CHILD FATALITIES IN TENNESSEE 2009

Tennessee Department of Health

Bureau of Health Services

Maternal and Child Health Section

Acknowledgements

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Thank you to the State Child Fatality Prevention Review Team members who find ways to put the recommendations in this report to work in saving lives.

Their efforts, and ours, are reinforced immeasurably by the support and cooperation of the following Tennessee agencies: the Department of Health, the Commission on Children and Youth, the Department of Children's Services, the Center for Forensic Medicine, the Office of the Attorney General, the Tennessee Bureau of Investigation, the Department of Mental Health, the Tennessee Medical Association, the Department of Education, the General Assembly, the State Supreme Court, the Tennessee Suicide Prevention Network, Tennessee local
and regional health departments, and the National Center for Child Death Review.

It is with deepest sympathy and respect that we dedicate this report to the memory of those children and families represented within these pages.

This report may be accessed online at
http://health.state.tn.us/MCH/CFR.htm

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Executive Summary

This report contains data extrapolated from 861 deaths to Tennessee children in 2009. The state of Tennessee is committed to investigating the death of all children age seventeen and under, with the exception of those that:

- involve gestations of 22 weeks or less and weights of less than 500 grams;
- occur outside the state.

Of the 867 deaths meeting review criteria, 99.3 percent (861) were reviewed and are represented in this annual report.

Key Findings

- The first year of life continues to be the most perilous for Tennessee's children, accounting for 62.5 percent of all deaths to those age 17 and under. Children between the ages of 15 and 17 suffered the second highest percentage of deaths, accounting for 14.8 percent of all deaths.
- A majority (63.4 percent) of all child deaths in 2009 were by natural manner, followed by a finding of an accidental manner of death, which accounted for another 17.3 percent.
- Male children had a higher percentage of fatalities (60%) than females (40%).
- African-American children suffered a higher rate of mortality than white children.
- The number of sleep-related deaths among infants has continued to climb. During the 2009 review year, 20 infant deaths were designated as Sudden Infant Death Syndrome (SIDS), while an *additional* 142 babies perished in the sleep environment due to known causes.
- Seventy (70) children (8.1% of all deaths) died in motor vehicle crashes, representing a slight decline compared to 2008, in which there were 92 deaths (9.5% of all deaths).
- Six (6) percent of deaths to children in 2009 (52 deaths) were the result of homicide.
- Child Fatality Review teams disagreed with the official manner of death for 28 (3.3 percent) of the 861 cases reviewed.

Figure 1: Manner of Death by AGE

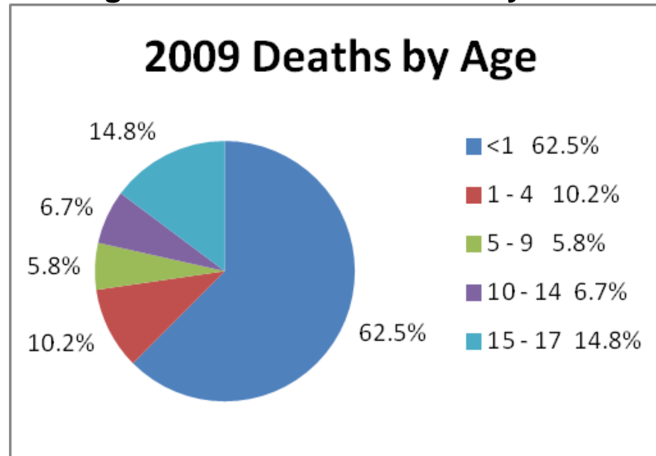


Figure 2: Manner of Death by GENDER

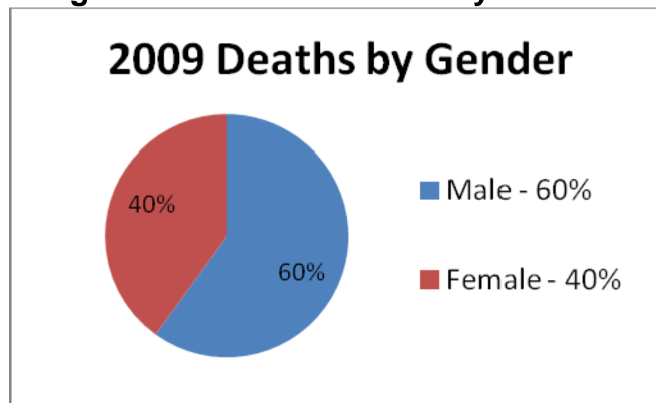
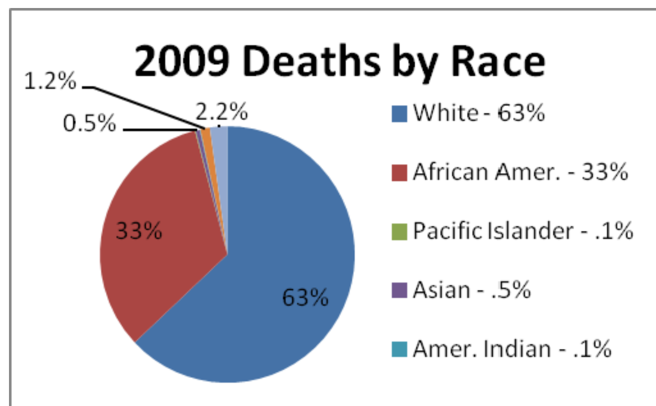


Figure 3: Manner of Death by RACE



State Child Fatality Prevention Team RECOMMENDATIONS

CAUSE of DEATH: SIDS/Sleep-Related
Responsible for **162** deaths in 2009

- Encourage the implementation of a mass media campaign focusing on the dangers of co-sleeping and the need for safe sleep environments (ABC: Alone, on their Back, in a Crib) with particular emphasis placed on the sleep environment for infants.
- Connect parents to social services that may be able to provide—or assist in purchasing—a crib. (including 211 system)
- Incorporate safe sleep messages (ABC: Alone, on their Back, in a Crib) and information about the dangers of co-sleeping in current materials distributed by state agencies for families with young children.
- Encourage training of health care providers to discuss importance of safe sleep (ABC: Alone, on their Back, in a Crib) and information about the dangers of co-sleeping with parents.

MANNER of DEATH: Accidental
Responsible for **149** deaths in 2009

- Support messaging to parents about adequate and appropriate supervision to prevent injuries.

CAUSE of DEATH: Vehicular
Responsible for **70** deaths in 2009

- Encourage community based efforts to emphasize and support efforts to increase use of seat belts and promote graduated driver licensing and safe driving techniques for teens. (example: Governor's Highway Safety Office)
- Focus on an educational campaign for older (senior) adults to raise awareness of the importance of the proper use of child safety restraints. (example: work with senior citizen centers)
- Adopt or develop a DVD emphasizing car seat safety. Arrange for DVD to play in OB/Gyn, pediatric, family practice offices, health departments, emergency rooms, and other relevant health/safety locations, in addition to driver licensing sites and senior citizen centers.

- Develop an educational campaign to increase use of helmets when riding or driving an ATV. Explore legislation to require children to wear helmets when riding an ATV.

CAUSE of DEATH: Drowning
Responsible for **15** deaths in 2009

- Communicate with pool builders and pool supply retailers to increase awareness of Tennessee's January 2011 "Katie Beth's Law," requiring pool alarms that sound at 50 decibels or higher when "a person or object weighing 15 pounds or more enters the water in a swimming pool."

- Increase the awareness of the availability of pool alarms.

- Work with parenting and social service agencies to spread a "designated watcher" message, emphasizing the need for caregivers to maintain close physical proximity at all swimming or other aquatic sites. In addition, encourage teens to watch out for each other.

- Encourage compliance with the use of life jackets.

CAUSE of DEATH: Illness/Medical
Responsible for **560** deaths in 2009

- Encourage the incorporation of CPR training in standard prenatal classes.

MANNER of DEATH: Suicide
Responsible for **23** deaths in 2009

- Encourage compliance with the Jason Flatt Act requirements for suicide prevention training for teachers and the anti-bullying legislation.

- Partner with the Tennessee Suicide Prevention Network to develop a resource list in order to implement timely suicide prevention education for children experiencing trauma or major life changes.

MANNER of DEATH: Homicide
Responsible for **52** deaths in 2009

- Continue strengthening and expanding access to long-term substance abuse and mental health services for underserved populations, in particular parents of children who are, have been, or are at risk of being in state custody.

- Encourage efforts to increase gang awareness and prevent gang involvement and support disengagement from gang activity.

Institutional Linkages

- Improve inter-conception wrap-around services for families who experience fetal and infant losses, while continuing to promote bereavement and mental health services.

- Develop a referral system between hospital NICUs and home visitation programs to ensure that the families of babies released from intensive care receive home visiting services.

Children's Safety/Welfare Recommendations

- Improve child welfare practice to better ensure child safety in child protective services cases.

Child Fatality Review Procedural Recommendations

- Require state training for all staff responsible for completing birth and death certificates. Conduct periodic quality assurance checks in each hospital system to ensure accuracy.

- Request that the Tennessee Suicide Prevention Network partner with the local child fatality review teams to gather information for the psychological autopsy investigation following suicides.

- Work with the National Child Death Review system to add a question about gang activity.

- Link with uniform crime reporting to identify gang involvement.

Summary of Findings from the 2009 Tennessee Child Fatality Review

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, accidental, homicide, suicide, pending, undetermined, and unknown. For deaths being reviewed, the Child Fatality Review Teams (CFRTs) report the manner of death as indicated on the death certificate.

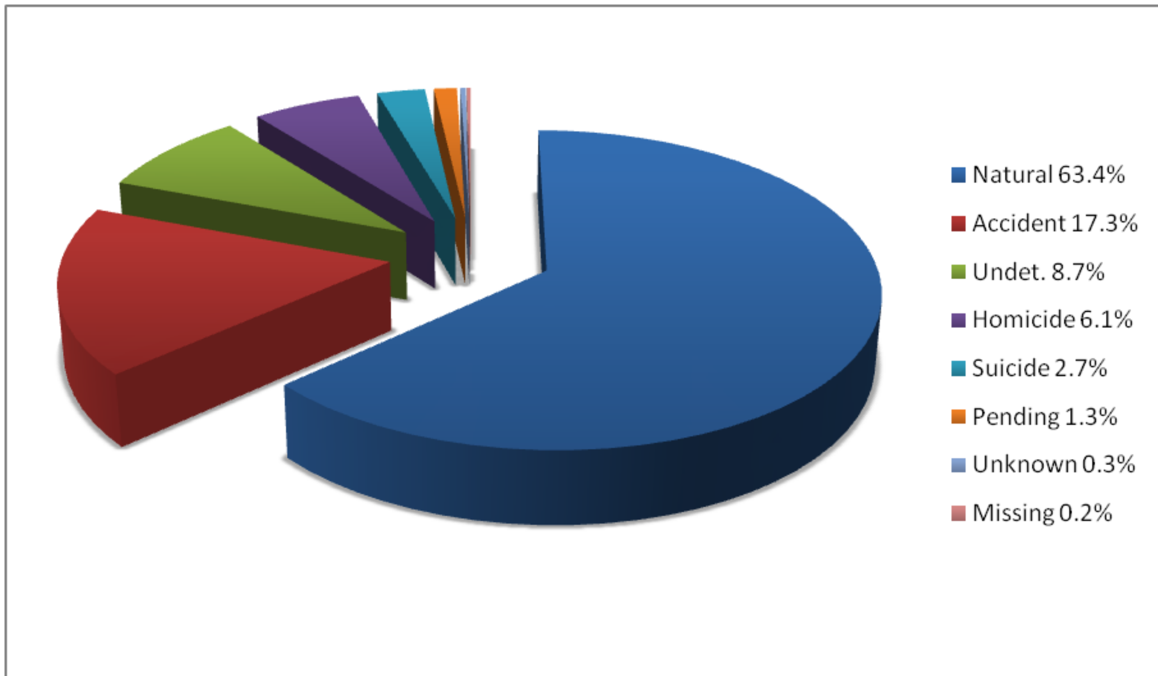
The overall rate of child fatalities for 2009 was 66.0 per 100,000 in the population of children age 17 and under. Fatality rates identified in this report are based on population estimates supplied by the United States Census Bureau.

Table 1, below, summarizes the manners of death for 2009 fatalities, as does Figure 1 on the following page.

Table 1: Manner of Death Summary by Age, Race, and Gender

	Natural	Accident	Homicide	Suicide	Undetermined	Unknown	Pending	Missing	TOTAL
Age									
<1	404	44	14	0	69	2	4	1	**538**
1-4	45	28	7	0	4	0	3	1	**88**
5-9	35	11	3	0	0	0	1	0	**50**
10-14	30	18	3	5	2	0	0	0	**58**
15-17	32	48	25	18	0	1	3	0	**127**
TOTAL	**546**	**149**	**52**	**23**	**75**	**3**	**11**	**2**	**861**
Race									
White	343	110	20	20	39	2	8	1	**543**
African American	181	36	32	2	28	1	2	1	**283**
Asian	3	1	0	0	0	0	0	0	**4**
American Indian	0	0	0	1	0	0	0	0	**1**
Pacific Islander	1	0	0	0	0	0	0	0	**1**
Multi-racial	5	1	0	0	3	0	1	0	**10**
Missing/Unknown	13	1	0	0	5	0	0	0	**19**
TOTAL	**546**	**149**	**52**	**23**	**75**	**3**	**11**	**2**	**861**
Gender									
Male	314	94	37	14	48	1	6	1	**515**
Female	232	55	15	9	27	2	5	1	**346**
TOTAL	**546**	**149**	**52**	**23**	**75**	**3**	**11**	**2**	**861**

Figure 4: Manner of Death Summary



Causes of Death: Medical/External

The CFR case report tool classifies causes of death as either **medical** causes or **external** causes. Medical causes are then further delineated by specific disease entities, while external causes are further delineated by the nature of the injury. Of the 861 deaths reviewed by the CFRT in 2009:

- Sixty-five (65) percent were due to **medical** causes.
- Twenty-eight (28) percent were due to **external** causes.
- Seven (7) percent of cases were **unknown or could not be determined** as a medical or external cause.

Table 2 on the following page displays medical and external causes as they relate to age, race, and gender.

Table 2: Medical / External Causes of Death Summary by Age, Race, and Gender

	External Cause of Injury	Medical Condition	Undetermined if Injury or Medical	Unknown	Total
Age					
<1	66	417	52	3	**538**
1-4	40	43	3	2	**88**
5-9	15	35	0	0	**50**
10-14	26	31	1	0	**58**
15-17	93	34	0	0	**127**
TOTAL	**240**	**560**	**56**	**5**	**861**
Race					
White	162	349	28	4	**543**
African American	74	187	21	1	**283**
Asian	1	3	0	0	**4**
American Indian	1	0	0	0	**1**
Pacific Islander	0	1	0	0	**1**
Multi-racial	1	6	3	0	**10**
Unknown/Missing data	1	14	4	0	**19**
TOTAL	**240**	**560**	**56**	**5**	**861**
Gender					
Male	157	321	33	4	**515**
Female	83	239	23	1	**346**
TOTAL	**240**	**560**	**56**	**5**	**861**

Prevention Analysis

A key goal of the Child Fatality Review Program is to craft and adopt recommendations that can prevent future child deaths. In Tennessee, several policies have been the direct result of the Child Fatality Review process.

If an individual or the community could reasonably have done something that would have changed the circumstances leading to a child's death, that fatality is considered to have been **preventable**. CFRTs carefully examine each death in an effort to determine preventability.

Of the cases reviewed, CFRTs determined that **233 deaths (27%) could probably have been prevented**.

Table 3: Preventability of Child Deaths

Manner of Death	Probably Not Preventable	Probably Preventable	Could Not Determine	Unknown	Total
Natural	479	17	28	22	**546**
Accident	6	126	7	10	**149**
Homicide	4	41	4	3	**52**
Suicide	3	15	3	2	**23**
Undetermined/ Unknown/Missing	15	26	34	5	**80**
Pending	2	8	1	0	**11**
TOTAL	**509**	**233**	**77**	**42**	**861**

Acts of Omission or Commission

A portion of preventable deaths are either directly or indirectly related to the lack of quality care on the part of a child's parents, guardians, or supervisors at the time of, or the time leading up to, death. Supervision may be entirely absent or inadequate for the age or activity of the child (**acts of omission**) or the child's supervisor may willfully endanger the child's health and welfare (**acts of commission**).

While CFRTs attempt to identify omission or commission during their case reviews, it is not always possible to do so. The table below reflects cases for which review teams felt confident that inferior supervision was (or *probably was*) a factor in a child's death.

During 2009, **the deaths of 203 children (or 24 percent of all child deaths) were determined to have been caused or influenced by supervisory omission or commission**. A more detailed breakdown of acts of omission or commission is outlined in Table 4, below.

Table 4: Acts of Omission/Commission*

Age Group	Deaths Reviewed	Poor or Absent Supervision	Child Abuse	Child Neglect	Other Negligence	Assault (not Child Abuse)	Suicide	Other
<1 Year	90	5	11	1	37	0	0	36
1-4 Years	30	16	4	2	4	1	0	5
5-9 Years	10	1	0	1	2	1	0	5
10-14 Years	21	4	0	2	5	1	3	6
15-17 Years	52	4	0	0	16	9	10	14
TOTAL	**203**	**30**	**15**	**6**	**64**	**12**	**13**	**66**

Of those 15 children identified as victims of child abuse, all 15 suffered physical abuse, while one child was confirmed to also have been sexually abused.

*Because categories are not mutually exclusive, the number of deaths reviewed is exceeded by the number of cases under each heading.

Deaths to Children with Special Circumstances

Just over 31 percent of the 2009 deaths involved children known to have suffered from a disability or chronic illness. Of those 271 children, 22 were enrolled in the Department of Health's Children's Special Services program (CSS).

The families of 40 children were involved in an open Child Protective Services case at the time of their deaths. For each of these children, the DCS representative on the local team reported that there was an open CPS case.

Table 5: Children with Special Circumstances

	Yes	No	Unknown	Blank
Did child have disability or chronic illness?	271	351	70	169
If disabled, was child receiving CSS?	22	120	20	109
Was there an open CPS case with child at time of death?	40	531	66	224

Detailed Findings from the 2009 Tennessee Child Fatality Review

Infant Mortality

Infant mortality is defined as a death during infancy (the first 12 months of life). Infant mortality accounts for the largest single component of the Child Fatality Review process and is of particular concern in the state of Tennessee. **The state's infant mortality rate of 8.0 deaths per 1,000 live births in 2009 exceeds the national rate of 6.7 deaths per live births.**

In 2009, **538*** Tennessee children lost their lives before the age of one year. Table 6 provides a snapshot of the risk factors readily associated with infant mortality. It is important to note that, because the categories are not mutually exclusive, their total will exceed that of the 538 deaths.

Table 6: Risk Factors Associated with Infant Death

	Natural	Accident	Homicide	Undetermined	Pending	Unknown	Total
Premature (<37 weeks)	288	14	4	22	2	1	**331**
Low birth weight (<2500 grams)	299	13	5	21	2	2	**342**
Intrauterine Smoke Exposure	96	18	2	21	1	1	**139**
Intrauterine Alcohol Exposure	1	0	0	0	0	0	**1**
Intrauterine Drug Exposure	19	3	1	3	0	0	**26**
Late (>6 months) or No Prenatal Care	32	4	2	5	0	1	**44**

*CFRTs are not able to review the death of every infant. Some reviews may be delayed until all legal investigations, autopsies, or prosecutions are completed. Some deaths occur outside the county of residence, thereby resulting in long delays in notification for the CFRT. Fetal deaths of less than 22 weeks' gestation and less than 500 grams in weight are not reviewed.

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

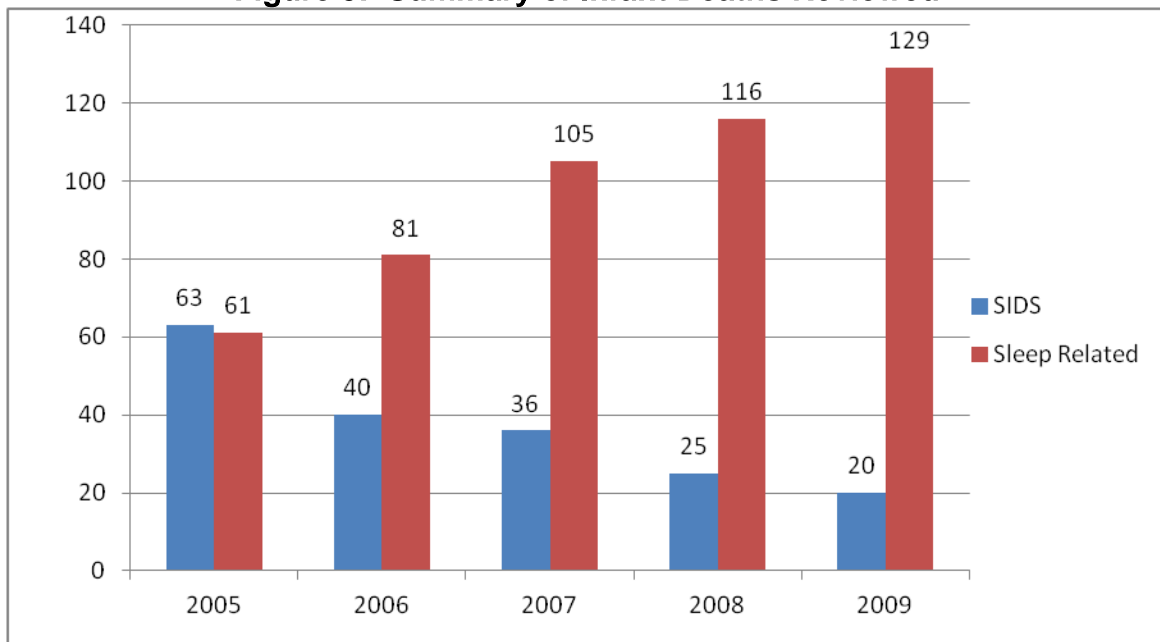
By definition, SIDS is an exclusionary manner of death for children under one year of age, indicating that all evidence (including an autopsy, death scene investigation, and review of the medical record) has failed to yield the specific cause of a natural death. When a baby is found deceased in a sleeping environment with a history of his or her head pressed into the mattress or pillow, when there is a co-sleeper, or when he or she is found wedged against an object, sleep-related asphyxiation may be a factor in the death.

The manner of death in these cases is determined after a Medical Examiner's autopsy and the body of knowledge already amassed in the SUID (Sudden Unexpected Infant Death) field. When seemingly healthy infants fail to awaken from sleep, their deaths may be SIDS; their deaths may be the result of suffocation related to the sleep environment, or their deaths may be the sign of an undiagnosed childhood malady.

In 2009, the manner of death in 69 fatalities to children under the age of one year was classified as "Undetermined." The complexities inherent in determining the exact cause of a sudden infant death become ever more apparent as the numbers continue to escalate.

In many cases, family members or others who find the baby may not be able to provide a detailed history of what transpired. When investigators arrive on the scene, the baby has usually been moved, and accurately recreating the death scene may not be possible. Thus, despite autopsies and the effort of Child Fatality Review Teams, the exact cause of infant sleep-related deaths may never be known for some infants and their families.

Figure 5: Summary of Infant Deaths Reviewed



As Figure 5 displays, **20 deaths were reported as SIDS** in 2009, and an additional **129 infant deaths resulted from an unsafe sleep environment**.

- These 20 deaths represent 5 percent of infant deaths due to medical conditions and 2.3 percent of all childhood deaths in 2009.
- Of all fatalities due to SIDS, 15 (60 percent) occurred from birth through three months of age.
- Forty (40) deaths were confirmed as asphyxia in the sleep environment.

Primary Cause of Death – Sleep Related

Table 7: Sleep Related Deaths by Cause[1]

	SIDS	Asphyxia	Medical Condition[2]	Undetermined[3]	All Other Causes	Total
0-1 Month	6	11	11	2	20	**50**
2-3 Months	9	14	9	5	11	**48**
4-5 Months	3	8	6	4	7	**28**
6-7 Months	1	4	3	1	5	**14**
8-11 Months	1	3	3	1	1	**9**
1-4 Years	0	0	4	0	4	**8**
5 Years & up	0	0	5	0	0	**5**
TOTAL	**20**	**40**	**41**	**13**	**48**	**162**

[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: Contributing Factors in Infant Sleep Environment Deaths[4]	2005	2006	2007	2008	2009
Infant not in a crib or bassinette	54	69	103	102	106
Infant sleeping with other people	45	60	72	67	77
Infant not sleeping on back	30	38	49	55	59
Unsafe bedding or toys in sleep area with infant	13	18	20	32	32
Obese adult sleeping with infant	3	9	8	10	4
Adult drug impaired sleeping with infant	0	2	4	2	2
Adult alcohol impaired sleeping with infant	1	2	1	3	2
Adult fell asleep bottle feeding	0	0	2	2	0
Adult fell asleep breast feeding	0	0	2	0	3

Table 9: Circumstances of SIDS and Sleep-Related Deaths

Ages	0-1 Mos.	2-3 Mos.	4-5 Mos.	6-7 Mos.	8-11 Mos.	1-4 Yrs.	5 Yrs. Up	Total
Unobstructed by person or object	10	11	8	4	5	2	0	**40**
On top of person	5	2	0	1	1	0	0	**9**
On top of object	2	8	6	0	1	0	0	**17**
Under person	5	2	0	1	0	0	0	**8**
Under object[5]	2	1	0	1	0	0	0	**4**
Between person	3	1	0	0	0	0	0	**4**
Between object5	0	1	0	0	0	0	0	**1**
Wedged	0	1	3	2	0	0	0	**6**
Pressed	4	4	1	0	0	0	0	**9**
Fell or rolled onto object	0	0	0	0	0	0	0	**0**
Tangled in object	0	1	0	0	0	0	0	**1**
Other	2	4	2	0	0	0	0	**8**
Unknown	17	12	8	5	2	6	5	**55**
TOTAL	**50**	**48**	**28**	**14**	**9**	**8**	**5**	**162**

[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.

Manner of Death

Manner of death is a classification of deaths based on the circumstances surrounding a cause of death and how the death occurred. Reporting categories include:

Natural	**546 deaths**	**(63.4%)**
Accidental	**149 deaths**	**(17.3%)**
Homicide	**52 deaths**	**(6%)**
Suicide	**23 deaths**	**(2.7%)**
Undetermined	**75 deaths**	**(8.7%)**
Pending	**11 deaths**	**(1.3%)**
Unknown (or Missing Data)	**5 deaths**	**(0.6%)**

Manner of Death: Violence-Related

Among the seven official manners of death, two pertain to violence: on the part of the decedent (suicide) or others (homicide).

Full details regarding these manners are outlined on the succeeding two pages.

Manner of Death: Violence-Related HOMICIDE

Fifty-two (52) children died at the hands of another during 2009. This number represents **six percent of all deaths**. African-Americans, males, and teens aged 15-17 suffered the highest percentage of homicidal fatalities.

Table 10: Homicide by Cause
n=52

Firearm	Sharp Instrument	Blunt Force Trauma	Traumatic Brain Injury	Asphyxiation	Other	Unknown
20	9	9	2	1	2	9

Table 11: Homicide by Location
n=52

Child's Home	Relative's Home	Friend's Home	Roadway / Parking Lot	Sidewalk	Playground	Unknown Location
35	2	2	7	3	1	2

Table 12: Homicide Victims by Age
n=52

Under 1 Year	Age 1 – 4 Years	Age 5 – 9 Years	Age 10 – 14 Years	Age 15 – 17 Years
14	7	3	4	24

Table 13: Homicide by Gender
n=52

Male	Female
38	14

Table 14: Homicide by Perpetrator *n=52*						
Acquaintance / Neighbor	**Parent**	**Mom's Partner**	**Relative**	**Friend**	**Other**	**Unknown / Stranger**
10	5	5	5	5	2	20

Manner of Death: Violence-Related SUICIDE

Twenty-three (23) young people took their own lives during 2009, a figure that represents **2.7 percent of all deaths for the year**. The majority of these suicides (18) were perpetrated by those in the 15-17 year age cohort, with the remaining five in the 10-14-year age group. Twenty of the suicide victims were White, two were African-American, and one was American Indian. Four deaths were to teenagers known to have suffered from depression or other mental health issues. Five suicide notes were found.

Table 15: Suicide by Cause *n=23*				
Weapon	**Asphyxiation**	**Drowning**	**Poisoning**	**Other**
10	10	1	1	1

Table 16: Suicide by Location *n=23*				
Child's Home	**Relative's Home**	**Roadway / Parking Lot**	**Unknown Location**	**Other* Location**
15	1	2	2	3

*Other locations include a lake, a foster home, and a golf course

Table 17: Suicide by Weapon/Implement *n=23*							
Rope / Cord	**Handgun**	**Shotgun**	**Hunting Rifle**	**Belt**	**Drugs**	**Water**	**Unknown**
7	6	2	1	1	1	1	4

- Three victims were suspected to have been motivated by a recent relationship issue.

- One victim had experienced her own father's suicide in the recent past.

Cause of Death

The official manner of death includes two broad categories: medical causes and external causes. Within the medical classification, causes are further specified by particular conditions or disease entities.

Medical Causes of Death

A medical cause can result from one of many serious health issues: from existing conditions, congenital anomalies, prematurity, disease, other medical causes, genetic disorders, etc.

With infant deaths, it is important to note that, when SIDS and/or a Sudden Unexplained Infant Death (SUID) is identified on a death certificate, it is classified under manner as "Natural" or "Undetermined."

Table 18: Cause of Death – Medical Causes

	All Deaths		Age					Gender		Race				Ethnic
Cause of Death	**Total**	**Percent**	**<1**	**1 - 4**	**5 - 9**	**10 - 14**	**15 - 17**	**Male**	**Female**	**White**	**Black**	**Asian**	**Other/ Multi**	**Hispanic**
Prematurity	164	19%	164	0	0	0	0	101	63	112	52	0	0	11
Other Medical condition	113	13.1%	68	13	8	6	18	61	52	72	39	1	1	6
Congenital anomaly	101	11.7%	59	13	7	7	15	54	47	68	32	1	0	10
Cancer	28	3.2%	15	5	2	2	4	18	10	21	7	0	0	2
Cardiovascular	27	3.1%	18	2	2	3	2	17	10	19	8	0	0	2
Other infection	29	3.4%	17	4	2	5	1	14	15	18	11	0	0	2
Pneumonia	22	2.6%	16	6	0	0	0	13	9	12	10	0	0	6
SIDS	20	2.3%	20	0	0	0	0	9	11	14	6	0	0	5
Other perinatal condition	18	2.1%	10	2	3	0	3	13	5	9	9	0	0	1
Neurological/ Seizure disorder	18	2.1%	9	1	1	2	5	12	6	15	3	0	0	1
Undetermined medical cause	14	1.6%	12	0	0	0	2	9	5	11	3	0	0	0
Influenza	4	0.5%	4	0	0	0	0	1	3	3	1	0	0	0
Low birth weight	2	0.2%	1	1	0	0	0	2	0	1	1	0	0	0
TOTAL	**560**	**65%**	**413**	**47**	**25**	**25**	**50**	**324**	**236**	**375**	**182**	**2**	**1**	**46**

External Causes of Death

The official manner of death includes two broad categories: medical causes and external causes. Within the external classification, individual deaths are then further classified according to the nature of the injury.

In 2009, **240 deaths were attributed to external cause**, which fall into one of the following injury categories:

Motor Vehicle and Other Transport
Asphyxia
Weapons
Drowning
Fire or Burns
Falls or Crush
Poisoning or Overdose
"Other" Injuries
Undetermined

Motor Vehicle Related Fatalities

Deaths related to motor vehicle incidents represent the highest number of fatalities among all external causes of death. This is true both nationally and in the state of Tennessee. In 2009, **70** Tennessee children and youth under the age of 18 died from injuries sustained in or by motor vehicles. **These 70 deaths represent 29.2 percent of all injury-related deaths and 8.1 percent of all child fatalities in 2009**.

Motor vehicle deaths were experienced among every age category, although, predictably, those of driving age, within the 15-17 year age cohort, were affected most frequently.

Table 19: Motor Vehicle/Other Transport Fatalities
n=70

Age Group	POSITION in VEHICLE				TOTAL
	Passenger	Driver	Pedestrian	Unknown	
<1 Year	1	0	0	0	1
1-4 Years	6	0	2	0	8
5-9 Years	4	0	3	0	7
10-14 Years	12	3	1	0	16
15-17 Years	14	22	1	1	38
TOTAL	**37**	**25**	**7**	**1**	**70**

Table 20: Vehicle Type *n=70*								
Car	**Truck**	**Van**	**SUV**	**ATV**	**Dirt Bike**	**Skate-Board**	**Unknown**	**Pedestrian**
35	8	4	1	9	2	1	3	7

Table 21: Motor Vehicle Fatalities by Gender *n=70*	
Male	**Female**
44	26

Table 22: Safety Equipment Usage *n=21* (Safety equipment information not available for remaining 49 fatalities)		
Seat Belts Worn Correctly	**Child Safety Seats Used *Incorrectly***	**Helmets in Use** (ATV Riders)
16	3	2

- There were no fatalities involving bicycles or farm equipment during 2009.
- Narrative reports of incidents indicate that **seven** of the auto accidents occurred during the **negotiation of curves**.

Asphyxiation Fatalities

Fifty-six (56) children died of asphyxia in 2009. This number represents **23.3 percent of all injury-related deaths and 6.5 percent of all deaths**. Asphyxia cases may be related to either suffocation, strangulation, or choking.

Forty-two (42) of the children who succumbed to death by asphyxia were infants under the age of one year. Nationally and in Tennessee, asphyxia accounts for the largest share of external deaths among children in this age group. **Forty of these 42 children expired in a sleep-related environment**.

Table 23: Asphyxiation Fatalities

Age Group	UNDERLYING CAUSES Sleep Environment	Suicide	Pending/ Undetermined/ Unknown	Other	Total
<1 Year	40	0	1	1	42
1-4 Years		0	0	1	1
5-9 Years		0	2	0	2
10-14 Years		2	0	0	2
15-17 Years		8	0	1	9
TOTAL	**40**	**10**	**3**	**3**	**56**

Table 24: Asphyxiation Fatalities by Gender
n=56

Male	Female
37	19

Table 25: Sleep Surface/Position of Sleep-Related Asphyxia Fatalities
n=36

Adult Bed	Couch	Floor	On Stomach	Unknown Surface
23	2	2	8	1

- A one-year old died choking on food, and a five-year old strangled on an unnoticed wire while playing among leaves in his family's yard.

- Asphyxiation accounted for 50 percent of all suicide deaths in 2009.

Weapons Fatalities

Fifty-six (56) children died via weapon injuries in 2009. This number represents **23.3 percent of all injury-related deaths and 6.5 percent of all 2009 deaths**. For classification purposes, body parts are included as weapons.

Forty-four (44) of the deaths were **homicide**; ten were **suicide**, and the remaining two were **accidental** weapon deaths. Of the 56 deaths, 41 were to males and 15 to females. Thirty (30) African Americans died as the result of weapon injuries, as did 26 whites. Case files indicated that five of the deaths occurred during, or subsequent to, an argument.

Table 26: Weapons Fatalities

	TYPE of WEAPON *n=56*					
Age Group	**Firearm**	**Sharp Instrument**	**Human Body Part**	**Other**	**Unknown**	**Total**
<1 Year	0	0	4	0	3	7
1-4 Years	1	0	3	2	1	7
5-9 Years	1	1	0	1	0	3
10-14 Years	6	0	0	0	1	7
15-17 Years	23	7	0	1	1	32
TOTAL	**31**	**8**	**7**	**4**	**6**	**56**

Table 27: Type of Firearm
n=31

Handgun	Shotgun	Hunting Rifle	Unknown Firearm
24	2	2	3

Table 28: Individual Yielding Weapon
n=56

Self	Acquaintance	Parent	Mom's Partner	Friend	Sibling	Neighbor	Relative	Unknown	Stranger or Other
12	6	5	5	5	2	2	2	13	4

Drowning Fatalities

Fifteen (15) children perished by drowning in 2009. This number represents **6.3 percent of all injury-related deaths and 1.7 percent of all 2009 deaths**. In the United States, accidental drowning claims the lives of more children in the age cohort of one to four years than does any other injury-related cause. This statistic holds true for Tennessee in 2009, as well, with nine children in this age category succumbing to a drowning death, the largest total death count for any injury-related cause among children aged one to four years.

Of the 15 drowning case reports, only two definitively acknowledged that the child was able to swim. Both of those children drowned in a natural body of water. Consumption of alcohol was *not* implicated in any of the drowning deaths.

Table 29: Drowning Fatalities

Age Group	DROWNING LOCATION			
	Lake / River / Pond / Creek	Pool / Hot Tub / Spa	Bathtub*	Total
<1 Year	0	1	0	1
1-4 Years	3	5	1	9
5-9 Years	0	0	0	0
10-14 Years	0	0	0	0
15-17 Years	5	0	0	5
TOTAL	**8**	**6**	**1**	**15**

*The bathtub drowning involved a three-year old who was unsupervised at the time of the incident.

Table 30: Drowning Fatalities by Gender
n=15

Male	Female
9	6

Fire/Burn Fatalities

Fires claimed the lives of **ten** children in 2009. This number represents **4.2 percent of all injury-related deaths and 1.2 percent of all 2009 deaths**. The ten deaths were the result of eight fires, as a set of siblings was killed in each of two separate fires. None of the eight homes involved was known to have a working smoke alarm. Residents of the southeastern United States typically suffer the highest percentage of fire-related deaths in the nation.

Table 31: Fire/Burn Fatalities

Age Group	TYPE of STRUCTURE				TOTAL
	Single Home	Apartment	Mobile Home/ Trailer	Unknown	
<1 Year	0	0	0	0	0
1-4 Years	2	3	2	0	7
5-9 Years	2	0	0	0	2
10-14 Years	0	0	0	0	0
15-17 Years	0	0	0	1	1
TOTAL	**4**	**3**	**2**	**1**	**10**

Table 32: Cause of Fire
n=8

Heater	Electrical	Arson*	Other	Unknown
2	1	1	1	3

*The arson was responsible for the deaths of two siblings.

Table 33: Fire/Burn Fatalities by Gender
n=10

Male	Female
6	4

Fall/Crush Fatalities

Eight children died as the result of a crush or fall injury in 2009. **These eight deaths represent 3.3 percent of all injury-related deaths and 0.9 percent of all child fatalities in 2009**. Six of the deaths were to males and two to females. All victims were of the white race.

Fall and crush deaths were evenly divided, with four fatalities resulting from each. In the United States, fall/crush injuries are among the most common **non**fatal childhood injuries each year, resulting in up to 2.8 million Emergency Room visits.

Table 34: Fall/Crush Fatalities

Age Group	Fall or Crush	Associated Object	Place of Injury	TOTAL
<1 Year	Crush	TV set	Child's home	1
1-4 Years	Crush Fall Fall	Track hoe --- Family truck	Child's home Rock quarry Child's home	3
5-9 Years	Crush	Tree limb	Relative's home	1
10-14 Years	Fall	Swing set	Child's home	1
15-17 Years	Crush Fall	Tractor Automobile	Relative's home Roadway	2
TOTAL				**8**

Poison-Related Fatalities

Six children died as the result of a poison-related incident in 2009. **These six deaths represent 2.5 percent of all injury-related deaths and 0.7 percent of all child fatalities in 2009**. Poisoning related fatalities include drug overdose and acute intoxication. Of the six victims, all belonged to the white race. Four of the deaths were to females, the remaining two, males.

Tennessee's statistics echo national data in relation to age cohorts, in that those over 15 generally have the highest percentage of poisonings, with children in the age group of five to nine having the lowest. In contrast to Tennessee's data, the most recent national data show that male deaths outnumbered female fatalities by a ratio of two to one.

Table 35 – Poison Related Fatalities

Age Group	Substance	Place of Poisoning	Total
<1 Year	Prescription drug	Child's home	1
1-4 Years	Kerosene	Child's home	1
5-9 Years			0
10-14 Years			0
15-17 Years	Prescription & OTC drugs Alcohol Prescription Painkiller Prescription & OTC drugs	Unknown Relative's home Relative's home Foster home	1 1 1 1
TOTAL			**6**

2009 County Information At a Glance

This section provides a quick reference to child fatality numbers in Tennessee's 95 counties.

Table 36: Manner of Death for All Counties									
County	Natural	Accident	Homicide	Suicide	Pending	Undet.	Unknown	Missing	Total
Anderson	5	1	0	0	0	1	0	0	7
Bedford	5	3	1	0	0	0	0	1	10
Benton	0	0	0	1	0	0	0	0	1
Bledsoe	2	0	0	0	0	0	0	0	2
Blount	5	0	0	0	0	0	0	0	5
Bradley	3	2	0	0	3	0	0	0	8
Campbell	2	3	0	0	0	0	0	0	5
Cannon	1	0	0	0	0	1	0	0	2
Carroll	0	0	1	0	0	0	0	0	1
Carter	10	2	0	0	0	2	0	0	14
Cheatham	1	0	0	2	0	0	0	0	3
Chester	3	1	0	0	0	0	0	0	4
Claiborne	4	2	0	0	0	0	0	0	6
Clay	0	0	0	0	0	0	0	0	0
Cocke	5	1	0	1	0	0	0	0	7
Coffee	4	0	0	0	0	0	0	0	4
Crockett	2	1	0	0	0	0	0	0	3
Cumberland	5	1	0	1	0	0	0	0	7
Davidson	67	8	9	3	0	5	2	0	94
Decatur	2	0	0	1	0	1	0	0	4
Dekalb	6	0	0	0	0	0	0	0	6
Dickson	6	4	0	0	0	0	0	0	10
Dyer	4	0	1	0	0	1	0	0	6
Fayette	3	0	2	0	0	0	0	0	5
Fentress	3	0	0	1	0	0	0	0	4
Franklin	3	3	0	0	0	0	0	0	6
Gibson	2	0	1	0	0	0	0	0	3
Giles	4	0	2	0	0	1	0	0	7
Grainger	2	0	0	0	0	0	0	0	2
Greene	4	1	0	1	0	1	0	0	7
Grundy	3	0	0	1	1	0	0	0	5
Hamblen	5	2	1	0	0	0	0	0	8
Hamilton	16	5	3	0	0	5	0	0	29
Hancock	2	1	0	0	0	0	0	0	3
Hardeman	2	2	1	0	0	0	0	0	5
Hardin	0	1	0	1	0	0	0	0	2
Hawkins	2	1	0	0	0	0	0	0	3
Haywood	3	0	0	0	1	0	0	0	4
Henderson	0	0	0	0	0	0	0	0	0
Henry	7	2	0	0	0	0	0	0	9
Hickman	2	2	0	0	0	0	0	0	4
Houston	0	0	0	0	0	0	0	0	0
Humphreys	0	1	0	0	0	1	0	0	2
Jackson	1	0	0	0	0	0	0	0	1
Jefferson	4	1	0	0	0	1	0	0	6
Johnson	0	2	0	0	0	0	0	0	2
Knox	28	5	1	0	0	3	0	0	37

Table 36: Manner of Death for All Counties									
County	Natural	Accident	Homicide	Suicide	Pending	Undet.	Unknown	Missing	Total
Lake	0	0	0	0	0	0	0	0	0
Lauderdale	4	0	0	0	0	0	0	0	4
Lawrence	2	2	0	1	0	0	0	0	5
Lewis	1	0	0	0	0	0	0	0	1
Lincoln	2	0	1	0	0	0	0	0	3
Loudon	1	0	0	0	0	0	0	0	1
Macon	3	1	0	1	0	0	0	0	5
Madison	10	0	0	0	0	4	0	0	14
Marion	3	1	0	0	0	1	0	0	5
Marshall	7	2	0	0	0	0	0	1	10
Maury	13	0	0	0	0	0	0	0	13
McMinn	4	1	0	0	1	1	0	0	7
McNairy	3	0	0	0	0	1	0	0	4
Meigs	0	1	0	0	0	0	0	0	1
Monroe	2	0	0	0	0	0	0	0	2
Montgomery	13	1	4	0	0	3	0	0	21
Moore	0	0	0	0	0	0	0	0	0
Morgan	2	0	0	0	0	0	0	0	2
Obion	0	2	0	0	0	0	0	0	2
Overton	2	2	0	0	0	0	0	0	4
Perry	1	0	0	1	0	0	0	0	2
Pickett	0	0	0	0	0	0	0	0	0
Polk	1	2	0	0	0	0	0	0	3
Putnam	7	2	1	0	1	3	0	0	14
Rhea	3	2	0	0	1	0	0	0	6
Roane	4	1	1	0	0	1	0	0	7
Robertson	4	1	0	0	0	2	0	0	7
Rutherford	24	10	0	2	1	7	0	0	44
Scott	0	2	0	0	0	0	0	0	2
Sequatchie	1	0	0	0	0	0	0	0	1
Sevier	10	3	1	1	0	0	0	0	15
Shelby	125	32	16	1	1	20	0	0	195
Smith	1	1	0	0	0	0	0	0	2
Stewart	10	3	2	0	0	1	0	0	16
Sullivan	10	4	0	0	0	3	0	0	17
Sumner	0	0	0	0	0	0	0	0	0
Tipton	4	2	0	1	0	0	0	0	7
Trousdale	0	0	0	0	0	1	0	0	1
Unicoi	2	0	0	0	0	0	1	0	3
Union	2	0	0	0	0	0	0	0	2
Van Buren	0	1	0	0	0	0	0	0	1
Warren	4	3	0	0	0	0	0	0	7
Washington	12	2	2	1	0	3	0	0	20
Wayne	0	1	0	0	0	0	0	0	1
Weakley	2	2	0	0	0	0	0	0	4
White	1	0	0	0	0	1	0	0	2
Williamson	7	0	0	1	1	0	0	0	9

Table 36: Manner of Death for All Counties									
County	Natural	Accident	Homicide	Suicide	Pending	Undet.	Unknown	Missing	Total
Wilson	3	2	1	0	0	2	0	0	8
TOTAL	**546**	**149**	**52**	**23**	**11**	**75**	**3**	**2**	**861**

Table 37: Counties with 15 or More Fatalities

COUNTY	TOTAL
Shelby	195
Davidson	94
Rutherford	44
Knox	37
Hamilton	29
Montgomery	21
Washington	20
Sullivan	17
Stewart	16
TOTAL	**473**

Table 38: Infant Deaths by County					
County	**2008**	**2009**	**County**	**2008**	**2009**
Anderson	2	4	**Lauderdale**	2	4
Bedford	4	5	**Lawrence**	4	1
Benton	0	0	**Lewis**	0	1
Bledsoe	0	2	**Lincoln**	3	1
Blount	10	3	**Loudon**	2	1
Bradley	8	2	**Macon**	3	2
Campbell	2	3	**Madison**	17	10
Cannon	0	2	**Marion**	1	4
Carroll	3	0	**Marshall**	4	7
Carter	5	11	**Maury**	8	12
Cheatham	1	1	**McMinn**	2	6
Chester	1	1	**McNairy**	2	2
Claiborne	4	3	**Meigs**	1	0
Clay	0	0	**Monroe**	3	1
Cocke	2	5	**Montgomery**	19	17
Coffee	5	4	**Moore**	0	0
Crockett	5	2	**Morgan**	0	1
Cumberland	4	3	**Obion**	4	1
Davidson	58	59	**Overton**	0	2
Decatur	0	2	**Perry**	0	1
DeKalb	4	6	**Pickett**	1	0
Dickson	4	6	**Polk**	2	1
Dyer	8	4	**Putnam**	9	7
Fayette	2	4	**Rhea**	2	3
Fentress	0	2	**Roane**	7	5
Franklin	4	3	**Robertson**	7	5
Gibson	4	3	**Rutherford**	24	29
Giles	1	3	**Scott**	0	1
Grainger	1	2	**Sequatchie**	2	0
Greene	3	3	**Sevier**	8	10
Grundy	3	1	**Shelby**	129	132
Hamblen	7	6	**Smith**	2	0
Hamilton	33	16	**Stewart**	1	1
Hancock	0	2	**Sullivan**	8	13
Hardeman	3	2	**Sumner**	19	6
Hardin	2	0	**Tipton**	8	4
Hawkins	3	2	**Trousdale**	0	0
Haywood	4	4	**Unicoi**	0	1
Henderson	1	0	**Union**	0	2
Henry	2	5	**VanBuren**	0	0
Hickman	5	0	**Warren**	3	3
Houston	0	0	**Washington**	8	13
Humphreys	1	2	**Wayne**	0	0
Jackson	0	0	**Weakley**	0	3
Jefferson	8	3	**White**	3	2
Johnson	0	0	**Williamson**	3	2
Knox	38	24	**Wilson**	8	6
Lake	1	0	**TOTAL**	**589**	**538**

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.

Commission (Act of) – Supervision that willfully endangers a child's health and welfare.

Congenital anomaly – A medical or genetic defect present 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 coordination 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.

Omission (Act of) – Supervision entirely absent or inadequate for the age or activity of the child.

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

Preterm – 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.

Sudden Infant Death Syndrome (SIDS) – An exclusionary manner of death for children under one year of age, indicating that all evidence (including an autopsy, death

scene investigation, and review of the medical record) 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 – Tennessee Child Fatality Review Process

Child deaths are often regarded as indicators of the health of a community. While mortality data provide 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 fatality 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 D) is composed of elected officials, commissioners, and other policy makers in the state of Tennessee as described in T.C.A. 68-142-103 (available online at http://www.childdeathreview.org/Legislation/TNleg.pdf). 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. Members of the state team, per T.C.A. 68-142-103, include:

(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.
(16) The Commissioner of Intellectual and Developmental Disabilities.

Local Child Fatality Review Teams

The Child Fatality Review and Prevention Act of 1995 (T.C.A. 68-142-101-109) established a statewide network of child fatality prevention teams in the Judicial Districts of Tennessee (see Appendix E). The judicial districts cover all 95 counties of the state. Fourteen team leaders provide the administration for and coordination of the multi-discipline, 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 State Child Fatality Prevention 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:

(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; and
(5) An employee of the local education agency, to be appointed by the Director of Schools.
(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.
    f. Each local Child Fatality Team may include representatives of public and nonpublic agencies in the community that provide services to children and their families.

Case Reporting Database

Tennessee's child fatality data are 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 Child Fatality 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.

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. They bring to the review table information from a variety of agencies, documents, and areas of expertise. 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 in 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.

APPENDIX C -
Tennessee Child Fatality Prevention State Team Membership 2011

Chair

John J. Dreyzehner, MD, MPH
Commissioner
Tennessee Department of Health

Members

Senator Charlotte Burks
Tennessee Senate

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

Karen Cline-Parhamovitch, DO
Medical Examiner

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

Representative Antonio Parkinson
Tennessee House of Representatives

Lisa Piercey, MD
American Medical Association

Margie Quin
Tennessee Bureau of Investigation

Sue Sheldon
Attorney General's Office

Representative Ryan Williams
Tennessee House of Representatives

Appendix D – Local Child Fatality Review Teams

Local CFRT Team Leaders

Judicial Districts (JD) and Counties	CFRT Leader
JD 1: Carter, Johnson, Unicoi, and Washington Counties	**Dr. David Kirschke/Pat Rash** Northeast TN Regional Health Office
JD 2: Sullivan County	**Dr. Stephen May/Janice Miller** Sullivan Co. Health Dept.
JD 3: Greene, Hamblen, Hancock, and Hawkins Counties	**Dr. David Kirschke/Pat Rash** Northeast TN Regional Health Office
JD 4: 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	**Dr. Tara Sturdivant/Paul Haug** East TN Regional Health Office
JD 6: Knox County	**Dr. Kathy Brown Ph.D.** **Alicia Mastronardi** Knox County Health Dept.
JD 10: Bradley, McMinn, Monroe, and Polk Counties **JD 12**: Bledsoe, Franklin, Grundy, Marion, Rhea, and Sequatchie Counties	**Dr. Jan BeVille/Billie Ammons** Southeast Regional Health Office
JD 11: Hamilton County	**Dr. Valerie Boaz** Chattanooga/Hamilton Co. Health Dept.
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 Regional Health Office

Judicial Districts (JD) and Counties	CFRT Leader
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/Dr. David Brumley** South Central Regional Health Office
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 Regional Health Office
JD 20: Davidson County	**Dr. Kimberly Wyche-Etheridge** **Amanda Holley** Metro/Davidson Co. Health Dept.
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. Shavetta Conner/Kathy Smith** West TN Regional Health Office
JD 26: Chester, Henderson, and Madison Counties	**Dr. Tony Emison** Jackson/Madison Co. Health Dept.
JD 30: Shelby County	**Dr. Helen Morrow** Shelby County Health Department