

The Effect of the Recession on Child Well-Being

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Overview

Safe and stable housing is critical to the healthy growth and development of children. There is an abundance of research associating inadequate or insecure housing with negative outcomes across multiple domains of child well-being. Housing instability can manifest itself both directly and indirectly in children's lives. Inadequate housing may be characterized by substandard or unsafe living conditions including homelessness. Children may also be indirectly affected by housing instability, as their parent's struggle to keep their family in their home can increase household stress.

Low-income families are more likely than families with higher incomes to have difficulty obtaining and retaining adequate housing, 93 and are more likely to move frequently. 94 For children in these families, frequent moves may mean frequent changes in school, which have been linked with poorer academic performance and lower educational attainment. 95 Children who experience numerous moves are less likely to graduate from high school than children who move less frequently. 96, 97 Housing instability may also correlate with adverse health outcomes including higher asthma rates and more pervasive developmental

delays, as well as with behavioral problems in children and adolescents. ^{22, 98-100}

Homelessness is perhaps the clearest marker of housing instability. Each year, as many as 1.5 million children experience homelessness at some point. ¹⁰¹ The characteristics of and hardships faced by such children differ very little from those of poor children in general. ^{98, 102, 103} Children need safe and stable housing in order to thrive, ⁹³ and while children who become homeless may face some unique challenges, the evidence suggests that housing instability is detrimental even if it does not lead to actual homelessness.

Prior Recessions

The scope and severity of the housing market collapse during the recent recession has drawn national attention to the plight of families and children who have become or are struggling to avoid homelessness. Yet while the current housing slump may be the worst in 50 years, high levels of residential instability predated the recession that began in December of 2007.





In fact, each of the past six recessions was preceded by a housing downturn.¹⁰⁴

Unfortunately, the consistency of this pattern does not translate into the ability to draw strong comparisons between recessions. Although data from the early 1990s and early 2000s do show that many states experienced an increase in the number of sheltered homeless individuals coinciding with periods of recession, there is not a large body of evidence on the dynamics of child and family housing instability, broadly defined, during prior recessions. 105 Further complicating efforts to draw parallels between recessions with respect to child well-being is the different social, economic, and political context in which prior recessions occurred. For example, while foreclosure rates increased in previous recessions, the types of mortgages people had were more traditional, and in some periods, regulations on lenders were stricter. As a result, there was far less volatility than is seen with the subprime mortgages that bear so much responsibility for the recent spike in foreclosures. 104, 106

Finally, because accounts from prior recessions tend to rely on shelter utilization data, it is difficult to get a broad sense of outcomes for children experiencing various forms of housing instability. Research dating back several decades documents the adverse educational, cognitive, and social outcomes associated with children living in overcrowded environments.^{107, 108} However, there is little available information on the magnitude of the problem or the long-term impacts of living in temporary accommodations, living doubled up with other families, or experiencing foreclosure, especially as many families who lose their homes tend to disappear from the radar screen.^{104, 109}

This is not to say that earlier recessions cannot help us understand the effects of the recent recession on housing stability for families. Research on previous recessions demonstrated that family homelessness was more sensitive to economic cycles than individual homelessness,¹¹⁰ and that government responses to housing crises faced by low-income families can alleviate some of the hardship and put families on a path to housing stability.^{101, 102, 111, 112} These data substantiate the need for federal, state, and local governments to identify how they best can meet the needs of residentially unstable children.

Recent Recession

For the past several decades, home ownership has been seen as an indicator and creator of wealth in the United States. During the recession that began in December 2007, the nation's household net worth dropped by \$10 trillion – the largest loss since the federal government began tracking this indicator 50 years ago. 113 As property values have declined over the past several years, many families have found that the amount they owe on their mortgage exceeds the actual value of the house.¹¹⁴ As a result, homeowners are finding it difficult to refinance or sell their homes, which many can no longer afford, and increasing numbers have entered foreclosure. Families in areas that are predominantly urban and comprised largely of racial/ethnic minorities and individuals of low-income status have experienced disproportionately high rates of foreclosures. Further, certain states, including California, Arizona, Nevada, and Florida have experienced more dramatic housing price downturns.¹¹⁵ Children in states that have been more severely affected by the foreclosure crisis are at particular risk of facing housing instability.

Housing Affordability

Understanding the impact of the recent recession on children requires a very general understanding of the conditions leading up the deterioration of the housing market beginning in 2006-2007. The number of families reporting housing problems has been on the rise since the early 2000s.¹¹⁶ Despite the rapid surge in

housing prices, demand, and new home construction that took place between 2003 and 2005, over 40 percent of all households with children reported that they were struggling to afford housing or were living in overcrowded and/or physically inadequate dwellings in 2007.8 In 2008, approximately 12.7 million children lived in households in which 50 percent or more of the family's income was spent on housing;104 to put this in perspective, the United States Department of Housing and Urban Development (HUD) considers housing unaffordable if it comprises more than 30 percent of a household's annual pre-tax income. 117 To cope with burdensome housing costs, it is likely that low-income families decreased expenditures in other areas, such as food purchases or energy bills, leading to other downstream effects on child well-being. 104

Housing affordability problems affect both homeowners and renters. Between 2008 and 2009, real median household income fell by 2.9 percent. 118 At the same time, property values declined by 5.8 percent¹¹⁹ and the median cost of rental housing increased from \$824 per month to \$842 per month. 9, 120 Data from the United States Census Bureau's 2009 American Community Survey shows that nearly two out of every five renters spent 35 percent or more of their income on housing.⁹ This discrepancy between housing costs and families' incomes is brought to the forefront by the fact that in 2009, there is no state in the United States in which a family with one full-time, minimumwage worker could afford a two-bedroom apartment without spending more than 30 percent of its income on housing.121

While low-income households may be eligible for housing subsidies to help make up the difference in rent costs, there is significant gap between the supply of housing vouchers for low-income renters and the demand for assistance among low-income households. The federal Housing Choice Voucher

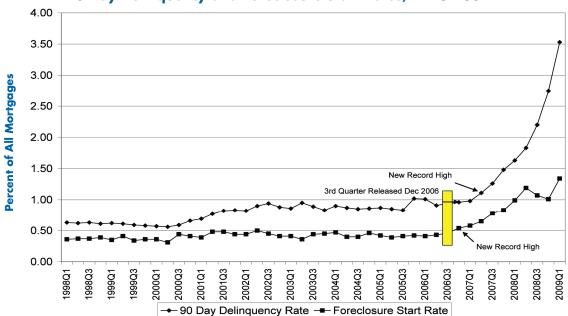
Program (commonly referred to as Section 8), which provides approximately two million low-income families with vouchers to help offset the cost of private market housing, has not kept pace with need in recent years. 122, 123 Between 2003 and 2007, Congress failed to fund new vouchers, despite significant increases in the number of households spending 50 percent or more of their income on housing. 82 In short, the gap between wages and housing costs is not unique to the recent economic downturn, and the housing affordability crisis cannot be entirely attributed to either foreclosure increases or any other single facet of the recent recession.

The Foreclosure Crisis

At the same time, it is clear that we are in the midst of a severe housing downturn, the onset of which coincided roughly with the start of the recent recession. Of particular concern is the high rate of foreclosures and other housing problems among families with children. Figure 5 shows the severity of the housing crisis, particularly when compared with the recession of 2001.

While research on the effects, particularly the health effects, of the foreclosure crisis has primarily focused on adults, the literature provides glimpses into the experiences of children living in households undergoing foreclosure. 95, 109, 114, 124, 125 One study, which looked at the health status of people experiencing foreclosure in the Philadelphia region, found that foreclosures tend to affect already-vulnerable groups, including the poor and families with children. 124 People in poorer health were heavily represented among those experiencing foreclosure. For instance, 23 percent of homeowners experiencing foreclosures reported being in poor or fair health, compared to 9.2 percent of homeowners with no housing strain, and 14.4 percent of homeowners with moderate housing strain. 125 Compared to homeowners and renters of similar socioeconomic status, homeowners in foreclosure experienced higher





Source: National Delinquency Survery, reprinted by permission of the Mortgage Bankers Association. Taken from: Report to Congress on the root causes of the foreclosure crisis, U.S. Department of Housing and Urban Development, 2010.

rates of hypertension, heart disease, and depression and/or anxiety – and were less likely to have health insurance. While the study design did not allow for the establishment of causality, it did reveal a strong association between foreclosure and adverse health outcomes in vulnerable populations.

The effects of foreclosures extend beyond the families who lose their homes. When foreclosures are concentrated in densely populated neighborhoods, as has been the case in the recent recession, area conditions may deteriorate in ways that affect children's health and well-being. Concentrated foreclosures, particularly in inner-city areas, have also been found to lower property values and decrease local services for residents. As a result of these factors, neighborhood cohesion may deteriorate. The impact of foreclosures is a particular issue in communities — especially predominantly African American and Latino communities — that were targeted by lenders offering subprime or other kinds of mortgages associated with

a higher likelihood of default relative to other types of mortgages. 95, 106, 113, 127

Homelessness

Many states have reported double-digit increases in the homeless shelter population, with a particular surge among families with children. Although the number of homeless individuals who spent any time in a homeless shelter decreased between 2007 and 2009, the number of sheltered homeless families increased substantially. In 2009, 170,129 families were homeless and spent time in a shelter; this represents a 30 percent increase since 2007. There was also a 20 percent increase in the average number of days families spent in shelters (from 30 days in 2008 to 36 days in 2009). 112

In addition to increases in the number of homeless families with children, there has been a shift in the types of shelter accommodations these families utilize. Increases in family use of homeless shelters between 2007 and 2008 were comprised of both increases in the

use of emergency shelters and transitional housing.¹¹² Between 2008 and 2009, the increase in sheltered homeless families was almost solely attributable to increased use of emergency shelters, which tend to be more crisis-driven and less oriented towards getting a family into an affordable housing situation. Some states have been able to use funds from a \$5 billion Temporary Assistance for Needy Families (TANF) Emergency Fund to address homelessness.¹²⁹ However, restrictions on the use of these funds (e.g., they must be for short-term, non-recurrent benefits) may dampen their effectiveness as a tool for creating housing stability for families in a broader sense.

Expanded Federal Support

As with health, food, and other domains of well-being, the response of federal, state, and local government can have a strong effect on how the recession affects children with regard to housing. HUD received \$13.54 billion in American Recovery and Reinvestment Act (ARRA) funding. These funds included \$1.5 billion for a Homelessness Prevention and Rapid Re-Housing Program, ¹⁰ created to provide families with housing search assistance, temporary rental assistance, and funds to cover security deposits and other one-time or short-term costs associated with securing housing.82 ARRA also allocated housing-specific funds for capital improvements to public housing, low-income housing tax credit programs, community development block grants, and neighborhood stabilization efforts. 130 The effects of these investments, which are funneled through states, localities, and community organizations, are not yet known; however, compared to the expansions in benefits to individuals and aid to states in the areas of food security and health, ARRA included little in the way of immediate housing assistance to low-income families and children.

ARRA is not the only source of housing assistance developed in response to the recent recession. In

February 2010, the federal Administration launched a \$1.5 billion Innovation Fund for the Hardest Hit Housing Markets (to which an additional \$2 billion has since been added). Under this initiative, Housing Finance Agencies in states with significant declines in home prices can apply to the Federal Housing Finance Agency for money to help prevent foreclosures. More recently, the Wall Street Reform and Consumer Protection Act, signed into law as P.L. 111-203 in July 2010, provided HUD with \$1 billion to implement an Emergency Homeowners Loan Program (EHLP). This program will work in conjunction with the Hardest Hit Initiative by providing foreclosure prevention resources to states and localities with unemployment higher than the national average. 132

While the effect of ARRA, the Hardest Hit Initiative, and EHLP remains unknown, the one-time nature of many of these resources is a potential cause for concern. Housing instability among families with children was high going into the recession, and efforts to counter the worst effects of the downturn may not address underlying affordability issues. Contrary to what has occurred in the realm of health insurance, where pre-recession investments in Medicaid and CHIP blunted the impact of the economic downturn on health insurance coverage for children, the absence of federal support for rental assistance in the years preceding the recession appears to have left low-income families particularly vulnerable to housing problems. For many children and families, a return to prerecession status will not equate to housing stability.

Key Points:

The Recession and Children's Housing

- The dramatic increase in foreclosures in the recent recession has left families particularly vulnerable to housing instability in comparison to prior recessions. Approximately 43 percent of families with children report that they are struggling to afford stable housing.⁸
- The recent increase in housing instability may have been exacerbated by a decline in housing affordability that predated the recent recession.
- While federal funds have been dedicated to emergency housing assistance and programs to help families avoid foreclosure during the recent recession, it is not yet clear whether this will be sufficient to meet the needs of lowincome families in particular.

References

- 1. DeNavas-Walt C, Proctor B, Smith J. *Income, poverty, and health insurance coverage in the United States, 2008.* Washington, DC: U.S. Government Printing Office;2009.
- 2. DeNavas-Walt C, Proctor B, Smith J. *Income, poverty, and health insurance coverage in the United States, 2009.* Washington, DC: U.S. Government Printing Office;2010.
- 3. Acs G, Nichols A. America insecure: Changes in the economic security of American families. Washington, DC: The Urban Institute;2010.
- **4.** Rosenbaum D. The food stamp program is efficient and effective. Washington, DC: Center on Budget and Policy Priorities; 2010.
- Feaster SW. Long road ahead to regaining lost jobs. *New York Times*. 2010. http://www.nytimes.com/interactive/2010/10/13/business/economy/economy/graphic.html?ref=economy/.
- 6. Acs G. Unemployment and income in a recession. Washington, DC: The Urban Institute;2008.
- 7. The Henry J. Kaiser Family Foundation. Measures of state economic distress: Housing foreclosures and changes in unemployment and food stamp participation. *State Health Facts*. Washington, DC: The Henry J. Kaiser Family Foundation, http://www.statehealthfacts.org/comparetable.jsp?cat=1&ind=649; 2009.
- **8.** Federal Interagency Forum on Child and Family Statistics. *America's children in brief: Key national indicators of well-being.* Washington, DC: U.S. Government Printing Office.;2010.
- **9.** Kresin M, Schwartz M. Rental housing market condition measures: 2009. Washington, DC: U.S. Department of Commerce, Census Bureau;2010.
- 10. American Recovery and Reinvestment Act of 2009.
- 11. National Bureau of Economic Research. *U.S. business cycle expansions and contractions*. 2010; http://www.nber.org/cycles/recessions.html.
- 12. Irons J. Economic scarring: The long term impacts of the recession. Washington, DC: Economic Policy Institute;2009.
- 13. Greenstein R, Parrott S, Sherman A. Poverty and share of Americans without health insurance were higher in 2007 and median income for working age households was lower than at bottom of last recession. Washington, DC: Center on Budget and Policy Priorities:2008.
- **14.** Holzer H, Schanzenback D, Duncan G, Ludwig J. The economic costs of childhood poverty in the United States. *Journal of Children and Poverty.* 2008;14(1):41-61.
- **15.** Bezruchka S. The effect of economic recession on population health. *Canadian Medical Association Journal*. 2009;185(5):281.
- **16.** Gerdtham U, Ruhm C. Deaths rise in good economic times: Evidence from the OECD. *Economics & Human Biology*. 2006;4(3):298-316.
- 17. Case A, Lubotsky, D, Paxson, C. Economic status and health in childhood: The origins of the gradient. *American Economic Review.* 2002;92(5):1308-1334.
- 18. U.S. Government Accountability Office. Poverty in America: Economic research shows adverse impacts on health and other social conditions as well as the economic growth rate. Washington, DC2007. GAO 07-344.
- 19. Frank D, Casey P, Black M, et al. Cumulative hardship and wellness of low-income, young children: Multisite surveil-

- lance study. Pediatrics. 2010;125(5):1053-1054.
- 20. McLoyd V. Socioeconomic disadvantage and child development. American Psychologist. 1998;53(2):185-204.
- **21.** Duncan G, Ziol-Guest. K, Kalil. A. Early-childhood poverty and adult attainment, behavior, and health. *Child Development*. 2010;81(1):306-325.
- 22. Center on the Developing Child. *The foundations of lifelong health are built in early childhood.* Cambridge, MA: Harvard University; 2010.
- 23. Middlebrooks JS, Audage NC. *The effects of childhood stress on health across the lifespan*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control; 2008.
- 24. Kishiyama M, Boyce W, Jimenez A, Perry L, Knight R. Socioeconomic disparities affect prefrontal function in children. *Journal of Cognitive Neuroscience*. 2009;21(6):1106-1115.
- **25.** Wood D. Effect of child and family poverty on child health in the United States. *Pediatrics*. 2003;112(3):707-711.
- 26. National Institute of Child Health, Human Development Early Child Care Research Network. Duration and developmental timing of poverty and children's cognitive and social development from birth through third grade. Child Development. 2005;76(4):795-810.
- **27.** Wagmiller R, Lennon MC, Kuang L, Alberti P, Aber JL. The dynamics of economic disadvantage and children's life chances. *American Sociological Review.* 2006;71(5):847-866.
- 28. First Focus. Turning point: The long-term effects of recession-induced child poverty. Washington, DC: First Focus; 2009.
- **29.** Emerson E. Relative child poverty, income inequality, wealth, and health. *Journal of American Medical Association*. 2009;301(4):425-426.
- **30.** Braveman P, Cubbin C, Egerter S, Williams D, Pamuk E. Socioeconomic disparities in health in the United States: What the patterns tell us. *American Journal of Public Health*. 2010;100(S1):S186-196.
- 31. Catalano R. The health effects of economic insecurity. American Journal of Public Health. 1991;81(9):1148-1152.
- 32. Dorn S. Health coverage in a recession. Washington, DC: Urban Institute;2008.
- 33. Dorn S, Garrett B, Holahan J, Williams A. Medicaid, SCHIP and economic downturn: Policy challenges and policy responses. Washington, DC: Brookings Institution;2008.
- **34.** Kaiser Commission on Medicaid and the Uninsured. *Medicaid enrollment: December 2009 data snapshot.* Washington, DC: The Henry J. Kaiser Family Foundation;2010.
- 35. Xu J, Kochanek K, Murphy S, Tejada-Vera B. *Deaths: Final data for 2007*. Washington, DC: National Center for Health Statistics;2010.
- **36.** Tapia Granados J, Diez Roux A. Life and death during the Great Depression. *Proceedings of the National Academy of Sciences*. 2009;106(41):17290-17295.
- 37. Ruhm C. Are recessions good for your health? The Quarterly Journal of Economics. 2000;115(2):617-650.
- **38.** Ferreira FHG, Schady N. Aggregate economic shocks, child schooling and child health. *The World Bank Research Observer.* 2009;24(2):147-181.
- 39. Dehejia R, Lleras-Muney A. Boom, busts, and babies' health. The Quarterly Journal of Economics. 2004;119(3):1091-1130.

- 40. The Henry J. Kaiser Family Foundation. Nearly two-thirds of states expanded access to Medicaid and SCHIP, July 06 January 08. *Kaiser Fast Facts*. Washington, DC: The Henry J. Kaiser Family Foundation, http://facts.kff.org/chart.aspx?ch=265; 2008.
- 41. Kaiser Fast Facts. Chart: Percentage of children without health insurance, by poverty level, 1998-2007. Washington, DC: The Henry J. Kaiser Family Foundation; 2009.
- **42.** Kaiser Commission on Medicaid and the Uninsured. *Health coverage of children: The role of Medicaid and CHIP.* Washington, DC: The Henry J. Kaiser Family Foundation;2010.
- **43.** Kenney GM, Lynch V, Cook A, Phong S. Who and where are the children yet to enroll in Medicaid and the Children's Health Insurance Program? *Health Affairs*. 2010;29(10):1920-1929.
- 44. Cummings J, Lavarreda S, Rice T, Brown E. The effects of varying periods of uninsurance on children's access to health care. *Pediatrics*. 2009;123(3):e411-418.
- **45.** Olson L, Tang S, Newacheck P. Children in the United States with discontinuous health insurance coverage. *New England Journal of Medicine*. 2005;353(4):382-391.
- **46.** Currie J. Child health and mortality. In: Blume L, Durlauf S, eds. *The New Palgrave Dictionary of Economics, 2nd Edition.* London: Macmillan; forthcoming.
- 47. McNichol E, Oliff P, Johnson N. Recession continues to batter state budgets; state responses could slow recovery. Washington, DC: Center on Budget and Policy Priorities;2010.
- **48.** Education, Jobs and Medicaid Assistance Act of 2010. *Pub. L. No. 111-148*.
- **49.** Kaiser Commission on Medicaid and the Uninsured. *Explaining health reform: Eligibility and enrollment processes for Medicaid, CHIP, and subsidies in the exchanges.* Washington, DC: The Henry J. Kaiser Family Foundation;2010.
- **50.** Kenney GM, Pelletiere JE. *How will the Patient Protection and Affordable Care Act of 2010 affect children?* Washington, DC: Urban Institute and Robert Wood Johnson Foundation;2010.
- **51.** Dadayan L, Boyd DJ. Revenue now growing in most states; sales tax gains 5.7 percent in 2nd quarter. Albany, NY: The Nelson A. Rockefeller Institute of Government;2010.
- 52. U.S. Government Accountability Office. *State and local governments' fiscal outlook: March 2010 update.* Washington, DC2010. GAO 10-358.
- 53. Trapp D. HHS calls for more insured children clashes with state budget troubles. *American Medical News*, 2010;53(18).
- 54. Angeles J, Solomon J. Recession threatens state health care programs: Extension of recovery act relief needed to avert more drastic cuts that would swell the ranks of the uninsured and weaken the economy. Washington, DC: Center on Budget and Policy Priorities;2010.
- 55. National Association of Public Hospitals and Health Systems. All states have requested extended FMAP funding, HHS Says October 5, 2010. 2010. http://www.naph.org/Homepage-Sections/News/Latest-From-Newsline/Extended-FMAP.aspx.
- 56. U.S. Department of Agriculture. Food Security in the United States: Measuring Household Food Security. http://www.ers.usda.gov/Briefing/FoodSecurity.measurement.htm.
- 57. Nord M. Food insecurity in households with children: Prevalence, severity, and household characteristics. Washington, DC,: U.S. Department of Agriculture, Economic Research Service;2009. EIB-56.
- 58. Slopen N, Fitzmaurice G, Williams D, Gilman S. Poverty, food insecurity, and the behavior for childhood internalizing

- and externalizing disorders. Journal of American Academy of Child and Adolescent Psychiatry. 2010;49(5):444-452.
- **59.** Whitaker R, Phillips S, Orzol S. Food insecurity and the risks of depression and anxiety in mothers and behavior problems in their preschool-aged children. *Pediatrics.* 2006;118(3):e859-868.
- **60.** Winicki J, Jemison K. Food insecurity and hunger in the kindergarten classroom: Its effect on learning and growth. *Contemporary Economic Policy.* 2003;21(2):145-157.
- 61. Rose-Jacobs R, Black M, Casey P, et al. Household food insecurity: Associations with at-risk infant and toddler development. *Pediatrics.* 2008;121(1):65-72.
- 62. Alaimo K, Olson, C, Frongillo, E. Food insufficiency and American school-aged children's cognitive, academic, and psychosocial development. *Pediatrics*. 2001;108(1):44-53.
- 63. Skalicky A, Meyers A, Adams W, Yang Z, Cook J, Frank D. Child food insecurity and iron deficiency anemia in low-income infants and toddlers in the United States. *Maternal & Child Health Journal*. 2006;10(2):177-185.
- 64. Cook J, Frank D, Levenson S, et al. Child food insecurity increases risks posed by household food insecurity to young children's health. *Journal of Nutrition*. 2006;136(4):1073-1076.
- 65. Boney CM, Verma A, Tucker R, Vohr BR. Metabolic syndrome in childhood: Association with birth weight, maternal obesity, and gestational diabetes mellitus. *Pediatrics.* 2005;115(3):e290-296.
- **66.** Wight VR, Thampi K, Briggs J. Who are America's poor children? Examining food insecurity among children in the United States. New York: National Center for Children in Poverty;2010.
- 67. Leingerger-Jabari A, Parker D, Oberg C. Child labor, gender, and health. *Public Health Reports.* 2005;120(6):642-648.
- **68.** Ver Ploeg M. *WIC and the battle against childhood overweight.* Washington, DC: U.S. Department of Agriculture, Economic Research Service;2009.
- **69.** Drewnowski A, Darmon N. The economics of obesity: Dietary energy density and energy cost. *American Society for Clinical Nutrition*. 2005;80(1 Suppl):265S-273S.
- **70.** Nord M, Hopwood H. Recent advances provide improved tools for measuring children's food security. *The Journal of Nutrition*. 2007;137(3):533-536.
- 71. Bhattacharya J, Currie J, Haider S. Poverty, food insecurity, and nutritional outcomes in children and adults. *Journal of Health Economics*. 2004;23(4):839-862.
- 72. Nord M. Food insecurity in households with children: Food assistance research brief. Washington, DC: U.S. Department of Agriculture, Economic Research Service;2003. 34-13.
- 73. Andrews M, Nord M. Food insecurity up in recessionary times. Washington, DC: U.S. Department of Agriculture;2009.
- 74. Nord M, Andrews M, Carlson. *Household food insecurity in the United States, 2004.* Washington, DC: U.S. Department of Agriculture, Economic Research Service;2005.
- 75. Pavetti L, Rosenbaum D. Creating a safety net that works when the economy doesn't: The role of the food stamp and TANF programs. Washington, DC: Center on Budget and Policy Priorities;2010.
- **76.** Leftin J. Trends in Supplemental Nutrition Assistance Program participation rates: 2001 to 2008. Washington, DC: Prepared by Mathematic Policy Research, Inc. for the U.S. Department of Agriculture, Food and Nutrition Service;2010.
- 77. Cook J, Frank D, Berkowitz C, et al. Food insecurity is associated with adverse health outcomes among human infants and toddlers. *American Society for Nutritional Sciences*. 2004;134(6).

- 78. Zedlewski S, Mon E. Many low-income working families turn to the supplemental nutrition assistance program for help. Washington, DC: The Urban Institute;2009.
- 79. Isaacs J. The effects of the recession on child poverty. Washington, DC: Brookings Institution & First Focus; 2009.
- 80. Leftin J, Gothro A, Eslami E. Characteristics of Supplemental Nutrition Assistance Program households: Fiscal Year 2009: Prepared by Mathematic Policy Research, Inc. for the U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis;2010.
- 81. Hanson K, Gundersen C. How unemployment affects the food stamp program. Washington, DC: U.S. Department of Agriculture, Economic Research Service; 2002.
- **82.** Rice D. Additional housing vouchers needed to stem increase in homelessness. Washington, DC: Center on Budget and Policy Priorities; 2009.
- 83. Bloch M, DeParle J, Ericson M, Gebeloff R. Food stamp usage across the country 2009.
- **84.** Eisler P, Weise E. More students on free lunch programs. *USA Today* 2009.
- **85.** Neuberger Z, Namian TF. Enrolling all children in a household for free school meals. Washington, DC: Center on Budget and Policy Priorities; 2010.
- **86.** U.S. Department of Agriculture. WIC Fact Sheet. *Nutrition Program Facts, Food and Nutrition Service* 2009; www.fns.usda.gov/wic/factsheets.htm.
- 87. U.S. Department of Agriculture. Nutrition program facts: WIC (Monthly data, FY08-FY10). http://www.fns.usda.gov/pd/wicmain.htm.
- 88. Aber L, Chaudry A. Low-income children, their families and the great recession: What's next in policy? Paper presented at: The Georgetown University and Urban Institute Conference on Reducing Poverty and Economic Distress after ARRA2010.
- 89. United States Department of Agriculture. http://www.fns.usda.gov/fns/recovery/recovery-snap.htm.
- 90. Mabli J, Castner L, Ohls J, Fox M, Crepinsek M, Condon E. *Food expenditures and diet quality among low-income households and individuals*. Washington, DC: Prepared by Mathematica Policy Research, Inc. for the U.S. Department of Agriculture, Food and Nutrition Service; 2010.
- 91. Rose D, Habicht J, Devaney B. Household participation in the Food Stamp and WIC programs increases the nutrient intakes of preschool children. *The Journal of Nutrition*. 1998;128(3):548-555.
- 92. U.S. Department of Agriculture. SNAP Farmers' Market Program website Learn how you can accept SNAP Benefits at Farmers' Markets. http://www.fns.usda.gov/snap/ebt/fm.htm.
- 93. Office of the Surgeon General of the United States. *The Surgeon General's call to action to promote healthy homes*: Office of the Surgeon General; 2009.
- **94.** The Institute for Children and Poverty. *Examination of residential instability and homelessness among young children.* New York: Institute for Children, Poverty & Homelessness; 2009.
- 95. Kingsley G, Smith R, Price D. The impact of foreclosures on families and communities. Washington, DC: Urban Institute;2009.
- 96. Rog J, Maynard M, Weiss E. *The hidden costs of the housing crisis: The long-term impact of housing affordability and quality on young children's odds of success.* Washington, DC: Economic Policy Institute, The Partnership for America's Economic Success; 2008.

- 97. Rumberger R, Larson K. Student mobility and the increased risk of high school dropout. *American Journal of Education*. 1998;107(1):1-35.
- **98.** Buckner J. Understanding the impact of homelessness on children: Challenges and future research directions. *American Behavioral Scientist.* 2008;51(6):721-736.
- 99. Grant R, Shapiro A, Joseph S, Goldsmith S, Rigual-Lynch L, Redlener I. The health of homeless children revisited. *Advances in Pediatrics.* 2007;54(1):173-187.
- **100.** Jellyman T, Spencer N. Residential mobility in childhood and health outcomes: a systemic review. *Journal of Epidemiology and Community Health*. 2008;62(7):584-592.
- 101. U.S. Department of Health and Human Services. *Current statistics on the prevalence and characteristics of people experiencing homelessness in the United States.* Washington, DC: U.S. Department of Health and Human Services;2010.
- 102. Culhane D, Metraux S. Rearranging the deck chairs or reallocating the lifeboats? Homelessness assistance and its alternatives. *Journal of the American Planning Association*. 2008;74(1):111-121.
- 103. Rog DJ, Buckner JC. Homeless families and children (discussion draft). 2007 National Symposium on Homelessness Research 2007.
- 104. Joint Center for Housing Studies. The state of the nation's housing. Cambridge, MA: Harvard University;2008.
- **105.** Center for Responsible Lending. *Updated projections of subprime foreclosures in the United States and their impact on home values and communities.* Washington, DC: Center for Responsible Lending;2008.
- 106. U.S. Department of Housing and Urban Development. Report to Congress on the root causes of the foreclosure crisis. Washington, DC: U.S. Department of Housing and Urban Development, Office of Policy Development and Research;2010.
- 107. Evans G. The environment of childhood poverty. American Psychologist. 2004;59(2):77-92.
- 108. Samuels J, Shinn M, Buckner JC. Homeless children: Update on research, policy, programs, and opportunities. In: U.S. Department of Health and Human Services, ed: Policy Research Associates; 2010.
- 109. Been V, Ellen IG, Schwartz AE, Stiefel L, Weinstein M. *Kids and foreclosures, New York City.* New York: Institute for Education and Social Policy, New York University; 2010.
- Culhane JF, Webb D, Grim S, Metraux S, Culhane DP. Prevalence of child welfare services involvement among homeless and low-income mothers: A five-year birth cohort study. *Journal of Sociology & Social Welfare*. 2003;30(3):79-95.
- 111. Maxwell CD, Stone RJG. The nexus between economic and family violence: The expected impact of recent economic declines on the rates and patterns of intimate, child and elder abuse: Submitted for publication to the U.S. Department of Justice; 2010.
- 112. Cortes A, Khadduri J, Buron L, Culhane D. *The 2009 annual homeless assessment report to Congress.* Washington, DC: U.S. Department of Housing and Urban Development, Office of Community Planning and Development; 2010.
- 113. Jacobsen LA, Mather M. U.S. economic and social trends since 2000. Population Bulletin. 2010;65(1).
- 114. Bennett GG, Scharoun-Lee M, Tucker-Seeley R. Will the public's health fall victim to the home foreclosure epidemic? *PLoS Medicine*. 2009;6(6):1-5.
- 115. Painter G. What happens to household formation in a recession? Washington, DC: Mortgage Bankers Association; 2010.
- 116. Land KC. Child and Youth Well-Being Index. New York: The Foundation for Child Development;2010.

- 117. U.S. Department of Housing and Urban Development. Community Development and Planning Website Affordable Housing. http://www.hud.gov/offices/cpd/affordablehousing/index.cfm.
- 118. Noss A. *Household income for states: 2008 and 2009.* Washington, DC: U.S. Department of Commerce, Census Bureau;2010.
- 119. Mazur C. Property value: 2008 and 2009. Washington, DC: U.S. Department of Commerce, Census Bureau; 2010.
- **120.** U.S. Census Bureau. Financial Characteristics (S2503). In: Data Set: 2008 American Community Survey 1-Year Estimates Survey: American Community Survey, ed. Washington, DC 2009.
- **121.** DeCrappeo M, Pelletiere D, Crowley S, Teater E. *Out of reach 2010: Renters in the Great Recession, the crisis continues.* Washington, DC: National Low Income Housing Coalition; 2010.
- **122.** Rice D, Sard B. *Decade of neglect has weakened federal low-income housing programs.* Washington, DC: Center on Budget and Policy Priorities; 2009.
- 123. U.S. Department of Housing and Urban Development. Worst case housing needs: A report to Congress. 2007.
- **124.** Pollack C, Lynch J. Health status of people undergoing foreclosure in the Philadelphia region. *American Journal of Public Health*. 2009;99(10):1833-1839.
- 125. Pollack C, Lynch J, Alley D, Cannuscio C. Foreclosure and health status. Philadelphia, PA: Leonard Davis Institute of Health Economics;2010.
- **126.** Lin Z, Rosenblatt E, Yao W. Spillover effects of foreclosures on neighborhood property values. *Journal of Real Estate Finance and Economics*. 2009;38(4):387-407.
- **127.** Immergluck D, Smith G. Measuring the effect of subprime lending on neighborhood foreclosures. *Urban Affairs Review.* 2005;40(3):362-389.
- 128. Sard B. Number of homeless families climbing due to recession. Washington, DC: Center on Budget and Policy Priorities; 2009.
- **129.** Schott L. *Using TANF emergency funds to help prevent and address family homelessness.* Washington, DC: Center on Budget and Policy Priorities;2010.
- **130.** National Housing Trust. Housing and Related Provisions in the American Recovery and Reinvestment Act of 2009 (Pub. L. No. 111-5). Washington, DC2009.
- 131. Treasury Public Affairs, U.S. Department of Housing and Urban Development. Obama administration announces additional support for targeted foreclosure-prevention programs to help homeowners struggling with unemployment 2010; http://portal.hud.gov/portal/page/portal/HUD/press/press_releases_media_advisories/2010/HUD-No.10-176.
- 132. U.S. Department of Housing and Urban Development. Summary of the Emergency Homeowner Loan Program. Washington, DC; 2010.
- 133. Keeping Children and Families Safe Act of 2003. Pub. L. No. 108-36.
- Sedlak AJ, Mettenburg J, Basena M, et al. Fourth National Incidence Study of Child Abuse and Neglect (NIS–4): Report to Congress. In: U.S. Department of Health and Human Services AfCaF, ed. Washington, DC2010.
- 135. Gilbert R, Kemp A, Thoburn J, et al. Recognising and responding to child maltreatment. *Lancet.* 2009;373:167-180.
- 136. U.S. Department of Health and Human Services. *Preliminary Estimates for FY 2009 as of July 2010*. Washington, DC: Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau;2010.

- 137. Belsky J. Etiology of child maltreatment: A developmental-ecological analysis. *Psychological Bulletin.* 1993;114(3):413-434.
- 138. Gil DG. Physical abuse of children: Findings and implications of a nationwide survey. *Pediatrics*. 1969;44(5):857-864.
- 139. Kotch J, Browne D, Dufort V, Winsor J, Catellier D. Predicting child maltreatment in the first 4 years of life from characteristics assessed in the neonatal period. *Child Abuse & Neglect.* 1999;23(4):305-319.
- 140. U.S. Department of Health and Human Services. *Blending perspectives and building common ground: A report to Congress on substance abuse and child protection.* Washington, DC: U.S. Department of Health and Human Services;1999.
- 141. U.S. Department of Health and Human Services. *Emerging practices in the prevention of child abuse and neglect.* Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families;2003.
- 142. Dube S, Felitti V, Dong M, Chapman D, Giles W, Anda R. Childhood abuse, neglect, and household dysfunction and the risk of illicit drug use: The Adverse Childhood Experiences Study. *Pediatrics*. 2003;111(3):564-572.
- 143. De Bellis M, Thomas L. Biologic findings of post-traumatic stress disorder and child maltreatment. *Current Psychiatry Reports.* 2003;5(2):108-117.
- **144.** Teicher MD. Wounds that time won't heal: The neurobiology of child abuse. *Cerebrum: The Dana Forum on Brain Science*. 2000;2(4):50-67.
- Springer KW, Sheridan J, Kuo D, Carnes M. Long-term physical and mental health consequences of childhood physical abuse: Results from a large population-based sample of men and women. *Child Abuse & Neglect.* 2007;31(5):517-530.
- **146.** Ringeisen H, Casanueva C, Urato M, Cross T. Special health care needs among children in the child welfare system. *Pediatrics.* 2008;122(1):e232-241.
- 147. Burns B, Phillips S, Wagner HR, et al. Mental health needs and access to mental health services by youths involved in child welfare: A national survey. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2004;43(8):960-970.
- Walker E, Gelfand A, Katon W, et al. Adult health status of women with histories of childhood abuse and neglect. *The American Journal of Medicine*. 1999;107(4):332-339.
- 149. Elder G. Children of the Great Depression: Social change in life experience. Chicago, IL: University of Chicago Press; 1974.
- **150.** Whipple E, Webster-Stratton C. The role of parental stress in physically abusive families. *Child Abuse & Neglect*. 1991;15(3):279-291.
- 151. Schumacher J, Slep A, Heyman R. Risk factors for child neglect. Aggression and Violent Behavior. 2001;6(2-3):231-254.
- 152. Drake B, Pandey S. Understanding the relationship between neighborhood poverty and specific types of child maltreatment. *Child Abuse & Neglect.* 1996;20(11):1003-1018.
- 153. Finkelhor D, Jones L, Shattuck A. *Updated trends in child maltreatment, 2008.* Durham, NH: Crimes Against Children Research Center;2010.
- **154.** Finkelhor D, Jones L. Why have child maltreatment and child victimization declined? *Journal of Social Issues*. 2006;62(4):685-716.
- 155. Berger R. An increase in abusive head trauma during the current recession: A multi-center analysis. Paper presented at: The Pediatric Academic Societies' Annual Conference 2010; Van Couver, British Columbia, Canada.
- 156. Zagorsky J, Schlesinger M, Sege R. What happens to child maltreatment when unemployment goes up? Paper pre-

- sented at: American Academy of Pediatrics 2010 National Conference and Exhibition; 3 October 2010, 2010; San Francisco, CA.
- 157. Nichols A. Poverty in the United States. Washington, DC: Urban Institute;2010.
- **158.** Johnson N, Oliff P, Williams E. An update on state budget cuts: At least 46 states have imposed cuts that hurt vulnerable residents and the economy. Washington, DC: Center on Budget and Policy Priorities;2010.
- **159.** McNichol E, Oliff P, Johnson N. *States continue to feel recession's impact.* Washington, DC: Center on Budget and Policy Priorities;2010.
- **160.** Edelman P, Golden O, Holzer H. Reducing poverty and economic distress after ARRA: Next steps for short-term recovery and long-term economic security. Washington, DC: The Urban Institute;2010.
- 161. Smith VK, Gifford K, Ellis E. Hoping for economic recovery, preparing for health reform: A look at Medicaid spending, coverage and policy trends. Washington, DC: Prepared by Health Management Associates and the Kaiser Commission on Medicaid and the Uninsured for The Henry J. Kaiser Family Foundation; 2010.