

# **CHILD FATALITIES IN TENNESSEE 2003**



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

**Phil Bredesen**  
Governor

**Kenneth S. Robinson, M.D.**  
Commissioner

## **Acknowledgements**

The Maternal and Child Health Section would like to acknowledge the professional assistance of The University of Tennessee Safety Center and the Tennessee Department of Health, Division of Health Statistics in the preparation of this report.

Analysis and evaluation of data prepared by:

Gregory C. Petty, PhD  
Susan M. Smith, Ed.D, MSPH  
June Gorski, DrPH

Special thanks to the child fatality review teams for their efforts in child death review and prevention.

For additional copies or questions concerning the report, contact:

Child Fatality Review Director  
Tennessee Department of Health  
Maternal and Child Health  
425 5<sup>th</sup> Avenue North  
5<sup>th</sup> Floor Cordell Hull Building  
Nashville, TN 37247-47-1  
(615) 741-0368

This report is also available on the Internet:

<http://www2.state.tn.us/health/MCH/CFR.htm>

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## Executive Summary

### 2003 Tennessee Child Fatality Review

Child Fatality Review Teams (CFRT) are active in all judicial districts in the state. During 2003, the teams completed review of 1,063 (95.8%) of the 1109 fatalities of Tennessee resident children. Department of Health team leaders provided administration and coordination of the teams. The CFRT reviewed children's deaths by Manner of Death and what caused the deaths (Cause of Death).

#### MANNER OF DEATH

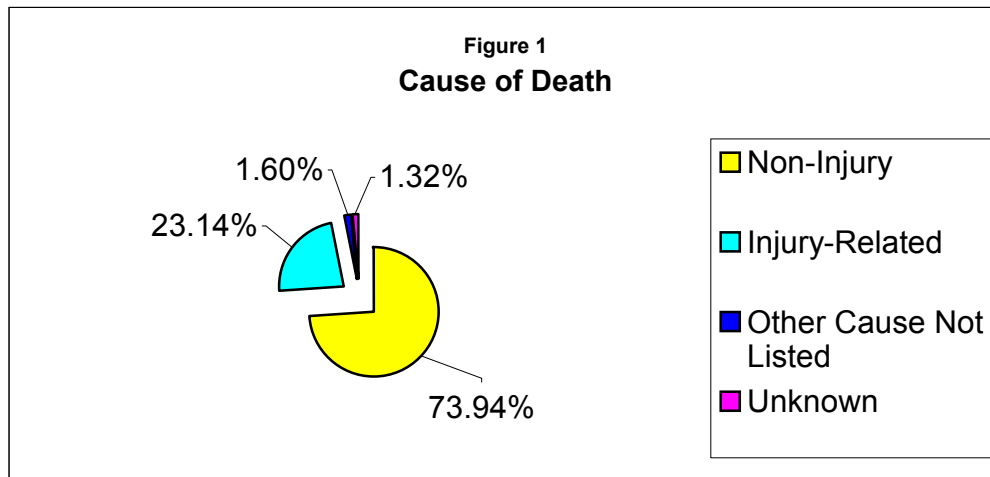
The manner of death for 1,063 child fatalities in 2003, was determined by the CFRT to be natural causes for 73.66% (N=783); unintentional injury (accidental) causes for 18.91% (N=201); homicide for 3.20% (N=34); suicide for 1.79% (N=19); could not be determined 1.69% (N=18); and undetermined due to suspicious circumstances 0.75% (N=8)(below Manner of Death)(see Table 1).

<b>Manner of Death</b>	<b>Number</b>	<b>Percent</b>	<b>Rate*</b>
Homicide	34	3.20	2.43
Accidental	201	18.91	14.37
Natural	783	73.66	55.99
Suicide	19	1.79	1.36
Could Not Be Determined	18	1.69	1.29
Undetermined due to suspicious circumstances	8	0.75	0.57
All Manner	1063	100.00	76.01

\*Rates per 100,000 in the population

#### CAUSE OF DEATH

The 1,063 child fatalities were divided into the following categories by cause of death: Non-injury 73.94% (N=786); Injury-related 23.14% (N=246); Other cause not listed 1.60% (N=17); Unknown 1.32% (N=14).



Overall, the cause of death was reported in 13 categories. The 786 deaths recorded as non-injury were reported in the categories of SIDS, lack of adequate care, prematurity, and illness/other natural cause. Injury related deaths (N=246) were reported in the categories of drowning, suffocation/strangulation, vehicular, firearm, inflicted injury, poison/overdose, and fire/burn. Other cause not listed (N=17) and unknown cause (N=14) were reported separately (below overall cause of death) (see Table 2).

<b>Table 2: Overall Cause of Death (N=1,063)</b>			
<b>Cause of Death</b>	<b>Number</b>	<b>Percent</b>	<b>Rate*</b>
Sudden Infant Death Syndrome	58	5.5	4.15
Lack of adequate care	1	0.1	0.07
Prematurity	336	31.6	24.03
Illness or other natural cause	391	36.8	27.96
Drowning	28	2.6	2.00
Suffocation/strangulation	40	3.8	2.86
Vehicular	108	10.2	7.72
Firearm	30	2.8	2.15
Inflicted Injury	15	1.4	1.07
Poisoning/overdose	5	0.5	0.36
Fire/burn	20	1.9	1.43
Other cause not listed above	17	1.6	1.22
Unknown cause	14	1.3	1.00
<b>Total</b>	<b>1063</b>	<b>100</b>	<b>76.01</b>

\*Rates per 100,000 in the population

### **Deaths Due to Non-injury Causes**

There were 786 deaths due to non-injury causes among Tennessee children in 2003, representing 73.94% of all child fatalities including those that were not determined. Of these, the greatest number of deaths due to non-injury resulted from illness (N=391) followed by prematurity (N=336). Of the deaths where gestational age was reported, 126 involved extremely premature infants (i.e., less than 23 weeks gestation), 199 involved gestations of 23 to 37 weeks and four involved more than 37 weeks gestation.

### **Deaths Due To Injury**

In 2003 there were 246 deaths (23.14% of all childhood fatalities) due to injury among children. The greatest number of childhood fatalities due to injuries resulted from vehicular incidents (108) or 43.94% of all injury-related fatalities). Suffocation/strangulation fatalities were the next most common cause of injury-related death resulting in 40 fatalities (16.26% of all injury-related fatalities) and firearm fatalities (30 or 12.2%). Overall, childhood fatalities due to injuries in 2003 occurred at a rate of 17.59 per 100,000.

## **Recommendations from the State Child Fatality Prevention Team**

The State Child Fatality prevention team discussed the recommendations submitted by the child fatality review team leaders (see attached) and felt that they were all important. The state prevention team decided the main items that needed to be brought before the legislature were recommendations to:

1. Reduce infant mortality by decreasing low birth weight and prematurity, increasing education/awareness regarding the dangers of smoking during pregnancy and promoting education/awareness on safe-sleep practices for children.
2. Encourage coordinated current and future state efforts in preventative substance abuse programs that mirror evidence based practices regarding families, pregnancies and children. (Impact of methamphetamine and methadone use of mothers/ parents on infant and children)
3. Promote public awareness of child abuse and neglect and the need for making reports of such incidents also supporting the need for additional training to staff of the Department of Children's Services in investigating abuse and neglect of children, particularly in sex abuse allegations/cases.
4. Coordinate the processes of the medical examiners and the organ donation offices to provide concise diagnoses on cause of death and assist in decreasing the number of preventable deaths. (Change T.C.A. § 38-7-101 Post Mortem Act)
5. Continue to promote and support the Tennessee Suicide Prevention Network as they implement the youth strategic plan –“Tennessee Lives Count.”
6. Increase coordinated school health programs to all Tennessee school districts focusing on health education and risk prevention activities.
7. Promote public awareness on the impact of environmental toxins on children i.e., pesticides, lead, etc.

### **Child Fatality Review State Prevention Team, 2005**

Karen Alexander, Assistant Special Agent in Charge, Tennessee Bureau of Investigation  
Stephanie Bailey, M.D., Director, Davidson County Health Department  
Bonnie Beneke, Tennessee Professional Society on Abuse of Children  
Andy Bennett, Chief Deputy Attorney General  
Senator Diane Black, Member, General Welfare, Health and Human Resources Committee  
Dr. Howard Burley, Mental Health and Developmental Disabilities  
Senator Charlotte Burks, Tennessee State Senate  
Representative Dennis Ferguson, Member, House Health and Human Resources Committee  
Judge Betty Adams Green, Juvenile Court  
Senator Roy Herron, Chair, Select Committee on Children and Youth  
Shalonda Cawthon, Executive Director, Child Safety  
Bruce Levy, M.D., State Medical Examiner  
Representative Joe McCord, Tennessee House of Representatives  
Linda O'Neal, Tennessee Commission on Children and Youth  
Cindy Perry, Select Committee, Children and Youth

**Child Fatality Review State Prevention Team, 2005 (Continued)**

Theodora Pinnock, M.D., Director Maternal and Child Health  
Scott Ridgeway, Tennessee Suicide Prevention Network  
Kenneth S. Robinson, M.D., Commissioner of the Department of Health  
Kim Rush, Program Director for Children and Youth Services

Tennessee Department of Health Staff

Jacqueline Johnson, M.P.A.  
Pinky Noble- Britton, R.N.

## **Recommendations from the Local Child Fatality Review Teams August 2005**

After review of the year's progress and concerns, the child fatality review teams (CFRT) submitted recommendations that were discussed and summarized by CFRT team leaders.

Recommendations to the state child fatality prevention team follow:

### **Highest Priority**

1. Develop a statewide media campaign surrounding SIDS; consistent policies relevant to safe sleep practices, and education of the public regarding child death issues.
2. Develop a statewide task force to review pre-mature deaths and infant mortality, cause and effect. Adopt the CDC's recommended guidelines as it relates to what constitutes a live birth, i.e., live births/deaths versus fetal demise. Promote statewide education on prenatal care and how it affects pre-maturity focus on smoking, substance and alcohol abuse during pregnancy.
3. Develop minimum physical education requirements for all grade levels in the school systems.

### **Other Concerns by Category**

#### **Agency**

1. Determine whether DCS can investigate and intervene if death occurs in family where methamphetamine use is suspected.

#### **Education**

1. Review violent death data and determine if major causes are murder, accident, firearm related, or shaken baby syndrome. Develop campaign to reduce child deaths in those categories.
2. Develop campaign regarding home pool safety.
3. Develop campaign to provide reminders to landlords as well as tenants to change batteries in smoke detectors when time changes each year.
4. Ensure that all graduated drivers' license rules are included in driver's education and tests.

#### **Law**

1. Develop and promote legislation to regulate all terrain vehicles (ATV) usage. Establish a minimum age requirement, safety gear, parental requirements, seller requirements and pre-training prior to driving.



2. Develop and promote legislation regulating methadone usage in pregnant women. Current practice allows for increase in dosage during pregnancy, which increases fetal addictions and fetal withdrawal problems.

These recommendations were identified by the team leaders as having the highest concern for 2005. However, the recommendations from 2004 continue to be of vital concern to the team leaders.

## Health Department Regions, Judicial Districts, and CFR Team Leaders

<b>Region</b>	<b>CFR Team Leader, Judicial District (JD) and Counties</b>
Northeast	Dr. Lawrence Moffatt JD 1: Carter, Johnson, Unicoi, and Washington Dr. Barbara Skelton JD 3: Greene, Hamblen, Hancock, and Hawkins
Sullivan	Dr. Stephen May JD 2: Sullivan
East	Dr. Paul Erwin JD 4: Cocke, Grainger, Jefferson, and Sevier JD 5: Blount JD 7: Anderson JD 8: Campbell, Claiborne, Fentress, Scott, and Union JD 9: Loudon, Meigs, Morgan, and Roane
Knox	Dr. Kelly Boggan JD 6: Knox
Southeast	Dr. Jan Beville JD 10: Bradley, McMinn, Monroe, and Polk JD 12: Bledsoe, Franklin, Grundy, Marion, Rhea, and Sequatchie
Hamilton	Kaye Greer JD 11: Hamilton
Upper Cumberland	Dr. Don Tansil JD 13: Clay, Cumberland, DeKalb, Overton, Pickett, Putnam, and White JD 15: Jackson, Macon, Smith, Trousdale, and Wilson JD 31: Van Buren and Warren
South Central	Dr. Langdon Smith JD 14: Coffee JD 17: Bedford, Lincoln, Marshall, and Moore JD 2101: Hickman, Lewis, and Perry JD 2201: Giles, Lawrence, and Wayne JD 2202: Maury
Davidson	Dr. Stephanie Bailey/ Brook McKelvey JD 20: Davidson
Mid Cumberland	Sharon A. Woodard/ Dr. Alison Asaro JD 16: Cannon, and Rutherford JD 18: Sumner JD 1901: Montgomery JD 1902: Robertson JD 2102: Williamson JD 23: Cheatham, Dickson, Houston, Humphreys, and Stewart

**Region****CFR Team Leader, Judicial District (JD) and Counties**

West

Dr. Shavetta Conner

JD 24: Benton, Carroll, Decatur, Hardin, and Henry

JD 25: Fayette, Hardeman, Lauderdale, McNairy, and Tipton

JD 27: Obion and Weakley

JD 28: Crockett, Gibson, and Haywood

JD 29: Dyer and Lake

Madison

Dr. Tony Emison

JD 26: Chester, Henderson, and Madison

Shelby

Flo Patton

JD 30: Shelby

# **2003 Tennessee Child Fatality Review**

## Tennessee Child Fatality Review 2003

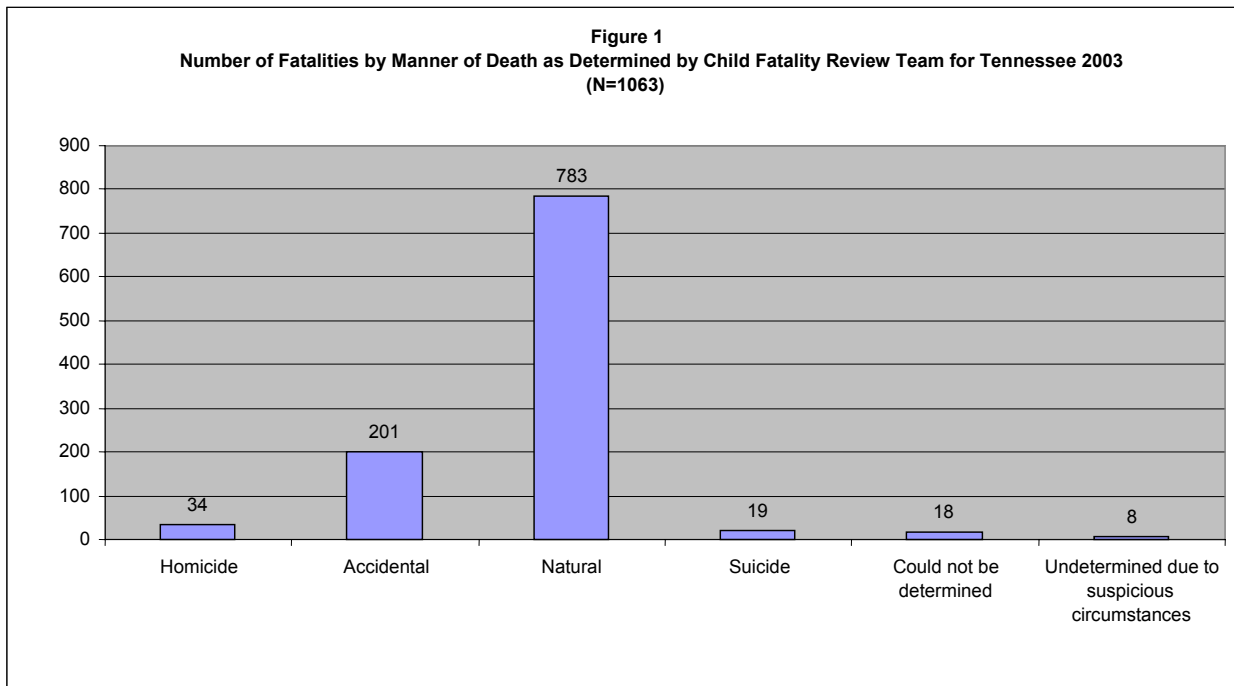
### MANNER OF DEATH

The manner of death for 1,063 child fatalities in 2003, was determined by the CFRT to be natural causes for 73.66% (N=783); unintentional injury (accidental) causes for 18.91% (N=201); homicide for 3.20% (N=34); suicide for 1.79% (N=19); could not be determined 1.69% (N=18); and undetermined due to suspicious circumstances 0.75% (N=8) (Table 1).

The overall rate of child fatalities for 2003 computed from the cases reviewed by the CFRT was 76.01 per 100,000. Fatality rates identified in this report were computed based on census data for Tennessee in 2000 and reported as the number of cases per 100,000 in the population of children less than 18 years of age.

<b>Table 1: Manner of Death (N=1,063)</b>			
<b>Manner of Death</b>	<b>Number</b>	<b>Percent</b>	<b>Rate*</b>
Homicide	34	3.20	2.43
Accidental	201	18.91	14.37
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\*Rates per 100,000 in the population



## Manner of Death as Determined by CFRT

The CFRT on average, agreed with the manner of death indicated on the death certificate in 72.56% (N=771) (Table 2). The CFRT concluded 34 of the cases were homicides (versus 31 on death certificate); 201 were accidental (versus 183 on death certificate); 783 were natural deaths (versus 589 on death certificates); 19 suicides (versus 19 on death certificate); 18 could not be determined (versus 14 on death certificate). Eight deaths were undetermined by the CFRT versus 44 deaths that listed pending investigation. All of the CFRT reports were marked versus 183 death certificates that were blank or not listed. The CFRT noted differences with the death certificate in 27.44% (N=292) of cases.

**Table 2: Differences in Death Certificate and CFRT Determination**

	Death Cert.	CFRT	Death Cert.	CFRT	Death Cert.	CFRT	Death Cert.	CFRT	Death Cert.	CFRT	Death Cert.	CFRT	Death Cert.	CFRT
Age	Homicide		Accidental		Natural		Suicide		Could Not Be Determined		Blank/Unmarked		Pending Investigation/Undetermined	
<1	7	8	30	38	460	619	0	0	12	14	142	0	33	6
1-2	4	5	20	19	22	35	0	0	0	0	12	0	3	2
3-5	4	4	21	21	14	17	0	0	0	1	4	0	0	0
6-8	2	2	23	22	21	24	0	0	0	0	2	0	0	0
9-11	1	0	11	12	13	19	1	1	0	0	5	0	1	0
12-14	2	3	20	21	27	36	5	5	0	1	8	0	4	0
15-17	11	12	58	68	32	33	12	13	2	2	10	0	3	0
<b>Total</b>	<b>31</b>	<b>34</b>	<b>183</b>	<b>201</b>	<b>589</b>	<b>783</b>	<b>19</b>	<b>19</b>	<b>14</b>	<b>18</b>	<b>183</b>	<b>0</b>	<b>44</b>	<b>8</b>
<b>%Agree</b>	<b>91.18</b>		<b>91.04</b>		<b>75.22</b>		<b>100</b>		<b>77.78</b>		<b>0</b>		<b>18.18</b>	
<b>Average Agreement</b>	<b>72.56%</b>													

## Manner of Death and Age

Across all groups the highest rate of fatalities in 2003 was during the first year of life (911.79 per 100,000). The second highest rate of fatalities occurred in youth aged 15-17 (55.01 per 100,000) (Table 3).

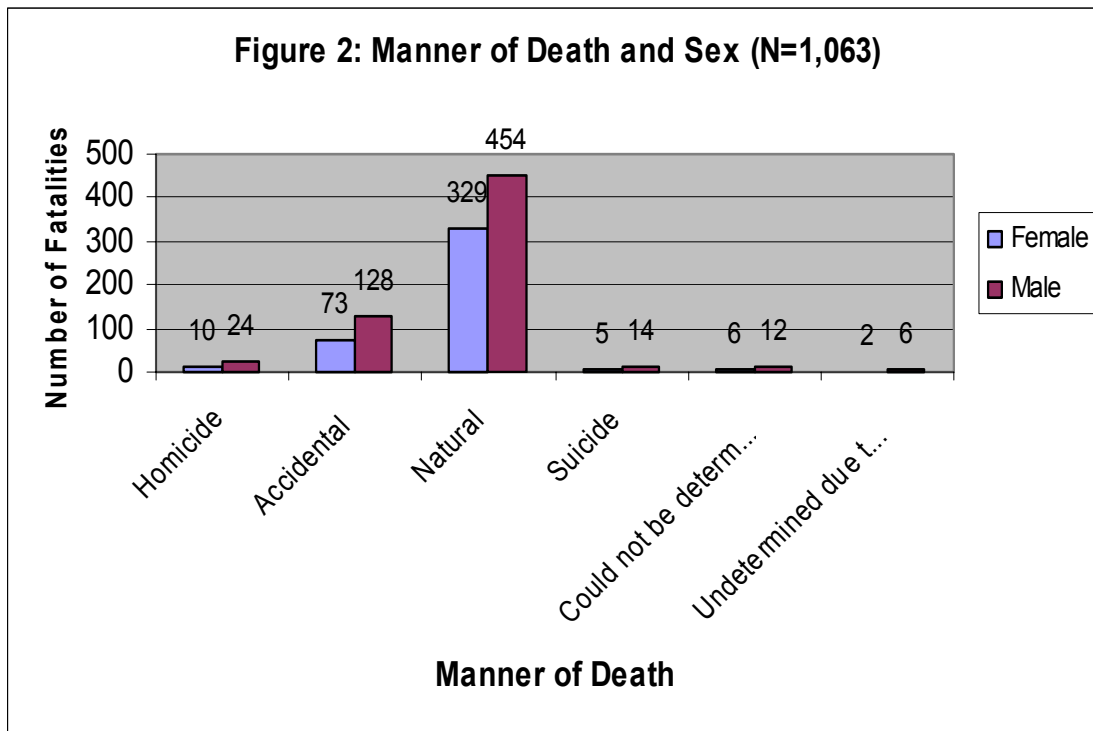
		Homicide	Accidental	Natural	Suicide	Could Not Determined	Undetermined/Suspicious	Not Marked	Total	Rate*
<b>Age</b>	<1	8	38	619	0	14	6	0	685	911.79
	1-2	5	19	35	0	0	2	0	61	40.75
	3-5	4	21	17	0	1	0	0	43	18.97
	6-8	2	22	24	0	0	0	0	48	20.30
	9-11	0	12	19	1	0	0	0	32	13.08
	12-14	3	21	36	5	1	0	0	66	28.29
	15-17	12	68	33	13	2	0	0	128	55.01
<b>Total</b>		<b>34</b>	<b>201</b>	<b>783</b>	<b>19</b>	<b>18</b>	<b>8</b>	<b>0</b>	<b>1063</b>	<b>76.01</b>
<b>Percent</b>		<b>3.20%</b>	<b>18.91%</b>	<b>73.66%</b>	<b>1.79%</b>	<b>1.69%</b>	<b>0.75%</b>	<b>0.00%</b>	<b>100.00%</b>	
<b>Rate</b>		<b>2.43</b>	<b>14.37</b>	<b>55.99</b>	<b>1.36</b>	<b>1.29</b>	<b>0.57</b>		<b>76.01</b>	

\*Rates per 100,000 in the population

## Manner of Death and Sex (Gender)

Sixty percent of child fatalities were males (N=638) and 40% were females (N=425), which corresponded to rates of 88.79 per 100,000 for males and 62.50 per 100,000 for female children in Tennessee. The largest number of fatalities for both sexes occurred by natural manner (Table 4 and Figure 2).

		Homicide	Accidental	Natural	Suicide	Could Not Determine	Undetermined/Suspicious	Not Marked	Total
<b>Sex</b>	Female	10	73	329	5	6	2	0	425
	Male	24	128	454	14	12	6	0	638
	Not Marked	0	0	0	0	0	0	0	0
<b>Total</b>		<b>34</b>	<b>201</b>	<b>783</b>	<b>19</b>	<b>18</b>	<b>8</b>	<b>0</b>	<b>1063</b>



### Manner of Death and Race

Natural was the highest category of manner of death for all races (N=783). The total number of natural fatalities for white children was 420 (54%), for African-American children 322 (41%), and for other 34 (5%). Seven of the natural fatalities were classified as Asian (Table 5).

**Table 5: Manner of Death and Race (N=1,063)**

		Homicide	Accidental	Natural	Suicide	Could Not Determine	Undetermined Suspicious	Not Marked	Total
<b>RACE</b>	African-American	19	37	322	0	3	1	0	382
	White	14	153	420	17	15	6	0	625
	Other	0	6	34	2	0	1	0	43
	Asian	1	5	7	0	0	0		13
	Missing	0	0	0	0	0	0	0	0
<b>Total</b>		<b>34</b>	<b>201</b>	<b>783</b>	<b>19</b>	<b>18</b>	<b>8</b>	<b>0</b>	<b>1063</b>

### Manner of Death by Age, Sex, and Race

Of the 1,063 childhood fatalities, 625 (59%) were reported as white, 382 (36%) were reported as African-American, and 43 (4%) were reported as other race. Thirteen deaths were reported in 2003 as Asian, however census data were not available to calculate death rate. The rate of all fatalities for African-American children was 128.83 per 100,000 or more than twice the rate for white children of 60.16 per 100,000. The rate for other race was 68.04 per 100,000.



Across all races, the highest rate of fatalities was during the first year of life. Taking age, race, and sex into account, the highest fatality rate was African-American males less than one year of age (2179.2 per 100,000), followed by African-American females under one year of age (1469.3 per 100,000). The rates for both male and female African-American children under one year of age were twice (1815.1 per 100,000) the rates for white males and white females (651.9 per 100,000) in the first year of life (Table 6).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	685	911.79	Female	425	62.5	African-American	382	128.83
1-2	61	40.75	Male	638	88.79	White	625	60.16
3-5	43	18.97				Other	43	68.04
6-8	48	20.30				Asian	13	
9-11	32	13.08				Not Marked	0	
12-14	66	28.29						
15-17	128	55.01						
<b>Total</b>	<b>1063</b>	<b>76.01</b>		<b>1063</b>	<b>76.01</b>		<b>1063</b>	<b>76.01</b>

\*Rates per 100,000 in the population

### **Manner of Death: Violence-related**

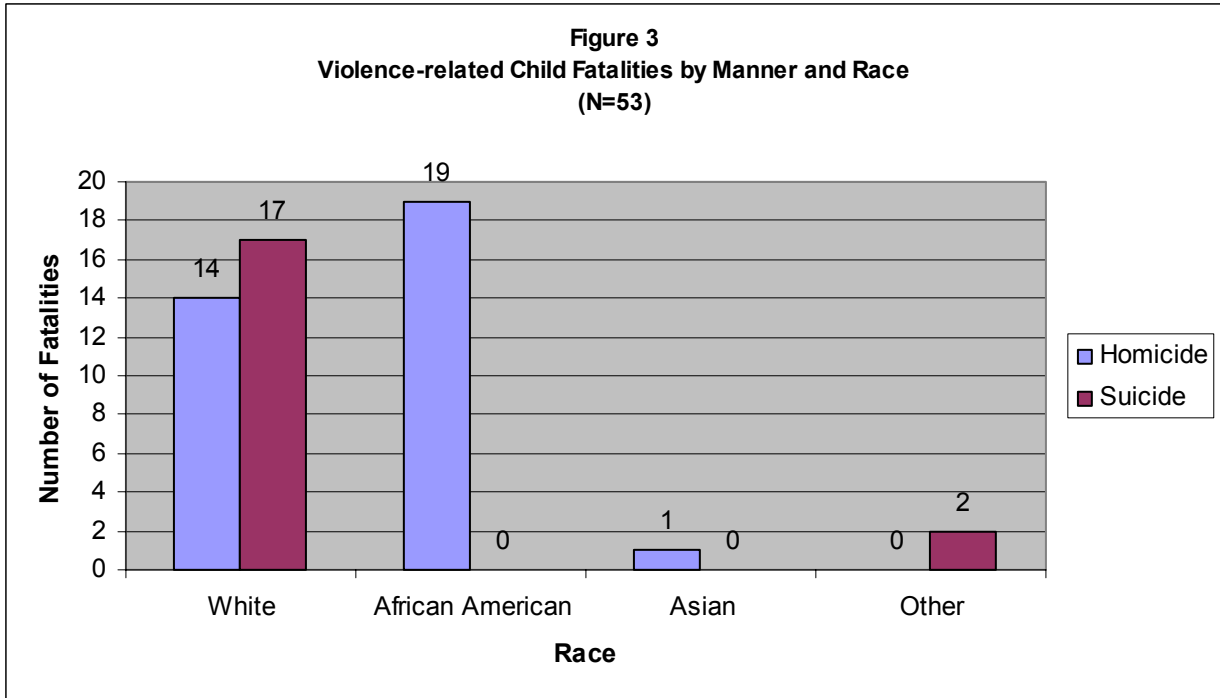
In 2003, there were 53 child fatalities due to violence-related injuries. These injuries were the result of either homicide (N=34) or suicide (N=19). This represents 5% of all child fatalities (Table 7, Figure 3).

Males (N=38; 5.29 per 100,000) were nearly three times more likely than females (N=15; 2.21 per 100,000) to die from violence-related injuries. African-American children (N=19; 6.41 per 100,000) were nearly five times more likely to die of violence-related injuries as white children (N=31; 2.98 per 100,000) followed by children in the "Other" racial category (N=2; 3.16 per 100,000) and Asian with one death.

Children in the 15-17 years age group had the highest rate of violence-related fatalities (N= 25; 10.74 per 100,000), followed by children less than one year (N=8; 10.65 per 100,000).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	8	10.65	Female	15	2.21	African-American	19	6.41
1-2	5	3.34	Male	38	5.29	White	31	2.98
3-5	4	1.76				Other	2	3.16
6-8	2	0.85				Asian	1	
9-11	1	0.41						
12-14	8	3.43						
15-17	25	10.74						
<b>Total</b>	<b>53</b>	<b>3.79</b>		<b>53</b>	<b>3.79</b>		<b>53</b>	<b>3.79</b>

\*Rates per 100,000 in the population



**Homicide**

In 2003, there were 34 child fatalities due to homicides. This represents 64% of all violence-related deaths and 3.2% of all child fatalities (Table 8).

Males (N=24; 3.34 per 100,000) were more likely than females (N=10; 1.47 per 100,000) to die from homicides. African-American children (N=14; 4.72 per 100,000) died at a rate nearly three times that of white children (N=19; 1.83 per 100,000) followed by children of Asian race (N=1).

Age	Number	Rate*	Sex	Number	Rate	Race	Number	Rate
<1	8	10.65	Female	10	1.47	African-American	14	4.72
1-2	5	3.34	Male	24	3.34	White	19	1.83
3-5	4	1.76				Other	0	0.00
6-8	2	0.85						
9-11	0	0.00				Asian	1	**
12-14	3	1.29						
15-17	12	5.16						
<b>Total</b>	<b>34</b>	<b>2.43</b>		<b>34</b>	<b>2.43</b>		<b>34</b>	<b>2.43</b>

\*Rates per 100,000 in the population

\*\*Rates not available

## Suicide

During 2003, 19 young people committed suicide. Most of these deaths were by children in the 15 to 17 years age group (N=13; 5.59 per 100,000). Five children committed suicide in the 12-14 age group (N=5; 2.14 per 100,000). One child in the 9 to 11 years age group committed suicide (0.41 per 100,000). Males (N=14; 1.95 per 100,000) were more likely than females (N=5; 0.74 per 100,000) to die from suicide. No African-American children committed suicide in 2003 while 17 white children (1.64 per 100,000) and two Other race children (3.16 per 100,000) died as a result of suicide (Table 9).

<b>Table 9: Suicide Fatalities by Age, Sex, and Race (N=19)***</b>								
<b>Age</b>	<b>Number</b>	<b>Rate*</b>	<b>Sex</b>	<b>Number</b>	<b>Rate</b>	<b>Race</b>	<b>Number</b>	<b>Rate</b>
<1	0	0.00	Female	5	0.74	African-American	0	0.00
1-2	0	0.00	Male	14	1.95	White	17	1.64
3-5	0	0.00				Other	2	3.16
6-8	0	0.00						
9-11	1	0.41				Asian	0	**
12-14	5	2.14						
15-17	13	5.59						
<b>Total</b>	<b>19</b>	<b>1.36</b>		<b>19</b>	<b>1.36</b>		<b>19</b>	<b>1.36</b>

\*Rates per 100,000 in the population

\*\*Rates not available

\*\*\*Note: There were 22 suicides in 2002, a 14% decrease.

## Manner of Death by County

Sixty-six percent (N=700) of all childhood fatalities occurred in 12 counties with 15 or more deaths each (Table 10). In 2003, the highly populated counties of Shelby and Davidson reported a total of 376 fatalities and accounted for 35% of all childhood fatalities. Shelby County had the highest percentage of all childhood fatalities (N=285; 27%) followed by Davidson (N=91; 8.6%), Hamilton (N=66; 6%). Knox (N=56; 5%), and of the 12 counties reporting the most child fatalities, all ranked in the top 18 counties with the highest population age 0-17 years. (Table 10).

<b>Table 10: Fatalities from Counties with 15 or More Fatalities (N=700)</b>		
<b>County</b>	<b>Fatalities</b>	<b>Rank in Population Ages 0-17</b>
SHELBY	285	1
DAVIDSON	91	2
HAMILTON	66	4
KNOX	56	3
RUTHERFORD	37	5
MONTGOMERY	31	6
BLOUNT	23	10
MADISON	22	11
SULLIVAN	20	9
TIPTON	19	18
WASHINGTON	18	13
ANDERSON	16	16
SUMNER	16	8
<b>TOTAL</b>	<b>700</b>	

**Table 11: Fatalities from All Counties (N=1063)**

COUNTY	Accidental	Natural	Homicide/ Suicide	Could not be determined	Undetermined due to suspicious circumstances	Total	*Rate
ANDERSON	5	9	2	0	0	16	96.76
BEDFORD	2	9	1	0	0	12	123.88
BENTON	2	1	0	0	0	3	82.39
BLED SOE	0	0	0	0	0	0	0.00
BLOUNT	6	17	0	0	0	23	95.32
BRADLEY	0	13	0	0	0	13	62.41
CAMPBELL	1	2	0	1	0	4	43.83
CANNON	3	2	0	0	0	5	153.42
CARROLL	0	0	0	0	0	0	0.00
CARTER	0	5	0	1	0	6	49.51
CHEATHAM	2	1	0	0	0	3	30.21
CHESTER	2	1	0	0	0	3	79.74
CLAIBORNE	1	1	0	0	0	2	28.39
CLAY	0	0	0	0	0	0	0.00
COCKE	5	1	0	0	0	6	78.32
COFFEE	6	5	1	0	0	12	99.62
CROCKETT	2	3	0	0	0	5	136.84
CUMBERLAND	2	1	0	0	0	3	29.97
DAVIDSON	11	73	5	2	0	91	71.97
DECATUR	0	0	0	0	0	0	0.00
DEKALB	0	3	0	0	0	3	74.04
DICKSON	1	3	1	0	1	6	52.24
DYER	2	1	0	0	0	3	31.26
FAYETTE	0	5	0	0	0	5	67.49
FENTRESS	1	1	0	0	0	2	49.71
FRANKLIN	2	3	0	0	0	5	55.29
GIBSON	5	9	0	0	0	14	121.34
GILES	0	3	0	0	0	3	41.55
GRAINGER	0	1	1	0	0	2	42.27
GREENE	6	6	0	0	0	12	85.77
GRUNDY	1	0	0	0	0	1	27.77
HAMBLEN	2	6	1	1	0	10	73.91
HAMILTON	7	51	6	1	1	66	92.38
HANCOCK	1	2	0	0	0	3	191.08
HARDEMAN	0	4	0	0	0	4	59.51
HARDIN	2	0	0	0	0	2	33.92
HAWKINS	1	4	2	0	0	7	56.09
HAYWOOD	3	3	2	0	0	8	148.70
HENDERSON	0	5	0	0	0	5	80.49
HENRY	0	8	0	0	0	8	115.72
HICKMAN	1	3	0	0	0	4	72.69
HOUSTON	0	2	0	0	0	2	101.52
HUMPHREYS	1	2	0	0	0	3	70.06
JACKSON	1	2	1	0	0	4	163.53
JEFFERSON	1	3	0	0	0	4	39.45
JOHNSON	1	2	0	0	0	3	86.98
KNOX	10	40	4	2	0	56	65.81

LAKE	0	2	0	0	0	2	141.74
LAUDERDALE	0	5	0	1	0	6	89.30
LAWRENCE	3	1	0	0	0	4	38.27
LEWIS	1	3	0	0	0	4	136.15
LINCOLN	3	0	0	0	0	3	40.12
LOUDON	1	4	0	0	0	5	58.41
MCMINN	1	2	1	0	0	4	34.11
MCNAIRY	1	2	0	0	0	3	51.50
MACON	0	1	0	1	0	2	37.64
MADISON	4	18	0	0	0	22	92.76
MARION	0	4	0	0	0	4	60.66
MARSHALL	1	2	0	0	1	4	58.45
MAURY	3	10	1	0	0	14	76.78
MEIGS	0	0	0	0	0	0	0.00
MONROE	1	1	0	0	0	2	20.75
MONTGOMERY	4	24	1	0	2	31	80.88
MOORE	0	0	0	0	0	0	0.00
MORGAN	2	2	0	0	0	4	87.28
OBION	2	3	0	0	0	5	65.74
OVERTON	1	0	0	0	0	1	21.60
PERRY	0	0	0	0	0	0	0.00
PICKETT	0	0	0	0	0	0	0.00
POLK	2	3	0	0	0	5	137.85
PUTNAM	0	7	0	0	0	7	50.44
RHEA	0	1	0	0	0	1	14.83
ROANE	2	7	1	1	1	12	103.49
ROBERTSON	2	6	0	0	0	8	54.86
RUTHERFORD	11	24	2	0	0	37	76.91
SCOTT	0	3	3	0	0	6	108.97
SEQUATCHIE	0	1	0	0	0	1	35.82
SEVIER	3	3	1	0	0	7	42.75
SHELBY	31	242	12	0	0	285	112.53
SMITH	0	0	0	0	0	0	0.00
STEWART	2	2	0	0	0	4	135.14
SULLIVAN	6	13	0	0	1	20	59.86
SUMNER	4	10	0	2	0	16	46.60
TIPTON	3	16	0	0	0	19	126.46
TROUSDALE	0	0	0	0	0	0	0.00
UNICOI	1	2	0	0	0	3	82.76
UNION	1	2	1	1	0	5	109.27
VAN BUREN	0	1	0	0	0	1	79.05
WARREN	2	2	0	0	1	5	53.88
WASHINGTON	1	12	1	4	0	18	78.82
WAYNE	1	0	1	0	0	2	55.57
WEAKLEY	1	4	0	0	0	5	66.22
WHITE	0	2	0	0	0	2	36.77
WILLIAMSON	1	9	0	0	0	10	26.77
WILSON	0	11	1	0	0	12	51.49
<b>Total</b>	<b>201</b>	<b>783</b>	<b>53</b>	<b>18</b>	<b>8</b>	<b>1063</b>	<b>76.01</b>

\*Rates per 100,000 in the population

**Note: Counties with no reviewed deaths: Bledsoe, Carroll, Clay, Decatur, Meigs, Moore, Perry, Pickett, Smith, and Trousdale**

### CAUSE OF DEATH

The 1,063 child fatalities were divided into the following categories by cause of death:

- Non-injury 786 (73.94%)
- Injury-related 246 (23.14%)
- Other cause not listed 17 ( 1.60%)
- Unknown 14 ( 1.32%)

Overall, the cause of death was reported in 13 categories. The 786 deaths recorded as non-injury were reported in the categories of SIDS, lack of adequate care, prematurity and illness/other natural cause. Injury related deaths (N=246) were reported in the categories of drowning, suffocation/strangulation, vehicular, firearm, inflicted injury, poison/overdose, and fire/burn. Other cause Not Listed (N=17) and unknown cause (N=14) were reported separately (Table 12).

<b>Table 12: Overall Cause of Death (N=1,063)</b>			
<b>Cause of Death</b>	<b>Number</b>	<b>Percent</b>	<b>Rate*</b>
Sudden Infant Death Syndrome	58	5.5	4.15
Lack of adequate care	1	0.1	0.07
Prematurity	336	31.6	24.03
Illness or other natural cause	391	36.8	27.96
Drowning	28	2.6	2.00
Suffocation/strangulation	40	3.8	2.86
Vehicular	108	10.2	7.72
Firearm	30	2.8	2.15
Inflicted Injury	15	1.4	1.07
Poisoning/overdose	5	0.5	0.36
Fire/burn	20	1.9	1.43
Other cause not listed above	17	1.6	1.22
Unknown cause	14	1.3	1.00
<b>Total</b>	<b>1063</b>	<b>100</b>	<b>76.01</b>

\*Rates per 100,000 in the population

A summary of cause of death by age, sex and race is reported in Tables 13, 14, and 15.

<b>Table 13: Cause of Death by Age (N=1,063)</b>								
	<b>&lt;1</b>	<b>1-2</b>	<b>3-5</b>	<b>6-8</b>	<b>9-11</b>	<b>12-14</b>	<b>15-17</b>	<b>Total</b>
SIDS	58	0	0	0	0	0	0	58
Lack of adequate care	0	1	0	0	0	0	0	1
Prematurity	336	0	0	0	0	0	0	336
Illness or other natural cause	229	33	17	24	19	36	33	391
Drowning	3	7	7	3	2	1	5	28
Suffocation/strangulation	25	3	1	1	0	4	6	40
Vehicular	8	3	8	11	6	14	58	108
Firearm	0	1	1	1	3	5	19	30
Inflicted Injury	7	3	3	0	0	1	1	15
Poisoning/overdose	0	1	0	1	0	0	3	5
Fire/burn	3	4	4	4	1	2	2	20
Other cause not listed above	5	4	2	3	1	2	0	17
Unknown cause	11	1	0	0	0	1	1	14
<b>Total All Causes</b>	<b>685</b>	<b>61</b>	<b>43</b>	<b>48</b>	<b>32</b>	<b>66</b>	<b>128</b>	<b>1063</b>

<b>Table 14: Cause of Death by Sex (N=1,063)</b>			
	<b>Female</b>	<b>Male</b>	<b>Total</b>
SIDS	24	34	58
Lack of adequate care	0	1	1
Prematurity	133	203	336
Illness or other natural cause	172	219	391
Drowning	6	22	28
Suffocation/strangulation	8	32	40
Vehicular	50	58	108
Firearm	6	24	30
Inflicted Injury	5	10	15
Poisoning/overdose	1	4	5
Fire/burn	9	11	20
Other cause not listed above	4	13	17
Unknown cause	7	7	14
<b>Total</b>	<b>425</b>	<b>638</b>	<b>1063</b>



**Table 15: Cause of Death by Race (N=1,063)**

	<b>African American</b>	<b>White</b>	<b>Asian</b>	<b>Other</b>	<b>Not Marked</b>	<b>Total</b>
SIDS	24	32	1	1	0	58
Lack of adequate care	0	0	0	1	0	1
Prematurity	175	147	3	11	0	336
Illness or other natural cause	122	244	3	22	0	391
Drowning	5	21	0	2	0	28
Suffocation/strangulation	8	29	1	2	0	40
Vehicular	15	88	3	2	0	108
Firearm	12	17	0	1	0	30
Inflicted Injury	6	8	1	0	0	15
Poisoning/overdose	1	4	0	0	0	5
Fire/burn	5	14	0	1	0	20
Other cause not listed above	7	9	1	0	0	17
Unknown cause	2	12	0	0	0	14
<b>Total All Causes</b>	<b>382</b>	<b>625</b>	<b>13</b>	<b>43</b>	<b>0</b>	<b>1063</b>

### **Deaths Due to Non-injury Causes**

There were 786 deaths due to non-injury causes among Tennessee children in 2003, representing 73.94% of all child fatalities including those that were not determined. Of these, the greatest number of deaths due to non-injury resulted from illness (N=391) followed by prematurity (N=336).

Of the 329 deaths due to prematurity where gestational age was reported, 126 involved extremely premature infants (i.e., less than 23 weeks gestation) and 199 involved gestations of 23 to 37 weeks. Four infants with gestational age of 38 weeks or more were reported as having died due to prematurity in 2003. This information is discussed in more detail under prematurity on page 26.

## Illness or Other Conditions

In 2003, 391 children died due to illness or other conditions. This represents 49.7% of all non-injury deaths and 36.7% of all childhood fatalities for 2003. More than half (N=229) of all fatalities due to illness involved children of less than one year of age (Table 16).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	229	304.82	Female	172	32.31	African-American	122	82.29
1-2	33	22.04	Male	219	23.94	White	244	11.74
3-5	17	7.50				Other	22	4.75
6-8	24	10.15				Asian	3	**
9-11	19	7.77				Missing	0	0
12-14	36	15.43						
15-17	33	14.18						
<b>Total</b>	<b>391</b>	<b>27.96</b>		<b>391</b>	<b>27.96</b>		<b>391</b>	<b>27.96</b>

\*Rates per 100,000 in the population

\*\*Rates not available

## Prematurity

A total of 336 children were reported as dead from complications due to prematurity in 2003. Gestational age was recorded for 329 children. Of these, 126 (38.3%) deaths in 2003 occurred in infants with a gestational age of less than 23 weeks. For infants who died with a gestational age of 23 to 37 weeks, 199 deaths (60.4%) were recorded. Prematurity was the cause of death of four children (1.2%) who were reported with a gestational age of more than 37 weeks. Overall, prematurity was the manner of death for 42.7% of deaths due to non-injury and 31.6% of all childhood deaths (Table 17).

Of the 126 fatalities due to prematurity with less than 23 weeks of gestational age:

- One hundred twenty four (124 or 98.4%) died within 24 hours of birth
- None died within 1 and 6 days of birth
- One (0.8%) died between 7 and 28 days
- None died between 29-364 days of birth
- Age at death was not reported for one child

Of the 199 fatalities due to prematurity with 23-37 weeks of gestational age:

- Ninety four (94 or 47.4%) died within 24 hours
- Thirty two (32 or 16.1%) died between 1 and 6 days of age
- Forty four (44 or 22.1%) died between 7 and 28 days
- Twenty nine (29 or 14.6%) died between 29 and 364 days of age

Of the four fatalities due to prematurity with greater than 37 weeks of gestational age:

- None died within 24 hours
- One (25%) died between 1 and 6 days of age
- One (25%) died between 7 and 28 days
- Two (50%) died between 29 and 364 days of age

<b>Table 17: Fatalities Due To Prematurity by Age, Sex, Race and Gestational Age (N=329)</b>								
<b>Gestational Age Less than 23 Weeks (N=126)</b>								
<b>Age</b>	<b>Number</b>	<b>%</b>	<b>Sex</b>	<b>Number</b>	<b>%</b>	<b>Race</b>	<b>Number</b>	<b>%</b>
<1 day	124	98.4	Female	50	40	African-American	78	62
1-6 days	0	0	Male	76	60	White	41	33
7-28 days	1	0.8				Other	4	3
29-364 days	0	0				Asian	3	2
Not Reported	1	0.8		0	0		0	0
<b>Total</b>	<b>126</b>	<b>100</b>		<b>126</b>	<b>100</b>		<b>126</b>	<b>100</b>
<b>Gestational Age 23-37 Weeks (N=199)</b>								
<b>Age</b>	<b>Number</b>	<b>%</b>	<b>Sex</b>	<b>Number</b>	<b>%</b>	<b>Race</b>	<b>Number</b>	<b>%</b>
<1 day	94	47.2	Female	78	39.2	African-American	90	45.2
1-6 days	32	16.1	Male	121	60.8	White	102	51.3
7-28 days	44	22.1				Other	7	3.5
29-364 days	29	14.6				Asian	0	0
<b>Total</b>	<b>199</b>	<b>100</b>		<b>199</b>	<b>100</b>		<b>199</b>	<b>100</b>
<b>Gestational Age More than 37 Weeks (N=4)</b>								
<b>Age</b>	<b>Number</b>	<b>%</b>	<b>Sex</b>	<b>Number</b>	<b>%</b>	<b>Race</b>	<b>Number</b>	<b>%</b>
<1 day	0	0	Female	3	75	African-American	1	25
1-6 days	1	25	Male	1	25	White	3	75
7-28 days	1	25				Other	0	0
29-364 days	2	50				Asian	0	0
<b>Total</b>	<b>4</b>	<b>100</b>		<b>4</b>	<b>100</b>		<b>4</b>	<b>100</b>

Mother's age and gestational age was reported for 311 of the 336 children who died due to prematurity. Of these 311, childhood fatalities among infants born at less than 23 weeks gestation were most frequent among women between 31 to 40 years of age (N=36). Childhood fatalities among infants born between 23 and 37 weeks of gestation were most frequent among mothers who were 22 to 25 years of age (N=51) (Table 18).

<b>Table 18: Fatalities Due Prematurity by Mother's Age and Gestational Age (N=311)</b>								
<b>Less than 23 weeks</b>			<b>23-37 weeks</b>			<b>More than 37 weeks</b>		
<b>Mother's Age</b>	<b>Number</b>	<b>Percent</b>	<b>Mother's Age</b>	<b>Number</b>	<b>Percent</b>	<b>Mother's Age</b>	<b>Number</b>	<b>Percent</b>
14-17	4	3.39%	14-17	15	7.89%	14-17	0	0
18-21	21	17.80%	18-21	50	26.32%	18-21	2	66.67%
22-25	34	28.81%	22-25	51	26.84%	22-25	1	33.33%
26-30	22	18.64%	26-30	36	18.95%	26-30	0	0
31-40	36	30.51%	31-40	38	20.00%	31-40	0	0
41-45	1	0.85%	41-45	0	0.00%	41-45	0	0
<b>Total</b>	<b>118</b>	<b>100%</b>	<b>Total</b>	<b>190</b>	<b>100%</b>	<b>Total</b>	<b>3</b>	<b>100%</b>

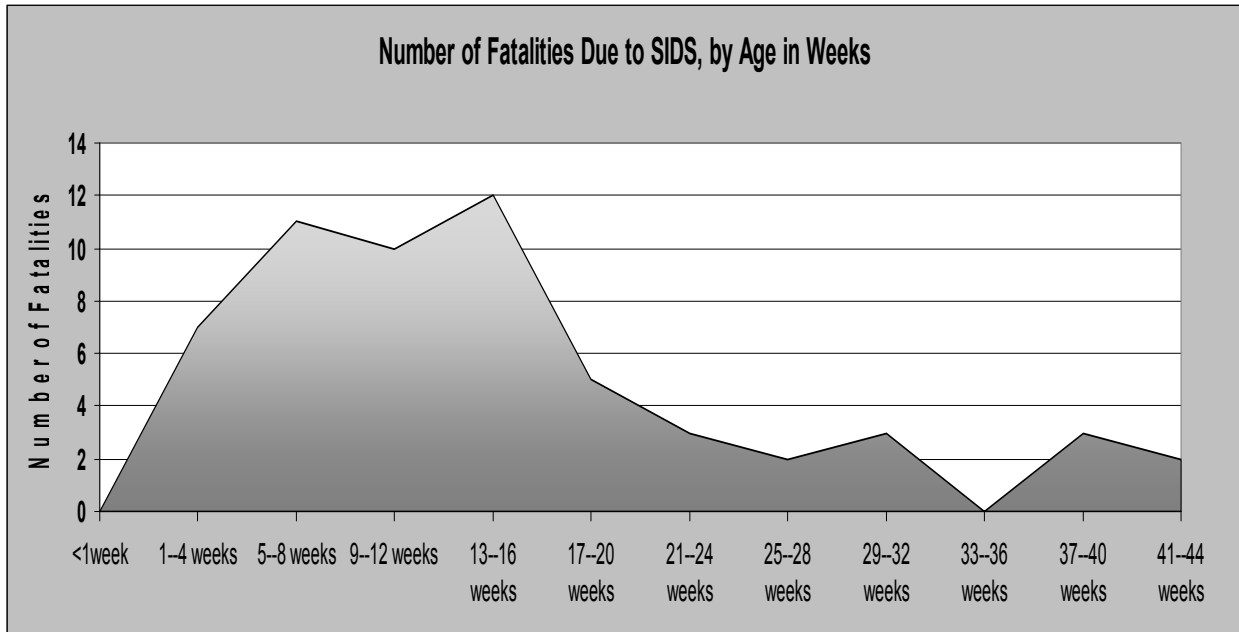
### **Sudden Infant Death Syndrome (SIDS)**

In 2003, 58 deaths were reported as sudden infant death syndrome (SIDS). This represents 7.4% of deaths due to non-injury and 5.5% of all childhood deaths in 2003. The most frequently occurring age of death was 13 to 16 weeks (N=12). Of all fatalities due to SIDS, 33 (57%) occurred between 5 and 16 weeks of age (Figure 5).

Of the 58 reported SIDS deaths, sleeping position was reported for 56 children. Of these 56, 18 (32%) was either not reported or unknown, 23 (41%) were on their stomachs with face down, 2 (3.5%) were on his/her stomach with face to the side, 4 (7%) were on their side, and 9 (16%) were on their back. Of the 54 responses to sleeping with another person, 18 (33%) were sleeping with another person, 26 (48%) were not and 10 (19%) were unknown or not reported. Regarding smoker in the household, of the 55 total reported, 27 (49%) reported yes and 9 (16%) no, the rest (N=19, 35%) were unknown.

### **Deaths Due To SIDS**

In 2003 there were 58 deaths that reported cause of death as SIDS (see Figure 4 below). This was a 24% decrease from 2002 when there were 76 Deaths due to SIDS.



**Figure 4: Sudden Infant Death Syndrome (SIDS) (N=58)**

**Fatalities Due To Lack of Medical Care**

In 2003, one fatality was attributed to delayed, inadequate or lack of medical care (Table 19).

Age	Number	Rate*	Sex	Number	Rate	Race	Number	Rate
<1	0	0	Female	0	0	African-American	0	0
1-2	1	.67	Male	1	0.14	White	0	0
3-5	0	0				Other	1	1.58
6-8	0	0						
9-11	0	0						
12-14	0	0						
15-17	0	0						
<b>Total</b>	<b>1</b>	<b>0.07</b>						

\*Rates per 100,000 in the population

## Deaths Due To Injury

In 2003, there were 246 deaths (23% of all childhood fatalities) due to injury among children. The greatest number of childhood fatalities due to injuries resulted from vehicular incidents (108) or 44% of all injury-related fatalities). Suffocation/strangulation fatalities were the next most common cause of injury-related death resulting in 40 fatalities (16.3% of all injury-related fatalities) (Figure 5). Death rates for African-American children were as likely to be involved in an injury-related fatality as white children (Tables 20-21; Figure 5). Overall, childhood fatalities due to unintentional injuries in 2003 occurred at a rate of 17.59 per 100,000.

<b>Age</b>	<b>Number</b>	<b>Rate*</b>	<b>Sex</b>	<b>Number</b>	<b>Rate*</b>	<b>Race</b>	<b>Number</b>	<b>Rate*</b>
<1	46	61.23	Female	86	12.65	African-American	52	17.54
1-2	22	14.70	Male	161	22.41	White	181	17.42
3-5	24	10.59				Other	8	12.66
6-8	21	8.88				Asian	5	**
9-11	12	4.90				Missing	0	**
12-14	27	11.57						
15-17	94	40.40						
<b>Total</b>	<b>246</b>	<b>17.59</b>		<b>246</b>	<b>17.59</b>		<b>246</b>	<b>17.59</b>

\*Rates per 100,000 in the population

\*\* Rates not available

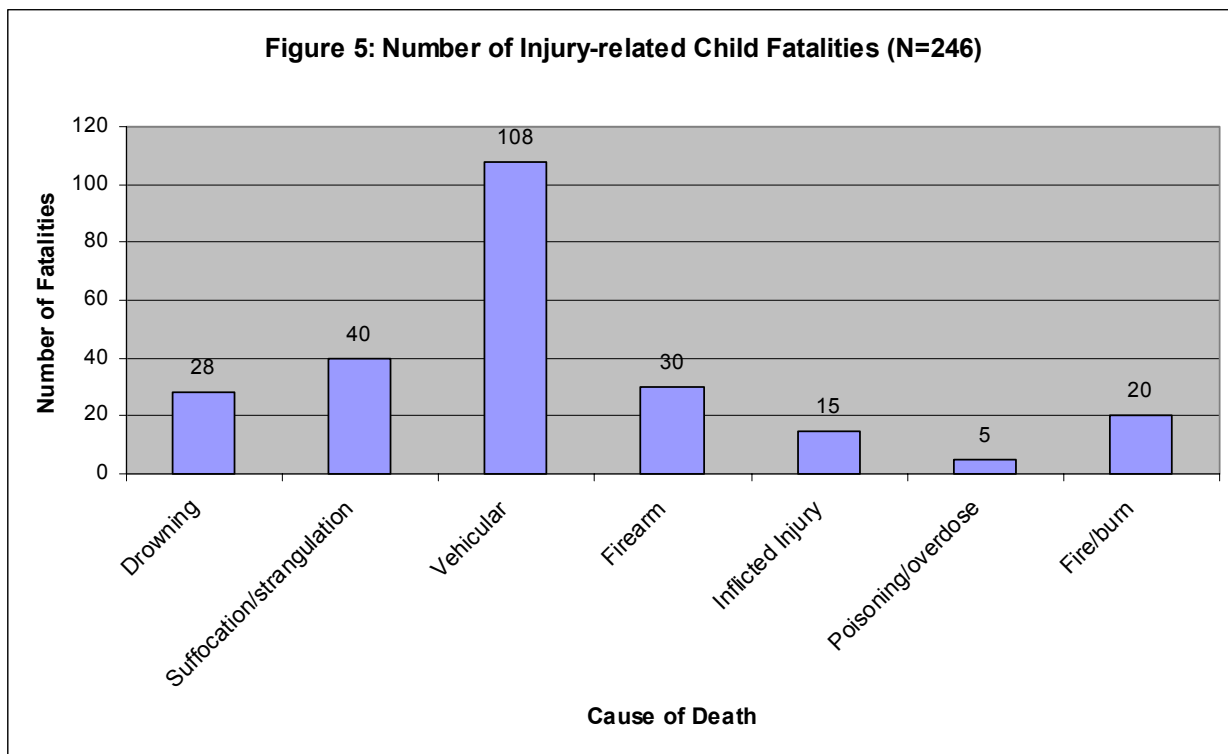
Childhood fatalities due to injuries were more prevalent among males (N= 161; 22.41 per 100,000) than females (N= 86; 12.65 per 100,000). Children ages 15 to 17 had the highest incidence of unintentional injury deaths (N=94; 40.40 per 100,000). Infants less than one year of age had the next highest number of deaths at 46 but were the highest injury-related death rate at 61.23 per 100,000.

Fatalities due to injuries among African-American children (N=52; 17.54 per 100,000) were approximately the same rate as white children 181 (17.42 per 100,000) and 8 (12.66 per 100,000) children died with race selected as other. Five children were reported as Asian and no rates were available.

	African-American	White	Other	Asian	Total
Drowning	5	21	2	0	28
Suffocation/Strangulation	8	29	2	1	40
Vehicular	15	88	2	3	108
Firearm	12	17	1	0	30
Inflicted Injury	6	8	0	1	15
Poison/Overdose	1	4	0	0	5
Fire/Burn	5	14	1	0	20
<b>TOTAL</b>	<b>52</b>	<b>181</b>	<b>8</b>	<b>5</b>	<b>246</b>
<b>Rate*</b>	<b>17.54</b>	<b>17.42</b>	<b>12.66</b>	<b>**</b>	<b>17.59</b>

\*Rates per 100,000 in the population

\*\* Rates not available



### Vehicle-Related Deaths

In 2003, 108 children died in vehicle-related incidents. This represents 44% of all injury-related deaths and 10% of all child fatalities for 2003. Children aged 15 to 17 were most likely to die as a result of a vehicle related injury N=58; 24.93 per 100,000) and infants less than one year (N=8; 10.65 per 100,000 in the population) were the second most likely to die in a vehicle related incident. Males (8.07 per 100,000 in the population) were only slightly more likely to die in a vehicle related death as females (7.35 per 100,000 in the population). Whites had a slightly

higher rate of vehicle related incidents than African-Americans (8.47 versus 5.06 respectively) (Table 22).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	8	10.65	Female	50	7.35	African-American	15	5.06
1-2	3	2.00	Male	58	8.07	White	88	8.47
3-5	8	3.53				Other	2	3.16
6-8	11	4.65				Asian	3	**
9-11	6	2.45				Missing	0	**
12-14	14	6.00						
15-17	58	24.93						
<b>Total</b>	<b>108</b>	<b>7.72</b>		<b>108</b>	<b>7.72</b>		<b>108</b>	<b>7.72</b>

\*Rates per 100,000 in the population

\*\*Rates not available

### **Vehicular**

Most vehicular deaths occurred in either a car (N=79; 68.7% or truck/rv (N=26; 22.6%) with decedent as passenger (N=52; 48.5%). The decedent was driver of the vehicle in 33 incidents (31%). Sixteen (16 or 15%) were pedestrians and six (5.6%) were other or unknown.

Safety belts were present in vehicle but not used in 49 (49%) of deaths and speed/recklessness was indicated in 21 (25.3%) of deaths (Table 23).

Safety Belt Use?	Number	Percent	Helmet?	Number	Percent	Vehicle In Which Decedent Was Occupant	Number	Percent
Present in vehicle, but not used	49	49.0	Yes	0	0	Operator driving impaired	12	14.5
None in vehicle	1	1.0	No	7	100	Speed/recklessness indicated	21	25.3
Restraint used	18	18.0				Other violation by operator	4	4.8
Unknown	12	12.0				Other	6	7.2
NA	20	20.0				Unknown	18	21.7
Not Marked	0	0				NA	22	26.5
						Not Marked	0	0
<b>Total</b>	<b>100</b>	<b>10</b>				<b>Total</b>	<b>100</b>	<b>100</b>

Note: Percentages rounded to nearest whole percent for illustration purposes

### **Firearms**

In 2003, 30 children died due to firearm injuries. This represents 12% of all injury deaths and 3% of all childhood fatalities (Table 24). Males (N=24; 3.34 per 100,000) were significantly more



likely to die due to firearm injuries than females (N=6; 0.88 per 100,000). Sixty three (N=19) percent of all firearm deaths occurred in age groups of 15-17 years old.

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	0	0.00	Female	6	0.88	African-American	12	4.72
1-2	1	0.67	Male	24	3.34	White	17	2.02
3-5	1	0.44				Other	1	0
6-8	1	0.42						
9-11	3	1.23				Asian	0	**
12-14	5	2.14						
15-17	19	8.17						
<b>Total</b>	<b>30</b>	<b>2.15</b>		<b>30</b>	<b>2.15</b>		<b>30</b>	<b>2.15</b>

\*Rates per 100,000 in the population

\*\*Rates not available

### **Suffocation or Strangulation**

In 2003, there were 40 child fatalities due to suffocation or strangulation. This represents 16% of all injuries and 3.7% of all child fatalities in 2003. Among these deaths, 62.5% (N=25) involved a child less than one year old (Table 25).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1 day	0		Female	8	1.18	African-American	8	2.70
1-6 days	0		Male	32	4.45	White	29	2.79
7-28 days	5					Other	2	3.16
29-364 days	20							
< 1 year	25	33.28				Asian	1	**
1-2 years	3	2.00						
3-5 years	1	0.44						
6-8 years	1	0.42						
9-11 years	0	0.00						
12-14 years	4	1.71						
15-17 years	6	2.58						
<b>Total</b>	<b>40</b>	<b>2.86</b>		<b>40</b>	<b>2.86</b>		<b>40</b>	<b>2.86</b>

\*Rates per 100,000 in the population

\*\*Rates not available

### **Fire/Burns**

In 2003, there were 20 child fatalities due to fire or burn injuries. This represents 8.1% of all injury fatalities and 2% of all child fatalities in 2003 (Table 26).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	3	3.99	Female	9	1.32	African-American	5	1.69
1-2	4	2.67	Male	11	1.53	White	14	1.35
3-5	4	1.76				Other	1	1.58
6-8	4	1.69				Asian	0	**
9-11	1	0.41						
12-14	2	0.86						
15-17	2	0.86						
<b>Total</b>	<b>20</b>	<b>1.43</b>		<b>20</b>	<b>1.43</b>		<b>20</b>	<b>1.43</b>

\*Rates per 100,000 in the population

\*\*Rates not available

### Drowning

In 2003, 15 children died from accidental drowning. This represents 6.1% of all injury-related deaths and 1.4% of all child fatalities in 2003. African-American children (N=6; 2.02 per 100,000 in the population) were more than twice as likely to die due to drowning than white children (8; 0.77 per 100,000 in the population) (Table 27).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	7	9.32	Female	5	0.74	African-American	6	2.02
1-2	3	2.00	Male	10	1.39	White	8	0.77
3-5	3	1.32				Other	0	0.00
6-8	0	0.00				Asian	1	**
9-11	0	0.00						
12-14	1	0.43						
15-17	1	0.43						
<b>Total</b>	<b>15</b>	<b>1.07</b>		<b>15</b>	<b>1.07</b>		<b>15</b>	<b>1.07</b>

\*Rates per 100,000 in the population

\*\*Rates not available

### Inflicted Injury

In 2003, there were 15 child fatalities due to inflicted injuries. This represents 6% of all injury-related fatalities and 1.4% of all child fatalities in 2003.

Children under one year of age were the most likely to die from inflicted injuries (N=7; 9.32 per 100,000 in the population) and males N=10; 1.39 per 100,000 in the population). African-American children (N=6; 2.02 per 100,000 in the population) were more likely to die from inflicted injuries than white children (N=8; 0.77 per 100,000 in the population) (Table 28).

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1	7	9.32	Female	5	0.74	African-American	6	2.02
1-2	3	2.00	Male	10	1.39	White	8	0.77
3-5	3	1.32				Other	0	0.00
6-8	0	0.00						
9-11	0	0.00				Asian	1	**
12-14	1	0.43						
15-17	1	0.43						
<b>Total</b>	<b>15</b>	<b>1.07</b>		<b>15</b>	<b>1.07</b>		<b>15</b>	<b>1.07</b>

\*Rates per 100,000 in the population

\*\*Rates not available

Most injuries were inflicted by the parent of the child (N=8; 53%) and most of the injured were reported as male (10 males versus 2 females). When race was reported or known (N=12) 7 were white and 5 were African American (Table 29).

Who Inflicted Injury?	Number	Percent	Gender of Person Inflicting Injury	Number	Percent	Race of Person Inflicting Injury	Number	Percent
Parent	8	53	Male	10	67	White	7	47
boyfriend	1	7	Female	2	13	African American	5	33
aunt	1	7	Not Marked	3	20	Unknown	2	13
mother's boyfriend	1	7				Not Marked	1	7
step-father	1	7						
babysitter	1	7						
Not Marked	2	13						
<b>Total</b>	<b>15</b>	<b>100</b>	<b>Total</b>	<b>15</b>	<b>100</b>	<b>Total</b>	<b>15</b>	<b>100</b>

Note: Percentages rounded to nearest whole percent for illustration purposes

## Manner and Location of Inflicted Injury

Most inflicted injury deaths occurred when a child was shaken (N=4; 26.7%) and hands/feet were used to inflict the injury (N=6; 40%). The child's residence was the location of most deaths (N=9; 60%) (Table 30).

Manner in which Injury was Inflicted	Number	Percent	Injury Inflicted With?	Number	Percent	Where did Injury Occur?	Number	Percent
Shaken	4	26.7	Sharp object	1	7	Child's residence	9	60
Struck	7	46.7	Blunt object	1	7	Relative/ friend's home	3	20
			Hands/feet	6	40	Child Care	1	7
Cut/stabbed	1	7				Other	1	7
Other	2	13	Other	2	13	Unknown	1	7
Unknown	1	7	Unknown	4	26.7			
			Not Marked	1	7			
<b>Total</b>	<b>15</b>	<b>100</b>	<b>Total</b>	<b>15</b>	<b>100</b>	<b>Total</b>	<b>15</b>	<b>100</b>

Note: Percentages rounded to nearest whole percent for illustration purposes

## Poisoning or Overdose

In 2003, there were five child fatalities due to poisoning or overdose. This represents 3% of all injury deaths and 1% of all child fatalities in 2003. Females (N=1; 0.15 per 100,000 in the population) were less likely than males (N=4; 0.56 per 100,000 in the population) to die from poisonings or overdose (Table 31).

Age	Number	Rate*	Sex	Number	Rate*	Race*	Number	Rate*
<1	0	0.00	Female	1	0.15	African-American	1	0.34
1-2	1	0.67	Male	4	0.56	White	4	0.58
3-5	0	0.00				Other	0	0
6-8	1	0.42				Asian	0	**
9-11	0	0.00						
12-14	0	0.00						
15-17	3	1.29						
<b>Total</b>	<b>5</b>	<b>0.36</b>		<b>5</b>	<b>0.36</b>		<b>5</b>	<b>0.36</b>

\*Rates per 100,000 in the population

\*\*Rates not available

### Other or Undetermined Cause of Death

In 2003, there were 31 total fatalities where the cause of death was other cause not listed (N=17) or listed as unknown cause (N=14) (Tables 32 and 33). This represents 3% of all child fatalities in 2003.

Age	Number	Rate	Sex	Number	Rate	Race*	Number	Rate
<1	5	6.66	Female	4	0.59	African-American	7	2.36
1-2	4	2.67	Male	13	1.81	White	9	0.87
3-5	2	0.88				Other	0	0.00
6-8	3	1.27				Asian	1	**
9-11	1	0.41						
12-14	2	0.86						
15-17	0	0.00						
<b>Total</b>	<b>17</b>	<b>1.22</b>		<b>17</b>	<b>1.22</b>		<b>17</b>	<b>1.22</b>

\*Rates per 100,000 in the population.

\*\*Rates not available

Age	Number	Rate*	Sex	Number	Rate*	Race	Number	Rate*
<1 year	11	14.64	Female	7	1.03	African-American	2	0.67
1-2 years	1	0.67	Male	7	0.97	White	12	1.16
3-5 years	0	0.00				Other	0	**
6-8 years	0	0.00				Asian	0	**
9-11 years	0	0.00						
12-14 years	1	0.43						
15-17 years	1	0.43						
<b>Total</b>	<b>14</b>	<b>1.00</b>		<b>14</b>	<b>1.00</b>		<b>14</b>	<b>1.00</b>

\*Rates per 100,000 in the population

\*\*Rates not available

## Place of Death

When asked to mark the place of death, the CFR team indicated most deaths occurred as hospital inpatients (N=606; 57%) with deaths in the hospital emergency room (N=153; 14.4%). One hundred fifty deaths (150 or 14.1%) occurred at the child's residence and 86 (8.1%) at the scene of incident. Three deaths occurred in an institutional setting or childcare facility (Table 34).

<b>Table 34: Fatalities and Place of Death</b>		
<b>Place of Death</b>	<b>Number</b>	<b>Percent</b>
Hospital Inpatient	606	57.0
Hospital Emergency Room	153	14.4
In Transit	16	1.5
Institutional Setting	3	.3
At Scene of Incident	86	8.1
Child's Residence	150	14.1
Relative's/Friend's Home	1	.1
Child Care	3	.3
Not Listed	3	.3
Not Marked, Blank or Other	42	4.0
<b>Total</b>	<b>1063</b>	<b>100.0</b>

# APPENDIX

## **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**

#### **68-142-101. Short title**

The chapter shall be known as and may be cited as the “Child Fatality Review and Prevention Act of 1995.”

[Acts 1995, ch.511,§ 1.]

#### **68-142-102. Child fatality prevention team**

There is hereby 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 herein. 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 mental retardation;
- (8) A member of the judiciary selected from a list submitted by the chief justice of the Tennessee Supreme Court;
- (10) The executive director of the commission of children and youth;
- (11) The president of the state professional society on the abuse of children
- (12) A team coordinator, to be appointed by the commissioner of health;



- (13) The chair of the select committee on children and youth;
- (14) Two members of the house of representatives to be appointed by the speaker of the house, at least one of whom shall be a member of the house health and human resources committee; and
- (15) Two senators to be appointed by the speaker of the senate at least one of whom shall be a member of the senate general welfare, health and human resources committee.

[Acts 1995, ch. 511, § 152.]

#### **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 chapter 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.]

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

- (a) There shall be a minimum of one 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 or such officer's designee, 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) 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.]

**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 chapter 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.]

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

- (a) The local team shall have access to and subpoena power to obtain all medical records and records maintained by any state, county or local agency, including, but not limited to, police investigations data, medical examiner investigative data and social services records, as necessary to complete the review of a specific fatality.

- (b) The local team shall not, as part of the review authorized under this chapter, 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.
  - (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 in evidence in any proceedings, and may only be disclosed as necessary to carry out the purposes of the state or local teams. 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 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.]

#### **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.

## **Sudden, Unexplained Child Death**

### **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 all sudden, unexplained deaths of infants under one (1) year of age.
- (b) 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.

- (c) 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.
- (d) 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.
- (e) 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.
- (f) The county medical examiner shall inform the parent or parents or legal guardian of the child, if an autopsy is authorized.
- (g) 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.
- (h) 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.
- (i) 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.
- (j) A copy of the completed autopsy, medical history, and death scene investigation shall be forwarded to the chief medical examiner.
- (k) 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.
- (l) 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.
- (m) 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.]

## **State Child Fatality Prevention Team Members (2005)**

### **Dr. Theodora Pinnock, Chair**

Director of Maternal and Child Health  
425 5<sup>th</sup> Avenue North  
Cordell Hull Building, 5<sup>th</sup> Floor  
Nashville, TN 37247  
615-741-0322

Serves by request of the Commissioner of the Tennessee Department of Health

### **Commissioner Kenneth S. Robinson, M.D.**

425 5<sup>th</sup> Avenue North  
Cordell Hull Building, 3<sup>rd</sup> Floor  
Nashville, TN 37247  
615-741-3111

Serves by virtue of position as the Commissioner of the Tennessee Department of Health

### **Voting Members**

#### **Shalonda Cawthon**

Executive Director, Child Safety  
436 Sixth Avenue North  
Cordell Hull Building, 8<sup>th</sup> Fl.  
Nashville, TN 37243-1290  
615-741-8278

Serves as designee for the Commissioner of the Department of Children's Services

#### **Stephanie Bailey, M.D.**

Davidson County Health Department  
311 23<sup>rd</sup> Avenue North  
Nashville, TN 37203  
615-340-5622

Serves as a physician selected from nominations submitted by the State chapter of the American Medical Association

#### **Bruce Levy, M.D.**

Center for Forensic Medicine  
850 R.S. Gass Blvd.  
Nashville TN 37216  
615-743-1800 x 0  
blevy@forensicmed.com

Serves as a physician who has credentials in forensic pathology, preferably with experience in pediatric forensic pathology

**Bonnie Beneke**

TN Professional Society on Abuse of Children  
5819 Old Harding Road, Suite 204  
Nashville, TN 37205  
615-352-4439

Serves by virtue of position as the President of the TN. Professional Society on the Abuse of Children

**Senator Charlotte Burks**

Legislative Plaza, Room 9  
Nashville, TN 37243  
615-741-3978

Appointed by: Tennessee Speaker of the Senate  
Serves by virtue of position as a member of the Tennessee Senate

**Senator Diane Black**

War Memorial Building, Room 305  
Nashville, TN 37243  
615-741-1999

Appointed by: Tennessee Speaker of the Senate  
Serves by virtue of position as a member of the Tennessee Senate and as a member of the Senate General Welfare, Health, and Human Resources Committee

**Senator Roy Herron**

10A Legislative Plaza  
Nashville, TN 37243  
(615) 741-4576

Serves by virtue of position as the Chair of the Select Committee on Children and Youth

**Representative Dennis Ferguson**

34 Legislative Plaza  
Nashville, TN 37243  
615-741-7658

Appointed by: Tennessee Speaker of the House  
Serves by virtue of position as a member of the Tennessee House of Representatives and a member of the House Health and Human Resources Committee

**Representative Joe McCord**

214 War Memorial Building  
Nashville, TN 37243  
Phone (615) 741-5481

Appointed by: Tennessee Speaker of the House  
Serves by virtue of position as a member of the Tennessee House of Representatives



**Linda O'Neal**

Tennessee Commission on Children and Youth  
9<sup>th</sup> Floor, Andrew Johnson Tower  
Nashville, TN 37243-0800  
615-741-2633

Serves by virtue of position as the Executive Director of the Tennessee Commission on Children and Youth

**Andy Bennett**

Deputy Chief Attorney General  
John Sevier Building, Suite 114  
Nashville, TN 37243  
615-741-3491

Serves by virtue of position as designee for the Attorney General and Reporter for Tennessee

**Karen Alexander**

Assistant Special Agent in Charge  
Tennessee Bureau of Investigation  
901 R.S. Gass Boulevard  
Nashville, TN 37215-2639  
615-744-4216; 24 hour: 744-4000; fax 744-4513

Serves by virtue of position as designee for the Tennessee Bureau of Investigation

**Dr. Howard Burley**

Mental Health & Developmental Disabilities  
425 5<sup>th</sup> Avenue North  
Cordell Hull Building, 5<sup>th</sup> Floor  
Nashville, TN 37243-6564  
615-532-6564

Serves as designee for the Department of Mental Health & Developmental Disabilities

**Judge Betty Adams Green**

Juvenile Court  
100 Woodland St.  
Nashville, TN 37213  
615-862-8054 elainefrey@jjs.nashville.org

Appointed by: Commissioner of Health

Serves by virtue of position as member of the judiciary selected from a list submitted by the Chief Justice of the State Supreme Court

**ExOfficio/Non-voting participants**

**Cindy Perry**

Select Committee, Children & Youth  
James K Polk Building, 3<sup>rd</sup> Fl.  
Nashville, TN 37243-0061  
615-741-6239

**Kim Rush**

Program Director for Children and Youth Services  
Middle Tennessee Mental Health Institute  
3411 Belmont Boulevard  
Nashville, TN 37215  
615-741-3290

**Scott Ridgeway**

Tennessee Suicide Prevention Network  
PO Box 40752  
Nashville, TN 37204  
615-297-1077

**TDH Central Office**

Maternal and Child Health  
425 5<sup>th</sup> Avenue North  
Cordell Hull Building, 5<sup>th</sup> Floor  
Nashville, TN 37247-4701

**Jacqueline Johnson, M.P.A.**

Director, Child Fatality Review Program  
615-741-0368

**Pinky Noble-Britton, R.N.**

Nurse Consultant  
615-741-0355

**Theresa Lindsey, Acting Commissioner  
Bureau of Health Services Administration  
(615) 532-9223**

**Dr. Ruth Hagstrom, Medical Services Director  
(615) 532-2431**

**Tom Sharp, TDOH Legislative Liaison  
(615) 741-5233**

## TENNESSEE CHILD FATALITY REVIEW TEAM LEADERS

CFRT Leader	Phone	<b>Judicial Districts (JD) and Counties</b>
<b>Dr. Lawrence Moffatt</b> Washington County Health Dept. 415 State of Franklin Johnson City, TN 37604	Phone: (423) 975-2200 Kathy Carver  Region (423) 979-4627	<b>JD 1:</b> Carter, Johnson, Unicoi, and Washington Counties
<b>Dr. Stephen May</b> Dana Osborne Sullivan Co. Health Dept. PO Box 630 (154 Blountville Bypass) Blountville, TN 37617	Phone: (423) 279-2794 Fax: (423) 279 2797	<b>JD 2:</b> Sullivan County
<b>Dr. Barbara Johnston Skelton</b> Hawkins Co. Health Dept. PO Box 209 247 Silver Lake Road Church Hill, TN 37642	Phone: Rogersville (Base): (423) 272-7641 x 129 Churchill 423-357-5341	<b>JD 3:</b> Greene, Hamblen, Hancock, and Hawkins Counties  (Sandy J. Malone, Admin.)
<b>Dr. Kelly Boggan</b> Knox County Health Dept. 140 Dameron Ave. Knoxville, TN 37917	Phone: (865) 544-4259 (865) 215-5437 Mary Campbell Linda Weber (ASA) 865-215-5272	<b>JD 6:</b> Knox County
<b>Dr. Paul Erwin</b> /Frank Bristow East TN Regional Health Office P.O. Box 59019 1522 Cherokee Trail Knoxville, TN 37950-9019	Phone: SH: (865) 549-5252 Office: (865) 549-5253 Fax: (865) 594-5738	<b>JD4</b> – Priscilla Garner: Cocke, Grainger, Jefferson and Sevier Counties <b>JD 5</b> – Dr. Ken Marmon: Blount County <b>JD 7</b> – Patti Campbell: Anderson County <b>JD 8</b> – Kerri Byrd-Hamby: Campbell, Claiborne, Fentress, Scott, and Union Counties <b>JD 9</b> – Dr. Bud Guider: Loudon, Meigs, Morgan, and Roane Counties

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**Dr. Jan BeVile**

Southeast Regional Health Office  
State Office Building  
540 McCallie Avenue  
Chattanooga, TN 37402

Phone: (423) 634-3124  
Eloise Waters  
423-476-0568 x 105

**JD 10:** Bradley, McMinn, Monroe, and Polk Counties  
**JD 12:** Bledsoe, Franklin, Grundy, Marion, Rhea, and Sequatchie Counties

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**Kaye Greer**

Chattanooga/Hamilton Co. Health Dept.  
921 East Third Street  
Chattanooga, TN 37403

Phone: (423) 209-8155

**JD 11:** Hamilton County

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**Dr. Langdon Smith**

South Central Regional Health Office  
1216 Trotwood Avenue  
Columbia, TN 38401-4809

Phone:  
(931) 380-2532 x 146  
Brandy Fox, Sec.  
Peggy Michonski  
x 123

**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

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**Sharon A. Woodard / Dr. Alison Asaro**

Mid Cumberland Reg. Health Office  
710 Hart Lane  
Nashville, TN 37247-0801

Phone: (615) 650-7015  
Fax 262-6139  
Melissa Crook  
650-4008

**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

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**Dr. Stephanie Bailey/Brook McKelvey**

Metro/Davidson Co. Health Dept.  
311 23<sup>rd</sup> Ave. North  
Nashville, TN 37203

Phone: (615) 340-0474

**JD 20:** Davidson County

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**Dr. Shavetta Conner**

Regional Health Officer  
West TN Regional Health Office  
295 Summar Street  
Jackson, TN 38301

Phone: (731) 423-6600  
Carolyn West  
Regional Health Office  
PO Box 190  
Union City, TN 38281

**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

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**Dr. Tony Emison**

Jackson/Madison Co. Health Dept.  
544 Rowland Ave.  
Jackson, TN 38301

Phone: (731) 423-3020

**JD 26:** Chester, Henderson, and Madison Counties

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**Flo Patton**

Phone: (901) 544-7380

**JD 30:** Shelby County

Shelby County Health Department  
814 Jefferson Avenue  
Memphis, TN 38105-5099

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**Dr. Bruce Levy**  
State Medical Examiner

Phone: (615) 743-1800

Lisa Robison

Phone: (615) 743-1801

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Judicial District No.: \_\_\_\_\_ Child Death Year/No.: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ - \_\_\_\_ / \_\_\_\_ / \_\_\_\_

Child's Name: \_\_\_\_\_  
Last First Middle

Date of Death: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Date of Birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Age at Death: \_\_\_\_ Sex:  Male  Female

Address: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
Street City

Race:  White  African American  Asian  Other: \_\_\_\_\_ Ethnicity: Hispanic origin?  Yes  No

Mother's Name: \_\_\_\_\_  
Last Maiden First Middle

Mother's Date of Birth: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ Mother's Marital Status (at time of Child's birth):  S  M  D  W  
Month Day Year

Census Tract: \_\_\_\_\_ County of Residence \_\_\_\_\_

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Birth Weight: \_\_\_\_ / \_\_\_\_ \_\_\_\_ / \_\_\_\_  
kg gm lb oz Clinical Estimate of Gestation (weeks): \_\_\_\_\_

Abnormal Conditions: \_\_\_\_\_ Congenital Anomalies: \_\_\_\_\_

Prenatal Care Questions:  
Specify Month Prenatal Care Began \_\_\_\_\_  No Prenatal Care  Unknown  
Number of Prenatal Visits \_\_\_\_\_  No Visits  Unknown

Risk Factors: Tobacco Use:  Yes  No No. of cigarettes per day \_\_\_\_\_  
Alcohol Use:  Yes  No No. of drinks per week \_\_\_\_\_  
Chemical Substance Abuse:  Yes  No Specify \_\_\_\_\_

To the best of the team's knowledge, is the Birth Certificate information correct/complete:  Yes  No

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Death Certificate Number \_\_\_\_\_ Is the Death Certificate adequate/complete?  Yes  No

Manner of death on Death Certificate:  Homicide  Suicide  Accidental  Natural  
 Pending Investigation  Could not be determined  Blank

Place of Death:  Hospital Inpatient  At Scene of Incident  
 Hospital Emergency Room  Child's Residence  
 In Transit  Relative's/Friend's Home  
 Institutional Setting  Child Care

Was an autopsy performed?  Yes  No  Unknown  
If Yes, location:  Medical Examiner \_\_\_\_\_  Hospital \_\_\_\_\_  Other \_\_\_\_\_

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Review team comments/recommendations and prevention issues (for local team use): _____ _____ _____ _____	Recommended for additional review? <input type="checkbox"/> Yes <input type="checkbox"/> No Which reports/records were requested for full review? <input type="checkbox"/> Law enforcement <input type="checkbox"/> Court <input type="checkbox"/> DA report <input type="checkbox"/> School <input type="checkbox"/> DHS <input type="checkbox"/> Health Dept. <input type="checkbox"/> Med. Exam autopsy <input type="checkbox"/> Hospital autopsy <input type="checkbox"/> Attending physician <input type="checkbox"/> Other: _____
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1. CAUSE AND CIRCUMSTANCES (Complete one)
- Sudden Infant Death Syndrome
  - Lack of adequate care
  - Prematurity
  - Illness or other natural cause
  - Drowning
  - Suffocation/strangulation
  - Vehicular
2. Family has prior child protective involvement?  Yes  No  Unknown
3. Other public/private agency involvement?  Yes  No  Unknown  
If yes, name of agency: \_\_\_\_\_  
Health Department:  Immunity  Home v  
 Home v  
DHS:  FF  Food St  
 Counseling/Mental Health  
 TennCare  
 Other: \_\_\_\_\_
4. Was there an apparent delay in seeking services?  Yes  No  Unknown
5. Suspected child abuse/neglect factored into the investigation?  Yes  No  Unknown
6. Overall was the investigation adequate?  Yes  No  Unknown  
If no, was the problem with:  
 Autopsy  \_\_\_\_\_  
 Hospital review  \_\_\_\_\_  
 Interagency Cooperation  \_\_\_\_\_  
 Other \_\_\_\_\_
7. Manner of death as determined by the investigation:  Homicide  Accidental  Natural  
 Could not be determined  
 Undetermined due to suspicion

Additional information for State office use:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CAUSE AND CIRCUMSTANCES OF THE DEATH**  
**Complete one of blocks 1-12 as applicable to indicate cause of death.**

**1. Sudden Infant Death Syndrome (SIDS)**  
 A. Position of infant on discovery?  
 1.  On stomach, face down  
 2.  On stomach, face to side  
 3.  On back 4.  On side 5.  Unknown  
 B. Sleeping with another person?  
 Yes  No  Unknown  
 C. Smoker in household?  
 Yes  No  Unknown

**2. Lack of Adequate Care**  
 A. Apparent lack of supervision?  Yes  No  
 B. Apparent lack of medical care?  Yes  No  
 C. If yes: 1.  Malnutrition or dehydration  
 2.  Oral water intoxication  
 3.  Delayed medical care  
 4.  Inadequate medical attention  
 5.  Out-of-hospital birth  
 6.  Other: \_\_\_\_\_  
 7.  Unknown

**3. Prematurity** (less than 37 weeks gestation)  
 A.  Known Condition \_\_\_\_\_

**4. Illness or Other Natural Cause**  
 A.  Known condition \_\_\_\_\_  
 B.  Unknown

**5. Drowning**  
 A. Place of drowning?  
 1.  Creek, river, pond or lake  
 Location prior to drowning?  
 a.  Boat b.  Waters edge  
 c.  Other \_\_\_\_\_ d.  Unknown  
 2.  Well, cistern, or septic tank  
 3.  Bathtub 4.  Swimming pool  
 5.  Bucket 6.  Wading pool  
 7.  Other: \_\_\_\_\_ 8.  Unknown  
 B. Wearing flotation device?  
 1.  Yes 2.  No 3.  Unknown 4.  NA  
 C.  Circumstances Unknown

**6. Suffocation/Strangulation**  
 A. Circumstances of the event?  
 1.  Other person overlying or rolling over decedent?  
 2.  Caused by other person, not overlying or rolling over  
 3.  Self-inflicted by decedent  
 4.  Not inflicted by any person  
 5.  Other: \_\_\_\_\_ 6.  Unknown  
 B. Object impeding breath?  
 1.  Food 2.  Other person's hand(s)  
 3.  Small object or toy in mouth  
 4.  Object (e.g., plastic bag) covering victim's mouth/nose  
 5.  Object (e.g., rope) exerting pressure on victim's neck  
 6.  Other: \_\_\_\_\_ 7.  Unknown  
 C. Injury occurred in bed, crib, or other sleeping arrangement?  
 1.  Yes 2.  No 3.  Unknown  
 D. If in bed/crib, due to:  
 1.  Hazardous design of crib/bed  
 2.  Malfunction/improper use of crib/bed  
 3.  Placement on soft sleeping surface (e.g. waterbed)  
 4.  Other: \_\_\_\_\_  
 5.  Unknown 6.  NA  
 E. Due to carbon monoxide inhalation?  
 1.  Yes 2.  No 3.  Unknown  
 F.  Circumstances unknown

**7. Vehicular**  
 A. # and type of vehicles involved:  
 1. Cars \_\_\_\_\_ 2. All-terrain vehicles \_\_\_\_\_  
 3. Motorcycles \_\_\_\_\_ 4. Riding mowers \_\_\_\_\_  
 5. Bicycles \_\_\_\_\_ 6. Farm tractors \_\_\_\_\_  
 7. Other farm vehicles \_\_\_\_\_ 8. Truck/RV \_\_\_\_\_  
 9. Other \_\_\_\_\_ 10. Unknown \_\_\_\_\_  
 B. Position of decedent?  
 1.  Driver 2.  Pedestrian  
 3.  Passenger 4.  Back of truck  
 5.  Other: \_\_\_\_\_ 6.  Unknown  
 C. Type vehicle in which decedent was occupant?  
 1.  Car 2.  All-terrain vehicle  
 3.  Motorcycle 4.  Riding mower  
 5.  Bicycle 6.  Farm tractor  
 7.  Other farm vehicle 8.  Truck/RV  
 9.  Other: \_\_\_\_\_ 10.  Unknown  
 D. Deceased's safety belt use?  
 1.  Present in vehicle, but not used  
 2.  None in vehicle 3.  Restraint used  
 4.  Unknown 5.  NA  
 E. Deceased's infant/toddler seat use?  
 1.  Present in vehicle, but not used  
 2.  None in vehicle  
 3.  Seat used correctly  
 4.  Seat used incorrectly  
 5.  NA  
 F. Deceased was wearing a helmet?  
 1.  Yes 2.  No  
 3.  Unknown 4.  NA  
 G. Vehicle in which decedent was occupant?  
 1. Age of driver \_\_\_\_\_  Unknown  
 2.  Operator driving impaired (alcohol/drug)  
 3.  Speed/recklessness indicated  
 4.  Other violation by operator  
 5.  Mechanical failure  
 6.  Other \_\_\_\_\_  
 7.  Unknown 8.  NA  
 H. Vehicle in which decedent was not occupant?  
 1. Age of driver \_\_\_\_\_  Unknown  
 2.  Operator driving impaired (alcohol/drug)  
 3.  Speed/recklessness indicated  
 4.  Other violation by operator  
 5.  Mechanical failure  
 6.  Other \_\_\_\_\_  
 7.  Unknown 8.  NA  
 I. Condition of road?  
 1.  Normal 2.  Loose gravel  
 3.  Wet 4.  Ice or snow  
 5.  Other: \_\_\_\_\_ 6.  Unknown  
 7.  NA  
 J.  Circumstances unknown

**8. Firearm**  
 A. Person handling the firearm?  
 1.  Decedent 2.  Parent  
 3.  Other: \_\_\_\_\_ 4.  Unknown  
 B. Type firearm involved?  
 1.  Handgun 2.  Rifle 3.  Shotgun  
 4.  Other: \_\_\_\_\_ 5.  Unknown  
 C. Age of person handling firearm:  
 1. years \_\_\_\_\_ 2.  Unknown  
 D. Use of firearm at time of injury?  
 1.  Shooting at other person 2.  Suicide  
 3.  Hunting 4.  Playing  
 5.  Other: \_\_\_\_\_ 6.  Unknown  
 E. Was decedent's home source of firearm?  
 1.  Yes 2.  No 3.  Unknown  
 F.  Circumstances unknown

**9. Inflicted Injury** (NOT firearm or suffocation/strangulation)  
 A. Who inflicted the injury?  
 1.  Self-inflicted 2.  Parent  
 3.  Relative: \_\_\_\_\_ 4.  Other: \_\_\_\_\_  
 B. Person inflicting injury?  
 1. Age \_\_\_\_\_  Unknown  
 2. Gender:  Male  Female  
 3. Race:  White  African American  
 Other: \_\_\_\_\_  Unknown  
 C. Manner in which injury was inflicted?  
 1.  Shaken 2.  Struck 3.  Thrown  
 4.  Cut/stabbed 5.  Sexual Assault  
 6.  Other: \_\_\_\_\_ 7.  Unknown  
 D. Injury inflicted with?  
 1.  Sharp object (e.g., knife, scissors)  
 2.  Blunt object (e.g., hammer, bat)  
 3.  Hot liquid or other substance  
 4.  Hands/feet 5.  Fire  
 6.  Other: \_\_\_\_\_ 7.  Unknown  
 E. Where did injury occur?  
 1.  Child's residence 2.  School  
 3.  Relative/friend's home  
 4.  Child care  
 5.  Other: \_\_\_\_\_ 6.  Unknown  
 F.  Circumstances unknown

**10. Poisoning/overdose**  
 A. Name of drug or chemical?  
 1.  Name \_\_\_\_\_  
 2.  Unknown  
 B.  Circumstances unknown

**11. Fire/burn**  
 A. If not a fire burn, its source?  
 1.  Hot water, etc. 2.  Appliance  
 3.  Other: \_\_\_\_\_  
 4.  Unknown 5.  NA  
 B. If ignition/fire, what was source?  
 1.  Oven/stove explosion  
 2.  Cooking appliance used as heat source  
 3.  Matches 4.  Lit cigarette  
 5.  Lighter 6.  Space heater  
 7.  Furnace 8.  Explosives  
 9.  Fireworks 10.  Electrical wiring  
 11.  Other: \_\_\_\_\_  
 12.  Unknown 13.  NA  
 C. Smoke alarm present at fire scene?  
 1.  Yes 2.  No 3.  Unknown  
 D. If alarm present, did it sound?  
 1.  Yes 2.  No 3.  Unknown  
 E. Was the fire started by a person?  
 1.  Yes 2.  No 3.  Unknown  
 F. If started by a person, his/her age: \_\_\_\_\_ years  
 1.  Unknown 2.  NA  
 G. If started by a person, his/her activity  
 1.  Playing 2.  Smoking  
 3.  Cooking 4.  Suspected arson  
 5.  Other: \_\_\_\_\_  
 6.  Unknown 7.  NA  
 H. Type of construction of building burned:  
 1.  Wood frame 2.  Brick/stone  
 3.  Trailer 4.  Other: \_\_\_\_\_  
 5.  Unknown 6.  NA  
 I. Smoke inhalation death: 1.  Yes 2.  No  
 J.  Circumstances unknown

**12. Other Cause Not Listed Above:**  
 \_\_\_\_\_

**2003** \_\_\_\_\_