

Striving To Reduce Youth Violence Everywhere (STRYVE): CDC's National Initiative to Prevent Youth Violence

Foundational Resource



National Center for Injury Prevention and Control Division of Violence Prevention

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Introduction to STRYVE and Purpose of the Foundational <u>Resource</u>

Description of the Striving To Reduce Youth Violence Everywhere (STRYVE) National Initiative

STRYVE is a national initiative led by the Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control (NCIPC), Division of Violence Prevention (DVP). This initiative provides direction at the national, state, and local levels on how to prevent youth violence with a public health approach, action that is comprehensive and driven by multiple sectors, and the use of prevention strategies that are based on the best available research evidence. STRYVE's vision is safe and healthy youth who can achieve their full potential as connected and contributing members of thriving, violence-free families, schools, and communities. STRYVE's goals are to:

- · Increase public health leadership in preventing youth violence;
- Promote the widespread use of youth violence prevention approaches that are based on the best available evidence; and
- Achieve national reductions in youth violence.

STRYVE is not a specific youth violence prevention program or package of programs. Guidance on selecting, implementing, and evaluating evidence-based prevention practices, programs, and policies is part of STRYVE's work, but achievement of STRYVE's goals requires broader action. STRYVE is an umbrella initiative with several interacting components that all contribute to the achievement of the STRYVE goals (see Appendix A for STRYVE's logic model). The STRYVE components are:

- National Partnerships—This component creates an active multisector constituency through the STRYVE Action Council and the STRYVE Partnership Network that builds momentum for prioritizing the prevention of youth violence at the local, state, and national levels and the roles of the public health sector in preventing youth violence.
- STRYVE Online (http://VetoViolence.cdc.gov/STRYVE)—This component increases the capacity
 of communities to strategically plan and implement prevention strategies that are based on the best
 available evidence by providing easy access to the latest youth violence prevention information, tools,
 interactive training videos, and a customizable online workspace.
- **STRYVE Pilot Communities**—This component provides resources to local public health departments to increase public health leadership in preventing youth violence and tests the use of STRYVE tools, training, and technical assistance to prevent youth violence in select communities.
- **STRYVE Technical Assistance**—This component provides customized tools, training, and other forms of technical assistance to select communities to increase their capacity and their activities to prevent youth violence using a public health approach, a systematic and data-driven strategy, and practices, programs, and policies that are based on the best available evidence.

The STRYVE Foundational Resource

This Foundational Resource defines STRYVE's scope of work and outlines the research and practice that guide this work. Because multiple activities are necessary to achieve the STRYVE goals, this Foundational Resource serves as a common point of reference for the STRYVE components. It helps to ensure that the STRYVE components are unified and consistent. The information presented in this document may also be used by the STRYVE components to support the development of other materials and activities. This Foundational

Resource lays out the conceptual framework for the STRYVE initiative. The specific activities of the various STRYVE components may vary and evolve over time as work with partners continues. The primary audience of this Foundational Resource is the developers, managers, and implementers of the various STRYVE components.

The STRYVE Foundational Resource articulates CDC's public health approach to preventing youth violence and outlines the best strategies to stopping youth violence before it occurs. Consequently, a secondary audience for this document is the multiple governmental and nongovernmental groups and individuals who have a role in prioritizing, selecting, and implementing youth violence prevention activities. These groups include: public health, education, criminal justice, public safety, housing, labor, businesses, faith-based organizations, community leaders and decision makers, youth and families, and other private and nonprofit organizations. These partners will find valuable information in this document that encourages the increased engagement of public health in preventing youth violence and the implementation of prevention activities that are effective, efficient, and sustainable.

The STRYVE Foundational Resource was developed by CDC youth violence prevention experts. At several points in its development, consultation was sought from other experts in youth violence prevention and in youth and community health promotion who are external to CDC (See Appendix B for a list of external experts). This consultation helped to ensure that the framework that underlies the STRYVE national initiative is grounded in research and guided by the best available evidence and practice.



Fundamental Elements of STRYVE

STRYVE is a national initiative to prevent youth violence with a public health approach, action that is comprehensive and driven by multiple sectors, and strategies that are based on the best available research evidence. This section of the STRYVE Foundational Resource provides in-depth discussion of each of these fundamental elements.

Focus on Youth Violence

Youth violence is when young people aged 10 to 24 years intentionally use physical force or power in order to threaten or cause physical or psychological harm to others.¹ Youth violence is a general term that includes many behaviors, such as fighting, bullying, threats with weapons, gang-related violence, and perpetrating homicide. In research and the media, these behaviors are at times referred to as community violence as opposed to youth violence. The risk for youth violence and patterns of violent behavior can begin before the age of 10, and the prevention of youth violence may include strategies implemented during early childhood. Young people can be involved with youth violence as victims, perpetrators, or witnesses.

Violence, including youth violence, negatively impacts people of all ages and all communities. Young people are disproportionately affected by violence, and youth violence takes an enormous toll on communities.

The consequences of youth violence for young people can be severe, including death, physical injuries, emotional and social difficulties, academic problems, substance abuse, and other long-term health problems. Youth violence often has a rippling affect and negatively impacts families, schools, and entire communities. Examples of youth violence and its broad impacts are:

• Young people are dying prematurely and getting hurt at alarming rates.

- Homicide is the third leading cause of death for young people ages 10 to 24 in the United States.² In 2010, 4,828 youth were victims of homicide—equating to an average of 13 young people each and every day.²
- Over 707,000 young people ages 10 to 24 were treated for an injury from a physical assault in emergency departments in the United States in 2011—an average of 1,938 young people each day.²
- In a 2011 nationwide survey, about 33% of high school students reported being in a physical fight in the 12 months before the survey.³
- Youth cannot grow into productive citizens and a developed workforce if unable to learn.
 - Among high school students in a 2011 nationwide survey, 5.9% reported that they did not go to school on one or more days in the 30 days before the survey because they felt unsafe at school or on their way to or from school.³
 - In a 2011 nationwide survey, 12% of high school students reported being in a physical fight on school property in the 12 months before the survey, 5.4% reported carrying a weapon (gun, knife or club) on school property in the 30 days before the survey, and 7.4% reported being threatened or injured with a weapon on school property in the 12 months before the survey.³
 - In 2011, 20% of high school students reported being bullied on school property, and 16% reported being bullied electronically.³
 - Youth who experience violence have weaker academic performance, are more likely to drop out of school, and have lower socioeconomic status and employment as adults.^{4,5}
- Youth violence and crime hurt everyone in a community—youth, adult residents, and businesses.
 - Young people between the ages of 10 and 24 accounted for 40% of all violent crime arrests and 54% of all property crime arrests in 2010.⁶
 - When young people are involved in crime, the risk for injuries and losing their lives increases.⁷
 - Violence increases health care costs, decreases property value, disrupts social services, and threatens the viability of businesses.⁸

• Costs of youth violence limit resources to achieve community goals.

- Each year, youth homicides and assault-related injuries result in an estimated \$16 billion in combined medical and work loss costs.²
- The cost of arresting, prosecuting, incarcerating, and treating youth offenders is one of largest parts of many state budgets.^{9,10}
- Exposure to violence increases a young person's risk for a range of physical and mental health difficulties, including smoking, high-risk sexual behavior, depression, obesity, asthma, post-traumatic stress disorder (PTSD) symptoms, and suicide.¹¹⁻¹⁴ Addressing these short- and long-term health consequences of violence places an additional strain on community resources.

Because of the heavy burden of youth violence, the STRYVE national initiative focuses on the prevention of youth violence. The strategies, programs, and policies articulated by STRYVE address some of the risk and protective factors associated with other forms of violence experienced by youth, including dating violence, sexual violence, child maltreatment, and suicide; however, these other forms of violence often require different prevention partners and approaches and are not the focus of STRYVE activities.

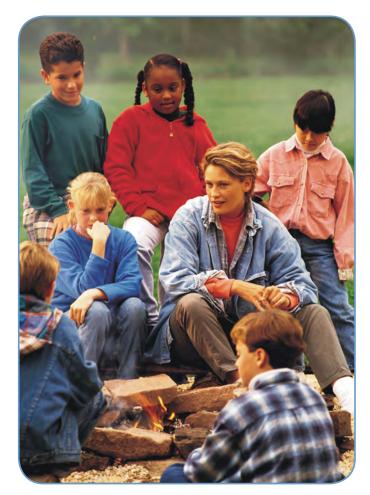
In most STRYVE activities and materials, including this Foundational Resource, the general term "youth violence" is used as opposed to presenting information about each form of youth violence. The goal of STRYVE is to prevent all forms of youth violence and not any one specific youth violence behavior. Information that is presented, such as risk and protective factors and prevention strategies, are related to achieving this goal of broad prevention of all forms of youth violence. In some materials developed and used by the STRYVE components, attention to specific forms of youth violence may emerge at times in order to support partner engagement, strategic planning, and the implementation and sustainability of prevention activities.

Focus on Prevention

Youth violence is not inevitable. Youth violence is truly preventable. A strong and growing research base demonstrates that there are multiple approaches to preventing youth violence that are cost effective, scientifically supported, and proven to work.^{18,15-17} Numerous programs and strategies have been developed and evaluated and shown to be effective in building youth's skills to avoid violence and in fostering relationships and environments that promote safety and health. These prevention efforts are implemented before youth violence occurs, and they stop youth violence from starting. These strategies can be beneficial for all youth regardless of their level risk, or they can be focused specifically on addressing the needs of individuals and environments at greatest risk.

Prevention is a part of a collection of activities that are necessary to fully address youth violence. Intervention activities that are implemented after youth violence occurs are also important. Interventions may include immediate and longterm law enforcement, medical and mental health responses to violent incidents, and additional supports for youth reentering communities from the juvenile justice system.^{18,19} These activities may help to stop youth violence from continuing or progressing and may help to ameliorate some of the physical, social, emotional, and behavioral consequences of violence, including the likelihood that a youth who experiences violence will engage in violence again in the future. A combination of prevention and intervention activities that are systematically selected and implemented are critical to solving the problem of youth violence.

Although there is a growing recognition that prevention must be part of the collection of activities that are implemented,^{20,21} a predominant emphasis on responding to youth violence rather than preventing it from occurring in the first place continues. There are many barriers to the effective use of the available knowledge about youth violence prevention and the inclusion of



prevention in approaches to address youth violence.^{1,8,20,22} One constraint is a historical focus of responding to youth violence after it occurs, which leads to a false belief that youth violence is being "solved" and limited prioritization of complementary and necessary prevention strategies.^{8,20} Challenges accessing and knowing how to apply information about what works to prevent youth violence as well as concerns about costs and the desire for immediate results are additional barriers to prevention becoming a strong part of activities to address youth violence.^{1,23}



STRYVE focuses on the prevention of youth violence because of the availability of effective youth violence prevention strategies, the necessity for prevention to be a part of the activities conducted to address youth violence, and the current limited use of prevention strategies. Through its various components, STRYVE works to overcome some of the barriers to including prevention approaches as a part of the range of activities that are necessary to address youth violence. STRYVE's work includes increasing awareness that youth violence is a preventable public health problem and not just a law enforcement problem. STRYVE strengthens access to prevention resources and emphasizes that prevention needs to be part of activities that support the healthy and violence-free development of all youth, families, schools, and communities. The focus on prevention is a gap that CDC is best positioned to fill and complements CDC's collaboration with other federal agencies, such as the Department of Justice and the Substance Abuse and Mental Health Services Administration, who help communities appropriately respond to violence.

Focus on a Public Health Approach

Youth violence is a significant public health problem—it jeopardizes the health and safety of the public and is a leading cause of injury, disability, and premature death.² Youth violence also increases the risk for other health problems and the poor development for the individuals and communities that experience it.^{8,11,12} The public health approach is a process rooted in the scientific method that helps communities better understand and prevent youth violence.^{22,24}

A public health approach to violence prevention is similar to a public health approach to addressing diseases and other harmful conditions—it applies scientific and programmatic expertise to preventing violence before it occurs.^{22,24} This approach involves:

- Collecting data and coordinating multiple data systems to understand and monitor the problem and to identify the populations and locations at greatest risk;
- Identifying risk and protective factors that influence the likelihood of violence;
- Developing and testing violence prevention strategies; and
- Widely implementing violence prevention strategies that are based on the best available evidence.

Through its interacting components, STRYVE helps communities take a public health approach to preventing youth violence.

Focus on Comprehensive Prevention

Youth violence is a learned behavior, and the likelihood that a young person will engage in violence is strongly influenced by multiple, interacting factors that change over time as youth, their relationships, and their environments evolve.^{1,8,25,26} Consequently, putting an end to youth violence is neither simple nor quick. There

is not one program, practice, or policy that can address all the factors that contribute to youth violence and result in national reductions in youth violence.

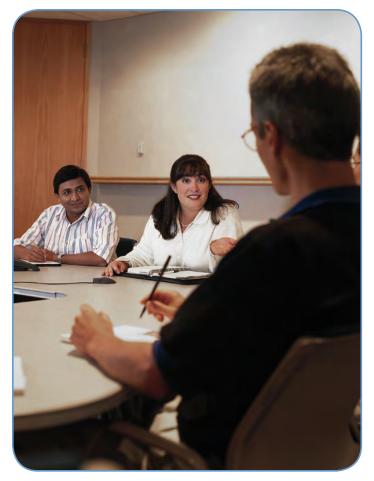
Within the strategic planning and implementation of prevention activities, a comprehensive prevention approach is critical.^{1,8} A comprehensive approach to preventing youth violence includes addressing the multiple factors that influence the likelihood of youth violence. These influences include individual risk and protective factors as well as characteristics and policies of the social systems, community, and society within which young people develop. The STRYVE national initiative promotes a comprehensive prevention approach.

Focus on Multisector Action

Because of the complexity of youth violence, its broad impact, and the need for comprehensive prevention, no one person or organization can prevent youth violence. Preventing youth violence requires multiple governmental and nongovernmental groups collaborating to strategically plan and act.^{23,27-31} These partners include diverse sectors and systems, such as justice, education, labor, social services, medical and mental health, and public health and safety. Community partners, such as businesses, youth serving organizations, and faith institutions, as well as community residents are also critical. Additionally, young people offer important perspectives to consider when designing and implementing a prevent strategy.^{32,33} Each of these partners has a unique and important role in preventing youth violence.

The STRYVE national initiative emphasizes the prevention of youth violence through the collaborative and coordinated action of multisector partners. The infrastructure and capacity of multisector partners to conduct strategic planning and prevention activities are strengthen by some of the STRYVE components. By working together, the effectiveness, efficiency, and sustainability of activities to prevent youth violence can increase.

Through its promotion of multisector action, the STRYVE national initiative draws attention to one critical partner that is often not engaged in addressing youth violence—the public health sector—and encourages its increased leadership in preventing youth violence.³⁴ The public health sector includes local and state health departments, federal public health institutions, researchers, practitioners, and schools of public health. With its emphasis on a science-driven approach and the health of all citizens, the public health sector brings a clear focus on prevention and the promotion of populationwide health, safety, and well-being. The public health community has the skills and expertise to collect and analyze data to understand the issue, to select and implement comprehensive prevention strategies, and to organize and integrate efforts of diverse sectors to successfully prevent complex health issues like youth violence for the entire population. Training, tools, and other resources provided by the STRYVE initiative increase the capacity of public health agencies to engage in and apply their strengths to serve as one of the youth violence prevention leaders.



Focus on Prevention Strategies that are Based on the Best Available Evidence

The research investment and efforts by communities to understand youth violence, develop and evaluate prevention strategies, and implement evidence-based approaches are paying off. Research clearly demonstrates that the reduction of factors that place youth at risk for violence and the strengthening of factors that protect youth from violence can occur.^{1,8,15-17} A growing number of approaches are available that demonstrate that youth violence can effectively be prevented, and some communities are having success in applying these approaches and measuring improvements in health and safety.

A challenge to putting this knowledge into practice is that communities often do not have the information or resources necessary to stay abreast of the latest youth violence prevention research or to select, implement, and sustain effective approaches that appear in the published research literature.^{23,8} Consequently, some communities continue to implement approaches that further study has demonstrated to not be helpful in reducing youth violence and in some instances to be harmful.¹ Additionally, some communities allocate their limited prevention resources to the development of new programs rather than taking advantage of approaches that have already been designed, tested, and shown to work.²³

The STRYVE national initiative supports the prioritization of youth violence prevention strategies that have already been evaluated and shown to be effective. Because youth violence prevention knowledge is evolving and growing, the level of available evidence across prevention strategies varies. Some strategies, such as those that address individual and family factors, have relatively more evidence of effectiveness than other strategies, such as those that modify community and societal influences.^{1,8,17} Some prevention strategies have the highest level of evidence—that is, they have been shown through a rigorous evaluation process to be effective at sustaining a significant reduction in youth violence.^{15,16} Other strategies have been shown to have effects on behaviors that are known to contribute to the risk for violence, such as impulsivity and weak problem-solving skills, but their direct effects on violence have not yet been evaluated. The activities of the STRYVE national initiative assist with the selection and implementation of existing prevention strategies with the best available evidence before investing in the development of new approaches or utilizing approaches with unknown or harmful effects.

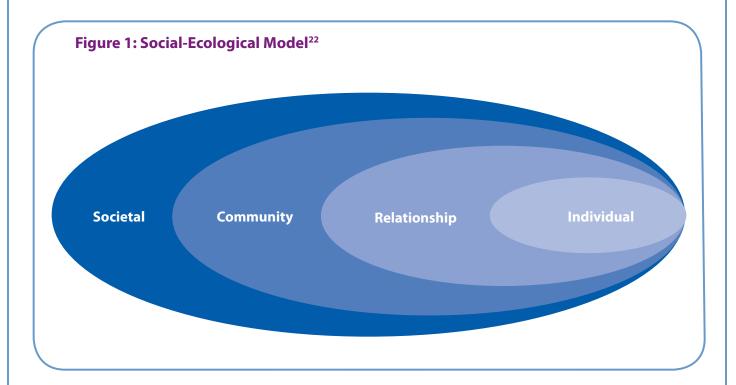
Brief Summary of Youth Violence Research that Guides STRYVE



Decades of investment into youth violence research have resulted in a strong understanding of youth violence and prevention strategies that work. STRYVE utilizes this knowledge to guide activities at the national, state, and local levels to prevent youth violence. This section of the STRYVE Foundational Resource provides a brief summary of youth violence research that informs STRYVE. Existing reviews of the youth violence prevention literature, including some of the latest studies, are accessible through STRYVE Online (http:// VetoViolence.cdc.gov/STRYVE) and other web-based resources.^{15,18,19} A high-level research summary is provided here that discusses the factors that influence the likelihood of youth violence, variations in the risk for youth violence, evaluated prevention approaches, and the cost-benefit for preventing youth violence before it occurs. This content informs STRYVE and its guiding principles and strategic approaches that are discussed in subsequent sections of this Foundational Resource.

Factors that Influence the Likelihood of Youth Violence

Research demonstrates that there is no one factor that, in isolation, leads to the development of youth violence.^{1,8,25,26} The likelihood of youth violence is influenced by multiple factors that youth are exposed to over the course of their development from early childhood through young adulthood. The CDC uses the four-level social-ecological model to better understand and address these influences (see Figure 1).²² The overlapping rings of the social-ecological model help to illustrate that the development of violent attitudes and behaviors is affected by a young person's characteristics and experiences as well as by the relationships, community, and society within which young people develop.⁸ Some of these influences may increase the risk for violence, and other influences may lower the risk for violence. All these factors interact to increase or reduce the likelihood of youth engaging in violence; consequently, understanding these multiple factors and implementing comprehensive prevention strategies that work at all levels of the social-ecological model are necessary for deep and sustained prevention of youth violence.



• Factors that increase the risk for youth violence

Research has identified a number of characteristics, experiences, and situations that can increase the risk of a youth engaging in violence, and these influences are commonly referred to as risk factors. Risk factors for youth violence are complex, interactive, and cumulative. The presence of risk factors does not always mean a young person will experience violence; however, young people who have multiple risk factors are more likely to develop violent attitudes and behaviors than their peers with few risk factors. Table 1 summarizes some of the risk factors for youth violence that have consistently been supported by research.^{1,8,25,26} Early research about youth violence risk factors focused predominantly on the young people themselves and their relationships. These examinations resulted in the identification of risk factors that include impulsivity, prior history of exposure to violence or abuse, and involvement with delinquent peers and gangs. The identification of community- and societal-level risk factors is increasing with the latest research identifying other risk factors, such as economic inequality and social norms supportive of violence.

Individual	Family	Peer/Social	Community/Societal
Risk Factors	Risk Factors	Risk Factors	Risk Factors
 History of violent victimization Attention deficits, hyperactivity or learning disorders History of early aggressive behavior Involvement with drugs, alcohol, or tobacco Low IQ Poor behavioral control Deficits in social cognitive or information-processing abilities High emotional distress History of treatment for emotional problems Antisocial beliefs and attitudes Unsupervised access to firearms and other weapons Exposure to violence and conflict in the family Poor academic performance 	 Authoritarian childrearing attitudes Harsh, lax or inconsistent disciplinary practices Low parental involvement Low emotional attachment to parents or caregivers Low parental education and income Parental substance abuse Parental criminality Poor family functioning Poor monitoring and supervision of children 	 Association with delinquent peers Involvement in gangs Social rejection by peers Lack of involvement in conventional activities Low commitment to school and school failure 	 Diminished economic opportunities High concentration of poor residents High level of transiency High level of family disruption Low levels of community participation Socially disorganized neighborhoods Community social norms supportive of using violence to solve problems Gender norms that link masculinity with aggression

Table 1. Examples of Youth Violence Risk Factors Identified by Research

• Factors that decrease the risk for youth violence

Research also demonstrates that young people experience factors that decrease their likelihood of engaging in violence, and these influences are commonly referred to as protective factors. Like risk factors, protective factors exist at all levels of the social-ecological model and are complex, interactive, and cumulative. Individuals with more protective factors are less likely to engage in youth violence, but these buffers do not offer absolute protection. Table 2 summarizes some of the protective factors that research has consistently shown help to reduce the risk of youth violence.^{1,8,26} Protective factors have not been studied as extensively or rigorously as risk factors, resulting in fewer known protective factors for youth violence. Research identifying and understanding protective factors is equally as important as examining risk factors, and a better understanding of the complex interplay of risk and protective factors is needed.^{35,36} While the factors listed in Table 2 include individual, family, peer, and community protective factors, the table is sparsely populated in comparison to the risk factors listed in Table 1 and demonstrates that more needs to be learned about youth violence protective factors.

Table 2. Examples of Youth Violence Protective Factors Identified by Research

Individual and Family	Peer/Social/Community
Protective Factors	Protective Factors
 Intolerant attitude toward deviance High IQ High grade point average Positive social orientation Religiosity Emotional attachment to family members Ability to discuss problems with parents Perceived parental expectations about school performance are high Frequent, shared activities with parents Consistent presence of parent during at least one of the following: when awakening, when arriving home from school, at evening mealtime or going to bed Involvement in prosocial activities 	 Commitment to school Positive, sustained attachments with at least one adult family member, teacher or other adult Schools, families, and peer groups that promote healthy beliefs and set clear standards Attachment or connection to the community or a sense of belonging

Variations in the Risk and Occurrence of Youth Violence

Youth violence is a significant problem that negatively impacts all young people, schools, and communities. The rates and types of youth violence, however, vary across different groups of young people and settings. Recognizing these differences increases the understanding of the broad and significant impacts that youth violence has, helps to demonstrate the importance of preventing youth violence, and strengthens the planning and implementation of prevention strategies. Presented below are examples of some, but not all, of the known variations.

Racial and ethnic group differences

The risk for some forms of youth violence varies significantly by racial and ethnic group. For instance, among young people between the ages of 10 and 24, homicide is the leading cause of death for African Americans, the second leading cause of death for Hispanics, and the third leading cause of death for American Indians and Alaskan Natives.²

Gender differences

Both males and females experience youth violence, but data demonstrate variability in their risk. For example, the youth homicide rate for males is approximately six times higher than the rate for females, and the rate of emergency department visits for physical assault injuries for males is twice as high as the rate for females.² Despite these differences, the prevention of youth violence experienced by females is critical. Homicide is the third leading cause of death of female adolescents and young adults, and young females represent 18% of arrests for all violent crime.^{2,6}

Developmental differences

The risk for different forms of youth violence changes across the lifespan. For example, research shows that physical aggression is very common in early childhood and becomes progressively less common as children learn social and problemsolving skills.³⁷ The risk for bullying increases during late childhood/early adolescence and then declines as youth enter high school.³⁸ Youth violence prevention activities are needed throughout childhood, adolescence, and young adulthood, and these activities need to account for developmental differences within and across developmental stages.

Community differences

Youth violence occurs in urban, suburban, rural, and tribal communities. Research does demonstrate variations in risk for youth violence across communities and neighborhood. For instance, large cities have higher rates of crime and youth gang activity than smaller cities and suburban areas.^{6,39} Even within a city, neighborhood blocks can differ significantly in their level and type of youth violence experienced.



The successful prevention of youth violence requires attending to the needs of all youth, families, schools, and communities. The use of data to understand which groups and settings may have an elevated or different risk for youth violence helps to ensure that a prevention plan includes all the strategies that are necessary to have a widespread and sustained reduction of youth violence.

Youth Violence Prevention Approaches Supported by Research

Many prevention approaches have been evaluated and shown to either reduce youth violence or modify youth violence risk and protective factors.^{1,8,15-17} These approaches include skill development programs, structural interventions, and policies. When developing strategic plans to prevent youth violence, some communities find utility in first considering broad categories of research-supported approaches before selecting a specific practice, program, or policy to implement. This section provides a summary of categories of youth violence prevention approaches that have evidence for their effectiveness and examples of specific activities for each category.

It is important to recognize that the research on specific practices, programs, or policies within a category can vary substantially. Some categories, such as universal school-based youth violence prevention programs, include many different programs that vary in their individual level of effectiveness. The amount of supporting evidence also varies across the categories. Some categories are supported by a small number of evaluations of different practices, programs, or policies. Before any specific prevention activity is conducted—even activities within the categories listed below—the research literature should be examined for the level of evidence, risk for harmful outcomes, and similarities and differences between the intended recipients and the groups who have participated in past evaluations. More detailed information about the approaches listed below and the evidence for activities and programs included in each approach are provided by STRYVE Online (http:// VetoViolence.cdc.gov/STRYVE) and other web-based resources.^{15,18,19}

Universal School-based Youth Violence Prevention Programs

These programs are delivered to all students in a school or grade and not just to students who have an elevated risk for youth violence. Many universal school-based programs have been developed, and these programs vary in their activities and impacts on youth violence.^{16,40} Examples include Life Skill Training, Good Behavior Game, and Promoting Alternative Thinking Strategies. In general, they provide students and school staff information about violence, change how students think and feel about violence, and teach skills to nonviolently resolve conflicts.

Parenting Skill and Family Relationship Programs

Substantial evidence supports the use of parenting programs as an effective strategy to positively influence child-rearing practices and child behavior. Many different programs have been developed that have varying activities and impacts on youth violence.¹⁵ Examples include Strengthening Families, the Incredible Years, and Guiding Good Choices. In general, these approaches provide caregivers with support and teach skills related to communication, problem-solving, monitoring, and behavior management.

Intensive Multi-System Approaches

An important element to preventing youth violence is implementing approaches that support youth at high-risk for violence, such as young people with histories of engaging in violence. Intensive strategies, such as Multisystemic Therapy and Multidimensional Treatment Foster Care, address factors in the youth's environment that contribute to violent and delinquent behavior. These factors include individual characteristics of the youth, family relations, peer relations, and school performance. Some of these approaches have resulted in significant reductions in youth violence.^{15,16}

• Policy, Environmental, and Structural Strategies

Specific structural and policy approaches that change the environmental characteristics of communities can enhance community safety, and in turn can be effective at influencing key risk and protective factors for youth violence. Examples of these approaches include Business Improvement Districts (BIDs) and Crime Prevention Through Environmental Design (CPTED). BIDs address community-level processes, such as order maintenance, formal and informal social control, and community cohesion, and have been found to have significant reductions in violent crime.⁴¹ CPTED focuses on changing characteristics of the physical environment to support appropriate use and to reduce risk for crime and violence.^{42,43}

Street Outreach and Community Mobilization

Community-based strategies that include street-level outreach and conflict mediation have demonstrated some effects on reducing youth violence. Examples are CeaseFire and Safe Streets.^{44,45} These approaches work to interrupt violence, particularly shootings, and change community environments in order to enhance safety and affect youth violence and youth violence risk/ protective factors.





Early Childhood Home Visitation

Home visitation is an early-intervention strategy that involves trained nurses providing direct services to families. Many different programs have been developed that have varying activities, and some have been evaluated for their potential in preventing youth violence. One example is Nurse Family Partnerships, which has been shown to result in decreases in risk factors for youth violence, such as child maltreatment and youth arrests.^{15,16} These approaches provide information, caregiver support, and training about child health, development, and care.

Preschool and Elementary School Enrichment

Early skill development and education can have long-lasting benefits for children who have an elevated risk for youth violence. The Early Risers Skills for Success and the Perry Preschool Project are examples of promising approaches that have demonstrated some prevention effects.^{15,19} Such approaches provide high-quality, early childhood education to at-risk children and families to build a strong foundation for future learning and healthy development.

Research also points to strategies that are not helpful in reducing youth violence, and in some cases actually increase the risk for youth violence. For example, the policy of transferring juvenile offenders to the adult criminal justice system rather than maintaining them in the juvenile justice system has been demonstrated to result in a 34% increase in re-arrests for violent crimes among juveniles who had been transferred.¹⁶ Other ineffective strategies include: Drug Abuse Resistance Education (DARE), Scared Straight, and boot camps.¹

Our understanding of what works and what does not work to prevent youth violence is growing, but more research on program effects is needed. There are still many youth violence prevention approaches that have either not been evaluated or have unknown effects. Other approaches have received some evaluation but require additional examination to determine if they offer benefits to other communities and settings. Findings by the University of Colorado's Center for the Study and Prevention of Violence illustrate these research gaps— of the 900+ prevention programs reviewed, only 33 met their criteria for being an evidence-based prevention program.¹⁵

Cost Savings of Implementing Youth Violence Prevention Strategies Supported by Research

A growing body of evidence indicates that some youth violence prevention approaches can also offer significant cost savings.⁴⁶⁻⁴⁸ Research on data from the state of Washington suggests that these benefits can range from \$1 to over \$37 per each dollar spent implementing an evidence-based prevention program.⁴⁸ For instance, among universal school-based youth violence prevention program, the benefits for \$1 of cost was \$37.52 for Life Skills Training and \$31.09 for the Good Behavior Game. The cost-benefit for intensive approaches for high-risk youth include \$4.37 for Multisystemic Therapy and \$4.95 for Multidimensional Treatment Foster Care for each dollar spent.⁴⁸ This new research also highlights that the prevention and cost-saving benefits of evidence-based programs depend on effective programs being implemented well and as designed.^{23,49}

Broad Implications for Preventing Youth Violence

The direct and most obvious results of preventing youth violence are fewer premature deaths and physical injuries experienced by young people. The prevention of youth violence can also minimize or eliminate the emotional, social, and behavioral difficulties that are significantly associated with youth violence and negatively impact the long-term health of a young person.^{15,18,19} Through the implementation of evidence-based prevention approaches that reduce risk factors and promote protective factors, a young person's risk for numerous difficulties, such as depression, anxiety, suicide, substance abuse, smoking, high-risk sexual behavior, asthma, and obesity, can be diminished.^{11,13-15,19}

Youth homicides and assault-related injuries result in an estimated \$16 billion in combined medical and work loss costs.² Violence also negatively affects property values and the viability of businesses.⁸ By preventing youth violence, resources can become available to address other community priorities.

Guiding Principles for STRYVE

The various activities of the STRYVE components are guided by a common set of research- and practice-driven principles. These principles are:

• Youth violence can be prevented, and individuals, families, communities, and society can be healthy and safe.

Youth violence can be prevented through the use of multiple programs, practices, and policies that are based on the best available evidence and implemented within a public health approach.^{1,8} A strategy to address youth violence must include prevention approaches to complement other approaches that intervene and respond to youth violence. Research demonstrates that reducing factors that heighten a young person's risk of engaging in violence while also increasing factors that promote the health and safety of individuals and communities can result in significant decreases in youth violence.^{1,8,15-17} Improvements in health and safety result from the implementation of effective prevention strategies that everyone can benefit from regardless of their level of risk for violence, such as all students in a school, as well as the implementation of specific prevention strategies designed to meet the unique needs for at-risk groups, such as youth with a history of aggression.

• A public health approach is critical to effective youth violence prevention.

A public health approach is a systematic process for understanding and ultimately preventing youth violence before it occurs.^{22,24} This approach includes using data to understand how often youth violence occurs, where it occurs, and who is most affected. To help identify where prevention strategies need to be applied, data are also used to understand the factors that protect youth or place them at risk for violence. This knowledge feeds into the development and evaluation of prevention strategies and then the broad implementation of effective strategies to support the health and safety of the entire population. Utilization of this science-based prevention approach ensures that youth violence prevention efforts are maximally effective and have deep and long-lasting impact. Additionally, a public health approach emphasizes the need for the organized and integrated efforts of multiple sectors to prevent violence and to promote health and safety for the entire population.

• The prevention of youth violence is best achieved using comprehensive approaches.

There is no single factor that explains why one person experiences violence while another does not; consequently, the implementation of a single prevention strategy is unlikely to result in deep, widespread, and long-lasting reductions in youth violence. A comprehensive approach to youth violence prevention is necessary.^{1,8} A comprehensive prevention approach involves the implementation of multiple strategies to influence the range of factors that increase or decrease the likelihood that youth violence will start. These factors include the characteristics of a young person and their relationships as well as influences in the schools, community, and society within which young people develop. Key to the effectiveness of a comprehensive prevention approach is that all the strategies that are utilized are based on the best available evidence.

• The prevention of youth violence is strengthened by a life course approach.

Young people's involvement in violence is significantly influenced by their developmental life course, which includes changes in their exposure to various risk and protective factors from birth through early adulthood.⁵⁰⁻⁵² A life course approach to youth violence prevention includes attending to these varying influences and working in a developmentally appropriate way to build healthy problem-solving skills, relationships, and environments at every life stage. A key element is for prevention activities to be sequenced and ongoing over the life span while allowing for enhanced prevention activities during critical transition periods when some forms of youth violence increase.

• Effective youth violence prevention approaches attend to the unique needs and strengths of individuals, families, and communities.

Youth violence is influenced by a variety of racial, ethnic, gender, culture, and socioeconomic factors that are part of individuals and their families, communities, and society.^{1,8,25} These factors include values, beliefs, traditions, and circumstances that may increase risk or alternatively promote health and protection from the development of violent attitudes and behaviors. For prevention efforts to be effective, these factors should be taken into account when selecting, implementing, and evaluating youth violence prevention practices, programs, and policies.



• Forms of youth violence and other health risk behaviors are interconnected and can be prevented with similar prevention strategies.

The likelihood of various forms of youth violence, including bullying, assaults, and gang violence, are influenced by common risk and protective factors.^{1,8,25,26} Many risk and protective factors for youth violence also are linked to other developmental and health outcomes and behaviors, such as alcohol and substance use and unsafe sexual behavior.^{53,54} Evidence-informed strategies that impact these common risk and protective factors are likely to support the prevention of multiple forms of youth violence and may have broader positive effects on adolescents' health and development.



• Youth violence prevention and health promotion require multisector action and infrastructure.

Youth violence affects all individuals and institutions in a community either directly or indirectly, and no one individual or group can do everything needed to prevent violence. As a result, effective youth violence prevention initiatives and the promotion of the health and safety of a community require participation and leadership from many partners.^{27-31,55,56} Multisector partnerships are needed at the local, state, and national levels and include individuals and organizations that have different skills, perspectives, and areas of expertise. Critical prevention partners include public health, social services, education, criminal justice, labor, and housing. For the work of these partners to be efficient and effective, infrastructure and systematic processes are necessary to enable collaboration, coordination, and sustainability of prevention activities.^{23,28,57-59}

• Youth violence prevention is driven by data and research.

Youth violence prevention strategic plans and activities that are data and research driven are most likely to be effective and sustainable.^{28,55,58} This work includes the use of coordinated local, state, and national surveillance systems to monitor and track youth violence indicators and health promotion factors. These data guide the design and implementation of prevention efforts and subsequently are used to evaluate the effectiveness of these efforts. Prioritization of prevention approaches that have been found to be effective through rigorous evaluation will result in the efficient use of resources and a higher likelihood of achieving the community's prevention goals. When previously evaluated approaches are not available, prevention activities should address empirically supported risk and protective factors, and such innovative prevention efforts must be coupled with an evaluation. Ongoing research and evaluation help to ensure that the goals of a violence prevention plan are being achieved and help others by expanding the research base for what is known about youth violence, its prevention, and how best to disseminate effective prevention strategies.

• Community input, engagement, and leadership are vital to successful prevention.

Community-level support and action are pivotal to successfully preventing youth violence, and national and state-level actions should inform and support local work.^{23,27-30,58} Active participation and leadership from community-based organizations, residents, faith-based groups, and local businesses help to ensure that youth violence prevention approaches are planned and conducted in ways that address unique needs and priorities. Community partner input, engagement, and leadership help to accurately define the local problem; develop, prioritize, and implement violence prevention strategies; build on existing efforts; and enhance outcomes. Engaging community partners also helps to build the capacity of individuals and organizations to forge sustainable solutions.

• Young people have integral roles in violence prevention planning and implementation.

Young people have important roles to play in preventing a problem that affects them so deeply.^{32,33} To ensure that planned prevention strategies meet the needs of young people, a youth voice should be reflected in efforts to prevent violence. Additionally, their involvement in helping to create and implement solutions can be an important violence prevention strategy in its own right by strengthening youth's knowledge and skills. Young people understand and are strong spokespersons for prevention efforts, particularly when those efforts develop their interpersonal skills and positive relationships, nurture their talents, and provide them with opportunities for leadership and selfexpression.



• A strategic plan is critical to youth violence prevention success.

Development and implementation of a comprehensive strategic plan are critical to preventing youth violence.²⁷⁻²⁹ A strategic plan includes analyzing data about the issue, delineating goals and measurable objectives, defining what steps need to be taken and by whom, implementing strategies, and evaluating the plan. Utilizing a strategic plan leads to better outcomes by promoting approaches that are well coordinated, responsive to local needs and strengths, and built on the best available data and research. Further, the process of developing a strategy builds a shared understanding and commitment by multisector partners and enables participants to develop the relationships and methods that are needed to enhance the likelihood of success.

• Youth violence prevention addresses risks and protective factors within settings and institutions.

Characteristics of settings and institutions, such as schools, neighborhoods, and workplaces, influence how people interact with each other and affect the likelihood that a person may or may not become involved in violence.^{1,8,22} In order to decrease the likelihood of youth violence and promote safety, youth violence prevention must extend beyond addressing individual and interpersonal risks. Prevention strategies need to include altering the characteristics and policies of the settings and institutions in which young people grown and develop in order to promote safety, health, and well-being.^{41,42}

• Knowledge sharing and technical assistance are needed to build and strengthen capacity for preventing youth violence.

Preventing youth violence with approaches that are systematic and based on the best available evidence requires knowledge and the capacity to use that knowledge.^{23,55-58} Systems to disseminate the latest research information, share community successes, and provide technical assistance are essential to building and strengthening local, state, and national activities to prevent youth violence. These systems should build the capacity to stay abreast of the latest youth violence research and trends, develop prevention coalitions, design strategic approaches, select and implement strategies that have the best available evidence, and evaluate implemented activities.

• Youth violence prevention efforts must be widespread and sustained.

Prevention activities need to be widespread and sustained to ensure that all people who can benefit from the activity are engaged and all environments that affect the likelihood of youth violence are impacted.^{23,56} An example of this work includes implementing a strategy in all schools of an entire school district rather than just one school and continuing the strategy so that year after year new students benefit.⁴⁰ This work requires the development of infrastructure, resources, capacity, and enhanced coordination and collaboration among multiple community partners.⁶⁰

STRYVE Strategic Approaches

Decades of research about youth violence and community efforts to implement prevention strategies have significantly advanced our knowledge and resulted in practices, programs, and policies that impact risk and protective factors for youth violence and reduce the occurrence of youth violence.^{1,8,15-17} The STRYVE strategic approaches presented in this section of the STRYVE Foundational Resource are based on consistent elements of this prevention knowledge. These approaches can be used at the national, state, and local levels.

The breadth and strength of research that underlie these strategic approaches vary, and this fact is reflected in the description of the approaches. A few examples of activities that are based on the best available evidence are presented for each strategy. However, all the specific practices, programs, and policies that have been found to be effective or ineffective in preventing youth violence are not presented in this Foundational Resource. STRYVE Online (http://VetoViolence.cdc.gov/STRYVE) and other web-based resources offer more extensive reviews of specific practices, programs, and policies.^{15,18,19} Before any specific prevention activity is conducted, previous evaluations of the activity should be carefully and closely reviewed because not all available activities are effective and some even increase the likelihood of youth violence. Similar programs can also vary substantially in their effects, thus examination of outcomes from previous studies and of similarities and differences between intended participants and groups who have participated in these studies is warranted.

Effective youth violence prevention requires the implementation of comprehensive, evidence-based approaches that simultaneously reduce risk factors and promote protective factors experienced by young people beginning in their early childhood and extending into early adulthood.^{1,8}These strategic approaches are organized and presented below by the social-ecological model to help emphasize the importance of comprehensive prevention that addresses the interconnected influences at multiple levels.^{8,22} Some of these connections are very apparent across the strategies. For instance, strengthening youth's conflict resolution skills (individual level) and teachers' classroom management skills (relationship level) help to foster a safe and connected school environment (community level) and shared norms about the unacceptability of youth violence (societal levels)—all of these strategies contribute to lower rates of youth violence. Sustained and widespread prevention of youth violence will only result from the implementation of multiple activities that bolster the skills of young people as well as strengthen the health and safety of their families, community, and society.

While the STRYVE strategic approaches are based on research about both risk and protective factors, they are presented in a way to emphasize the positive action that is needed. This intentional, proactive frame presents the action that needs to occur to prevent youth violence as opposed to highlighting where young people and their families, communities, and society have problems. This frame also helps to emphasize that prevention activities need to reach all youth, families, schools, and communities. The potential to stop youth violence is limited if only the most obvious at-risk groups are engaged in prevention activities. A strategic plan to prevent youth violence should include activities that reach all groups and settings regardless of their level of risk as well as activities that meet the unique needs of groups and environments that are at high-risk or are already experiencing elevated rates of youth violence.^{1,8}

Strengthen the Personal Capacity of Youth to Resist Violence

Youth-focused approaches to violence prevention seek to enhance the skills, knowledge, and motivation for young people to choose nonviolent behaviors and to effectively address difficulties that increase their risk for violence. They also seek to engage young people in structured opportunities that enable them to develop leadership skills, talents, and prosocial interests. These prevention approaches build and strengthen youth's social, emotional, cognitive, and behavioral skills by working directly with young people from early childhood to young adulthood as their exposure to risk and protective factors change. These individuallevel strategies are based on a deep and strong research literature about risk and protective factors and effective youth violence prevention activities that develop young people's skills and competencies.^{1,8,15-17}



• Individual Strategy 1: Build children's and adolescents' skills and competencies early.

Young people who have difficulties with problem-solving, anger management, impulse control, and emotion regulation exhibit higher levels of aggressive behavior than their peers who have effective skills in these areas.^{1,8,25,26} Youth who are aggressive in early childhood are more likely than their nonaggressive peers to engage in violent behavior as adolescents. The goal of this strategy is to equip children and adolescents with the skills and competencies needed to support healthy mental, physical, social, emotional, and behavioral development.^{1,8,15,16} For very young children, activities in support of this strategy may include helping them to understand and label emotions, control aggressive impulses, communicate effectively, experience empathy, and solve interpersonal problems through such programs as I Can Problem Solve.¹⁵ Prevention activities with older children and adolescents may seek to develop social perspective-taking, anger management, impulse control, and communication skills. These activities may be conducted through universal school-based programs, such as the Good Behavior Game, that are designed to develop the skills of all students in a grade or school.^{40,15,16} Activities may also be implemented through more intensive and individualized approaches, such as Multisystemic Therapy, that are designed to meet the unique needs of youth who have a history of engaging in violence or have many risk factors for youth violence.^{15,16}

• Individual Strategy 2: Engage children and adolescents in positive youth development programs.

Positive youth development approaches engage children and adolescents in opportunities that develop and enhance their interests, skills, and abilities in order to help them avoid risk and achieve their full potential across their lifespan.⁶¹⁻⁶³ These approaches have the intentional goal of fostering the development of protective factors, such as healthy connections, confidence, competence, and contributions to the community. The goal of this strategy is to develop young people's self-confidence, leadership skills, and other abilities to enable them to cope well with developmental challenges, make safe behavioral choices, and form prosocial relationships. Activities may include positive development programs that have been evaluated and demonstrated to help youth develop skills, such as managing their emotions, communicating effectively with peers and adults, developing a positive future orientation, and resolving conflicts without resorting to aggression or violence. These activities are needed throughout a young person's development and could include promising programs like the Perry Preschool Project implemented in early childhood and Raising Health Children implemented in childhood through adolescence.¹⁵

Build and Support Positive Relationships between Youth and Adults and Peers

Relationship-focused approaches seek to build, strengthen, and maintain interpersonal connections between young people and their parents, teachers, other caring adults in the community, and prosocial peers. These positive relationships should be established at birth and continue through young adulthood with these relationships providing support and healthy models to youth as they develop attitudes, behavior, skills, and independence. Positive relationships with caring adults and prosocial peers can be critical assets in promoting a young person's well-being as they can buffer environmental stress, attenuate the effects of community violence, and prevent the development of violent behavior.^{1,8,25,26,64} The relationship level strategies are based on strong research about effective approaches that strengthen parent-youth relationships, teacher skills, and mentoring relationships as well as on risk and protective factor research about peer relationships.^{1,8,15-17}

• Relationship Strategy 1: Build and maintain positive relationships between youth and their parents and other caregivers.

The support of parents and other primary caregivers, such as foster parents and grandparents, has a direct and significant effect on youth's risk-taking behavior and likelihood to engage in violence.^{1,8,64} Positive and warm parent-youth relationships in which parents set consistent, developmentally-appropriate limits and monitor youth's activities are associated with good child and adolescent developmental outcomes and the prevention of youth violence.^{8,64} A healthy and strong parent-youth relationship helps to buffer a young person from developing violent behavior even when young people are exposed to violence in their communities. The goal of this strategy is to promote supportive, safe, stable, and nurturing relationships between youth and their primary caregivers.^{1,8,26,64,65} The activities may include building the caregiver's effective communication skills, ability to set and enforce age-appropriate rules, and monitoring of their child's activities and relationships. These activities may be conducted through programs that are designed to support any parent, such as the Strengthening Families Program for Parents and Youth, or they may be implemented through more intensive approaches, such as Multidimensional Treatment Foster Care, that are designed to meet the unique needs of high-risk youth and families.^{15,16}

• Relationship Strategy 2: Build and maintain positive relationships between youth and their teachers and other caring adults in school.

Quality and prosocial relationships with teachers and other school personnel can be a protective factor for young people and play a role in promoting their positive development and engagement in school.^{66,67} The goal of this strategy is for children and adolescents at any given time in their development to feel connected to at least one caring and supportive adult in their school. This strategy also supports school personnel in fostering and building positive relationships with students throughout their school career and in modeling nonviolent attitudes and behaviors. Activities associated with this strategy include professional development of teachers about effective classroom management practices, conflict resolution, and how to promote positive connections between students with diverse backgrounds. This work may be conducted through a structured format like the Incredible Years Training for Teachers program.¹⁵ Other programs, such as Promoting Alternative Thinking Strategies, build teachers' skills and give ongoing support while also providing teachers with structured ways to directly strengthen similar skills in their students.¹⁵



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• Relationship Strategy 3: Build and maintain positive relationships between youth and caring adults in the community.

Healthy and safe relationships with adults other than primary caregivers can be a strong protective influence from youth violence and foster resilience of young people.⁶⁸⁻⁷⁰ These relationships may be formal and stable like those with mentors and coaches. They also may be less structured, such as relationships with neighbors, tutors, and members of a faith-based institution a young person attends. The goals of this strategy include helping children and adolescents feel connected to at least one caring, supportive, and stable adult in the community, and supporting adults to build positive relationships with children and adolescents from their community. This strategy may include mentoring activities like Big Brothers Big Sisters of America that provide young people with supportive, prosocial role models who can offer guidance and advocacy when needed and create a strong bond between youth and adults in their community.¹⁵ Activities in support of this strategy may also include adults in the community providing informal monitoring of youth's activities, guidance on making healthy and safe behavior choices, and additional nonviolent role models.^{71,72}

• Relationship Strategy 4: Build and maintain positive relationships between youth and prosocial peers.

A young person's attitudes and behaviors are significantly influenced by their relationships, including those with peers. From early childhood through young adulthood, peer groups provide a unique situation within which young people can learn problem-solving skills and develop beliefs about themselves, others, and their environments.⁷³ While having prosocial friends is associated with a range of positive outcomes, a negative peer group can lead to unhealthy behaviors being perceived as acceptable and higher rates of youth violence.^{1,51,66} The goal of this strategy is to create opportunities for youth to develop and sustain relationships with prosocial peers. Activities may include creating in-person and online places and clubs that are monitored and supervised by adults where youth can interact in prosocial ways with others their age. Creating these opportunities is important for all youth and is particularly important for youth who struggle to form friendships or whose primarily friendships are with youth who are at-risk or already engaging in youth violence.

Promote Thriving, Safe, and Connected Communities

Community-level strategies to prevent youth violence seek to enhance the contexts in which social relationships are embedded, such as schools, workplaces, and neighborhoods. The characteristics of these settings influence how people interact with each other and affect the likelihood that a person may or may not become involved in violence.^{1,8,22} Research is emerging about community-level factors that influence the likelihood of youth violence and about strategies that modify the social, environmental, and economic characteristics of these settings in order to promote thriving, safe, and connected communities.^{41-43,74-77} Community-level strategies address risk factors, such as instability of residents, population density, crowded housing, high levels of unemployment, lack of social connectedness, and physical aspects of environments that make violence and crime more likely. These strategies also work to make available and sustain educational, economic, vocational, and prosocial opportunities.



• Community Strategy 1: Promote and sustain economic opportunities and a strong economic infrastructure within the community.

Economically disadvantaged communities and families are at high-risk for youth violence and other negative outcomes, such as instability of residents, crowded housing, and high levels of unemployment, that contribute to escalations in violence.^{65,78-80} The goal of this strategy is to develop and enhance the viability of businesses and employment opportunities. Activities may include developing Business Improvement Districts (BIDs) that help establish and maintain the infrastructure necessary to support local-area businesses and invest resources into communities to encourage economic opportunities.⁴¹ Activities may also include providing job skill training to all residents and offering incentives for businesses to expand and draw upon the local workforce.^{20,81}



• Community Strategy 2: Promote connections among community members and organizations that support the community.

The risk for youth violence increases when residents and organizations within the community do not have positive social interactions and do not collaborate to strengthen the community.^{1,77,80} In contrast, when the connections are strong, neighbors are more willing to intervene when problems arise, civic engagement increases, coordinated services result, and rates of youth violence are lower. The goal of this strategy is to enhance social cohesion and connectedness among community members and between community members and governmental and nongovernmental organizations. Activities that are a part of this strategy may include creating regular and meaningful opportunities for all residents to interact, form relationships, and understand and accept differences as well as street outreach efforts to solve conflict nonviolently.^{44,45} This work may include structured or informal efforts to develop a common community vision and to identify ways for all community residents and groups to contribute to the health and safety of their community.^{28,29}

• Community Strategy 3. Enhance and sustain community and school physical environments that promote safety and connectedness.

Youth violence occurs in the places where people routinely interact with each other, such as near their homes and at schools, parks, businesses, and transportation hubs. The physical characteristics of these places affect the level of youth violence experienced.^{1,8,22} The goal of this strategy is to address the physical characteristics of housing, communities, and schools to improve perceived and actual safety, to reduce opportunities for crime and violence, and to promote positive interactions among residents.^{41-43,74-76} Structural or policy activities may address environmental factors, such as lighting, availability of green spaces, and repair and upkeep of neighborhoods and schools, in order to encourage safety, visibility, and positive interactions among residents.

• Community Strategy 4: Strengthen community policies that promote health and safety.

Research is emerging about community factors that increase or decrease the risk for youth violence. Community policies that impact these factors may be a promising approach to reducing youth violence.^{79,82} The goal of this strategy is to evaluate policies that influence the likelihood for youth violence. For example, this work may include policies related to the density of alcohol outlets and sales.⁸² Activities could also include evaluation of community policies to examine if they are having their intended outcome or having any unintended or unexpected effects. Community Strategy 5: Implement schoolwide activities and policies that foster social connectedness and a positive learning and working environment.

Rates of youth violence are lower and academic achievement is stronger in school environments that promote positive behavior, address discipline problems, and build positive connections between students and teachers.^{1,8,67} The goal of this strategy is to promote positive and safe school environments. Efforts in support of this strategy may include approaches, such as Steps to Respect, that encourage activities and policies that foster a violence-free learning environment for students and a productive working environment for teachers.¹⁵ Additionally, activities could include opportunities for parents and other community members to contribute to school activities and goals.



Create a Society that Promotes Safety and Health

Societal-focused approaches create the necessary conditions to facilitate the implementation of multiple, evidence-based prevention activities and to achieve population-wide improvements in health and safety. These strategies encourage the development or strengthening of systems that support multisector collaboration, the prioritization of prevention, and the use of data to plan and implement comprehensive prevention approaches.^{23,56} These strategies also address broad factors that influence the likelihood of youth violence, such as normative beliefs about youth violence and social determinants of health inequities.^{1,8} The societal level strategies are based on practice and limited research about societal level risk and protective factors. More research is needed about these broad influences on youth violence and approaches that effectively address these influences.

• Societal Strategy 1: Create a prevention system that enhances multisector collaboration in order to strengthen the use of data and approaches based on the best available evidence to prevent youth violence.

The sustainability and effectiveness of comprehensive youth violence prevention activities are strengthened by multiple groups working together to design, implement, and evaluate an approach.^{23,27-30} The goal of this strategy is to create a prevention system that enhances the involvement of all sectors of society in the prevention of youth violence. These sectors include public health, education, justice, public safety, community development and human service systems, community leaders, residents, businesses, the media, faith-based organizations, and other private and nonprofit organizations. By strengthening collaboration, the prevention of youth violence would be a goal of all systems, limited youth violence prevention resources could be maximized, redundancy of efforts reduced, and gaps in prevention activities could be identified and addressed. Collaboration can also facilitate the use of data to better understand the prevalence of and trends in youth violence and encourage the widespread use of comprehensive youth violence prevention strategies that are based on the best available evidence. Prevention systems, such as Communities that Care, show promise in preventing youth violence and other problem behaviors.¹⁵ Other activities may include policies that promote multisector collaboration, blended funding, use of evidence to guide decision making, and enhanced national surveillance of youth violence and risk and protective factors.

• Societal Strategy 2: Promote societal norms about the unacceptability of youth violence and the willingness to prevent it.

Many youth and adults believe violence is an acceptable way to resolve conflicts, carrying a weapon or instigating violence is necessary to keep from becoming a victim, and some forms of violence like bullying are experiences that all youth must endure.^{1,8} These beliefs are associated with an elevated risk for youth violence and a lower likelihood that individuals will act in a way to stop youth violence. The goal of this strategy is to change these collective beliefs about youth violence to a view that youth violence is not acceptable in any form or developmental stage and is a significant public health issue that individuals have the power and responsibility to prevent. This work may include activities that create a shared understanding of what youth violence is and how everyone has a role in preventing youth violence. Activities may also include promoting the positive portrayal of youth as responsible members of society in the media and minimizing exposure to violence in media, such as television, movies, video games, and music.

• Societal Strategy 3: Change the social, economic, and structural conditions that affect youth violence and lead to health inequity.

Socioeconomic position, education, occupation, and income disparities contribute to youth violence and health inequalities.^{65,78-80} Each of these factors influences the likelihood of youth violence, and some areas of the United States experience disproportionately higher rates of youth violence because they have a high concentration of all of these risk factors. The goal of this strategy is to address these underlying determinants and to promote strong education and economic growth for all. Activities could include improving educational opportunities, enhancing labor and workforce development, and supporting the provision of mental health and social work supports to young people and their families. Other activities may include changes to housing in order to deconcentrate poverty and increase access to safe homes as well as designing communities to minimize risk for crime and violence.



Implementation of Youth Violence Prevention Strategies

The STRYVE strategic approaches demonstrate that much is known about youth violence and how to effectively prevent it. However, simply having this knowledge does not result in reductions in youth violence. Activities at the national, state, and local levels are needed to prevent youth violence. This work needs to be carefully planned and monitored, conducted by multisector partners, and enabled by a prevention infrastructure. This section of the STRYVE Foundational Resource outlines and briefly discusses some of activities known from research and practice that are important to successfully link youth violence prevention knowledge to practice.

Strategic Planning and Implementation

For a comprehensive, public health approach to prevent youth violence to be effective and efficient, activities must be data-driven and thoughtfully planned and conducted.^{28,29,55,58} Data provide an understanding of how big the problem of youth violence is, where it is occurring, and who it affects as well as an understanding of activities already underway to address the problem. This information feeds into the development of prevention goals and the selection of STRYVE prevention strategies. Following the systematic implementation of these strategies, data help to know when prevention goals are achieved and when changes in prevention approaches are needed. Essential processes to effective strategic planning and implementation of prevention approaches include:



• Engage in data-driven assessment

There is not one youth violence prevention solution. Effective youth violence prevention approaches differ between states and communities. Consequently, the effective prevention of youth violence starts with an assessment of the needs, assets, resources, and opportunities where prevention activities will be implemented.^{28,29,55} This information is the foundation for a systematic prevention approach.

• Develop a strategic plan

Using data obtained from the assessment, the development of a strategic plan is then necessary to guide prevention activities.^{28,29,55} This plan delineates prevention goals and measurable objectives, identifies what activities need to be conducted and by whom, and outlines an approach to implementing and evaluating the plan. Utilizing a strategic plan leads to better outcomes by promoting approaches that are well coordinated; responsive to local needs, strengths, and experience; and built on the best available data and research.

• Implement, monitor, and continuously evaluate implementation efforts

For youth violence to be stopped before it starts, prevention plans need to be implemented. At this stage of the process, prevention practices, programs, and policies that are based on the best available evidence are implemented and routinely evaluated to determine effectiveness and to inform quality improvement.^{28,29,55,59}

Multisector Partners

Strong partnerships and collaborative efforts are critical to implementing and sustaining a comprehensive approach to prevent youth violence.^{23,27-29,58} Essential processes to establishing multisector partnerships and implementing activities to prevent youth violence with a multisector coalition include:

Build a collaborative youth violence prevention coalition

Youth violence affects all aspects of life, and all key public and private sectors need to be involved in preventing youth violence.^{23,27-29,58} These critical partners include public health, criminal justice, education, health and human services, members of the community, labor, media, business, and faith-based groups. Young people also have a critical role in preventing youth violence and should be meaningfully involved in a coalition's prevention approach.^{32,33}

Establish youth violence prevention leadership

The work of a multisector coalition to prevent youth violence at the local, state, or national level requires leadership.^{28,29,83} Leadership is central to engaging and maintaining multiple partners, providing an overarching vision, and weaving together the work of multiple sectors to capitalize on their unique strengths and to ensure all gaps in a comprehensive violence prevention approach are filled. Strong leadership also helps to sustain attention to the importance of preventing youth violence and the implementation of effective prevention strategies.

Define a process and structure for collaboration

For a coalition to be successful in sustaining participation and forward momentum, the coalition needs a clear structure and understanding of their collaborative process. This includes establishing a defined role for each participating individual and group.^{28,29} A mutual understanding is needed about how and where various activities are going to take place, who is responsible and accountable for specific tasks, how frequently the coalition will work together, how the coalition will set goals and make decisions, what resources each member will contribute, and how assessment of progress and subsequent change will be conducted.

Prevention Infrastructure

The success of a comprehensive youth violence prevention approach and the implementation of strategies based on the best available evidence hinge on the capacity to support planning, partnerships, and activities.^{28,29,55,58} Essential processes to having the infrastructure to prevent youth violence include:

Establish youth violence prevention staff

Identifying and maintaining staff at the local, state, and national level who are dedicated to leading and coordinating activities to prevent youth violence is critical.^{23,28,29,57} This staff ensures that the necessary functions of collaboration and coordination are carried out in an organized and sustainable manner.

• Develop systems for the provision of training, technical assistance, and information sharing

Many partners who are important to effectively preventing youth violence need to strengthen their knowledge and skills to develop, implement, and evaluate a comprehensive approach that is based on the best available evidence. Important elements to building this capacity include training, technical assistance, and information-sharing about partnership-building, needs/assets assessments, strategic planning, best and promising youth violence prevention activities, current research findings, available resources and expertise, and program design and evaluation.^{23,28,55,58,59}This work provides a means to bridge the gap between the rapidly expanding scientific knowledge about violence prevention and the demand for this knowledge by people who can apply it in their local settings.

STRYVE Moving Forward

Youth violence can be prevented. Scientifically supported prevention strategies are available, and experience has resulted in the identification of processes that are important to implementing and sustaining prevention approaches. STRYVE promotes the use of this knowledge through various activities.

Youth violence is a dynamic research area. The understanding of youth violence and effective prevention strategies is rapidly evolving. Examples of current research include expanding the identification of factors that protect against the likelihood of youth violence and testing prevention strategies that impact community factors, such as strengthening economic development and improving physical environments. As new information and effective prevention strategies become available, this knowledge will inform the specific activities of the various STRYVE components.

References

- 1. United States Department of Health and Human Services. *Youth violence: a report of the surgeon general.* Rockville, MD: US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; Substance Abuse and Mental Health Services Administration, Center for Mental Health Services; National Institutes of Health, National Institute of Mental Health; 2001.
- 2. Centers for Disease Control and Prevention. *Web-based injury statistics query and reporting system (WISQARS)* [Internet]. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2007 [cited 2012 Oct 19]. Available from: http://www.cdc.gov/injury/wisqars/index.html.
- 3. Centers for Disease Control and Prevention. *Youth online: high school YRBS* [Internet]. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2011 [cited 2012 Aug 1]. Available from: http://apps.nccd.cdc.gov/youthonline/App/Default.aspx.
- 4. Macmillan R, Hagan J. Violence in the transition to adulthood: adolescent victimization, education, and socioeconomic attainment in later life. *Journal of Research on Adolescence* 2004;14(2);127–158.
- 5. Peguero AA. Violence, schools, and dropping out: racial and ethnic disparities in the educational consequence of student victimization. *Journal of Interpersonal Violence* 2011;26(18);3753–3772.
- Federal Bureau of Investigation. Crime in the United States, 2010 [Internet]. Washington, DC: US Department of Justice, Federal Bureau of Investigation; 2011 [cited 2012 Aug 1]. Available from: http://www.fbi.gov/about-us/ cjis/ucr/ucr.
- 7. Lauritsen JL, Laub J. Understanding the link between victimization and offending: new reflections on an old idea. In: Hough M, Maxfield M, editors. *Surveying crime in the 21st century: commemorating the 25th anniversary of the British crime survey*. Monsey, NY: Criminal Justice Press; 2007. p. 55-75.
- 8. Mercy J, Butchart A, Farrington D, Cerdá M. Youth violence. In: Krug E, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, editors. *World report on violence and health*. Geneva, Switzerland: World Health Organization; 2002. p. 25–56.
- 9. Aos S, Miller M, Drake E. *Evidence-based public policy options to reduce future prison construction, criminal justice costs, and crime rates.* Olympia, WA: Washington State Institute for Public Policy; 2006.
- 10. Petteruti A, Walsh N, Velázquez T. *The costs of confinement: why good juvenile justice policies make good fiscal sense.* Washington, DC: Justice Policy Institute; 2009.

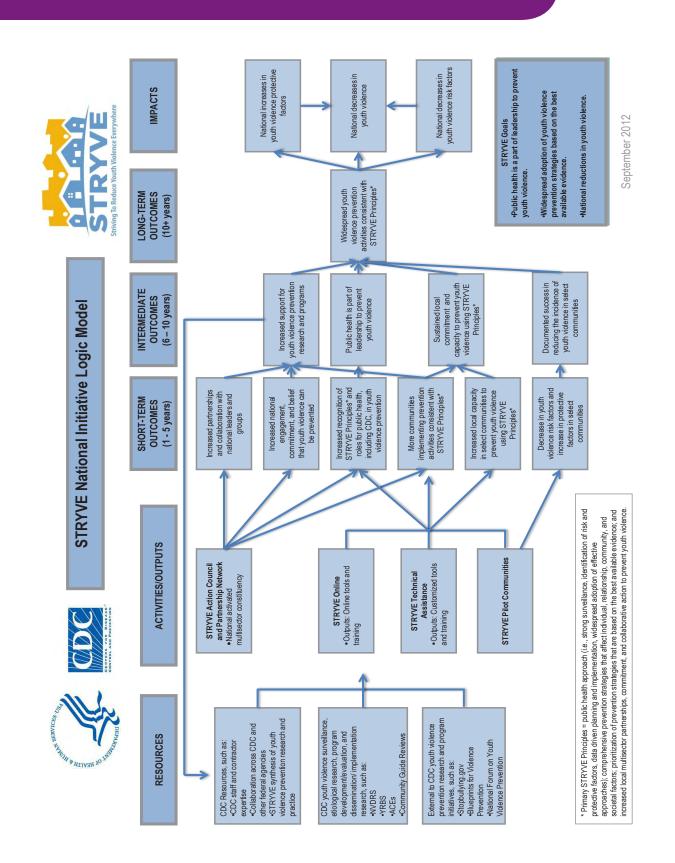
- 11. Arseneault L, Walsh E, Trzeniewski K, Newcombe R, Caspi A. Bullying victimization uniquely contributes to adjustment problems in young children: a nationally representative cohort study. *Pediatrics* 2006;118:130-138.
- 12. Gini G, Pozzoli T. Association between bullying and psychosomatic problems: a metaanalysis. *Pediatrics* 2009; 123:1059-1065.
- 13. Menard S. *Short- and long-term consequences of adolescent victimization*. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention; 2002.
- 14. Swahn MH, Bossarte RM. The associations between victimization, feeling unsafe, and asthma episodes among US high-school students. *American Journal of Public Health* 2006;96(5):802-804.
- 15. Center for the Study and Prevention of Violence. *Blueprints for violence prevention* [Internet]. University of Colorado Boulder, Institute of Behavioral Science, Center for the Study and Prevention of Violence [cited 2012 Aug 1]. Available from: http://www.colorado.edu/cspv/blueprints/.
- 16. Centers for Disease Control and Prevention. *The guide to community preventive services: the community guide* [Internet]. Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services [cited 2012 Aug 1]. Available from: http://www.thecommunityguide.org/index.html.
- 17. Matjasko JL, Vivolo-Kantor AM, Massetti GM, Holland KM, Holt MK, Cruz JD. A systematic meta-review of evaluations of youth violence prevention programs: common and divergent findings from 25 years of meta-analyses and systematic reviews. *Aggression and Violent Behavior* 2012;17:540-552.
- 18. Office of Justice Programs. *Crime solutions* [Internet]. US Department of Justice, Office of Justice Programs, Office of Justice Programs [cited 2012 Aug 1]. Available from: http://www.crimesolutions.gov/.
- 19. Substance Abuse and Mental Health Services Administration. *National registry of evidence-based programs and practices (NREPP)* [Internet]. Substance Abuse and Mental Health Services Administration [cited 2012 Aug 1]. Available from: http://www.nrepp.samhsa.gov/.
- 20. Wilson JJ, Howell JC. *Comprehensive strategy for serious, chronic and violent juvenile offenders*. Washington, DC: Department of Justice, Office of Juvenile Justice and Delinquency Prevention; 1993.
- 21. United States Conference of Mayors. 2008 adopted resolutions: youth violence as a public health crisis. 76th annual meeting of the United States Conference of Mayors; 2008 June 20-24; Miami, FL; 2008.
- 22. Dahlberg LL, Krug EG. Violence-a global public health problem. In: Krug E, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, editors. *World report on violence and health*. Geneva, Switzerland: World Health Organization; 2002. p. 1-56.
- 23. Backer TE, Guerra NG. Mobilizing communities to implement evidence-based practices in youth violence prevention: the state of the art. *American Journal of Community Psychology* 2011;48:31-42.
- 24. Mercy JA, Rosenberg ML, Powell KE, Broome CV, Roper WL. Public health policy for preventing violence. *Health Affairs* 1993;12:7–29.
- 25. Lipsey MW, Derzon JH. Predictors of violent and serious delinquency in adolescence and early adulthood: a synthesis of longitudinal research. In: Loeber R, Farrington DP, editors. *Serious and violent juvenile offenders: risk factors and successful interventions.* Thousand Oaks, CA: Sage Publications; 1998. p. 86–105.
- 26. Resnick MD, Ireland M, Borowsky I. Youth violence perpetration: what protects? what predicts? findings from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health* 2004;35:424.e1–e10.
- 27. Communities that Care. *Communities that care* [Internet]. Social Development Research Group [cited 2012 Aug 1]. Available from: http://www.sdrg.org/ctcresource/index.htm.
- 28. National Association of County and City Health Officials. *Mobilizing for action through planning and partnerships* [Internet]. Washington, DC: National Association of County and City Health Officials; 2001 [cited 2012 Aug 1]. Available from: http://www.naccho.org/topics/infrastructure/mapp/.
- 29. Prevention Institute. Overview of the UNITY roadmap: a framework for effective and sustainable efforts. Oakland, CA: Prevention Institute; 2008.

- 30. PROSPER. *Promoting school-community-university partnerships to enhance resilience partnership model* [Internet]. Partnerships in Prevention Science Institute [cited 2012 Aug 1]. Available from: http://www.prosper.ppsi.iastate.edu.
- 31. National Forum on Youth Violence Prevention. *National forum on youth violence prevention [Internet]*. Interagency Working Group on Youth Programs [cited 2012 Aug 1]. Available from: http://www.findyouthinfo.gov/ collaboration-profiles/national-forum-youth-violence-prevention.
- 32. Powers JL, Tiffany JS. Engaging youth in participatory research and evaluation. *Journal of Public Health Management Practices* 2006;November(Suppl):S79-S87.
- 33. Zeldin S. Preventing youth violence through the promotion of community engagement and membership. *Journal of Community Psychology* 2004;32:623–641.
- 34. Safe States Alliance. Preventing violence: roles for public health agencies. Atlanta, GA: Safe States Alliance; 2011.
- 35. Bearinger LH, Pettingell S, Resnick MD, Skay CL, Potthoff SJ, Eichhorn J. Violence perpetration among urban American Indian youth: can protection offset risk? *Archives of Pediatric & Adolescent Medicine* 2005;159(3):270-277.
- 36. Hall JE, Simon TR, Mercy JA, Loeber R, Farrington DP, Lee RD. Centers for Disease Control and Prevention's expert panel on protective factors for youth violence perpetration background and overview. *American Journal of Preventive Medicine* 2012;43(2S1):S1–S7.
- 37. Tremblay RE, Nagin DS, Séguin JR, Zoccolillo M, Zelazo PD, Boivin M, Pérusse D, Japel C. Physical aggression during early childhood: trajectories and predictors. *Pediatrics* 2004;114:e43-e50.
- 38. Williams KR, Guerra NG. Prevalence and predictors of internet bullying. Journal of Adolescent Health 2007;41:s14-s21.
- 39. Egley A, Howell JC. *Highlights of the 2009 national youth gang survey*. Washington, DC: US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention; 2011.
- 40. Hahn R, Fuqua-Whitley D, Wethington H, Lowy J,Crosby A, Fullilove M, Johnson R, Liberman A, Moscicki E, Price L, Snyder S, Tuma F, Cory S, Stone G, Mukhopadhaya K, Chattopadhyay S, Dahlberg L, Task Force on Community Preventive Services. Effectiveness of universal school-based programs to prevent violent and aggressive behavior: a systematic review. American Journal of Preventive Medicine 2007;33(2S):S114–129.
- 41. MacDonald J, Golinelli D, Stokes RJ, Bluthenthal R. The effect of business improvement districts on the incidence of violent crimes. *Injury Prevention* 2010;16:327-332.
- 42. Carter SP, Carter SL, Dannenberg AL. Zoning out crime and improving community health in Sarasota, Florida: crime prevention through environmental design. *American Journal of Public Health* 2003,93:1442-1445.
- 43. Mair JS, Mair M. Violence prevention and control through environmental modifications. *Annual Review of Public Health* 2003;24:209-225.
- 44. Chicago Project for Violence Prevention. *Ceasefire* [Internet]. University of Chicago School of Public Health; 2012 [cited 2012 Aug 1]. Available from: http://ceasefirechicago.org/.
- 45. Webster DW, Whitehill JM, Vernick JS, Parker EM. *Evaluation of Baltimore's Safe Streets program: effects on attitudes, participants' experiences, and gun violence.* Baltimore, MD: Johns Hopkins Center for Prevention of Youth Violence; 2012.
- 46. Klietz SJ, Borduin CM, Schaeffer CM. Cost–benefit analysis of Multisystemic Therapy with serious and violent juvenile offenders. *Journal of Family Psychology* 2010;24(5):657–666.
- 47. Kuklinski, MR, Briney JS, Hawkins JD, Catalano RF. Cost-benefit analysis of Communities that Care outcomes at eighth grade. *Prevention Science* 2012;13:150–161.
- 48. Lee S, Aos S, Drake E, Pennucci A, Miller M, Anderson L. *Return on investment: evidence-based options to improve statewide outcomes.* Olympia: Washington State Institute for Public Policy; 2012.
- 49. Results First. *Better programs, better results: rigorous quality assurance ensures that Washington state's evidence-based programs produce expected results.* Washington, DC: Pew Center on the States and MacArthur Foundation; 2012.

- 50. Dahlberg LL, Simon TR. Predicting and preventing youth violence: developmental pathways and risk. In: Lutzker JR, editor. *Preventing violence: research and evidence-based intervention strategies*. Washington, DC: American Psychological Association; 2006. p. 97-124.
- 51. Herrenkohl TI, Maguin E, Hill KG, Hawkins JD, Abbott RD, Catalano RF. Developmental risk factors for youth violence. *Journal of Adolescent Health* 2000;26:176–186.
- 52. Park NS, Lee BS, Sun F, Vazsonyi AT, Bollande JM. Pathways and predictors of antisocial behaviors in African American adolescents from poor neighborhoods. *Children and Youth Services Review* 2010;32(3):409–415.
- 53. Melzer-Lange MD. Violence and associated high-risk health behavior in adolescents: substance abuse, sexually transmitted diseases, and pregnancy of adolescents. *Pediatric Clinics of North America* 1998;45(2):307-317.
- 54. Resnick MD, Bearman PS, Blum RW, Bauman KE, Harris KM, Jones J, Tabor J, Beuhring T, Bieving RE, Shew M, Ireland M, Bearinger LH, Udry JR. Protecting adolescents from harm: findings from the national longitudinal study on adolescent health. *Journal of the American Medical Association* 1997;278:823-832.
- 55. Hawkins JD, Brown EC, Oesterle S, Arthur MW, Abbott RD, Catalano RF. Early effects of Communities that Care on targeted risks and initiation of delinquent behavior and substance use. *Journal of Adolescent Health* 2008;43:15-22.
- 56. Hawkins JD, Oesterle S, Brown EC, Arthur MW, Abbott RD, Fagan AA, Catalano RF. Results of a type 2 translational research trial to prevent adolescent drug use and delinquency: a test of Communities that Care. *Archives of Pediatric and Adolescent Medicine* 2009;163:789-798.
- 57. Gloppen KM, Arthur MW, Hawkins JD, Shapiro VB. Sustainability of the Communities that Care prevention system by coalitions participating in the community youth development study. *Journal of Adolescent Health* 2012;51:259-264.
- 58. Spoth R, Greenberg M. Impact challenges in community science-with-practice: lessons from PROSPER on transformative practitioner-scientist partnerships and prevention infrastructure development. *American Journal of Community Psychology* 2011;48:106-119.
- 59. Spoth R, Guyll M, Redmond C, Greenberg M, Feinberg M. Six-year sustainability of evidence-based intervention implementation quality by community-university partnerships: the PROSPER study. *American Journal of Community Psychology* 2011;48:412-425.
- 60. Wandersman A, Duffy J, Flaspohler P, Noonan R, Lubell K, Stillman L, Blachman M, Dunville R, Saul J. Bridging the gap between prevention research and practice: the interactive systems framework for dissemination. *American Journal of Community Psychology* 2008;41:171-181.
- 61. Catalano RF, Berglund ML, Ryan JA, Lonczak HS, Hawkins JD. Positive youth development in the United States. Research findings on evaluations of the positive youth development programs. *Prevention and Treatment* 2002;5.
- 62. Pittman K, O'Brien R, Kimball M. Youth development and resiliency research: making connections to substance abuse prevention. Washington, DC: Center for Youth Development and Policy Research, Academy for Educational Development; 1993.
- 63. Roth JL, Brooks-Gunn J. Youth development programs: risk, prevention and policy. *Journal of Adolescent Health* 2003;32:170–182.
- 64. Burrus B, Leeks KD, Sipe TA, Dolina S, Soler RE, Elder RW, Barrios L, Greenspan A, Fishbein D, Lindegren ML, Achrekar A, Dittus P, Community Preventive Services Task Force. Person-to-person interventions targeted to parents and other caregivers to improve adolescent health: a community guide systematic review. *American Journal of Preventive Medicine* 2012;42(3):316-326.
- 65. Stevens T, Morash M, Park S. Late-adolescent delinquency: risks and resilience for girls differing in risk at the start of adolescence. *Youth and Society* 2011;43:1433-1458.
- 66. Aisenberg E, Herrenkohl T. Community violence in context: risk and resilience in children and families. *Journal of Interpersonal Violence* 2008;23:296-315.
- 67. Centers for Disease Control and Prevention. *School connectedness: strategies for increasing protective factors among youth.* Atlanta, GA: Department of Health and Human Services; 2009.

- 68. Rhodes JE. Stand by me: the risks and rewards of mentoring today's youth. Cambridge, MA: Harvard University Press; 2002.
- 69. Rolf J, Garmezy N, Masten AS, Cicchetti D, Nüchterlein KH, Weintraub S. *Risk and protective factors in the development of psychopathology*. Cambridge, NY: Cambridge University Press; 1990.
- 70. Tierney JP, Grossman JB, Resch NL. *Making a difference: an impact study of big brothers big sisters*. Chicago: Public/ Private Ventures; 2000.
- 71. Peskin MF, Tortolero SR, Addy RC, Weller NF. Weapon carrying prevention: should adults spend more time with youth? *Youth Violence and Juvenile Justice* 2009;7:32-45.
- 72. Rhodes JE, Davis AB. Supportive ties between nonparent adults and urban adolescent, girls. In: Leadbeater BJ, Way N, editors. *Urban girls: resisting stereotypes, creating identities*. New York: New York University Press; 1996. p. 213-225.
- 73. Rubin KH, Bukowski WM, Parker JG. Peer interactions, relationships and groups. In: Damon W, Lerner RM, Eisenberg N, editors. *Handbook of child psychology: Vol. 3. Social, emotional, and personality development 6th edition*. New York: Wiley; 2006. p. 571-645.
- 74. Branas CC, Cheney RA, Macdonald JM, Tam VW, Jackson TD, Ten Have TR. A difference-in-differences analysis of health, safety, and greening vacant urban space. *American Journal of Epidemiology* 2011;174:1296-1306.
- 75. Garvin EC, Cannuscio CC, Branas CC. Greening vacant lots to reduce violent crime: a randomised controlled trial. *Injury Prevention* [Internet] 2012 Sept 7 [cited 2012 Aug 1]. Available from: http://injuryprevention.bmj.com/ content/early/2012/08/06/injuryprev-2012-040439.full.pdf+html.
- 76. Kuo FE, Sullivan WC. Environment and crime in the inner city: does vegetation reduce crime? *Environment and Behavior* 2001;33:343-367.
- 77. Sampson RJ, Raudenbush SW, Earls F. Neighborhoods and violent crime: a multilevel study of collective efficacy. *Science* 1997;277:919–924.
- 78. Egerter S, Barclay C, Grossman-Kahn R, Braveman P. *Exploring the social determinants of health: violence, social disadvantage and health.* Princeton, NJ: Robert Wood Johnson Foundation; 2011.
- 79. Farrington D. Key results from the first forty years of the Cambridge study in delinquent development. In: Thornberry TP, Krohn MD, editors. *Taking stock of delinquency: an overview of findings from contemporary longitudinal studies.* New York, NY: Kluwer Academic/Plenum; 2003. p. 137-183.
- 80. Lederman D, Loayza N, Menendez AM. Violent crime: does social capital matter? Washington, DC, World Bank; 1999.
- 81. Raskin S, Aaron K. Youth-serving social microenterprise: a promising strategy for youth gang violence prevention [Internet]. *Community Youth Development Journal* 2005. Available from: http://www.cydjournal.org/contents.html.
- 82. Elder RW, Lawrence B, Ferguson A, Naimi TS, Brewer RD, Chattopadhyay S K, Toomey TL, Fielding JE. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *American Journal of Preventive Medicine* 2010;38:217-229.
- 83. Kendall E, Muenchberger H, Sunderland N, Harris M, Cowan D. Collaborative capacity building in complex community-based health partnerships: a model for translating knowledge into action. *Journal of Public Health Management Practice* 2012;18:E1-E13.

Appendix A: STRYVE Logic Model



Appendix B: External Expert Review

Between 2007 and 2008, youth violence prevention experts at CDC outlined a framework for the overall STRYVE initiative. This initial work included a review of youth violence research and prevention practice and the drafting of evidence-based prevention strategies and programmatic implementation steps. Additional local and state-level experiences and knowledge of experts with preventing youth violence who were external to CDC were then infused into the refinement of the STRYVE guiding principles and evidence-based strategies between 2009 and 2010 through formal consultative relationships with Rachel Davis (Managing Director of the Prevention Institute and CDC's UNITY cooperative agreement) and Barbara Shaw (Director of the Illinois Violence Prevention Authority). Ms. Davis and Ms. Shaw thoroughly critiqued previously developed STRYVE materials and collaborated with CDC on the drafting and revision of some STRYVE materials. One of the outcomes of this work was an early draft of the STRYVE Foundational Resource.

To help ensure that the STRYVE initiative is grounded in research and guided by the best available evidence and practice, between January and March 2010 additional subject matter experts critiqued an early draft of the STRYVE Foundational Resource. These individuals have expertise in youth violence prevention and in youth and community health promotion, and they have the knowledge, skills, and expertise to reflect on the strengths and weaknesses of the underlying framework of the STRYVE initiative that the document described. These experts included:

- Roseanna Ander, MS, Executive Director, University of Chicago Crime Lab
- Carl Bell, MD, Acting Director, Institute for Juvenile Research; Professor, Department of Psychiatry and School of Public Health, University of Illinois at Chicago; President/CEO Community Mental Health Council
- Steven Berkowitz, MD, Associate Professor, Department of Psychiatry, University of Pennsylvania
- · Linda Bowen, MA, Executive Director, Institute for Community Peace
- · Larry Cohen, MSW, Executive Director, Prevention Institute
- Deborah Gorman-Smith, PhD, Research Fellow, Chapin Hall at the University of Chicago; Director, Chicago Center for Youth Violence Prevention
- Nancy Guerra, EdD, Professor of Psychology; University of California-Riverside; Director, Southern California Center of Excellence on Youth Violence Prevention
- Darnell Hawkins, PhD, Professor Emeritus of African-American Studies, Sociology, and Criminal Justice, University of Illinois at Chicago
- · John MacDonald, PhD, Assistant Professor, Department of Criminology, University of Pennsylvania
- Howard Pinderhughes, PhD, Chair, Associate Professor, Department of Social and Behavioral Sciences, University of California-San Francisco
- · Karen Pittman, MS, President and CEO, Forum for Youth Investment
- Deborah Prothrow-Stith, MD, Adjunct Professor, Department of Health Policy and Management, Harvard University; Spencer Stuart Consultant
- Paul Smokowski, PhD, Associate Professor, School of Social Work, University of North Carolina at Chapel Hill

- Terence Thornberry, PhD, Department of Criminology and Criminal Justice, University of Maryland
- Billie Weiss, MPH, Associate Director for Outreach and Communication, Southern California Injury Prevention Research Center, University of California, Los Angeles
- Marc Zimmerman, PhD, Professor and Chair, Department of Health Behavior and Health Education, University of Michigan; Director, Prevention Research Institute of Michigan

CDC reflected on the feedback provided by all external reviewers to complete the final version of the STRYVE Foundational Resource. The external experts provided many constructive comments that helped to shape this resource, but they were not asked to review or endorse the final version. Additionally, the findings and conclusions in this document are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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