

Title: Examining trends in and characteristics of youth violence at the neighborhood level (*Paper presented at the 2007 APHA Annual Meeting on 11/06/07 in Washington D.C.*)

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Abstract:

Background: While national youth homicide rates have declined slightly in recent years, data suggest nonfatal youth violence has stabilized. Comprehensive surveillance of violence requires local level consideration of fatal and nonfatal incidents.

Method: New York City's (NYC) Department of Health and Mental Hygiene tracks fatal and nonfatal assault-related injuries, citywide and by neighborhood, among youth 15 to 24 years. Mortality and hospitalization rates are computed from administrative datasets. Rates were compared between citywide averages and two demographically similar neighborhoods of NYC, northern Manhattan and south Bronx. To analyze trends, data were pooled into two-year groupings.

Results: NYC and south Bronx youth homicide rates showed no significant change from 2001-2002 to 2004-2005 (16.4 to 15.8 and 29.4 to 31.1 per 100,000 youth, respectively). In contrast, northern Manhattan homicide rates decreased 38% (15.2 to 9.4 per 100,000 youth). While firearms accounted for 75% of homicides citywide and 78% in the south Bronx, their contribution to homicides in northern Manhattan (92%) was greater. Citywide assault-related hospitalization rates rose 12%, from 180.4 to 201.7 per 100,000 youth; in northern Manhattan and south Bronx rates rose 37% (149.7 to 202.4 per 100,000 youth) and 18% (300.8 to 354.8 per 100,000 youth), respectively. Citywide, 35% of assault-related hospitalizations resulted from knives. Patterns were similar at the neighborhood level. In northern Manhattan, 41% of assault-related hospitalizations resulted from knives; in the south Bronx 39% of assault-related hospitalizations did.

Conclusions: Trends in youth violence vary by severity in NYC. Demographically similar neighborhoods have different patterns of fatal violence. Prevention should target neighborhood level factors, such as access to guns. Surveillance findings also suggest further research is needed to understand why non-fatal assault-related hospitalization rates increased at a greater rate in specific neighborhoods compared to NYC overall.