



National Academic Centers of Excellence in Youth Violence Prevention: Working with Communities to Prevent Youth Violence

National Center for Injury Prevention and Control
Division of Violence Prevention



Youth Violence in the United States

Violence disproportionately affects youths between the ages of 10 and 24 in the United States. Young people can be victims, offenders or witnesses to violence. Homicide is the second leading cause of death in this age group. Each year more than 5,000 young people between ages 10 and 24 are murdered--an average of more than 14 per day.¹

Deaths resulting from youth violence are only part of the problem. Youth violence includes serious violent and delinquent acts such as aggravated assault, robbery, rape, and homicide and less serious, but still aggressive behaviors such as verbal abuse, bullying, or fighting. Many young

people seek medical care for violence-related injuries. In 2010 738,000 people ages 10 to 24 were treated in U.S. emergency departments for assault-related injuries.² These behaviors can have major emotional consequences even when they do not result in serious injury or death.

Youth violence can also affect the health of entire communities. It can increase healthcare costs, decrease property values, and disrupt social services. The lifetime costs associated with medical care, lost work, and household productivity resulting from medically treated youth violence exceed \$14 billion each year.³

National Academic Centers of Excellence in Youth Violence Prevention

In 2000, Congressional legislation was introduced that ultimately formed the National Academic Centers of Excellence in Youth Violence Prevention (ACEs). Between 2000 and 2005, the goals of the ACEs were to build the scientific infrastructure necessary to support the development and application of evidence-based interventions, promote interdisciplinary research strategies to address the problem of youth violence, foster collaboration between academic researchers and communities, and empower communities to address the problem of youth violence. Beginning in 2005, the ACEs also focused their efforts on partnering with communities with high rates of youth violence, integrating efficacy and effectiveness research, and implementing and disseminating research findings. The ACE Program funded four new centers in 2010 and two additional centers in 2011. The current ACE Program sets out a bold new path in bringing science to bear on youth violence in communities.

Over the course of a decade of funding, the objectives of the ACE Program have progressed towards increased emphasis on impact and integration. This new emphasis means that

ACEs must measure and evaluate the public health impact of comprehensive youth violence prevention efforts while working with multiple sectors in the community. The primary goal of the 2010-2015 ACE Program is to partner with high-risk communities and their local health departments to implement and evaluate comprehensive strategies to prevent youth violence. These strategies rely on the best scientific evidence about effective violence prevention programs. The ACEs have three core features:

- A core administrative infrastructure to support implementation and evaluation activities, to foster necessary collaborations, and to work together as an *ACE Youth Violence Prevention Network*;
- Integrated implementation and evaluation activities focused on a comprehensive, evidence-based approach to youth violence prevention; and
- Integrated training activities for junior and future researchers in youth violence prevention to complement the implementation and evaluation activities of the Center.

Accomplishments 2000–2010

- Developed multidisciplinary and community partnerships
- Established local surveillance systems to monitor and track trends in youth violence
- Built community capacity to work collaboratively to prevent violence
- Conducted research on risk and protective factors for youth violence
- Trained the current and future workforce on youth violence prevention
- Developed and evaluated youth violence prevention programs
- Disseminated knowledge on youth violence prevention to the community and research field with over 500 presentations and journal publications
- Informed local policy efforts focused on building youth violence prevention capacity

Currently Funded Academic Centers of Excellence

- Johns Hopkins University
- University of Michigan
- University of Chicago
- University of North Carolina, Chapel Hill
- University of Colorado, Boulder
- Virginia Commonwealth University

Highlights of the Academic Centers of Excellence in Youth Violence Prevention

High-Risk Communities

The goal of each ACE is to reduce youth violence in a defined high-risk community, defined as “individuals residing in a geographical area, such as a catchment area or neighborhood, where multiple risk factors for youth violence are present.”

Researchers at the University of North Carolina, Chapel Hill (North Carolina Academic Center of Excellence or NC-ACE) and the University of Michigan (Michigan Youth Violence Prevention Center or Mi-YVPC) are working with two very unique communities. The NC-ACE is partnering with Robeson County, where the Lumbee tribe makes up more than a third of the population. Although this county has a rich cultural heritage, it has also experienced severe economic stressors. Robeson County is ranked 1st among all North Carolina counties in juvenile arrests. Mi-YVPC’s efforts have been focused in Flint, Michigan. The city of Flint is unique in that it has seen both economic prosperity and misfortune over the years. In the 1960s, Flint was home to high-paying manufacturing jobs at several General Motors (GM) factories. However, since the 1970s Flint has lost over 70,000 auto industry jobs due to the departure of many of the GM factories. Based on socio-economic indicators, Flint is now one of the most distressed cities in Michigan; with unemployment rates that consistently exceed the state average and violent crime rates that exceed the national average.

Implementation

The ACEs are integrating comprehensive strategies to prevent violence through partnerships with public health departments and multi-sector collaborations. The strategies include efforts to work with all youth in the community as well as efforts to prevent violence among youth at high risk for violence. The comprehensive prevention strategies are put in place through coordination and collaboration with community partners. The ACEs’ strategies target risk factors at the individual (e.g., delinquency, substance abuse, lack of social skills); relationship (e.g., inadequate parental monitoring, supervision, discipline;

peer norms supporting violence); and community (e.g., social disorganization, lack of cohesion, lack of economic or supervised recreational activities for youth) levels. These evidence-based strategies have been shown to effectively prevent or reduce youth violence and its associated risk factors.

The Chicago Center for Youth Violence Prevention (CCYVP) approaches the complex problem of youth violence by implementing prevention programs targeted at children and families at different developmental ages and with youth at varying levels of risk. One aspect of this approach focuses on implementing programs with families, including SAFE Children, which focuses on children’s transition into elementary school and is designed to aid in maintaining parental involvement in school and helping children get a good start in school. An adaptation of SAFE Children will also be implemented with 6th grade students. Another characteristic of this developmental approach includes focusing efforts on high school students and those living in the community. CCYVP is supporting implementation of CeaseFire, a program that provides community education and mobilization strategies designed to affect neighborhood norms regarding aggression and violence. CeaseFire outreach workers focus efforts on high-risk individuals to mediate events where there is a high likelihood of violence.

Additionally, the Denver Collaborative to Reduce Youth Violence (Denver ACE) is implementing Communities That Care (CTC) in the Montbello community in Denver, Colorado. CTC is a strategic planning mechanism that builds upon a concept of first identifying and then targeting each community’s specific needs, risk factors, and assets, and developing a tailored, comprehensive prevention strategy based on those needs and resources. CTC relies on a data-informed process for leveraging a community’s assets and resources, and ensures that the evidence-based prevention strategies match the specific needs and characteristics that are unique to each community. CTC also uses data to assess prevention needs and test the effectiveness of prevention programs.

Evaluation of Comprehensive Strategy

In order to understand if the comprehensive strategies implemented in communities are working to reduce and prevent youth violence, ACEs are conducting rigorous evaluations to assess youth violence outcomes over the span of five years. These evaluations will detect the community-wide impact of the prevention strategies on the targeted high-risk communities compared to matched control communities.

Researchers at Virginia Commonwealth University (Clark-Hill Institute for Positive Youth Development) and Johns Hopkins Center for the Prevention of Youth Violence (JHCPYV) are using rigorous and innovative designs to evaluate their strategies. Clark-Hill Institute is utilizing an innovative quasi-experimental approach called the multiple baseline design. This design allows the research team to stagger implementation among three communities over the course of five years. They are also collecting data on rates of violence, including: homicides, injuries due to violence, emergency department visits, school discipline records, and youths' own reports of fighting and violence, as well as factors reflecting their positive development.

Using a different approach, JHCPYV is using a comparative interrupted time-series design. This approach estimates program impacts using multiple research methods and data sources including police data (e.g., homicides, shootings, crime), school data (e.g., suspensions for fighting), school climate, and community surveys to contrast changes in youth violence during the intervention period across three neighborhoods – one that implements community and school strategies, one that implements the school intervention only, and a third that receives no intervention.

Future Directions

CDC continues to work with the ACEs and other relevant partners in building communities' capacity to put science to action to prevent youth violence. University-community partnerships provide a unique and important opportunity to support communities' efforts to prevent violence by using strategies informed by the best available research evidence. The evaluation research that is central to the ACE Program will make a tremendous contribution to preventing violence in communities by identifying strategies that are effective at reducing violence and creating safer, healthier communities.

1. Centers for Disease Control and Prevention. (2012). Web-based Injury Statistics Query and Reporting System (WISQARS) [Data file]. Retrieved from <http://www.cdc.gov/injury/wisqars/fatal.html>
2. Centers for Disease Control and Prevention. (2012). Web-based Injury Statistics Query and Reporting System (WISQARS) [Data file]. Retrieved from <http://www.cdc.gov/injury/wisqars/nonfatal.html>
3. Corso, P. S., Mercy, J. A., Simon, T. R., Finkelstein, E. A., & Miller, T. R. (2007). Medical Costs and Productivity Losses Due to Interpersonal Violence and Self-Directed Violence. *American Journal of Preventive Medicine*, 32, 474-482.

Integration and Collaboration

Several key components of the ACE Program include partnering with local or state public health departments, collaborating across ACEs, and integrating training activities. In addition, ACEs are assisting with other CDC youth violence prevention initiatives, including Striving to Reduce Youth Violence Everywhere (STRYVE) and Urban Networks to Increase Thriving Youth (UNITY).

ACEs collaborate with each other through the ACE Network, made up of ACE PIs, co-investigators, and CDC scientific collaborators. Four ACE Network Workgroups, including an Evaluation and Indicators Workgroup, Implementation and Fidelity Workgroup, Training Workgroup, and Policy, Communications, and Partnerships Workgroup were established in 2011. The goals of the workgroups are to provide shared resources and support for the work of each ACE. The Training Workgroup, for instance, brings attention to and connects the work being done to train junior scientists at the ACEs. This workgroup focuses on sharing information and resources about how various training activities can be connected to work in communities (e.g., by using webinars or other technology to make training activities available to a broad audience). For example, JHCPYV is working with members of the Training Workgroup to develop a Summer Institute for junior scientists working in youth violence. The Summer Institute will be used to train postdoctoral scientists in the field of violence prevention and help them to develop strong relationships with key leaders in the field.

Reducing youth violence is not an easy task. It involves giving communities the resources and technical expertise to create, implement, and monitor a comprehensive youth violence prevention strategy. The ACE Program is designed to help communities benefit from scientific advances and research about what works to promote thriving youth and create safer environments. The emphasis on evaluation ensures that we continue to learn from our violence prevention efforts and build the knowledge needed to address the public health challenges of youth violence.

Visit www.cdc.gov/violenceprevention/ACE for more information about the ACE Program and its history.
Visit www.cdc.gov/violenceprevention to learn more about CDC and youth violence prevention.