

Preventing Violence Among High-Risk Youth and Communities with Economic, Policy, and Structural Strategies

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Summary

Youth violence is preventable, and the reduction of health disparities is possible with evidence-based approaches. Achieving community-wide reductions in youth violence and health disparities has been limited in part because of the lack of prevention strategies to address community risk factors. CDC-supported research has resulted in three promising community-level approaches: Business Improvement Districts (BIDs) in Los Angeles, California; alcohol policy to reduce youth access in Richmond, Virginia; and the Safe Streets program in Baltimore, Maryland. Evaluation findings indicated that BIDs in Los Angeles were associated with a 12% reduction in robberies (one type of violent crime) and an 8% reduction in violent crime overall. In Richmond's alcohol policy program, investigators found that the monthly average of ambulance pickups for violent injuries among youth aged 15–24 years had a significantly greater decrease in the intervention (19.6 to 0 per 1,000) than comparison communities (7.4 to 3.3 per 1,000). Investigators of Safe Streets found that some intervention communities experienced reductions in homicide and/or nonfatal shootings, but results were not consistent across communities. Communitywide rates of violence can be changed in communities with disproportionately high rates of youth violence associated with entrenched health disparities and socioeconomic disadvantage. Community-level strategies are a critical part of comprehensive approaches necessary to achieve broad reductions in violence and health disparities.

Introduction

Racial/ethnic minority youth aged 10–24 years are affected disproportionately by violence. The homicide rate in 2013 for non-Hispanic black youth (27.6 per 100,000) was 13 times higher than the rate for non-Hispanic white youth (2.1 per 100,000), 16.2 times higher than the rate for Asian/Pacific Islander youth (1.7 per 100,000), 4.3 times higher than the rate for Hispanic youth (6.3 per 100,000), and five times higher than the rate for American Indian/Alaska Native youth (5.5 per 100,000) (1). Homicide is the leading cause of death among black youth, the second among Hispanic youth, the third among American Indian/Alaska Native youth, and the fourth among Asian/Pacific Islander youth (1). Despite national decreases in youth violence since the 1990s, minority youth continue to experience disproportionate rates of violence, and the downward trends are less pronounced among this group (2).

Decades of research have resulted in the development and implementation of evidence-based programs that aim at preventing violence, including among minority youth, by modifying individual or family risks (3). However, when these approaches are implemented in isolation, communitywide reductions in youth violence are limited because they do not address underlying community factors that exert a powerful influence on the development and epidemiology of violence.

Community risk factors include high levels of neighborhood disorganization, availability of illegal drugs and firearms, weak economies, low community cohesion, and physical environments that increase the likelihood of violence (4). Comprehensive prevention strategies can have communitywide sustained impacts on violence and health disparities by simultaneously addressing individual, relationship, and community risks, and have broader reach (5).

Few community-level strategies for preventing youth violence have been evaluated (5). Increasing the availability of these strategies is a primary focus for CDC's Division of Violence Prevention.

Results are presented for three CDC-funded evaluations of economic, policy, and structural strategies implemented within communities with disproportionately high youth violence rates and minority youth. These evaluations demonstrate the growing opportunity for communitywide reductions in youth violence and health disparities in violence. The findings are summarized across the three previously published evaluations to highlight opportunities for promising community-level strategies for youth violence prevention.

CDC's Office of Minority Health and Health Equity selected the intervention analysis and discussion that follows to provide examples of programs that might be effective in reducing

violence-related disparities in the United States. Criteria for selecting these programs are described in the Background and Rationale for this supplement (6).

Methods

Intervention Methods

Business Improvement Districts

Establishing Business Improvement Districts (BIDs) is an economic development strategy that includes the collection and investment of resources from local merchants or property owners into area service provision and activities such as place promotion, street cleaning/beautification, and public safety (7). During 1996–2003, a total of 30 BIDs were implemented in the city of Los Angeles, California, across 179 neighborhoods. Los Angeles is characterized by substantial racial/ethnic disparities in youth crime and homicide (7). During the study period, approximately 46% of residents were Hispanic, 11% of families lived in poverty, and the unemployment rate was approximately 10%. The Los Angeles City Clerk's Administrative Services Division manages the city's BID program (8,9). An evaluation of the Los Angeles BIDs was conducted by the RAND Corporation through a CDC-funded cooperative agreement (7,9).

Alcohol Policy

Approximately 57% of the population of Richmond, Virginia, in 2003 was black, and 64% of youth aged 10–24 years were black. The 2008 homicide rate (46.0 per 100,000 population) was nearly three times the national average (5.7 per 100,000 population). Most homicide deaths were among racial/ethnic minority youth aged 15–24 years (10). Community leaders in Richmond examined data about violence-related injuries and alcohol use to develop a policy that restricted licenses for the sale of single-serve alcoholic beverages by convenience stores during January–June 2003 (10). Despite strong initial support for these license restrictions, enforcement ended after 6 months in response to opposition by grocery store owners. The timing of the licensing restrictions allowed researchers to evaluate its impact by tracking injuries before and during the restrictions, and after the restrictions were reversed. The CDC-funded Center of Excellence in Youth Violence Prevention at Virginia Commonwealth University (VCU) collaborated with the Virginia Alcohol Beverage Control Board, the VCU Health System, the Richmond Medical Examiner, the Richmond Vital Registry, the Richmond Ambulance Authority, and the Richmond Department of Juvenile Justice to examine the policy's impact (10).

Baltimore Safe Streets

Safe Streets is a street outreach and community mobilization strategy to interrupt the transmission of violence, change community norms about the acceptability of violence, and build positive community connections through community events (10). Safe Streets was implemented in four Baltimore, Maryland, neighborhoods that had rates of homicides and nonfatal shootings (NFS) within the top 25% in the city. The neighborhoods were populated almost exclusively by racial/ethnic minorities. One neighborhood began implementing Safe Streets in 2007, and the program was expanded to one additional neighborhood in February 2008 and to two more in November 2008. Monthly evaluation data span 2007–2010 for the first neighborhood, 2008–2010 for the second, and 2009–2010 for the third and fourth. To evaluate Safe Streets, the CDC-funded Center of Excellence in Youth Violence Prevention at Johns Hopkins University worked with the Baltimore City Health Department, Baltimore police, and community-based organizations, including the Park Heights Renaissance, Family Health Centers for Baltimore in Cherry Hill, and the Living Classrooms Foundation in McElderry Park (11).

Data Collection and Analysis

Business Improvement Districts

RAND investigators examined before and after changes in the incidence or rate of violent crimes during 1994–2005 using a longitudinal analysis of neighborhoods exposed ($n = 179$) and not exposed ($n = 893$) to BIDs. Data included yearly counts of robbery and a violent crime index that included homicide, rape, robbery, and aggravated assault (7).

Alcohol Policy

VCU investigators used an ecological panel study to examine the impact of Richmond's alcohol policy on intentional-injury-related ambulance pickups during July 2001–December 2004 (10). Investigators compared rates of ambulance pickups for violent injuries among youth aged 15–24 years in five census tracts affected by the policy to rates in demographically similar control census tracts across three phases: 18 months before the policy was in effect, 6 months when the policy was in effect, and 18 months after the end of the policy. Investigators then analyzed changes in ambulance pickups for intentional injuries with a multilevel modeling approach in which the three phases were nested within census tracts.

Baltimore Safe Streets

Using a quasi-experimental design, JHU investigators examined Safe Streets' impact on homicides and NFS within four Baltimore communities (11). Monthly panel datasets were created for homicides and NFS incidents for 39 police posts in Baltimore for January 2003–December 2010; four police posts were inside the intervention neighborhoods while the remaining 35 were outside the intervention neighborhoods. Investigators estimated program effects using negative binomial regression appropriate for modeling outcomes represented as incident counts. Models estimated program effects by contrasting changes in target communities with changes in communities that did not have the program, while controlling for baseline levels of violence.

Results

Business Improvement Districts

Evaluation findings indicated that implementation of BIDs was associated with substantial reductions in violence. Evidence from police reports indicated that BIDs in Los Angeles were associated with a 12% reduction in robberies (one type of violent crime) and an 8% reduction in violent crime overall (12).

Alcohol Policy

The five census tracts (containing 18 stores) where license restrictions were in place represented the intervention communities, and five demographically similar census tracts were selected as comparison communities. Intervention and comparison communities at baseline did not differ substantially on neighborhood characteristics (e.g., proportion of residents who were black, living at or below the poverty level, or having less than a high school education). Evaluation findings indicated that the monthly average of ambulance pickups for violent injuries among youth aged 15–24 years had a significantly greater decrease in the intervention (19.6 to 0 per 1,000 population) than comparison communities (7.4 to 3.3 per 1,000 population) when the alcohol policy was enacted ($p = 0.011$). During the 18 months after the policy was ended, the rate in the intervention communities increased to 11.4 per 1,000 population while the rate in comparison communities (2.5 per 1,000 population) was not statistically different from baseline (95% posterior probability interval -5 to 21) (9).

Baltimore Safe Streets

Evaluation findings indicated that in one of four intervention communities, Safe Streets was associated with a 56% reduction in homicides (incident rate ratio [IRR]: 0.44; $p < 0.001$) and a 34% reduction in NFS (IRR: 0.66; $p < 0.001$). Investigators found that the program was associated with decreases of 26% for homicide (IRR: 0.74; $p = 0.003$) and 22% for NFS (IRR: 1.22; $p = 0.001$) in a second community, no change in homicides and a 34% reduction in NFS (IRR: 0.66; $p < 0.001$) in a third, and a 44% decrease in NFS (IRR: 0.56; $p < 0.001$) in a fourth but a 2.7 times increase in the homicide rate (IRR: 2.70; $p < 0.001$) (11). Several possible reasons might account for this increase, including the fact that the program was only implemented for 18 months in that particular community compared with ≥ 2 years in other communities, and high rates of gang activity at the time of initial program implementation. Additional information on program implementation, including the frequency of conflict mediations, can help explain variation in program effects across communities (11).

Discussion

Results for CDC-funded evaluations of BIDs, alcohol policy interventions, and Baltimore Safe Streets suggest communitywide rates of violence can be changed in communities with disproportionately high rates of youth violence associated with entrenched health disparities and socioeconomic disadvantage. These evaluations are an important step forward in building the evidence base for community violence prevention strategies. If these community-level strategies are used in conjunction with other evidence-based individual and family prevention strategies, communities can have significant impact on the health and safety of minority youth (2).

The potential national impact of community-level prevention strategies is enhanced by their ability to be implemented in different types of communities. Programs like Safe Streets are being replicated in many cities in the United States and internationally (<http://cureviolence.org/partners>). BIDs continue in over 30 communities in Los Angeles, and similar approaches have been implemented across the country, mostly in urban areas such as New York City, Philadelphia, Houston, Chicago, and the District of Columbia (13). Once these strategies are implemented, they often are sustained. For instance, a form of Safe Streets has been implemented consistently in Chicago since 2000, and BIDs have been implemented in Los Angeles since 1994.

However, effective community change strategies are subject to competing community pressures. Despite the substantial promise demonstrated by Richmond's alcohol policy, it was ended after only 6 months of implementation in response to pressure from grocery store owners.

The continued evaluation of scalable community-level strategies and the broad dissemination of findings are critical to helping communities make data-informed prevention decisions. CDC's National Centers of Excellence in Youth Violence Prevention and the Striving to Prevent Youth Violence Everywhere initiatives involve assistance to high-risk communities to select comprehensive evidence-based strategies and develop collaborative public health approaches to implement and evaluate strategies. Continued focus on identifying effective community prevention strategies and building implementation capacity can lead to implementation of policies and strategies that result in decreased violence-related health disparities.

Limitations

The findings in this report are subject to at least two limitations. First, the evaluations used administrative measures from police or health records that do not include unreported incidents of violence. Second, although the studies provide support for the effectiveness of the prevention strategies, additional evaluations are needed to confirm and replicate these findings in other communities.

Conclusion

Racial/ethnic minority youth are at particularly high risk for morbidity and mortality associated with violence, including homicide. These youth often live in communities that have disproportionately high violence rates and community conditions associated with violence and violent injuries. Community-level strategies are a critical part of comprehensive approaches that are necessary to achieve broad reductions in violence and health disparities. CDC's emphasis on evaluating these strategies is addressing a critical gap. CDC-funded evaluations of BIDs, alcohol policy to reduce youth access, and Baltimore's Safe Streets program found significant reductions in violence associated with the implementation of these community-level strategies. These community-level strategies have potential for broader impact on health disparities by addressing important health-related community characteristics.

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