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Chicago Homicide Dataset Series

Children's risk of homicide: Victimization from birth to age 14, 1965 to 1995

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All homicides are tragic, but homicides of children are among the most devastating. In the U.S, homicide is a leading cause of death among children under the age of 15 (Krug, Mercy, Dahlberg & Powell, 1998). In their comparison of child homicide rates in 26 industrialized countries, Krug

Although young children have a lower risk of homicide victimization than adults, the murder rate for children from birth to age 14 increased steadily for 31 years.

and colleagues found that the rate in the U.S. was twice that of the next-highest country (Singapore). In 1995, the homicide victimization rate for children age 14 or younger was 8.49 in Chicago and 2.27 in the U.S. (WISQARS, 2004). The high rate of child homicide in the U.S. is not new, having increased threefold from 1950 to 1994 (National Center for Health

Statistics, 1995), with especially rapid increases in the late 1980s and early 1990s (Finkelhor & Ormrod, 2001).

Although young children are clearly at risk, most published studies of child homicide trends focus on teenagers and young adults ages 15 to 24. To develop successful interventions and prevention policies that might reduce the risk to younger children, trends and patterns of homicide should be studied for those specific young victims. This *Research Bulletin* examines the 1,124 homicides of children aged 14 and younger that occurred in Chicago from 1965 to 1995. Trends in population-based risk of homicide compare the risks for young children versus older teens and adults, boys versus girls, children of different racial/ethnic groups, and children in different developmental age groups. Patterns in these 31-year trends suggest practical implications for reducing homicide levels among young children.



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Beginning in 1968 with the collection of 1965 data, the Crime Analysis Unit of the Chicago Police Department has assisted and advised Richard Block, Carolyn Block, and others in the Chicago Homicide Dataset project. The Illinois Authority has supported and maintained the dataset since 1979. The data used in this report is available from the Inter-university Consortium for Political and Social Research at <http://www.icpsr.umich.edu/NACJD/index.html>.

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Table 1
Victim's age at date of fatal injury, Chicago Homicide Dataset,
1965-1995*

Age	Total homicides		Latino		Non-Latino black		Non-Latino white/other	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Birth to 11 months	106	91	16	10	78	71	12	8
12 to 23 months	92	62	14	7	67	52	11	3
24 to 35 months	64	54	6	2	45	45	13	7
3	43	28	3	3	36	21	4	4
4	27	23	2	3	22	16	3	4
5	17	13	1	1	12	10	4	2
6	21	7	0	1	19	5	2	1
7	16	8	1	0	13	8	2	0
8	16	8	4	1	10	5	2	2
9	18	13	1	2	16	7	1	4
10	17	9	3	2	12	5	2	2
11	16	8	1	0	14	7	1	1
12	27	17	3	1	22	16	2	0
13	66	37	14	3	50	28	2	6
14	152	48	30	6	115	39	7	3
Total	698	426	99	42	531	335	68	47

*N = 1,124. Racial/ethnic group is missing for two newborn girls.

Data source

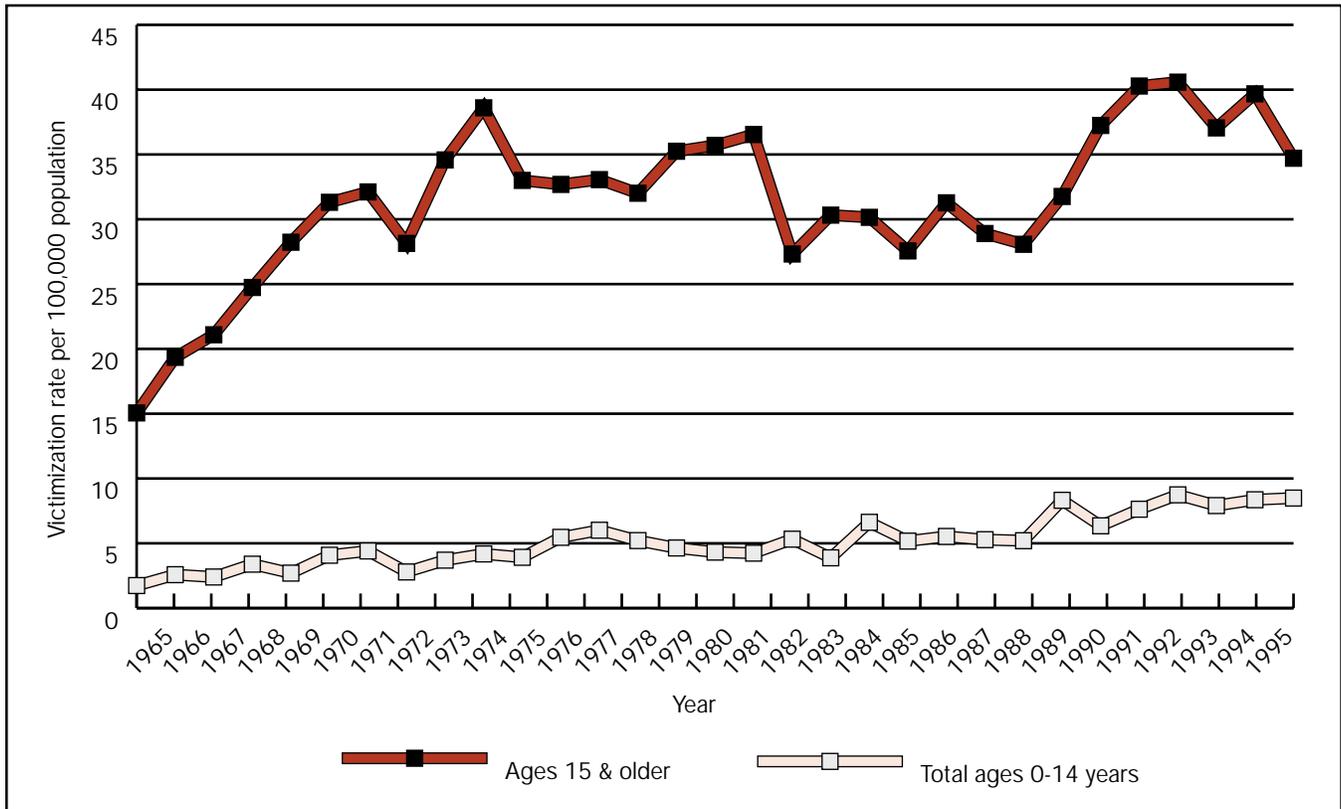
Analysis in this *Research Bulletin* is based on the Chicago Homicide Dataset (CHD), using data from 1965-1995. (The Authority and the Chicago Police Department are in the process of updating the Chicago Homicide Dataset through 2001.) Collected with the cooperation of the Chicago Police Department over many years, and containing detailed information on every homicide recorded by the police from 1965 to 1995, the Chicago Homicide Dataset is the largest, most detailed dataset on violence available in the U.S.

In the current analysis, all of the 1,124 child victims were selected from the 23,817 victim records in the

CHD (Table 1). The dataset included all children aged 14 or younger who were murdered in Chicago between 1965 and 1995.

To analyze trends over time in risk of homicide victimization, the researchers calculated annual population-based rates of homicides by the child's gender, developmental age group, and racial/ethnic group (Latino, non-Latino white/other and non-Latino black). These rate calculations required a 31-year population data file with annual data from 1965 to 1995 for boys and girls in three standard census age groups (newborn to four, five to nine and 10 to 14) and three racial/ethnic groups. Chicago demographer Marie Bousfield pro-

Figure 1
Trends in homicide risk: Comparing young children to older victims



vided annual inter-census population estimates for specific age, gender and race/ethnicity categories (Hispanic, non-Hispanic African American, and non-Hispanic white and “all other” racial groups) (Bousfield, 2002; Bousfield, 1998). The category “non-Hispanic, white and all other” includes Asians and Pacific Islanders, Native Americans and whites (Bousfield, 1998). Hispanic and non-Hispanic are identified in the following analysis as “Latino,” and non-Latino African American as “black.”

Reliable annual population estimates by gender, age, and race/ethnicity are available only for children in five-year age groups. Therefore, victimization risk trends for separate ages, such as one-year-olds versus newborns, are impossible to calculate. However, this analysis presents trends in the *numbers* of murdered children for some of these single ages.

Trends in homicide risk for young children compared to older victims

In every year from 1965 to 1995, the population-based risk (per 100,000) of a child aged 14 or younger becoming a homicide victim was much lower than the

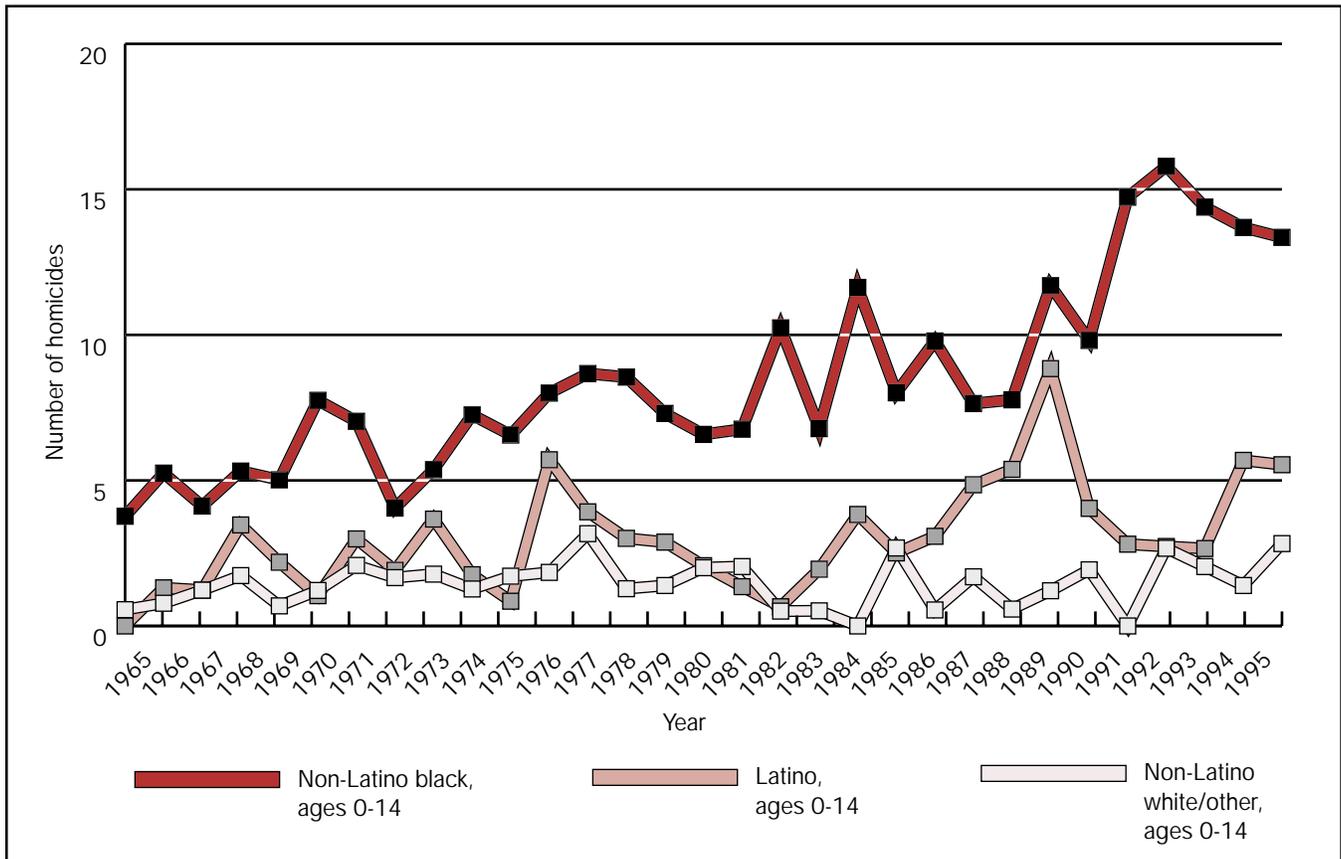
risk for older people (Figure 1). However, the trends over time differ sharply. While the risk for people aged 15 and older showed volatile increases and decreases over the 31 years, the risk of victimization for children 14 or younger followed a straight line with minor fluctuations. That is not to say, however, that young children’s risk of being murdered was stable. On the contrary, their victimization rate per 100,000 population rose from 1.74 in 1965 to 8.49 in 1995, a 388 percent increase.

Thus, while the risk of becoming a homicide victim climbed or fell over time for those aged 15 or older, the risk for babies and young children rose steadily for 31 years. By specifying whether the steadily increasing trend in victimization risk occurred for only certain groups of children, patterns may be discovered that could lead to ideas for successful prevention or intervention.

Victimization trends for black, white/other, and Latino young children

Minority children suffer from higher levels of victimization than non-minority children. African-American

Figure 2
Risk trends for all young children by race/ethnic group



children in all developmental age groups have higher rates of victimization (Lord et al., 2002; Finkelhor & Ormrod, 2001). In Chicago, the risk of victimization was much greater for non-Latino black children than for Latino or non-Latino white/other children in each year from 1965 to 1995 (Figure 2). For example, the risk for black children was 9.81 per 100,000 population in 1990, compared to 1.93 and 4.04 for white/other and Latino children, respectively.

But what about trends over time? Non-Latino black children experienced a sharp increase in their risk of being murdered, from 3.77 per 100,000 in 1965 to 13.25 per 100,000 in 1995, a 254 percent increase (Table 2). In contrast, the risk for white/other children remained level, fluctuating around an average 1.45 per 100,000 over the 31 years, with no year higher than 3.17. Unlike either of the other trends, the risk for Latino children fluctuated sharply, with spurts in 1976, 1989, and 1994 that were preceded and followed by years with much lower rates. For example, the 1989 spurt (8.84 per 100,000) was followed by 3.06 on average from 1990 to

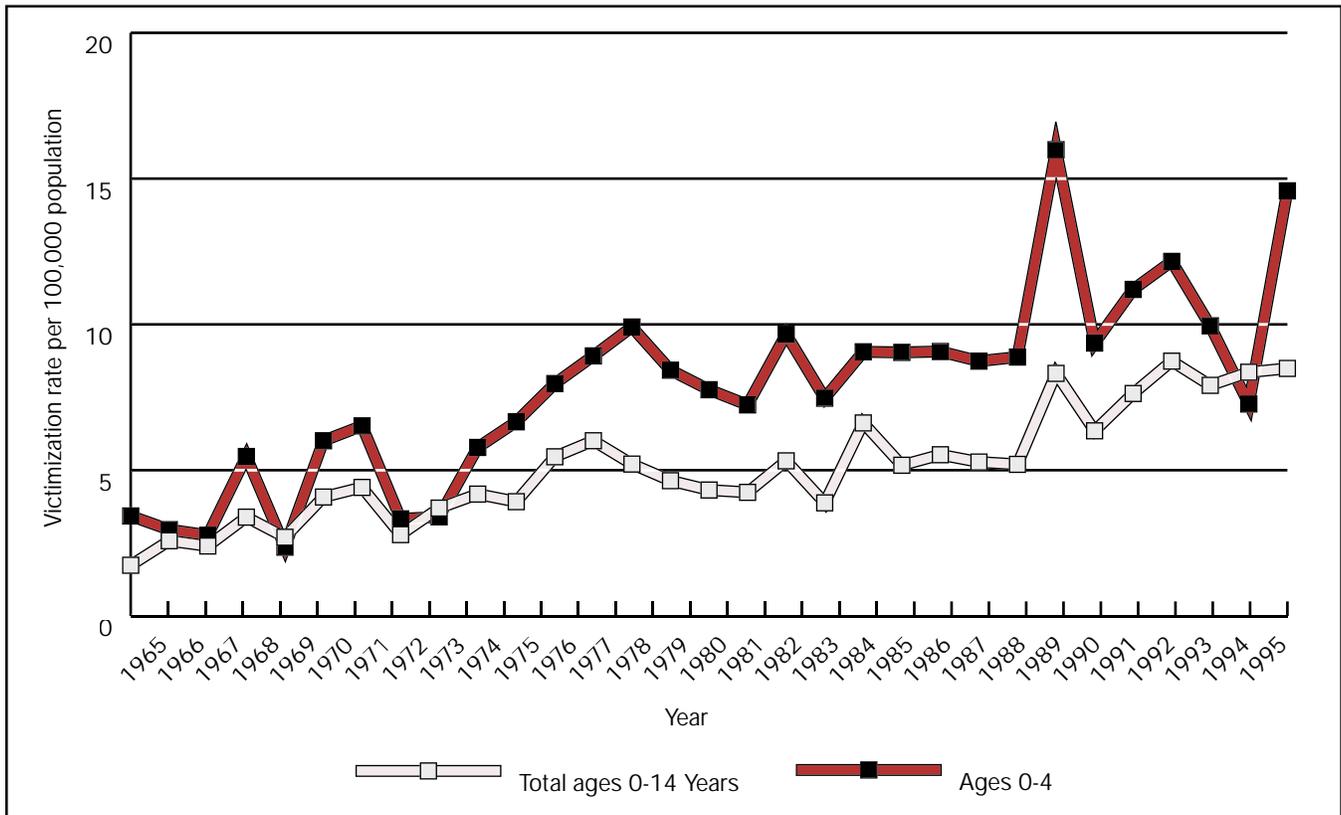
1993, and then by a spurt in 1994 (5.69 per 100,000). Therefore, the steadily increasing risk for young children taken as a whole actually occurred only for non-Latino black children, though it was influenced by periodic spurts in the risk for Latino children.

Because of these different trends, the disparity between the risk of being murdered for black versus Latino and white/other children increased tremendously over time. In 1965, children in the three racial/ethnic groups were much more similar to each other in the risk of being murdered than in 1995. By 1995, the “race gap” in victimization risk was at unprecedented levels. The risk of African-American children was 13.35 per 100,000, compared to 5.54 for Latino children and 2.88 for white or other children.

Victimization trends by developmental age group

Research suggests that the risk of homicide victimization is related to the developmental stages of childhood, with the highest risk in the youngest (newborn to age 4) and oldest (10 to 14) age groups (Chew et al.,

Figure 3
Risk trends for infants and pre-schoolers compared to all young children



1999; Finkelhor, 1997; Crittenden & Craig, 1990; Christoffel, et al. 1983). This is also true in Chicago. The risk of victimization was higher for the youngest children than the oldest children in 26 of the 31 years in the entire study period and in 21 of the 22 years from 1974 through 1995. The victimization rate for primary school-age children (ages five through nine) was the lowest of the three developmental groups in each of the 31 years.

Figures 3, 4, and 5 show trends over 31 years in the risk of homicide victimization for each specific age group, compared to the combined risk for all children age newborn through 14. Compared to all young children, the risk of being murdered rose rapidly over the 31 years for infants and pre-schoolers, from 3.43 to 14.58 per 100,000, an increase of 325 percent (Figure 3). In the 1960s and early 1970s, the risk for the youngest children was similar to the annual risk for all young children combined, but after 1973, the pace of the increase accelerated for babies and pre-schoolers.

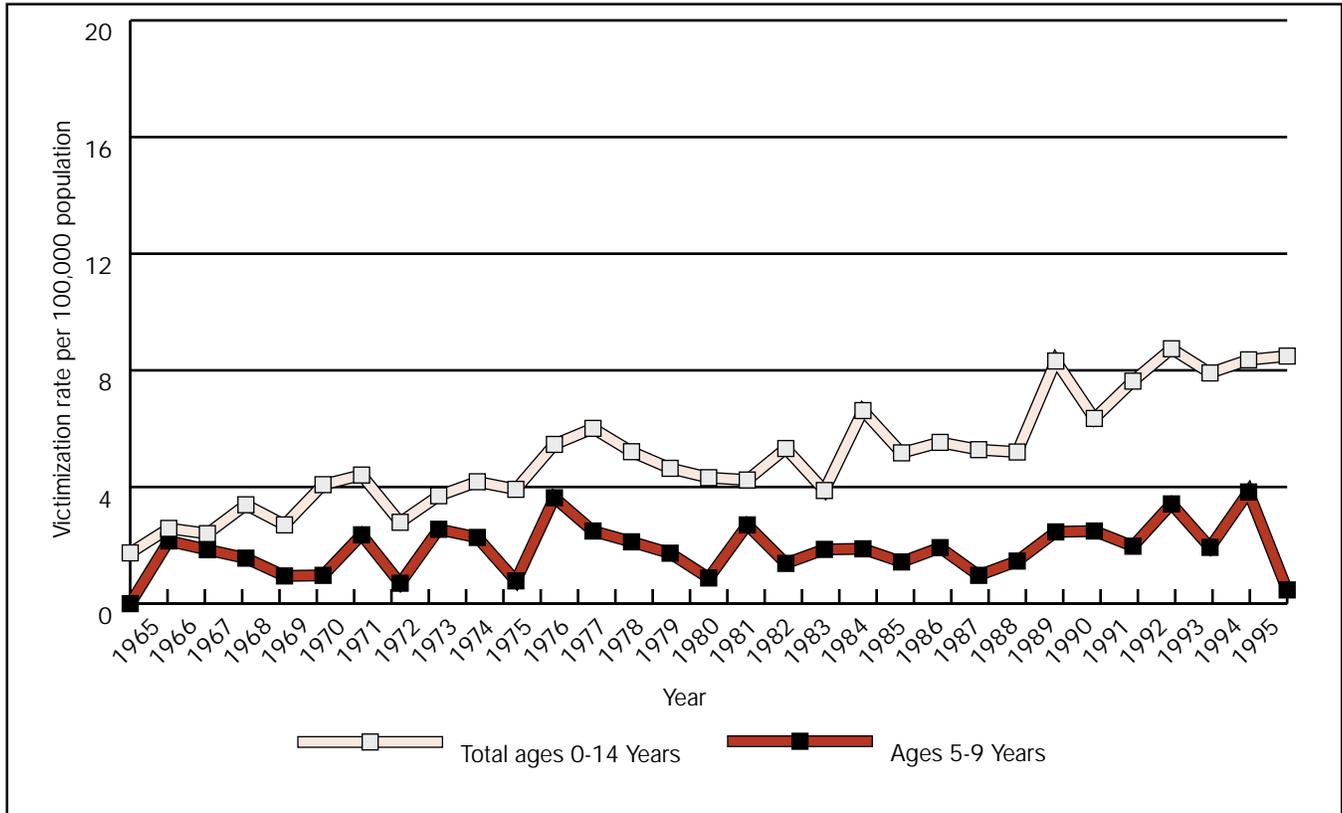
In the meantime, the risk for primary school-aged children was lower than the risk for young children as a whole and changed little over the 31 years (Figure 4).

While the risk for the youngest children was generally higher than the risk for all young children, the risk for middle school-aged children closely tracked the risk for all young children through most of the 31-year period (Figure 5). However, from 1990 to 1994, there was a rapid spurt in the risk for children aged 10 to 14.

Not only is the risk of being murdered high for infants and toddlers as well as for middle school-aged children, but there has been a switch in the “age gap” of victimization risk. Before 1974, the risk was generally higher for middle school-aged children, but after 1974, the risk was generally higher for infants and toddlers.

Did this pattern of risk for children age four or younger happen for all babies and toddlers, or only for specific ages? Unfortunately, the population data do not allow us to calculate population-based rates for individual ages. However, an analysis of the raw data for each individual age group within the 0 to 4 category

Figure 4
Risk trends for primary school-aged children compared to all young children



indicates that the strong and steady increase in the risk of being murdered that occurred for children age four or younger in Chicago from 1965 to 1995 actually occurred only for the very youngest children — infants, one-year-olds and (to some extent) two-year-olds (Figure 6).

For infants age 11 months or younger, the number of homicides increased from 38 in the decade 1965 to 1974, to 78 in 1975 to 1984, and 84 in 1985 to 1994, with 15 occurring in 1995 alone. For one-year-olds (12 to 23 months), homicides increased from 25 in 1965 to 1974, to 39 in 1975 to 1984 and 65 in 1985 to 1994, with eight in 1995. The number of newborn babies (two weeks or younger) murdered in Chicago also increased sharply, from only three from 1965 to 1974, to eight from 1975 to 1984 and 18 from 1985 to 1994, with five in 1995 alone.

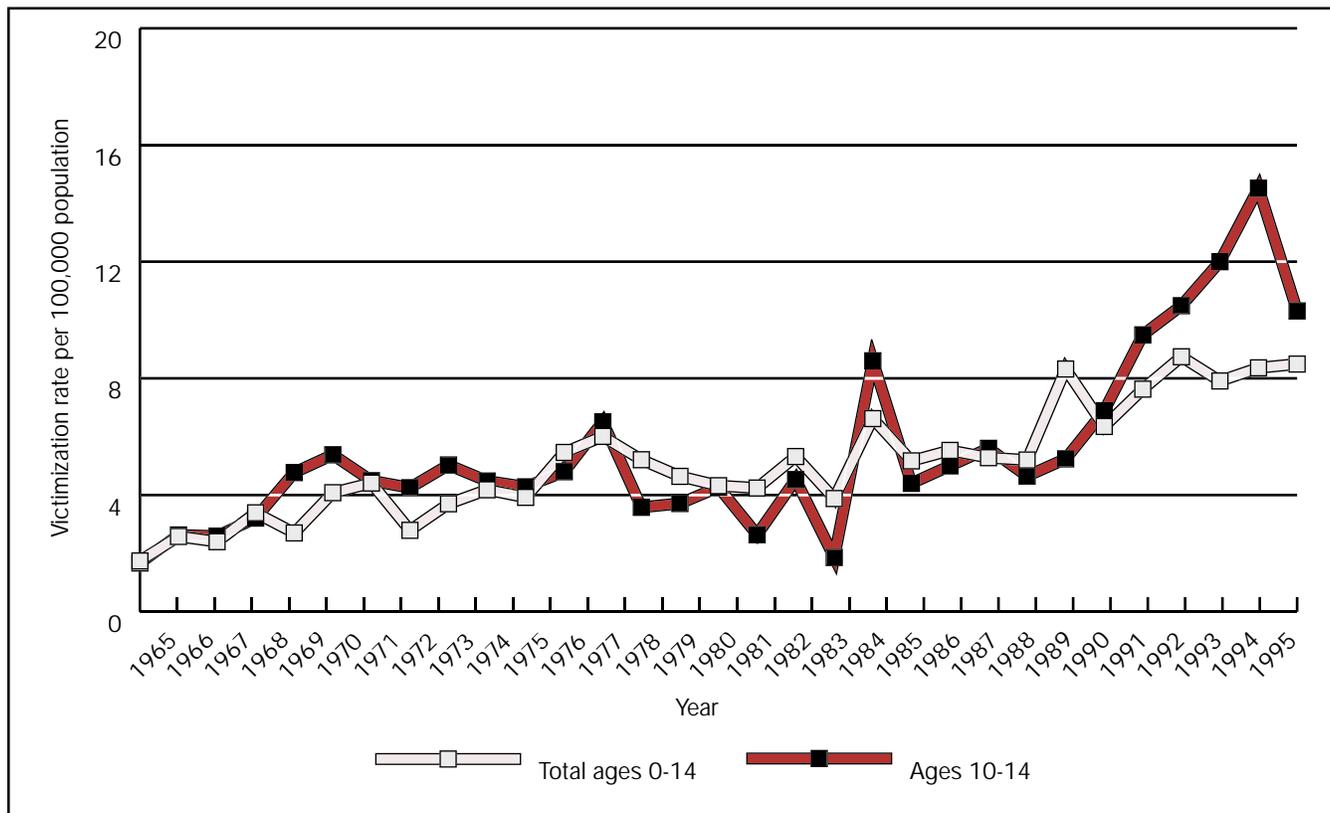
Homicides of two-year-olds increased from 28 in 1965 to 1974, to 38 in 1985 to 1994 and 46 in 1985 to 1994, with five in 1995. In contrast, homicides of children aged three or four did not change over time (32 in 1965 to 1974, 46 in 1975 to 1984, 40 in 1985 to 1994, and four

in 1995). Comparing the two decades 1965-1974 and 1985-1994, the number of homicides increased 121 percent for infants under age one, 160 percent for one-year-olds, 64 percent for two-year-olds, and 20 percent for three- or four-year-olds.

In summary, this section examined whether the steady increase in risk over 31 years seen when all children ages 14 or younger are grouped together occurred for all age groups or just for particular age groups. Results showed that the risk for babies and pre-schoolers (ages birth through four) increased sharply and steadily throughout the 31 years, and the risk for middle school-age children (10 through 14) rose rapidly after 1984 and through the mid-1990s. In contrast, the risk for children in the primary school-age years showed no pattern of increase.

Therefore, the long-term increase in child victimization risk is specified by the child's developmental age. It occurred only in two groups — infants and toddlers (birth through age four) and middle school-age children (10 through 14). Further, there is some indication

Figure 5
Risk trends for middle school-aged children compared to all young children



that the increase in risk for infants and pre-schoolers occurred only for children under age two.

Victimization trends for girls and boys

Studies have found that the population-based risk of being murdered is almost equal for boys and girls when they are infants, but there is an increasing gender gap as children grow older (Alder & Polk, 2001; Boudreaux, Lord & Jarvis, 2001; Finkelhor, 1997). This is also true in Chicago (Table 2). The risk of being murdered was higher for boys than for girls in every year from 1965 to 1995 except two. The gender gap (ratio of the risk for boys to girls) ranged from .81 in 1988 to 4.27 in 1968. In 20 of the 31 years, the rate for boys was at least 50 percent higher than the rate for girls.

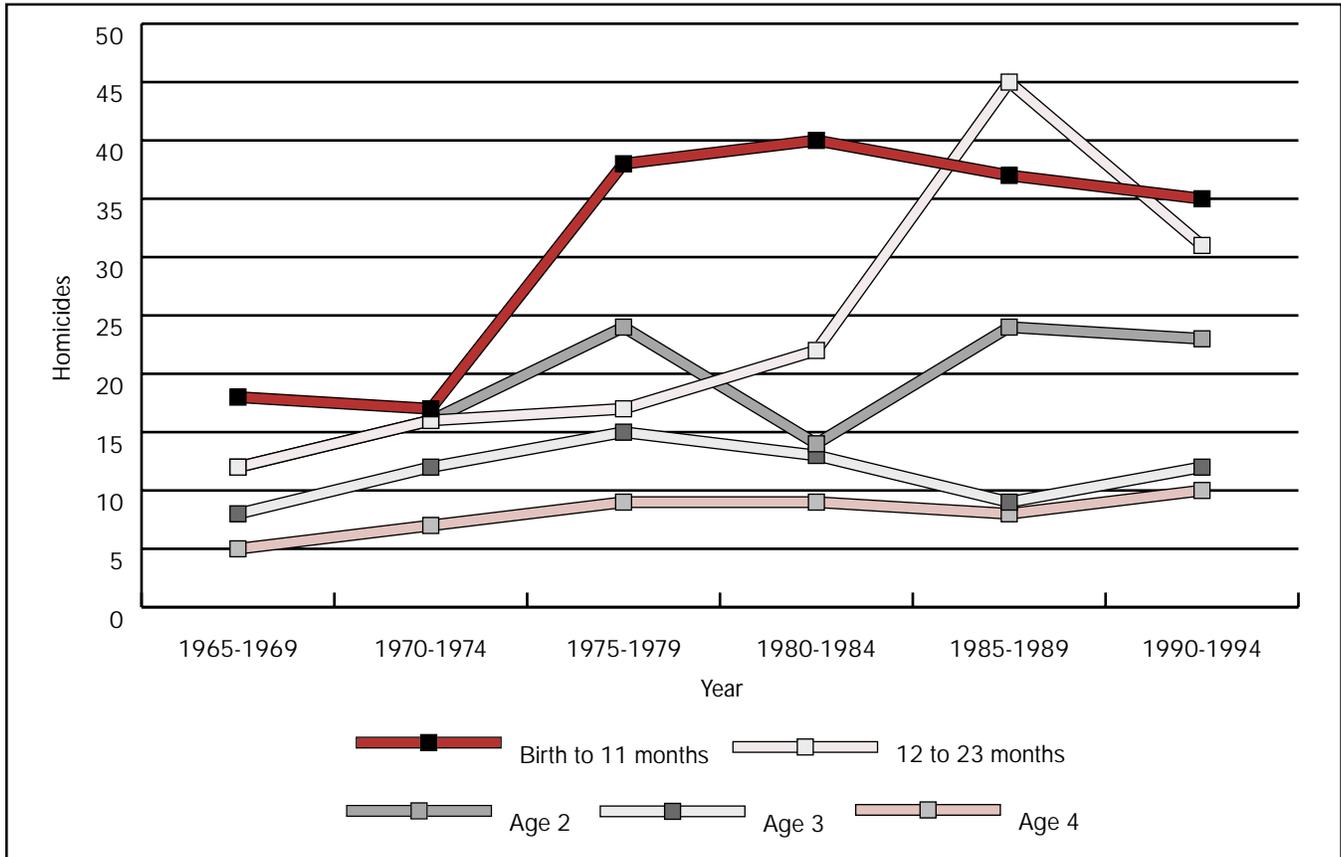
Further, the older the developmental age group, the greater the difference between boys and girls and their risk of being murdered. Averaged over the 31 years, the gender gap was 1.40 for children from infants to age 4, 1.62 for children ages 5 to 9, and 2.81 for children ages 10 to 14. (Because the number of homicides

of girls was zero in some years and age groups, the gender ratio could not be calculated in 1965 for children ages 10 to 14, or in 1965, 1968, 1988, 1992, or 1993 for children ages 5 to 9.)

For both boys and girls, victimization rates moved steadily upward from 1965 to 1995, increasing 365 percent for boys and 374 percent for girls (Table 2). The rate for boys peaked at 11.80 in 1992, while the rate for girls peaked a year earlier, at 6.27. Because the steady increase over time in the risk of homicide victimization happened for both girls and boys, it cannot be specified by the child's gender.

The pattern of an increasing trend in victimization risk for only the youngest and oldest children holds for both girls and boys (Table 3). When the risk of being murdered began to climb in the mid-1970s, the increase was sharpest for the youngest girls and boys (newborn through age four). The late 1980s saw another increase for infants, toddlers, and pre-schoolers (30 percent for girls and 21 percent for boys from 1985 to 1989). Overall, from 1965 to 1989, the homicide risk for the youngest children, infant to

Figure 6
Trends in number of homicides for infants and pre-schoolers



preschool, increased faster and more consistently than the risk for any other age group, even middle school-aged boys.

In the six years from 1990 to 1995, middle school-aged boys suffered the largest increase in their risk of homicide victimization (Table 3). After increasing rather slowly for 25 years, their homicide victimization risk suddenly exploded in the early 1990s. They were not alone, however — the risk for little girls aged birth through four did not decline, and the risk for little boys aged birth through four peaked at 18.81 per 100,000 in 1995 (higher than the 15.26 rate for middle school-age boys).

Victimization trends by developmental age, gender and racial/ethnic group

Previous sections compared trends in the risk of being murdered for young children in different age groups, for boys versus girls, and for Latino versus black versus white/other children. This section examines all three of these characteristics in combination. Table 4

shows the risk of homicide victimization for each of 12 subgroups (three age groups by two genders by three racial ethnic groups) for each five years from 1965 to 1994 and for 1995 separately.

Over the 31 years, the risk of being murdered increased among children in the youngest age group, infant through age four, with the exception of the rate for white/other girls, which declined slightly. Comparing the decades 1965-1974 and 1985-1994, the risk per 100,000 per year increased 23 percent for white/other boys, 129 percent for black girls, 193 percent for black boys, 208 percent for Latina girls, and 90 percent for Latino boys. Further, the homicide victimization risk was especially high in 1995 for four groups of the youngest children — white/other boys, black girls, black boys, and Latino boys.

The risk for children ages five to nine showed no consistent pattern over time and was consistent for black, white/other, and Latino boys and girls.

Table 2
Homicide risk for boys versus girls in Chicago, 1965-1995

Year	Victimization rate per 100,000 population		Gender ratio (boys rate/girls rate)
	Boys ages 0-14 (N = 698)	Girls ages 0-14 (N = 428)	
1965	2.44	1.03	1.98
1966	3.69	1.46	2.53
1967	2.90	1.90	1.53
1968	5.47	1.28	4.27
1969	3.64	1.74	2.09
1970	4.15	4.00	1.04
1971	4.48	4.34	1.03
1972	2.76	2.82	.98
1973	4.49	2.90	1.55
1974	4.37	3.98	1.10
1975	4.25	3.58	1.19
1976	7.44	3.42	2.18
1977	6.59	5.41	1.22
1978	6.50	3.89	1.67
1979	5.55	3.70	1.50
1980	5.69	2.92	1.95
1981	4.90	3.55	1.38
1982	6.41	4.19	1.53
1983	4.71	3.02	1.56
1984	7.72	5.49	1.41
1985	5.99	4.32	1.39
1986	6.66	4.36	1.53
1987	7.04	3.47	2.03
1988	4.65	5.76	.81
1989	10.39	6.17	1.68
1990	8.02	4.63	1.73
1991	8.95	6.27	1.43
1992	11.80	5.59	2.11
1993	9.85	5.90	1.67
1994	11.71	4.90	2.39
1995	11.35	4.88	2.33

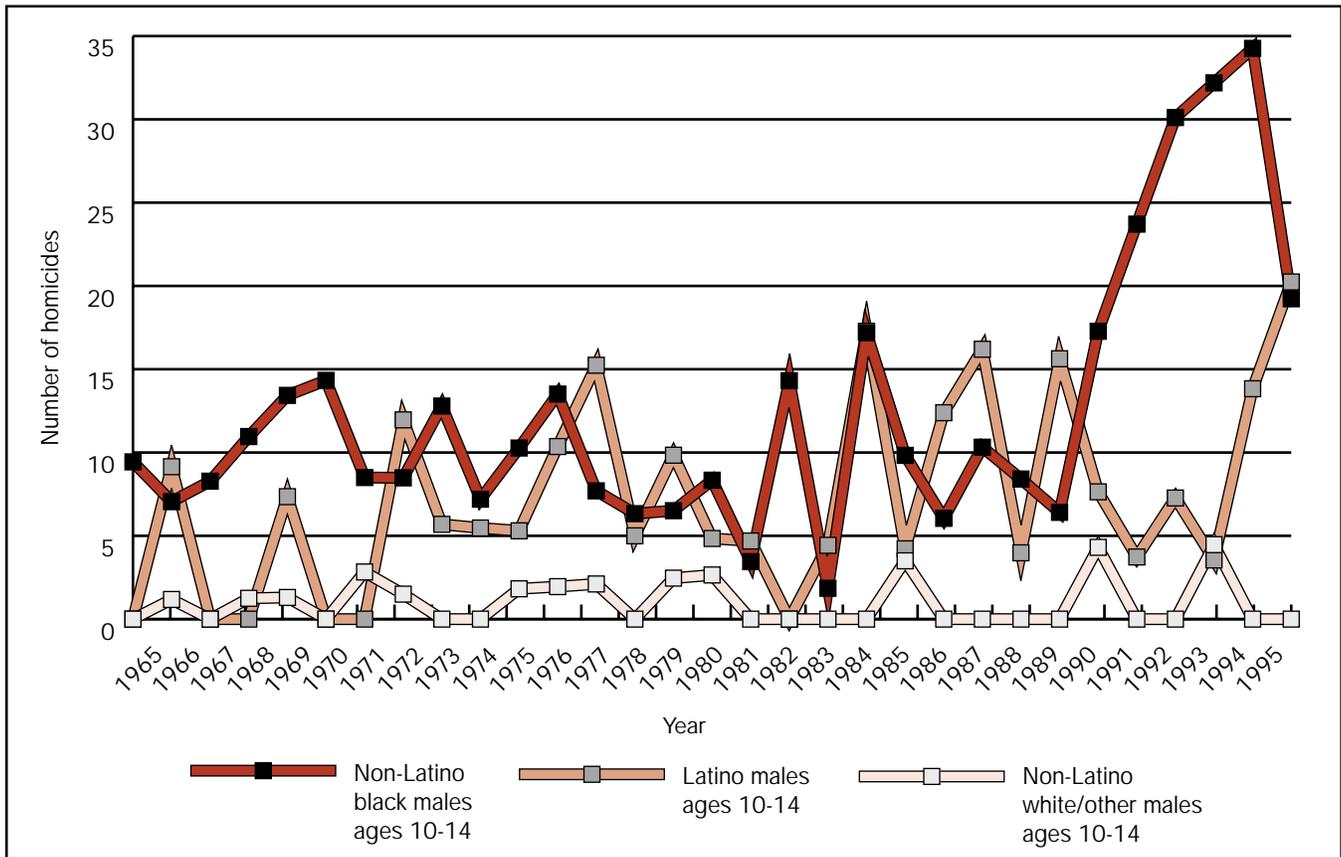
Table 3
Homicide risk by gender and age group in Chicago, 1965-1995

Year	Victimization rate per 100,000 population					
	Girls 0-4	Boys 0-4	Girls 5-9	Boys 5-9	Girls 10-14	Boys 10-14
1965	2.90	3.96	.00	.00	.00	3.33
1966	1.80	4.10	1.24	3.04	1.32	3.94
1967	3.12	2.44	0.62	3.06	1.95	3.24
1968	2.60	8.26	.00	3.09	1.29	5.12
1969	1.36	3.33	1.28	0.63	2.55	6.97
1970	7.14	4.89	.66	1.28	4.45	6.30
1971	8.06	5.01	1.36	3.34	3.88	5.09
1972	5.25	1.46	0.71	.70	2.64	5.83
1973	2.30	4.48	2.94	2.17	3.39	6.63
1974	6.25	5.32	0.76	3.75	4.89	4.09
1975	7.16	6.17	1.58	.00	2.16	6.34
1976	6.48	9.41	3.26	4.00	0.75	8.75
1977	9.07	8.77	0.84	4.11	6.19	6.82
1978	6.72	13.00	1.72	2.52	3.21	3.93
1979	7.71	9.12	1.75	1.71	1.67	5.71
1980	5.25	10.19	.89	0.87	2.59	5.92
1981	6.06	8.38	1.83	3.55	2.67	2.62
1982	9.40	9.91	.93	1.81	1.83	7.18
1983	4.22	10.61	2.84	.92	1.88	1.85
1984	9.22	8.91	1.91	1.86	4.82	12.32
1985	8.36	9.69	1.93	.94	1.97	6.79
1986	6.71	11.34	1.95	1.89	4.04	5.94
1987	6.77	10.64	.98	.95	2.06	9.06
1988	12.04	5.82	.00	2.88	4.19	5.11
1989	12.31	19.56	2.00	2.91	3.19	7.24
1990	8.16	10.52	3.03	1.96	2.15	11.50
1991	10.03	12.34	2.00	1.94	6.42	12.48
1992	11.91	12.40	.00	6.73	4.25	16.55
1993	11.05	8.89	.00	3.81	6.35	17.49
1994	4.62	9.82	1.95	5.65	8.41	20.47
1995	10.20	18.81	.96	.00	3.14	15.26

Table 4
Average annual homicide risk for young children in Chicago
by child's age, gender, and race/ethnicity, 1965-1995

Time period and racial/ethnic group	Victimization rate per 100,000 population					
	Girls 0-4	Boys 0-4	Girls 5-9	Boys 5-9	Girls 10-14	Boys 10-14
Non-Latino black						
1965-69	4.63	6.24	1.20	3.81	2.76	9.84
1970-74	8.97	7.03	1.80	3.63	6.23	10.26
1975-79	14.42	14.23	1.98	2.97	4.93	8.87
1980-84	12.52	17.27	2.99	3.62	4.97	9.03
1985-89	13.77	19.80	2.88	3.69	4.07	8.21
1990-94	17.39	19.49	1.28	7.02	9.21	27.51
1995	19.45	33.82	2.06	.00	6.54	19.23
Latino						
1965-69	2.61	2.50	.00	1.37	.00	3.30
1970-74	1.18	3.15	.00	1.08	3.87	4.62
1975-79	.94	6.51	1.91	.97	.00	9.15
1980-84	.67	4.04	.85	.00	.00	6.25
1985-89	7.80	6.79	.00	.70	3.35	10.48
1990-94	3.66	3.99	1.35	1.91	3.70	7.20
1995	5.58	8.05	.00	.00	.00	20.24
White or other						
1965-69	.49	3.38	.26	.50	.50	.75
1970-74	3.97	1.70	1.15	.96	1.22	.86
1975-79	1.02	3.73	1.50	2.59	.83	1.67
1980-84	2.42	2.34	.00	.00	.56	.53
1985-89	2.91	2.76	.00	.00	.80	.70
1990-94	1.41	3.48	1.69	.83	.00	1.75
1995	.00	7.39	.00	.00	9.56	.00

Figure 7
Risk trends for middle school-aged boys by racial/ethnic group



The risk of being murdered for the oldest children (age 10 to 14) increased over the 31 years among all groups of children, with the exception of Latina and white/other girls. Overall, the percent increase from the 1960s to the 1990s in the victimization rate for these older children was much less than the percent increase for the youngest children. In addition, three of the six groups of older children showed unique patterns over time in their risk of homicide victimization.

Though the victimization rate for middle school-aged non-Latino black boys and girls increased very little between the 1960s and the 1980s, these children suffered a rapid increase in their risk in the 1990s. The risk of being murdered peaked in 1994 for both boys (34.26 per 100,000) and girls (15.29 per 100,000).

The risk of being murdered for Latino boys in age group 10 to 14 followed a unique pattern over the 31 years, characterized by sharp spurts of record high rates interspersed with years of low rates. In addition, Latino boys are the only group of children where the risk of being murdered was consistently higher for

children in age group 10 to 14 than for children in the youngest age group, throughout the period studied.

Trends in homicide risk for middle school-age boys can be seen more clearly in Figure 7. There was no early 1990s spurt for non-Latino white or other boys, while the risk in 1995 was extremely high for both Latino and non-Latino black boys. For African-American boys, the risk of being murdered was even higher in 1993 and 1994 than in 1995, while the risk was relatively low for Latino boys between 1991 and 1993. On the other hand, the risk for Latino middle school-age boys was higher than for non-Latino black boys in 1986, 1987 and 1989.

In summary, the trend patterns for developmental age groups were generally consistent when gender and racial/ethnic group were taken into account. The strong increase over the 31 years in homicide risk for infants and pre-schoolers happened regardless of the child's gender or racial/ethnic group, with one exception (white/other girls). Homicide risk was consistently low over time for the primary school-aged children of

both genders and all racial/ethnic groups, and for Latina and white/other middle school-age girls.

In contrast, while the risk of being murdered changed little between 1965 and 1989 for non-Latino black children, homicide rates increased sharply in the early 1990s, for both girls and boys. Latino middle school-age boys, on the other hand, suffered spurts of high risk, interspersed with periods of low risk.

The increased risk in the nineties for young children as a whole resulted from a combination of rapid growth for non-Latino black middle school-age boys and girls, the spurt for Latino middle school-age boys, and the continuing increase in risk for infant and pre-school-age boys and girls.

Major findings

Successful interventions or public policies aimed at reducing the risk of homicide victimization for young children must build upon accurate and specific information about patterns of risk for these children. This analysis revealed a number of patterns in the homicide risk and trends over 31 years for children from birth through age 14.

1) From 1965 to 1995, the risk of being murdered climbed steadily and sharply for young Chicago children, while the corresponding risk for people age 15 or older fluctuated sharply over time. With adult homicides, the spurts and declines over the years tell us that the risk of homicide is not necessarily written in stone. An explanation of the spurts in the past could aid in the prevention of spurts in the future. By understanding why the homicide rate fell in the past, a determination could be made on how to keep the rate low in the future.

In contrast, if the murder rate for the youngest victims is moving inexorably upward, with no appreciable spurts or declines over 31 years, the causes of the increase may be related to long-term societal processes that are less amenable to intervention than the processes that may be driving adult homicides.

2) This steady increase in the risk of being murdered happened only for non-Latino black girls and boys. The risk for white/other children was steady over time, and the risk for Latino children fluctuated between periods of lower risk interspersed by sharp upward spurts.

3) The long-term, steady increase in homicide risk occurred only for the youngest developmental age group (birth to age four), especially children under age two. For children in the middle school age group (10 to 14), the risk of being murdered also climbed over the 31 years, but not steadily. In contrast, the risk of being murdered in the primary school age years (ages five to nine) was consistently lower than at younger or older ages, and followed no particular pattern of change over time.

4) The risk of being murdered increased over the 31 years for both girls and boys (374 percent for girls and 365 percent for boys). The risk for boys, however, was higher than the risk for girls, and the gender gap increased with developmental age group. The homicide victimization risk for infant and pre-school boys was 1.40 times as high as for girls, but the risk for middle school-age boys was 2.81 times as high as for girls.

5) For all groups of children except Latino boys, the risk of being murdered in any given year is generally higher for the youngest children than for middle school-age children. In fact, in 21 of the 22 years from 1974 to 1995, the risk was higher for the youngest children than the oldest children. For Latino boys, however, the risk of being murdered is generally higher when they are in the middle school-age group than when they are age four or younger.

6) For non-Latino black boys and girls in age group 10 to 14, the risk of being murdered stayed at a relatively steady level from the 1960s through the 1980s, but increased precipitously in the 1990s.

7) Latino boys ages 10 to 14 suffered spurts in their the risk of being murdered — very high rates in 1977, 1984, and 1994, preceded and followed by periods of comparatively low risk.

Practical implications for risk reduction

The rapidly increasing risk of homicide victimization for infants and children age four or younger has been documented across the U.S. and in other countries (Krug, Mercy, Dahlberg & Powell, 1998). In Illinois, public health planners and lawmakers not only documented the high rates in the mid-1990s, but developed legislation aimed at reducing them. The Authority is currently gathering Chicago Homicide Dataset data for

the years 1996 to 2000. When this effort is completed, it is hoped that a comparison of the earlier to the later figures will show that the risk of being murdered stopped escalating, or even declined, for these youngest children. Indeed, on a national level, research is beginning to show just such a decline (Eber, Annest, Mercy & Ryan, 2004).

One Illinois program is aimed specifically at newborn babies. Building on research that suggests that the prevention of out-of-hospital births may be very important for reducing the number of newborns who are killed or abandoned at birth (see Paulozzi & Sells, 2002; Sanders, et al., 1999; Rivara & Grossman, 1996), the Abandoned Newborn Infant Protection Act (Public Act 92-0408) was established in August 2001 (IL Compiled Statutes, 2001), and made effective indefinitely in July, 2005 (Public Act 94-0207). The act “allows a parent to anonymously relinquish her or his newborn infant to the care and custody of a safe haven,” (Save Abandoned Babies Foundation, 2005) such as a hospital, fire station or emergency medical facility. In 2002, a task force convened by the Metropolitan Chicago Healthcare Council developed guidelines and resources to help hospitals and manned fire stations comply with the legislation (MCHC, 2002). According to the Illinois Department of Children and Family Services, 16 newborns had been surrendered in Illinois as of July 2005 since August, 2001 (the inception of the act), compared to 36 newborns found abandoned (19 after death) in the same period.

Research has suggested other interventions that could reduce the risk of homicide for all young children, not just newborns. For example, home visitation by trained nurses during pregnancy and the first two years of life (Overpeck, et al, 1998; Olds, Henderson, Chamberlin & Tatelbaum, 1986) is aimed not only at improving the welfare and safety of newborns but also older infants and toddlers. Home visitation has been related to reduced levels of neglect and abuse, though an evaluation by Joseph Alper for the Robert Wood Johnson Foundation (Alper & Shapiro, 2003) found that home visitation programs require certain specific conditions for success.

In Illinois, a change in public policy aimed at reducing violence against children was the Illinois Child Endangerment Risk Assessment Protocol, implemented in December 1995, and credited for a decrease of nearly

24 percent over 12 months in the recurrence of maltreatment among child clients of DCFS (Illinois Department of Children & Family Services, 1997).

Other prevention strategies have been aimed at primary and middle school-aged children. Research suggests programs that teach children skills, such as conflict resolution, anger management, or problem solving, may reduce violence of children against other children (Olweus, Limber & Mihalic, 1999; Greenberg, Kusché & Mihalic, 1998; Grossman, Neckerman, Koepsell, Liu, Asher, Beland, Frey & Rivera, 1997). Also, public policies and laws aimed at child sexual abuse may reduce the risk of murder by a sexual predator, an area of risk for children in this age group. In addition, programs aimed at decreasing access to firearms or training young children in gun safety may reduce the risk of homicide victimization in primary and middle school-aged children (Eber, Annest, Mercy & Ryan, 2004; Himle, Miltenberger, Gatheridge & Flessner, 2004; Christoffel & Christoffel, 1999). Efforts by emergency room physicians and social workers to provide assessment and case management to victims of violence have been successful at reducing both violent offending and victimization in children and young adults ages 10 to 24 (Mitka, 2002).

Finally, an important prevention strategy is the establishment of child death review boards (Webster, Schnitzer, Jenny, Ewigman & Alario, 2003; Rimsza, Schackner, Bowen & Marshall, 2002; Onwauachi-Saunders, Forjuoh, West and Brooks, 1999). Good homicide information is needed to develop successful interventions. Child death review boards assess the circumstances surrounding child deaths, and help discover what support systems may be lacking, or how existing support systems may be better coordinated so that children do not slip through the safety net. Community intervention and prevention efforts may be more successful if they are targeted to the specific circumstances surrounding the different types of child homicide.

Implications for future research

Though this *Research Bulletin* focused specifically on children’s homicide from one perspective — long-term trends in the risk of being murdered — the results raise a number of additional issues. Some of the questions raised have direct implications for interven-

tion or prevention. In future *Research Bulletins*, the co-authors plan to address the following issues and questions:

- For groups of children who suffered rapid increases or sharp spurts in their risk of homicide over the 31 years, did the increase or spurt occur only in homicides with particular characteristics? For example, did the increase or spurt occur only for gang-related homicides, child abuse homicides, or homicides with a firearm?
- Who are the typical offenders in murders of young children, and does the typical offender differ for different groups of children? How do offenders gain access to the very youngest victims? Is the offender a parent, another caretaker, a neighbor, a janitor, a friend of the parent?
- What are the typical circumstances under which young children are murdered? Do these circumstances differ for children in different developmental age groups? Do they differ for boys versus girls, or for children in different racial/ethnic groups?
- Which children are most vulnerable to being killed in specific situations, such as arson homicide, sexual assault homicide, or in the crossfire of intimate partner violence?

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