (2) Promulgate rules and regulations in accordance with the Uniform Administrative Procedures Act, compiled in title 4, chapter 5, that establish minimum standards for conducting and completing an investigation, including an autopsy if deemed necessary, into the sudden, unexplained death of any child from birth to age seventeen (17). Initial rules promulgated pursuant to subdivision (2) are authorized to be promulgated as public necessity rules, pursuant to § 4-5-209. In promulgating such rules, the commissioner may rely, in whole or in part, on any nationally recognized standards regarding such investigations. Compliance with such rules shall make county governments eligible for reimbursement, to the extent authorized by those rules, of the costs of any autopsy deemed necessary;
- (3) Collect such factual information from physicians, coroners, medical examiners, hospitals, and public health officials who have examined any child known or believed to have experienced sudden, unexplained death; provided that no information shall be collected or solicited that reasonably could be expected to reveal the identity of such child;
- (4) Make such information available to physicians, coroners, medical examiners, hospitals, public health officials, and educational and institutional organizations conducting research as to the causes and incidence of sudden, unexplained child death;
- (5) Cause appropriate counseling services to be established and maintained for families affected by the occurrence of sudden infant death syndrome; and
- (6) Conduct educational programs to inform the general public of any research findings which may lead to the possible means of prevention, early identification, and treatment of sudden infant death syndrome.
[Acts 2001, ch. 321, § 3; 2005, ch. 356, § 1.]

Appendix F – Index of Tables

Table 1 – Counties with 15 or More Fatalities	1
Table 2 - Manner of Death Summary	2
Table 3 - Cause of Death Summary	3
Table 4 - Preventability of Child Deaths	9
Table 5 - Infant Deaths by County	11
Table 6 - Risk Factors Associated with Infant Death	12
Table 7 - Sleep-Related Deaths by Cause	14
Table 8 – Contributing Factors in Infant Sleep Environment Deaths	15
Table 9 – Circumstances of SIDS and Sleep-Related Deaths	15
Table 10 – Manner of Death	17
Table 11 – Number of Fatalities by Manner of Death and Age	17
Table 12 – Manner of Death and Gender	18
Table 13 – Manner of Death and Race	19
Table 14 – Manner of Death and Ethnicity	19
Table 15 – Child Deaths by Age, Gender and Race	20
Table 16 – Violence-Related Fatalities by Age, Gender and Race	20
Table 17 – Homicide Fatalities by Age, Gender and Race	21
Table 18 – Suicide Fatalities by Age, Gender and Race	21
Table 19 – Ranking of Counties with 15 or More Fatalities	22
Table 20 – Manner of Death for All Counties	23
Table 21 – Medical Causes of Death	26
Table 22 – External Causes of Death Categories	27
Table 23 – External Cause of Death by Age	28
Table 24 – External Cause of Death by Gender	29
Table 25 – External Cause of Death by Race	30
Table 26 – Fatalities Due to Motor Vehicle and Other Transport	31
Table 27 – Fatalities Due to Asphyxia	32
Table 28 – Fatalities Due to Weapons	32
Table 29 – Fatalities Due to Drowning	33
Table 30 – Fatalities Due to Fire/Burns	33
Table 31 – Fatalities Due to Falls	34
Table 32 – Fatalities Due to Poisoning	34
Table 33 – Fatalities Due to Exposure	35
Table 34 – Fatalities Due to Undetermined Causes	35

Appendix G – Index of Figures

Figure 1 – Manner of Death Summary	2
Figure 2 – CFR Process Flow Chart	8
Figure 3 – Infant Deaths by Month	10
Figure 4 – Summary of Infant Deaths Reviewed	12
Figure 5 – SIDS and Infant Sleep-Related Deaths	13
Figure 6 – TN Local Judicial Districts	43