HEALTHY COMMUNITIES MAY MAKE SAFE COMMUNITIES: PUBLIC HEALTH APPROACHES TO VIOLENCE PREVENTION

BY SARAH SCHWEIG

Police chiefs, public health directors and researchers are establishing innovative public health/public safety collaborations to fight crime.



ost people may not think of jogging and biking as crime reduction strategies, but in neighborhoods in East Palo Alto, Calif., with the highest levels of shootings, law enforcement officers and residents are coming together and engaging in these types of outdoor activities to combat crime.

The East Palo Alto Police Department's Fitness Improvement Training (FIT) Zones are part of an innovative initiative aimed at testing whether improvements in community health can help increase community safety in the city's most dangerous neighborhoods. The FIT Zones implement health-related programs in public spaces that have been underused by residents and overtaken by gang members. The idea is that as residents increase outdoor physical activities like power walking, yoga and Zumba dancing, they will increase their presence in public spaces, improve their health, and regain control and ownership of their neighborhoods.

According to Ronald Davis, director of the U.S. Department of Justice's Office of Community Oriented Policing Services (COPS Office) and former police chief of the East Palo Alto Police Department, "The greatest deterrent to crime and violence is not a community saturated with cops — it is a neighborhood alive with residents. The concept is that a healthy community would be, in fact, a safe community."

"Whoever controls a neighborhood's public spaces controls the quality of life in that neighborhood," he added. "That control must rest with the residents."

The FIT Zones are just one of a handful of new approaches that use public health strategies to solve community problems. These approaches tend to treat crime and violence like contagious diseases and look for innovative ways to prevent these "diseases" from spreading. Many involve partnerships between public health and public safety agencies and show promise in reducing and preventing crime and violence.

What Is the Public Health Approach?

The public health approach to solving problems consists of four basic elements:

• **Define and monitor the problem:** The first step in preventing violence is to understand the "who," "what," "when," "where" and "how" associated with it. This involves analyzing data from police reports, medical examiner files, vital records, hospital charts, registries, population-based surveys and other sources.

Identify risk and protective factors:

Understanding what factors protect people or put them at risk for experiencing or perpetrating violence is also important. Risk and protective factors help identify where prevention efforts should be focused.

- Develop and test prevention strategies: Research data and findings from needs assessments, community surveys, stakeholder interviews and focus groups are useful for designing prevention programs. Once programs are implemented, they are evaluated rigorously to determine their effectiveness.
- Ensure widespread adoption: Once prevention programs have been proven effective, they must be implemented and adopted more broadly. Dissemination techniques to promote widespread adoption include training, networking, technical assistance and evaluation.¹

Public Health Approaches to Violence Prevention

A 1979 Surgeon General's report made one of the first explicit links between public health and law enforcement: It identified violent behavior as a significant risk to health. Four years later, the Centers for Disease Control and Prevention (CDC) established the Violence Epidemiology Branch, which later became the Division of Violence Prevention.²

Since then, law enforcement and public health agencies have increasingly recognized a shared interest in poverty, violence and other societal problems. Both fields respond to existing problems while also taking a preventive approach, stopping problems before they start. Public health and public safety agencies have started to adopt similar strategies and tools — many of which emphasize data analysis, collaboration, community engagement and problem solving — to combat problems facing communities. (To read about NIJ's longstanding commitment to public health-public safety collaborations, see sidebar, "NIJ's Investment in Public Safety and Public Health Partnerships.")

Violence prevention lends itself to a public health approach for a number of reasons. Violence shares many of the "special characteristics of epidemics," according to Gary Slutkin, an epidemiologist and the founder of the Chicago Project for Violence Prevention's Cure Violence (formerly Chicago CeaseFire) program. For example, violence is said to be "infectious," but rather than being transmitted by a vector, such as bacteria, it is transmitted through behavior, such as modeling (for example, a parent modeling behavior for a child) or social pressure.³ In addition, crime mapping uses many of the techniques originally developed to study disease patterns, and when researchers map incidents of violence, they often find that geographic clusters of crime closely match geographic clusters of disease.⁴

Today, one of the most visible programs to take a stated epidemiological approach to violence is the Cure Violence model. This model enlists members of

the community, including former gang members, to serve as "violence interrupters," who hold community demonstrations and counsel those affected by gun violence in an effort to halt the cycle of violence and retaliation after a shooting occurs.⁵

Other models, like the Cardiff Model for Violence Prevention and the Homicide Review Model, emphasize sharing data to identify opportunities for prevention efforts.

Sharing Data and Creating Solutions

Tight budgets make it necessary to maximize existing resources and share information across sectors. By analyzing data in new ways, overstressed police departments can target interventions more precisely.

For example, when Jonathan Shepherd, an emergency department physician, raised concerns that most assault-related injuries coming in for emergency services in Cardiff, Wales, were not reflected in crime data, the Cardiff Model for Violence Prevention was born. The Cardiff Model is a multiagency partnership that combines anonymous data from hospitals with law enforcement data to guide violence prevention. Reception staff in emergency departments are trained to ask basic questions about the nature and location of the violence, the date and time of the incident, and the weapon type. This information is stripped of identifiers, entered into a database and shared with a crime analyst, who then combines the information with police data to generate maps and summaries of violent incidents.

Sharing data can lead to strategic operational adjustments: In Cardiff, police can patrol routes and use closed-circuit television systems in the most problematic areas. Buses can make more frequent late-night stops to avoid overcrowding at certain locations. Local authorities can require a construction site near an alcohol outlet to secure pallets of building supplies that are being used as weapons. According to researchers, after implementing these relatively modest interventions, Cardiff saw a significant (32 percent) relative reduction in assault-related injuries recorded by police over the study period of more than four years when compared with 14 similar cities.⁶ A recent cost-benefit analysis completed by the CDC and Shepherd further found that the Cardiff Model resulted in significant cost savings — substantially exceeding the costs of implementing the program for the health services and criminal justice systems.

Bringing Two Fields Together

Police chiefs, public health directors and social science researchers are just beginning to truly understand the potential of public health-public safety partnerships. To further understand and encourage such collaborations, the COPS Office, The California Endowment and the Center for Court Innovation brought together police chiefs, public health experts, researchers and grant-makers from around the U.S. for two roundtable discussions. Roundtable participants agreed that, as budgets are tightening across sectors, the traditional ways of fighting crime are changing.

The first roundtable identified opportunities for collaborations between law enforcement and public health officials. Afterward, The California Endowment invited participants to apply for mini-grants of \$10,000 for crime and violence prevention projects involving collaborations between the two fields; ultimately, nine programs were awarded funding.

The second roundtable was held to share some of the results of the nine mini-grant projects. Some projects partnered with researchers to document early results; others focused on creating new tools that precincts and health departments can use to analyze data across sectors. Below is a brief look at two of the projects.

Milwaukee, Wisconsin

According to Mallory O'Brien, a researcher and epidemiologist, the first step in public health and public safety collaborations is to get public health officials and law enforcement to agree that violence is preventable.

NIJ's Investment in Public Safety and Public Health Partnerships

By Katrina Baum

NIJ has a long-standing commitment to spur innovative solutions to violence through collaboration. Some of NIJ's early work in public health came through partnerships with the Centers for Disease Control and Prevention (CDC). For example, in the 1990s, the agencies worked together on the National Violence Against Women Survey¹ to better understand intimate partner violence and measure the rate of injury, the use of medical services and the criminal justice system's involvement. Over the years, this partnership has continued to provide research on the consequences of intimate partner violence, now measured by the National Intimate Partner and Sexual Violence Survey.² And just recently, NIJ and CDC jointly published *Changing Course: Preventing Gang Membership,* a book that describes key principles in preventing youth from joining gangs.³

For the last three years, NIJ has also been a sponsoring organization for the Forum on Global Violence Prevention in the Institute of Medicine at the National Academies. The Forum draws together a diverse set of stakeholders representing philanthropy, science offices within the National Institutes of Health and CDC, and other federal partners to discuss the best science has to offer on violence prevention. To date, the Forum has held six two-day workshops, bringing together hundreds of participants, including some who tuned in via a free webcast. The workshops focused on:

- 1. Preventing violence against women and children
- 2. Social and economic costs of violence
- 3. Communications and technology for violence prevention
- 4. Contagion of violence
- 5. Evidence for violence prevention across the lifespan and around the world
- 6. Elder abuse and its prevention

The workshop proceedings are available for free download at http://www.iom.edu/Activities/Global/ Violenceforum.aspx.

The Forum is unique in that its reach is multidisciplinary and international. NIJ does not have the statutory authority to conduct research outside the United States, yet the findings of its research often have implications for victims around the world. This partnership has allowed NIJ-funded research on understanding, preventing and responding to violence — along with relevant research from the health, social work, education and development fields — to reach a large audience across the globe.

One of the challenges facing both public safety and public health is how to not only get evidence into the hands of practitioners around the world, but also ensure that programs are implemented with fidelity. These implementation challenges were raised in a recent discussion paper released by the Institute of Medicine, "Violence Prevention: Moving From Evidence to Implementation."⁴ One of the tools highlighted in the article is CrimeSolutions.gov. This site, which is managed by NIJ, aims to help practitioners and policymakers understand what works in justice-related programs and practices. Identifying programs is not sufficient; practitioners need resources to ensure that interventions can be evaluated when they move from their places of origin to new settings and populations.

To learn more about NIJ's investment in these and other public health-public safety projects, visit NIJ.gov, keywords: public health.

About the Author

Katrina Baum is a former senior research officer at NIJ.

Notes

- Tjaden, Patricia, and Nancy Thoennes, "Extent, Nature, and Consequences of Intimate Partner Violence: Findings From the National Violence Against Women Survey," Final report to the National Institute of Justice, grant number 93-IJ-CX-0012, July 2000, NCJ 181867, available at https://www.ncjrs.gov/pdffiles1/nij/181867.pdf.
- 2. Centers for Disease Control and Prevention, *The National Intimate Partner and Sexual Violence Survey*, Atlanta, Ga.: Author, 2011, available at http://www.cdc.gov/violenceprevention/nisvs.
- Simon, Thomas R., Nancy M. Ritter, and Reshma R. Mahendra, *Changing Course: Preventing Gang Membership*, Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, 2013, NCJ 239234, available at https://ncjrs. gov/pdffiles1/nij/239234.pdf.
- 4. Baum, Katrina, Katherine M. Blakeslee, Jacqueline Lloyd, and Anthony Petrosino, "Violence Prevention: Moving From Evidence to Implementation," Washington, D.C.: Institute of Medicine, 2013, available at http://www.iom.edu/Global/ Perspectives/2013/ViolencePreventionImplementation.aspx.

O'Brien is the founding director of the Milwaukee Homicide Review Commission, a collaboration of criminal justice professionals and community service providers that regularly exchanges information about the city's homicides and other violent crimes to identify methods of prevention from both public health and criminal justice perspectives.⁷ With funding from The California Endowment, the Wisconsin Office of Justice Assistance, and the University of Wisconsin-Madison School of Medicine and Public Health, the commission created a first-of-its-kind data hub where researchers and law enforcement can look holistically at individuals and neighborhoods that have frequent contact with the criminal justice system. The hub currently houses arrest, pretrial and health department data from the city of Milwaukee. Its design allows for regular feeds of updated data as well as new data sets, such as workforce development and department of corrections data.

"Once we have the data, we want to be able to share it with the community and with jurisdictions to help identify opportunities for interventions and then assess if they're working," O'Brien said.

Because one challenge to data sharing is ensuring individual privacy, all of the data are stripped of identifiers and made anonymous, as in the Cardiff Model's approach. Each data provider sits on a governance committee that determines what kinds of data can be shared across sectors.

The Milwaukee Homicide Review Commission recently received a grant from the COPS Office to provide technical assistance to cities interested in implementing this collaborative approach, such as Chicago, New Orleans and Indianapolis.

East Palo Alto, California

In planning East Palo Alto's FIT Zones, Davis brought in researcher Sarah Lawrence from the very beginning.

"One of the good things about this project is having a researcher at the table from the beginning, playing a role in shaping it and also an evaluative role in finding outcomes," said Lawrence, director of policy analysis at the University of California (UC), Berkeley, Law School's Warren Institute on Law and Social Policy.

"The FIT Zone project would not have been successful without having a research partner at the table during each stage of the project," Davis said. "UC Berkeley's involvement in the FIT Zones helped make the project successful and its results credible."

East Palo Alto's approach is both grounded in and continually shaped by research. In 2010, the city's violent crime rate was nearly 80 percent higher than that of the state of California overall, and there was a large disparity between the number of shooting incidents and actual calls to police.

"If you live in a community where you've been hearing gunshots every day, at some point you just stop calling because from your perspective, nothing really happens, and it just becomes, unfortunately, part of life," Davis said.

The East Palo Alto Police Department used a gunshot detection system to gain a more comprehensive understanding of the volume and nature of shootings, including the number of rounds fired, and the precise time and location of the incidents.⁸ Using these data, the department worked with an epidemiologist from the local county public health agency to identify the areas with the most shootings. Ultimately, they chose two sites to pilot the project; 26 percent of the city's population lives in these two sites.

Before the FIT Zones started, Lawrence conducted a telephone survey of residents to establish a baseline. The survey asked residents about their levels of fear, their confidence in the police in their neighborhood, their use of public space and their general thoughts about health. Additional rounds of surveys are being conducted to assess whether those perceptions and opinions have changed since implementation of the FIT Zones.

Nine months into a one-year study, the two FIT Zones are yielding promising results. Since activities began, shootings in the two FIT Zones are down 60 percent and 43 percent, compared with a decrease of 30 percent in other areas in the city.⁹

Next Steps: Validating Results

Although some police departments and public health agencies have already partnered with researchers to show early results and successes when using public health strategies to solve community problems, others may need assistance to hone their approaches and document outcomes.

"Many of the community-based organizations we work with really don't have the capacity to know whether their strategies are successful," O'Brien said.

As Barbara Raymond of The California Endowment explained, research is key for these approaches to "make the leap into the mainstream and demonstrate that what makes us healthier also makes us safer." Researchers can not only document the promising results of new approaches — they can also act as intermediaries, helping to bridge the worlds of public health and law enforcement so that all stakeholders can understand what is working, what is not and why.

However, validating innovation can be complex. Budget savings, for example, can be a huge selling point for state and federal policymakers, but proving that expenditures were spared because of prevention efforts can be hard. It can also be difficult to share innovative concepts across sectors. Even when public health and law enforcement agencies share the same goal, differing values and vocabularies can undermine partnerships.

"The challenge of policing in the new economy," said Davis, "is not to do more of the same with less; it is doing more things differently based on evidence and science."

Public health and public safety collaborations have shown promise in reducing crime and violence. More research about these strategies is a necessary next step. That way, effective prevention strategies — instead of violence — can spread.

About the Author

Sarah Schweig is a senior writer at the Center for Court Innovation.

Notes

- Centers for Disease Control and Prevention, "The Public Health Approach to Violence Prevention," Atlanta, Ga.: Author, 2013, available at http://www.cdc.gov/ violenceprevention/overview/publichealthapproach.html.
- Dahlberg, Linda L., and James A. Mercy, *The History of Violence as a Public Health Issue*, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control, 2009, available at http://www.cdc.gov/violenceprevention/pdf/history_violence-a.pdf.
- According to Slutkin, "The principal driver of violent behavior actually is whether you think that someone in your peer groups expects it of you"; from Slutkin, Gary, "Gary Slutkin: Disrupting Violence," videotaped presentation, PopTech Salon, Chicago, May 2010, available at http://vimeo. com/11841675.
- 4. Wolf, Robert V., Law Enforcement and Public Health: Sharing Resources and Strategies to Make Communities Safer, U.S. Department of Justice, Office of Community Oriented Policing Services, 2012, available at http://www.courtinnovation.org/research/ law-enforcement-and-public-health-sharing-resources-andstrategies-make-communities-safer.
- To read about an NIJ-sponsored evaluation of the program, see Ritter, Nancy, "CeaseFire: A Public Health Approach to Reduce Shootings and Killings," *NIJ Journal* 264 (2009): 20-25, available at http://www.nij.gov/journals/264/pages/ ceasefire.aspx.
- Florence, Curtis, Jonathan Shepherd, Iain Brennan, and Thomas Simon, "Effectiveness of anonymised information sharing and use in health service, police, and local government partnership for preventing violence related injury: Experimental study and time series analysis," *BMJ* 342 (2011): d3313, available at http://www.bmj.com/ content/342/bmj.d3313.
- 7. An NIJ-funded impact evaluation showed that Milwaukee Homicide Review Commission interventions produced a statistically significant 52 percent decrease in the monthly homicide rate in the treatment districts. Researchers found a 9.2 percent decrease in the monthly homicide rate in the control districts. The interventions were associated with a

noteworthy decrease in homicide. For more information, see Azrael, Deborah, Anthony A. Braga, and Mallory O'Brien, "Developing the Capacity to Understand and Prevent Homicide: An Evaluation of the Milwaukee Homicide Review Commission," Final report to the National Institute of Justice, grant number 2005-IJ-CX-0005, January 2013, NCJ 240814, available at https://www.ncjrs.gov/pdffiles1/nij/ grants/240814.pdf.

- For more information, see *Geography & Public Safety*, an NIJ-COPS collaborative publication: Lawrence, Sarah, Chief Ronald Davis, and Brad Jacobson, "Using public health strategies to reduce violence in 'hot spots' in East Palo Alto, California," *Geography & Public Safety*, 3.2 (August 2012): 5-8, available at http://cops.usdoj.gov/Publications/ e05122469c.pdf.
- 9. Author call with Chief Ronald Davis.

NCJ 244150

Cite this article as: Schweig, Sarah, "Healthy Communities May Make Safe Communities: Public Health Approaches to Violence Prevention," *NIJ Journal* 273 (2014): 52-59, available at http://www. nij.gov/journals/273/pages/violence-prevention.aspx.