Reduction youth violence—particularly its most lethal forms—requires law enforcement strategies proven to reduce gun violence complemented by effective community mobilization. Substantial reductions in youth violence over the past 15 years provide reason to believe that serious youth violence can be prevented.

In 2006, there were 18,573 homicides in the United States, an annual rate of 6.2 per 100,000 population. Youth are at especially high risk, particularly Black and Hispanic males. Among males ages 15 to 34, homicide is the leading cause of death among Blacks and the second leading cause of death for Hispanics. Homicide is the second leading cause of death for Black males ages 10 to 14 years and for the entire 15 to 24 year age group. In addition to homicides, 4% of youths ages 12-24 reported that they had been a victim of a criminal act of violence in 2008. While most of these acts of violence did not result in serious injury, 6 out of 1,000 teens and 9 of 1,000 youths ages 20-24 were victims of aggravated assaults in 2008.

What follows is a description of current research on the causes of youth violence as well as promising strategies and interventions to address these causes and reduce youth violence.

What Causes Youth Violence?

Individual-Level Risk Factors

Research has found that there are two distinct groups of adolescents who engage in violence and other antisocial behavior: 1) adolescents whose problem behaviors begin in early childhood and 2) adolescents whose problem behaviors begin during adolescence.

Persistent Violence. The first, referred to as life course persistent (LCP), describes a small proportion of the population—5%-10% of adolescent boys included in the longitudinal study—whose problem behaviors...
emerge at an early age and tend to persist at least into early adulthood. At birth, babies who develop LCP antisocial behavior often experience perinatal complications, low birth weight, and minor physical abnormalities. These babies tend to have difficult temperaments and are hard to console when upset. As young children, LCP youth often exhibit hyperactivity and delayed motor development. During primary school, the youth tend to have poor memory and reading skills, and exhibit aggressive behavior and continued hyperactivity.4–7 These challenging children are typically born to mothers who are single, poor, relatively young, and may have substance abuse and other mental health problems. The parenting that LCP youth receive is often characterized by harsh, inconsistent discipline, rejection, neglect and physical abuse.6 Neurological deficits, difficulty with learning, and trouble getting along with peers lead LCP children to school failure, greater involvement with deviant peers, and difficulties in intimate relationships.

Research on criminally-involved youth also reveals widespread mental illness in the population. A study of incarcerated youth in New Jersey and Illinois found that half had a substance abuse disorder, one-third had a disruptive behavior disorder, one-fifth had an anxiety disorder, and 9% had a mood disorder.8

Violence Limited to Adolescent Years. In contrast to the LCP group, adolescence-limited (AL) antisocial behavior begins during adolescence. AL antisocial behavior is established by a gap between physical maturity and social maturity. For adolescents in the AL trajectory, antisocial behaviors become normative. For boys, this includes fighting or using threats of violence. Adolescents in the AL trajectory for antisocial behavior are more likely to use alcohol, tobacco, and illicit drugs and are less likely to have a close relationship with their parents.

Family-Level Risk Factors

Child Maltreatment. Research has indicated that maltreatment experienced in childhood is associated with violent behavior in adolescence and adulthood. Child maltreatment can include various forms of abuse, including physical assault of a child, sexual molestation or exploitation, emotional or psychological abuse, and neglect. Results from a recent study indicated that individuals who experienced greater incidences of childhood abuse were more likely to have difficulty controlling anger.9

Additionally, evidence exists that childhood maltreatment can effect brain structure and function and have significant impact on a child’s emotional well being. However, many of the neurological problems linked with antisocial behavior and violence do not result in increased risk when a child has a stable, nurturing family environment. Generally, adolescents’ connectedness to school and parents or other adults serve as protective factors against violence committed by adolescents.10

Household Environmental Factors. Children who are exposed to toxic environmental agents in the household, specifically lead, exhibit low IQ scores and have shown increased problem behavior disorders, emotional regulation, and aggression. Lead exposure in children can occur through ingestion of lead paint chips, lead inhaled in the air, or exposure to dust that is contaminated by settled city air lead. Much of the evidence linking lead exposure to violence among youth comes from studies examining cohort trends in lead exposure and subsequent rates of violence and crime. A study of crime trends in nine countries revealed a strong association between blood lead levels among preschoolers and crime rate trends over several decades.11 Another study found that homicide incidence in the US is significantly associated with air lead concentration.12
Community and Social Environmental Risk Factors

Circumstances Surrounding Serious Youth Violence. There has been surprisingly little research that describes the circumstances surrounding serious acts of violence involving youth. Data from the FBI's Supplemental Homicide Report (SHR) includes the reported circumstances surrounding homicides involving offenders in two age groups, age 14 to 17 (juveniles) and 18-24 (young adults). SHR data is summarized in Table 1.

One study, which provided detailed insights into urban youth violence, revealed that the most common “spark” or scenario for the violent events studied involved situations in which the offender reported that he felt he was being disrespected or that his masculinity or status was being challenged (42%). The second most common scenario involved situations in which there was competition over a young woman or incidents in which the assailant believed the victim had disrespected the assailant’s girlfriend (31%). Other common scenarios involved acts of self-defense (22%), robberies (20%), drug business disputes (17%), and acts of revenge (17%).

What is striking about the data from this study is that very few of the “sparks” of these incidents would seem to easily lend themselves to the common conflict resolution skills that are the core of many violence prevention interventions. Within this population, there seemed to be very few incidents where misunderstandings could have been worked out. Rather, the incidents reported typically involved raw attempts by an aggressor to gain something (status, money, or a woman) at the expense of someone else whose life had little value to the aggressor.

Gangs. Gangs tend to flourish in communities where educational and job opportunities are poor, social institutions are weak, and fear of gun violence is high. Youth with antisocial tendencies self select into gangs, and there is strong evidence that joining a gang significantly increases violence, gun possession and use, drug selling, and other crimes. Likewise, leaving a gang results in significantly reduced involvement in violence, guns and other crimes. Multiple studies have shown that youth who identify themselves as gang members are more likely than non-gang members to own guns, and that gang membership is a motivating factor for carrying guns. Gang membership increases youth delinquency and violence beyond the effects of associating with delinquent peers.

Community Support of Youth and Failure to Control Violence. Rates of violence, particularly homicide, can vary greatly across neighborhoods. Homicides tend to cluster in neighborhoods with concentrated disadvantage—large proportions of the population that are poor, unemployed, racial minorities, and living in single-family households. Other community

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Table 1. FBI’s Supplemental Homicide Report (SHR) on Reported Circumstances Surrounding Homicides

<table>
<thead>
<tr>
<th>Circumstance</th>
<th>Juveniles (ages 14-17)</th>
<th>Young adults (ages 18-24)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gang-related homicides</td>
<td>24%</td>
<td>18%</td>
</tr>
<tr>
<td>Homicides resulting from arguments</td>
<td>22%</td>
<td>27%</td>
</tr>
<tr>
<td>Robbery</td>
<td>21%</td>
<td>16%</td>
</tr>
<tr>
<td>Other unspecified non-felony events</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Drug-related homicide*</td>
<td>5% - 8%</td>
<td>5% - 8%</td>
</tr>
</tbody>
</table>

*There is reason to believe that this could be a significant underestimate due to a possible undercount of drug- and gang-motivated killings as witnesses are less likely to come forward for murders involving violent drug dealers and gangs.
characteristics associated with high rates of violence are residential instability, dense population, and high concentrations of alcohol outlets. A classic study of neighborhoods and violence in Chicago examined the social processes that explain why concentrated disadvantage and residential instability lead to high rates of violence. The study found that the effects of concentrated disadvantage and residential instability on neighborhood violence were largely mediated by weak collective efficacy—residents' unwillingness to intervene to prevent teen truancy, confront those disturbing the peace, or to work together to solve community problems. Based on their estimates, if a community increased in collective efficacy by two standard deviations, it could expect a 40% drop in homicides.

Unfortunately, there has been little research that has examined strategies to increase collective self-efficacy in communities with high rates of violence. Fear and perceptions of widespread gun carrying by youth is a deterrent for adults to assert informal social controls over youth in high-crime urban neighborhoods. Interventions to decrease illegal gun carrying could make residents less fearful of exerting informal social control.

Structural conditions like high unemployment and highly concentrated poverty impede collective efficacy within a community. One way to address these conditions is through housing policies that disperse poverty, if not reduce it. Many large cities have demolished high-rise public housing units that served as breeding grounds for gangs, drugs, and violence. These units have been replaced with garden style apartments that are made available to both low- and middle-income residents.

Moving to Opportunities

In the Moving to Opportunities project, the US Department of Housing and Urban Development (HUD) found that juvenile arrests in families that moved to lower poverty neighborhoods were significantly lower than families that moved to high poverty neighborhoods.

The experimental group, a randomly selected group of public housing tenants living in poor Baltimore neighborhoods, was offered vouchers and assistance with finding private market housing on the condition that they move to a neighborhood where less than 10% of the residents are poor. Another group, the control group, did not receive housing vouchers or assistance. During an early follow-up period, juvenile arrests for violence in the experimental group were about half as high as that of juveniles in families in the control group. Interim evaluation results (collected between 4-7 years after enrollment) revealed that there were approximately 15 percent fewer violent crime arrests made among youth in the experimental group compared to the control group, indicating that moving to lower poverty neighborhoods is associated with fewer violent crime arrests.

A coalition of Baltimore public housing tenants won a lawsuit against HUD in 2005 for failing, in the judge's words, “to affirmatively further fair-housing laws” by not taking a regional approach to the desegregation of public housing in Baltimore. The judge ruled that government housing policies have worked to make segregation and concentrated poverty persist. During the 1990's 89% of the public housing units in the Baltimore region developed with HUD support were in Baltimore City, principally in neighborhoods with high concentrations of poor African Americans. Baltimore's public housing tenants want access to vouchers that they could use in suburban communities in the region where there is less concentrated poverty, more jobs, better schools, and better city services. The case is in the remedy phase now, and provides a promising opportunity for reforming housing policies that create neighborhood conditions that reduce urban violence.
The Role of Guns in Youth Violence

Although circumstances surrounding serious acts of youth violence vary across time and place, some factors are relatively consistent. First, males perpetrate the vast majority of lethal youth violence, typically with firearms. Second, the fear of others with guns prompts yet more demand for guns, more gun carrying, and further increasing the likelihood of lethal confrontations. Since the late 1980s, a substantial proportion of young African American males living in urban areas have possessed and carried guns, in some instances with some regularity. Researchers have persuasively argued that the ubiquity of guns and gun violence has had a profound impact on the development, social perceptions, and culture of a generation of youth (particularly African American males), and the communities in which they live. There is a widespread fear among this high risk population that others are carrying guns or have easy access to guns, raising the stakes of daily interactions and potential confrontations. Gun carrying and/or easy access to guns is reported by large percentages of urban male adolescents and by the vast majority of youth who reported involvement with selling drugs and/or gangs during the early and mid-1990s.

After the epidemic of youth homicide peaked in the early 1990s, the ability and willingness of young urban males to commit violence was linked to gun possession and use. In urban neighborhoods with high rates of violence, there is a widespread belief among young males that one’s status as well as one’s ultimate safety depend on a willingness and ability to commit acts of serious violence. This belief, coupled with widespread gun carrying, also led older community residents to avoid any potential confrontation with young males, thus reducing the collective efficacy in many inner-city neighborhoods important for reducing community violence.

Promising Strategies of Interventions to Address Violence

Early Prevention Strategies

Life Course Persistent Violence: Home Visitation Programs. Primary prevention of life course persistent violence and other antisocial behavior should address the early causes of neurological impairment and negative life experiences that can harm a child’s ability to control their emotions and process social information. This begins with efforts to enhance the health of low-income pregnant women through improved access and utilization of prenatal care, improved nutrition, and reducing prenatal exposure to toxins and drugs that can harm fetal brain development, such as lead, tobacco, alcohol and other drugs. These interventions to improve should also address important precursors to early child behavior problems that can develop into persistent antisocial behavior and violence.

A popular strategy that addresses these early determinants of social and cognitive development is home visitation programs. These programs are typically delivered by public health nurses and aim to provide:

- Sensory and developmental screening of infants and toddlers
- Health education focused on improving maternal and child health behavior
- Counseling and referrals to reduce pregnant women’s use of tobacco, alcohol and other drugs
- Identification and referrals for mothers’ mental health and social problems (depression, domestic violence)
- Parent education about child development and parenting skills to improve parent-child interactions and the overall quality of the home learning environment
Some programs also attempt to improve mothers’ economic and social situation through family planning and programs to enhance educational achievement and employment.

Home visitation programs that use nurses or mental health workers as frontline staff appear to significantly reduce risks for child maltreatment and related child outcomes that are often precursors to persistent violence into adulthood. Mixed results have been found for programs that used paraprofessionals, a person trained to assist a professional, but not licensed to practice in the profession. A large study of existing home visitation programs identified several implementation problems and no lasting impact on child outcomes. Only one study has examined the effects of these programs on children into adolescence (age 15) and found that program participants had fewer juvenile arrests than controls. However, there was no program effect on child- and parent-reported delinquency. The needs of the families of the children at highest risk for persistent violence are many and the problems difficult to solve. Families should be thoroughly screened to assess these needs and more extensive services offered to those at greatest risk to determine whether maternal and child life courses can be significantly altered for the better. Due to shortages of nurses and cost constraints, programs should consider partnering paraprofessionals with nurses or mental health workers, while enhancing training and supervision to ensure that families’ needs are being addressed.

Best Practices Program: The Incredible Years.

Parents needs for assistance in raising children with difficult temperaments and behavior problems extend beyond the ages of children typically addressed by home visitation programs. Webster-Stratton developed “The Incredible Years” to help children ages 3 to 8 years with behavior problems and difficult temperaments to control their aggression and to promote positive social, emotional, and academic development. Most research has focused on the parent-training component of the program; however, there are complementary programs for teachers and for the children themselves. The common goals of these programs are to promote the development of positive social skills, self-control, and problem solving skills while reducing defiance and aggression. The parenting component has been evaluated in families with children ages 4 to 8 with diagnosed conduct problems and has shown to increase positive parenting and reduce aggressive and destructive behavior over a three-year follow-up.

Violence Limited to Adolescent Years: Programs to Change Social Norms Toward Violence

Decisions by adolescents to carry guns, and to join gangs are driven by their fear of other youths who have a reputation for committing serious acts of violence. Thus, strategies that effectively target and reduce violence committed by youth who would otherwise be persistently antisocial and violent, could lead to reductions in risky behaviors by youth in the adolescent-limited group as well.

Although effectiveness varies, reviews of school-based violence prevention interventions tend to show modest reductions in violent behavior (typically measured by involvement in fights) with little meaningful difference between the specific strategies used in the programs. Behavior of youth in the adolescence-limited antisocial group is influenced by perceived social contingencies, largely from peers, for antisocial versus pro-social behavior. Therefore, promoting pro-social peer norms and offering youth opportunities to play meaning roles in their families, schools, and communities may best prevent adolescence-limited violence.
Best Practices Program: The Aban Aya Youth Project.

The strong connection between changing attitudes about the use of violence and reductions in youth violence likely explain the striking success of the Aban Aya Youth Project. The program was tested in 12 mostly inner-city Chicago schools where the student body was 80% or more African American. Each school was randomly assigned to one of three study conditions—a comparison group that received a health enhancement curriculum, a social development curriculum (SDC), or a SDC plus a school/community intervention (SCI). The SDC consisted of 16 to 21 sessions per year for students in grades 5 through 8. It was designed to address key cognitive-behavioral skills (resisting peer pressure, interpersonal skills, decision making, problem solving, and managing stress) relevant to avoiding violence, drug use, delinquency, and unsafe sex. The SCI combined the SDC with a parental support program, a school-wide effort to integrate the SDC skills into the school environment, and a community program. The community program brought together parents, schools, and local businesses to propose changes in school policies and undertake community activities to “rebuild the village.” When compared with the control group, results from the Aban Aya Youth Project are as follows:

Table 2. Results from the Aban Aya Youth Project

<table>
<thead>
<tr>
<th></th>
<th>SDC</th>
<th>SCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidences of violence</td>
<td>-35%</td>
<td>-47%</td>
</tr>
<tr>
<td>Provoking behavior</td>
<td>-41%</td>
<td>-59%</td>
</tr>
<tr>
<td>Drug use</td>
<td>-32%</td>
<td>-34%</td>
</tr>
<tr>
<td>School delinquency</td>
<td>-31%</td>
<td>-66%</td>
</tr>
<tr>
<td>Sexual intercourse</td>
<td>-44%</td>
<td>-67%</td>
</tr>
<tr>
<td>Condom use</td>
<td>95%</td>
<td>165%</td>
</tr>
<tr>
<td>Overall improvement</td>
<td>51%</td>
<td>79%</td>
</tr>
</tbody>
</table>

Prevention Strategies at the Community Level

Best Practices Program: CeaseFire—Chicago. The CeaseFire program in Chicago was formed in 1999 to address and prevent violence at a community level. CeaseFire is theory-based and aims to impact potentially violent risky activities performed by a small number of community members with a high chance of either being a victim or perpetrator of violence.

The CeaseFire model suggests that by increasing the decision alternatives to violence, changing the norms surrounding violence, and increasing the perceived risks or costs to committing violence, shootings and violence would decrease. These outcomes are facilitated by actions such as: street intervention, client outreach by community members who mentored risky individuals, involvement by clergy, community mobilization, public education campaigns, and increased police presence and prosecution for violent crimes. The program was implemented by outreach workers and violence interrupters hired from within the community.

The CeaseFire program conducted both a process and outcome evaluation in order to systematically monitor the impact of their activities in seven sites in the Chicago area. Using statistical models and 192 months of data, findings showed that CeaseFire significantly reduced the number of individuals shot in five sites. The program also significantly reduced shootings in crime “hot spots,” where shooting are most common. The CeaseFire program also reduced gang-related homicide in two program sites and reduced in reciprocal killings in four program sites.

Limitations of CeaseFire

- The relative strength of the program implementation was not considered since only pre- and post- data on general violence indicators were measured.
- The initiation dates of the program were
somewhat difficult to determine, since community mobilization and education components were often initiated before the violence interrupter components.

- Only events that were reported and recorded by law enforcement officials were considered, which could underestimate the actual number of violent events that occurred.
- The intervention's effects may have spilled over into comparison areas, underestimating the impact of the program.

Despite these limitations, the evidence suggests that CeaseFire reduced gun violence using a public health strategy to reduce individual and community-level risks.

**Best Practices Program: Safe Streets—Baltimore**

The Safe Streets program replicated the CeaseFire program in several high-crime Baltimore neighborhoods. In 2007, an interim evaluation of the program was conducted to describe the process of implementation and estimate the effects of Safe Streets on attitudes and norms surrounding youth gun violence and severe violence involving youth. Results based on data collected 5-6 months and 22-23 months following program implementation indicated a 25% to 28% lower score on a scale for supportiveness for using gun violence to settle disputes in program sites. One site had no homicides during the first 23 months after Safe Streets was implemented, as compared to an average of 0.31 homicides per month in the months prior to implementation. This reduction in homicides is statistically significant, and provides very positive support for the success of the program.

An updated analysis of data through September 2009 on the effects of Safe Streets indicate that among the three program sites studied, there were significant program-related reductions in homicides and nonfatal shootings in two sites, but a significant increase in these outcomes in the third program site. A key difference between the two sites which experienced significant reductions in gun violence and the site with an increase in gun violence was the number of serious conflicts—some of which involved gangs and large number of individuals—that were mediated by program outreach workers. The two successful sites mediate more than twice as many conflicts per month than the site where gun violence increased.

**Keeping Guns Away from Underage Youth and Criminals**

Given the important role that guns play in the most serious forms of youth violence, keeping guns out of the hands of underage youth and of criminals should be an important component of a comprehensive strategy to reduce youth violence. Illegal gun acquisition and carrying can be viewed from an economic perspective, with one set of strategies focusing on the demand for illegal guns and another set of strategies focusing on the supply. Increasing the cost of acquiring and carrying guns can reduce demand for guns by underage youth. The costs of illegal possession of guns can also be influenced by the probability that it will lead to arrest and punishment such as incarceration.

An effective way to increase the cost of illegal gun possession is to deploy specially trained police units to areas where shootings often occur in order to increase detection and deterrence of illegal gun carrying. These strategies have been shown to consistently lead to significant reductions in gun violence without displacing shootings to near-by areas.\(^5^0\) Criminally involved youth report that awareness of these police tactics in the most powerful deterrent to carrying guns.\(^5^1\)

Another strategy that is designed to increase the costs associated with illegal gun possession involves a coordinated program involving several steps or components:

1. Identifying individuals within a community who are considered to be of highest risk of
perpetrating gun violence using police and criminal justice records combined with street intelligence

2. Delivering a clear message to these individuals that they are being watched and that they will be targeted for federal prosecution if they illegally possess or use guns

3. Encouraging community leaders and family members to stay away from violence

4. Offering services to reduce their risks (such as job training)

This approach has been tried in several cities and has consistently led to reductions in gun violence.52-55

Reducing the supply of illegal of guns to youth can be challenging, but can be achieved through policies that increase the accountability of gun sellers and enforcement practices that increase the risks of making illegal sales. Required background checks for all guns sales—not just those sold by licensed dealers—and comprehensive regulation and oversight of gun dealers is associated with decreased gun trafficking.56 Undercover stings of gun dealers can also reduce the flow of new guns to criminals.57

In Summary

Key to achieving the goal of maximally reducing loss of lives and disability from youth violence is the forging of a mutually beneficial partnership between public health, law enforcement, and communities. There is a long history of partnerships between public health and law enforcement to enhance public health and safety. To substantially reduce a problem such as youth violence—particularly its most lethal forms—requires law enforcement strategies proven to reduce gun violence complemented by effective community mobilization.

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