



An Assessment of the Risk of Preventable Deaths Among Children in Child Care in Georgia

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Bright from the Start: Georgia Department of Early Care and Learning
www.decal.ga.gov

Background



- Conducted by Dr. John Carter from the Rollins School of Public Health at Emory University.
- Purpose was to review and compare fatalities to children in child care programs with children in the general population.
- Goal is to identify ways to reduce serious injuries and fatalities in child care settings.

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Methods Overview



- Assess the risk of preventable deaths in child care settings (for children ages birth to four).
- Compare the fatality rate in child care settings to the fatality rate in the general population.

Context



- Study focuses on preventable fatalities.
 - Many infant – and some child – deaths are generally considered not preventable. Premature and low birth weight infants have a higher risk of death, and death is likely to occur within the first month of life.
 - Reviewing 2004-2008 data, slightly over 50% of all infant deaths occurred within the first week of life (zero to six days, early neonatal).
- Unintentional injuries, homicides, and deaths attributed to sudden infant death syndrome (SIDS) are potentially preventable deaths.
 - While not all SIDS deaths or infant/toddler deaths attributed to external causes are preventable, over 40% of post-neonatal and toddler deaths are due to external causes and do have modifiable risk factors.

Context



- The leading cause of infant deaths was suffocation. Homicides and motor vehicle incidents were the second and third leading causes.

**Table 1: Average Annual Deaths, by Selected Causes, GA
2004 – 2008 (Data Review)**

	<u>All Deaths</u>	<u>SIDS</u>	<u>External Causes</u>	<u>% Preventable</u>
Post-Neonatal Infants	409	120	50	41.6
Toddlers (ages 1 - 4)	184		87	47.3

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5

Data Sources



- Vital Records Section, Georgia Department of Public Health (DPH)
- Online Analytical Statistical Information System (OASIS)
- Child Fatality Review Reports (Georgia Child Fatality Review)
- Fatality Incident Reports (DECAL)
- 2008 Child Care Economic Impact Study (DECAL)

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6

Methods



- Analysis covered years 2007-2009
- Using DECAL incident reports and child fatality review studies, identified cases of infant/child death due to SIDS or an external cause that occurred in a child care setting.
 - A key finding being addressed is that two data sources did not always align.
- Computed mortality rates for SIDS and external causes (2004-2009).
 - SIDS – 82.1 per 100,000
 - External Causes – 18.4 per 100,000

Methods *(continued)*



- Estimated mortality rates (SIDS and external causes) for infant/toddlers in child care settings
 - Requires assumptions about the number of children in child care and the time spent in child care.
- Low rates for SIDS and external causes in child care settings
 - SIDS – 18.4 fatalities per 100,000. 64 could be expected.
 - External Causes – rate too small to compute. Twelve were expected; four occurred.

Findings



- The death of an infant or toddler is a rare event, but many are preventable.
- An infant in child care has a slightly lower risk of SIDS than the general infant population, but SIDS is the major cause of death associated with child care.
 - Rate calculation is based on a small number of fatalities and assumptions about exposure to child care.
- The risk of a preventable death is much lower for an infant or toddler in child care than for a child in the general population.
- Whether or not the child is in child care has no direct bearing on infant or toddler deaths when identified medical conditions exist.



John T. Carter. (2014). *Infant and Child Injuries in Georgia: A Study Comparing Injuries in Child Care Facilities with Infant and Child Injuries in the General Population (Using Emergency Room and Hospital Data)*. Atlanta, GA: Rollins School of Public Health, Emory University.