

Safe Start

How Early Experiences
Can Help
Reduce Violence





By almost any measure, the United States is the most violent developed nation in the world. The U.S. Department of Justice reports that in 1997 alone, over 3 million Americans were the victims of violent crimes, including over 300,000 children who were abused and 18,000 people who were murdered.¹ Polls consistently indicate that Americans are afraid that they or someone they love will be a victim of a violent crime. These fears have persisted despite the well-publicized recent decline in the rates of murder and other violent crime.

Reducing violence is near the top of the agenda for nearly every candidate for local, state, or national office. Many initiatives have been proposed and implemented to reduce the incidence of violent crime, including community policing, stiffer sentences for convicted criminals and programs to keep adolescents involved in positive activities and “off the streets.” However, many communities have overlooked what a national organization of law enforcement officials and crime victims cites as the most promising approach to reducing violence: prevention and intervention programs for very young children ages birth to five. Built on decades of research on child development, these programs are making lasting differences and helping young children receive a safer start in life.

Understanding Violence

In order to understand how working with very young children and their families can help reduce the incidence of violent behavior, it is useful to first define what constitutes violence. Biologists and sociologists have defined violence as aggressive behavior that goes beyond the limits of social acceptance. Aggression—asserting one’s will on another—is itself not necessarily a bad thing. From an evolutionary perspective, aggression can be an adaptive response that allows an animal or person to ensure that his or her needs are met. Indeed, people are often admired for “standing up for themselves” or for aggressively pursuing victory on an athletic field.

Acts of physical aggression are termed “violence” when they are out of proportion to the situation at hand. Clearly, beating one’s spouse during an argument, shooting a fellow motorist because he cut you off, and placing a child in scalding water after a toileting accident are considered violent acts because they are outside the range of socially acceptable behavior in these situations. One way high quality early childhood programs can help prevent violent behavior is by helping children understand what is and what is not acceptable at an early age, before negative behavior patterns are established.

Learning Self-Control

Even more important than knowing right from wrong, however, is being able to control one’s own behavior. Psychologists call the ability to match one’s emotional responses and behavior to the demands of a situation “emotional regulation.” It is not an inborn ability, but rather one that is learned through interactions with caregivers and peers.

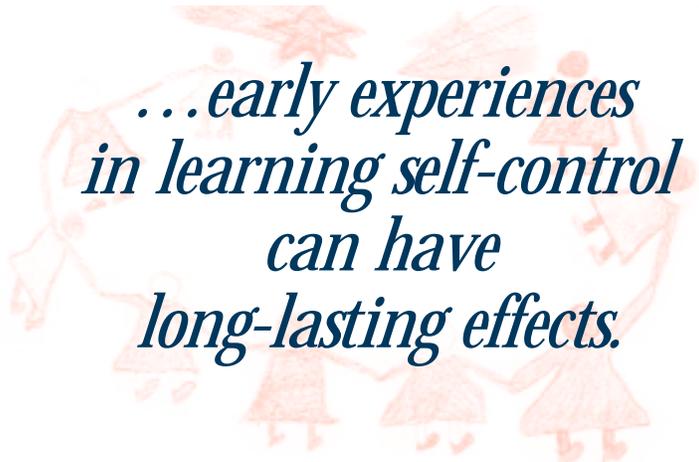
Most parents learn quickly that newborn babies have a very limited capacity for emotional regulation: the slightest

distress may prompt them to cry intensely, and they are often unable to calm down without their parents' help. Given lots of sensitive, loving care and time for their nervous systems to mature, most babies by age six months begin to learn self-soothing strategies and are able to maintain a more "even keel." More difficult self-control challenges emerge as the child learns to reach for objects, crawl, and walk. Curiosity often gets the best of babies and toddlers wanting to explore things declared "off-limits" by their parents.

It is during this age that aggressive behavior begins to emerge. Toddlers have poor control over their aggressive urges; they are famous for grabbing toys away from one another and for hitting or biting anyone who stands in their way. Parents and caregivers need to teach children how to behave appropriately when feeling jealous, frustrated, or angry. They do this not only by discouraging unacceptable behavior, but also by modeling appropriate behavior and teaching children acceptable ways to express their feelings.

Setting appropriate limits on children's behavior and helping them develop self-control is difficult and does not just come naturally to many parents. Like many of the skills needed to raise healthy children, these behaviors are often learned (or not learned) by parents very early in their own lives. Parents who suffer from depression, have few psychological resources, or who are under severe stress may have particular difficulty helping their children learn how to behave appropriately. Early childhood intervention programs can help parents develop effective discipline strategies. Programs that work directly with children, such as developmentally appropriate child care programs, can also help children develop self-control.

Recent research suggests that early experiences in learning self-control can

A faint, stylized illustration of several children in a circle, holding hands and playing. The children are depicted in simple, rounded shapes with some wearing hats or dresses. The illustration is in a light, warm color, possibly orange or light red, and is positioned behind the main title text.

...early experiences in learning self-control can have long-lasting effects.

have long-lasting effects. Early emotional experiences help shape the developing brain, altering both structure and neurochemistry, and can predispose a person to respond appropriately or inappropriately to future situations² (*see box*). Researchers have long observed that children who exhibit severe conduct problems in middle childhood and early adolescence are at very high risk for becoming violent adults. Conversely, research also demonstrates that positive early experiences help children develop the capacity to form loving, caring relationships with others. The advantages of starting early in preventing violence are clear.

Early Risk Factors For Violence

Crime statistics consistently indicate that some individuals are far more prone to violence than others. Many risk factors have been identified that appear to be related to the propensity for violent behavior. As with all developmental outcomes, no one risk factor is definitive. The overwhelming majority of children who experience one or two of these risks do not become violent adults. However, when children experience several of these risk factors, the likelihood increases substantially that they will commit a violent act as an adult.

THE BIOLOGY OF VIOLENCE

Over the last decade, neuroscientists have made tremendous strides toward understanding the biology of violent behavior. Research on both humans and animals has pointed to the important role of certain brain chemicals, especially the neurotransmitters serotonin and noradrenaline, in regulating aggressive behavior. Serotonin appears to act as a "braking" mechanism on aggressive impulses: studies show that very low levels of serotonin are related to impulsive behavior and explosive rages. Noradrenaline, in contrast, is like an accelerator: high levels of this brain chemical are related to a constant state of hyper-arousal, in which a person might quickly over-react to even the slightest apparent threat.

Research in animals and some preliminary research in humans suggest that early childhood experiences are an important predictor of an individual's neurochemical balance. Negative experiences, particularly severe neglect and trauma, can cause long-lasting changes in noradrenaline and serotonin levels in some individuals. Children who live in highly threatening environments adapt by becoming hyper-vigilant and hyper-reactive to perceived threats, and may become less able to control their own behavior. Although there is no evidence that these types of changes in brain chemistry are irreversible, it does appear that prevention and earlier intervention is likely to be more effective and far less expensive than latter attempts at remediation.

Child abuse and neglect: In 1997, almost 300,000 children in the United States were the subject of confirmed reports of abuse, and over 500,000 more children were found by child protective agencies to be neglected.³ Research over the past several decades has consistently shown that children who suffer abuse or neglect are far more likely than their non-maltreated peers to abuse their own children when they are adults. Recent research suggests that child maltreatment contributes to other types of violent crime as well;⁴ several studies have shown that the majority of those incarcerated for murder, rape, and assault were abused or severely neglected as children.⁵

Less obvious problems in parent-child relationships can also contribute to the development of a predisposition to violence. Research shows that children who have secure early relationships with parents are less likely to develop the type of behavior problems in later childhood that are predictive of violence in adulthood.⁶ In fact, positive parent-child relationships, especially if continuously positive from early in life, can buffer children against other risk factors they might encounter as they grow up, such as community violence, later abuse or neglect, and negative peer influences.

Witnessing violence: Witnessing violence is an all too common experience for young children in America. In one survey done at an inner-city pediatric clinic, almost all of the children under age six had been exposed to multiple forms of violence either in their homes or in their community, with 10% having witnessed a shooting or stabbing.⁷ Preschool teachers frequently describe children playing “funeral” in the classroom, trying to make sense of the common experience in their communities of losing friends and family members to murder. In our country’s “inner-city war zones,” parents teach their children to watch

television and sleep under the windowsills to be safe from stray bullets that might come through the windows.

Physiological research on victims who have witnessed violence indicate that watching horrifying events can overload the brain’s “stress management” system, leading to long-lasting changes in how the brain functions. Contrary to the common belief that babies and toddlers are not significantly affected by witnessing violence because they are “too young to understand,” even very young children often exhibit symptoms after traumatic experiences.⁸ They become hyper-vigilant and hyper-reactive to stimuli, and may develop significant attention and learning problems. Because young children’s responses to witnessing violence are only beginning to be researched, the long-term consequences of exposure to violence are not yet clear. However, preliminary evidence suggests that children who witness violence are at increased risk for developing conduct disorders and for becoming violent as adults.

Brain damage: Neurobiologists have discovered that some types of brain injury are likely to lead to an increase in violent behavior. Damage to the frontal cortex, the region of the brain that helps modify our aggressive tendencies and fear responses, has been shown to lead to greater aggression in animals. Retrospective studies of inmates suggest that poor functioning and/or structural damage in this region of the brain is very common among violent offenders.⁹ This type of damage can result from severe physical abuse, including shaken baby syndrome.

Studies also have shown that more subtle types of brain damage that can lead to behavior problems may be caused by prenatal exposure to alcohol, cocaine, and other drugs. Similarly, lead poisoning either *in utero* or in early childhood has been associated with juvenile delinquency.¹⁰ Poor prenatal

EVIDENCE THAT EARLY CHILDHOOD PROGRAMS WORK TO REDUCE CRIME

The promise of high quality early childhood education and care as a crime prevention strategy has been well demonstrated by three longitudinal studies that began in the 1960s and 70s and that have followed children’s development through adulthood: the Syracuse University Family Development Research Program; the High/Scope Perry Preschool Study; and the Prenatal and Early Infancy Study. Two of these randomized trials provided at-risk children with high-quality center-based care and education, the Syracuse study providing full-time care (40 hours per week) beginning in infancy and the Perry Preschool offering a half-day program beginning at age three or four. Both programs also involved parents at the center and through home visits. The Prenatal and Early Infancy Study provided families with regular home visits by nurses during pregnancy and for two years after the child’s birth.

The results are impressive. In the Syracuse Study, less than 2% of the individuals in the program were reported delinquent by age 16, as compared to 17% of the control group.¹⁶ Similarly, only 7% of Perry Preschool children had been arrested five or more times before age 27, as compared to 35% of the children denied services in early childhood.¹⁷ The Prenatal and Early Infancy Program resulted in a 50% decrease in delinquency among the children through age 15, and an even greater reduction in arrests among the mothers themselves.¹⁸ The cost savings attributable to this reduction in crime more than offset the investment required for these high-quality early childhood programs.¹⁹

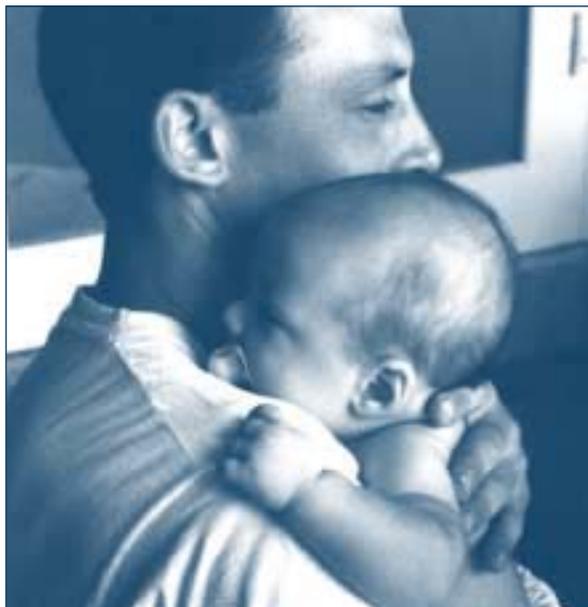
care and nutrition also have been implicated: children born at low birthweight are at increased risk for behavior problems in childhood and violent behavior later in life.¹¹

Promising Interventions

Research confirms that a child's experiences in infancy and very early childhood build a foundation for what is to follow. Yet, it is during this same period that families—faced with all the demands, anxieties and excitement of parenthood—often receive little help or attention. There are several promising strategies that communities can adopt to support children's healthy development and reduce the risk of later violent behavior.

Home visiting and parent support programs:

Many of the early risk factors for violent behavior described in this report can be addressed through community-based home visiting programs, which provide parents who choose to participate the information, advice and support they need in their new role. Ideally, these programs start working with young parents even before their first child is born, producing healthier pregnancies and better birth outcomes for babies. The programs continue to work with families over a period of several months or years in order to help them establish positive parent-child relationships. Home visitors help parents to understand and appropriately respond to their infants' and toddlers' behavior, while managing the sometimes overwhelming stress associated with caring for very young children. Research has shown that high-quality home visiting programs can significantly reduce the incidence and severity of child abuse and neglect, especially among high-risk families.¹² These programs can also help parents nurture their children's emerging capacities for emotional regulation and caring.



Early childhood education and care:

Longitudinal studies have demonstrated that high-quality early childhood education and care can reduce the risk of criminal behavior in adolescence and early adulthood (*see box*). Programs with the greatest effect appear to be those that: (1) last at least two years (and

preferably cover the entire birth-to-six period); (2) include educational infant-toddler child care or preschool; (3) provide child-rearing information and support for parents; and (4) offer health care, educational, and vocational services for parents as needed.¹³

Early childhood programs appear to influence later violent behavior through multiple pathways. As suggested above, developmentally appropriate early

childhood education and care teaches children social skills and helps them develop the capacity to regulate their emotions. Children in these programs also gain cognitive skills and are less likely to experience school failure, a strong predictor of later violent behavior. Finally, high quality early childhood programs strengthen parents' capacity to effectively care for their children throughout childhood and adolescence.

Services for children who witness or are the targets of violence:

It is only in the last 25 years that mental health professionals have recognized the importance of providing counseling and other services to young children who have witnessed or been the victims of violence. New approaches to treatment have been developed, including play therapy and counseling for parents and caregivers.¹⁴ Yet these services are still unavailable in many areas of the country, and are frequently not reimbursed by insurance.

Special initiatives in New Haven, Connecticut and New Orleans have paired police departments with local university-based child mental health programs to help ensure that children who witness violence are given the help

FIGHT CRIME: INVEST IN KIDS

Police, prosecutors and crime victims across America have teamed up to form Fight Crime: Invest in Kids, a national organization that advocates public investments in programs which cut crime by helping children get the right start in life. They spread the message about the cost-effectiveness of providing quality child care, good schools, and engaging after-school programs, as well as preventing child abuse through family support programs. The project also has created state and local chapters throughout the country. To get Fight Crime's latest reports on the crime prevention impact of investments in kids or to join their e-mail listserve, visit their web site at www.fightcrime.org or contact Fight Crime: Invest in Kids at 1334 G St. NW, Suite B, Washington, DC 20005.

they need.¹⁵ Police officers are given special training in how to work with child witnesses and victims at crime and accident scenes. In addition, they provide families with referrals for additional services. When necessary, these officers systematically and immediately contact a mental health professional specially trained in helping young children who have experienced trauma. These programs have been enormously successful in helping not only young children, but also the police officers and parents who so often struggle with how to respond to traumatized children.

Conclusions

Violence is a complex problem that will require multi-faceted solutions. Traditionally, violence prevention strategies have focused on adolescents and adults. There is strong evidence, however, that the propensity for violent behavior is also influenced by many early childhood factors. Research on effective interventions—including home visiting, early childhood education and care, and community-based programs for children who witness or are victims of violence—provides hope that communities can substantially reduce violence by investing in young children and their families.

Suggested Reading

- 1 Karr-Morse, R. & Wiley, M.S. (1997). *Ghosts from the nursery: Tracing the roots of violence*. New York: Atlantic Monthly Press.
- 2 Reiss, A.J. & Roth, J.A., Eds. (1993). *Understanding and preventing violence*. Washington, DC: National Academy Press.
- 3 Osofsky, J.D. (1997). *Children in a violent*

society. New York: Guilford Press.

- 4 Niehoff, D. (1999). *The biology of violence*. New York: The Free Press.
 - 5 Osofsky, J.D. & Fenichel, E., Eds. (1996). *Islands of safety: Assessing and treating young victims of violence*. Washington, DC: ZERO TO THREE.
 - 6 Garbarino, J. (1999). *Lost boys: Why our sons turn violent and how we can save them*. New York: The Free Press.
- ## Notes
- 1 U.S. Department of Justice Bureau of Justice Statistics, posted at www.ojp.usdoj.gov/bjs/
 - 2 Niehoff, D. (1999) *The biology of violence: How understanding the brain, behavior, and environment can break the vicious circle of aggression*. New York: The Free Press.
 - 3 Wang, C.T. & Daro, D. (1998). *Current trends in child abuse reporting and fatalities: The results of the 1997 annual fifty state survey*. Chicago, IL: Prevent Child Abuse America.
 - 4 Widom, C.S., & Maxfield, M.G. (1996). *A prospective examination of risk for violence among abused and neglected children*. Annals of the New York Academy of Sciences, 794, 256-276.
 - 5 Lewis, D.O., Mallowh, C., and Webb, V. (1989). "Child abuse, delinquency, and violent criminality." In Cicchetti, D. and Carlson, V., Eds. *Child maltreatment theory and research on the causes and consequences of child abuse and neglect*. Cambridge, England: Cambridge University Press.
 - 6 Egeland, B., Carlson, E. & Sroufe, L.A. (1993). *Resilience as process*. Development and Psychopathology, 5, 517-528.
 - 7 Taylor, L., Zuckerman, B., Harik, V., & Groves, B.M. (1994). *Witnessing violence by young children and their mothers*. Journal of Developmental and Behavioral Pediatrics, 15, 120-123.
 - 8 Zero To Three (1994). *Caring for infants and toddlers in violent environments: Hurt, healing and hope*. Washington, DC: ZERO TO THREE.
 - 9 Golden, C.J., Jackson, M.L., Peterson-Rohne, A., & Gontkovsky, S.T. (1996). *Neuropsychological correlates of violence and aggression: A review of the clinical literature*.

Aggression and Violent Behavior, 1, 3-25.

- 10 Mirsky, A.F. & Siegel (1994). *The neurobiology of violence and aggression. In Understanding and preventing violence, Vol. 2: Biobehavioral perspectives on violence*. Washington, DC: National Research Council.
- 11 Kanarek, R.B. (1994). *Nutrition and violent behavior. In Understanding and preventing violence, Vol. 2: Biobehavioral perspectives on violence*. Washington, DC: National Research Council.
- 12 Olds, D.L., Henderson, C.R., Chamberlin, R. & Tatelbaum, R. (1986). *Preventing child abuse and neglect: A randomized trial of nurse home visitation*. Pediatrics, 78, 65-78.
- 13 Yoshikawa, H. (1994). *Prevention as cumulative protection: Effects of early family support and education on chronic delinquency and its risks*. Psychological Bulletin, 115, 28-54.
- 14 Osofsky, J.D. & Fenichel, E., Eds. (1996). *Islands of safety: Assessing and treating young victims of violence*. Washington, DC: ZERO TO THREE.
- 15 Osofsky, J.D. (Ed.) (1997). *Children in a violent society*. New York: Guilford Press.
- 16 Lally, J.R., Mangione, P.L. & Honig, A.S. (1988). *The Syracuse University Family Development Research Program: Long-range impact of an early intervention with low-income children and their families*. In D.R. Powell, ed., Parent education as early childhood intervention: Emerging directions in theory, research and practice. Norwood, NJ: Ablex Publishing, pp. 79-104. Data cited are based on re-analyses completed by Fight Crime: Invest in Kids.
- 17 Schweinhart, L.J., Barnes, H.V. & Weikart, D.P. (1993). *Significant benefits: The High/Scope Perry Preschool Study through age 27*. Ypsilanti, MI: High/Scope Press.
- 18 Olds, D., Henderson, C. Kitzman, H. et al (1998). *The promise of home visitation: Results of two randomized trials*. Journal of Community Psychology, 26, 5-21.
- 19 Karoly, L.A. Greenwood, P.A., Everingham, S. et al. (1998) *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions*. Santa Monica, CA: RAND Corporation.



122 S. Michigan Ave., Suite 2050
Chicago, IL 60603-6198
Phone: (312) 922-3863
Fax: (312) 922-3337



We wish to thank the American Legion Child Welfare Foundation, Inc. for their support of this report.

Author: Theresa Hawley, Ph.D.

Photographs: Marilyn Nolt

Design: Henry McGill Design

©2000 Ounce of Prevention Fund