GEORGIA CHILD FATALITY REVIEW PANEL

Summary Report
Calendar Years 1999-2004

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Mission

To serve Georgia's children by promoting more accurate identification and reporting of child fatalities, evaluating the prevalence and circumstances of both child abuse cases and child fatality investigations, and monitoring the implementation and impact of the statewide child abuse prevention plan in order to prevent and reduce incidents of child abuse and fatalities in the State

Acknowledgements

The Georgia Child Fatality Review Panel wishes to acknowledge those whose enormous commitment, dedication and unwavering support to child fatality review have made this report possible. These include:

- All the members who serve on each of the county child fatality review committees
- Emily Kahn, Ph.D., MPH, Nicole Alexander, MPH, Jimmy Clanton, Graphics, Maternal and Child Health Epidemiology Section, Epidemiology Branch and; Lisa Dawson, MPH and Injury Prevention Section, Environmental Health and Injury Prevention Branch, Georgia Division of Public Health
- John T. Carter, Ph.D. Epidemiology Department of Emory University, Rollins School of Public Health
- Georgina Howard, Director of the Office of Vital Statistics
- All the other public/private agencies that have so willingly collaborated with this office and provided support

GEORGIA CHILD FATALITY REVIEW PANEL

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The Georgia Child Fatality Review Panel is an appointed body of 17 representatives that oversees the county child fatality review process, reports to the governor annually on the incidence of child deaths, and recommends prevention measures based on the data. Two year appointments are made by the governor except as otherwise noted.

[1]Appointed by the Lieutenant Governor
[2]Appointed by the speaker of the House of Representatives
[3]Ex-Officio

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Preface

How well are we protecting Our Children?

Child protection has long been an issue that has generated discussion among those in child-focused organizations, legislators, and city, county, and state governments. However, it is often only the most egregious, heinous circumstances that garner media attention and support of resources. While these should not be ignored, these events are considerably less frequent than the more common, foreseeable, and preventable injuries which often occur in the home everyday, and often lead to death. Child protection must encompass a broader range of thinking if we are truly committed to protecting children. We must take the necessary steps to eliminate practices contributing to child deaths, and employ measures proven to reduce injury and death. Listed below are some of those measures.

Motor Vehicles

- Currently, Georgia law exempts pickup trucks from the mandated child restraint requirements. In 2005, the federal government offered grants to states with a comprehensive child restraint law. After several attempts to legislate this simple safety measure, the bill to remove the exemption for pickup trucks was not passed (HB 18). Georgia's children remain at risk of being killed in a pickup truck crash while unrestrained.
- Current Georgia ATV regulations do not require the completion of a driver safety course, use of helmets for child operators, the restriction of children as passengers, or the speeds at which children can drive. Although requiring these driver safety measures for ATVs is recommended by the ATV manufacturers and CDC, Georgia legislators did not approve this measure in 2006 (HB 1004), which continues to place children at high risk of being fatally injured in a crash.

Swimming Pools

- Georgia does not have any statewide regulations to ensure the safety of private or semi-private swimming pools, although pool fencing is the safest, most convenient layer of protection against the dangers that swimming pools can pose to toddlers. Adequate pool fencing prevents a child from having access to a swimming pool if a responsible adult is not present and has been promoted as a method to prevent drowning.

Firearms

- Though seventeen states currently have Child Access Prevention legislation (CAP) to regulate child access and usage of firearms (including Florida and Virginia), Georgia does not have a CAP law, negligent owner law, or a minimum age for possession of rifles or shotguns. The Georgia legislature has failed twice to pass a CAP law (SB 72 in 1995, and SB 190 in 1997), which leaves children poorly protected from careless gun owners. Florida's CAP law has been shown to reduce youth gun deaths by 51% from 1989 to 2000, probably due in large part to its stiff penalties and statewide marketing (Pediatrics, 2000).

Smoke Alarms

- Although smoke detectors are proven to protect children and families in the event of a residential fire, Georgia does not require landlords to install or maintain smoke alarms in all sleeping areas. A significant number of fires occur in rental properties; therefore, mandating installation and maintenance of working smoke alarms in rental homes would certainly save a number of young lives lost.

In addition to the need for improvement in the aforementioned areas, there are other measures that should be addressed. Child protection encompasses not only the child's physical home environment and the neighborhoods where they live and play, but also the child's family who cares for them each day and night.

Child Abuse and Neglect

An unwanted child is not well-protected, but Georgia law builds barriers against unwilling parents who may want to protect their unwanted child.

- The Safe Place for Newborns Act of 2002 grants amnesty from child abuse or abandonment prosecution to mothers who relinquish custody of their unwanted newborns. This is a good starting point to protect newborn infants from injury or harm, but does not address the primary issues that lead to abandonment of unwanted children. This poorly-publicized law does not permit mothers to relinquish children at fire stations or police stations, which are often more accessible than birthing centers and hospitals, nor can she remain anonymous. These provisions therefore discourage drop-offs and have resulted in only two officially recorded infant drop-offs in the four years since the legislation passed.

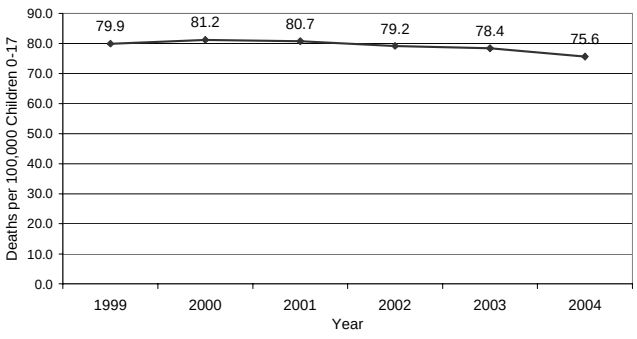
Child protection and safety should not be delegated to any one agency, but should include all organizations responsible for the well-being of children. Unfortunately, agencies responsible for children often have competing visions and expectations. We must structure linkages between agencies if we are to succeed in protecting children. There must also be a community response and responsibility for children. Successful prevention efforts require planning, forethought, and commitment, resulting in the institutionalization of safeguards that seek to prevent injury of any kind. There are many well-researched, proven protection strategies that we have failed to implement, and further avoidance will only lead to more deaths of children. If we are committed to helping our children grow up to be healthy, educated and employable, we must work together to make their childhood environment a safe place to grow up.

Executive Summary

The Georgia Child Fatality Review Panel (Panel) publishes an annual report chronicling the tragic, preventable deaths of children in Georgia. Child deaths are identified through death certification data provided by the Vital Statistics Unit of Public Health. Local child fatality review committees review only those deaths that are sudden, unexpected, or unexplained ("eligible"), and complete a standardized form detailing the circumstances of the deaths. That information is compiled and used in the Panel's report. The Panel is charged with tracking the numbers and causes of child deaths as well as identifying and recommending prevention strategies that could reduce the number of child deaths.

This year, the Panel is providing a summary report detailing the circumstances of child deaths from 1999 – 2004. The good news is that we have seen a decline in the rate of child deaths from 1999 (79.9/100,000) to 2004 (75.6/100,000) and a decline in the number of deaths eligible for review (based on adjusted death certificate data) from 34.8% in 1999 to 33.7% in 2004. Considering aggregated child death data over a period of time is useful in revealing recurring patterns and indicating prevention gaps and opportunities. We encourage parents, communities, organizations, and policymakers to use these data to make life-saving decisions for children.

Rate of Death to Children 0-17 years old, Adjusted Death Certificate Data, Georgia 1999-2004



Key Findings

From 1999 – 2004, 10,620 children died in Georgia. Based on adjusted death certificate data, 3,577 deaths were eligible for review. Child fatality review committees reviewed 2,943 (82%) of those deaths; however, the cause of death listed on death certificates and the cause of death determined by child fatality review committees sometimes differed due to cause of death coding standards for the death certificate data. The percent of reviewed deaths greatly improved over the time period from 75.9% in 1999 to 98.6% in 2004. Vital Records has begun to use child fatality review data, which is believed to be more reliable, to adjust death certificate data in the state.

FATAL CHILD ABUSE/NEGLECT

Department of Family and Children Services reported that 355 children in Georgia died as a result of substantiated abuse or neglect. Those deaths were investigated by DFCS, and did not include deaths handled by law enforcement and the courts without DFCS involvement. One hundred eighty-seven (53%) of the 355 child abuse/neglect related deaths were children who were previously known to DFCS.

Child fatality review committees determined that 709 child deaths resulted from both confirmed and suspected abuse/neglect (390 confirmed and 319 suspected). Perpetrators were identified in 437 of the 709 abuse/neglect related deaths, as well as relationship of the perpetrator to the child. More than 1 perpetrator was identified in 40 child abuse/neglect deaths. Sixty percent (60%) of those perpetrators were natural parents. Homicide was the cause of 195 confirmed abuse deaths, and children under the age of 5 accounted for 78% (153) of those homicides.

NATURAL

Adjusted death certificate data indicated a total of 7,837 children under the age of 18 died of natural causes. Infants accounted for the vast majority (6,402) of those deaths. There were 787 SIDS deaths – a 22% increase over the time period from 1999 – 2004. The leading causes of infant deaths continued to be congenital anomalies, low birth weight, and prematurity.

Child fatality review committees reviewed 1,210 deaths from natural causes. Six hundred ninety-two (692) of those deaths were SIDS and SUID. (SUID – Sudden Unexplained Infant Death - is a term used for a death that appears to be SIDS, but has other factors that *could* have contributed to the death.) Committees are required to review all SIDS deaths, and medical deaths that are unexpected or unattended by a physician.

INJURIES

Adjusted death certificate data listed 2,783 deaths to have resulted from known injuries, but 34 of those deaths listed an unknown intent. An additional 120 deaths listed an unknown cause.

Unintentional Injuries

Adjusted death certificate data indicated that 62% (2,363) of deaths in children ages 1 – 17 resulted from injuries (infant deaths [6,822] were mostly due to natural causes [6,402]). Seventy-seven percent (77%) of all injuries in the 1 – 17 year age group resulting in death were unintentional (excludes unknown intent and unknown cause). The 3 leading single causes of unintentional injury related deaths in all age groups were:

- 1,181 motor vehicle incidents
- 264 drowning incidents
- 196 suffocation incidents

There was a 9% decline in the number of all deaths caused by unintentional injuries from 366 in 1999 to 333 in 2004. The most marked increase in unintentional deaths over this time period was fire-related deaths, from 13 in 1999 to 38 in 2004.

Child fatality review committees reviewed 1,617 deaths attributed to unintentional injuries. Child fatality review data agreed with adjusted death certificate data on the 3 leading causes of death related to unintentional injury as seen below:

- 961 motor vehicle incidents
- 205 drowning incidents
- 166 suffocation incidents

Intentional Injuries

Adjusted death certificate data indicated 601 children died from injuries intentionally inflicted by themselves or by others. From 1999 to 2004, there were 429 homicides (a 9% decline over this time period), and 172 suicides (a 7% decline over this time period).

Child fatality review committees reviewed 533 deaths from intentional causes – 378 homicides and 155 suicides.

FIREARM DEATHS

Adjusted death certificate data indicated firearms were used in 280 child deaths. One hundred fifty-nine (159) of those deaths were ruled homicides, 83 were suicides, 33 were unintentional, 4 were unknown intent and 1 death was classified as unknown cause.

Child fatality review committees reviewed 268 firearm related deaths. Eighty-seven percent (87%) were intentional (159 homicides and 73 suicides). The type of firearm was identified in 254 of the 268 reviewed firearm related deaths. Handguns were most frequently used (188 of the 254 deaths where type of firearm was identified).

PREVENTABILITY

A primary function of the child fatality review process is to identify those deaths believed to be preventable. The issue of preventability was addressed in 3,413 (99%) of the 3,461 child deaths reviewed. Child fatality review committees determined that 77% (2,463) of the 3,413 reviewed child deaths with preventability data were definitely or possibly preventable. Ninety-six percent (676) of the 706 reviewed child abuse/neglect related deaths with preventability data were determined to be definitely or possibly preventable.

AGENCY INVOLVEMENT

Child fatality review committees reported that in 479 (68%) of the 709 child abuse/neglect related deaths, the child and/or family had prior involvement with at least one state or local agency. Committees identified 72 deaths for which they concluded an agency intervention could have prevented the death. Forty-three of those 72 deaths (60%) had an abuse/neglect findings.

Accomplishments and Recommendations

Accomplishments

1. Realized a 30% increase in county committees compliance in reviewing eligible child deaths over the 6 year period (from 76% in 1999 to 99% in 2004)
2. Formed a number of partnerships to provide training to committees and assistance with local prevention efforts. Partnerships included the Georgia SIDS Project, Georgia Traffic Injury Prevention Institute, Public Health, and GBI
3. Distributed over one thousand gun locks to county committees for local distribution
4. In 2004, initiated annual recognition of county efforts through the "Coroner of the Year", and "County Committee of the Year" awards
5. Established and supported child fatality investigation teams with a multi-disciplinary approach in a total of 20 judicial circuits.
6. Implemented an on-line reporting system for completion of child fatality and coroner reports by local committees
7. Published and distributed a "Child Fatality Review Policy and Procedures" manual
8. Published and distributed a "Statewide Model Child Abuse Protocol" manual in collaboration with the Office of Child Advocate, DFCS, and GBI
9. Co-sponsored an annual conference with DFCS, Office of Child Advocate, and GBI on serious injury and child fatality

On-going Legislative Recommendations

1. Provide sufficient funding to the Georgia Child Fatality Review Panel to fulfill statutory requirements
2. Fund expansion of home-based family support models that promote and enable appropriate parenting skills for prevention of child abuse and neglect
3. Require fences and gates in public and private swimming pools statewide
4. Require an autopsy, including toxicology studies, for every death of a child under the age of seven with the exception of children who are known to have died of a disease process while attended by a physician. Further, require complete skeletal x-ray (following established pediatric and radiological protocol), of the bodies of children who died before their second birthday
5. Expand funding for mental health services for children, especially those identified as "at risk"

On-going Agency Recommendations

1. **DFCS:** The Panel recommends that when a child dies due to parent(s) or caretaker(s) neglect or aggression, efforts be made to visit the surviving children in the home on an on-going basis for a minimum of 3 months to assess their safety and well-being, and enable referrals to appropriate services
2. **Public Health:** Implement a statewide campaign that promotes safe infant sleep environments, and explicitly describes dangers posed to infants in bed-sharing and other unsafe sleep environments
3. **Coroner's and Medical Examiner's Offices:** Conduct a death scene investigation for any child death that is suspicious, unexpected, and/or unexplained

On-going Goal

1. Collaborate with relevant organizations to develop a statewide child abuse/child injury prevention plan

Georgia Child Fatality Investigation Program

The Child Fatality Investigation Program was created to develop and support these multi-disciplinary child death investigation teams in communities around the state. The program is administered through the Child Fatality Review Panel, through collaboration with the Georgia Bureau of Investigation and the Department of Family and Children Services. Unlike the approach to adult homicides, in which each discipline becomes involved separately in time and allocation of effort, this team approach maximizes the information-gathering and decision-making capabilities of authorities. Child death investigation teams recognize the value of employing the specific expertise and resources each involved agency brings to the investigation. These teams utilize highly trained representatives from their own district attorney's offices, local law enforcement agencies, coroners and/or medical examiners, and the Department of Family and Children Services. These teams immediately respond and share information from the point of the child's death, thereby encouraging better investigations with more obtainable evidence. Regional specialists from the Georgia Bureau of Investigation are available to assist teams as well. This is an investigative trend that Georgia has begun to embrace statewide.

Numerous jurisdictions around Georgia have agreed to participate in the Child Fatality Investigation Program and have received assistance and training upon request and without any cost. The program is available for consultation and review of both new and old cases and many jurisdictions have availed themselves of the opportunity to put a "fresh eye" on cases by referring them to the program. Model protocols are available as well as initial and follow-up trainings and case consultations. Resource notebooks designed for teams to utilize at death scenes are offered to participating teams as well. Several members of the program have requested and received assistance interviewing and preparing expert medical witnesses for trial. A continued goal of the program is to assist the legal and investigative communities in understanding the evolving medical testimony in shaking and shaken/impact cases, now more often referred to as acceleration/deceleration deaths. Recent attacks on the accepted science in this area have resulted in some confusion amongst practitioners in law enforcement and prosecution; however, this is simply a training issue which the program can readily address.

The original jurisdictions involved in the pilot program include: Lookout Mountain Judicial Circuit, Middle Judicial Circuit, Douglas Judicial Circuit, Dougherty Judicial Circuit, Stone Mountain Judicial Circuit, Eastern Judicial Circuit, Rome Judicial Circuit, Northeastern Judicial Circuit, Alcovy Judicial Circuit, Southern Judicial Circuit, and Tifton Judicial Circuit. The following jurisdictions enrolled in the program in 2004: Blue Ridge Judicial Circuit, Bell-Forsyth Judicial Circuit, Clarke Judicial Circuit, Rockdale Judicial Circuit, and Gwinnett Judicial Circuit. In 2005, the Flint, Cobb, Clayton and Macon Circuits joined the program and the Douglas Circuit re-established their team. In 2006, the focus of the program was to work with new and existing teams to enhance their teamwork and investigative skills. The Brunswick Judicial Circuit also joined the program in 2006.

The goal of the Program is to ensure that proper scene investigation is performed in all appropriate cases, and that involved agencies work in concert with one another from the inception of the investigation pursuant to their protocols, sharing valuable information and facilitating better decision-making. In 2004, 569 cases of child death were considered eligible for review by CFR teams. Forty-two of those deaths were deemed to be homicides. Therefore, given that nearly one child a week is a victim of homicide in Georgia, the need for the best quality in investigations is apparent.

Utilizing 2004 CFR data from two jurisdictions - one employing a team approach and one employing the traditional approach - participation in scene investigation was reviewed. An interview with the jurisdiction utilizing a team approach was also performed. CFR data revealed that in the team-based jurisdiction where only drowning, possible SIDS/SUID and potential asphyxia cases were reported, the team activated and reported to the scene in 100% of drowning cases, 100% of potential SID/SUID cases, and 75% of potential asphyxia cases (50% of those cases resulted in criminal charges). In those 25% of cases where the entire team did not report to the scene, the team followed protocol by communicating with one another. In the jurisdiction employing the traditional approach, as expected, only law enforcement reported to every scene. By including the district attorney in their early investigations, the team-based jurisdictions can benefit from expert legal advice as well as practical information on securing a conviction beyond making an arrest. By including a DFCS investigator, teams can benefit from the family histories already available with the agency from prior contact in many cases. The jurisdiction employing a team approach reports that communication does cut down on conflicting action by the involved agencies and results in better decision making by all parties.

Information Sources and Inconsistencies

This summary report on Georgia's 1999 - 2004 infant and child fatalities uses two related but independent sources of data – death certificate (DC) data collected by the Vital Statistics Unit and prepared by the Office of Health Information and Policy (OHIP), and the child fatality review (CFR) data collected by the Office of Child Fatality Review. These two data sources do not always agree on the cause or manner of death; however, the cause and manner of death are consistent between the two sources for a majority of deaths. The CFR process brings together people and information that may not be available when the DC is completed. Access to additional information by CFR committees sometimes results in a different conclusion regarding the cause and/or manner of death.

There are two major differences between the prior **annual** CFR reports (1999 through 2004) and this **summary** report. The cause of death for the death certificate has been "corrected" to agree with the conclusion of the county CFR team if there were differences between the two sources. One example is a car crash that lands in a lake resulting in a drowning death. The DC may report this as a drowning death while the CFR team concludes it was a motor vehicle-related death. Both are reasonable conclusions; however, for consistency, we have used the CFR cause throughout this report. Corrected DC data in this summary report is labeled "Adjusted Death Certificate" data.

The prior annual CFR reports have generally included data from all child fatality reviews submitted by the county review teams. Every year there are a few reviewed deaths for which we cannot identify a Georgia death certificate. There were a total of 84 unlinked reviews over the six-year period. These may be out-of-state deaths of GA residents that are not reported back to Georgia Vital Records. These 84 reviews are not included in the results presented in this report.

Child Deaths in Georgia

The rate of child deaths in Georgia has shown a slight decline from 1999 through 2004 – the six year period covered in this report. A total of 10,620 children died during this time period due to medical causes, intentional and unintentional injuries. The vast majority of those deaths were due to medical causes (7,043). However, the main focus of this report will be on injury-related child deaths and SIDS/SUID which accounted for the remaining 3,577 deaths. Aside from medical deaths, motor vehicle-related incidents continued to be the leading cause of death in children less than 18 years of age, while Sudden Infant Death Syndrome (SIDS) was the leading cause of death in infants.

Existing research indicates that injury-related deaths are predictable, therefore preventable. If we hold to this premise, 2663 children died unnecessary deaths.

County committees have gradually embraced the assertion that injury-related deaths are preventable as evidenced in their findings (see "Preventability"). Each year during this time period, committees have determined a higher percentage of deaths to be definitely or possibly preventable.

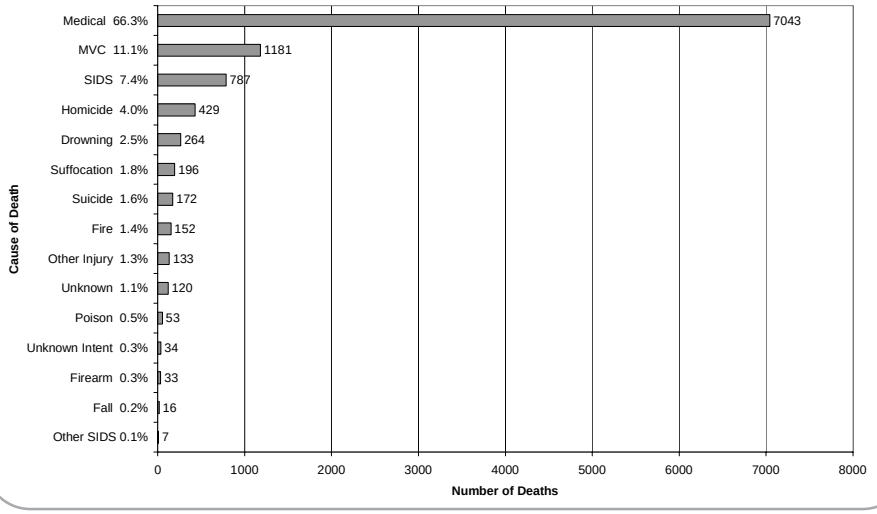
The following sections illustrate cause and topic-specific data. Cause of death is further subdivided by factors such as gender, age and race to show greater detail and highlight areas for possible prevention. Each section also addresses findings, and recommendations resulting from adjusted death certificate data and CFR reports as indicated.

Medical deaths in this report do not include those attributed to SIDS.

Findings:

- Two-thirds (66%) of all child deaths are due to medical causes. Examples include deaths due to diseases such as leukemia, complications of prematurity and low birthweight, and deaths due to birth defects. Medical deaths in this report do not include those attributed to SIDS.
- The second leading cause of death overall was motor vehicle crashes.
- SIDS, the third leading cause of death, accounted for 787 deaths, or 7.4% of all child deaths

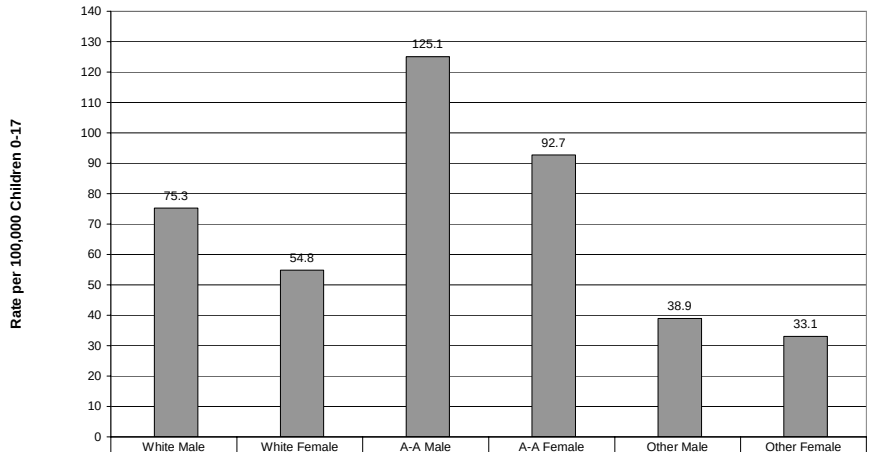
Figure 1: Deaths to Children Under Age 18 in Georgia All Causes Based on Adjusted Death Certificate, 1999-2004 (N=10,620)



Findings:

- Child deaths disproportionately occur among African-Americans. The rate for African-Americans is 1.7 times higher than for Whites among both males and females
- Males are more likely to die than are females. Within each racial category, the rate for males is higher than that for females

Figure 2: All Child Death Rates per 100,000 Children Age 0-17 by Race/Gender Categories, 1999-2004 (N=10620)



	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female
# of Deaths	3176	2176	2930	2118	122	98
Rate	75.3	54.8	125.1	92.7	38.9	33.1

Infants

Top 5 Causes of Death by Race and Age Group, 1999-2004 (N=10,620)

	Age Group in Years					
Rank	<1 6822 (64.2%)	1-4 1066 (10.0%)	5-9 612 (5.8%)	10-14 840 (7.9%)	15-17 1280 (12.1%)	Total 10620 (100%)
1	Medical 5608 (82.0%)	Medical 504 (47.2%)	Medical 279 (45.6%)	Medical 361 (43.0%)	MVC 568 (44.4%)	Medical 7043 (66.3%)
2	SIDS 787 (11.5%)	MVC 161 (15.1%)	MVC 168 (24.5%)	MVC 229 (27.3%)	Medical 291 (22.7%)	MVC 1181 (11.1%)
3	Suffocation 131 (1.9%)	Homicide 114 (10.7%)	Drowning 42 (6.9%)	Homicide 56 (6.7%)	Homicide 142 (11.1%)	SIDS 787 (7.4%)
4	Unknown 82 (1.2%)	Drowning 106 (9.9%)	Homicide 37 (6.0%)	Drowning/Suicide 47 (5.6%)	Suicide 124 (9.7%)	Homicide 429 (4%)
5	Homicide 80 (1.1%)	Fire 70 (6.6%)	Fire 32 (5.2%)		Drowning 57 (4.5%)	Drowning 264 (2.5%)

- Infants (children less than one year old) accounted for 64% of all child deaths
- Eighty-two percent of infant deaths were due to medical causes, primarily complications of prematurity and low birthweight and birth defects
- The second leading cause, accounting for another 12% of infant deaths, was SIDS
- The third leading cause of death among infants, accounting for 2% of infant deaths was suffocation.
- Ten percent of all child deaths occurred to children between the ages of one and four years
- The largest group of deaths was due to medical causes, including: birth defects, respiratory diseases, cardiovascular diseases and cancer
- The leading cause of non-medical deaths in this age group, and every age group beyond infancy is motor vehicle crashes. These deaths are largely preventable
- The third most common cause of death, and the second leading cause of non-medical deaths, was homicide. These deaths are preventable
- Drowning and fire were the next two most common causes of death, respectively. These causes remain on the list, throughout childhood. These deaths are also preventable

Ages 5-9 (Middle Childhood)

- The fewest child deaths (6%) occur in this age group
- Motor vehicle crashes are the most common cause of non-medical deaths
- Drownings are the third leading cause of death.
- Homicide and fire were the fourth and fifth most common causes of death in this age group

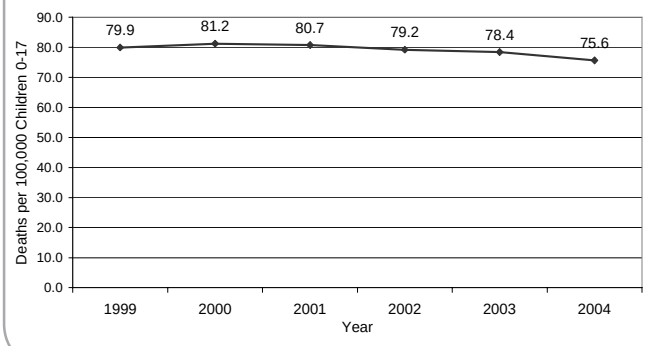
Ages 10-14 (Early Adolescence)

- Eight percent of child deaths occur among children between the ages of ten and fourteen
- Motor vehicle crashes were the second leading cause of death; however in this age group, they account for a larger percentage of non-medical deaths than in younger ages. Twenty-seven percent of child deaths in this age group were caused by motor vehicle crashes, compared with 25% for 5-9 year olds and 15% for 1-4 year olds.
- Homicide is the third leading cause of death in this age group, accounting for 56 deaths, or 7% of the total
- Suicide emerges as one of the five leading causes of death in this age group, accounting for 6% of deaths in this age group. The same number of deaths in this age group was due to fire

Ages 15-17 (Later Adolescence)

- Twelve percent of child deaths occur among teens between the ages of 15 and 17
- In this age group, motor vehicle crashes surpass medical causes of death to become the leading cause of death overall. Motor vehicle crashes account for 44% of deaths to teens between the ages of 15 and 17.
- Homicide is the second leading cause of non-medical deaths, accounting for 11% of deaths.
- Suicide is the third cause of non-medical deaths, accounting for another 10% of deaths.
- Drowning is the fourth leading cause of non-medical deaths. Between 1999 and 2004, there were 264 drowning deaths in this age group, accounting for 3% of deaths among 15-17 year olds

Rate of Death to Children 0-17 years old, Adjusted Death Certificate Data, Georgia 1999-2004



All 1999 - 2004 Reviewed Deaths

In this 6-year retrospective review period, child fatality review committees reported on 3,461 infants and children who died from suspicious, unexpected or unexplained circumstances. A child's death is eligible for review when it occurs outside of a hospital or hospice, as a result of injury or without expectation. Child medical deaths are recommended for review only if unattended by a physician (unexpected heart failure, complications from diabetes, or similar circumstances). Of all child deaths reported by death certificate data eligibility requirements as either an injury or infant sleep-related death (3,577), CFR committees reviewed 82.2% (2,943). An additional 518 medical deaths were also reviewed by committees, leading to a total number of 3,461 reviewed child deaths. Complete data on reviewed child deaths can be found in Appendix C.2.

Why review child deaths?

The purpose of the child fatality review process is to analyze all circumstances of each child's untimely death. The mission of child fatality review in Georgia and throughout the country is to prevent child deaths by understanding those factors that put children at risk. There may be critical factors which contributed to the death and one or more of those factors could have been prevented. Reducing risk factors and promoting protective factors in families and in the built environment can save lives. Understanding the events which surround a child's death through investigation and reporting can help families, communities and policymakers learn from the tragedy and work to protect other children from the same outcome.

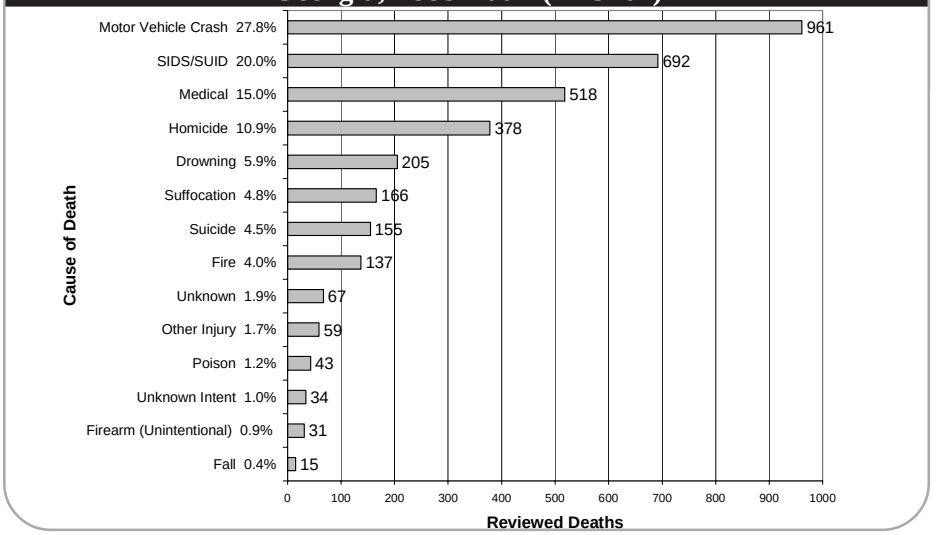
A large percentage of child deaths in Georgia occur in those counties with the largest percentage of the child population. The ten counties with the most reviewable child deaths (1,418 total) were Bibb, Chatham, Cherokee, Clayton, Cobb, DeKalb, Fulton, Gwinnett, Muscogee, and Richmond. These ten counties held 40% of the total of eligible child deaths statewide, and reviewed 89% of their reviewable deaths (1,256), which is higher than the state overall average. There were 30 counties that had from 1 to 5 reviewable child deaths (100 total), and 68% were reviewed (68), which is lower than the state average.

All charts, graphs and findings in the following sections include only those eligible deaths which were reviewed by committees. Medical causes of deaths, and those with unknown data, are not included unless otherwise noted.

Findings:

- Motor vehicle incidents were the leading cause of injury-related deaths to children (28%)
- SIDS and SUID together are the second leading cause of child death (20.0%). The number of infants who died only during sleep (692) is higher than the number of all children who died from drowning, suffocation, suicide, fire, and falls combined (678)
- Medical circumstances were the third leading cause of deaths to children (15.0%), which includes such causes as asthma, congenital abnormalities, heart-related illness, and prematurity

Figure 1: Cause of Death, All Reviewed Infant/Child Deaths, Georgia, 1999-2004 (N=3461)



Preventability

A preventable death is defined by Georgia Child Fatality Review as one in which, with *retrospective analysis*, it is determined that a *reasonable intervention* (e.g., medical, educational, social, psychological, legal, or technological) could have prevented the death**. In other words, a child's death is preventable if the community or an individual could reasonably have done something that would have changed the circumstances that led to the death.** We often think that injury events are random "accidents". However, most injuries to children are predictable, understandable, and therefore, preventable. Perinatal and infant death could be prevented if attention is paid to factors relating to maternal health in the prenatal period, and sleeping environment in the first year of life. Many medical deaths could be prevented by compliance with medical treatment regimens. Motor vehicle deaths could be prevented by supervising small children in driveways and parking lots, improving driver training and enforcement of driving regulations. Not all risk factors can be addressed in the short-term. Some identifiable, but complicated risk factors can be modified over time, with changes in the social environment and acceptability of certain behaviors.

Committees are expected to determine which child deaths could have been prevented. A death is generally determined to be "definitely preventable" when the risk factors had been addressed and were well-known in the community. A death is generally determined to be "possibly preventable" when the risk factors may have been addressed but may not have been well-known in the community. A death is generally determined to be "not preventable" when there were no identifiable risk factors, or the circumstances were entirely unpredictable.

Table 1: Preventability, All Reviewed Infant/Child Deaths, Georgia 1999-2004 (N=3461

Definitely Preventable	1305	37.7%
Possibly Preventable	1338	38.7%
Not Preventable	770	22.2%
Missing Information	48	1.4%

CFR Committee Prevention Recommendations

- Restrict access to neighborhood ponds and lakes. Neighborhood/ homeowner's associations should be responsible for restricting access to any body of water found in the neighborhood
- Legislation for ice cream trucks and all other service vehicles that attract children to have large mirrors installed to prevent injury to child pedestrians
- Parenting/safety classes with fees structured on a sliding scale based on family income. Parents have expressed interest in taking such a class, but are unable to meet the required fee
- Require more intensive follow-up for juveniles with depression or with suicidal ideation. Place liability on mental health facilities for failing in its service to juveniles.
- Require all drivers to have driver education classes before receiving license. Rural dirt roads are a problem for inexperienced drivers.
- DNR should teach boating and/or hunting safety. Initiate legislation to propose boating safety classes for anyone that operates a boat.
- Database that DFCS can use to see if there is a restraining order (TPO) on mother and boyfriend, which there was, but nobody was aware of it at the time and possibly could have had some impact on this child and family
- There should be some safety measures in place to assure that referrals are made when a family moves to another state. The family had lived in GA for 2 years and none of the state agencies were familiar with this child. After this child died, there were numerous complaints alleging abuse
- Parenting classes to bring attention to common symptoms of baby disease (referring to a child with jaundice at birth and no medical treatment; cause of death associated with complications of disease)
- Legislation requiring young mothers to go through parenting classes
- When many of our (North Georgia) babies are born in Tennessee, the health department in Georgia does not receive a referral. The Panel should work with bordering states to address coordination of services
- State should take initiative to push local jurisdiction to pass ordinances for fencing-in of private pools
- "Community Partnership for Protecting Children" should have bee aware of the presence of this child living in public housing. The baby was born in a Tennessee hospital so referrals were not made to local agencies for services.

Child Abuse and Neglect

There are generally four recognized forms of child maltreatment: neglect, physical abuse, sexual abuse, and psychological or emotional maltreatment. Most victims of maltreatment are very young, with almost three-fourths being younger than 5 years old. The child rescue orientation is reflected in a long-standing tendency to see child maltreatment as arising from poverty and parental irresponsibility, and so emphasizes the removal of children from their homes to protect them. The family support approach, by contrast, focuses on ameliorating the social and environmental factors that contribute to parental stress and child maltreatment (Future of Children).

How does GA compare to the U.S.?
From 1999 to 2004, 73% of child abuse and neglect deaths in Georgia occurred to children younger than five years old. Of these deaths, 53% are infants younger than one year. National statistics show that children under six years of age account for 86% of all maltreatment deaths and infants account for 43% of these deaths. Fatal abuse is interrelated with poverty, domestic violence and substance abuse. Fathers and mothers' boyfriends are most often the perpetrators in the abuse deaths; mothers are more often at fault in the neglect fatalities.

Domestic Violence and Child Abuse
The concurrent incidence of domestic violence and child abuse within the same families is well documented. In a national survey of over 6,000 families, researchers found that 50% of the men who frequently assaulted their wives also frequently assaulted their children (Family Violence Prevention Fund). In fact, the U.S. Advisory Board on Child Abuse and Neglect suggests that domestic violence may be the *single major precursor* to child abuse and neglect fatalities in this country (1995). Babies whose mothers are victims of domestic violence during pregnancy are more than twice as likely to die in the first weeks of life (Amer. Journal of Public Health, 2006).

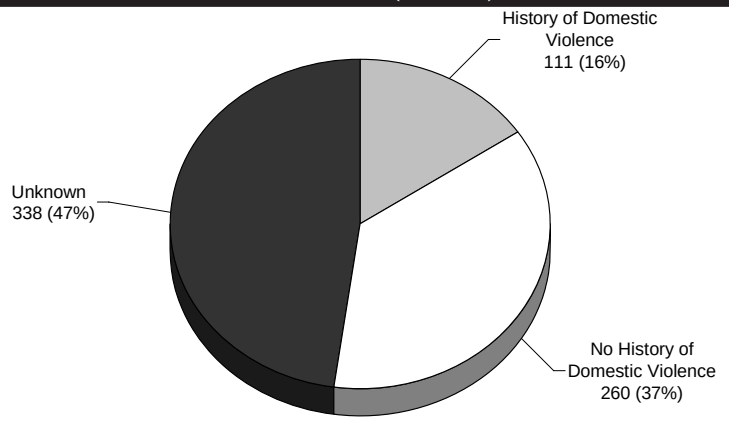
Finding:

- Among the 371 child abuse/ neglect deaths with information on history of domestic violence, 111 (30%) indicated a history of domestic violence in the home of the caretaker

Facts:

- Domestic violence perpetrators sometimes intentionally injure children in an effort to intimidate and control their adult partners. Children may also be injured - either intentionally or accidentally - during attacks on their mothers
- Children whose mothers are abused sometimes suffer at the hands of their mothers as well. One study found that the rate of child abuse by mothers who were beaten is at least double that of mothers whose husbands did not assault them (Family Violence Prevention Fund)

Figure 1: History of Domestic Violence in the Home of the Caretaker Among Reviewed Cases with Abuse/Neglect Findings, 1999-2004 (N=709)



Opportunity for Prevention:

- Provide and support effective child abuse and family violence prevention programming to include public education campaigns aimed at changing the social norms that ignore and support abuse, and mobilizing individuals to take actions that protect women and children. Provide support to new families, such as home visitation or family support programs

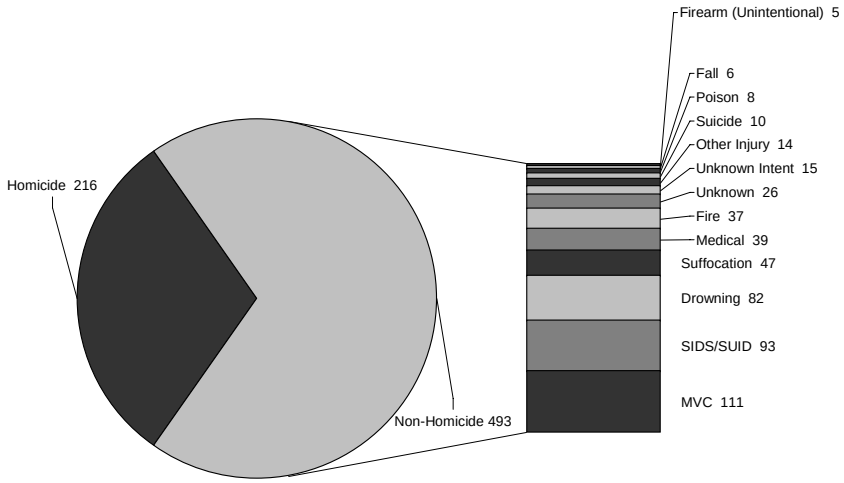
Findings:

- More than two-thirds of the deaths with abuse/neglect findings are due to unintentional injuries
- Among unintentional injury-related deaths, motor-vehicle incidents were the leading cause of death to children (22.5%), followed by sleep-related infant deaths (18.9%) and drowning (16.6%)

Facts:

- Neglect cases can result from intentional or grossly negligent failure to adequately supervise a child, resulting in bathtub drowning, suffocations, poisonings and other types of fatal incidents
- Most fatal injuries resulting from abuse are much more subtle than poisoning, beating, bludgeoning, shooting, or strangulation. Suffocation, for example, often leaves absolutely no medical sign of the cause of death. Most infant deaths are related to head injuries, some of which leave no external sign of trauma

Figure 6: Causes of Death Among Reviewed Deaths with Abuse/ Neglect Findings, Georgia 1999-2004 (N=709)



Opportunity for Prevention:

- Recognize and reduce risk factors for child maltreatment. Certain risk factors can be easily identified, such as: children under the age of five, parents or caregivers who are under the age of 30, low income, single-parent families experiencing major stresses, children left with male caregivers who lack emotional attachment to the child, substance abuse among caregivers, parents and caregivers with unrealistic expectations of child development and behavior, children with emotional and health problems, and lack of suitable childcare

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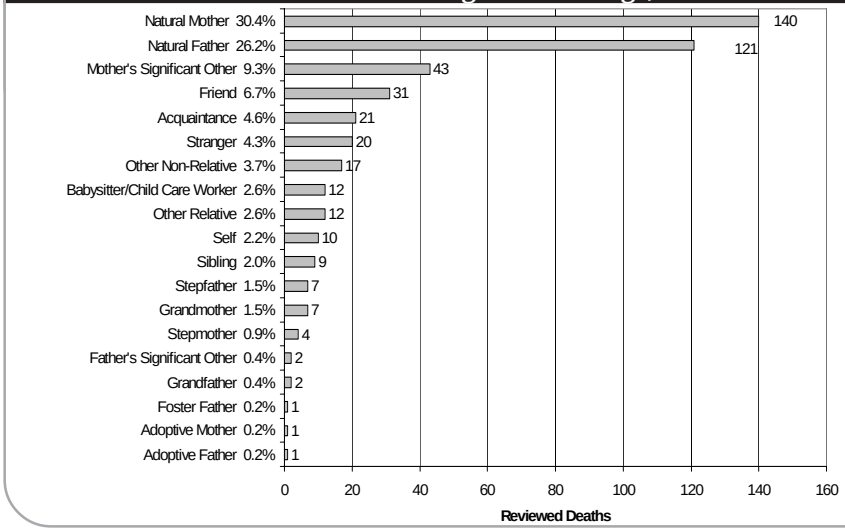
Findings:

- More than half of all perpetrators were the natural parents. Mothers accounted for 30.4%, and fathers accounted for 26.2% of abuse or neglect-related deaths to children
- The mother's significant other was involved in 43 deaths (9%), while friends (31) and acquaintances (21) were the perpetrators in 52 abuse or neglect-related deaths (11.3%)

Fact:

- Research findings show that among children age 0-3 years, the majority of child abuse homicide cases occurred within the family. After age 12, perpetrators are primarily extra-familial (outside the family)

Figure 4: Relationship of Perpetrator to Decedent in Reviewed Cases with Abuse/Neglect Findings, 1999-2004



Opportunities for Prevention:

- Promote the less visible but critically important resources for child protection such as the contributions made by worship communities, extended families, friends and neighbors, youth groups, and other community resources that support families and guide parents in the proper care and nurturance of their children

Findings:

- Infants have the highest rates of abuse/neglect related deaths among all age groups, at 35.2 per 100,000 population, but the risk of child abuse/neglect-related deaths decreases as the child gets older
- Seventy-three percent of all deaths with findings of child abuse/neglect occurred among pre-school aged children
- Males are more likely to have deaths associated with abuse and neglect than are females. Overall, males are 41% more likely than females to have abuse and neglect findings
- African-American males and females have the highest rates of abuse/neglect related deaths among all race/gender groups, at 10.0 and 6.3 per 100,000 population, respectively

Table 1: Demographics of Deaths with Abuse/Neglect Findings, 1999-2004 (N=709)

Demographic	Category	Number	%	Rate Per 100,000 Children Age 0 - 17
Age	Infant	274	38.6%	35.2
	1 to 4	243	34.3%	8.1
	5 to 14	147	20.7%	2.0
	15 to 17	45	6.3%	2.1
Race	White	316	44.6%	3.9
	Black	379	53.5%	8.2
	Other	14	2.0%	2.3
Gender	Male	423	59.7%	6.2
	Female	286	40.3%	4.4
Race/Gender	White Male	184	26.0%	4.4
	White Female	132	18.6%	3.3
	A-A Male	234	33.0%	10.0
	A-A Female	145	20.5%	6.3
	Other Male	5	0.7%	*
	Other Female	9	1.3%	3.0

Fact:

- One study of the social support and social network relationships of neglecting and non-neglecting, low-income, single, African-American mothers found key differences in the mothers' perceptions of their relationships and interactions. The study found that the relationships of neglecting mothers were characterized by conflict, distrust, and lack of mutuality, while non-neglecting mothers experienced satisfying supportive relationships which emphasized a sense of mutuality and fairness (Family Violence Prevention Fund)

Prevention Gaps:

- Child welfare and family violence advocates do not operate under the same guidelines and with the same mandates. These two groups often each operate in their own silo, never coming to understand that violence in the family is a complex issue that requires collaboration and cooperation among outside organizations to understand each side of the issue, and work together in finding answers to end violence in the home

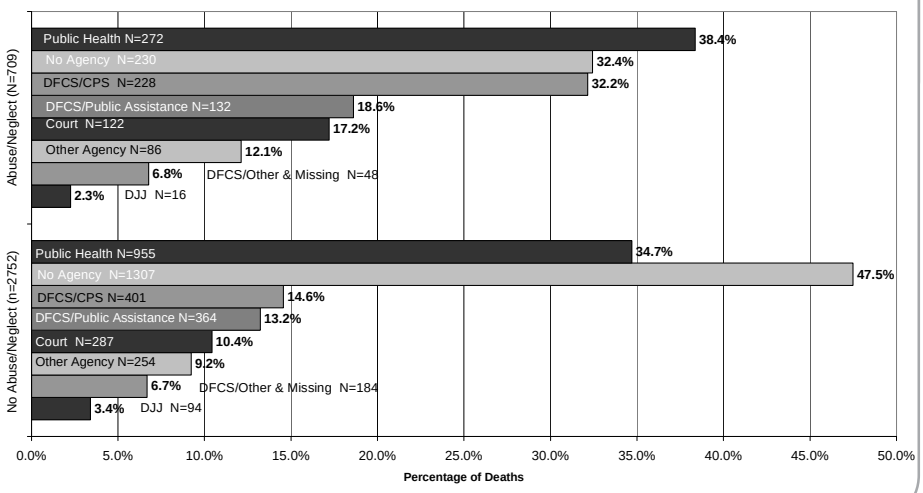
Statewide Opportunities for Prevention:

- Examples of promising practice approaches include: Co-locating domestic violence advocates in child welfare offices for case consultation and supportive services; Developing cross-system protocols and partnerships to ensure coordinated services and responses to families; Instituting family court models that address overlapping domestic violence and child abuse cases; Cross training domestic violence and child welfare advocates; and creating domestic violence units in child welfare agencies
- Child maltreatment prevention should be a multi-year effort, not an attempt at a "quick fix." It will take several years to develop and implement a multifaceted approach to prevention through a collaborative effort among multiple groups both on a local and national level. In order to create broad public support for prevention efforts, a longitudinal evaluation of the project's impact on families will also be necessary. Clearly, these important strategies will take a considerable investment of time and resources

Prior Agency Involvement

Fifty-five percent (1,924) of all reviewed child deaths had personal (direct) or familial (indirect) involvement with one or more county agencies. Agency involvement did not always occur immediately before the child death, but may have occurred at any period prior to the death, and with any member of the child's family. Families may have had interaction with more than one county agency, and the service encounter may have been only once or for ongoing services.

Figure 5: Agency Involvement Among Reviewed Deaths by Abuse/Neglect Status, 1999-2004



Findings:

- Sixty-eight percent of children with abuse/neglect findings had had prior agency contact. Of children without abuse/neglect findings, 48% had had prior contact with governmental agencies
- For both children with and without abuse/neglect findings, public health was the most common point of contact (38% and 35% respectively)
- One third (32%) of children with abuse/neglect findings had prior involvement with Child Protective Services, as did 15% of children without abuse/neglect findings.
- Seventeen percent of children with abuse/neglect findings had had previous contact with the courts, compared with ten percent of children without abuse/neglect findings
- DFCS (Public Assistance) was involved in 18.6% of child deaths when abuse or neglect was reported, and 13.2% of child deaths without evidence of abuse or neglect

Fact:

- Professionals who work with governmental and other public agencies are mandated to report suspected child abuse or neglect, yet often receive little or no formal training in identification of risk factors or signs associated with abuse

Opportunity for Prevention:

- Specific project strategies including training, should be created through a dynamic partnership between local public agencies and service providers, including CPS, domestic violence agencies, home visitation programs, fatherhood programs, early childhood development and daycare programs, the schools, the police, healthcare providers, after school youth programs, and economic development programs, to name a few. Ideally, the policies and practices of each of the partnership agencies would be reviewed and changed to integrate a strong prevention focus into services and programs

Opportunity for Prevention:

- Provide ongoing support services to child protective services staff through continued education and training, caseload numbers reflective of the Child Welfare League recommended average, and emotional support assistance

Reported CPS Involvement Among Deaths with Abuse/Neglect Findings, 1999-2004 (N=228)

Decedent	49
Decedent and Other Child in Family	41
Other Child in Family, Not Decedent	49
Decedent, Other Child in Family and Caretaker	28
Caretaker	17
Other Child in Family and Caretaker	7
Decedent and Caretaker	15
Unknown	22

Sleep-Related Infant Deaths

Sleep-related deaths include all deaths to infants that occur while sleeping, but have no obvious medical or environmental cause. They are the leading cause of death for children birth to 1 year of age. According to the Centers for Disease Control and Prevention, more than 4,500 infants die each year with no obvious explanation. Many of these deaths are SIDS (the sudden death of an infant less than 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). Others appear to be SIDS, but have other factors present that could have contributed to the deaths (SUID). Also included in sleep-related deaths are those resulting from sleep-related asphyxia (extreme decrease of oxygen in the body accompanied by an increase of carbon dioxide). Examples of sleep-related asphyxia include unintentional overlay by a caregiver, sleeping with head or face covered, or wedging.

Although many risk factors have been identified in association with SIDS, no main cause has been determined. Research is suggesting that there may be a complex combination of predisposing factors and environmental stressors that contribute to SIDS. Even though there has been a significant decrease in the number of deaths attributed to SIDS since the "Back to Sleep" campaign began in 1992, SIDS and other sleep-related factors continue to contribute to a major number of infant deaths.

Asphyxia

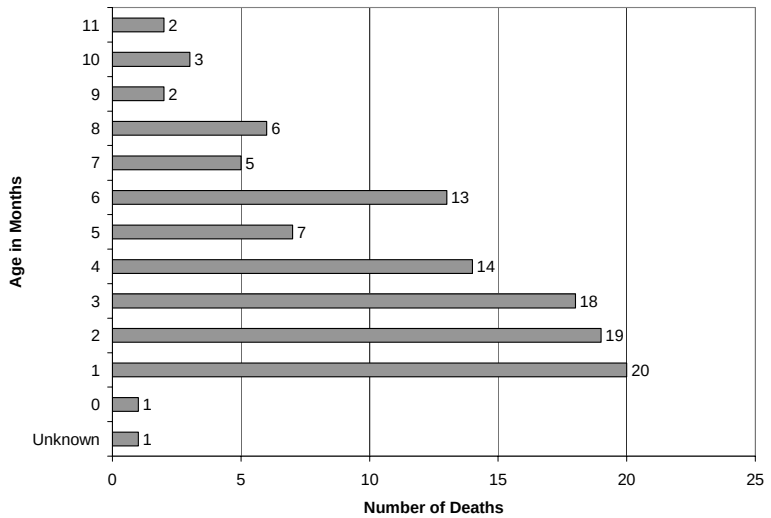
Findings:

- Ninety-two percent of infants were six months of age or younger when they died
- Fifty-two percent (58) of the children who died were 3 months old or younger
- The most frequent ages at death were 1 month (n=20), 2 months (n=19) and 3 months (n=18)

Fact:

- Sixty percent of infant suffocation occurs in the sleeping environment (SafeKids, 2005). Infants in particular are at greater risk for suffocation because of their inability to lift their heads or remove themselves from tight places

Figure 1: Reviewed Sleep-Related Asphyxia Deaths, Age <1, By Month of Age, 1999-2004 (N=111)



Opportunity for Prevention:

- Always place infants to sleep on a flat, firm sleeping environment. Adult beds do not meet federal safety standards for infants and can cause accidental entrapment or suffocation

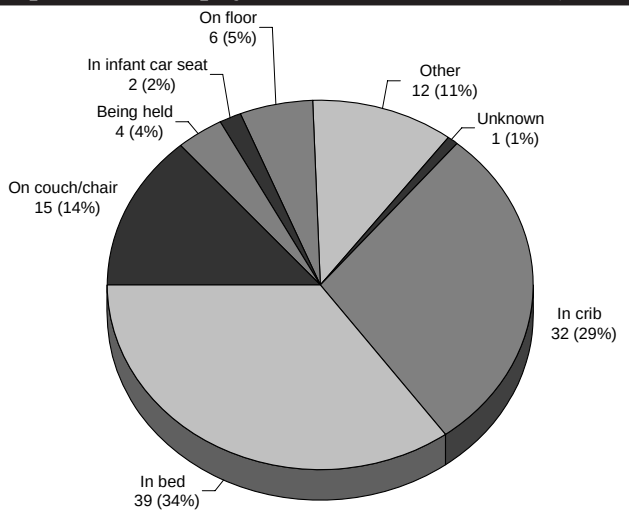
Findings:

- Thirty-nine infants (34%) were found in a bed
- Thirty-two infants (29%) were found in a crib
- Fifteen infants (14%) were found on a couch or chair

Fact:

- No studies have found protective effects of bedsharing with respect to SIDS; however, some studies have found a decreased risk factor of SIDS among infants who sleep in the same room as their parents (Arch. of Pediatric Adolescent Medicine, 2003)

Figure 2: Location at Time of Death for Infants Reported as Sleep-Related Asphyxia Deaths, 1999-2004 (N=111)



Opportunity for Prevention:

- Community agencies shouldparticipate in free or reduced-cost crib programs to support low income families who may not be able to afford a separate safe sleep space for their infant.

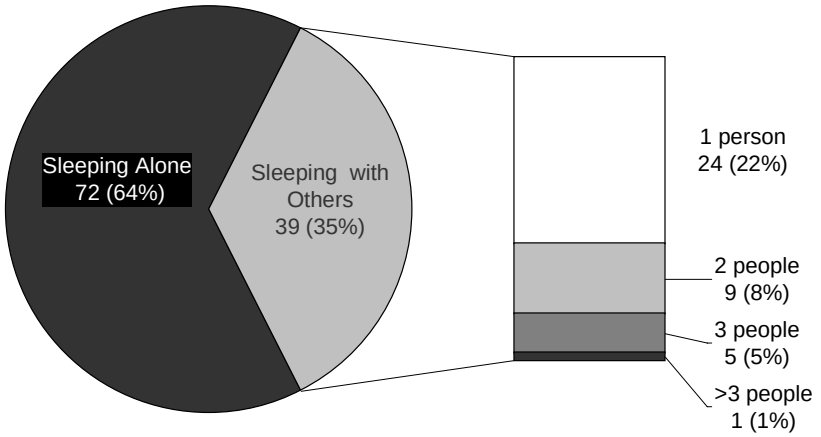
Findings:

- Seventy-two infants (65%) were sleeping alone when they were discovered
- Thirty-nine infants (35%) were sleeping with others at the time of death. Of these more than half (n=22) were sleeping with one other person. Nine infants were sleeping with two other people, and six infants were sleeping with three or more people

Facts:

- Bed-sharing is particularly dangerous when the caregiver is overweight or under the influence of anything that might hamper a normal arousal response
- Infants exposed to tobacco smoke may have a diminished arousal response. The risk for SIDS increases when infants bed-share with mothers who smoke

Figure 3: Number of People Sleeping with Infant at Time of Death, 1999-2004 (N=111)



Opportunity for Prevention:

- Never let an infant sleep with anyone as it increases the risk for entrapment or suffocation from overlay

Family was visiting with grandparents. The baby was bed-sharing with the parents when the father awoke and found the baby unresponsive.

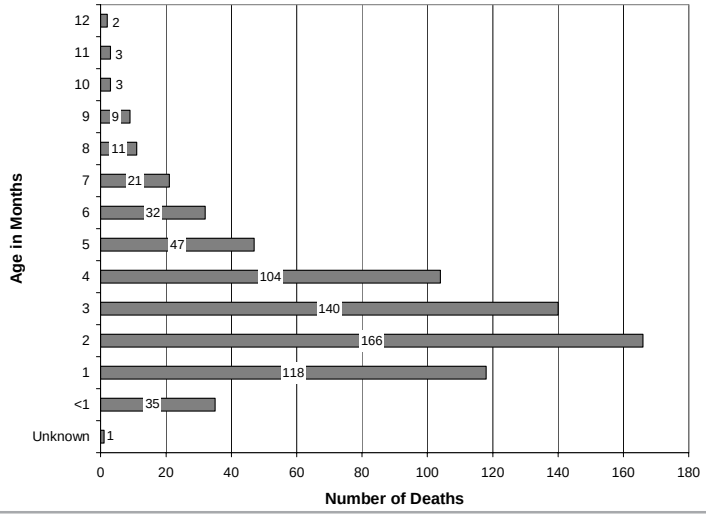
Findings:

- The most common age for SIDS /SUID was two months (n=166 [24%])
- Sixty-six percent of all SIDS and SUID deaths occur in children younger than four months
- Only seven percent of all SIDS/SUID deaths occurred in infants older than six months

Fact:

- Generally, most babies who die from SIDS/SUID are between 2 and 6 months old. The risk of death declines dramatically after 6 months of age

Figure 1: Reviewed SIDS/SUID Deaths By Age, 1999-2004 (N=692)



Opportunity for Prevention:

- Health care providers should consistently provide parents with prevention materials promoting the "Back to Sleep" message and safe sleep environments during the first months of a child's life

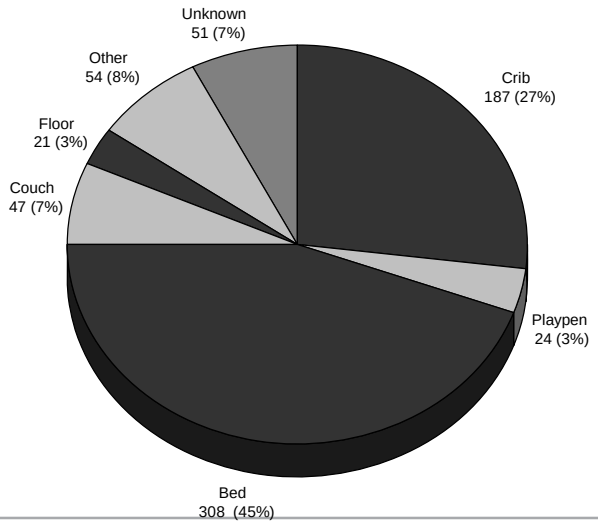
Findings:

- The most common location for SIDS/SUID deaths was a bed (n=308 [45%])
- Almost ¼ (27%) of SIDS/SUID deaths occurred while the infant was in a crib
- An additional 7% of infants with SIDS/SUID deaths were found on couches

Fact:

- No studies have found protective effects of bedsharing with respect to SIDS; however, some studies have found a decreased risk factor of SIDS among infants who sleep in the same room as their parents (Arch. of Pediatric Adolescent Medicine, 2003)

Figure 3: Location at Time of Death for Infants who Died of SIDS/SUID, 1999-2004 (N=692)



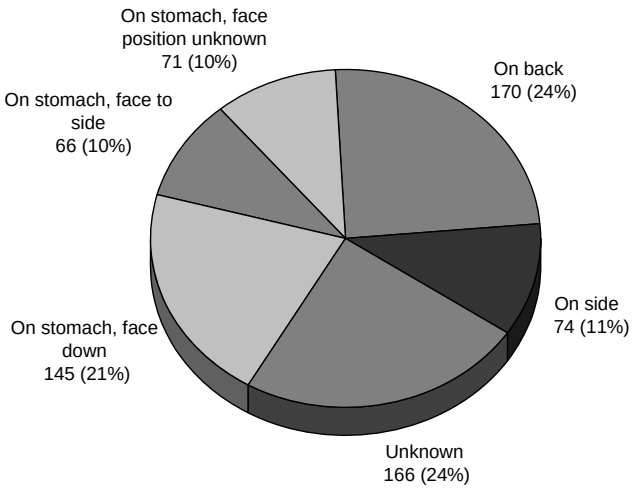
Opportunity for Prevention:

- Community agencies shouldparticipate in free or reduced-cost crib programs to support low income families who may not be able to afford a separate safe sleep space for their infant

Findings:

- Sleeping position was unknown for 24% of infants who died of SIDS and SUID
- Forty-one percent of SIDS/SUID infants were found on their stomachs; an additional eleven percent of SIDS/SUID infants were found on their sides
- Less than one quarter of infants (24%) were sleeping on their back – the recommended position to prevent SIDS

Figure 2: Discovery Sleeping Position of Infants who Died of SIDS/SUID, 1999-2004 (N=692)



Facts:

- Perceived infant comfort is a main reason caregivers place babies in a prone position for sleep despite the "Back to Sleep" message (Arch. of Pediatric Adolescent Medicine, 1999)
- Infants who are experienced sleeping the in the supine position have a decreased ability to escape suffocation when placed in the prone position (Pediatrics, 2004)

Opportunities for Prevention:

- Train nurses to model SIDS risk-reduction techniques to ensure that families know how to reduce SIDS risk. The most critical period during which nurses can influence parents' behavior is during the 24 to 48 hours following delivery (Maternal and Child Health Bureau)
- Childbirth educators, lactation consultants, trainers for babysitter courses, WIC agencies and pediatricians should distribute information related to infant safe sleep environments to all child caregivers

Finding:

- There are no clear temporal patterns associated with SIDS/SUID deaths; however, the months with the greatest number of SIDS deaths are December (n=73) and January (n=74)

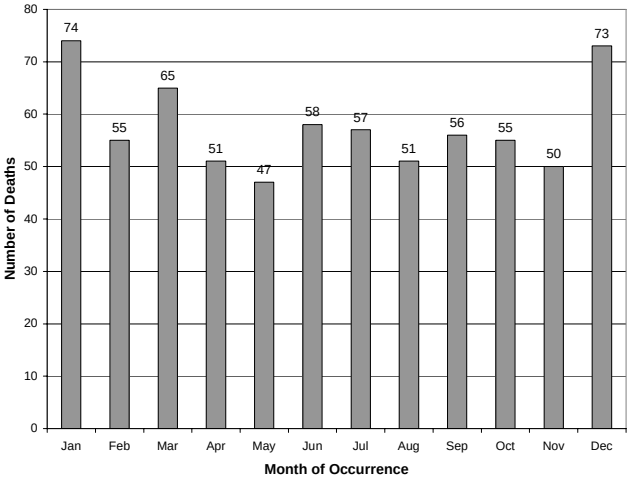
Fact:

- Research has a long history documenting the seasonality of SIDS showing an increased risk during the winter months

Opportunity for Prevention:

- Increase public awareness that infant overbundling and overheating are risk factors for SIDS

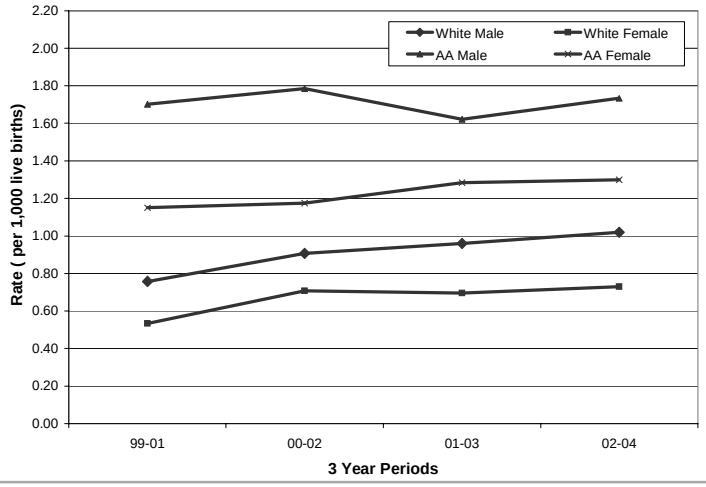
Figure 5: Reviewed SIDS/SUID Deaths by Month of Occurrence, 1999-2004 (N=692)



Findings:

- SIDS and SUID have consistently been highest for African-American infants; both African-American males and African-American females have higher rates than their White counterparts
- Boys have higher SIDS/SUID rates than do females
- Despite decreases in the SIDS rates in the early 1990's, particularly among Black males, however there has been a slight increase since the late 1990s for White males and females and for African-American females. The SIDS rate for African-American boys has remained steady since 1999

Figure 16. SIDS Death Rates per 1,000 Live Births: Age<1 (Based on Adjusted Death Certificate Data), Three Year Moving Average, 1999-2004



Findings:

- SIDS and SUID are higher for African-American infants; both African-American males and African-American females have higher rates than their White counterparts
- Males have higher SIDS/SUID rates than do females.
- The rate for African-American males (highest) is 3 times higher than the rate for White females (lowest)

Table 1: Demographics Reviewed SIDS/SUID Deaths, 1999-2004 (N=692)

Characteristic	Category	Number (%)		Rate per 1,000 Live Births
Race/Gender	White Male	207	29.9%	0.8
	White Female	132	19.1%	0.5
	A-A Male	201	29.0%	1.5
	A-A Female	141	20.4%	1.1
	Other Male	7	1.0%	*
	Other Female	4	0.6%	*

Facts:

- According to recent SIDS research, both African-American and White mothers were likely to follow advice of medical personnel; however, fewer African-American mothers were advised about proper infants sleep position (Hauck, F., Pediatrics, 2002)
- Data from the Center for Health Statistics show that nationally the SIDS rate among African-American infants remains more than twice the rate of White infants

Opportunity for Prevention:

- Begin a community-wide distribution program of the "Back to Sleep Resource Kit – African American Outreach" as developed by the National Institute of Child Health and Human Development (www.nichd.nih.gov/sids/resource_kit.cfm)

Statewide Opportunities for Prevention:

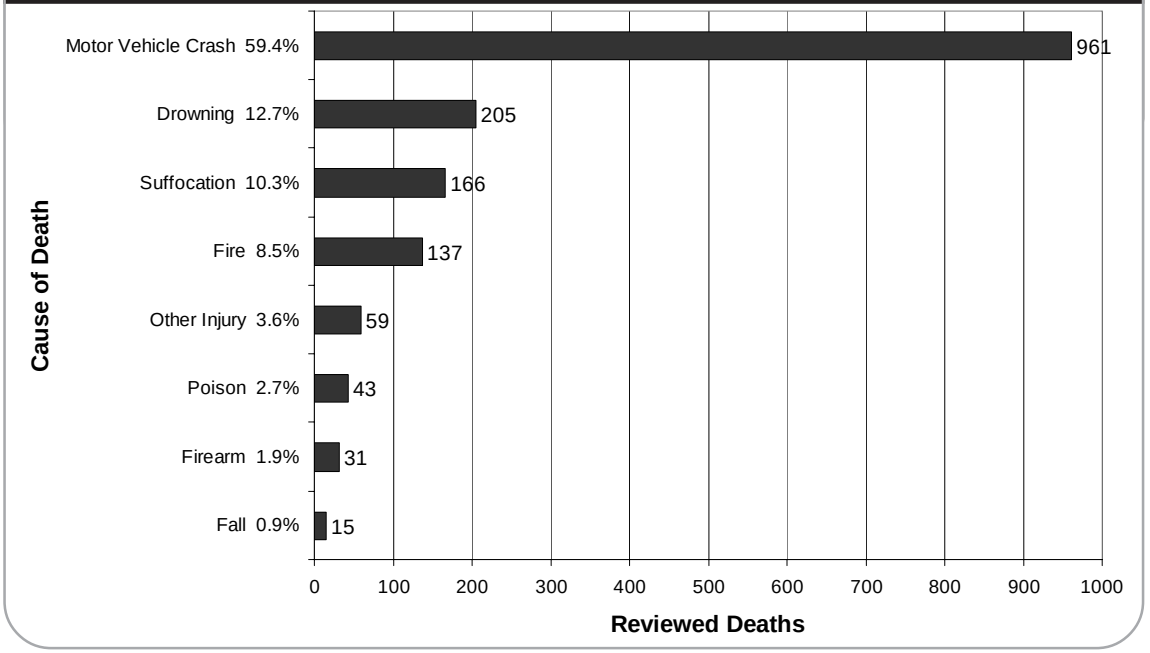
- The American Academy of Pediatrics recommends offering an infant a pacifier at nap time and bedtime because research shows a strong association between pacifier use and the reduction of SIDS. Breastfeeding infants should be introduced to using a pacifier after they turn one month old. The pacifier should be used when placing an infant down for sleep and should not be reinserted once the infant falls asleep.
- Educate caregivers in the community about the dangers of exposing infants to tobacco smoke. Maternal smoking during pregnancy is associated with a significantly increased risk of SIDS (Am J Public Health, 2006).
- Excessive bed clothes, overheating, prone sleeping, soft bedding, bed sharing, low birth weight and passive smoke are all risk factors for SIDS (Guntheroth, W., Pediatrics, 2001). Share information within communities about the risk factors for SIDS and the steps caregivers can take to lessen the danger for infants.

Unintentional Injury-Related Deaths

Unintentional injuries are a leading cause of death for all children over the age of one, regardless of gender, race, or economic status. Many deaths occur during summer months when children are less likely to be supervised. Children younger than 4, poor children and minority children are disproportionately represented in these statistics.

How does GA compare with the U.S. average?
The crude rate for unintentional injury-related deaths from 1999 - 2003 among Georgia's children ages 0-17 was 1.3 times higher (15.88 per 100,000) than the national average of 12.19 per 100,000.

Figure X: Reviewed Unintentional Injury-Related Deaths By Cause, 1999-2004 (n=1617)



Findings:

- Motor vehicle-related deaths represent nearly 60% of all child fatalities from unintentional injuries and have been the leading cause of unintentional injury-related death every year from 1999 through 2004
- Drowning consistently ranks in the top 3 causes of death from unintentional injuries
- The number of deaths from suffocation averages 27 per year and ranged from a low of 21 to a high of 40 during this time period
- Twenty-two of the forty-three deaths from poisoning were caused by a child's ingestion of prescription medicines

Facts:

- Among youth, ages 1-19, unintentional injuries are responsible for more deaths than homicides, suicides, congenital anomalies, cancer, heart disease, respiratory illness and HIV combined (CDC, 1997)
- Children are highly unlikely to die from injuries sustained from a fall. During any year, approximately 2.5 million children nationally under the age of 14 will be treated in a hospital emergency room for injuries from a fall, but only 100 children will die from their injuries

Motor Vehicle-Related Deaths

From 1999-2004, motor vehicle incidents claimed the lives of 721 of Georgia's children. Most deaths are caused by risky behavior and can be prevented. Since MV crash victims are a diverse group, prevention efforts need to target specific populations. Lack of appropriate restraint use, such as child safety seats and booster seats, contributes significantly to deaths and injuries among infants and young children. Older adolescents between the ages of 15 and 17 have the highest risk for motor vehicle crashes with the primary cause of death being driver error.

How does GA compare with the U.S. average?
From 1999-2003, Georgia's unintentional motor vehicle crash fatality rate for children 0-17 years of age is 9.70 per 100,000. This rate is 1.3 times higher than the national average of 7.32 per 100,000 for the same time period.

Findings:

- Children who died in motor vehicle crashes were equally likely to be back seat passengers (n=256), or the operators of the vehicle (n=255)
- Of the 255 children operating vehicles, 33 (13%) were 14 years old or younger
- One hundred and eighty-seven (26%) were passengers in the front seat of the vehicle. One quarter of these front seat passengers (n=44) were nine years old or younger

Facts:

- Children ages 12 and under should ride in the back seat of the vehicle whether or not the child has outgrown the use of a booster seat
- Back seat placement must be accompanied by proper restraint use
- Age-appropriate restraints and rear seat positioning are particularly important for children riding in SUV's since these vehicles have a higher tendency to be involved in deadly rollover crashes (Pediatrics, 2006)

Figure 1a: Reviewed Motor Vehicle Deaths by Position at Time of Injury Among Occupants of a Vehicle, 1999-2003

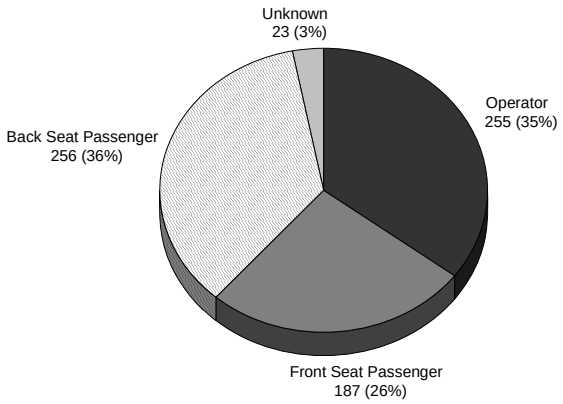
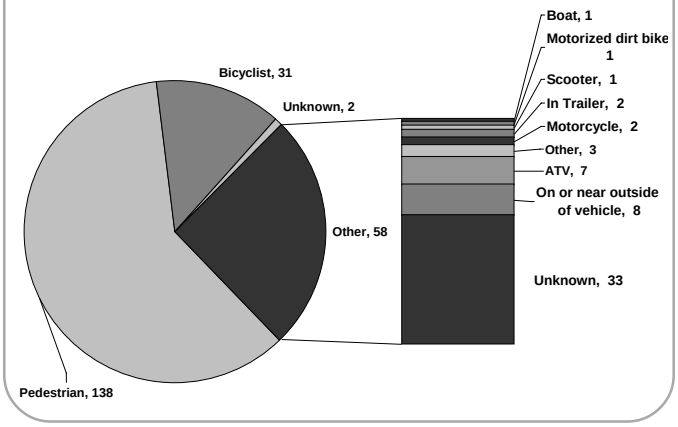


Figure 1b: Reviewed Motor Vehicle Deaths by Position at Time of Injury Among Occupants Outside a Vehicle, 1999-2004 (N=229)



A 10 month old baby was left unattended in a car seat in the driveway. The parents were pre-occupied. A van proceeded to exit the driveway after checking mirrors and visually inspecting the driveway. The van ran over the baby and the car seat.

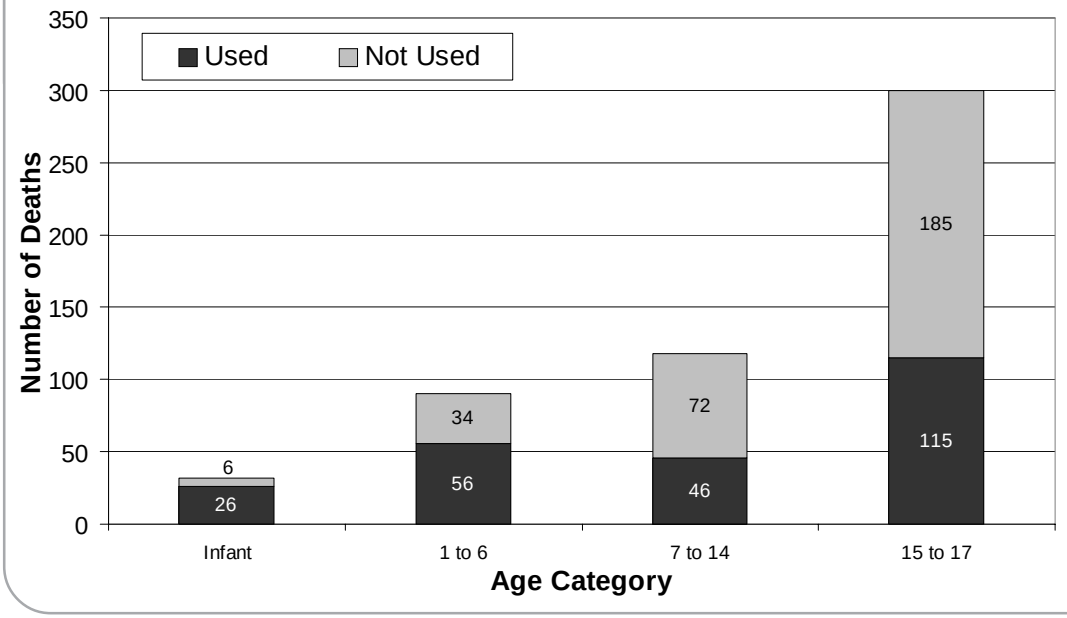
Findings:

- Pedestrians accounted for 60% of the motor vehicle-related deaths of children outside a vehicle. Pedestrians include children crossing streets, walking through parking lots and standing at bus stops
- Seven fatalities were attributed to children who were passengers on ATV's. (There are no child-sized ATV's designed to carry passengers.)
- In 11 incidents, there was no reported information on the child's position, either inside or outside the vehicle

Prevention Opportunity:

- Start a "Spot the Tot" program in the community. This program was started by SafeKids Worldwide in September 2006 to prevent injuries to children who are playing in driveways or in parking lots. "Spot the Tot" recommends that the driver walk completely around the vehicle before starting the car

Figure 2: Reviewed Motor Vehicle-Related Deaths by Restraint Use and Age, 1999-2004



Findings:

- Among the infants and children who die in motor vehicle-related incidents, infants are most likely to be restrained
- Almost two-thirds (62%) of 15 to 17 year olds were not properly restrained

Facts:

- Research shows that caregiver use of booster seats almost doubles when community education programs are utilized as an intervention (McCartt, Atetal, Accident analysis & Prevention, 2003))
- A study by the Center for Injury Research and Prevention found that nationally for every 100 children killed in a crash wearing only a seat belt, 28 would have lived if they had been in a car seat or booster seat
- Findings from the National Institutes of Health show that the part of an adolescent's brain that controls thoughts of long-term consequences remains underdeveloped until the age of 25 which might explain the limited success of graduated licensing programs and driver education. These findings strongly correlate to crash statistics which show that the overall number of motor vehicle crashes significantly decreases around the age of 25

Opportunities for Prevention:

- Increase the availability of public information so caregivers are aware of the state law that requires children to ride in a child safety restraint until age 6. Caregivers should know that children do not fit into adult seat belts until they are approximately 4 ½ feet tall and weigh approximately 80 pounds
- Increase public awareness that it is just as important to use child restraints when traveling locally as when traveling far from home. Twenty-five percent of all crashes occur less than five minutes from home and at low speeds (SafeKids, 2005)
- Incorporate non-use of safety belts as a point violation in TADRA
- Create culturally specific child safety seat programs. A focus group of Hispanic parents found that they felt more nurturing and that they believed their children were safer when they held the children in their laps while riding in vehicles (Kids Count Indicator Brief, July 2005)

A 12 year-old was given permission by her parents to drive their pick-up truck a short distance on a dirt road to the neighbor's house. She and her friend got into the truck. They drove onto a paved road where she lost control of the car and hit a tree. Both children were killed.

Finding:

- Driver error (49%) and speeding (23%) together account for almost three-fourths of all MV crash deaths among 15 – 17 year-olds

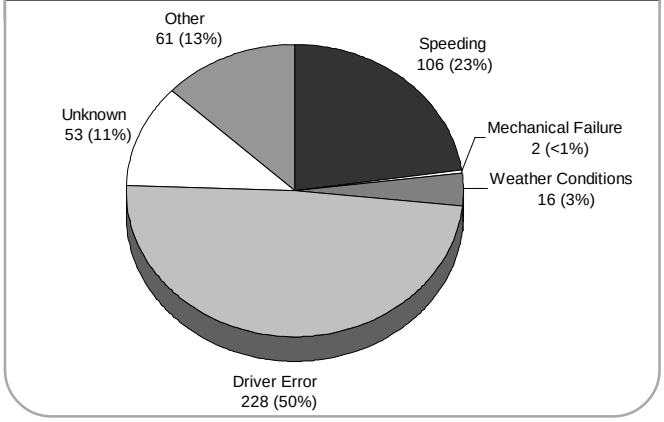
Facts:

- Crashes involving young drivers typically are single-vehicle, run-off-the-road crashes that involve driver error and/or speeding (Insurance Institute)
- Teenage drivers are more likely to tailgate and exceed the speed limit if there is a teenage male passenger in the front seat (National Inst. Of Child Health)
- Behavioral research indicates that experience measured in miles traveled may be more significant than the hours spent driving. After 1,000 miles, crash rates greatly decline (Cosgrove, L., NHTSA, presentation 2006)

Opportunities for Prevention:

- Reduce distractions to teen drivers by strengthening existing graduating licensing laws to increase limits on the number of teen passengers allowed in a car with a teen driver
- Parents should model driving without distractions i.e. restrict use of cell phones while driving
- Incorporate teen usage of cell phones during the probationary driving period as a point of violation in TADRA

Figure 3: Primary Cause of Reviewed Fatal Motor Vehicle Crashes Among Teens Ages 15-17, 1999-2004 (N=466)



A sixteen year-old was killed on a rural road when the car he was driving lost control in a curve and hit a tree. One week earlier he had received a citation for speeding.

Findings:

- The MV crash fatality "rate" is 1.7 times higher in rural areas than in urban areas
- Rural motor vehicles crashes are more likely to be fatal

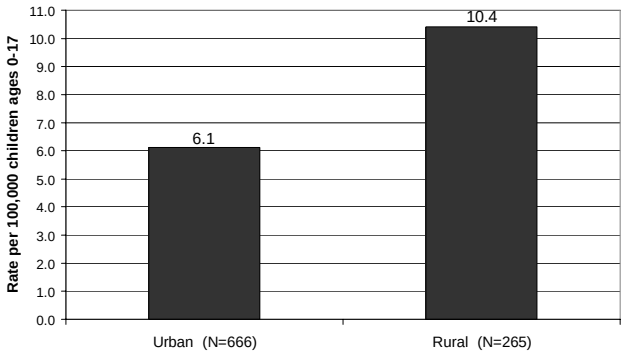
Facts:

- Rural roads present a different driving environment as they typically do not have the safeguards such as divided lanes, graded curves, or shoulders which are found on urban roads
- Studies show that the outcome of child injury is adversely affected in rural areas where there are not specialized pediatric emergency services. Pediatric intensive care units are predominately located in urban counties

Opportunity for Prevention:

- Telemedicine could prevent child fatalities by facilitating access to pediatric critical care services in rural areas

Figure 4: Reviewed Motor Vehicle-Related Death Rate (per 100,000 children ages 0-17) by Rural versus Urban Locale, 1999-2004



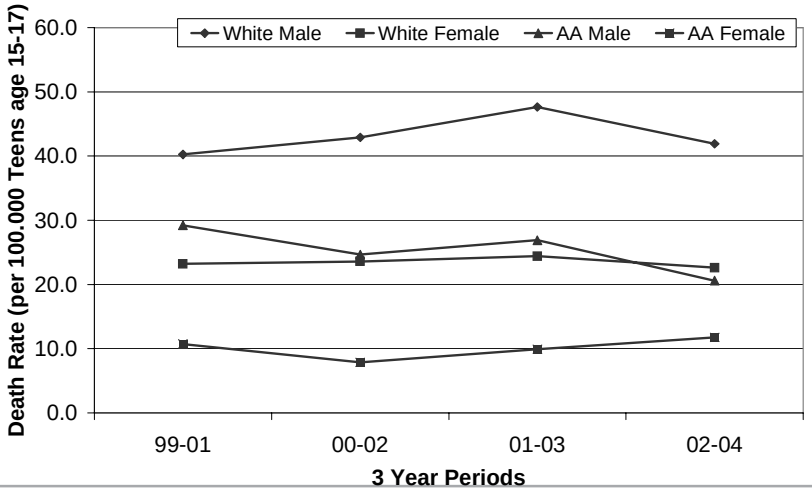
Findings:

- The MV crash fatality rates for 15 to 17 year-olds appear to have been stable for the last four three-year periods. The average rate for 2000 to 2004 was 28 deaths per 100,000
- The rates among white males are the highest among the four displayed race/sex populations, and they are about four times the rates for African-American females

Facts:

- In an evaluation of the Teenage and Adult Driver Responsibility Act (TADRA), Georgia's graduated driver's license provision enacted in 1997, showed a 37% decrease in fatal crashes by 16 year-old drivers, 5.5 years after enactment (Rios, et al., 2006). The same evaluation showed an increase of 27% in overall restraint use

Figure 5: Motor Vehicle-Related Death Rates per 100,000 Teens Age 15-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



- Ten percent of high school students report that they rarely or never wear a seat belt, and 27% rode with a drinking driver in the past month (Georgia Student Health Survey, 2005)

Findings:

- Teens ages 15 – 17 accounted for nearly half of all fatalities
- White males are associated with higher risk for death from motor vehicle-related incidents

Fact:

- The Governor's Office of Highway Safety (GOHS) reports that teenagers are disproportionately represented in crash deaths in Georgia. While they are 7% of the state's population, they represent 12% of all crash deaths

Table 1: Demographics and Other Important Characteristics of Reviewed Motor Vehicle-Related Deaths, 1999-2004 (N=961)

Characteristic	Category	Number	(%)	Rate per 100,000 Children ages 0-17
Age	Infant	43	4.5%	5.5
	1 to 6	181	18.8%	4.1
	7 to 14	271	28.2%	4.5
	15 to 17	466	48.5%	21.5
Race/Gender	White Male	429	44.6%	10.2
	A-A Male	167	17.4%	7.1
	Other Male	7	0.7%	2.2
	White Female	257	26.7%	6.5
	A-A Female	99	10.3%	4.3
	Other Female	2	0.2%	*

Opportunities for Prevention:

- Never let a child put a shoulder belt under his arm or behind his back. Belts in these positions can result in serious injury in a crash
- Promote the U.S. Consumer Product Safety Commission's campaign to educate riders on the safe use of ATV's. The campaign created new public service announcements and the www.ATVSafety.gov website

Table 2: Other Important Characteristics of Reviewed Motor Vehicle-Related Deaths, 1999-2004 (N=961)

Characteristic	Category	Number	Percent
Type of Vehicle (Decedent the occupant)	Car	460	47.9%
	Truck/SUV/Van	226	23.5%
	All Terrain Vehicle	44	4.6%
	Semi-Tractor Trailer	2	0.2%
	Motorcycle	15	1.6%
	Bicycle	24	2.5%
	Bus	2	0.2%
	Farm Tractor/Vehicle	2	0.2%
	Riding Mower	1	0.1%
	Other	19	2.0%
	Unknown	20	2.1%
	Not Applicable	146	15.2%
Conditions of Roads	Normal	769	80.0%
	Loose Gravel	6	0.6%
	Wet	74	7.7%
	Other	34	3.5%
	Unknown	78	8.1%
Alcohol/Drug Use	Alcohol/Drugs Involved	125	13.0%
	Unknown	356	37.0%
	Not Applicable	480	49.9%

Prevention Gaps:

- Georgia requires that ATV's have a muffler, are not driven on private property without permission, and are not used on paved roads. Georgia ATV requirements lack a minimum driver's age, a safety education certificate, a helmet law and passenger prohibition
- A national study showed that a child's restraint use often depended on the driver's restraint use. Almost 40% of unrestrained children are riding with unbelted drivers. (Cody, 2002)

Resources:

National Highway Transportation Safety Administration
http://www.nhtsa.dot.gov/
SAFE KIDS of Georgia
http://www.choa.org/default.aspx?id=463
American Academy of Pediatrics
http://www.aap.org/family/carseatguide.htm
Governor's Office of Highway Safety
http://www.gohs.state.ga.us/
Pedestrian Educating Drivers on Safety, Atlanta, Georgia
http://www.peds.org

Statewide Opportunities for Prevention:

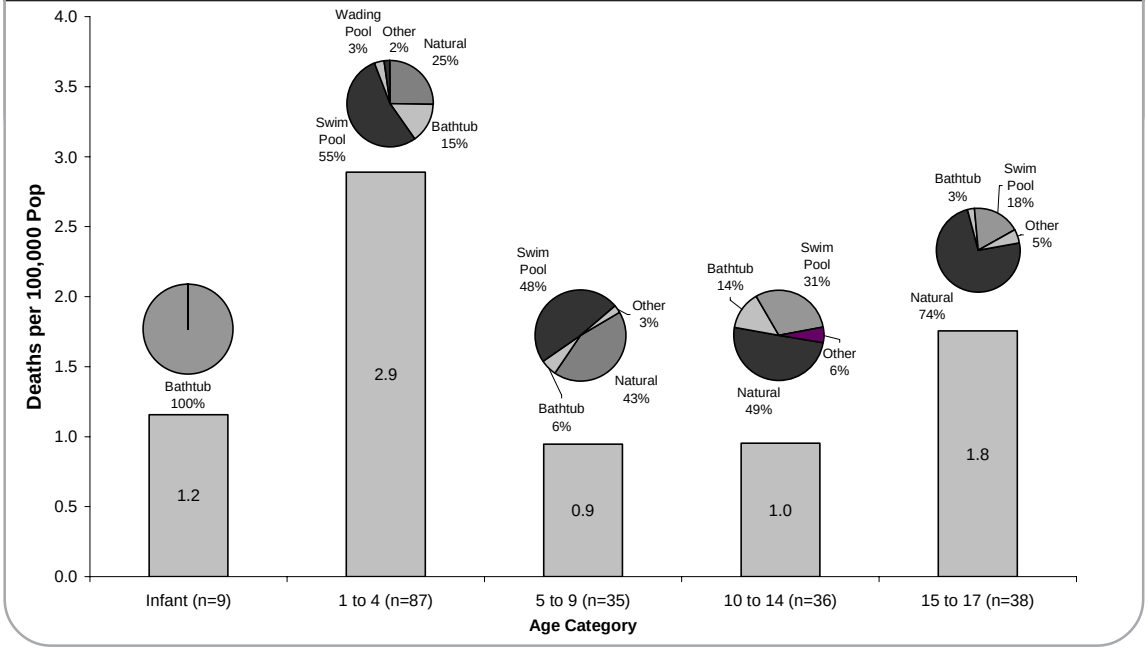
- Consider "offenders programs" through the court system as an educational alternative to fines
- Start or support child safety seat distribution and education programs, such as those provided by health departments and Safe Kids Coalitions
- Community leaders can encourage, assure and support the enforcement of current restraint laws by providing incentives, alternatives and strict consequences to the public, law enforcement and courts. These can include community restraint use signage (goal of 90%), offenders programs (education as a formal alternative to monetary penalties) and 100% adjudication enforcement for any violator in that community
- Support efforts to require the National Highway Traffic Safety Administration to test backup warning devices, set performance standards for these devices and make them standard equipment on SUV's and pickup trucks

Drowning Deaths

In Georgia, drowning has consistently been the second or third leading cause of unintentional injury-related death for children. Nationally, drowning remains the second leading cause of unintentional injury-related death for children ages 1-14 (CDC, 2005). Childhood drowning can happen in a matter of seconds with the child losing consciousness within two minutes. The majority of children who survive near-drowning were discovered within five minutes of their submersion. A child can drown in as little as 1 inch of water. Drowning for infants mostly occurs in bathtubs. Children ages 1-4 are most in danger around pools or other small bodies of water close to home. Teen drowning occurs most often in lakes or other natural bodies of water. Lack of supervision and improper barriers to bodies of water contribute greatly to these problem.

How does GA compare with the U.S. average?
Children in Georgia ages 0-17 drown at a rate of 2.01 per 100,000 from 1999 – 2003. This rate is 1.4 times higher than the national average of 1.45 per 100,000.

Figure X2: Numbers, Rates and Locations of Reviewed Deaths Due to Drowning Per 100,000 population, 1999-2004 (N=205)



Findings:

- Eighty-seven children between the ages of 1 and 4 years old died during this time period; this group had the highest death rate, (2.9 deaths per 100,000 population). The second highest drowning death rate was among teens between the ages of 15 and 17 years old
- The type of body of water involved in drowning deaths clearly differed by age category
  - o All infant drowning deaths occured in a bathtub
  - o Children ages 1 to 9 years old are most likely to drown in a swimming pool
  - o Children age 10 to 17 are most likely to drown in natural bodies of water (lakes and rivers)
- Five of the six bathtub drowning deaths among children older than ten years noted that the child had a history of seizure disorder

Facts:

- Nationally, there are approximately 300 children who drown in swimming pools. More than half of the children drown in their family pool, and one-third drown in the pool of a family member or friend
- Most bathtub drowning cases involve a child who was unsupervised. (CPSC, 2006). After pools, more children drown in bathtubs than in any other product in or around the home. (CPSC, 2006)
- Baby bath seats or bath rings are not safety devices and are not substitutes for adult supervision
- In a survey, nearly all parents (94 percent) report that they always actively supervise their children while swimming. However, deeper examination reveals that parents participate in a variety of distracting behaviors while supervising, including talking to others (38 percent), reading (18 percent), eating (17 percent) and talking on the phone (11 percent)

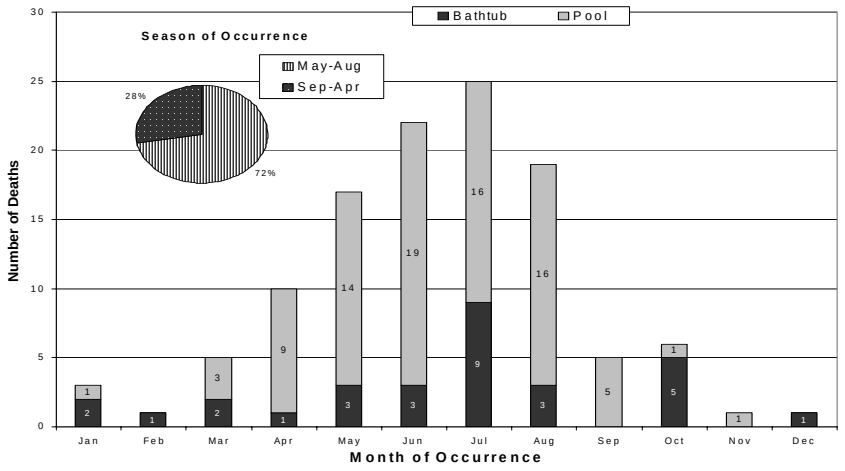
Findings:

- Overall, 72% of the pool and bathtub drowning deaths occurred during the summer months between May and August
- Pool-related deaths showed a clear seasonal pattern, with these deaths occurring most frequently during the summer
- Bathtub related deaths did not show a seasonal pattern

Facts:

- Most young children who drowned in pools were last seen in the home, had been out of sight less than five minutes, and were in the care of one or both parents at the time
- Nineteen percent of drowning deaths involving children occur in public pools with a certified lifeguards present
- Among all causes of unintentional injury death, drowning shows the greatest seasonal variation. Nationally, the majority of deaths occurs between May and August and are disproportionately represented on weekends (Pediatrics, 2003)

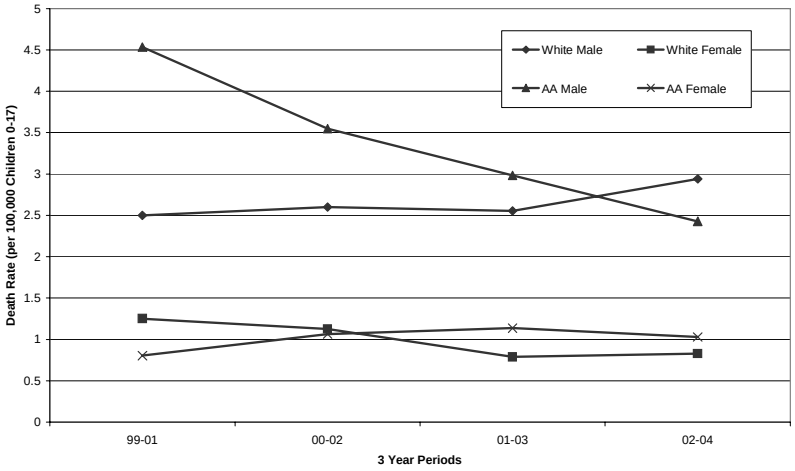
Figure X: Reviewed Deaths Due to Drowning in Pools and Bathtub by Month of Occurrence, 1999-2004 (N=115)



Findings:

- White males showed a small increase (6.4%) in the rate of drowning over the six year time period. In 2002-2004, this group had the highest drowning rate for the first time (3.3 deaths per 100,000)
- White females showed the largest increase (5%) during the same time period. The rate in 1999 was 1.25; in 2004, the rate was 1.31 drowning deaths per 100,000 population
- The rate for African-American males went down by 53% from 5.2 deaths per 100,000 population in 1999 to 2.5 in 2004

Figure 3: Drowning Death Rates per 100,000 Children Age 0-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



- The rate for African-American females went down by 38% from 0.8 deaths per 100,000 population in 1999 to 0.5 in 2004

A 2 year-old slipped out of the house while his mother was sleeping. He drowned in the neighbor's pool. The mother awoke to sirens.

Table 1: Demographics and Other Important Characteristics of Reviewed Drowning Deaths, 1999-2004 (N=205)

Characteristic	Category	Number	(%)	Rate per 100,000 Children ages 0-17
Race/Gender	White Male	92	44.9%	2.2
	White Female	32	15.6%	0.8
	A-A Male	60	29.3%	2.6
	A-A Female	16	7.8%	0.7
	Other Male	1	0.5%	*
	Other Female	4	2.0%	*
Alcohol or drugs a factor for decedent?	Yes	5	2.4%	
	No	105	51.2%	
	Unknown	95	46.3%	
Alcohol or drugs a factor for caretaker?	Yes	6	2.9%	
	No	78	38.0%	
	Unknown	121	59.0%	
Decedent wearing a floatation device?	Yes	3	1.5%	
	No	193	94.1%	
	Unknown	9	4.4%	

Findings:

- Males had a drowning death rate that was 2.8 times higher than the rate for females
- Alcohol and drugs were known to be a factor in only a small proportion of deaths (less than 3 percent). Among the children who died, alcohol and drug use were unknown in 46% of the deaths Alcohol and drug use were unknown for the caretakers of 59% of the children who died
- Flotation devices were being worn by only 3 of the children who died from drowning. Almost 95% of children who drowned were reported as not wearing an approved flotation device

Statewide Opportunities for Prevention:

- Implement use of safety devices designed to avert outdoor drowning dangers such as water motion sensors for pools/hot tubs as well as establishing effective barriers around ponds and open bodies of water
- Communities are usually governed by local ordinances regarding pool safety that are not always enforced if they are in place at all. Estimates predict that the widespread use of pool fencing would prevent 50-90% of deaths by drowning.
- One in five parents (20 percent) believes that when lifeguards are present, the lifeguard is the main person responsible for supervising children in the water. However, the typical lifeguard-to-swimmer ratio at public swimming areas may be as great as 25 swimmers per lifeguard. Post warnings that children swimming with a lifeguard present are not necessarily protected
- Provide free CPR courses for the community. Immediate resuscitation before the arrival of paramedic personnel is associated with a significantly better outcome for children with a submersion injury (American Academy of Pediatrics, 2003)
- Participate and encourage children to take swimming lessons
- Reinforce the need for constant adult supervision for children engaging in water-related activities by an individual who can swim and is knowledgeable in basic rescue techniques, including CPR
- Raise awareness of indoor safety devices which can help delay a toddler's access to dangers in the home, including: baby gates and door-knob covers as barriers to bathrooms, kitchens, garages, and toilet cover locks
- All bathtub drowning incidents should be evaluated for potential abuse or neglect. History of trauma, blame placed on younger siblings and delays in seeking treatment are all red flags for an abuse or neglect investigation (Alpert, B., 2003)
- Encourage parents/caregivers to consistently use Coast Guard-approved Personal Flotation Devices (PFDs) for themselves and their children when involved in water-related recreational activities

Resources:

American Academy of Pediatrics
http://www.aap.org/family/tipppool.htm
American Red Cross
www.redcross.org
National Safety Council
http://www.nsc.org/library/facts/drown.htm
U.S. Coast Guard, Office of Boating Safety
http://www.uscgboating.org/
The United States Lifesaving Association
www.usla.org

Suffocation Deaths

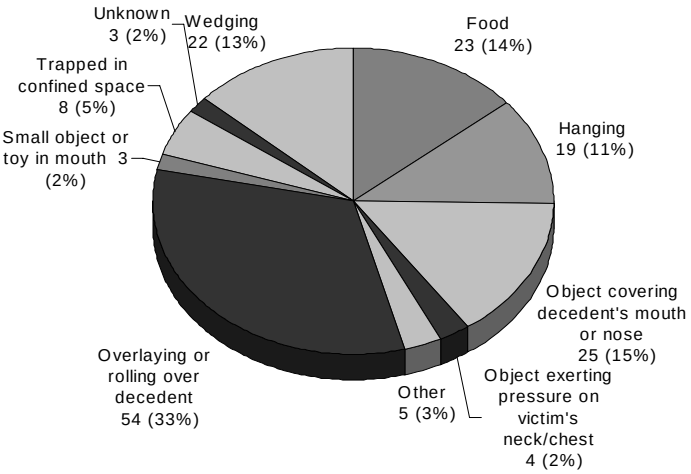
Nationally, choking, suffocation and strangulation are leading causes of unintentional injury-related death in children under the age of 1. (Safe Kids, 2004). It ranks fourth as a cause of death in children 1 to 9 years old, surpassed only by motor vehicle injuries, drowning and fire related injuries (CDC, 2000). Most unintentional suffocations are caused by overlay, positional asphyxia, choking, confinement, and strangulation.

How does Georgia compare to the U.S.?
For 1999 – 2004, Georgia's rate of infant deaths by unintentional suffocation (1.45 per 100,000) is slightly higher than the national rate of 1.20 per 100,000. The rate of death by unintentional suffocation for infants under the age of 1 is 1.1 times higher (16.08 per 100,000) than the national average of 14.59 per 100,000.

Findings:

- The largest number of suffocation deaths were caused by someone overlaying or rolling over on the child who died
- Similar percentages of children were killed by an object covering the mouth or nose (15%), choking on food (14%) and wedging (compression of infant's body or face into a narrow space resulting in interference with chest wall movements and normal breathing) (13%)
- Accidental hanging was responsible for nineteen (11%) suffocation deaths

Figure X: Suffocation Deaths by Cause of Asphyxia, 1999-2004 (N=166)



Facts:

- The majority of childhood suffocations and asphyxiations occur in the home (Safe Kids, 2004)
- Death to an infant by overlaying has been described in literature as far back as 200 A.D.
- An estimated 900 infant deaths that occur nationally each year are attributed to Sudden Infant Death Syndrome (SIDS) even when the infants were found in potentially suffocating environments, frequently on their stomachs, with their noses and mouths covered by soft bedding (Safe Kids, 2004)

Opportunities for Prevention:

- During the first six months of a child's life, parents should consistently have materials available to them promoting the "Back to Sleep" message
- Never place a child to sleep on a soft mattress, pillow or comforter
- Never allow an infant to share the same sleep surface with another person
- Do not use long cards to attach pacifiers.

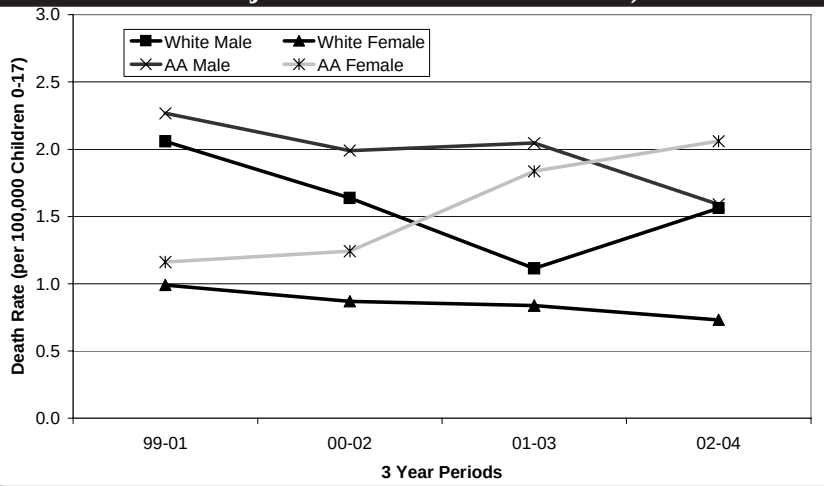
Findings:

- Suffocation rates for African-American females showed a substantial increase of 77% from 1.2 to 2.1 deaths per 100,000 population
- Suffocation-related death rates for African-American males showed a 30% decrease
- White females and white males showed decreases in suffocation-related deaths over time (26% and 24% respectively)

Fact:

- African-American infants are more likely than white infants to be placed on their stomachs and on soft bedding (Safe Kids, 2004)

Figure 3: Suffocation-Related Death Rates per 100,000 Children Age 0-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



Opportunity for Prevention:

- Distribute culturally sensitive education materials on the prevention of suffocation-related deaths in infants to all caregivers, particularly those caregivers who are from low income or predominately African-American communities

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Findings:

- More than two-thirds of the suffocation-related deaths are to infants less than one year old. The rate for infant deaths is more than 4 times higher than the next highest rate
- The large majority of infant suffocation deaths (111) are sleep-related. The two infant deaths that are not sleep-related choked on food
- Suffocation-related deaths occur at a slightly higher rate for males than for females

Fact:

- Nationally, children ages 4 and under, especially under the age of 1, are at greatest risk for all forms of suffocation and asphyxia-related deaths (Safe Kids, 2004)

Table 1: Demographics of Suffocation Deaths, 1999-2004 (N=166)

Characteristic	Category	Number	(%)	Rate per 100,000 Children ages 0-17
Age	Infant	113	68.1%	14.5
	1 to 4	26	15.7%	0.9
	5 to 9	6	3.6%	0.2
	10 to 14	15	9.0%	0.4
	15 to 17	6	3.6%	0.3
Race/Gender	White Male	68	41.0%	1.6
	White Female	27	16.3%	0.7
	A-A Male	38	22.9%	1.6
	A-A Female	29	17.5%	1.3
	Other Female	4	2.4%	*

Opportunities for Prevention:

- Do not allow children under age 6 to eat small, round or hard foods, including hot dogs or grapes
- Tie up all window blind and drapery cords, or cut the ends and fit them with safety tassels.

A 2 year old choked on a hot dog that her parents had given her to eat while they were at a fair. EMS personnel were on the scene immediately, but were unable to dislodge the hot dog and the child died

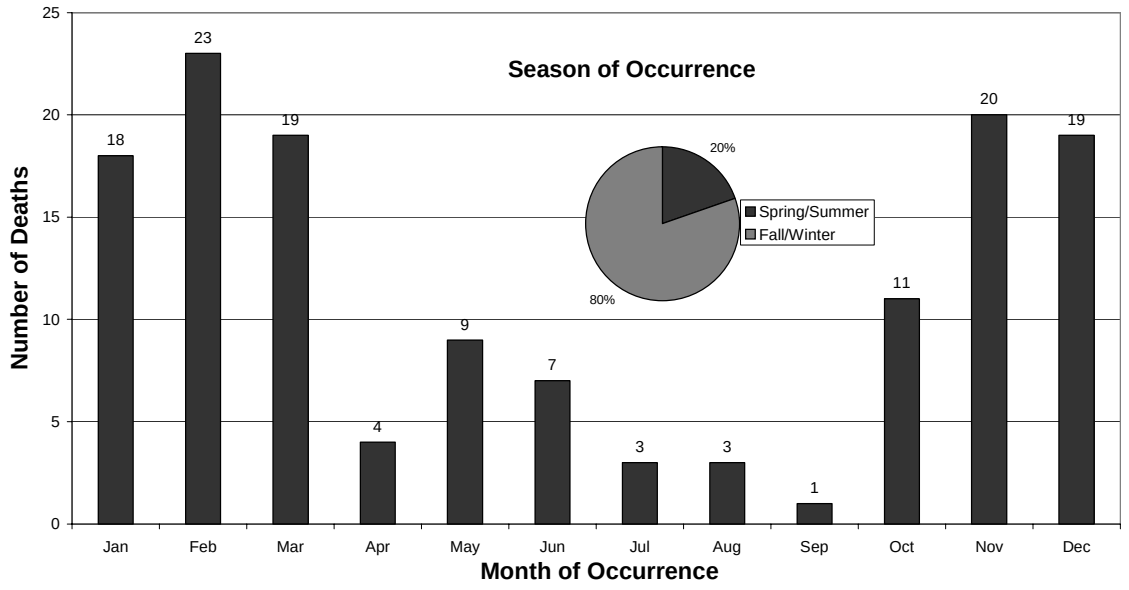
Fire-Related Deaths

Fire and burns are the fifth leading cause of unintentional injury-related death among children ages 14 and under. Children under the age of 4 are at greatest risk for fire-related death (CDC, 2004).

In Georgia, most of the fire-related incidents caused the death of more than one child. Although smoke alarms dramatically increase a child's chance of surviving a fire, recent research shows that children may not wake to the tone of the alarm. Most fires in Georgia occurred in homes with no smoke alarms. It is estimated that nearly half of all residential fires and 60% of fatalities occur in homes with no smoke alarms. Developing and rehearsing escape plans continues to be critical to the survival of a fire.

How does GA compare with the U.S. average? The crude rate of fire and burn related deaths for Georgia's children ages 0-17 at .91 per 100,000 is only slightly higher than the national average of .82 per 100,000.

Figure 3: Reviewed Deaths Due to Fire by Month of Occurrence, 1999-2004 (N=137)

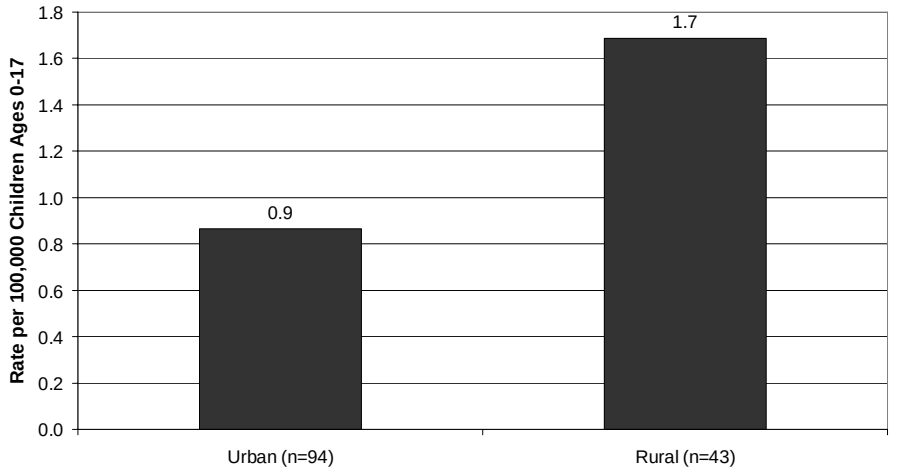


Findings:

- Eighty percent of fires resulting in death occurred between October and March; the remaining 20% happened during the spring and summer months

Two children, ages two and five, died in a house fire started by candles. One parent was at home asleep while the other parent was at work. The sleeping parent awoke to a house full of smoke but could not reach the children in time to save them.

Figure 1: Reviewed Fire-Related Death Rate (per 100,000 Children Ages 0-17) by Rural versus Urban Locale, 1999-2004



Findings:

- Ninety-four fire-related deaths were in urban areas and 43 were in rural areas.
- Over the six-year period, the rate of death from fire-related causes was 2.0 times higher in rural areas than in urban areas (1.7 vs. 0.9 per 100,000 children)

Facts:

- While 66% of Americans have an escape plan in case of a fire, only 34% of those with a plan have practiced it (National Fire Prevention Association [NFPA], www. nfpa.org)
- Eighteen to 24 year-olds are the least likely to have even developed an escape plan (NFPA, www.nfpa.org)

Table 1: Demographics of Reviewed Fire-Related Deaths, 1999-2004 (N=137)

Characteristic	Category	Number	(%)	Rate per 100,000 Children ages 0-17
Age	Infant	8	5.8%	1.0
	1 to 4	64	46.7%	2.1
	5 to 9	28	20.4%	0.8
	10 to 14	28	20.4%	0.7
	15 to 17	9	6.6%	0.4
Race/Gender	White Male	39	28.5%	0.9
	White Female	19	13.9%	0.5
	A-A Male	42	30.7%	1.8
	A-A Female	35	25.5%	1.5
	Other Male	1	0.7%	*
	Other Female	1	0.7%	*

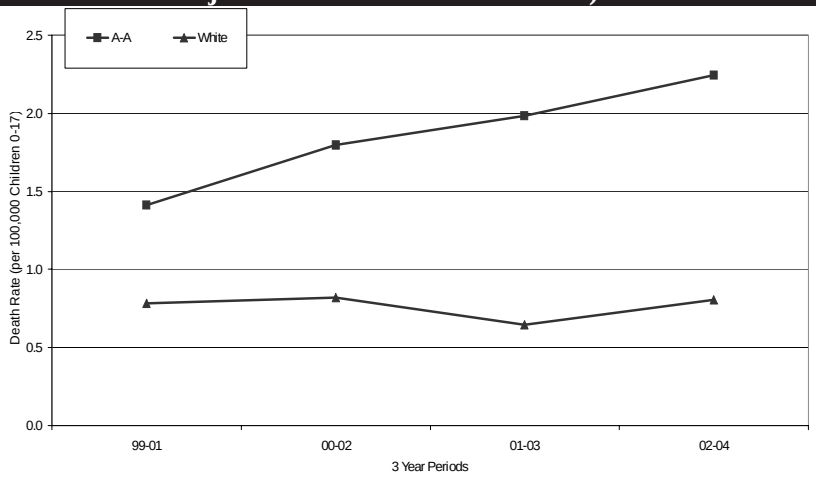
Finding:

- The fire-related death rates were highest among children ages 1-4 years old, African-Americans and males

Facts:

- Three in 10 reported home fires start in the kitchen - more than any other place in the home (NFPA, www.nfpa.org)
- Portable and fixed space heaters, including wood stoves, cause a disproportionate share of home heating fire deaths (NFPA, www.nfpa.org)

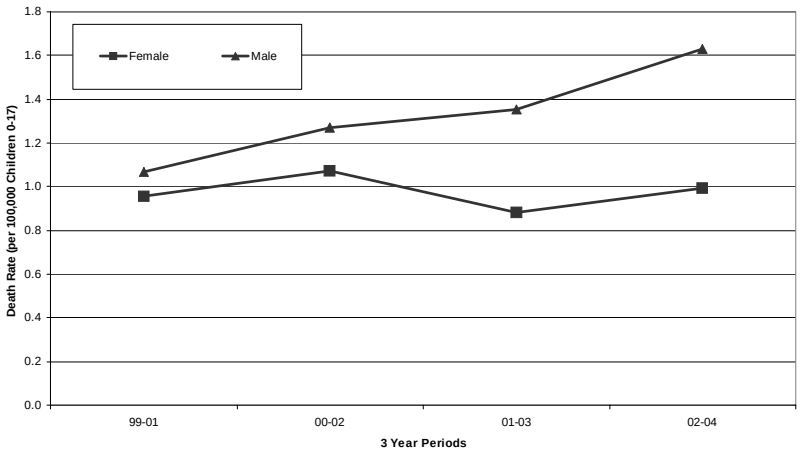
Figure X: Fire-Related Death Rates per 100,000 Children Age 0-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



Findings:

- Both the number and rate of fire-related deaths have increased over the six-year time period; however there are differences by race
- Fire-related death rates have increased by 59% among African-Americans (from 1.4 deaths per 100,000 children in 1999-2001 to 2.2 deaths per 100,000 in 2002-2004)
- The rate of fire-related deaths among Whites during the same time period has remained stable at 0.8 deaths per 100,000

Figure X: Fire-Related Death Rates per 100,000 Children Age 0-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



Findings:

- Males and females show different patterns of fire-related fatalities over time
- Among males, both the number of deaths and rates has increased steadily over time. The death rate increased by 53% , (from 1.1 to 1.6 deaths per 100,000 population) between 1999-2001 and 2002-2004
- Among females, the death rate has remained constant at approximately 1.0 death per 100,000 population

Table 1: Other Important Characteristics of Reviewed Fire-Related Deaths, 1999-2004 (N=137)

Characteristic	Category	Number	(%)
Fire Source	Matches/Lighter	19	13.9%
	Cigarettes	2	1.5%
	Combustibles	4	2.9%
	Space Heater	18	13.1%
	Faulty Wiring	16	11.7%
	Other (Stove, Candle, Etc.)	36	26.3%
	Unknown	42	30.7%
Smoke Alarm Present/Working	Present/Working	16	11.7%
	Present/Not Working	16	11.7%
	Present/Working Status Unknown	15	10.9%
	Not Present	13	9.5%
	Not Present, N/A	35	25.5%
	Unknown Presence/Working Status Unknown	40	29.2%
	NA/NA	2	1.5%
Construction of the Fire Site	Wood Frame	58	42.3%
	Brick/Stone	11	8.0%
	Trailer	40	29.2%
	Other	4	2.9%
	Unknown	18	13.1%
	N/A	6	4.4%
Multiple Fire Injuries or Death	Yes	110	80.3%
	No	18	13.1%
	Unknown	9	6.6%
Location of Decedent	Hiding	12	8.8%
	In Bed	39	28.5%
	Close to Exit	26	19.0%
	Other (Bedroom, Floor, Etc)	54	39.4%
	Unknown	6	4.4%

Findings:

- For most of the fires (80%), more than one child died
- Fire-related death occurred most commonly in wood frame construction (42%) and trailers (29%). The type of construction was unknown for 13% of fire-related deaths
- The causes of fires were varied. Similar proportions were caused by matches (13.9%), space heaters (13.1%) and faulty wiring (11.7%). Over half the deaths resulted from fires with unknown (30.7%) and other (26.5%) causes
- Only 13% of deaths occurred when a working smoke alarm was known to be present

Opportunities for Prevention:

- The chance of a child surviving a fire is increased through the presence of a working smoke alarm and an able-bodied adult who is not under the influences of drugs or alcohol
- A recent study shows that tone alarms may be less effective in waking children than hearing the voice of their mother. Some children in the study slept through the alarm even when it was played at 100 decibels at pillow level which is close to the same sound level as a power lawn mower
- The majority of fatalities take place in homes that are not equipped with alarms or in homes where the equipment is broken, dismantled, or missing a battery
- Test the smoke alarm after the children have gone to sleep to see if it is effective
- Let the children hear what a smoke alarm sounds like so they can readily identify it
- Practice the fire safety plan in the middle of the night so all members of the family can experience making an escape in the dark with little warning
- Consider keeping a baby harness near the crib so you can keep your hands free while helping another child
- Lighters are not child-proof, they are merely child-resistant. All lighters should be kept in a secured location away from children

Resources:

National Fire Protection Association
http://www.nfpa.org/
SAFE KIDS Worldwide
http://www.safekids.org
Georgia Firefighters Burn Foundation
http://www.gfbf.org/
U.S. Fire Administration
http://www.usfa.fema.gov/public/

Intentional Injury

From 1999 to 2004, local committees reviewed 533 child deaths resulting from intentional homicide and suicide. Males are more likely to be both victims and the perpetrators of intentional injury (homicide and suicide). Homicide is the leading cause of intentional injury deaths to infants (under the age of one) in the United States. In Georgia, the number of infant homicides during this review period (72) is 1.67 times higher than the number of motor vehicle-related deaths to infants (43). Violence is a major public health problem in the United States. Homicide and suicide are the second and third leading causes of death, respectively, for adolescents every year in the U.S. Further reductions in childhood injury rates will require that injury prevention advocates and leaders work together to provide the ingenuity to devise new safety devices and programs, incentives to persuade the public to adopt a "culture of safety" as a social norm, and the political will to challenge the status quo and engage the public interest.

Homicide

Nationally, males are about six times more likely than females to die from homicide. The Bureau of Justice Statistics reports that the risk of homicide is greater in the first year of life than in any other year of childhood before age 17. Although many perpetrators of teen homicides are teens themselves, two-thirds are age 18 or older. Gang violence has been associated with many teen deaths. Gang homicides, more often than other homicides, are usually attributed to fear and retaliation. Gang homicides occur more often in the street than non-gang homicides, and they often involve unidentified assailants. While school-related homicides have received substantial attention in the media, school shootings still remain relatively rare events. From 1990 to 2000, approximately 52 youth homicides have occurred in American schools (Pediatrics, 2005). While clearly a serious issue, the number of children and youth homicides that are school-related make up just one percent of the total number of child and youth homicides in the United States (CDC, 2006).

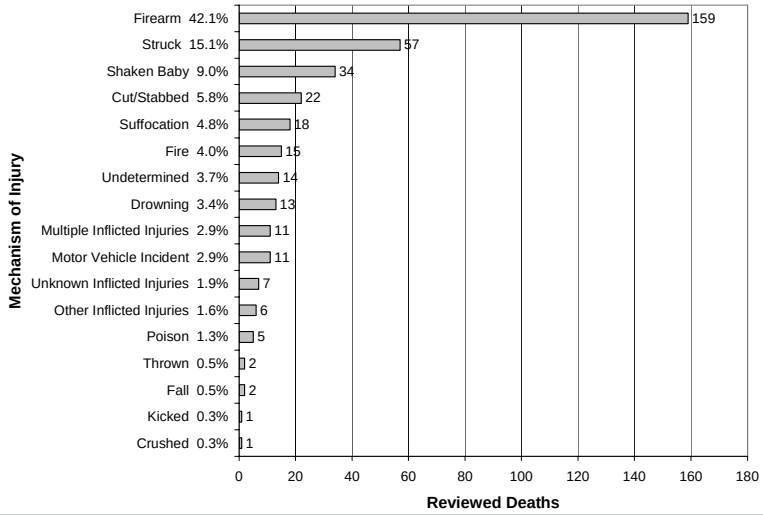
How does Georgia compare with the U.S. average?

From 1999 to 2003, Georgia's child death rate due to homicide was 3.14 per 100,000 population. The U.S. rate for this same period was 2.54, which is 24% lower than the state rate.

Findings:

- Of the 378 homicide deaths of children between 1999 and 2004, 159 (42%) were caused by firearms
- The number of children killed by firearms (159) is 1.4 times higher than the total number of children who were beaten/ struck (57), shaken (34), and cut/stabbed (22)

Figure 1: Reviewed Homicide Deaths by Mechanism of Injury, 1999-2004 (N=378)



Fact:

- The CDC reports that the use of firearms in homicide peaks during adolescence and young adulthood. From 1999 to 2004, there were 6,722 homicides perpetrated by children under the age of 17 with firearms, and 2,995 homicides without firearms (Bureau of Justice Statistics)

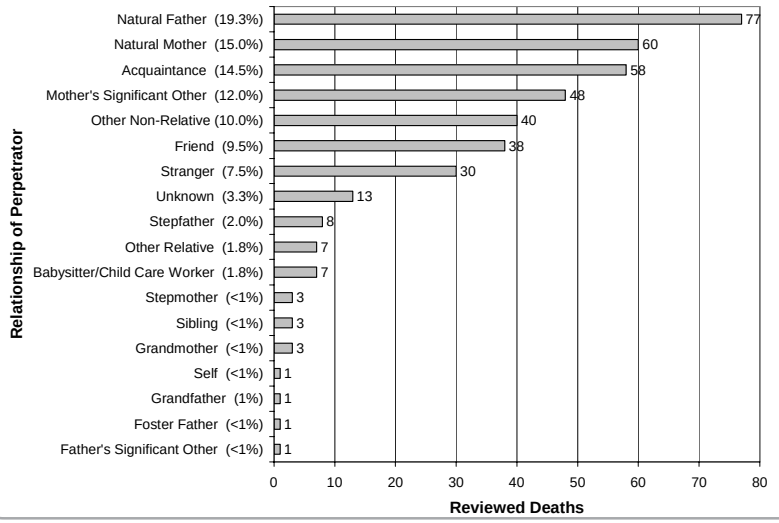
Opportunities for Prevention:

- Educate new parents and caregivers about the dangers of shaking an infant, and appropriate methods of coping with infant-related stress
- Reduce access to firearms and other weapons for all children
- Promote in-school and after-school programs teaching conflict resolution, impulse control, anger management and empathy (e.g. Second Step – violence prevention program)

Findings:

- Thirty-four percent of the homicide victims (137) were killed by their natural parent, and 15% were killed by a step-parent or parent's significant other
- Ninety-six children were killed by one of their friends or acquaintances (24%)

Figure 3: Relationship of Perpetrator Among Reviewed Homicide Deaths, 1999-2004



Facts:

- Infants are most likely to be killed by their mother in the first week of life, but are more likely to be killed by a male (usually their father or stepfather) after that period. Males are generally more likely than females to be killed during the first year of life (Child Trends Data Bank)
- The Bureau of Justice Statistics reports that male-on-male and male-on-female child homicides are almost twice as high as female-on-male and female-on-female child homicides since 2000

Opportunities for Prevention:

- Increase support for violence prevention programs
- Provide alternative after-school programs for children
- Implement programs to assist overwhelmed parents and caregivers with childcare issues

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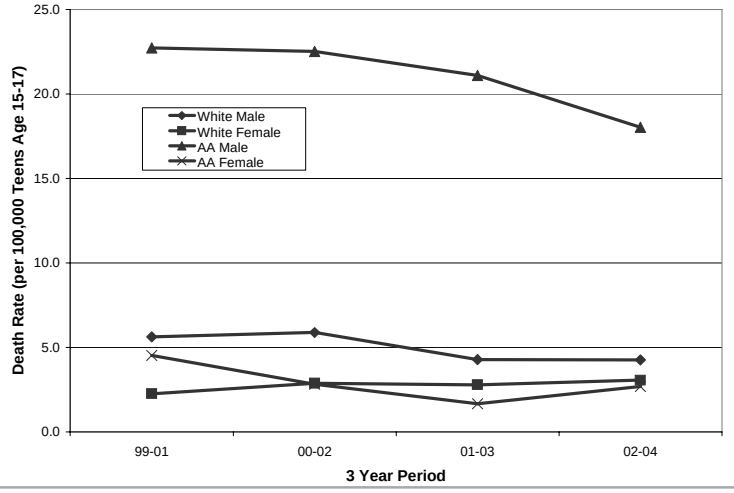
Findings:

- African-American males continue to have the highest rate of death from homicide. While this group has had a 21% decrease over the five year time period, their rate remains more than 4 times higher than that of other race/gender groups
- African-American females showed the largest decrease in homicide rate, declining 41% from 4.5 per 100,000 population in 1999-2001 to 2.7 in 2002-2004
- The homicide rate declined by 25% in White males from 5.6 to 4.2 per 100,000 population.
- White females were the only group to show an increase over the 5-year time period, with a 35% increase from 2.3 to 3.5 homicides per 100,000 population

Figure 2: Homicide Death Rate per 100,000 Teens Age 15-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate data)



Fact:

- Nationally, the homicide rate for African-American male teens is 16 times higher than the rate for non-Hispanic White male teens, and 2 times higher than the rate for Hispanic male teens

Opportunities for Prevention:

- Learn and teach children anger management skills, and demonstrate behavior which devalues bullying and violence
- Support bullying prevention and gang awareness programs in schools and communities

Teenaged friends engaged in argument culminating in shooting death of victim

Table 1: Demographics of Reviewed Homicide Deaths, 1999-2004 (N=378)

Demographics	Category	Number	(%)	Rate per 100,000 Children ages 0-17
Age	Infant	72	19.0%	9.3
	1 to 4	99	26.2%	3.3
	5 to 9	35	9.3%	0.9
	10 to 14	50	13.2%	1.3
	15 to 17	122	32.3%	5.6
Race/Gender	White Male	81	21.4%	1.9
	White Female	64	16.9%	1.6
	A-A Male	148	39.2%	6.3
	A-A Female	80	21.2%	3.5
	Other Male	5	1.3%	*
	Other Female	0	0.0%	*

Findings:

- The highest rate of homicides is among infants, with a rate of 9.3 per 100,000 population. This rate is 64% higher than the rate among teens between the ages of 15 and 17 years
- Homicide rates are higher among African-Americans. The rate for African-American males is 3.3 times higher than for White males, and the rate for African-American females is 2.2 higher than for White females
- Among both African-Americans and Whites, homicide rates are higher for males than for females

Facts:

- Youth homicide is a serious problem in large urban areas, especially among African-American males. Homicides are the number one cause of death for African-American and Hispanic teens. Yet when socio-economic status is held constant, differences in homicide rates by race become insignificant (MCH Child Death Review)
- Nationally, males are overwhelmingly the perpetrators in homicides involving youth, accounting for more than 90% of incidents involving those 10-17 years of age. Moreover, handgun homicides committed by young males (15-18) between 1980 and 1995 increased by more than 150%, while the rate for females remained low and stable

Prevention Gap:

- Georgia offers several prevention programs such as First Steps (which provides expectant parents and parents of newborns with emotional support, parenting education, and referrals to community services for a minimum of three months) and Healthy Families (which provides intensive, flexible, and culturally sensitive services for up to five years). These programs improve parental knowledge and confidence in infant and child care, and reach thousands of families each year. More support should be dedicated to ensuring that these types of programs can be fully staffed and expanded to reach families and children in every county

12-year old male was throwing eggs at 15-year old during Halloween. 15 year old shot 12 y/o in chest because he would not stop throwing eggs at him

Statewide Opportunities for Prevention

- Support bullying and violence prevention programs in every school system. A number of risk factors have been associated with bullying behaviors: child poverty; family violence and/or childhood traumas (physical and/or sexual abuse); racism, forms of discrimination; abuse of alcohol, drugs and other substances; inconsistent and/or excessive discipline practices; media violence; academic failure; and abnormal neurological functioning
- Recognize youth at risk for becoming perpetrators or victims of homicide. Major risk factors include: youth active in drug and gang activity, with prior histories of early school failure, delinquency and violence; easy availability of and access to firearms; youth living in neighborhoods with high rates of poverty, and school failure; social isolation and family violence; youth with little or no adult supervision; and prior witnessing of violence. Youth homicides usually occur in connection with an argument or dispute

Resources:

National Youth Violence Prevention Resource Center
http://www.safeyouth.org/

National Center for Victims of Crime
http://www.ncvc.org

National Center for Injury Prevention and Control (NCIPC)
http://www.cdc.gov/ncipc/

Suicide Deaths

Each year in the United States, thousands of teenagers commit suicide. There has been a significant increase in youth suicide, over 300% since 1950. While the suicide rate for high school students has remained relatively constant for the past ten years, the suicide rate for middle school students (age 10-14), has increased more than 100% during the same time period. In the United States, more than four times as many male youth die by suicide, but females attempt suicide more often and report higher rates of depression. Younger children may be less likely to complete suicide because they do not have the cognitive ability to plan and carry out a suicide attempt, but research also suggests that the increase in suicide rates among younger children may be due to the increased likelihood of exposure to critical risk factors, such as serious depression, drugs and alcohol. Studies have found that for younger children exposed to such risk factors, the suicide rate is similar to that for older teens.

How does Georgia compare with the U.S. average?

From 1999 to 2003, Georgia's child death rate due to suicide was 1.27 per 100,000 population. The U.S. rate for this same period was 1.38, which is 8% higher than the state rate.

Finding:

- Firearms and suffocation (hanging) combined were used in 92% of the youth suicides in Georgia

Fact:

- From 1992 to 2002, the suicide rate by firearm decreased, and suicide by suffocation increased (American Association of Suicidology)

Opportunity for Prevention:

- Reduce access and availability of firearms to children and teens. Firearms remain the most commonly used suicide method among youth

16 year old sibling, child outside playing "army' with friends. Child had disagreement, went inside, got shotgun, put it in his mouth and killed himself

Figure 1: Reviewed Suicide Deaths by Mechanism of Death, 1999-2004 (N=155)

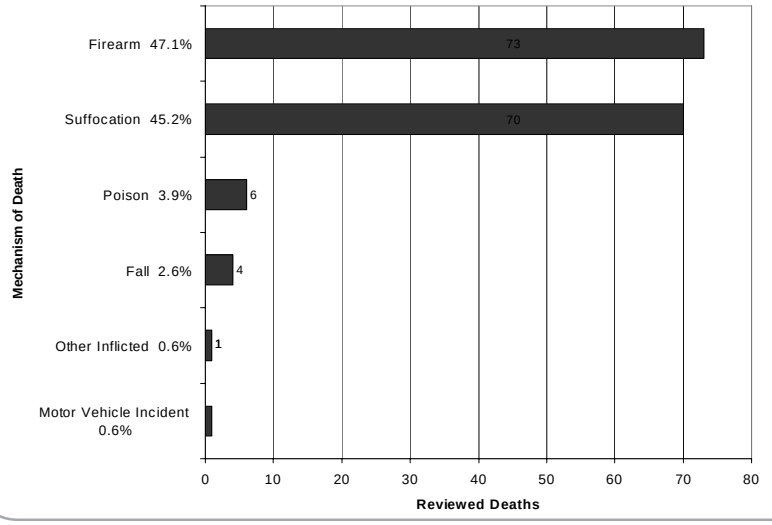
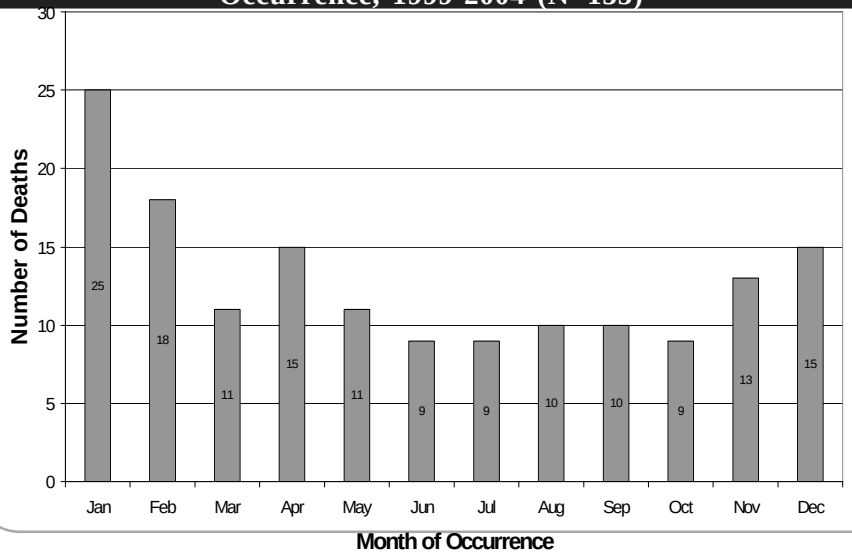


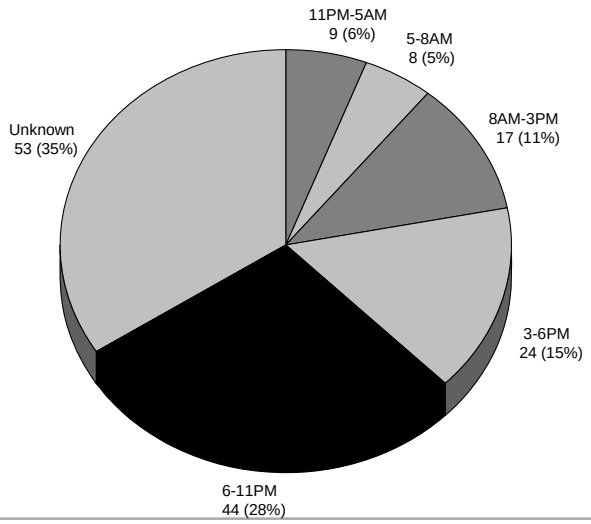
Figure 4: Reviewed Suicide Deaths by Month of Occurrence, 1999-2004 (N=155)



Finding:

- When the time of death was known and reported, the most common time period was in the late evening hours between 6 and 11pm (n=44) and in the early evening hours between 3 and 6pm (n=24)

Figure 3: Time of Death Among Suicide Deaths, 1999-2004 (N=155)



Facts:

- Research has shown that most adolescent suicides occur after school hours and in the teen's home
- Teens aged 15 to 16 who do not eat dinner with their parents on a regular basis are twice as likely to have attempted suicide as those who do (Annie E. Casey/ Kids Count Brief, 2005)

Opportunities for Prevention:

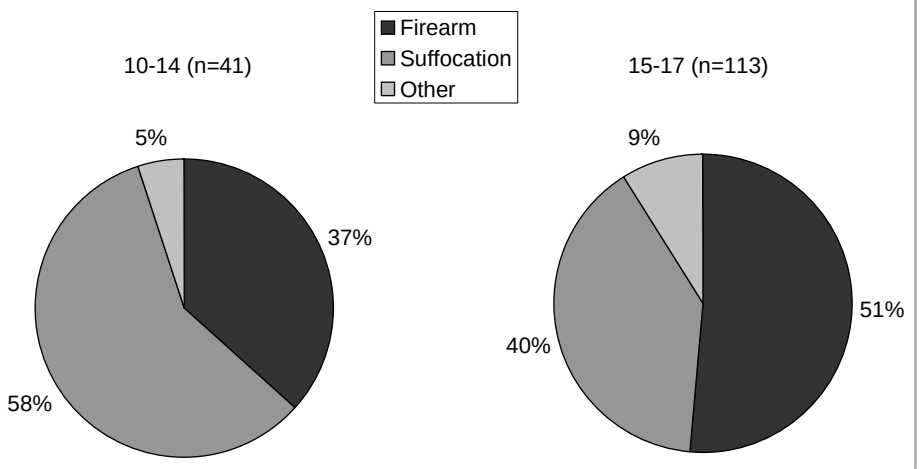
- Increase awareness of suicide warning signs, and promote prompt action when warning signs are recognized among parents, caretakers, school personnel and communities
- Increase availability and accessibility of mental health services to children and youth
- Family support and parent education programs—which are often geared to parents with very young children—should be redesigned to meet the needs of all families. Research shows that youngsters do better when parents have the kinds of managerial skills that allow them to locate and utilize programs and services (Furstenberg, 1999)

When decedent arrived home from school his mother began talking to him about his failing grades in school. He was given a list of chores to do. He went into his room. After a brief period of time his mother went to check on him and discovered him hanging by the neck in his closet. He used his karate belt to hang himself.

Findings:

- Children under age 15 are most likely to kill themselves by hanging
- Children ages 15 years and older most commonly commit suicide with a firearm

Figure 5: Mechanism of Suicide by Age Group, 1999-2004 (n=154)



Fact:

- The "Suicide in Georgia: 2005" fact book states that, among middle school students, 13% had reported that at some time in their lives, they had made a plan to commit suicide, and 8% had attempted it. Among high school students, 13% reported that at some time in the previous year (2003), they had made a plan to commit suicide and 9% had attempted it (Georgia Division of Public Health)

Opportunities for Prevention:

- Support suicide screening and intervention in elementary and middle schools statewide
- Closely monitor children for changes in behavior, such as a loss of interest in favorite things, changes in school performance, or withdrawal from friends and family

Findings:

- White males have the highest rates of suicide (58.1%)
- Older teenagers are most at risk for suicide (72.9%)

Table 1: Demographics of Suicide Deaths, 1999-2004 (N=155)

Demographics	Category	Number (%)		Rate per 100,000 Children ages 0-17
Age	5 to 9	1	0.6%	*
	10 to 14	41	26.5%	1.1
	15 to 17	113	72.9%	5.2
Race/Gender	White Male	90	58.1%	2.1
	White Female	31	20.0%	0.8
	A-A Male	24	15.5%	1.0
	A-A Female	6	3.9%	0.3
	Other Male	4	2.6%	*
Gender	Male	118	76.1%	1.7
	Female	37	23.9%	0.6
Race	African-American	30	19.4%	0.6
	White	121	78.1%	1.5

Facts:

- If a male teen has attempted suicide in the past, he is more than thirty times more likely to complete suicide in a subsequent attempt, while a female with a past attempt has about three times the risk to complete another suicide attempt. Approximately a third of teenage suicide victims have made a previous suicide attempt
- Stressful life events often precede a suicide and/or suicide attempt. Such stressful life events include getting into trouble at school or with a law enforcement agency; fighting or breaking up with a boyfriend or a girlfriend; and fighting with friends. They are rarely a sufficient cause of suicide, but they often act as precipitating factors in young people

Opportunity for Prevention:

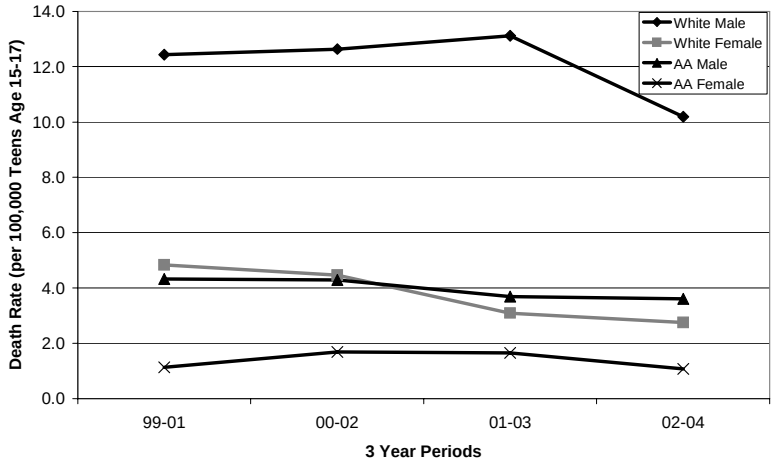
- Promote suicide prevention through risk reduction measures that enhance resilience or protective factors. Some identified protective factors are: learned skills in problem solving, impulse control, conflict resolution, and nonviolent handling of disputes; family and community support; access to effective and appropriate mental health care and support for help-seeking; restricted access to highly lethal methods of suicide; and cultural and religious beliefs that discourage suicide and support self-preservation instincts

Victim was at home with family and friends when she was told to go clean her room. After several minutes, she went upstairs alone to her brother's room to watch TV. Victim's little brother came into this room approximately 15 minutes later and found victim had hung herself from bedpost on bunk bed.

Findings:

- Suicide rates and numbers have decreased in all race and gender groups over the time period. White females had the greatest percent decrease (43%), with rates declining from 4.8 suicide deaths per 100,000 population in 1999-2001 to 2.7 in 2002-04
- White males showed the second largest percent decrease (18%), with rates going from 12.4 to 10.2 suicide deaths per 100,000 population. However, White males remain approximately three times more likely than all other teens to commit suicide

Figure 2: Suicide Death Rate per 100,000 Teens Age 15-17, Three Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



- Suicide rates have decreased by smaller amounts for African-Americans; among African-American males the rate decreased by 17% and among African-American females, the suicide rate decreased by 5%

Facts:

- Overall suicide rates for 15-19 year olds have more than doubled since the 1950s, but have declined 34% nationally since peaking in 1994
- Although their rates are lower than for White youth, African-American youth (age 10-14) showed the largest increase in suicide rates between 1980 and 1995 (233%)

Opportunities for Prevention:

- Use culturally appropriate suicide awareness and prevention efforts in schools and communities
- Recognize risk factors for suicide: impulsive or aggressive behavior, use of alcohol or drugs, family instability or significant family conflict, presence of a psychiatric disorder, talk of suicide, and exposure to another's suicide

The subject left a note advising that he planned to commit suicide. He was upset over a break up with a girl-friend. He was a star baseball player and the incident was completely unexpected to the family.

Prevention Gap:

- The Georgia Suicide Prevention Plan, developed in 2001, aims to prevent deaths due to suicide and other self-harmful acts by promoting awareness that suicide is a serious public health problem and that many suicides are preventable, to develop broad-based support of suicide prevention, and to develop and implement strategies to reduce the stigma associated with being a consumer of mental health, substance abuse and suicide prevention services. Easily accessible and widely available mental health counseling in schools should be supported as a part of the prevention efforts

Statewide Opportunities for Prevention:

- Provide support services for youth experiencing stress, confusion, depression, substance abuse, and/or behavioral problems
- Organize and involve local communities in suicide prevention planning
- Promote overall mental health among school-aged children by reducing early risk factors for depression, substance abuse and aggressive behaviors and building resiliency. In addition to the potential for saving lives, youths benefit from an overall enhancement of academic performance and a reduction in peer and family conflict
- To detect youth most likely to be suicidal, confidentially screen for depression, substance abuse, and suicidal ideation. If a youth reports any of these, further evaluation of the youth can take place by professionals, followed by referral for treatment as needed
- Caution should be used in the development of suicide prevention programs for youth because researchers have found that some types of suicide prevention efforts may be counterproductive. For example, some school-based youth suicide awareness and prevention programs have had unintended negative effects (National Institute of Mental Health)

Resources:

Georgia Suicide Prevention Plan
http://georgiasuicidepreventionplan.org/

Suicide Prevention Action Network
http://www.spanusa.org/GSPP.html

Firearm-Related Deaths

On an annual average, firearms kill 5,285 children in the United States.

At least 25 million American households have handguns and 50% of owners keep them loaded.

Nearly two-thirds of firearm-owning parents with school-age children believe they keep their firearm safely away from their children. However, fewer than half of the U.S. families with firearms and children store those firearms locked (either in a locked place or secured with a trigger lock) and separate from ammunition. Seventeen states currently have Child Access Prevention legislation to regulate child access and usage of firearms (including Florida and Virginia). Georgia does not currently have a Child Access Prevention law, negligent owner law, or a minimum age for possession of rifles or shotguns. In addition, Georgia children under age 18 can possess a firearm if they are at their own residence, and under the control of their parent or guardian.

How does Georgia compare to the U.S. average? From 1999 to 2003, Georgia's child death rate due to firearms was 2.09 per 100,000 population. The U.S. rate for this same period was 1.85, which is 13% lower than the state rate.

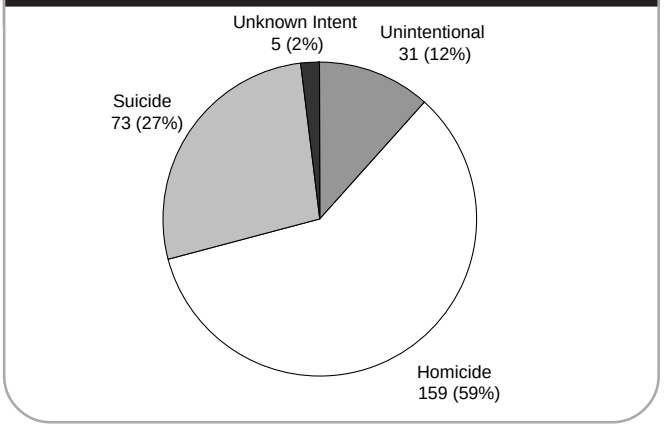
Findings:

- Eighty-six percent of all firearm-related deaths of children were intentional. Of these, 159 (59%) were homicides and 73 (27%) were suicides
- Thirty-one (12%) firearm-related deaths were unintentional

Facts:

- Numerous studies have shown that there is a clear association between the presence of firearms in the home and suicides
- Unintentional shootings among young people most frequently happen when children or youth obtain a gun and play with it, not realizing that it is real, or loaded, or pointed at themselves or a friend

Figure 1: Reviewed Firearm-Related Deaths by Intent, 1999-2004 (N=268)



Opportunities for Prevention:

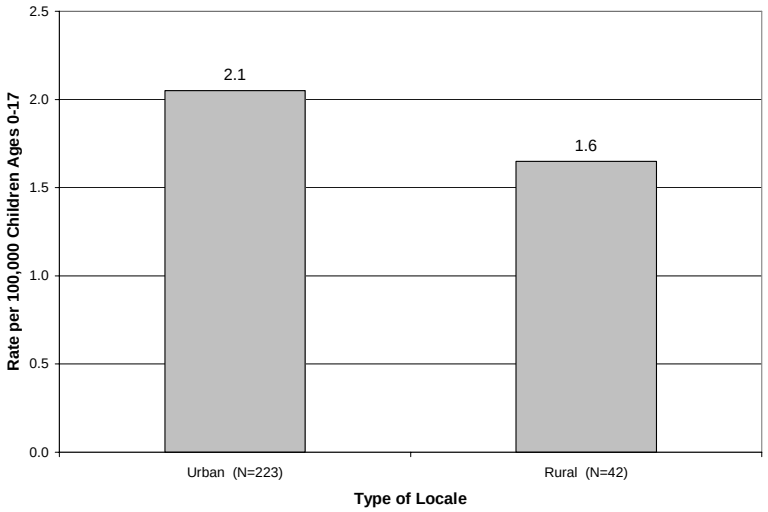
- Practice and promote safe gun storage in every community. If guns were not present in the home, if they were designed with safety features making them more difficult for children to fire, or if they were stored safely, the risk to young children could be virtually eliminated
- Elected officials, faith leaders, and educators all can play key roles in enforcing social norms against youth gun use. Poverty, discrimination, and violence are often linked, therefore, each should be addressed in any plan to reduce violent behavior

This 13 year old female, after arguing with her mother and being grounded from seeing her boyfriend, went to her mother's bedroom closet and retrieved a pistol. She then called brother into room to say goodbye and shot herself in the abdomen.

Finding:

- Firearm-related deaths were 24% more likely to occur in an urban county (2.1 urban firearm-related deaths vs. 1.6 rural firearm-related deaths)

Figure 5: Reviewed Firearm-Related Death Rate (per 100,000 Children Ages 0-17) by Urban versus Rural Locale, 1999-2004



Facts:

- Gang problems occur most often in larger cities; however, many smaller cities do experience gang conflict to a lesser degree (Center for the Study and Prevention of Violence, 1997)
- The lack of economic opportunities for inner-city youth has led many gang members to continue gang membership rather than "growing out" of their gangs and entering conventional adult roles (ibid.)

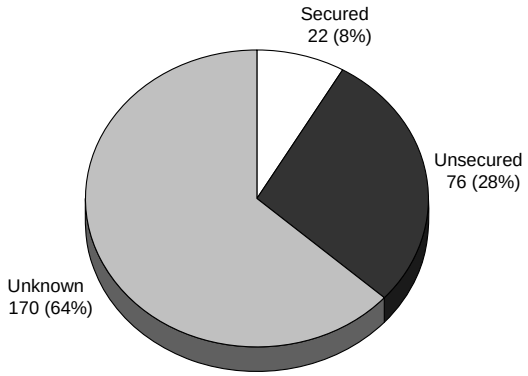
Opportunity for Prevention:

- Promote programs that teach effective parenting skills among economically disadvantaged families. Research shows that children at risk for injury often come from disadvantaged homes and tend to be poorly supervised. In addition, parents of injured children tend to be less educated, emotionally overwhelmed, lack energy, and are less involved with their children (Journal of Pediatric Psychology, 1986)

Findings:

- The security status was unknown for almost 2/3 of firearm-related child deaths
- When the status of the firearm was known (98), it was most often in an unsecured (i.e. easily accessible) location (78%)

Figure 2: Reviewed Firearm Deaths by Status of Firearm Security, 1999-2004 (N=268)



Facts:

- Although some oppose safe storage because they believe it makes guns less accessible for self-defense, this concern must be weighed against the risk that a child could find and use guns that are not stored safely
- Safe storage gun practices have the potential to decrease unintentional shootings by making guns less accessible to children and youth
- Guns are most likely to be stored loaded and unlocked in households in the South, in households with teenagers, and in households where someone is employed in law enforcement (American Journal of Public Health, April 2000)

Opportunity for Prevention:

- Support protective gun safety manufacturing. Relatively inexpensive product modifications could make guns more difficult for children to fire and could reduce unintentional firearm injuries caused when children do not realize a gun is loaded. More sophisticated devices that allow only the rightful owners of guns to fire them could prove even more useful in reducing youth firearm injury and death, because they could keep youth from being able to intentionally fire guns obtained wrongfully from family, friends, illegal gun markets, or through theft

Sibling accidentally shot decedent thinking gun was a toy. Found gun on apartment grounds playground trash can. Gun was loaded

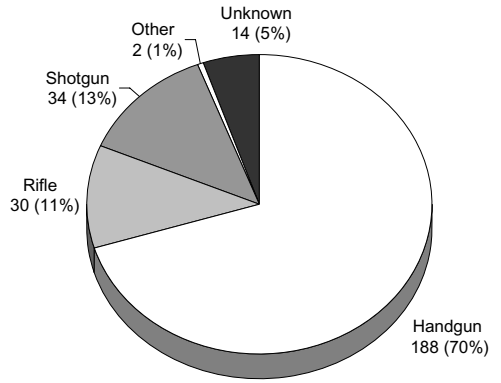
Finding:

- Handguns were used most often in firearm-related deaths in Georgia (70%), with shotguns and rifles together being used only 24% of the time

Opportunity for Prevention:

- Keep handguns away from children by explaining the potential for serious injuries. While gun safety programs frequently warn children not to touch guns, there should be more consideration that the "don't touch" message alone may enhance the allure of guns

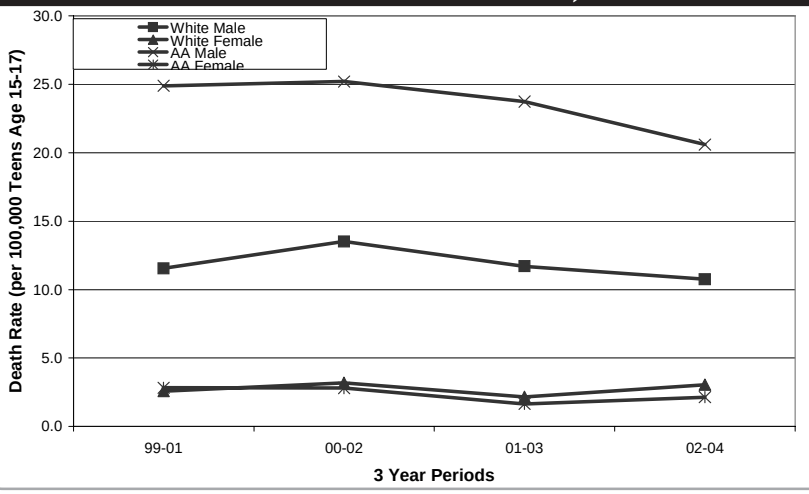
Figure 3: Reviewed Firearm-Related Deaths by Type of Firearm, 1999-2004 (N=268)



Findings:

- Firearm-related death rates have remained relatively constant over the 5-year time period
- Rates are highest among males, particularly among African-American males, whose rate is approximately twice that of White males
- The rates for White and African-American females have remained similar over the five years

Figure 4: Firearm-Related Death Rate per 100,000 Teens Age 15-17, Three-Year Moving Average, 1999-2004 (Based on Adjusted Death Certificate Data)



Fact:

- Research consistently shows that parents remain a powerful influence on adolescents and young adults, and can play an important role in fostering healthy development and preventing risky behaviors (Simpson, 2001; National Council of Economic Advisors, 2000). In particular, parent involvement is a major influence in helping young people avoid drinking and drug use, violent behavior, and the kind of mental health problems that lead to suicide attempts

Opportunity for Prevention:

- Multi-pronged efforts are needed to strengthen parents' and other caretaking adults' involvement with young people; fortify youth development agencies and other community organizations that serve adolescents and their parents; and seize opportunities to introduce or bolster policies that concern at-risk youth**.** Many societal factors affect the well-being of young people; strategies to keep them healthy and safe require proactive, coordinated efforts (H.H.S., 2004)

Table 1: Demographics of Reviewed Firearm-Related Deaths, 1999-2004 (N=268)

Demographics	Category	Number	(%)	Rate per 100,000 Children ages 0-17
Age	Infant	1	0.4%	0.1
	1 to 4	19	7.1%	0.6
	5 to 9	17	6.3%	0.5
	10 to 14	60	22.4%	1.6
	15 to 17	171	63.8%	7.9
Race/Gender	White Male	101	37.7%	2.4
	White Female	32	11.9%	0.8
	A-A Male	111	41.4%	4.7
	A-A Female	20	7.5%	0.9
	Other Male	4	1.5%	*
	Other Female	0	0.0%	*
Use of Firearm at Time of Injury	Shooting at other person	131	48.9%	
	Shooting at self	76	28.4%	
	Target shooting	2	0.7%	
	Playing	27	10.1%	
	Other	13	4.9%	
	Unknown	19	7.1%	
Person handling the Firearm	Decedent	84	31.3%	
	Acquaintance	72	26.9%	
	Family Member	40	14.9%	
	Stranger	39	14.6%	
	Unknown	33	12.3%	

Findings:

- The firearm-related death rate was highest among teens age 15-17 years; it is 5 times higher than the rate for 10-14 year
- African-American males have the highest firearm-related death rate (4.7 deaths per 100,000 population), which is twice as high as the rate for White males
- At the time of the death, 131 (49%) perpetrators were intentionally shooting the gun at another person (the victim); 76 (28%) were shooting at themselves

Fact:

- In states where fewer homes have guns, there are fewer accidental firearm deaths and fewer teen suicides. In comparison to the four states with the lowest levels of gun prevalence, the four states with the highest prevalence had twice as many teen suicides and about 10 times as many gun-related accidental deaths (National Council of Economic Advisors, 2000)

Prevention Gaps:

- A Child Access Prevention law in Georgia could possibly protect children from unintentional shooting deaths. Stiff penalties for negligent gun storage and thorough marketing of the law to all communities, as seat belt requirements are marketed, would provide education and may help to change the lax gun storage practices of many families

Statewide Opportunities for Prevention:

- Secure all firearms in a safe, secure, and childproof location. Store firearms and ammunition in separate locations
- Promote development of school and community-based risk reduction firearm safety programs for children, parents and other caretakers
- Promote and train gun owners on the use of firearm safety devices, including trigger locks and lock-boxes
- Teach and promote conflict resolution skills as well as personal firearm safety precautions for children

Resources:
Center to Prevent Handgun Violence
www.handguncontrol.org
National Rifle Association Safety Guide for Parents
www.nrahq.org/safety/eddie/infoparents.asp

Race, Ethnicity and Disproportionate Deaths

The 2005 estimated population in Georgia is 9,072,576 people. While the U.S. population grew by 13.1% from 1990 to 2000, the state of Georgia grew twice as fast, gaining 26.4% more residents. About 2.7 million are African-Americans (29.6% of the state population), compared to 12.8% of the U.S. population. Approximately 6 million Georgians are non-Hispanic Whites (66.4% of the state population), compared to 80.4% of the U.S. population. There are about 646,568 Georgians of Hispanic ethnicity. Of the total population in Georgia, about 26.4% are children (US Census Bureau).

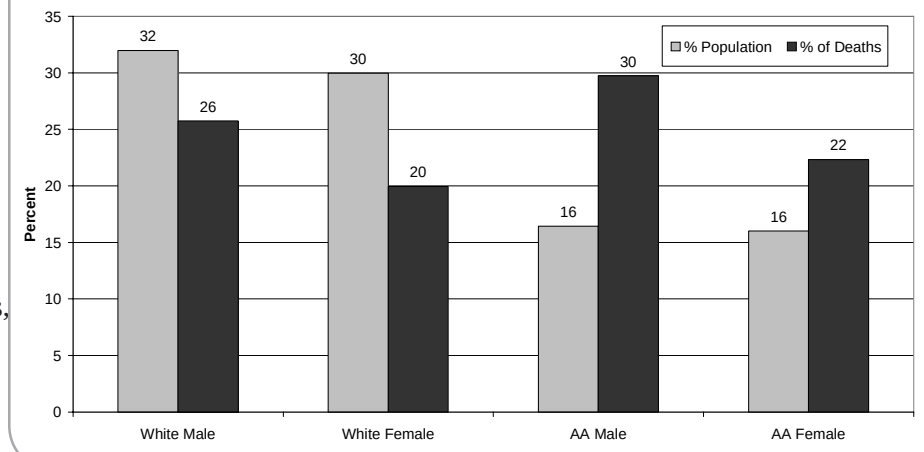
The infant mortality rate (the death rate for babies younger than one year of age) has continued to steadily decline over the past several decades, from 26.0 per 1,000 live births in 1960 to 6.9 per 1,000 live births in 2000. The United States ranked 28th in the world in infant mortality in 1998. This ranking is due in large part to disparities which continue to exist among various racial and ethnic groups in this country, particularly African-Americans. Infant mortality among African-Americans in 2000 occurred at a rate of 14.1 deaths per 1,000 live births. This is more than twice the national average of 6.9 deaths per 1,000 live births. The leading causes of infant death include congenital abnormalities, pre-term/low birth weight, Sudden Infant Death Syndrome (SIDS), problems related to complications of pregnancy, and respiratory distress syndrome.

Data generated by death certificates are presented here to illustrate certain health disparities between racial and ethnic groups. Race is divided into three groups: "White", "African-American", and "Other" (which refer to children of Asian, Native American, or Pacific Islander origin). Hispanic ethnicity is omitted from the graphs, unless otherwise noted.

Findings:

- White male infants are one-third (32%) of the infant population, but only one-fourth (26%) of the infant deaths, compared to African-American male infants, who are 16% of the infant population, but almost one-third (30%) of the infant deaths
- White female infants are almost one-third (30%) of the infant population, but less than one-fourth (20%) of the infant deaths, compared to African-American female infants, who are 16% of the infant population, but almost one-fourth (22%) of the infant deaths

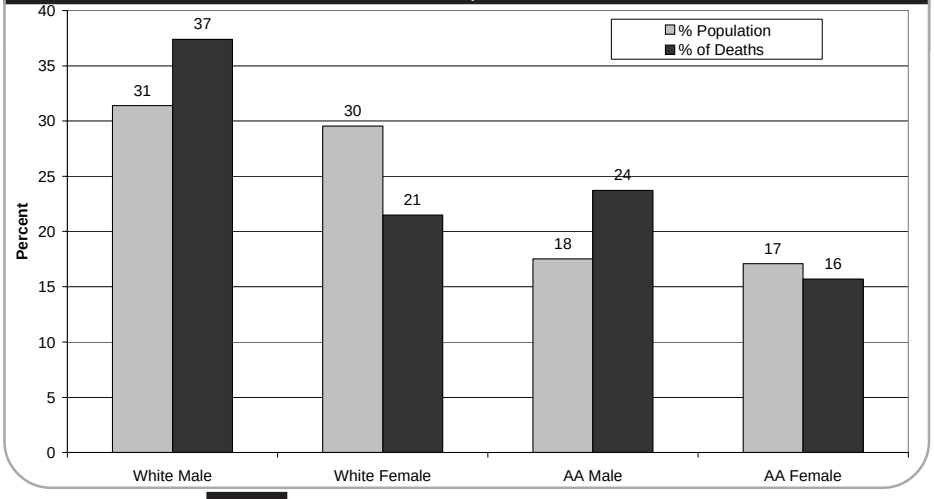
Figure 1. Deaths to Children <1 and Percent of Population in Georgia by Race and Gender Based on Adjusted Death Certificates, 1999-2004



Findings:

- White males are 31% of the child population, and 37% of the child deaths (a 6% difference); while African-American males are 18% of the child population, and 24% of the child deaths (also a 6% difference)
- White females are 30% of the child population, and only 21% of the child deaths (a difference of 9%), compared to African-American females, who are 17% of the child population, but 16% of the child deaths

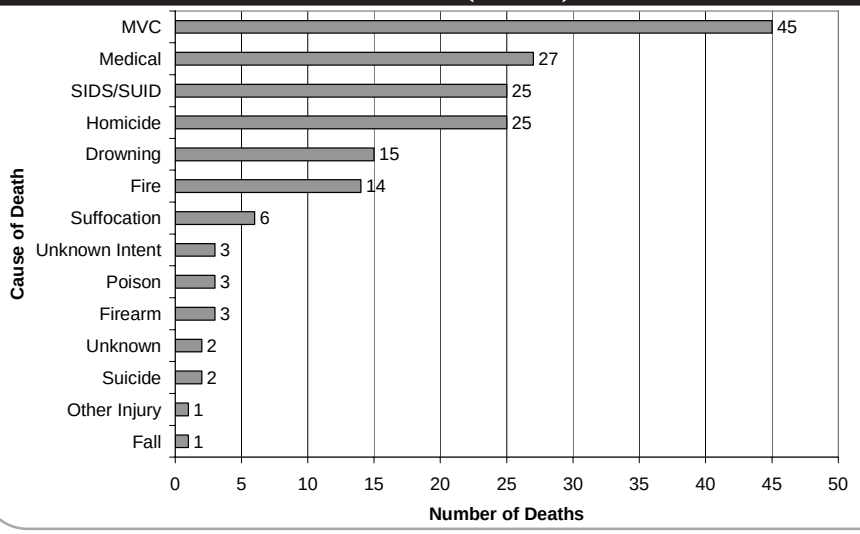
Figure 2: Deaths to Children 1-17 and Percent of Population in Georgia by Race and Gender Based on Adjusted Death Certificates, 1999-2004



Findings:

- Among deaths eligible for review, motor-vehicle deaths are the leading cause of death for Hispanic children (45)
- Hispanic children are equally likely to be victims of medical deaths (27), sleep-related infant deaths (25), and homicide (25)

Figure 1: Reviewed Hispanic Deaths by Cause of Death, 1999-2004 (N=172)



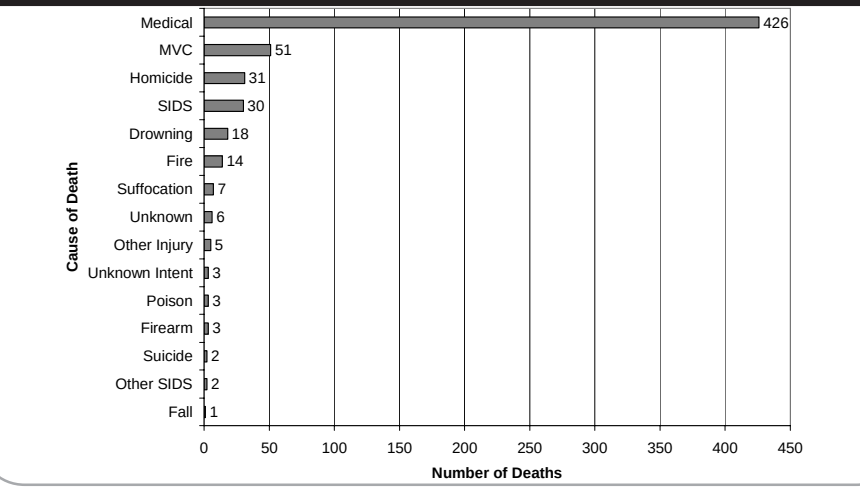
Finding:

- Among death certificate-reported causes of death, Hispanic children are most likely to die from medical causes, such as congenital abnormalities and prematurity

Fact:

- Hispanics have a lower infant mortality rate compared to non-Hispanic Whites and African-Americans. One study found that healthy birth outcomes among Hispanics were due to higher education, no preterm delivery history, prenatal care, marriage, and no daily tobacco use

Figure 2: Deaths to Hispanic Children Under Age 18 in Georgia, All Causes Based on Adjusted Death Certificate, 1999-2004 (N=602)



Findings:

- Hispanic males make up 3.7% of the child population, and 3.5% of child deaths. The child death rate for Hispanic males is 71.7, which is 21% lower than the rate for non-Hispanic males

	# of Deaths	% of Deaths	Population	% of Population
Hispanic Male	354	3.5	493,524	3.7
Hispanic Female	248	2.5	447,556	3.3
Non Hispanic Male	5572	55.1	6,379,024	47.5
Non Hispanic Female	3932	38.9	6,101,700	45.5
	10106	100.0	13,421,804	100.0

- Hispanic females make up 3.3% of the child population, and 2.5% of child deaths. The child death rate for Hispanic females is 55.4, which is 16% lower than the rate for non-Hispanic females

History of Child Fatality Review

1990 - 1993

Legislation established the Statewide Child Fatality Review Panel with responsibilities for compiling statistics on child fatalities and making recommendations to the Governor and General Assembly based on the data. It established local county protocol committees and directed that they develop county-based written protocols for the investigation of alleged child abuse and neglect cases. Statutory amendments were adapted to:

- Establish a separate child fatality review team in each county and determine procedures for conducting reviews and completing reports
- Require the Panel to:
  - Submit an annual report documenting the prevalence and circumstances of all child fatalities with special emphasis on deaths associated with child abuse
  - Recommend measures to reduce child fatalities to the Governor, the Lieutenant Governor, and the Speaker of the Georgia House of Representatives
  - Establish a protocol for the review of policies, procedures and operations of the Division of Family and Children Services for child abuse cases

1996 - 1998

- The Panel established the Office of Child Fatality Review with a full-time director to administer the activities of the Panel
- Researchers from Emory University and Georgia State University conducted an evaluation of the child fatality review process. The evaluation concluded that there were policy, procedure and funding issues that limited the effectiveness of the review process. Recommendations for improvement were made to the General Assembly
- Statutory amendments were adopted to:
  - Identify agencies required to be represented on child fatality review teams, and establish penalties for non-participation
  - Require that all child deaths be reported to the coroner/medical examiner in each county

1999 - 2001

Child death investigation teams were initially developed in four judicial circuits as a pilot project, with six additional teams later added. Teams assumed responsibility for conducting death scene investigations of child deaths that met established criteria within their judicial circuit

- Statutory amendments were adopted which resulted in the Code section governing the Child Fatality Review Panel, child fatality review committees, and child abuse protocol committees being completely rewritten. This was an attempt to provide greater clarity and a more comprehensive, concise format
- The Panel's budget was increased

2002 – 2005

- The Panel published and distributed a child fatality review protocol manual to all county committee members
- Statutory amendments were adopted which resulted in the following:
  - Appointment of District Attorneys to serve as chairpersons of local committees in their circuits
  - Authority of the Superior Court Judge on the Panel to issue an order requiring the participation of mandated agencies on local child fatality review committees. Failure to comply would be cause for contempt
  - Authority of the Panel to compel the production of documents or the attendance of witnesses pursuant to a subpoena
  - Director of the Division of Mental Health added as a member of the Panel
- Funding was secured and an on-line reporting system was established for both the child fatality review report and the coroner/medical examiner report
- A collaboration was established between the Office of Child Fatality Review and the National Center for Child Death Review
- A Statewide Model Child Abuse Protocol was developed and distributed to all Protocol committee members
- A Prevention Advocate was added, by policy, to all child fatality review committees. Statewide training was conducted for all prevention advocate members
- A quarterly newsletter was created and distributed. The newsletter is sent to all child fatality review members and contains useful information about the process as well as prevention
- Annual awards were established for the Child Fatality Review Coroner of the Year and Child Fatality Review County Committee of the Year. Awards are presented at the annual Child Fatality and Serious Injury Conference sponsored by the Panel, DHR, GBI and the Office of the Child Advocate
- A sub-committee of the Panel was formed to begin working on a Statewide Prevention Plan. The sub-committee also includes outside agencies working in the prevention field

Appendix A
Criteria For Child Death Reviews

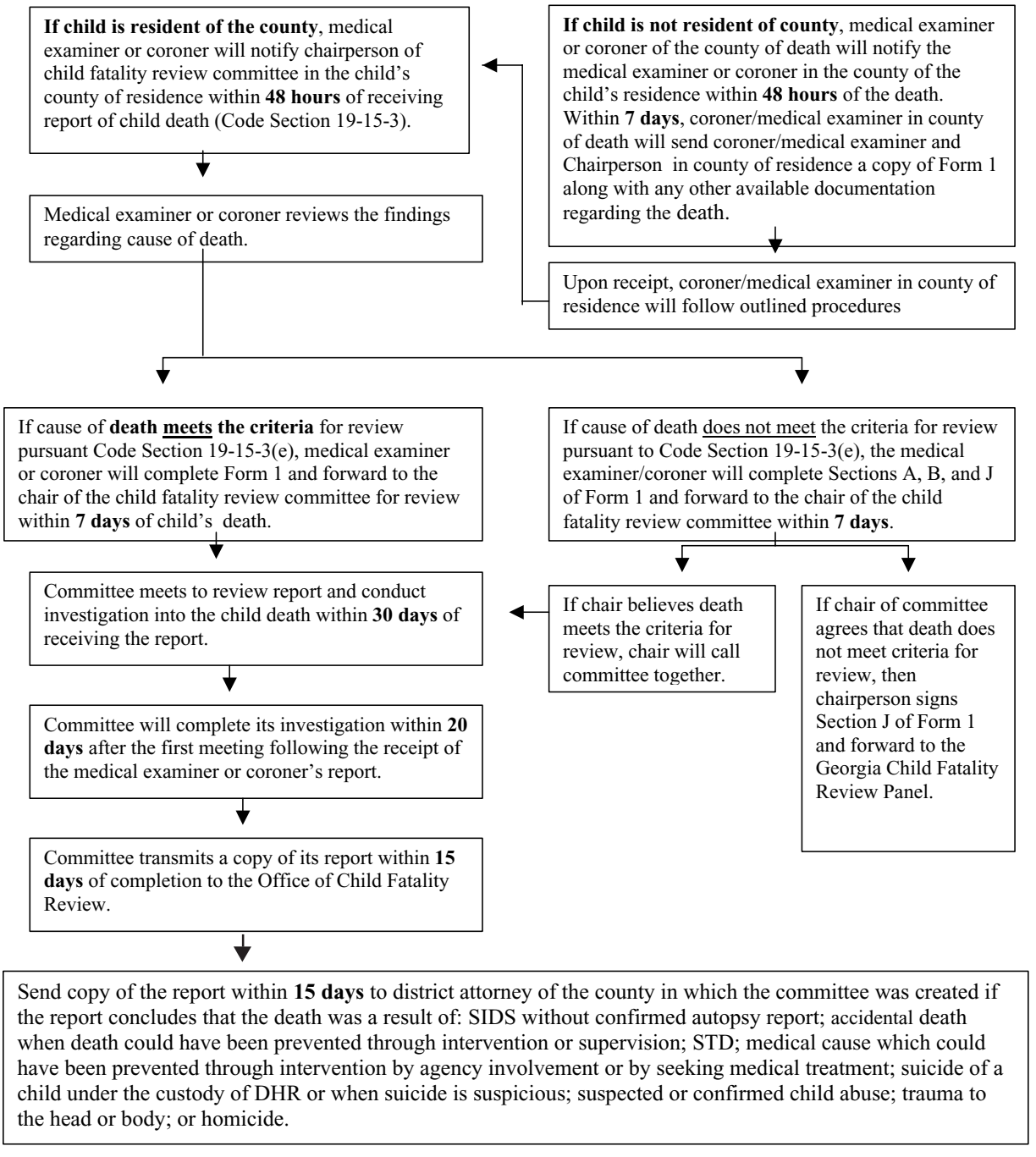
Child Fatality Review Teams are required to review the deaths of all children under the age of 18 that meet the criteria for a coroner/medical examiner's investigation.

"Eligible" Deaths **or Deaths to be Reviewed by Child Fatality Review Committees**
O.C.G.A. 19-15-3 (e)

The death of a child under the age of 18 must be reviewed when the death is ***suspicious, unusual, or unexpected***. Included in this definition are incidents when a child dies:

1. as a result of violence
2. by suicide
3. by a casualty (i.e., car crash, fire)
4. suddenly when in apparent good health
5. when unattended by a physician
6. in any suspicious or unusual manner, especially if under 16 years of age
7. after birth but before seven years of age if the death is unexpected or unexplained
8. while an inmate of a state hospital or a state, county, or city penal institution

Appendix B
Child Fatality Review Timeframes and Responsibilities



Appendix C.1 Total Child Fatalities Based on Adjusted Death Certificate (N=10620)

Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
Infant (Age <1)								
	Drowning	5	3	2	2			12
	Fall	1		2	1			4
	Fire	3	4		3			10
	Homicide	14	13	28	25			80
	Medical	1394	1117	1690	1271	78	58	5608
	MVC	14	19	13	7	1	1	55
	Other Injury	6	5	6	5			22
	Other SIDS	1	4	1	1			7
	Poison	4		5	2	1		12
	SIDS	234	159	226	157	7	4	787
	Suffocation	47	21	29	31		3	131
	Unknown Intent	5	2	4	1			12
	Unknown	28	13	23	16	1	1	82
	Total	1756	1360	2029	1522	88	67	6822
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
1 to 4								
	Drowning	53	25	19	5	2	2	106
	Fall	5	1	2			1	9
	Fire	23	9	13	24	1		70
	Firearm	2			1			3
	Homicide	23	23	37	28	3		114
	Medical	162	106	121	99	4	12	504
	MVC	67	45	33	14	1	1	161
	Other Injury	9	7	8	9		1	34
	Poison	4	1	7				12
	Suffocation	10	7	6	5		1	29
	Unknown Intent	3		2	2			7
	Unknown	4	1	8	4			17
	Total	365	225	256	191	11	18	1066
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
5 to 14								
	Drowning	24	11	40	12		2	89
	Fall			2				2
	Fire	16	4	28	13			61
	Firearm	7	2	7				16
	Homicide	21	20	31	20	1		93
	Medical	190	146	140	150	8	6	640
	MVC	156	103	69	63	4	2	397
	Other Injury	21	17	8	4			50
	Poison	3	1	3	1			8
	Suffocation	13	6	9	1			29
	Suicide	25	9	10	3	1		48
	Unknown Intent	4	2	2	1			9
	Unknown	5	2		3			10
	Total	485	323	349	271	14	10	1452
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
15 to 17								
	Drowning	33	2	20	2			57
	Fall	1						1
	Fire	3	3	3	1		1	11
	Firearm	10		4				14
	Homicide	34	17	77	13	1		142
	Medical	89	65	69	65	1	2	291
	MVC	284	146	94	41	3		568
	Other Injury	11	3	8	4	1		27
	Poison	15	5	1				21
	Suffocation	6		1				7
	Suicide	78	24	15	4	3		124
	Unknown Intent	3	1	2				6
	Unknown	3	2	2	4			11
	Total	570	268	296	134	9	3	1280

Appendix C.2 Total Reviewed Child Fatalities (N=3461)

Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
Infant (Age <1)								
	Drowning	5	2	1	1			9
	Fall	1		2	1			4
	Fire	2	4		2			8
	Homicide	13	13	22	24			72
	Medical	43	42	67	74	7		233
	MVC	11	14	11	6	1		43
	Other Injury	2	3	5	1			11
	Poison	2		3	2	1		8
	SIDS/SUID	207	132	201	141	7	4	692
	Suffocation	42	17	26	25		3	113
	Unknown Intent	5	2	4	1			12
	Unknown	14	2	13	9	1		39
	Total	347	231	355	287	17	7	1244
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
1 to 4								
	Drowning	43	19	17	5	1	2	87
	Fall	4	1	2			1	8
	Fire	21	9	12	21	1		64
	Firearm	2			1			3
	Homicide	19	21	32	24	3		99
	Medical	32	18	29	26	1	5	111
	MVC	58	36	26	10	1	1	132
	Other Injury	5	6	3	1		1	16
	Poison	4	1	5				10
	Suffocation	10	5	6	4		1	26
	Unknown Intent	3		2	2			7
	Unknown	2	1	5	4			12
	Total	203	117	139	98	7	11	575
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
5 to 14								
	Drowning	21	10	29	9		2	71
	Fall			2				2
	Fire	14	4	27	11			56
	Firearm	7	2	7				16
	Homicide	19	18	27	20	1		85
	Medical	31	28	25	32		2	118
	MVC	129	87	52	47	4	1	320
	Other Injury	13	5	7				25
	Poison	3	1	3	1			8
	Suffocation	11	5	5				21
	Suicide	19	9	10	3	1		42
	Unknown Intent	4	2	2	1			9
	Unknown	4	1		3			8
	Total	275	172	196	127	6	5	781
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
15 to 17								
	Drowning	23	1	13	1			38
	Fall	1						1
	Fire	2	2	3	1		1	9
	Firearm	9		3				12
	Homicide	30	12	67	12	1		122
	Medical	11	9	23	11		2	56
	MVC	231	120	78	36	1		466
	Other Injury	3		2	2			7
	Poison	11	5	1				17
	Suffocation	5		1				6
	Suicide	71	22	14	3	3		113
	Unknown Intent	3	1	2				6
	Unknown	3	1	1	3			8
	Total	403	173	208	69	5	3	861

Appendix C.3 Reviewed Child Fatalities with Abuse/Neglect Findings (N=709)

Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
Infant (Age <1)								
	Drowning	3	1	1	1			6
	Fire	1	1					2
	Homicide	13	13	21	23			70
	Medical	2	1	9	7			19
	MVC	3	3	5	2			13
	Other Injury		1	4				5
	Poison	1				1		2
	SIDS/SUID	15	17	44	17			93
	Suffocation	11	5	9	12		3	40
	Unknown Intent	2	1	3	1			7
	Unknown	6	1	4	5	1		17
	Total	57	44	100	68	2	3	274
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
1 to 4								
	Drowning	22	8	15	4		2	51
	Fall	4		2				6
	Fire	11	5	3	4			23
	Firearm	1			1			2
	Homicide	18	17	31	23	1		90
	Medical	1		3	2		1	7
	MVC	15	10	9	1	1		36
	Other Injury	1	3	1			1	6
	Poison	3	1	1				5
	Suffocation	1		2	2		1	6
	Unknown Intent	1		2	2			5
	Unknown	2	1	3				6
	Total	80	45	72	39	2	5	243
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
5 to 14								
	Drowning	7	3	10	3		1	24
	Fire	2		7	2			11
	Firearm	1		2				3
	Homicide	7	11	10	14	1		43
	Medical		2	2	2			6
	MVC	13	16	9	10			48
	Other Injury	1		2				3
	Poison	1						1
	Suffocation		1					1
	Suicide	1		1				2
	Unknown Intent	2			1			3
	Unknown	1			1			2
	Total	36	33	43	33	1	1	147
Age	Cause of Death	White Male	White Female	A-A Male	A-A Female	Other Male	Other Female	Total
15 to 17								
	Drowning			1				1
	Fire			1				1
	Homicide		1	11	1			13
	Medical		2	2	3			7
	MVC	7	5	2				14
	Suicide	4	2	2				8
	Unknown				1			1
	Total	11	10	19	5	0	0	45

Appendix C.4

Preventability for Reviewed Deaths with Suspected or Confirmed Abuse or Neglect (N=709)

		Preventability		
Cause of Death	Missing	Not at All	Possibly	Definitely
Drowning			3	79
Fall				6
Fire		3	8	26
Firearm				5
Homicide	2	20	37	157
Medical		5	30	4
MVC	1		19	91
Other Injury			2	12
Poison				8
SIDS/SUID		2	82	9
Suffocation			6	41
Suicide			4	6
Unknown Intent			3	12
Unknown			19	7
Total	3	30	213	463

Preventability for Reviewed Deaths with No Suspected or Confirmed Abuse or Neglect (N=2752)

		Preventability		
Cause of Death	Missing	Not at All	Possibly	Definitely
Drowning	5	10	47	61
Fall	1	1	3	4
Fire		2	60	38
Firearm			4	22
Homicide	4	21	30	107
Medical	7	322	135	15
MVC	10	95	327	418
Other Injury	1	16	15	13
Poison	1	1	15	18
SIDS/SUID	12	225	339	23
Suffocation	2	9	42	66
Suicide	1	27	70	47
Unknown Intent		1	11	7
Unknown	1	10	27	3
Total	45	740	1125	842

Appendix D
Eligible Deaths Reviewed/Eligible Deaths, Georgia, 1999- 2004

APPENDIX E
1999 - 2004 Child Fatality Reviews, By County, By Age Groups

Appendix E presents county level data for the Child Fatality Review process for 1999 through 2004. The data is presented for four age groups (infants less than one year old, children from 1 to 4 years of age, children 5 through 14, and teenagers ages 15 through 17). Four numbers are provided for each age group:

Total Deaths: The total number of deaths (all causes) for that age group. This number is based on Georgia death certificate data and only includes deaths to Georgia residents under the age of 18. This does include deaths of Georgia residents that occurred in other states and were reported back to Georgia, but it does not include deaths of out-of-state residents that occurred in Georgia. The review team of the child's county of residence has the responsibility of reviewing deaths. However, the residence determined by the team may not match the residence reported on the death certificate. There were 132 deaths over the six-year period that had different Georgia counties of residence on the death certificate and the CFR report, and the death certificate resident county was used for the data analysis.

Reviewable Deaths: The number of SIDS/SUID, unintentional, unknown cause, or violence-related deaths (reviewable deaths) according to the death certificate classifications. Although other deaths due to medical or natural causes may be eligible for review according to OCGA 19-15-3(e), SIDS/SUID deaths are explicitly required to be reviewed, and unintentional/violence related deaths should be reviewed as "sudden or unexpected deaths." Thus, this number represents a minimum number of deaths that should be reviewed. This is a subset of total deaths.

The death certificate is not a "perfect" determinant of reviewable deaths. For example, a death certificate may be filed with "R99" (undetermined) for the cause of death. The review team may have autopsy or toxicology information that identifies a specific cause. If that is a medical cause, the CFR review team could decide that it is not a reviewable death and may not complete a review. Five such deaths were identified in 2004, but these deaths are not excluded from this set of reviewable deaths. Thus, the number of reviewable deaths is a slight overestimate, and the calculated proportion of reviewable deaths reviewed is an underestimate.

Reviewable Deaths Reviewed: The number of SIDS/SUID, unintentional, unknown cause, or violence related deaths that were reviewed. This number is a measure of how well a county identified and reviewed the minimum number of appropriate deaths. This is a subset of the total "reviewable" deaths.

Total Deaths Reviewed: This is the total number of child deaths in 2004 for which a Child Fatality Review Report was submitted. It includes deaths due to natural causes (other than SIDS) in addition to those deaths that were identified as eligible for review. This is based on the county of residence identified from the death certificates.

	All Deaths					Eligible Deaths					Eligible Reviewed					All Reviewed				
COUNTY	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total
Appling	22	7	11	3	43	5	4	7	2	18	5	4	5		14	9	6	7	1	23
Atkinson	12	1	5	4	22	3	1	3	3	10			3	2	5			3	2	5
Bacon	7	4	3	2	16	1		3	2	6	1		1	1	3	1		1	1	3
Baker	3	1		1	5					0					0					0
Baldwin	44	6	13	4	67	6	2	7	2	17	4	1	3	2	10	5	1	3	2	11
Banks	6		3	2	11	1		3	2	6			2	1	3			2	1	3
Barrow	32	5	10	7	54	9	3	9	6	27	5	2	6	4	17	7	2	6	4	19
Bartow	55	13	15	11	94	16	4	9	10	39	16	4	8	8	36	17	5	8	9	39
Ben Hill	20	4	5	3	32	6	2	2	1	11	5	2	2		9	5	3	2	1	11
Berrien	12	1	6	7	26	3	1	6	4	14	3	1	6	2	12	6	1	6	2	15
Bibb	195	27	22	29	273	22	15	10	25	72	17	13	8	15	53	23	14	10	16	63
Bleckley	9		4	2	15	2		3	2	7	2		3	2	7	2		4	2	8
Brantley	7	2	2	4	15	1		2	4	7	1		2	2	5	1		2	2	5
Brooks	12	1	6	7	26		1	5	6	12		1	5	5	11	2	1	5	5	13
Bryan	12	2	5	6	25	3	2	2	6	13	3	1	2	4	10	3	1	2	4	10
Bulloch	57	7	10	11	85	9	4	6	8	27	6	3	5	6	20	7	3	5	6	21
Burke	24	9	3	7	43	4	7	2	5	18	1	4	1	4	10	1	4	1	4	10
Butts	16	1	2	3	22	3	1	1	3	8	3	1	1	3	8	3	1	1	3	8
Calhoun	4	1	4	1	10		1	3		4		1	3		4		1	3		4
Camden	30	6	9	4	49	7	4	6	3	20	7	4	5	3	19	9	4	5	3	21
Candler	13	2	5	5	25		1	3	5	9		1	2	3	6	1	1	2	3	7
Carroll	62	9	13	25	109	12	6	9	20	47	12	2	7	16	37	24	3	8	17	52
Catoosa	31	7	7	4	49	10	6	4	4	24	9	6	4	4	23	9	6	4	4	23
Charlton	10	3	4	3	20	2	3	2	2	9		2	1		3		2	2		4
Chatham	208	24	34	24	290	35	12	19	19	85	34	12	18	14	78	37	14	24	15	90
Chattahooc	7	2		2	11	1			2	3	1			2	3	2	1		2	5
Chattooga	18	2	3	7	30	4	1	2	6	13	3	1	2	2	8	5	2	3	2	12
Cherokee	80	16	20	23	139	20	9	9	18	56	19	8	9	17	53	19	8	14	17	58
Clarke	75	7	13	11	106	13	3	6	10	32	13	3	4	8	28	16	4	6	8	34
Clay	4	1			5					0					0					0
Clayton	252	34	36	31	353	35	19	14	20	88	25	15	12	18	70	40	20	17	19	96
Clinch	5	3	3	1	12		2	2	1	5		2	2	1	5	1	3	3	1	8
Cobb	383	66	80	68	597	51	28	47	47	173	47	28	46	46	167	54	39	55	50	198
Coffee	47	7	13	6	73	5	3	7	6	21	4	1	7	5	17	4	2	7	5	18
Colquitt	46	6	9	11	72	5	1	6	8	20	4	1	5	7	17	6	2	5	7	20

	All Deaths					Eligible Deaths					Eligible Reviewed					All Reviewed				
COUNTY	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total
Columbia	42	5	18	18	83	2		10	14	26	2		7	14	23	2	1	8	14	25
Cook	14	3	4		21	3	3	1		7	1	2			3	1	2			3
Coweta	62	8	19	12	101	13	5	9	12	39	9	5	9	11	34	10	5	10	11	36
Crawford	5	3	3		11	1	2	2		5					0					0
Crisp	26	7	4	4	41	7	5	3	2	17	6	4	2	2	14	8	5	3	4	20
Dade	7	1		4	12	2			4	6	2			3	5	2			3	5
Dawson	7		2	5	14	4		1	5	10	3		1	5	9	3		1	5	9
Decatur	27	1	9	7	44	5	1	5	5	16	1	1		3	5	1	1		3	5
DeKalb	593	72	124	91	880	79	35	58	61	233	68	28	40	50	186	85	38	53	57	233
Dodge	12	5	6	8	31	1	1	3	7	12			1	4	5			2	4	6
Dooly	12	5	1	4	22	2	4	1	3	10	2	4	1	2	9	2	4	1	2	9
Dougherty	101	18	11	4	134	17	12	3	3	35	14	9	3	2	28	15	10	3	2	30
Douglas	63	9	19	15	106	14	4	10	10	38	10	4	5	10	29	11	4	5	10	30
Early	14	3	5	2	24	1	1	3	2	7	1	1	3	2	7	3	2	4	2	11
Echols	3		1		4	1		1		2	1		1		2	1		1		2
Effingham	32	3	9	9	53	3	2	4	6	15	2	1	1	4	8	2	1	2	4	9
Elbert	10	1	7	5	23			3	5	8			3	3	6			4	3	7
Emanuel	32	4	5	6	47	5	4	1	4	14	3		1	2	6	3		1	2	6
Evans	12	2	3	2	19	1	1	2	2	6			2	1	3			2	1	3
Fannin	15	1	3	5	24	6	1		5	12	5	1		4	10	7	1		4	12
Fayette	30	12	8	20	70	5	4	4	12	25	5	2	2	8	17	7	3	3	12	25
Floyd	74	12	18	12	116	19	6	14	10	49	18	6	13	8	45	23	8	15	8	54
Forsyth	69	12	21	13	115	15	4	14	11	44	13	4	14	11	42	15	4	15	11	45
Franklin	13	3	7	4	27	3	1	5	4	13	3	1	5	2	11	3	1	6	2	12
Fulton	648	87	119	116	970	128	45	67	86	326	119	40	64	83	306	143	54	82	97	376
Gilmer	24	4	5	4	37	5	4	4	4	17	3	4	4	3	14	3	4	4	3	14
Glascock	3		1	1	5	1		1	1	3	1		1	1	3	1		1	1	3
Glynn	58	8	9	9	84	15	3	8	6	32	14	3	7	5	29	17	3	7	6	33
Gordon	44	4	6	6	60	12	1	4	6	23	9	1	4	6	20	10	4	4	6	24
Grady	29	6	9	9	53	10	1	5	7	23	10	1	5	7	23	14	4	7	7	32
Greene	17	2	3	3	25	7		3	1	11	4		3	1	8	5	1	3	1	10
Gwinnett	452	80	88	74	694	58	46	49	56	209	56	45	48	51	200	66	46	50	53	215
Habershan	23	8	9	5	45	8	7	7	5	27	8	7	6	4	25	9	7	6	4	26
Hall	122	20	20	18	180	15	8	9	15	47	10	8	7	14	39	12	9	9	14	44
Hancock	14		2	1	17	1		2	1	4			2	1	3			2	1	3
Haralson	17	4	4	7	32	6	4	1	4	15	3	1			4	4	1	1		6
Harris	14	2	7	8	31		1	3	8	12			2	3	5			2	3	5
Hart	16	2	3	3	24	3	1	1	3	8	1			1	2	1			1	2
Heard	16		2	5	23	5		1	4	10	5			4	9	5			4	9
Henry	104	13	23	21	161	13	6	18	16	53	12	6	17	16	51	18	9	17	19	63
Houston	105	19	14	11	149	15	10	7	10	42	13	8	6	6	33	18	10	8	6	42
Irwin	8		2	1	11	3				3	3				3	3				3

	All Deaths					Eligible Deaths					Eligible Reviewed					All Reviewed				
COUNTY	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total
Jackson	36	7	8	9	60	8	4	5	8	25	1	3	3	4	11	2	3	3	4	12
Jasper	12		2	2	16	5		1	2	8	3		1	1	5	4		1	1	6
Jeff Davis	17	1	3	5	26	5	1	2	4	12	3	1		1	5	3	1		1	5
Jefferson	20	2	3	2	27	1	1		2	4				1	1				1	1
Jenkins	8	1	6	3	18	3	1	4	3	11	2	1	4	1	8	2	1	4	1	8
Johnson	5	3	2		10			1		1			1		1		3	1		4
Jones	18	3	5	6	32	4	2	1	5	12	2			3	5	2			3	5
Lamar	12	3	4	2	21	2	3	2	2	9	1	3	1		5	1	3	1		5
Lanier	7		1	2	10	1			1	2				1	1	1			1	2
Laurens	36	8	9	10	63	8	4	6	5	23	6	2	5	4	17	12	2	7	7	28
Lee	11	2	6	7	26	1	2	4	6	13	1	1	4	5	11	1	1	6	5	13
Liberty	97	11	13	9	130	24	7	7	5	43	21	7	7	5	40	22	7	8	8	45
Lincoln	6		3	1	10			1		1					0					0
Long	4	1	1		6	1				1	1				1	1				1
Lowndes	122	13	8	17	160	21	7	4	11	43	21	6	4	11	42	27	11	5	15	58
Lumpkin	8	5	3		16	1	2	3		6	1	2	3		6	1	2	3		6
McDuffie	31	1	6	8	46	9		4	6	19	8		4	6	18	9	1	5	6	21
McIntosh	11	2	2	6	21		2		5	7		2		5	7		2		5	7
Macon	13	2	4	1	20	5	1	2	1	9	4	1	1		6	4	1	1		6
Madison	12	3	6	6	27	7	2	5	6	20	6	2	3	4	15	6	3	3	4	16
Marion	7	2		2	11		2		2	4		2		2	4	2	2		2	6
Meriwether	14	9	2	2	27	3	6	1	2	12	1	2			3	1	2			3
Miller	4	2			6	2	1			3	2				2	2				2
Mitchell	23	4	3	6	36	8	2	3	5	18	8	2	3	5	18	9	3	3	5	20
Monroe	17	3	2	1	23	2	3	2	1	8	1	2	2	1	6	1	2	2	1	6
Montgomer	7			3	10	2			2	4	1			2	3	1			2	3
Morgan	8	3	7	3	21	1	2	3	3	9	1	2	3	3	9	1	2	4	3	10
Murray	21	6	10	9	46	6	5	6	9	26	5	5	5	9	24	5	6	6	9	26
Muscogee	277	26	30	26	359	52	15	18	19	104	46	14	17	19	96	56	16	20	20	112
Newton	43	20	12	7	82	14	12	6	6	38	14	11	6	6	37	15	11	6	6	38
Oconee	16	4	5	2	27	1	2	4	2	9	1	2	3		6	1	2	3		6
Oglethorpe	9		1	2	12	1		1	2	4	1		1	2	4	1		1	2	4
Paulding	54	7	16	13	90	11	4	8	11	34	8	3	6	9	26	10	3	7	9	29
Peach	19	4	2	1	26	6	1	2	1	10	2		1		3	2		1		3
Pickens	26	2	5	7	40	7	1	4	7	19	6	1	4	6	17	9	2	5	6	22
Pierce	9	2	3	7	21	3	2	3	7	15	1		2	4	7	1		2	4	7
Pike	5		2	5	12	2		2	4	8	2		2	4	8	3		2	5	10
Polk	24	7	7	4	42	1	6	5	4	16		3	2	4	9		3	2	4	9
Pulaski	1	4	4	1	10		4	3	1	8		1	2	1	4		1	2	1	4
Putnam	20	2	6	2	30	4	2	5	2	13	3	1	2	2	8	3	1	2	2	8
Quitman	6	1	1	1	9	1	1	1	1	4	1	1	1	1	4	1	1	1	1	4
Rabun	8	1	2	2	13	2		2	2	6	1		1	2	4	1	1	1	2	5
Randolph	13		3	1	17	1		3	1	5			3		3	1		3		4

	All Deaths					Eligible Deaths					Eligible Reviewed					All Reviewed				
COUNTY	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total	Infant	1 to 4	5 to 14	15 to 17	Total
Richmond	206	26	39	29	300	30	12	12	21	75	21	7	6	13	47	28	9	8	13	58
Rockdale	31	9	9	13	62	9	5	4	11	29	8	5	3	11	27	8	5	4	11	28
Schley	4	2	2	1	9		1	1	1	3		1		1	2		1		1	2
Screven	21	4	6	2	33	3	1	4		8	1	1	4		6	2	2	4		8
Seminole	10	1	3	5	19	2	1	2	3	8	1	1	2	3	7	1	1	2	3	7
Spalding	62	13	8	2	85	9	5	4	2	20	9	5	3	2	19	11	7	3	2	23
Stephens	12	6	4	8	30	2	4	2	6	14	2	4	2	6	14	2	4	2	6	14
Stewart	6	1		1	8	2			1	3	1				1	1				1
Sumter	34	3	5	1	43	7	3	2		12	6	3			9	10	3	1		14
Talbot	5	3	1	2	11	1	2		2	5					0					0
Taliaferro	2				2					0					0					0
Tattnall	17	2	3	7	29	3	1	2	4	10	3	1	2	1	7	3	1	2	1	7
Taylor	6		3	2	11	1		2	2	5	1		2	2	5	1		2	2	5
Telfair	6	1	5	4	16	2	1	3	3	9	2	1	3	3	9	2	1	3	3	9
Terrell	13		3	1	17	3		1	1	5	2				2	2				2
Thomas	38	6	8	7	59	6	4	7	6	23	3	4	4	5	16	4	4	4	5	17
Tift	30	7	10	4	51	1	3	4	3	11		1	4	2	7		1	4	2	7
Toombs	20	1	3	8	32	3		3	8	14	3		2	3	8	3	1	2	3	9
Towns	5		3	4	12	1		1	4	6	1		1	3	5	1		1	3	5
Treutlen	6	1			7	1				1					0					0
Troup	53	10	11	11	85	11	4	6	7	28	11	4	4	4	23	15	8	5	4	32
Turner	9	3	2	4	18	3	1	1	3	8	3	1	1	3	8	3	1	1	3	8
Twiggs	9	1	3	2	15				2	2				1	1	1		1	1	3
Union	6		3	5	14	2			4	6	2			3	5	2		2	3	7
Upson	13	1	7	3	24	4		3	2	9	3				3	5		1		6
Walker	35	6	15	6	62	10	4	9	5	28	8	3	7	4	22	8	3	8	4	23
Walton	42	12	14	7	75	7	6	6	4	23	7	6	3	4	20	8	8	3	4	23
Ware	24	2	8	6	40	7		6	4	17	6		5	4	15	9	2	5	4	20
Warren	7	1	1	1	10	1	1		1	3	1	1		1	3	1	1	1	1	4
Washingto	17	2	3	1	23	6	2	3	1	12	3	1		1	5	4	1		1	6
Wayne	23	4	5	6	38	5	1	1	5	12	2			2	4	2		1	2	5
Webster	2		1	1	4				1	1				1	1			1	1	2
Wheeler	2	2	4	4	12			3	4	7			3	4	7		2	4	4	10
White	14	2	4	3	23	4		2	3	9	4		2	3	9	6		2	3	11
Whitfield	67	10	13	15	105	16	7	7	11	41	13	7	6	11	37	16	9	8	11	44
Wilcox	9	2	1	1	13	2	1	1	1	5	2		1	1	4	2	1	1	1	5
Wilkes	10	4	2	2	18	1	1	2	2	6	1	1	1	2	5	1	2	1	2	6
Wilkinson	9	2	4	1	16			4	1	5			1	1	2			1	1	2
Worth	11	3	7	6	27	5	2	4	2	13	5	2	4	2	13	6	2	4	2	14
Totals	**6,822**	**1,066**	**1,452**	**1,280**	**10,620**	**1,214**	**562**	**812**	**989**	**3,577**	**1,011**	**464**	**663**	**805**	**2,943**	**1,244**	**575**	**781**	**861**	**3,461**
% Eligible Reviewed						**83.3**	**82.6**	**81.7**	**81.4**	**82.3**										

DEFINITIONS OF TERMS AND ABBREVIATIONS USED IN THIS REPORT

AA - African American

Child Abuse and Neglect – an act, or failure to act, on the part of a parent or caretaker that results in serious physical or emotional harm, sexual exploitation, or death of a child.

Child Abuse Protocol Committee - County level representatives from the office of the sheriff, county department of family and children services, office of the district attorney, juvenile court, magistrate court, county board of education, office of the chief of police, office of the chief of police of the largest municipality in county, and office of the coroner or medical examiner. The committee is charged with developing local protocols to investigate and prosecute alleged cases of child abuse.

Child Fatality Review Report - A standardized form required for collecting data on child fatalities meeting the criteria for review by child fatality review committees.

Child Fatality Review Committee - County level representatives from the office of the coroner or medical examiner, county department of family and children services, public health department, juvenile court, office of the district attorney, law enforcement, and mental health, and prevention advocate.

Drowning Deaths – Deaths that occur from water-related submersion and suffocation.

Eligible Death - Death meeting the criteria for review including death resulting from SIDS, unintentional injuries, intentional injuries, medical conditions when unattended by a physician, or any manner that is suspicious or unusual.

Firearms – any weapon that fires a high-velocity projectile, and includes rifles, pistols, revolvers, shotguns, handguns, and BB guns.

Fire-Related Death – Death resulting from fire or burn-related injuries sustained in a fire, and includes deaths from smoke inhalation.

Form 1 - A standardized form required for collecting data on all child fatalities by coroners or medical examiners.

Georgia Child Fatality Review Panel - An appointed body of 17 representatives that oversees the county child fatality review process, reports to the governor annually on the incidence of child deaths, and recommends prevention measures based on the data.

Injury - Refers to any force whether it be physical, chemical (poisoning), thermal (fire), or electrical that resulted in death.

Intentional - Refers to the act that resulted in death being one that was deliberate, willful, or planned. It includes homicide and suicide.

Medical Cause - Refers to death resulting from a natural cause other than SIDS.

Motor Vehicle-Related Death – incidents that include the occupants of a vehicle, pedestrians struck by motor vehicles, bicycles, and occupants or riders of any other form of transportation (ATV, go-carts, etc.).

Natural Cause - Refers to death resulting from an inherent, existing condition. Natural causes include congenital anomalies, diseases of the nervous system, diseases of the respiratory system, other medical causes and SIDS.

"Other" Race - Refers to those of Asian, Pacific Islander, or Native American origin.

"Other" as Category of Death - Includes deaths from poisoning and falls (unless otherwise indicated).

Perpetrator - Person(s) who committed an act that resulted in the death of a child.

Preventable Death - One in which with retrospective analysis it is determined that a reasonable intervention could have prevented the death. Interventions include medical, social, educational, legal, technological, or psychological.

Reviewed Death - Death which has been reviewed by a local child fatality review committee and a completed Child Fatality Review Report has been submitted to the Georgia Child Fatality Review Panel.

Risk Factor - Refers to persons, things, events, etc. that put an individual at an increased likelihood of dying.

Sleep-Related Infant Death – all deaths to infants that occur while sleeping but have no medical cause. Included are SIDS, SUIDS, and all suffocation/asphyxia deaths related to a sleep environment.

Sudden Infant Death Syndrome (SIDS) - The sudden death of an infant under one 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. In this report, SIDS is not considered a "medical" cause.

Sudden Unexplained Infant Death (SUID) - is a category used by child fatality review committees for deaths that appear to be SIDS but have other risk factors that could have contributed to the infant's death.

Trend - Refers to changes occurring in the number and distribution of child deaths. In this report, the actual number of deaths for each cause is relatively small for the purpose of statistical analysis, which causes some uncertainty in estimating the risk of death. **Unintentional Death -** Refers to the act that resulted in death being one that was not deliberate, willful, or planned.