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Epidemiology of child homicides 14 years and younger in Cook County, IL, 2005-2010

Fulfilling requirements for Culminating Experience
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Abstract

Title: Epidemiology of child homicides 14 years and younger in Cook County, IL, 2005-2010.

Background: Violence against children is a serious public health issue, and violence is a major cause of mortality among children. Cook County, IL, which houses Chicago, has drawn attention for its high levels of firearm and street violence. Little information is available surrounding homicide of children aged 0 to 14 in Cook County.

Methods: Surveillance data from the Illinois Violent Death Reporting System (IVDRS) was used to identify children 14 years and younger who had been victims of homicide, accidental gunshot death, or suicide in Cook County, IL between the years 2005-2010. The demographics of the victims and perpetrators were described as well as circumstances surrounding the victim's deaths.

Results: Between 2005 and 2010 in Cook County, IL there were 173 cases of child homicide (<14 years old). The two ages groups with the highest incidence of homicide victims were 0-12 months (27.3%) and 13-14 years (24.4%). The most common victims were males (64.7%), blacks (68.8%), and died in the city of Chicago (73.0%). There were 57 firearm related homicides (32.9%) and 52 homicides related to abusive head trauma (30.1%). Young children most often killed at the hands of caregivers while older children are more likely to have deaths perpetrated by nonfamily members relating to street and gang violence. Children whose families had a prior documented history of child abuse

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were more likely to be killed in their home ($p < 0.001$), be killed by their father ($p < 0.001$) or mother's male partner ($p < 0.001$).

Discussion: The major findings of this study are: 1) There is a bimodal distribution of child homicides, with the majority of deaths occurring within the first years at the hands of caregivers and then in the early adolescent years perpetrated to non-family members; 2) Among child homicides there is a disproportionate number of black children who are victims; 3) Children who were killed when they are older are more likely to be male and killed by non-family members; 4) Children who were killed by fathers and the male partners of mother were more likely to be younger. 5) When there has been a documented prior history of child abuse children are more likely to be killed at home by their fathers and mother's male partners.

Conclusion: This study revealed a bimodal distribution of homicides in children 14 years and younger in Cook County, IL with the majority of deaths occurring in young children at the hands of caregivers and among adolescents committed by non-relatives using firearms. The results of this study can help inform intervention efforts, which will likely require different interventions depending upon the age of the child.

Introduction

Violence has wide reaching consequences across American streets, homes, and communities. Violence wreaks havoc not only in the lives of its victims but also in bystanders, witnesses, and family members. Violence can take many forms including physical and sexual violence, coercion, intimate partner violence, child abuse and neglect, and in its most severe form, homicide. This paper will focus on homicide as it affects children.

Violence is a serious public health issue that impacts millions of people globally.[1-3] Beyond the loss the life, violence is known to have negative downstream effects including problems with alcohol and drug addition, unemployment, incarceration, depression, suicide, school dropout, and poor childhood development. [1] Beyond the personal level, the cost of violence upon society is large. In the United States the cost of violence is estimated to reach up to 3.3% of the GDP, or \$553 billion dollars in today's value. [4]

Children are one group that is particularly vulnerable to violence.[2] During the second half of the 20th century there was a drastic drop in the number of total child mortality due to all causes, but during this same time period, however, child related homicides tripled in number and suicides quadrupled.[5] Violence has a particularly large impact on children and youth as they are a vulnerable and often-powerless group. Children are victims of homicide, street and gang violence, domestic violence, self-harm, bullying, and sexual violence. In the United States homicide is the third leading cause of death of children and adolescents, and in 2010, 738,000 children and adolescents were seen in emergency departments due to assault related injuries. [6] More than 10 million

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US children have experienced maltreatment at the hands of a caregiver and the most severe of these abuses have resulted in homicide. [7]

One of most severe forms of violence against children is homicide. Much attention has been paid homicides among adolescents ages 14-24 years old as this group makes up the highest number of firearm, gang, and street violence related deaths. [6] Less attention, however, has been given to children under the age of 14 years old despite, in 2010, violent death still being the third leading cause of death of children between age 1 and 14 years of age. [8] For the remainder of this paper violent child deaths and child homicides will refer to deaths and homicides of children aged 14 and younger. Violent child deaths occur via death by homicide, suicide, undetermined deaths, and unintentional violent death (accidental firearm death, accidental strangulation, etc.) [9]

Homicides account for the highest incidence of violent death in children. Annually, in the United States there are more than 16,000 total homicides, and the United States has the highest rate of child homicides of any developed country. [2, 5] It was estimated that 1,560 children died as a result of child maltreatment in 2010 in the United States, with a rate of 2.07 per 100,000 children. Several prior studies have noted that the majority of child deaths occur at the hands of caregivers and residents of the child's home. [10-12]

The majority of child homicides occur before the age of 5 and prior studies have demonstrated that the majority of these homicides are at the hands of caregivers.[10, 13] Nationally, The leading causes of death in child homicides were due to abusive head trauma, blunt trauma, and asphyxiation, but as children aged firearm deaths became more prevalent.[10] Some studies have demonstrated equal likelihood of the perpetrator being

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the mother or the father in young children, while others have demonstrated increased likelihood of the father being the perpetrator.[10, 14, 15] Other studies have implicated fathers are more likely perpetrators in cases of death due to physical trauma while mothers are more likely perpetrators in cases of death due to neglect.[13]

Homicide is a significant cause of mortality in children and many of these deaths are preventable. [23] One study demonstrated that as children age the preventability of deaths increased, and the authors concluded that 61% of deaths related to child abuse could be prevented. [23] The authors concluded that the majority of the responsibility for preventing these deaths fell upon the community and family members who knew or suspected abuse but failed to report the situations to the appropriate authorities.

Illinois rate of child deaths as a result of child maltreatment was 2.30 per 100,000 and Illinois had the 16th highest mortality rate out of the 50 states. [16] In particular, Chicago has gained a lot of media attention over the past several years for its high levels of violence with violence peaking in 2016 with over 4,300 shooting and 750 homicides.[17] Among the major metropolitan areas, defined as areas of one million or more population, Chicago leads in number of violent deaths when compared to New York and Los Angeles.[18] Chicago is known for its high rates of firearm homicides with an average rate of 12.9 per 100,000. The highest incidence of homicides occurs in males aged 20 to 24 years old.[19] To our knowledge it has not been well described how the violence seen in Cook Country affects mortality among children and young adolescents.

Several studies have examined violent deaths of children in smaller states and mid sized cities, but to our knowledge, there have not been any studies describing the rates of violent deaths of children in a large US city during the years 2005 to 2010.[14, 20, 21]

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This study provides epidemiologic review of the homicides of children 14 years and younger within Cook County as well as perpetrator demographics and circumstances of death. Understanding the epidemiology of homicides against children is critical to guiding intervention efforts within Cook County.

Methods

This study is a retrospective ecological study using surveillance data to examine violent death of children 14 years and younger in Cook County, IL.

The methods used were similar to previously published methods. [19, 22] The National Violent Death Reporting System (NVDRS) is a state-based surveillance system developed and managed by the Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (CDC Injury Center). NVDRS collects data on violent deaths, which the CDC Injury Center defines with the following manner: suicide, homicide, death from legal intervention, death from undetermined intent, and unintentional/accidental firearm deaths. NVDRS data include victim demographics, mechanism of injury, method of injury, location of residence, location of injury, location of death, autopsy and toxicology results, and circumstances surrounding the death. The primary data sources are death certificates, coroner/medical examiner reports, law enforcement reports, and crime laboratory reports. These data are linked to the victim and entered into a web-based database.

The Illinois Violent Death Reporting System (IVDRS) collects violent data from a sample of urban, suburban, and rural counties in Illinois. From 2005 to 2014, the

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IVDRS operated as a shadow system, collecting data on cases with dates of death from 2005 to 2010. CDC Injury Center software and protocols used with NVDRS were used to collect data for IVDRS. Data elements from IVDRS are the same as those in NVDRS. The IVDRS database contains a deidentified qualitative narrative describing the circumstances of each death from the amalgamated data sources.

The data used for this analysis included all data contained in IVDRS with deaths occurring from 2005 to 2010. Cases were selected according to the following criteria: 1) manner of death was listed as homicide 2) both the injury and subsequent death occurred in Cook County, which includes the city of Chicago, and 3) decedents were aged 14 years and younger. Deaths with a manner of undetermined intent were excluded from this study.

The demographics were described using the collected IVDRS data. The qualitative narrative for each case was analyzed using qualitative content analysis.[23] Content analysis is a qualitative analysis technique of text that allows for the structured analysis of the text by coding and categorizing the data. This process starts with the reading of all the narratives to identify common circumstantial features of the narratives. Each narrative was then coded with further victim demographics, perpetrator demographics, relationships between victim and perpetrator, and circumstances surrounding each death that were induced from the data. In detailing the circumstances surrounding each death, a “yes” response means that the circumstances were present, and a “no, unknown, or unavailable” response can mean that the circumstance was not present or the information was not available to be recorded.

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These data were then examined for trends or patterns. Common circumstances that were coded included: relationship between perpetrator and victim, i.e. mother, father, etc.; location of death, i.e. residence; prior documented child abuse; circumstances surrounding the death, i.e. drive by shooting, murder suicide, multiple victims. These qualitative coded data were then categorized with a variety of variables including age, year, etc. This helped identify patterns and relationships in the data.

The IVDRS system has quantitative data within the system that were also analyzed. This includes variables such as manner of death, weapon, age of victim, gender of victim, suburban vs. urban cook county, etc.

Both the quantitative and qualitative data were organized to give information on demographics of the victims, perpetrators, and the circumstances surrounding the homicide.

Categorical variables were described using numerical values and percentages. Differences between selected circumstances, ethnicity, age, and documented history of child abuse and location were assessed using Pearson's χ^2 test.

Data were collected in software developed by the CDC for NVDRS. All analyses were performed using SPSS version 22.0 (IBM, Chicago, IL).

Results

Between 2005 and 2010, there were 173 homicides of children 14 years and younger in Cook County. The victim demographics are displayed in Table 1. The most number of homicides was seen in children aged <1 year (27.3%), followed by children aged 13-14 years old (24.4%). Children aged 3-4 years old were the least common victim

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with only 8.7% of homicides occurring during that age range. 64.7% of victims were male while 35.5% were female. Over two thirds (68.8%) of victims were black, 22% were Hispanic, and 7.5% were white.

The number of homicides per year ranged from 23 homicides to 35 homicides. 2007 saw the most number of homicides at 35 (20.2%).

The most common mechanism of homicide was firearm (32.9%) followed closely by head trauma (30.1%). The majority of deaths occurred within the city of Chicago (73.0%) when compared with suburban cook county (27%).

Table 2 describes the relationship between the perpetrator demographics as they relate to the victim. The largest numbers of children were killed by non-family members/caregivers with 46.0% of children killed by non-caregivers. Of caregivers, fathers were the most common perpetrators with 17.9% of perpetrators being the father of the victim. Male partners of the mother and other family members both accounted for 13.3% of perpetrators. Mothers accounted for 9.2% of perpetrators. At younger ages parents and parental paramours account for the majority of perpetrators. Between ages 0-12 months perpetrators are 45% fathers, 15% mothers, and 19% male partners of the mothers.

Table 3 describes the circumstances surrounding the violent deaths. The majority of deaths occurred within the residence of the victim (58%). Gang involvement/victim gang affiliation was only noted in 14.5% of homicides. Of child homicides 39% of households had noted prior histories of abuse and 13% had noted prior Department of Child and Family Services (DCFS) involvement. 8.0% of homicide had multiple fatalities and 6.0% were due to drive by shootings.

Tables 4 and 5 present statistical analysis regarding the circumstances of the child deaths. Table 4 describes statistics of characteristics relating to the age of children. The average age of male victims was 85.4 months and the average age of female victims was 56.3 months. Males were statistically more likely to be killed when they are older than when compared with females ($p=0.007$). The average age ranged from 68.7 months to 100.1 months for black, Hispanic, and white children, but there was not a statistically significant difference in the age of children killed by race ($p=0.610$). The average age of children killed by their mother was 50.7 months, the average of children killed by their fathers and male partners of their mothers was 30.3 months and 32.8 months, respectively. Children killed by non-family members/caregivers were much older with the average age of 116.6 months. Children killed by their mothers were statistically more likely to be older than children killed by fathers or male partners of the mother. ($p<0.001$) Children killed by non-family members were much more likely to be older than children killed by caregivers ($p<0.001$).

Children who were killed in the city of Chicago had an average age of 83.6 months compared with children who were killed in suburban Chicago who had an average age of 52.8 months. Children killed in Chicago were statistically significantly more likely to be older than children in suburban Cook County ($p=0.005$)

Table 5 describes the statistical analysis of circumstances as they related to a prior documented history of child abuse. This is a documented history of child abuse in the family prior to the murder of the victim. When there was a documented prior history of child abuse children were statistically more likely to be killed at their residence ($p<0.001$), by their father ($p<0.001$) or mother's male partner ($p<0.001$).

Discussion

This study found that in Cook County there were 173 child homicides between 2005-2010 for children 14 years old and younger. The major findings of this study are: 1) There is a bimodal distribution of violent death, with the majority of deaths occurring within the first years at the hands of caregivers and then a second cluster of deaths in the early adolescent years perpetrated to non-family members; 2) Among child homicides there is a disproportionate number of black children who are victims; 3) Children who were killed when they are older are more likely to be male and killed by non-family members; 4) Children who were killed by fathers and the male partners of mother were more likely to be younger. 5) When there has been a documented prior history of child abuse children are more likely to be killed at home by their fathers and mother's male partners.

Over one-fourth (27%) of all violent deaths occurred before 1 year of age and over half (55.2%) occur before the age of 5 years old. In this age group children are most often killed at the hands of caregivers with the most common mechanism being abusive head trauma. This is consistent national data for children of this age range. National studies have found that young children are often killed at home, by their caregivers, with deaths caused by abusive head trauma and blunt physical trauma.[24]

Differing from national data was the increasing number of deaths seen as children entered their preteen and teenage years. Over one-third (33.7%) of homicides occurred in the 10-14 years old age group. These deaths are most commonly at the hands of

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nonfamily members and firearms are the most common mechanism of death in this age group.

Many studies have noted that nationally young children under 5 years old are the most common victims of child homicides and that child homicides continue to remain low as children age.[13, 14, 21, 25] This study, however, shows a bimodal distribution of child homicides with a large number of children killed under the age of 5 years old and then a second group killed after age 13 years old. This sharp rise in the number of homicides that is seen as children enter their adolescent years differs from national findings.

The types of homicides seen in these two groups differ not only in terms of the circumstances of their deaths, but also with regards to the locations, manners of homicide, and perpetrator. The younger children are more often killed at home by caregivers and die as a result of blunt trauma. This is different that the homicides of children in early adolescents who are killed outside of their homes by noncaregivers and most often die as a result of firearm violence. Because of the differences between these two clusters of homicides interventions will likely have to be tailored with regards to the age of the child.

Interventions for violence against children often focus on reducing both individual and familial risk factors and strengthening protective factors. Nationally, the majority of child mortality results from young children who are killed by caregivers, so interventions have been largely directed towards parents. [6] These interventions include parental education, working to develop safe, stable, and nurturing relationships between parents and child, and providing economic support. In Cook County there is also increased risk of

homicide as children enter into their adolescent years, and very different interventions must be used to address these homicides. This often includes urban, minority populations. Interventions in this age group have aimed at reducing antisocial behavior within children to help reduce the risk of children both perpetrating and being victims of violence.[22]

There have been several identified risk and protective factors for violence against children. These risks can individual risk factors and family risk factors. The CDC has listed several risk and protective factors of violence against children: [6]

Risk Factors for Violence[6]:

- Individual: history of violent victimization; attention deficits; hyperactivity or learning disorders; history of early aggressive behavior; involvement with drugs; alcohol or tobacco; Low IQ; poor behavioral control; deficits in social cognitive or information-processing abilities; high emotional distress; history of treatment for emotional problems; antisocial beliefs and attitudes; exposure to violence and conflict in the family.
- Family: authoritarian childrearing attitudes; harsh, lax or inconsistent disciplinary practices; low parental involvement; low emotional attachment to parents or caregivers; low parental education and income; parental substance abuse or criminality; poor family functioning; poor monitoring and supervision of children.

Protective Factors for Violence

- Individual: intolerant attitude towards deviance; High IQ; High grade point average; positive social orientation; highly developed social skills/competencies; highly developed skills for realistic planning; religiosity

- Family: connectedness to family or adults outside the family; ability to discuss problems with parents; perceived parental expectations about school performance are high; frequent shared activities with parents; consistent presence of parent during at least one of the follow: when awakening, when arriving home from school, at evening mealtime or going to bed; involvement in social activities; parental/family use of constructive strategies for coping with problems.

In young children the risk and protective factors are largely the result of the environment they are in and the parents they have. This would include economic mean of the family, social support for the mother, the presence of parental coping strategies, and stability of home lives. As children age these environmental and family factors continue to play a role in a child's risk of violence, but these factors change to include new areas including school, friend groups, and larger societal and community factors. But as children age they also begin to develop individual risk factors for violence including lower IQ, poor behavior and social skills, drug/alcohol use, and antisocial behavior. Any interventions that aim to reduce child homicides must recognize that young children and older children have different risk factors and manners of homicide and therefore successful interventions between these two groups must be different. Further evaluation of the risk and protective factors of these two clusters of children are warranted and should be a topic of further research.

A disproportionate number of child homicides in Cook County are from black children with 68.8% of homicide victims being black children. This is compared with

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22% of Hispanic children and 7.5% of white children. A previous study examining violent deaths in Cook County during the same time period found that among all age groups blacks accounted for 76% of all violent deaths, Hispanics accounted for 20%, and whites accounted for 3%.[19] This racial trend is also apparent in children within Cook County. One national study found of child homicide of children aged 0-4 years old found that black children were 4.2x more likely to be killed by homicide than white children.[24] This racial trend is seen within Cook County.

The data show that only 14.5% of homicides were noted for gang involvement. This is similar to reported rates of homicides related to gang activity of children aged 0-14 years in 5 large U.S. cities during 2006-2008.[26] This likely underrepresents the number of homicides that were associated with gang involvement as gang involvement was only coded if the victim or perpetrator had noted gang involvement within the database. It has been previously noted that violence surveillance systems likely underestimate the number of homicides related to gang activity. [27] Many of these homicides are likely related to gang activity and street violence but did not meet to criteria for being coded as gang related within the database. Even with acknowledging that the number of gang related homicides is likely underestimated, a majority of these deaths were not related to gang violence. These non-gang related deaths that increase as children age are likely related to interpersonal violence and not to any specific gang activity. It is likely that interpersonal violence between youth is exacerbated by poverty, easy access to firearms, and feuds exacerbated by social media. [28, 29]

There are several circumstances relating to the child age that are of note. (Table 4) Male children are more likely to be killed when they are older than female children (85

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months vs. 56 months). This is likely because as boys age there is increased risk of them dying relating to the firearm deaths in Cook County, as the most common victims of homicide in Chicago is late adolescent males.[19]

The average age of children killed by fathers or male partners of the mother were around 2.5 years old while the average age of children killed by mothers was around 4 years old. Other studies have also noted differences in homicides committed by mothers versus fathers, including findings that fathers are more likely to commit homicide through physical abuse and mothers are more likely to commit homicide through neglect.[15] The age difference seen in this study helps illuminate continued differences between comparing homicides committed by mothers versus male caregivers. This requires further investigation as it may help further elucidate triggers that cause mothers vs. male caregivers to kill their children. This information when taken in conjunction with the differing manners in which mothers versus male caregivers kill their children can help provide directed interventions for both parents.

The average age of children killed by non-family members rose significantly to around 9.5 years old ($p < 0.001$). This reflects the increased number of homicides committed by firearms as children enter their adolescent years.

Prior histories of abuse were reported in 39% of child homicides. Other studies have indicated prior histories of abuse in up to 50% of child homicides, and it is one of the leading risk factors for child homicide.[6, 15] When statistical analysis was conducted on the circumstances surrounding documented prior histories of child abuse there were several notable findings. In homicide cases with prior documented child abuse children were more likely to be killed in their homes than outside of their homes. The murders

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were also more likely to be committed by fathers or male partners of the mothers than by the mothers.

There are several limitations to this study. This study reflects the number of violent deaths in Cook County, which is an urban and suburban county of the major metropolitan area of Chicago. This is not reflective on Illinois as a whole and is not generalizable to the whole country. Secondly, these data are surveillance data obtained from documentation and information bias may be reflected in the results. As previously mentioned this study may underestimate the number of gang related violent deaths. Another limitation from this study is that the data did not contain information on household socioeconomic status. When identifying prevention strategies and risk factors household socioeconomic status is a valuable piece of information. A further effort to place the residence of the victims and cross-reference with the average incomes with the zip codes could help provide valuable data. Furthermore, when examining the circumstances surrounding each death a negative response ("no, unknown, unavailable") could mean that the circumstance was not present or that the information was not available. This means it was likely that positive responses were under recorded.

This data shows two major sources of child homicides within Cook County. The first source is homicides committed by caregivers at the residence of the child, which accounts for the largest number of child related homicides. Most often these homicides occur when the child is young. The second source of homicides is from non-family members/caregivers and is related to firearm violence as children enter into their adolescent. Any interventions aimed at decreasing total child homicides within Cook

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County must work to address both homicides committed by caregivers when children are young and firearm violence effecting older children.

Conclusion

In conclusion, this was an epidemiologic study examining child homicides of children 14 years and younger in Cook County, IL. Violence is a known public health issue and children are particularly vulnerable to violence. Violent death remains the 3rd leading cause of death among children and beyond the loss of life it has far reaching consequences on child development, family structures, educational and employment achievement, and societal economic resources. The United States remains the developed country with the highest numbers of child homicides. Using surveillance data from IVDRS data were collected on violent deaths within Illinois. Qualitative and quantitative analysis was conducted on all the homicides of children 14 years old and younger.

There is a bimodal distribution of violent death in children in Cook Country. The majority of deaths occurring within the first few years of life occur in the residence of the victim, at the hands of caregivers. A second cluster of deaths occurs in the early adolescent years relating to firearm violence committed by nonfamily members. Homicide victims are disproportionately black, male children. Children killed by their mothers were more likely to be around 4 years old while children killed by their fathers or male partners of their mothers were more likely be around 2 years old. When a reported prior history of abuse was present children where more likely to be killed in their own homes by the child's father or the male partner of the mother. The majority of child homicide deaths are preventable. Interventions within Cook County designed to

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reduce homicides of young children must focus on home interventions aimed at caregivers, while interventions designed to reduce homicides of older children must focus on firearm violence within the city.

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Table 1. Demographics of Homicide Victims in Cook Country, ages 0-14 years old, 2005-2010

	<u>n</u>	<u>%</u>
Total (N=173)	173	100.0%
<u>Year of death</u>		
2005	27	15.6%
2006	30	17.3%
2007	35	20.2%
2008	28	16.2%
2009	23	13.3%
2010	30	17.3%
<u>Age (years)</u>		
<1	47	27.3%
1 to 2	33	19.2%
3 to 4	15	8.7%
5 to 9	19	11.0%
10 to 12	16	9.3%
13 to 14	42	24.4%
<u>Sex</u>		
Male	112	64.7%
Female	61	35.3%

<u>Race/Ethnicity</u>		
Non-Hispanic White	13	7.5%
Non-Hispanic Black	119	68.8%
Hispanic	38	22.0%
Other	3	1.7%
<u>Location of Fatal Injury</u>		
City of Chicago	126	73.0%
Suburban Cook County	47	27.0%
<u>Weapon/Mechanism of Fatal Injury</u>		
Firearm	57	32.9%
Head Trauma*	52	30.1%
Other Abusive Trauma*	17	9.8%
Asphyxiation	15	8.7%
Sharp instrument	11	6.4%
Other/Undetermined	21	12.2%
* Either personal weapons (e.g. fists) or blunt objects		

Table 2. Demographics of Homicide Perpetrators in Cook County, 2005-2010

	<u>n</u>	<u>%</u>
Mother	16	9.2%
Father	31	17.9%
Male partner of mother	23	13.3%

Other family member/Caregiver*	23	13.3%
Non-family member/Caregiver	80	46.0%

* Includes more than one suspect, regardless who suspect(s) might be

Table 3. Circumstances Surrounding Homicides, 2005-2010

	<u>n</u>	<u>%</u>
Death at residence/Home of victim	101	58.0%
History of Abuse	68	39.0%
Gang-related or Gang-affiliation of victim noted	25	14.5%
Noted DCFS priors	21	12.1%
Multiple Victims	14	8.0%
Drive by Shooting	10	6.0%

Table 4. Age of victim by selected demographics and circumstances

	<u>Age (months)</u>	<u>p-value</u>
<u>Sex</u>		
Male	85.4	0.007
Female	56.3	
<u>Race/Ethnicity</u>		
Non-Hispanic White	70.9	0.610
Non-Hispanic Black	68.7	
Hispanic	100.1	

Other		
<u>Location of Fatal Injury</u>		
City of Chicago	83.6	0.005
Suburban Cook County	52.8	
<u>Perpetrator</u>		
Mother	50.7	<0.001
Father	30.3	
Male partner of mother	32.8	
Other family member/Caregiver*	53.7	
Non-family member/Caregiver	116.6	

Table 5. Documented history of child abuse present by selected circumstances

	<u>%</u>	<u>p-value</u>
Fatal injury occurred at victim's home	53.5%	<0.001
Fatal injury did not occur at victim's home	19.4%	
Victim's father was the perpetrator	68.6%	<0.001
Victim's father was not the perpetrator	31.9%	
Mother's male partner was the perpetrator	76.9%	<0.001
Mother's male partner was not the perpetrator	32.7%	
Noted DCFS priors	25.0%	<0.001

Nicholas Lopez

No noted DCFS priors

75.0%
