



The Importance of Early Intervention for Infants and Toddlers with Disabilities and their Families

July 2011

The Infants and Toddlers with Disabilities Program (Part C) of the Individuals with Disabilities Education Act (IDEA) was created in 1986 to **enhance the development** of infants and toddlers with disabilities, **minimize potential developmental delay**, and reduce educational costs to our society by minimizing the need for special education services as children with disabilities reach school age.¹ Part C provides early intervention (EI) services to infants and toddlers aged birth to three with developmental delays or a medical condition likely to lead to a developmental delay. Part C is not intended to be a stand-alone program. The intent is to **build interagency partnerships** among state agencies and programs in health, education, human services and developmental disabilities.

WHY INTERVENE EARLY?

Decades of rigorous research show that children's earliest experiences play a critical role in **brain development**. The Center on the Developing Child at Harvard University has summarized this research:^{2,3}

- Neural circuits, which create the foundation for learning, behavior and health, are most flexible or "plastic" during the **first three years** of life. Over time, they become increasingly difficult to change.
- Persistent "**toxic**" stress, such as extreme poverty, abuse and neglect, or severe maternal depression can damage the developing brain, leading to lifelong problems in learning, behavior, and physical and mental health.
- The brain is strengthened by **positive early experiences**, especially **stable relationships** with caring and responsive adults, safe and supportive environments, and appropriate nutrition.
- Early social/ emotional development and physical health provide the foundation upon which **cognitive and language skills** develop.
- High quality early intervention services can **change a child's developmental trajectory** and improve outcomes for children, families, and communities.
- Intervention is likely to be **more effective** and **less costly** when it is provided earlier in life rather than later.

WHY ARE SERVICES ESSENTIAL?

Positive early experiences are essential prerequisites for later success in school, the workplace, and the community. Services to young children who have or are at risk for developmental delays have been shown to **positively impact outcomes across developmental domains**, including health,³ language and communication,^{4,7} cognitive development^{8,9} and social/emotional development.^{8,10} Families benefit from early intervention by being able to better meet their children's special needs from an early age and throughout their lives.^{8,11} Benefits to society include reducing economic burden through a **decreased need for special education**.^{8,9}

WHAT ARE THE UNMET NEEDS?

There is a **high need** for good quality Part C early intervention programs.

- **More children are in need of services** than are currently being served. In 2009, Part C served 348,604 children nationally, which represents 2.67% of the general population of children aged birth to 3.¹² However, research indicates that as many as 13% of birth to 3 year olds have delays that would make them eligible according to criteria commonly used by the states.¹³

nectac

The National Early Childhood Technical Assistance Center

919-962-2001 • phone 919-966-7463 • fax
www.nectac.org • web nectac@unc.edu • email



- There is a need to **serve children earlier**. Research has shown that at 9 months of age, only 9% of children who have delays that would make them eligible receive services; at 24 months of age only 12% of children who would be eligible receive services.¹⁴
- Research also suggests that there are **racial disparities** in the receipt of EI services,^{13,14} with black children who would be eligible at 24 months of age being up to five times less like to receive services than white children.¹⁴
- Young children experiencing **homelessness** are more likely to have lower birth weights than other children, learning disabilities, developmental delays, emotional problems and behavior issues,¹⁵⁻¹⁸ yet they are greatly **underrepresented** in early childhood programs.¹⁵
- There is a significant shortage of **well-trained professionals** with expertise in serving very young children with **behavioral or emotional** (e.g. depression, anxiety) problems^{19,20} that negatively impact early learning, social interactions, and the overall well-being of an estimated 9% to 14% of children aged birth to five.^{21,22}
- Approximately **10-11% of all newborns have prenatal substance exposure**,²³ a risk factor for poor developmental outcomes. An estimated **90-95% of these infants are sent home at birth without being identified or referred for services**.²³
- In 2009, 702,000 children experienced **substantiated abuse or neglect**; 40% of these children received no post-investigation services; **one third were under age four, and infants under the age of one were the most likely to be victims**.²⁴ These young children often have **high rates of physical, cognitive, social-emotional, relational and psychological problems**.^{25,26}

TAKE HOME MESSAGE

- There is an urgent and substantial need to identify as early as possible those infants and toddlers in need of services to ensure that intervention is provided when the **developing brain is most capable of change**.¹
- High quality early intervention programs for vulnerable infants and toddlers can **reduce the incidence of future problems** in their learning, behavior and health status.^{2,3}
- Intervention is likely to be **more effective and less costly** when it is provided **earlier in life** rather than later.^{2,3}


IDEA requires referral to Part C for any child under the age of 3 who is identified as affected by illegal substance abuse, or is involved in a substantiated case of child abuse or neglect.¹

REFERENCES

1. Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 et seq. (2004).
2. Center on the Developing Child at Harvard University (2008). *InfBrief: The science of early childhood development*. http://developingchild.harvard.edu/download_file/-/view/64/
3. Center on the Developing Child at Harvard University. (2010). *The foundations of lifelong health are built in early childhood*. http://developingchild.harvard.edu/library/reports_and_working_papers/foundations-of-lifelong-health/
4. American Speech-Language-Hearing Association. (2008). *Roles and responsibilities of speech-language pathologists in early intervention: Technical report*. <http://www.asha.org/docs/html/TR2008-00290.html>
5. McLean, L. K., & Cripe, J. W. (1997). The effectiveness of early intervention for children with communication disorders. In M. J. Guralnick (Ed.), *The effectiveness of early intervention* (pp. 349-428). Baltimore, MD: Brookes.
6. Ward, S. (1999). An investigation into the effectiveness of an early intervention method on delayed language development in young children. *International Journal of Language & Communication Disorders*, 34(3), 243-264.
7. Joint Committee on Infant Hearing. (2007). Year 2007 position statement: Principles and guidelines for early hearing detection and intervention programs. *Pediatrics*, 120(4), 898-921.
8. Hebbeler, K., Spiker, D., Bailey, D., Scarborough, A., Mallik, S., Simeonson, R., & Singer, M. (2007). *Early intervention for infants & toddlers with disabilities and their families: participants, services, and outcomes. Final report of the National Early Intervention Longitudinal Study (NEILS)*. http://www.sri.com/neils/pdfs/NEILS_Report_02_07_Final2.pdf
9. Hebbeler, K. (2009). *First five years find briefing. Presentation given at a Congressional briefing on June 11, 2009, to discuss Education that works: The impact of early childhood intervention on reducing the need for special education services*. http://www.sri.com/neils/pdfs/FFYF_Briefing_Hebbeler_June2009_test.pdf
10. Landa, R. J., Holman, K. C., O'Neill, A. H., & Stuart, E. A. (2010). Intervention targeting development of socially synchronous engagement in toddlers with autism spectrum disorder: A randomized controlled trial. *Journal of Child Psychology and Psychiatry*, 52(1):13-21. doi: 10.1111/j.1469-7610.2010.02288
11. Bailey, D. B., Hebbeler, K., Spiker, D., Scarborough, A., Mallik, S., & Nelson, L. (2005). Thirty-six-month outcomes for families of children who have disabilities and participated in early intervention. *Pediatrics*, 116, 1346-1352.
12. Data Accountability Center. (2010). *Part C child count: 2009*. https://www.ideadata.org/arc_toc11.asp#partCC
13. Rosenberg, S., Zhang, D. & Robinson, C. (2008). Prevalence of developmental delays and participation in early intervention services for young children. *Pediatrics*, 121(6) e1503-e1509. doi:10.1542/peds.2007-1680
14. Feinberg, E., Silverstein, M., Donahue, S. & Bliss, R. (2011). The impact of race on participation in Part C Early intervention services. *Journal of Developmental and Behavioral Pediatrics*, 32(4), 1-8.
15. U.S. Department of Education. (2006). *Report to the President and Congress on the implementation of the Education or Homeless Children and Youth Program under the McKinney-Vento Homeless Assistance Act*. <http://www.ed.gov/programs/homeless/rpt2006.doc>
16. Hart-Shegos, E. (1999). *Homelessness and its effects on children*. http://www.hffund.org/_dnld/reports/SupportiveChildren.pdf
17. National Center on Family Homelessness. (2009). *America's youngest outcasts: State report card on child homelessness*. <http://www.homelesschildrenamerica.org/findings.php>
18. National Child Traumatic Stress Network. (2005). *Facts on trauma and homeless children*. http://www.ncstnet.org/ncstn_assets/pdfs/promising_practices/Facts_on_Trauma_and_Homeless_Children.pdf
19. National Scientific Council on the Developing Child (2008). *Mental health problems in early childhood can impair learning and behavior for life* (Working Paper No. 6). http://developingchild.harvard.edu/index.php/library/reports_and_working_papers/working_papers/vwp6/
20. Osofsky, J. D., & Lieberman, A. F. (2011). A call for integrating a mental health perspective into systems of care for abused and neglected infants and young children. *American Psychologist*, 66(2), 120-128. doi: 10.1037/a0021630
21. Brauner, C. B., & Stephen, B. C. (2006). Estimating the prevalence of early childhood serious emotional/behavioral disorder. *Public Health Reports*, 121, 303-310. <http://www.publichealthreports.org/issueopen.cfm?articleID=1691>
22. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. (2010). *Addressing the mental health needs of young children and their families*. <http://store.samhsa.gov/shin/content/SMA10-4547/SMA10-4547.pdf>
23. National Center on Substance Abuse and Child Welfare. (2009). *Substance exposed infants: State responses to the problem*. <http://www.ncsacw.samhsa.gov/files/Substance-Exposed-Infants.pdf>
24. U.S. Department of Health and Human Services, Administration for Children, Youth and Families. (2010). *Child maltreatment 2009*. <http://www.acf.hhs.gov/programs/cb/pubs/cm09/index.htm>
25. Wiggins, C., Fenichel, E. & Mann, T. (2007). *Literature review: Developmental problems of maltreated children and early intervention options for maltreated children*. <http://aspe.hhs.gov/hsp/07/Children-CPS/litrev/report.pdf>
26. Barth, R. P., Scarborough, A., Lloyd, E. C., Losby, J., Casanueva, C., & Mann, T. (2007). *Developmental status and early intervention service needs of maltreated children*. <http://aspe.hhs.gov/hsp/08/devneeds/index.htm>

Compiled by Sue Goode, Martha Diefendorf & Siobhan Colgan
Download this and related publications from:
<http://www.nectac.org/pubs/pubdetails.asp?pubsid=104>

The National Early Childhood Technical Assistance Center (NECTAC) is supported by cooperative agreement H326H060005 with the Office of Special Education Programs (OSEP), U.S. Department of Education (ED). NECTAC is a part of OSEP's Technical Assistance and Dissemination (TA&D) Network. Grantees undertaking projects under government sponsorship are encouraged to express their judgment in professional and technical matters. Opinions expressed do not necessarily represent the Department of Education's position or policy.



Project Officer: Julia Martin Eile
Project Director: Lynne Kahn
Photos & Design: Alex Lazara