

# Breaking the Cycle

HOW HOME VISITING CAN REDUCE CHILD ABUSE AND NEGLECT  
AND PREVENT CRIME IN NEVADA



A Report by FIGHT CRIME: INVEST IN KIDS

# Acknowledgements

## **Breaking the Cycle** **How Home Visiting Can Reduce Child Abuse** **and Neglect and Prevent Crime in Nevada**

A Report by FIGHT CRIME: INVEST IN KIDS

### **ACKNOWLEDGEMENTS**

FIGHT CRIME: INVEST IN KIDS is supported by tax-deductible contributions from foundations, individuals and corporations. FIGHT CRIME: INVEST IN KIDS accepts no funds from federal, state or local governments.

Major funding for FIGHT CRIME: INVEST IN KIDS is provided by: Birth to Five Policy Alliance • The California Endowment • The California Wellness Foundation • Annie E. Casey Foundation • Robert Sterling Clark Foundation • Bill & Melinda Gates Foundation • The Grable Foundation • Grand Victoria Foundation • The George Gund Foundation • Hagedorn Foundation • Irving Harris Foundation • The Heinz Endowments • W.K. Kellogg Foundation • McCormick Foundation • The New York Community Trust • The David and Lucile Packard Foundation • William Penn Foundation • The Pew Charitable Trusts • Pritzker Early Childhood Foundation • Rauch Foundation • Dr. Scholl Foundation • W. Clement and Jessie V. Stone Foundation. The opinions expressed are those of the author(s) and do not necessarily reflect the views of The Pew Charitable Trusts.

This report was authored by Lindsay Warner, William Christeson and Stephanie Schaefer.

Mike Kiernan, Ted Eismeier, Natasha O'Dell Archer, Miriam Rollin and Soren Messner-Zidell also contributed to this report.

# Breaking the Cycle

HOW HOME VISITING CAN REDUCE CHILD ABUSE AND NEGLECT AND PREVENT CRIME IN NEVADA

## Executive Summary



**Abuse and neglect increases crime.** Nothing can fully prepare a law enforcement officer to walk into a home where child abuse has taken place. The terrible experience of removing children from

their homes is one reason why the law enforcement leaders of FIGHT CRIME: INVEST IN KIDS are so committed to preventing abuse or neglect *before* children are hurt. Over 4,600 Nevada children were victims of abuse or neglect in 2010, almost 90 children every week, and at least 15 Nevada children died from that abuse or neglect. The true numbers are likely much higher because many cases of abuse and neglect are not reported. In addition, law enforcement leaders want to prevent abuse and neglect because maltreatment contributes to future crime. While most survivors of childhood abuse and neglect never become violent criminals, research shows that an estimated *over 185 victims of abuse and neglect in Nevada in 2010 will later become violent criminals* who otherwise would have avoided such crimes if not for the abuse and neglect they endured as children.

**Home visiting for families with infants and young children can cut abuse and neglect and reduce future crime.** One evidence-based program, the Nurse-Family Partnership (NFP), cut abuse and neglect and arrests in half. These large reductions in abuse and neglect and crime mean that home visiting can save far more than it costs. However, only proven, evidence-based programs can realize substantial outcomes for children and families and resulting fiscal savings for states and communities. We need to ensure that public investments are directed to those services proven to work. Promising programs that lack a strong evidence base should be rigorously evaluated to confirm they deliver results.

**Stopping child abuse is a critical crime prevention strategy.**

As law enforcement leaders, we urge state lawmakers to direct federal and state funding to maintain, improve and expand existing home visiting programs even in these tough financial times. In order to leverage federal funding for home visiting, Nevada *must* preserve existing state efforts to fund evidence-based home visiting. In addition, we urge the Nevada congressional delegation to protect federal funding of voluntary, evidence-based home visitation services as a proven child abuse and neglect prevention strategy that will reduce future crime and save taxpayer money.

# Breaking the Cycle

## HOW HOME VISITING CAN REDUCE CHILD ABUSE AND NEGLECT AND PREVENT CRIME IN NEVADA

### The Toll of Abuse and Neglect - More Violence, Suicides and Abuse in the Future

Most Nevadans hear about severe cases of abuse on the evening news. Few, however, know how widespread the problem is. According to figures reported to the United States Department of Health and Human Services, over 4,600 Nevada children were confirmed victims of abuse or neglect in 2010; almost 90 children every week. Fifteen children died as a result of abuse and neglect.<sup>1</sup> The true numbers are almost certainly much higher due primarily to underreporting. Research indicates that the actual number of children exposed to abuse or neglect is well over three times as high, meaning there may be more than 13,000 victims per year.<sup>2</sup> The youngest children are the most vulnerable. Nationally, one third of all abuse victims are younger than 4 years of age and almost half of maltreatment fatalities are among children under the age of 1.<sup>3</sup>

The long-term consequences of this abuse and neglect include more costly incidences of violence, suicide and other poor life outcomes. Physical abuse can cause post-traumatic stress disorders leaving children quicker to switch into a "fight or flight" mode.<sup>4</sup> The impact of severe neglect can be equally harmful. Dr. Bruce Perry, a neurobiologist and authority on brain development and children in crisis has written,

**Being abused or neglected almost doubles the odds that a child will commit a crime as a juvenile.**

Cathy S. Widom, Adjunct Professor of Psychology,  
University of Medicine & Dentistry of New Jersey,(2000)

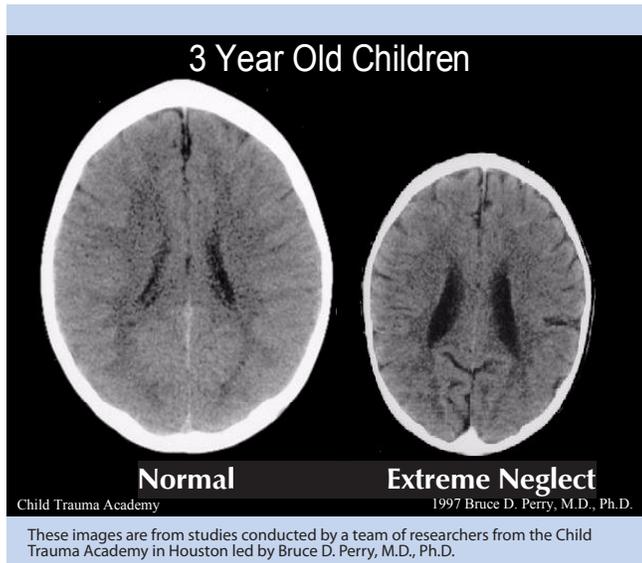


Over 4,600 children are abused and neglected in Nevada each year - enough to fill the Colosseum at Caesars Palace.

Forest & Kim Starr, 2012

"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." Perry explains that severely neglected children frequently respond to mild provocation with aggression and cruelty that "is often accompanied by a detached, cold lack of empathy."<sup>5</sup> Perry further warns: "The most dangerous children [and adults] are created by a malignant combination of experiences. Developmental neglect and traumatic stress during childhood create violent, remorseless children."<sup>6</sup>

Although surveys report varying numbers, 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>7</sup> Research by Dr. Cathy Spatz Widom found that even after isolating other risk factors for crime, like growing up in poverty or with high-crime peers, child abuse and neglect is a significant driver of crime rates. Compared to youth from similar



backgrounds and neighborhoods, being abused or neglected almost *doubles the odds* that a child will commit a crime by age 19.<sup>8</sup>

As for violent crime, Widom found that 18 percent of abused or neglected youngsters went on to be arrested for a violent crime 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>9</sup>

Applying Widom's four percentage point figure to Nevada's over 4,600 cases of abuse and neglect in 2010 produces a figure of over 185 additional Nevada citizens 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.<sup>10</sup>

Perhaps most disturbing, researchers who conducted extensive interviews with extremely violent offenders are convinced that severe abuse or neglect was a defining influence in almost all of these violent offenders' lives.<sup>11</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>12</sup> John Douglas, one of the experts who helped the FBI develop violent criminal profiles, reached similar conclusions from his studies.<sup>13</sup>

Widom's research shows that an increased risk of criminality is not the only negative outcome abused or neglected children face. She found that children without exposure to abuse or neglect were 40 percent more likely to be employed and 50 percent more likely to have stable marriages than individuals who were abused or neglected. Victims of abuse or neglect were also more than twice as likely to attempt suicide.<sup>14</sup>

Further, abuse victims are more likely than non-victims to become abusers themselves, continuing the cycle of family violence. Study results vary, but one study comparing extreme cases found that poor mothers who had been severely physically abused as children were 13 times more likely to abuse their own children than mothers who had emotionally supportive parents.<sup>15</sup> More generally, evidence suggests that an estimated one third of adults with a history of abuse may maltreat their own children.<sup>16</sup>

Many abused or neglected children grow up to lead productive lives, and these children can often be helped with proper care and services. Unfortunately, however, some injuries cannot be undone. New research emerging from neurobiology, endocrinology, immunology and genetics reveals serious lifelong physical and mental health consequences that have never before been connected to early abuse and neglect. These include increased risk of heart disease, diabetes, obesity, depression and addiction.<sup>17</sup> For states like Nevada, the best and most cost effective way to reduce the short- and long-term costs, both financial and emotional, of abuse and neglect is to invest in services with a proven record of preventing maltreatment and improving child and family wellbeing. One such program is quality, voluntary home visiting for families with infants and young children.

### What is Home Visiting?

High-quality, voluntary home visiting teams parents with trained professionals who provide information and support during pregnancy and throughout the child's first years of life. Quality home visiting is proven to improve short- and long-term outcomes for participating children and families.

By reaching expectant mothers early, home visitation helps them adopt healthier behaviors at a critical time that can impact child development. After the baby's birth, home visitors help parents understand and support healthy infant development; provide responsive, nurturing care; and ensure a safe, stimulating environment. In addition, home visitors promote the parent's own personal growth and development by working with them to improve their own education, find employment and build stronger, more stable relationships with the people in their lives. All of these changes can lead to less maltreatment and better outcomes for children.

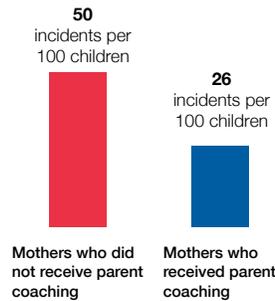
### Quality Home Visiting Cuts Abuse and Neglect, Prevents Crime

Research has shown that home visiting can prevent child abuse and neglect, give kids the right start in life and reduce crime. Of the main models used in Nevada, two have been shown to reduce abuse and neglect and one has shown a decrease criminal behavior among the children served.

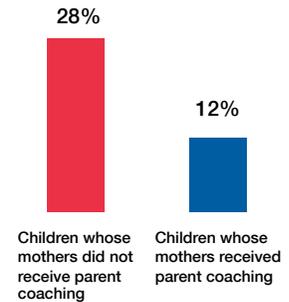
- The Nurse-Family Partnership (NFP)** serves approximately 280 Nevada families in Clark County within the city of Las Vegas.<sup>18</sup> NFP pairs nurses with young, poor women who are experiencing their first pregnancy. The visits, which are voluntary for families, start before the birth of a child and last until the child is two. Researchers conducted a long-term study of their Elmira, New York program, tracking abuse and neglect and crime results. The randomized controlled trial showed that children of participating mothers had 48 percent fewer substantiated reports of abuse or neglect than the children of mothers in the control group, indicating that home visiting can cut abuse and neglect nearly in half among at-risk children.<sup>19</sup> The children left out of the program also had more than twice as many arrests by age 15, and they were twice as likely to be convicted by age 19.<sup>20</sup>
- Parents as Teachers (PAT)** has four Nevada programs.<sup>21</sup> A randomized controlled trial found that teen mothers who participated in PAT, combined with case management to help families find any needed psychological, health, educational, or vocational services, were less likely to be investigated for child abuse and neglect than teen mothers who did not participate.<sup>22</sup>
- Early Head Start** has almost 20 Nevada programs.<sup>23</sup> A randomized control trial study found notable positive effects on language and cognitive development and reduced aggressive behavior at ages 3 and 5, but those outcomes were not sustained.<sup>24</sup> Improvements in Early Head Start are already underway as part of the 2007 reauthorization of the program to ensure the positive early outcomes are strengthened and sustained.
- Home Instruction for Parents of Preschool Youngsters (HIPPY)** has one Nevada site.<sup>25</sup> HIPPY serves 4- and 5-year-olds, helping parents with limited formal education prepare their children for school. A randomized control trial of HIPPY in New York found that cognitive skills were significantly higher at the end of the program for participants compared to those not receiving HIPPY. When the children were tested again a year later, the reading and adaptation to the classroom scores were also significantly higher for children in HIPPY compared to children not receiving the program.<sup>26</sup>
- Nevada has additional state- and locally created home visiting models. These models should be rigorously evaluated to ensure they produce the desired results or programs should transition to evidence-based models.

**Children not served by the Nurse-Family Partnership were abused and neglected twice as often by age 15 and were twice as likely to be convicted of a crime by age 19**

**Abuse and Neglect Down 48 percent**  
Incidents of substantiated abuse or neglect per 100 children by age 15



**More than Twice as Likely to be Convicted**  
Percent convicted by age 19



Sources: Olds, 2006; Eckenrode, 2010

## Federal Funding

Thanks to the solid research on evidence-based home visiting, the federal Maternal, Infant, and Early Childhood Home Visiting (MIECHV) program provides \$1.5 billion over five years to fund the expansion of such programs nationally. Nevada was awarded \$1.1 million in formula funding from MIECHV in Fiscal Year 2011.<sup>27</sup> After a needs assessment process, Nevada is using the federal funding in Clark County (Las Vegas) to expand Early Head Start and Home Instruction for Parents of Preschool Youngsters (HIPPY) programs and in Washoe County (Reno) to expand Early Head Start. With future funding, the state hopes to support program creation and expansion in Mineral, Nye and Douglas Counties, which have the next highest levels of risk for young children.<sup>28</sup>

The federal legislation requires that federal dollars supplement existing state home visiting spending, not replace it. Nevada

**The Washington State Institute for Public Policy found that NFP produced a net savings of over \$13,000 for each family served.**

Washington State Institute  
for Public Policy (2012)

must maintain the same level of state spending to remain eligible for federal funding. This requirement makes it even more crucial that Nevada, at a minimum, maintain existing funding for its state programs.

## Cost Savings

The Centers for Disease Control and Prevention recently concluded that, “the total lifetime economic burden resulting from new cases of fatal and nonfatal child maltreatment in the United States in 2008 is approximately \$124 billion.”<sup>29</sup> In Nevada alone, total FY 2006, federal, state, and local child welfare spending on services like foster care totaled over \$100 million.<sup>30</sup> When the Washington State Institute for Public Policy applied a cost-benefit analysis to the findings from a range of rigorous studies of NFP programs in the U.S., they found that the program produced a net savings of over \$13,000 for each family served.<sup>31</sup>

## Conclusion

The 25 law enforcement and crime survivor members of FIGHT CRIME: INVEST IN KIDS in Nevada and the over 5,000 members nationally know that the most powerful weapons we have against crime, violence and abuse are the proven programs that help kids get a good start in life. High-quality home visiting for families with infants and young children can deliver strong crime-fighting results, in part by cutting abuse and neglect, so it is essential that Nevada continue to support and expand home visiting funding and fully utilize new federal funding for home visiting. If Nevada invests wisely in what works, fewer of our officers and deputies will find themselves carrying children away from abusive or neglectful homes, and fewer Nevada residents will become victims of violence in the future.

Maintaining state funding, while expanding services using new federal and private-sector resources, will require a firm commitment on the part of the governor and legislature in these tough fiscal times. It will also require the Nevada congressional delegation to protect federal funding for voluntary, evidence-based home visitation services. Supporting home visiting will prevent suffering from abuse and neglect now, reduce future crime and save taxpayers millions of dollars.<sup>32</sup> Breaking the cycle of child abuse and neglect is one of the wisest investments Nevada and our nation can make for our children and our future.

## Endnotes

- 1 4,654 unique victims. Children's Bureau. (2011). *Child Maltreatment 2010*. Washington, DC: U.S. Department of Health and Human Services. Retrieved on January 26, 2012 from <http://www.acf.hhs.gov/programs/cb/pubs/cm10>
- 2 Sedlak, A.J., Mettenburg, J., Basena, M., Peta, I., McPherson, K., Greene, A., et al. (2010). *Fourth national incidence study of child abuse and neglect (NIS-4)*. Washington, DC: U.S. Department of Health and Human Services. Retrieved on December 8, 2011 from [http://www.acf.hhs.gov/programs/opre/abuse\\_neglect/nat\\_incid](http://www.acf.hhs.gov/programs/opre/abuse_neglect/nat_incid)
- 3 Children's Bureau. (2011). *Child Maltreatment 2010*. Washington, DC: U.S. Department of Health and Human Services. Retrieved on February 24, 2012 from <http://www.acf.hhs.gov/programs/cb/pubs/cm10>
- 4 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.
- 5 Perry, B. D. (2002). Bonding and attachment in maltreated children: Consequences of emotional neglect in childhood. *Child Trauma Academy Press*, 3, 1-30.
- 6 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.
- 7 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.
- 8 Widom C.S. (2000). Childhood victimization: Early adversity, later psychopathology. *National Institute of Justice Journal*. Retrieved on December 8, 2011 from <http://www.nij.gov/journals/jr000242.htm>
- 9 Maxfield, M.G. & Widom, C.S. (1996). The cycle of violence: Revisited 6 years later. *Archives of Pediatrics and Adolescent Medicine*, 150, 390-395.
- 10 This is considered a seminal work in the field and is thus used even though it is old. Maxfield, M.G., & Widom, C.S. (1996). The cycle of violence: Revisited 6 years later. *Archives of Pediatrics and Adolescent Medicine*, 150, 390-395. Widom found that 18 percent of the abused or neglected youngsters went on to be arrested for a violent crime 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 29 percent higher likelihood. Applying the four percentage point increase in criminality (18 percent vs. 14 percent) to the 4,654 confirmed Nevada cases of abuse and neglect in 2010 produces a figure of approximately 186 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.
- 11 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: Random House. See the rest of the book for additional examples.
- 12 Lewis, D. O., Pincus, J. H., Bard, B., Richardson, E., Prichep, L. S., Feldman, M., et al. (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., Prichep, L. S., Feldman, M., et al. (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: Random House.
- 13 Douglas, J. & Olshaker, M. (1999). *The anatomy of motive*. New York: Scribner.
- 14 Widom, C.S. (2000). Childhood victimization: Early adversity, later psychopathology. *National Institute of Justice Journal*. Retrieved on December 8, 2011 from <http://www.nij.gov/journals/jr000242.htm>
- 15 Egeland, B., Jacobovitz, 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.
- 16 Kaufman, J., & Zigler, E. (1987). Do abused children become abusive parents. *American Journal of Orthopsychiatry*, 57, 186-192. There is disagreement about the accuracy of retrospective studies of intergenerational transmission due to methodological issues, but this is a frequently cited figure.
- 17 Karr-Morse, R., & Wiley, M.S. (2012). *Scared Sick: The Role of Childhood Trauma in Adult Disease*. New York, NY: Basic Books.
- 18 Nurse-Family Partnership. (2012). *Nurse-Family Partnership in Nevada, state profile 2012*. Denver, CO: Author. Retrieved on May 8, 2012 from [http://www.nursefamilypartnership.org/assets/PDF/Communities/State-profiles/NV\\_State\\_Profile](http://www.nursefamilypartnership.org/assets/PDF/Communities/State-profiles/NV_State_Profile)
- 19 The original findings were presented in Olds, D.L., Eckenrode, J., Henderson, C.R., Kitzman, J.H., Powers, J., Cole, R., et al. (1997). Long-term effects of home visitation on maternal life course and child abuse and neglect: Fifteen-year follow-up of a randomized trial. *JAMA*, 278(8), 637-643; Revised results in: Luckey, D.W., Olds, D.L., Zhang, W., Henderson, C., Knudtson, M., Eckenrode, J., et al. “Revised analysis of 15-Year Outcomes in the Elmira Trial of the Nurse-Family Partnership.” Prevention Research Center for Family and Child Health, University of Colorado Department of Pediatrics, 2008.
- 20 Eckenrode, J., Campa, M., Luckey, D.W., Henderson, C.R., Cole, R., et al. (2010). Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19-year follow-up of a randomized trial. *Archives of Pediatrics and Adolescent Medicine*, 164(1), 9-15; Luckey, D.W., Olds, D.L., Zhang, W., Henderson, C., Knudtson, M., Eckenrode, J., et al. “Revised analysis of 15-Year Outcomes in the Elmira Trial of the Nurse-Family Partnership.” Prevention Research Center for Family and Child Health, University of Colorado Department of Pediatrics, 2008.
- 21 Parents as Teachers locations. Retrieved on May 8, 2012 from <http://www.parentsasteachers.org/resources/locations>
- 22 Wagner, M.M. & Clayton, S.L. (1999). The Parents as Teachers program: Results from two demonstrations. *The Future of Children*, 9(1), 91-115.
- 23 Head Start Center Locator. Retrieved on May 8, 2012 from <http://eclkc.ohs.acf.hhs.gov/hslc/HeadStartOffices>
- 24 Love, J.M., Kisker, E.E., Ross, C., Constantine, J., Boller, K., Chazan-Cohen, R., et al. (2005). The effectiveness of Early Head Start for 3-year-old children and their parents: Lessons for policy and programs. *Developmental Psychology*, 41, 885-901; Vogel, C. A., Xue, Y., Moiduddin, E. M., Kisker, E. E., & Carlson, B. L. (2010). *Early Head Start children in grade 5: Long-term follow-up of the Early Head Start Research and Evaluation Study sample*. OPRE Report #2011-8, Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.
- 25 HIPPY USA. (n.d.). *HIPPY USA independent site directory*. Retrieved on May 8, 2012 from <http://www.hippysusa.org/memangar/pdf/Independent%20Site%20Directory.pdf>
- 26 Baker, A.J.L., Piotrkowski, C.S., & Brooks-Gunn J. (Spring/Summer 1999). The Home Instruction Program for Preschool Youngsters (HIPPY). *The Future of Children*, 9(1), 91-115.
- 27 Formula funding grants are determined based on the number of children under age 5 in poverty in each state. Health Resources and Services Administration, U.S. Department of Health and Human Services. (September 2011). *Maternal, Infant and Early Childhood Home Visiting Program FY 2011 Grant Awards*. Washington, DC: Author. Retrieved on January 30, 2012 from <http://www.hrsa.gov/about/news/2011tables/110922homevisiting.html>
- 28 State of Nevada. (2011). *Maternal, Infant and Early Childhood Home Visiting, Updated state plan for the state home visiting program*. Retrieved May 8, 2012 from [http://health.nv.gov/PDFs/BCFCW/NevadaRevised\\_StatePlan.pdf](http://health.nv.gov/PDFs/BCFCW/NevadaRevised_StatePlan.pdf)
- 29 Fang, X., Brown, D.S., Florence, C.S., & Mercy, J.A. (2012). The economic burden of child maltreatment in the United States and implications for prevention. *Child Abuse and Neglect*. Available online January 31, 2012. Retrieved on March 7, 2012 from <http://www.sciencedirect.com/science/article/pii/S0145213411003140#FCANote>
- 30 Child Trends. (2010). *Total child welfare expenditures in SFY 2006, all sources*. Seattle, WA: Casey Family Programs. Retrieved on May 8, 2012 from <http://www.childwelfarepolicy.org/maps/state?id=34>
- 31 Lee, S., Aos, S., Drake, E., Pennucci, A., Miller, M., & Anderson, L. (2012). Return on investment: Evidence-based options to improve statewide outcomes, April 2012 (Document No. 12-04-1201). Olympia, WA: Washington State Institute for Public Policy. Retrieved on May 4, 2012 from <http://www.wsipp.wa.gov/rptfiles/12-04-1201.pdf>
- 32 Lee, S., Aos, S., Drake, E., Pennucci, A., Miller, M., & Anderson, L. (2012). Return on investment: Evidence-based options to improve statewide outcomes, April 2012 (Document No. 12-04-1201). Olympia, WA: Washington State Institute for Public Policy. Retrieved on May 4, 2012 from <http://www.wsipp.wa.gov/rptfiles/12-04-1201.pdf>

1212 New York Ave NW  
Suite 300  
Washington DC 20005  
Tel 202.776.0027  
Fax 202.776.0110

