

*Protecting Kids*

*Reducing Crime*

*Saving Money*

**Preventing Child Abuse and Neglect in Washington  
By Supporting Intensive Home Visiting**

**A Report from  
FIGHT CRIME: INVEST IN KIDS WASHINGTON**



## ACKNOWLEDGEMENTS

FIGHT CRIME: INVEST IN KIDS *WASHINGTON* is a statewide, bipartisan, anti-crime organization comprised of more than 100 police chiefs, sheriffs, district attorneys, other law enforcement leaders and violence survivors.

Its mission is to help policy-makers and the public understand and act on the knowledge that among the most powerful weapons in the fight against crime and violence are public investments in programs shown to prevent kids from ever becoming criminals.

Launched in January 2006, FIGHT CRIME: INVEST IN KIDS *WASHINGTON* is a state office of Washington, D.C.-based FIGHT CRIME: INVEST IN KIDS, a national nonprofit organization of more than 3,000 law enforcement leaders and violence survivors. It is supported by tax-deductible contributions from foundations, individuals and corporations, and receives no funds from federal, state or local governments.

This report was authored by William Christeson, David Kass and Laura Wells.

The following staff members of FIGHT CRIME: INVEST IN KIDS contributed to production of this report: Jessica Blose, Phil Evans, Soren Messner-Zidell, Miriam Rollin and Meredith Wiley, J.D.

Special thanks to Robin Karr-Morse.

Publication design by Elizabeth Kuehl.

Copyright © All Rights Reserved, 2007, FIGHT CRIME: INVEST IN KIDS *WASHINGTON*, Seattle, WA

## Executive Summary

The 126 police chiefs, sheriffs, district attorneys, other law enforcement leaders and violence survivors who are members of FIGHT CRIME: INVEST IN KIDS WASHINGTON, and the over 3,000 members of FIGHT CRIME: INVEST IN KIDS nationwide, have taken a hard-nosed look at what works—and what does not work—to cut crime and violence. Extensive evidence shows that children who suffered abuse or neglect are more likely to grow up to commit crimes. Solid research shows that nearly half of all abuse and neglect in high-risk families can now be prevented by programs that also prepare children to succeed in school. Preventing abuse and neglect will directly protect children and save lives. Sharply reducing abuse and neglect will also save the public hundreds of millions of dollars in Washington while greatly reducing the number of children growing up to be violent criminals.

### [The Annual Toll in Washington: As Many as 6,730 Abused and Neglected Children](#) [The Future Toll: 270 Additional Violent Criminals from Every Year's Abuse and Neglect](#)

Official figures mask the real toll of child abuse and neglect in Washington. Although 6,730 children were officially substantiated as being the victims of abuse or neglect in 2004, the best estimate of the real number each year, based on a survey by the U.S. Department of Health and Human Services, is over 13,000. From 2000 through 2004, 61 children were officially documented as dying from abuse or neglect in Washington, but there are likely others whose abuse or neglect caused their death. Nearly half of the Washington children killed by abuse or neglect die before their first birthday.

While most victimized children who survive never become violent criminals, being abused or neglected sharply increases the risk that children will grow up to be arrested for a violent crime. The best available research indicates that, of the 6,730 children who had confirmed incidents of abuse or neglect in one year, 270 will become violent criminals as adults who otherwise would have avoided such crimes if not for the abuse and neglect they endured. Year after year, abuse and neglect creates more violent criminals in Washington.

### [Research Shows Most Abuse and Neglect in High-Risk Families Can Be Prevented](#)

Failure to invest now in programs that coach at-risk parents in parenting and other skills that are proven to prevent child abuse and neglect puts every Washingtonian at greater risk of becoming a victim of crime. Members of FIGHT CRIME: INVEST IN KIDS call on Washington State to offer voluntary, intensive home visiting programs to all at-risk parents of infants and toddlers.

Coaching, provided voluntarily by trained professionals to at-risk young mothers can significantly reduce abuse and neglect. The Nurse-Family Partnership (NFP) in Elmira, N.Y. randomly offered at-risk pregnant women home visits by nurses. Starting before the birth of their first child and continuing until the child was age two, the nurses coached the young women in parenting and other skills and helped the mothers address their own problems. Rigorous research, originally published in the *Journal of the American Medical Association*, shows that children of mothers in the program had 48 percent fewer substantiated reports of abuse or neglect. Put another way: intensive home visiting services can prevent nearly half of all cases of abuse or neglect of at-risk children.

By the time the children had reached age 15, mothers in the program had 61 percent fewer

arrests than mothers left out of the program, and their children had 59 percent fewer arrests than the kids left out. When this program was later replicated and carefully studied in Memphis, seven of the 515 children in the study whose parents did not receive home visiting services had fractures and/or head trauma requiring hospitalizations while none of the 228 children whose parents received the program were hospitalized for such injuries. A further replication underway in Denver has so far produced similarly strong results.

Compared to the children not receiving NFP, the children in NFP also demonstrated they were better prepared to succeed in school, showing improvements in their language skills, increased cognitive abilities, and increased abilities to behave in class.

Seven counties in Washington have embraced the benefits of home visiting with commitments to support Nurse-Family Partnership programs. Yet more than eight out of ten at-risk pregnant teens in Washington who would likely take advantage of the program if it were available are not yet being served.

NFP is not the only voluntary home visiting program in Washington. Other promising home visiting programs include Early Head Start, which serves children across the state, Parents as Teachers, which has trained parent coaches at 26 sites, and the Parent-Child Home Program that serves 2- and 3- year olds at seven sites.

## Saving Lives, Preventing Crime, and Saving Money

Preventing child abuse and neglect will not only save lives and reduce crime, it will also save taxpayers money. Just to maintain the existing child protective system in Washington alone costs the federal and state governments combined over \$400 million a year. Until the number of victims of abuse or neglect can be reduced, those expenses are unavoidable. Yet that is only a small part of the overall costs to taxpayers and society as a whole from abuse and neglect. A study commissioned by the U.S. Justice Department concluded that child abuse and neglect cost taxpayers and crime victims over \$80 billion a year in the United States and the same researchers estimated the costs for Washington State are over \$2 billion. The direct federal, state and local taxpayer costs for Washington are over \$400 million. A Washington State Institute for Public Policy analysis found that NFP reduced crime so effectively among high-risk families that it produced average net savings of over \$27,000 per family.

## Law Enforcement Leaders are United

Law enforcement leaders and violence survivors are united in calling for investments to prepare children for school, protect them from abuse and neglect, save taxpayers' dollars, and make life safer for all Washingtonians.

A national survey of over 1,000 chiefs of police, sheriffs and prosecutors was conducted by Mason-Dixon Polling and Research in 2002. The law enforcement leaders were asked, "Do you believe that offering parenting coaching for at-risk parents and expanding resources for other child abuse prevention and foster care programs will: significantly reduce youth crime and violence, or, have little impact on crime and violence?" Eighty-one percent of the chiefs, sheriffs and prosecutors said it would significantly reduce crime and violence.

The evidence is in. Home visiting services can save the people in Washington hundreds of millions of dollars a year while preventing half of all abuse and neglect in high-risk families and reducing crime. The time to act is now.

## Chapter 1

# The Hidden Toll of One Year of Abuse and Neglect

From shocking accounts on the evening news, most Washingtonians are aware of the severe abuse and neglect some children suffer. Few people in the state, however, realize the breathtaking scope of the problem or the severity of the consequences. In 2004, there were 6,730 confirmed incidents of child abuse and neglect in Washington. And, from 2000 through 2004 there were 61 confirmed deaths from abuse and neglect.<sup>1</sup>

However, this is not the end of the tragedy. Though many abused and neglected children grow up to lead fulfilling and productive lives, children who live through abuse or neglect are far more likely than other children to go on to harm or kill someone else—or themselves. A year's toll of abuse and neglect has consequences well into the future and well beyond the initial victims.

### Finding the Children

In a society obsessed with statistics, data on abused and neglected children routinely misses thousands of children. Grim as the official numbers are, the truth is that the real number of children injured and killed by abuse and neglect each year are much higher than the official counts.

According to the federal government's 1995 study, the Third National Incidence Study of Child Abuse and Neglect, the true number of children abused or neglected nationally each year is three times the officially reported

number.<sup>2</sup> This includes abused or neglected children that social workers missed when they conducted their investigations and all the abused or neglected children who were never brought to the attention of authorities in the first place because no one knew about them or someone knew but was unwilling to make a report. Three times the figure of 6,730 confirmed cases would equal 20,000 children abused and neglected in Washington in 2004. The Washington State government acknowledges that "the confirmed number of child maltreatment cases are underestimates" because "only a portion of child maltreatment is reported to Child Protective Services."<sup>3</sup> It is impossible at this time to arrive at a firm number that everyone can agree on for how many children are abused and neglected each year in Washington. But there is little doubt that it is much higher than the officially reported figure.<sup>4</sup>

### 61 Washington Children Died from Abuse and Neglect from 2000 through 2004

From 2000 through 2004, the state of Washington reported to the federal government that 61 children were killed in the state from abuse or neglect.<sup>5</sup> Nationally, nearly half the children who died from abuse or neglect were killed before their first birthday.<sup>6</sup>

Research shows the official number of children killed by abuse or neglect is likely an

## What is Child Abuse and Neglect?

The state's Washington Council for Prevention of Child Abuse and Neglect has a definition of child abuse and serious physical neglect that includes:

### Types of Child Abuse and Neglect

**Physical injury:** A physically abused child is one who has sustained non-accidental physical injury or injuries such as: bruises, burns, fractures, bites, internal injuries, auditory, dental, ocular or brain damage, etc. Injuries sustained may be permanent or temporary.

**Mental injury:** A child who has been injured mentally is one who sustains damage to intellectual, emotional or psychological functioning which is clearly attributable to the non-accidental acts or omissions of the parent or guardian. Examples of parental or caretaker behaviors include a pattern of rejecting, isolating, ignoring, corrupting or terrorizing a child.

**Sexual Abuse:** There is a wide range of sexual offenses defined in the Washington state criminal code involving children that constitute sexual abuse such as: indecent liberties, communication with a minor for immoral purposes, sexual exploitation of a minor, child molestation, sexual misconduct with a minor, rape of a child and rape.

**Neglect:** Negligent treatment or maltreatment (a dangerous act) is that which constitutes a clear and present danger to the child's health, welfare and safety such as:

- Failure to provide adequate food, clothing, shelter, emotional nurturing or health care;
- Failure to provide adequate supervision in relation to a child's level of development;
- An act of abandonment;
- An act of exploitation;
- An act of reckless endangerment.<sup>13</sup>

In Washington State, of the children who were abused or neglected in 2004, 19 percent suffered physical abuse, 7 percent suffered sexual abuse, and eighty percent suffered neglect (with some suffering from more than one form of abuse or neglect).<sup>14</sup>

undercount. In 2004, the National Child Abuse and Neglect Data System (NCANDS) recorded 1,490 children killed by abuse or neglect nationwide.<sup>7</sup> However, in a Justice Department publication, the National Center on Child Fatality Review concluded that "an estimated 2,000 children in the United States die of child abuse and neglect each year."<sup>8</sup> A fatality review in California concluded that the true number of deaths in that state from abuse or neglect was three times the NCANDS number,<sup>9</sup> and an article in the *Journal of the American Medical Association* concluded that North Carolina had undercounted its deaths

from abuse or neglect by a factor of three.<sup>10</sup>

A Washington State review of child fatalities in 2003 that was limited to those deaths that were reported directly to the Children's Administration showed 12 cases of "homicide by abuse" while the figure on deaths from abuse or neglect that was reported to the federal government for 2003 was nine deaths.<sup>11</sup> In addition, a Childhood Injury Report produced by the Washington State Department of Health for the three years 1999 through 2001 found 165 deaths of children during that period in which physical abuse or

neglect was considered at least a contributing factor in their deaths.<sup>12</sup> The official counts of deaths directly due to abuse or neglect reported to the federal government for that period show only 36 deaths. As with the overall numbers for children abused or neglected, it may not be possible to come up with one agreed upon number for how many children are killed by abuse or neglect. One thing is clear, though: too many Washington children continue to be abused or neglected, and too many are dying from it.

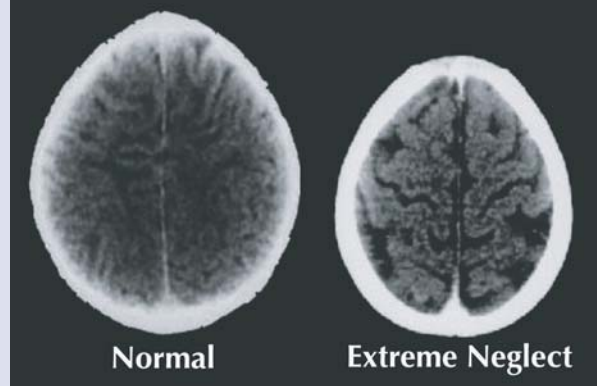
### Creating Children Primed for Violence

Severe abuse and neglect, particularly when it occurs during the earliest months and years of life, can permanently injure children in ways that make them much more susceptible to violence. According to Dr. Bruce Perry, a neurobiologist and authority on brain development and children in crisis, “The systems in the human brain that allow us to form and maintain emotional relationships develop during infancy and the first years of life ... With severe emotional neglect in early childhood the impact can be devastating.”<sup>15</sup> Perry explains that severely neglected children frequently respond with aggression and cruelty that “is often accompanied by a detached, cold lack of empathy.”<sup>16</sup> Research shows that neglect is as likely as physical abuse to lead to future criminal behavior when a child reaches adulthood.<sup>17</sup> Physical abuse can cause post-traumatic stress disorders in children. Even when nothing is threatening them, abused children’s brains can become “stuck” in high alert with very high resting heart rates and high levels of stress hormones in their blood. These children are predisposed to interpret others’ actions as threatening and are quick to respond impulsively and aggressively in their own defense.<sup>18</sup> Perry warns: “The most dangerous children are created by a malignant combination of experiences. Developmental neglect and traumatic stress during childhood create violent, remorseless children.”<sup>19</sup>

Of growing concern is the role head injuries play in violent behavior, particularly injuries to

### Effect of Neglect on Brain Development

#### 3-Year-Old Children



These images are from studies conducted by a team of researchers from the ChildTrauma Academy in Houston led by Bruce D. Perry, M.D., Ph.D.

Permission for reproduction granted by B. Perry, 2003

the frontal or temporal lobes of the brain. The frontal lobes are the seat of the capacities for planning and self-regulation as well as abstract thinking and judgment, while the temporal lobes contain the limbic system that regulates aggression, impulsiveness, and the more primitive emotions such as jealousy and rage.<sup>20</sup> A baby or toddler’s head is especially vulnerable to rough shaking or blows to the head that can cause shearing and microscopic lesions throughout the brain during this time of critical and rapid development. Young children’s head injuries are often cumulative from repeated incidents of abuse and usually go undetected, except in the most extreme cases, because they leave no external marks. The damage done may not manifest itself until much later as the brain matures.<sup>21</sup>

A number of studies on adolescents and adults link head injuries to recurring aggression and violence. Studies done on death row inmates by Dr. Dorothy Lewis and her colleagues show that a high percentage of them have a history of serious head injury.<sup>22</sup> Many researchers have concluded that as many as 30 to 50 percent of individuals with a criminal history may have sustained injuries to their frontal or temporal lobes.<sup>23</sup>

## One Year of Child Abuse and Neglect Produces 270 Additional Violent Criminals in Washington

Although surveys report varying numbers, it is clear that a high percentage of criminals were abused or neglected as children. One review of the literature on prior abuse and neglect concluded that approximately half of the youths arrested for delinquency had been abused and/or neglected earlier in their lives.<sup>24</sup> Many of these individuals, however, also had other risk factors for crime in their lives, such as poverty or growing up with high-crime peers.

In an effort to isolate the specific impact of abuse and neglect by controlling for other factors, Dr. Cathy Spatz Widom, a professor of psychology at the New Jersey Medical School, identified individuals who had been abused and neglected as children and compared them to otherwise similar individuals who had no official record of abuse or neglect. By studying the subsequent arrest records and controlling for other demographic risk factors, Widom found that being abused and neglected almost

doubles the odds that a child will commit a crime as a juvenile.<sup>25</sup>

As for violent crime, Widom found that 18 percent of the abused or neglected youngsters went on to be arrested for a violent crime either as juveniles or as adults, compared to 14 percent of similar individuals who shared the same other advantages and disadvantages as these children but who had not been abused or neglected as children—a difference of four percentage points.<sup>26</sup>

Applying Widom's four percent figure to the 6,730 confirmed cases in Washington of abuse and neglect in 2004 produces a figure of approximately 270 additional individuals who will be arrested for at least one violent crime beyond the number of those who would have been arrested had the abuse or neglect never occurred. In other words, the abuse or neglect will result in 270 additional violent criminals and all the violent crimes those individuals commit (see the Appendix for a more detailed discussion of this projection).

Widom cautions that her research does not indicate whether the same relationship would hold for unconfirmed cases of abuse or neglect, since those children may not have been as seriously harmed as the individuals whose abuse or neglect was confirmed. As previously discussed, it is estimated that in Washington there are three times as many actual cases of abuse and neglect as the number of officially confirmed cases. Even if only a small percentage of these children go on to become violent criminals who otherwise would not have, the 270 figure will prove to be a significant underestimate of the number of additional violent criminals in Washington resulting from the children who were abused and neglected in 2004. And each year more victims of child abuse and neglect, and more future criminals, are added to the total.

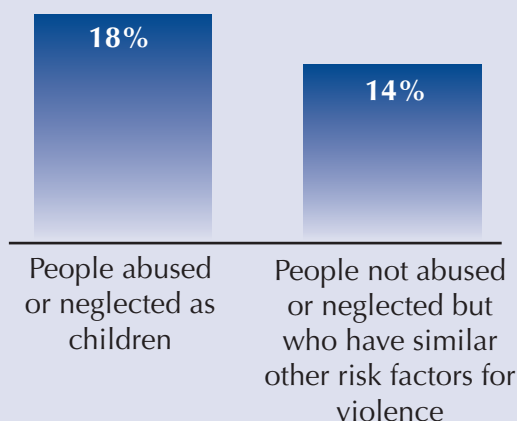
### What Does This Mean for Homicides?

Children who are abused and neglected are not only more likely than other children to commit crimes as adults, but they are also

#### Abuse and Neglect Produces More Violent Criminals

Compared to children with similar other risk factors but with no official record of abuse or neglect, children who had been abused or neglected were 29 percent more likely to grow up to be violent criminals.

#### At Least One Arrest for a Violent Crime



M.G. Maxfield & C.S. Widom, 1996



more likely than other criminals to be arrested at a younger age. This is a well-known risk factor that indicates these children might become both more serious and more chronic offenders, committing more crimes over their lifetimes.<sup>27</sup>

For example, a study done in Sacramento County, Calif. showed that children between the ages of nine and 12 reported to have been abused or neglected were 67 times more likely to be arrested than other children in that age group. Six percent of those who had been abused or neglected had already been arrested by age 12, compared to less than one-tenth of one percent of other children in that age group.<sup>28</sup>

In their Rochester Youth Development study, Carolyn Smith and Terence Thornberry tracked 1,000 seventh- and eighth-grade students from Rochester, N.Y. up to age 22. They found that the more frequent and severe the maltreatment, the more likely the child was to commit more violent acts of delinquency.<sup>29</sup>

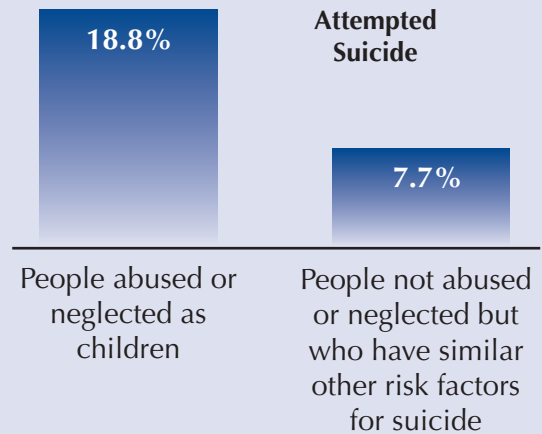
Perhaps most disturbing, researchers who have extensively interviewed extremely violent offenders are convinced that severe abuse or neglect was a defining influence in almost all of these violent offenders' lives.<sup>30</sup> In addition to documenting the link between head injuries and extreme violence,<sup>31</sup> Dorothy Lewis and Jonathan Pincus interviewed 14 of the 37 juveniles facing death sentences in 1986 and 1987. They found that only one of those interviewed had not suffered childhood family violence and severe physical abuse.<sup>32</sup> John Douglas, one of the experts who helped the FBI develop violent criminal profiles, reached similar conclusions from his studies.<sup>33</sup>

## Child Abuse and Neglect Can Lead to Lost Employment, Failed Marriages and Suicide

Most abused or neglected children never become involved in violent crime. While many grow up to lead productive lives, research by Widom and others shows that abuse and

### Abuse and Neglect Leads to More Suicide Attempts

Compared to children with similar other risk factors but with no official record of abuse or neglect, children who had been abused or neglected were more than twice as likely to attempt suicide later in life.



C.S. Widom, 2000

neglect often lead to other serious consequences for its victims. For example, individuals not abused or neglected as children were 40 percent more likely to be employed and 50 percent more likely to have stable marriages than similar individuals who were abused or neglected.<sup>34</sup>

Victims of child abuse or neglect, as they grow older, are also two and a half times more likely than other children to attempt suicide. Widom's research indicates that 18.8 percent of abused or neglected children later attempted suicide, compared to 7.7 percent of children with similar risk factors but who had not been abused or neglected.<sup>35</sup> This means that as many as 740 Washingtonians who were the victims of abuse and neglect in 2004 will ultimately attempt suicide who otherwise would not have if not for the abuse and neglect they endured. Although the number of these abused or neglected individuals who will succeed in killing themselves cannot be reliably estimated, a large number undoubtedly will succeed.<sup>36</sup>

## A Cycle of Violence

Research shows that all too often negative

behaviors and consequences, violent or otherwise, are passed on to the next generation, and the cycle continues. One rigorous study showed that poor mothers who had been severely physically abused as children were 13 times more likely to abuse their children than mothers who had emotionally supportive parents.<sup>37</sup>

A sad example of this cycle of violence and neglect was found in a fatality report conducted by Washington State's Children's Administration. On October 14, 2004, a three-month old boy died from a skull fracture that apparently was inflicted by his mother.

Witnesses reported seeing her hitting the baby. The mother had herself been removed from her own family when she was 14 due to alcohol and drug abuse by her mother. She later became involved in drugs and crime and served eight months in jail. The father of this child, who apparently tried to help cover up the crime by claiming he had accidentally fallen asleep on the child, had grown up with an extremely abusive father. At one point that father (the grandfather of the dead boy) reportedly sat on his pregnant wife's stomach and held a gun to her head.<sup>38</sup>

## Chapter 2

# Research Shows Abuse and Neglect Can Be Prevented

Waiting to act against abuse and neglect until after it occurs will always be too late, and it may be fatal. Child protective services and available foster care families are essential services that can help protect children who have already been identified as abused or neglected. But many children never come to the attention of child protective services or if they do, their cases at the time may not be serious enough to warrant removal from their homes. In Washington, half of the 12 children who were reported as victims of homicide by abuse in 2003 had no history within the past 12 months with the Children’s Administration, the agency that supervises the Child Protective Services in Washington.<sup>39</sup> Relying only on child protective services and foster care services to protect children proved to be inadequate to save the Washington children who were killed as a result of abuse or neglect.

Even when children are identified as victims and they and their families receive services, healing their physical and emotional injuries is difficult. And some injuries can never be undone. For instance, early neglect can stunt brain development and prenatal exposure to alcohol can cause mental retardation. For many children, treatment is too frequently limited in its duration and effectiveness.

As a child grows older, it becomes more difficult to undo damage and is more expensive to treat the consequences of abuse and neglect. Even more troublesome is the

plight of thousands of Washington children who receive no treatment at all because they fall through the cracks and never come to the attention of child protective services. As long as these “lost” children remain unidentified, there will be few opportunities to repair the damage done to them or to protect communities from the risk that they might become future criminals. For these “lost” children, prevention is probably their only hope.<sup>40</sup>

Research shows there are rigorously tested solutions that can significantly reduce child abuse and neglect in high-risk families. Programs beginning as early as during pregnancy to help families develop parenting skills and change problem behaviors have proven effective in preventing child abuse and neglect. To protect vulnerable children—and all Washingtonians—these programs must be made available to all families who need them before abuse or neglect takes place.

### The Nurse-Family Partnership Program Shows What Home Visiting Services Can Accomplish

Beginning during pregnancy, voluntary parent coaching for at-risk parents of infants and toddlers can dramatically reduce abuse and neglect. Who are those “at-risk” parents? While there are parents from all income levels and walks of life who abuse and neglect their children, some families face more challenges

than others.

Nationally, almost half of the families referred to child protective services for abuse or neglect were receiving welfare at the time and more than half of all referred families had received assistance in the past.<sup>41</sup> In a study conducted in Illinois, 40 percent of the children placed into foster care came from families receiving welfare (while only 15 percent of all families in Illinois were on welfare at the time) and another 20 percent of children in foster care were from families that had recently received welfare.<sup>42</sup>

Failing to graduate from high school is also a risk factor. Compared to parents with a high school degree, those without a degree are almost five times more likely to be officially reported for abuse or neglect.<sup>43</sup> Multiple risk factors can have cumulative effects. Single mothers without a high school diploma are 10 times more likely to be officially reported for abusing or neglecting their children than women in two-parent families with more education.<sup>44</sup>

Groundbreaking research initially conducted

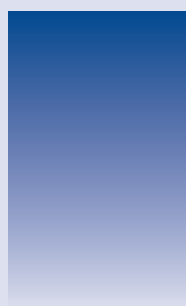
in Elmira, N.Y. showed that parent coaching in the homes of new, at-risk, young parents can be extraordinarily effective in reducing child abuse and neglect when provided with enough quality and frequency. The Nurse-Family Partnership (NFP) randomly assigned half of a group of single, poor, first-time young mothers to receive visits by carefully trained nurses. The nurses provided coaching in parenting skills and other advice and support. Starting in 1978, the women in the program received an average of nine home visits during their pregnancy and 23 visits from birth to their child's second birthday. Rigorous research, originally published in the *Journal of the American Medical Association*, shows that children of mothers in the program had 48 percent fewer substantiated reports of abuse or neglect. Put another way: home visiting services can prevent nearly half of all cases of abuse or neglect of at-risk children.<sup>45</sup>

In addition, by the time the children reached age 15, mothers in the program had 61 percent fewer arrests than the mothers left out of the program, and their children had 59 percent fewer arrests than the kids left out.<sup>46</sup>

### The Nurse Family Partnership Cut Abuse and Neglect and Arrests in Half Among the At-risk Kids it Served

**Abuse and Neglect Down 48%**  
Rate of substantiated reports of abuse or neglect by age 15

**50 per 100**



Mothers who did not receive parent coaching

**26 per 100**



Mothers who received parent coaching

**Arrests Down 59%**  
Rate of arrests by age 15

**37 per 100**



Children whose mothers did not receive parent coaching

**15 per 100**



Children whose mothers received parent coaching

Olds, 2006

A replication study of NFP, also using a rigorous random assignment design, began in 1990 in Memphis. The mothers and children served are still being followed. There is no data available yet on the children's arrest records, and the official abuse and neglect records are not adequate to directly measure whether the children were maltreated.<sup>47</sup> Compared to children in the program, however, the children whose parents did not receive the parent coaching and family support were more likely to be hospitalized for injuries or ingestions and spent five times more days in the hospital for those causes. While children can certainly be injured without being abused or neglected, such extreme differences reinforce the findings of the earlier study in Elmira, N.Y. Moreover, in Memphis, hospitalized children who were not in the program sustained more serious injuries. For example, while seven of the 515 children in the group that did not receive parent coaching had fractures and/or head trauma requiring hospitalizations, none of the

228 children in the program were hospitalized for fractures or head trauma.<sup>48</sup> Finally, another replication underway in Denver is also generating strong positive results for the children.<sup>49</sup>

There were many other benefits. For example, the children in the Elmira program were brought before local courts as juveniles in need of supervision for incorrigible behavior 90 percent less often than the children not in the program.<sup>50</sup> The mothers receiving parent coaching in Elmira also averaged 21 percent fewer births 15 years after delivery of their first child and one-third fewer months on welfare than the mothers not receiving coaching.<sup>51</sup> The at-risk children in NFP showed improved readiness for school. Compared to the children not receiving NFP, the children in NFP demonstrated increased language skills, increased cognitive abilities, and increased abilities to regulate their behavior which can lead to a better learning environment.<sup>52</sup>

### Nurse Family Partnership:

Hospitalizations in Memphis for which injuries or ingestions were detected

Separate admissions of children whose mothers were visited by nurses prenatally up to age 2 (N=228)		Separate admissions of children whose mothers were not visited by nurses (N= 515)	
Diagnosis	Days in hosp.	Diagnosis	Days in hosp.
Burns	2	Head trauma	1
Coin Ingestion	1	Fractured fibula/congenital syphilis	12
Ingestion of iron medication	4	Strangulated hernia w delay in seeking care/burns	15
		Bilateral subdural hematoma	19
		Fractured skull	5
		Bilateral subdural hematoma/aseptic meningitis, 2 <sup>nd</sup> hospitalization	4
		Fractured skull	3
		Coin ingestion	2
		Child abuse/neglect suspected	2
		Fractured tibia	2
		Burns (2 <sup>nd</sup> and 3 <sup>rd</sup> degree to face/neck)	5
		Burns (2 <sup>nd</sup> and 3 <sup>rd</sup> degree to bilateral leg)	4
		Gastroenteritis/head trauma	3
		Burns (splinting/grafting) 2 <sup>nd</sup> hospitalization	6
		Finger injury/osteomyelitis	6
<b>Total days hospitalized</b>	<b>7</b>	<b>Total days hospitalized</b>	<b>89</b>

## Continuous Monitoring and Continuous Improvement

The Nurse-Family Partnership has been very scientific about how it approaches expanding services to new areas. Instead of just assuming new sites are implementing the program as it was designed, NFP carefully collects a wealth of data to determine whether the program is being implemented as designed and whether it is gaining results comparable to other NFP programs throughout the country. This continuous improvement process ensures that the best research is being turned into best practices on the ground in each site. It also ensures that new lessons learned from around the country will be quickly adopted throughout the NFP system.

The extensive data collected in the 39 page report, Washington NFP Evaluation Report 1, March 22, 2006, shows that the families that completed NFP in Washington are generally meeting or, in many cases, exceeding the results achieved by families completing NFP in other locations across the nation. For example:

- **Smoking during pregnancy** - a 56 percent reduction in smoking in Washington State vs. a 15 percent reduction for NFP nationwide.
- **Employment by the mother after 24 months** - 47 percent employed in Washington State vs. 42 percent nationwide for NFP.
- **Low birth weight babies** - 8.4 percent of babies were low birth weight in Washington State vs. 8.6 percent nationwide for NFP.
- **Toddlers who score in the top range for language skills** - 22 percent scored in the top range in Washington State vs. 10 percent nationwide for NFP kids.

The national NFP program has developed a model that has been rigorously tested and shown repeatedly to work. It then implemented a continuous improvement process for bringing new programs to scale with fidelity.

NFP began operating in Washington State in 1999. It is now serving at-risk families in seven counties: Jefferson, King, Mason, Skagit, Snohomish, Thurston and Yakima. There are 27 full-time employees (almost all nurses) across the state. Seattle/King County has the largest program with a capacity to serve 255 families, and, statewide, the NFP programs have the capacity to coach over 600 at-risk pregnant young teens. Statewide, more than 1,300 families have already been served by the programs.<sup>53</sup>

## Other Home Visiting Programs in Washington

Home visiting is also often a part of the services delivered by the federal Early Head Start program, and Parents as Teachers has trained home visiting coaches in 26 sites throughout the state in cities such as Bellingham, Olympia, Seattle, Spokane and Vancouver. Parents as Teachers often serve more than just high-risk families. They are currently serving more than 1,200 families in Washington with waiting lists at half their sites.<sup>54</sup> Though there are no data such as NFP has for either the Parents as Teachers program or Early Head Start that follow the children long enough to have crime prevention results, both programs have shown they can effectively help children, particularly when they serve at-risk children.<sup>55</sup>

The Parent-Child Home Program is another parent coaching program that has seven sites in Washington: one in Coupeville, two in Yakima, and four in Seattle. It uses home visits by trained personnel to offer parents of 2- and 3-year olds the books, toys and training in the skills they need to stimulate their children's development. Families receive two home visits per week for two years.

PCHP can serve as an important bridge between infant home visiting programs and preschool for many at-risk children. According to PCHP, "in the twice-weekly home sessions with the parent and the child, the home visitor models verbal interaction and reading and play

activities, demonstrating how to use the books and toys to cultivate language and emergent literacy skills.”<sup>56</sup>

One study of PCHP in South Carolina compared the children who participated in the PCHP program to similar groups of children statewide who were not in the program. The researchers found that the PCHP children passed South Carolina’s statewide first grade assessment at rates not only higher than other first graders from low income families, but also at higher rates than all first graders of any income or ethnicity – 92 percent of children in the program passed compared to 82 percent of all first graders.<sup>57</sup>

A study of PCHP in Buffalo showed that minority children from low-income homes without PCHP scored 10.5 points lower than the PCHP children on literacy skills when entering kindergarten (89.4 vs.99.9). The minority children from low-income homes in the PCHP program even scored above the national average of 97 points, and continued to do much better than the national average when leaving kindergarten (104.7 vs. 97).<sup>58</sup>

Another study in Pittsfield, Massachusetts followed children who completed PCHP and also received pre-kindergarten. The study compared them on entry into kindergarten with children who had pre-kindergarten only and with children who had neither PCHP nor pre-kindergarten. When they entered kindergarten, 39 percent of the children with neither pre-k nor PCHP scored above average for their age on a developmental test. If the children had pre-kindergarten, 69 percent scored above average, and that figure jumped to 93 percent for the children who had both pre-kindergarten and PCHP.<sup>59</sup>

Finally, a separate randomized control study of PCHP found that, of the children researchers were able to follow through high school, 84 percent of the children finishing the program graduated from high school compared to 54 percent of those who did not receive the intervention.<sup>60</sup> This indicates PCHP

may prevent crime because separate studies have concluded that improving graduation rates reduces crime.<sup>61</sup>

Some of the impressive results in the Buffalo and Pittsfield studies might be accounted for by such factors as higher motivation among the parents who participated in the program compared to parents not in the program or those dropping out of the program. Nevertheless, such dramatic results for at-risk children are a strong indication that the PCHP program is successful in helping at-risk children to not only catch up with children from more advantaged backgrounds, but to actually excel. The Business Partnership for Early Learning has funded an evaluation to see if such impressive results can be replicated in Seattle. Initial results from that test show that parents are improving the way they interact with their children, and the children appear to be benefiting.<sup>62</sup>

## The Real Challenge is Funding

The real challenge is not in finding programs that can deliver results. The real challenge is getting the successful programs to more children. For example, based on Washington State data, the Consortium of NFP programs estimated that there are nearly 3,800 young women in the state who are under age 19, pregnant, and eligible for Medicaid who would likely take advantage of the NFP program if it were available. That means, however, that with current capacity only able to serve roughly 600 pregnant, at-risk teens, the program is still not available for well over eight out of ten young women who should, and likely would, take advantage of it if it were fully available in Washington State.<sup>63</sup> More local, state and national funding is needed to coach young at-risk families on how they and their children can stay away from crime and lead more productive lives.

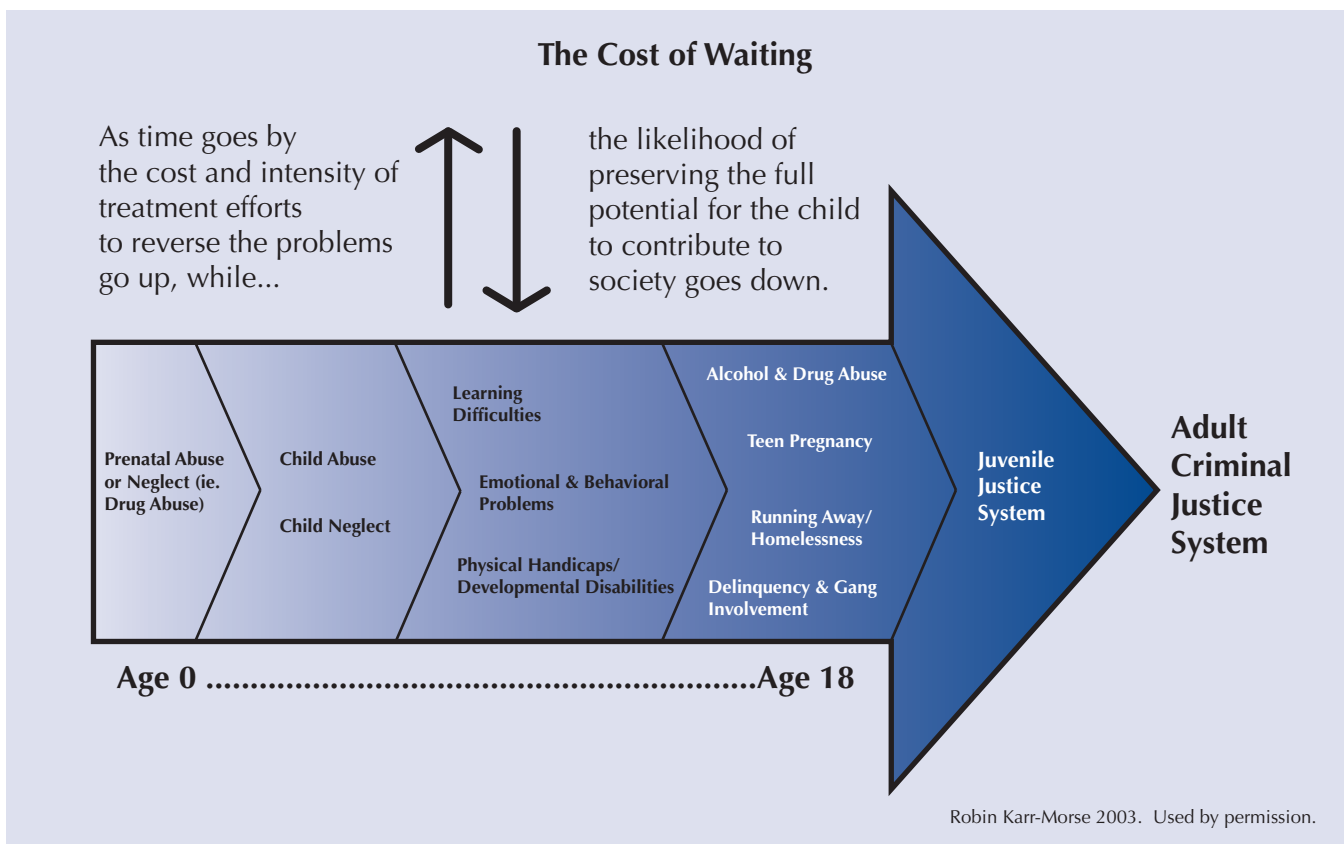
## Chapter 3

# Saving Money While Protecting Kids and Preventing Crime

Stopping child abuse and neglect before children are hurt is not only the right thing to do, it is also the fiscally sound thing to do. In a study commissioned by the Justice Department, The Children's Safety Network Economic Insurance Resource Center analyzed the direct and indirect costs of child abuse and neglect to taxpayers and all those individuals impacted by the consequences of abuse or neglect. It concluded that child abuse and neglect costs Americans \$83 billion a year.<sup>64</sup>

The Center also estimated that the cost of child abuse and neglect in Washington State was over \$2 billion a year.<sup>65</sup>

The direct taxpayer costs alone of paying for child abuse and neglect in Washington are huge. According to the Urban Institute, in fiscal year 2004 the federal and state governments each paid about half of the costs, with the total cost to taxpayers reaching \$432 million.<sup>66</sup> The direct child protective costs do not include later indirect costs borne by





taxpayers. These include educational, welfare, medical and criminal justice costs when many of the abused or neglected children fail to become productive adults.

By waiting to pay for services until the problems cannot be avoided, Washington taxpayers are paying huge sums to cover the costs of holding children back in school, providing special education services, paying for welfare, and especially paying for arresting and imprisoning criminals. Not only is this an unbalanced investment strategy, it ignores the opportunity to act when the interventions are less expensive and more likely to succeed.

### Home Visiting Programs Can Save Money

Analysts with the Federal Reserve Bank of Minneapolis reported that NFP produced an average of five dollars in savings for every dollar invested and produced more than \$28,000 in net savings to taxpayers for every high-risk family enrolled in the program.<sup>67</sup> A new study by Steve Aos and his team at the Washington State Institute for Public Policy found similar results: \$27,000 in net savings per family because of reductions in crime by the mothers and their children.<sup>68</sup> In fact, of the

### Quality In-home Parent Coaching Saves Money

Taxpayers saved over \$5 for every \$1 invested in the Nurse Family Partnership program.



For every \$1 invested

Over \$5 was saved

Washington State Institute for Public Policy, 2006

over 50 different adult and juvenile programs to reduce crime reported on by Aos in that particular study, the reduction in crimes among the at-risk teen mothers served by NFP was by far the largest crime reduction produced by any of the programs reviewed.<sup>69</sup>

With such potential savings, Washington and the federal government should seize the opportunity to ensure that Washington's home visiting programs reach their full potential and are offered to all at-risk parents of infants and toddlers in the state.

## Chapter 4

# From the Front Lines of the Battle Against Crime: A Call to Action

The 126 police chiefs, sheriffs, district attorneys and violence survivors who are members of FIGHT CRIME: INVEST IN KIDS WASHINGTON and the over 3,000 members of FIGHT CRIME: INVEST IN KIDS throughout the United States are calling for greater investments to help children succeed in school, protect them from abuse and neglect, save taxpayers' dollars, and make all Washingtonians safer. This call has been endorsed by the Washington Association of Sheriffs and Police Chiefs and the Washington Association of Prosecuting Attorneys.

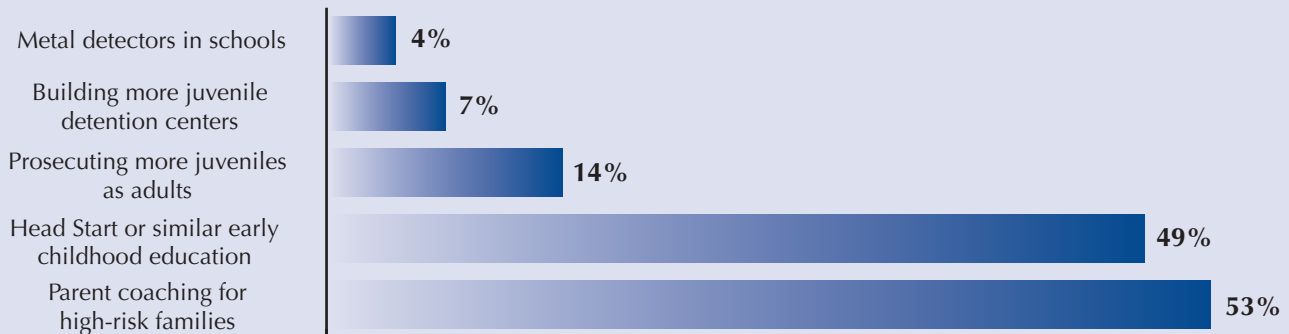
Research shows how to prevent child abuse and neglect before children are hurt and before those children can go on to hurt others. The research shows that high quality parent coaching services beginning prenatally can help children succeed while preventing nearly half of all cases of abuse or neglect of at-risk children. They can save children's lives now while helping to prevent 270 children a year in Washington from growing up to be violent criminals. The programs will prevent murders

and suicides in Washington. All this can be accomplished while saving the people of Washington hundreds of millions of dollars each year.

Government's most fundamental responsibility is to protect its citizens. When more than 1,000 children nationwide are dying each year from abuse and neglect and tens of thousands more are growing up to be violent criminals as a result of abuse or neglect, federal, state and local governments clearly are not doing enough. Washington's initial home visiting efforts are a good first step. But many more families need high-quality services. For example, NFP still reaches less than two out of ten of the young at-risk pregnant teens that program should be serving. Government must meet the challenge of providing adequate funding. Elected leaders at the state and federal level should invest now in the best research-driven programs that can help children succeed while eliminating half of all abuse and neglect in high-risk families.

### Police Chiefs Rate Parent Coaching and Pre-Kindergarten Programs as Effective Crime Prevention

Police Chiefs nationwide were asked: "Please rate the following strategies on a scale of 1 to 5 on their value as a crime prevention tool." This chart shows the percentage for each strategy that received a "1" rating by the Police Chiefs.



S. Keeter & S. Mastrofski, 1999

# Appendix

## Technical Notes on Estimating the Number of Violent Criminals, Murderers, and Those Who Attempt Suicide Who Will Emerge from the Children Abused and Neglected in 2004

The projections on how many abused or neglected children will grow up to be arrested for a violent crime, to be arrested for murder, or to attempt suicide are based on the original research of Michael Maxfield and Cathy Spatz Widom. Their article, "The cycle of violence: Revisited 6 years later," appeared in the Archives of Pediatric and Adolescent Medicine in April of 1996 (v.150: 390-395). Widom and Maxfield matched 908 children who had substantiated cases of abuse or neglect with a control group of 667 individuals with no substantiated cases of abuse or neglect. The individuals in the study were matched on the basis of their date of birth, race, sex, and approximate social class. Using official records, the researchers determined that the abused and neglected individuals were one quarter (4 percentage points) more likely to have had at least one arrest for violence, either as an adult or as a juvenile, than those otherwise similar individuals who had not been maltreated [18 percent - 14 percent = 4 percent]. In other words, while 14 percent of the abused and neglected individuals in this study would have been arrested for a violent crime whether or not they had been abused or neglected, an additional 4 percent of the abused and neglected individuals were arrested for a violent crime who apparently would not have been if they had not suffered abuse or neglect as children.

The four-percentage point difference can be applied to the number of substantiated cases of abuse and neglect in Washington in 2004—6,730 (which is a conservative count of the number of children abused and neglected every year in Washington). Four percentage points multiplied by that number results in an estimate of 270 additional individuals who will be arrested at least once for violence at some time in their life after having been abused and neglected in 2004 [ $6,730 \times .04 = 269$ ]. Other research cited in this report, however, indicates that each year there are three times as many children who were victims of abuse or neglect that were not confirmed, or over 2,000 children abused or neglected. Widom has cautioned that her research cannot answer whether the same rate of arrests for violence applies to the higher number of unconfirmed cases of abuse and neglect. Even if only a small percentage of these children go on to become violent criminals who otherwise would not have, the 270 figure is a significant underestimation of the number of additional violent criminals arising out of the children who were abused and neglected in 2004.

In a national version of this report, FIGHT CRIME: INVEST IN KIDS projected that there will be at least 250 additional individuals arrested for homicide which would not take place if not for that abuse and neglect these children suffered in 2001 (see [www.fightcrime.org](http://www.fightcrime.org)). Given the smaller numbers for Washington, however, this report does not attempt to make such projections. The research is clear though: if Washington can significantly reduce abuse and neglect now, it will be preventing many murders in the future.

When Widom later looked at attempted suicides, she determined that 18.8 percent of children with substantiated cases of abuse or neglect went on to attempt suicide at some point in their life, whereas 7.7 percent of the children without abuse or neglect later attempted suicide. The difference is a dramatic 11.1 percentage points. Applying that 11.1 percentage point difference to the number of confirmed cases of abuse or neglect in 2004 produces 740 additional suicide attempts that presumably would not happen if not for the lingering suffering from the abuse and neglect suffered in 2004 [ $6,730 \times .111 = 740$ ].

## Endnotes

- <sup>1</sup> U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, Children's Bureau. (2006). *Child maltreatment 2000- 2004*. Retrieved January 3, 2007 from <http://www.acf.hhs.gov/programs/cb/pubs/cm04/index.htm>
- <sup>2</sup> Sedlak, A. J., & Broadhurst, D. D. (1996). Executive summary of *The third national incidence study of child abuse and neglect*. Retrieved from the U.S. Department of Health and Human Services Web site: <http://www.calib.com/nccanch/pubs/statinfo/nis3.cfm#national>. According to a discussion published by the Child Welfare League of America, "The Third National Incidence Study of Child Abuse and Neglect, conducted in 1995, estimates that the real incidence of abuse and neglect may be three times greater than the numbers reported to authorities." Child Welfare League of America. (2002). Child protection frequently asked questions. Retrieved from <http://www.cwla.org/programs/childprotection>
- <sup>3</sup> Washington State Department of Health. (2006). Draft Child Abuse and Neglect. Retrieved January 4, 2006 from [http://www.doh.wa.gov/hsqa/emstraua/injury/pubs/icpg/Draft\\_Child\\_Maltreatment.pdf](http://www.doh.wa.gov/hsqa/emstraua/injury/pubs/icpg/Draft_Child_Maltreatment.pdf)
- <sup>4</sup> For further studies on the underreporting of child abuse and neglect, see: Theodore, A.D., Chang, J.J., Runyan, D.K., Hunter, W.M., Bangdiwala, S.I., & Agans, R. (2005). Epidemiologic Features of the Physical and Sexual Maltreatment of Children in the Carolinas. *Pediatrics*, 115(3), e331-e337; Hussey, J.M., Chang, J.J. & Kotch, J.B. (2006). Child Maltreatment in the United States: Prevalence, Risk Factors, and Adolescent Health Consequences. *Pediatrics*, 118(3), 933-942.
- <sup>5</sup> U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, Children's Bureau. (2006). *Child maltreatment 2000- 2004*. Retrieved January 3, 2007 from <http://www.acf.hhs.gov/programs/cb/pubs/cm04/index.htm>
- <sup>6</sup> The figure for children killed by abuse and neglect before their first birthday nationally was 45 percent. U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, Children's Bureau. (2006). *Child maltreatment 2004*. Retrieved January 3, 2007 from <http://www.acf.hhs.gov/programs/cb/pubs/cm04/index.htm>
- <sup>7</sup> U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, Children's Bureau. (2006). *Child maltreatment 2004*. Retrieved January 3, 2007 from <http://www.acf.hhs.gov/programs/cb/pubs/cm04/index.htm>
- <sup>8</sup> Langstaff, J., Sleeper, T., (April 2001). *National Center on Child Fatality Review*. Washington, D.C., Department of Justice. Retrieved from [www.ncjrs.org/pdffiles1/ojdp/fs200112.pdf](http://www.ncjrs.org/pdffiles1/ojdp/fs200112.pdf)
- <sup>9</sup> California Department of Health and Human Services, Epidemiology and Prevention for Injury Control Branch. (1999). *Counting fatal child abuse and neglect, results of California reconciliation audit, 1996* [On-line]. Retrieved from the California Department of Human Services website: <http://www.dhs.ca.gov/epic/documents/FatalCANAudit96.pdf>
- <sup>10</sup> Herman-Giddens, M.E., Brown, G., Verbiest, S., Carlson, P.J., Hooten, E.G., Howell, E., & Butts, J.D. (1999). Underascertainment of child abuse mortality in the United States. *Journal of the American Medical Association*, 282(5), 463-467; Langstaff, J., & Sleeper, T. (2001).
- <sup>11</sup> Washington State Department of Social and Health Services, Children's Administration. (2006). Washington State Children's Administration Annual Fatality Report: 2003, retrieved January 5, 2007 from: [www1.dshs.wa.gov/pdf/ca/FINAL%20Child%20Fatality%20Report%202003%202-22-06.pdf](http://www1.dshs.wa.gov/pdf/ca/FINAL%20Child%20Fatality%20Report%202003%202-22-06.pdf)
- <sup>12</sup> Washington State Department of Health, *Childhood Injury Report*, retrieved January 5, 2007 from <http://www.doh.wa.gov/hsqa/emstraua/injury/pubs/wscir/>
- <sup>13</sup> Washington Council for Prevention of Child Abuse and Neglect. (2007). *What is Abuse?* Retrieved January 3, 2007 from: [http://www.wcpcan.wa.gov/temp\\_what\\_is\\_abuse.asp](http://www.wcpcan.wa.gov/temp_what_is_abuse.asp)
- <sup>14</sup> U.S. Department of Health and Human Services, Administration on Children, Youth, and Families, Children's Bureau. (2006). *Child maltreatment 2004*. Retrieved January 3, 2007 from <http://www.acf.hhs.gov/programs/cb/pubs/cm04/index.htm>
- <sup>15</sup> Perry, B. D. (2002). Childhood experience and the expression of genetic potential: What childhood neglect tells us about nature and nurture. *Brain and mind*, 3, 79-100.
- <sup>16</sup> Perry, B. D. (2002). *Bonding and attachment in maltreated children: Consequences of emotional neglect in childhood*. Child Trauma Academy Press, 3, 1-30.
- <sup>17</sup> Widom, C. S. (1991). Avoidance of criminality in abused and neglected children. *Psychiatry*, 54, 162-174.
- <sup>18</sup> Perry, B. D., Pollard, R., Blakely, T., Baker, W., & Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation and "use-dependent" development of the brain: How "states" become "traits." *Infant Mental Health Journal*, 16(4), 271-291.
- <sup>19</sup> Perry, B. D. (1997). Incubated in terror: Neurodevelopmental factors in the 'cycle of violence.' In J. Osofsky (Ed.), *Children in a Violent Society* (pp. 124-148). New York: Guilford Press.
- <sup>20</sup> Golden, C. J., Jackson, M. I., 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.
- <sup>21</sup> Raine, A. (1993). *The psychopathology of crime: Criminal behavior as a clinical disorder*. New York: Academic Press.
- <sup>22</sup> Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Pritchep, L. S., Feldman, M., & Yeager, C. (1986). Psychiatric, neurological, and psycho-educational characteristics of 15 death row inmates in the United States. *American Journal of Psychiatry*, 143, 838-845; Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Pritchep, L. S., Feldman, M., Yeager, C. (1988). Neuropsychiatric, psychoeducational and family characteristics of 14 juveniles condemned to death in the United States. *American Journal of Psychiatry*, 145(5), 585-589. Cited in Rhodes, R. (1999). *Why they kill*. New York: Randomhouse.
- <sup>23</sup> D. Golden, C. J., Jackson, M. I., 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. For a discussion of the various research on the links between head injuries and violence, see: Karr-Morse, R., & Wiley, M. S. (1997). *Ghost from the nursery: Tracing the roots of violence*. New York: The Atlantic Monthly Press.
- <sup>24</sup> Zingraff, M. T., Leiter, J., Johnsen, M. C., & Myers, K. A. (1994). The mediating effect of good school performance on the maltreatment-delinquency relationship. *Journal of Research in Crime and Delinquency*, 31(1), 62-91.
- <sup>25</sup> Widom, C. S. (2000). Childhood victimization: Early adversity, later psychopathology. Retrieved from the National Criminal Justice Reference Service Web site: [www.ncjrs.org/pdffiles1/jr000242b.pdf](http://www.ncjrs.org/pdffiles1/jr000242b.pdf)
- <sup>26</sup> Maxfield, M. G., & Widom, C. S. (1996). The cycle of violence: Revisited 6 years later. *Archives of Pediatric and Adolescent Medicine*, 150, 390-395.
- <sup>27</sup> Hawkins, J. D., Herrenkohl, T., Farrington, D. P., Brewer, D., Catalano, R. F., & Harachi, T. W. (1998). A review of predictors of youth violence. In R. Loeber & D. Farrington (Eds.), *Serious and violent juvenile offenders: Risk factors and successful interventions* (pp. 106-146). Thousand Oaks, CA: Sage Publications.
- <sup>28</sup> Child Welfare League of America. (1997). Sacramento County community intervention program: Findings from a comprehensive study by community partners in child welfare, law enforcement, juvenile justice, and the Child Welfare League of America. Washington, DC: Author.
- <sup>29</sup> Smith, C., & Thornberry, T. P. (1995). The relationship between childhood maltreatment and adolescent involvement in delinquency. *Criminology*, 33, 451-479.
- <sup>30</sup> One of these researchers, Dr. Lonnie Athens, interviewed a large

number of violent criminals and concluded that children who became seriously violent criminals were almost always trained to be violent by violent individuals in their lives. For a profile on Athens, see: Rhodes, R. (1999). *Why they kill*. New York: Randomhouse. See the rest of the text for additional examples.

<sup>31</sup> Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Pritchep, L. S., Feldman, M., & Yeager, C. (1986). Psychiatric, neurological, and psycho-educational characteristics of 15 death row inmates in the United States. *American Journal of Psychiatry*, 143, 838-845; Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Pritchep, L. S., Feldman, M., Yeager, C. (1988). Neuropsychiatric, psychoeducational and family characteristics of 14 juveniles condemned to death in the United States. *American Journal of Psychiatry*, 145(5), 585-589. Cited in Rhodes, R. (1999). *Why they kill*. New York: Randomhouse.

<sup>32</sup> Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Pritchep, L. S., Feldman, M., Yeager, C. (1988). Neuropsychiatric, psychoeducational and family characteristics of 14 juveniles condemned to death in the United States. *American Journal of Psychiatry*, 145(5), 585-589. Cited in Rhodes, R. (1999). *Why they kill*. New York: Randomhouse.

<sup>33</sup> Douglas, J., & Olshaker, M. (1999). *The anatomy of motive*. New York: Scribner.

<sup>34</sup> Widom, C. S. (2000). Childhood victimization: Early adversity, later psychopathology. Retrieved from the National Criminal Justice Reference Service Web site: [www.ncjrs.org/pdffiles1/jr000242b.pdf](http://www.ncjrs.org/pdffiles1/jr000242b.pdf)

<sup>35</sup> Widom, C. S. (2000). Childhood victimization: Early adversity, later psychopathology. Retrieved from the National Criminal Justice Reference Service Web site: [www.ncjrs.org/pdffiles1/jr000242b.pdf](http://www.ncjrs.org/pdffiles1/jr000242b.pdf)

<sup>36</sup> National Institute of Mental Health. (2003). Suicide facts. Retrieved from <http://www.nimh.nih.gov/research/suifact.cfm>. For every successful suicide, there are an estimated 8 to 25 attempts. It is unknown, however, what proportion of successful suicides there are among the population of abused and neglected individuals who attempt suicide.

<sup>37</sup> Egeland, B., Jacobvitz, D., & Sroufe, A. (1998). Breaking the cycle of abuse. *Child Development*, 59, 1080-1088. Cited in Ertem, I., Leventhal, J., & Dobbs, S. (2000). Intergenerational continuity of child physical abuse: How good is the evidence? *The Lancet*, 356, 814-819. Ertem, et al. systematically reviewed and ranked for rigor a number of studies that attempted to trace the intergenerational continuity of child abuse. They discovered that current studies show a wide range of results.

<sup>38</sup> Washington State Department of Social & Health Services, Children's Administration. (2006). *Quarterly child fatality report: January – March 2006*. Retrieved from the internet on January 4, 2007, at <http://www1.dshs.wa.gov/legrel/LR/CIYA.shtm>

<sup>39</sup> Washington State Department of Social & Health Services, Children's Administration. (2006). Washington State Children's Administration Annual Child Fatality Report: 2003. Retrieved from the internet on 1-18-06, at [www1.dshs.wa.gov/pdf/ca/FINAL%20Child%20Fatality%20Report%202003%202-22-06.pdf](http://www1.dshs.wa.gov/pdf/ca/FINAL%20Child%20Fatality%20Report%202003%202-22-06.pdf)

<sup>40</sup> Sedlak, A. J., & Broadhurst, D. D. (1996). Executive summary of the third national incidence study of child abuse and neglect. Retrieved from the U.S. Department of Health and Human Services Web site: <http://www.calib.com/nccanch/pubs/statinfo/nis3.cfm#national>

<sup>41</sup> Paxson, C., & Waldfogel, J. (1999). *Work, welfare, and child maltreatment*. Washington, DC: National Bureau of Economic Research.

<sup>42</sup> Shook, K. (1998). Assessing the consequences of welfare reform for child welfare. *Poverty Research News: The Newsletter of the Northwestern University/ University of Chicago Joint Center for Poverty Research*, 2(2), 8-12. Cited in Paxson, C., & Waldfogel, J. (1999). *Work, welfare, and child maltreatment*. Washington, DC: National Bureau of Economic Research.

<sup>43</sup> Murphey, D. A., & Braner, M. (2000). Linking child maltreatment retrospectively to birth and home visit records: An initial examination. *Child Welfare*, 79(6), 711-728.

<sup>44</sup> Murphey, D. A., & Braner, M. (2000). Linking child maltreatment retrospectively to birth and home visit records: An initial examination. *Child Welfare*, 79(6), 711-728.

<sup>45</sup> The original findings were presented in Olds, D. L. (1998). Long-term effects of nurse home visitation on children's criminal and anti-social behavior: 15-year follow-up of a randomized controlled trial. *Journal of the American Medical Association*, 280(14), 1238-1244. David Olds, the principal author, updated some of those findings using alternative statistical analysis. Those results are presented on his web site under research findings and an interview: <http://www.nurse-familypartnership.org/index.cfm?fuseaction=home>

<sup>46</sup> For the original outcomes on the mothers in the program, see: Olds, D. L. (1997). Long-term effects of nurse home visitation on maternal life course and child abuse and neglect. *Journal of the American Medical Association*, 278(8), 637-643. For outcomes on the children in the program, see: Olds, D. L. (1998). Long-term effects of nurse home visitation on children's criminal and anti-social behavior: 15-year follow-up of a randomized controlled trial. *Journal of the American Medical Association*, 280(14), 1238-1244. David Olds, the principal author, updated some of those findings using alternative statistical analysis. Those results are presented on his web site under research findings and an interview: <http://www.nursefamilypartnership.org/index.cfm?fuseaction=home>

<sup>47</sup> The rate of state-verified cases of child abuse and neglect among low-income first-born children in Memphis was too low to serve as a reliable outcome in this setting. Olds, D. L., Henderson, C., & Eckenrode, J. (2002). Preventing child abuse and neglect with prenatal and infancy home visiting by nurses. In K. Browne, H. Hanks, P. Stratton, & C. Hamilton (Eds.), *Early prediction and prevention of child abuse: A handbook*. London: John Wiley & Sons.

<sup>48</sup> Kitzman, H., Olds, D.L., Henderson, C.R., Hanks C., Cole, R., Tatelbaum, R., McConnochie, K.M., Sidora, K., Luckey, D.W., Shaver D., Engelhardt, K., James, D., Barnard, K., (August 27, 1997). Effect of prenatal and infancy home visitation by nurses on pregnancy outcomes, childhood injuries, and repeated childbearing. *Journal of the American Medical Association*, 278(8), 644-652.

<sup>49</sup> Olds, D. L., Robinson, J., Pettitt, L., Luckey, D. W., Holmberg, J., Ng, R. K., Isacks, K., Sheff K., Henderson Jr. C. R., (December 6, 2004), Effects of home visits by paraprofessionals and by nurses: Age 4 follow-up results of a randomized trial. *Pediatrics*, 114(6), 1560-1568. Retrieved on December 2, 2005 from [www.pediatrics.org](http://www.pediatrics.org)

<sup>50</sup> Olds, D. L. (1998). Long-term effects of nurse home visitation on children's criminal and anti-social behavior: 15-year follow-up of a randomized controlled trial. *Journal of the American Medical Association*, 280(14), 1238-1244. David Olds, the principal author, updated some of those findings using alternative statistical analysis. Those results are presented on his web site under research findings and an interview: <http://www.nursefamilypartnership.org/index.cfm?fuseaction=home>

<sup>51</sup> Olds, D. L., Eckenrode, J., Henderson, C.R., Kitzman, H., Powers, J., Cole, R., Sidora, K., Morris, P., Pettitt, L.M., Luckey, D. (1997). Long-term effects of nurse home visitation on maternal life course and child abuse and neglect. *Journal of the American Medical Association*, 278(8), 637-643.

<sup>52</sup> This summary of the data across studies in Elmira, Memphis, and Denver is from the Nurse-Family Partnership website <http://www.nursefamilypartnership.org/content/index.cfm?fuseaction=showContent&contentID=113&navID=101>

<sup>53</sup> Kellie Teter, Program Manager for the Nurse-Family Partnership National Service Office, provided a table, *WA Scale of NFP Operations*, in a personal communication on August 10, 2006, from which the figures for current capacity, families served, and full-time employees are drawn.

<sup>54</sup> Personal conversation with Kathy Zeisel, Parents As Teachers State Coordinator, Parent Trust for Washington Children, on January 18, 2007.

<sup>55</sup> For example, in a meta-analysis of the more rigorous research done on Parents As Teachers programs as stand-alone programs

which was done for a cost-benefit analysis, Steve Aos and his team at the Washington State Institute for Public Policy concluded that the program produced \$4,300 in benefits per family enrolled, and more than paid for itself, saving the public on average \$800 for every family enrolled. Aos, S. (2004, September). These results were not as strong as those reported for NFP, but were still impressive. Benefits and costs of prevention and early intervention programs for youth. Olympia, WA: Washington State Institute for Public Policy. Available online, <http://www.wsipp.wa.gov/pub.asp?docid=04-07-3901> There are also strong results for Early Head Start (EHS) when it combines center based care with home visitation. Families randomly assigned to receive the combined center/home visit approach were 62 percent more likely to read to their children daily than families that did not receive the program. Children left out of these EHS programs were 34 percent more likely to score in the low range on a test of cognitive, social and emotional development than those enrolled in EHS. See: Love, J. M., Kisker, E. E., Ross, C. M., Schochet, P. Z., Brooks-Gunn, J., Paulsell, D., Boller, K., Constantine, J., Vogel, C., Fuligni, A. S., & Brady-Smith, C. (2002). Making a difference in the lives of infants and toddlers and their families: The impacts of Early Head Start, Volume I, Final technical report. Washington, DC: U. S. Department of Health and Human Services, Administration for Children and Families, Head Start Bureau.

<sup>56</sup> Retrieved from the Child-Parent Home Program website on February 16, 2006: <http://www.parent-child.org/>

<sup>57</sup> Levenstein, P., Levenstein, S., Oliver, D., (2002). First grade school readiness of former child participants in a South Carolina replication of the Parent-Child Home Program, *Applied Developmental Psychology*. 23(2002) 331-353. A special set of severely developmentally-delayed children who had been added to the program were not included in this study.

<sup>58</sup> Parent-Child Home Program, School Readiness in Buffalo New York, Retrieved from the Child-Parent Home Program website on February 16, 2006: <http://www.parent-child.org/>

<sup>59</sup> Parent-Child Home Program, School Readiness in Pittsfield MA, Retrieved from the Child-Parent Home Program website on February 16, 2006: <http://www.parent-child.org/>

<sup>60</sup> Unfortunately, though randomized, this study suffered from a high attrition rate and low sample sizes, so the results should be re-confirmed in other studies. Levenstein, P., Levenstein, S., Shiminski, J.A., Stolzberg, J.E., (1998). Long-term impact of a verbal interaction program for at-risk toddlers: An exploratory study of high school outcomes in a replication of the Mother-Child Home Program, *Journal of Applied Developmental Psychology*. 19(2): 267-285. The study and the study had a high number of children lost to follow-up, but the results were robust enough to warrant publication in a peer reviewed journal.

<sup>61</sup> Lochner, L., & Moretti, E. (2003). The Effect of Education on Crime: Evidence from Prison Inmates, Arrests, and Self-Reports. Manuscript. pp. 1-30.

<sup>62</sup> Organizational Research Services. (September 2006). *Parent-Child Home Program/Play & Learn Group Demonstration Project: Preliminary finding report*. Seattle, prepared for the Business Partnership for Early Learning,

<sup>63</sup> The projections on women eligible and likely to take advantage of the program is from an Excel data chart titled, Washington State NFP costs, draft, 5-12-06, created by the Consortium of Nurse-Family Partnership Programs and provided to us by Kellie Teter, Program Manager for the Nurse-Family Partnership National Service Office on August 10, 2006. Teter also provided us with another table, WA Scale of NFP Operations, from which the estimate of current capacity is drawn.

<sup>64</sup> Miller, T., Cohen, M., & Weirsema, B. (1998). *Cost of child abuse and neglect, 1996*. Landover, MD: Children's Safety Network Economics and Insurance Resource Center, National Public Services Research Institute. The figure includes an accounting for lost quality of life.

<sup>65</sup> Childrens Safety Network. (2000). Cost of Child Abuse and

Neglect in Washington. Retrieved January 4, 2006 from <http://www.edarc.org/pubs/can/wa-can.htm>

<sup>66</sup> The exact figure is \$432,948,513. The federal figure is \$206,085,394, state figure is \$226,863,119. Scarcella, C., Bess, R., Zielewski, E., Geen, R. (2006). The Cost of Protecting Vulnerable Children V: Assessing the New Federalism. The Urban Institute. Retrieved on November 22, 2006 at: [http://www.urban.org/UploadedPDF/311314\\_vulnerable\\_children.pdf](http://www.urban.org/UploadedPDF/311314_vulnerable_children.pdf)

<sup>67</sup> Burr, J., Grunewald, R. (2006). *Lessons learned: A review of early childhood development studies, Draft*, retrieved on November 22, 2006 from <http://www.minneapolisfed.org/research/studies/early-child/index.cfm>. Grunewald confirmed that the figures on NFP's cost benefit results will not change when they finalize this report. The current analysis is based on the original cost benefit study by RAND: Karoly, L.A., Greenwood, P.W., Everingham, S.S., Houbé, J., Kilburn, M.R., Rydell, C.P., Sanders, M., & Chiesa, J. (1998). *Investing in our children: What we know and don't know about the costs and benefits of early childhood interventions* [Online]. Retrieved November 22, 2006 from: <http://www.rand.org/publications/MR/MR898/>

<sup>68</sup> These savings included savings to crime victims and taxpayers. In Exhibit 4 of the report, Aos calculates that NFP results in a 56 percent reduction in crime for the mothers in the program. Aos, S, Miller, M., Drake, E. (2006). *Evidence-Based Public Policy Options To Reduce Future Prison Construction, Criminal Justice Costs, And Crime Rates*. Olympia, WA: Washington State Institute for Public Policy. Retrieved November 22, 2006 at: <http://www.wsipp.wa.gov/rptfiles/06-10-1201.pdf>

<sup>69</sup> NFP reduced crime by the mothers in the program by 56 percent. Of the over 50 programs NFP is compared to, the next highest percentage reduction in crime, using Aos's formula, is 22 percent. Aos, S, Miller, M., Drake, E. (2006). *Evidence-Based Public Policy Options To Reduce Future Prison Construction, Criminal Justice Costs, And Crime Rates*. Olympia, WA: Washington State Institute for Public Policy. Retrieved November 22, 2006 at: <http://www.wsipp.wa.gov/rptfiles/06-10-1201.pdf>





For more information or to access other reports contact us at: [www.fightcrime.org/wa](http://www.fightcrime.org/wa)