ISSUE BRIEF



APRIL | 2009



Figure 1. U.S. Children (0-17 yrs.) Who Have No Usual Source of Care by Income Level

Source: Centers for Disease Control and Prevention, 2005-2007.

The Face of Health Disparities Among Children in Ohio

Substantial disparities in children's health are often associated with race and socio-economic status. It has been well-documented that children from lower-income families and racial minorities do not receive adequate primary care and as a result experience poorer health status.¹ In fact, national data from the Centers for Disease Control and Prevention (CDC) indicate that low-income children are two to three times more likely to lack a usual health care source than children from higher income families (see figure 1),² and the same holds true for some racial minorities (see figure 2).³ As a result, these children experience a higher incidence of chronic disease, poor oral health and unmet mental health needs, both in Ohio and at the national level. Similarly, these children also experience a higher rate of low birthweight, a leading risk factor for infant mortality.

Fortunately, there are a number of steps we can take to address the issue of health disparities. For instance, researchers indicate that the future of combating health inequities relies strongly on coalition development and sustainability.⁴ In Ohio, the Ohio Statewide Health Disparities Collaborative is an assembly of key stakeholders and community members that came together in 2007 to serve this very function. Convened by Children's Defense Fund – Ohio, with direction from the Ohio Commission on Minority Health, the Collaborative seeks to provide an infrastructure to coordinate health disparity efforts across the state of Ohio and establish a policy agenda. Ultimately, it is a catalyst to create successful community partnerships to reduce health disparities for low-income and minority children and youth.



Figure 2. U.S. Children (0-17 yrs.) Who Have No Usual Source of Care by Race/Ethnicity

Source: Centers for Disease Control and Prevention, 2005-2007.



O H I O

Figure 3. Percent of Low-Birthweight Babies Born in Ohio by Race/Ethnicity



* Data for very low birthweight American Indian/Alaska Native babies born in Ohio was not available.

Source: Centers for Disease Control and Prevention, 2003-2005.

Child Health Outcomes in Ohio Infant Mortality, Low Birthweight and Pre-term Births

Infant mortality is a significant indicator of community health and is defined as the rate at which babies die within the first year of life.⁵ Low birthweight (<2500 grams) is one of the leading risk factors for infant mortality.⁶ In fact, research indicates that the infant mortality rate for low-birthweight babies is 20 times higher than for babies born at a healthy weight.⁷ Nationally, Ohio ranked 36th out of 50 states, or 14th worst, for the percent of low-birthweight babies born in 2005.⁸

Disparities in low birthweight by race and ethnicity have been well-documented. In Ohio, Black women are twice as likely to have a low-birthweight baby as White and Hispanic women (see figure 3).⁹ And the rate of infant mortality among Black infants is about 2.5 times as high as that of White infants, both in Ohio and at the national level (see figure 4).¹⁰ Similarly, Black women are at the highest risk of having a pre-term birth, as indicated by both state and national data (see figure 5).¹¹ Pre-term birth, defined as a birth before 37 weeks gestation, is associated with infant mortality and affects more than 530,000 babies in the United States each year.¹² In 2006 pre-term

birth rates in Ohio were slightly higher than the national average at 13.3 percent and 12.8 percent, respectively. 13

In addition to an increased risk of infant mortality, research indicates that pre-term low-birthweight babies that survive are more likely to experience adverse developmental outcomes¹⁴ and often require increased hospitalization after birth and during the first year.¹⁵ Aside from the medical complications these children experience, the impact on the health care system is significant.

Socio-economic status is also an important determinant of infant health, as evidenced by figure 6. The following scatter plot illustrates a very strong correlation (r=0.88) between percentage of children in poverty and the percentage of babies born at low birthweight (<2,500 grams) among Ohio's 20 most populous counties, for which 2006 poverty data is available. Ultimately, women from the most impoverished counties in Ohio are giving birth to low-birth weight babies at the highest rate.

Figure 4. Infant Mortality Rate (Deaths per 1,000 Live Births) by Race/Ethnicity



Source: Matthews, TJ, M.S., et al. (2008). Infant mortality rates by race and Hispanic origin of mother for 2003-2005: United States and each state, Puerto Rico, Virgin Islands, and Guam, 2003-2005 linked files.





Figure 5. Percent of Pre-term Births by Race/Ethnicity

Source: The Henry J. Kaiser Family Foundation, 2006.

Asthma

Asthma is a chronic respiratory disease that often becomes manifest in childhood. At present, it is the leading cause of hospitalizations among children, and also school absences.¹⁶ According to the National Health Interview Survey, children 5 to 17 years of age missed 14.7 million school days due to asthma in 2004.¹⁷

Regrettably, children from low socio-economic families and racial minorities experience a higher incidence of this chronic disease. For example, an estimated 13.3 percent of Ohio

children under the age of 18 were affected by asthma in 2004. However, a racial collapse of the data indicates that Hispanic and Black children experienced higher rates of diagnoses, 16 percent and 19.5 percent respectively, relative to 12.2 percent of their White counterparts.¹⁸

Ohio children from families with incomes less than 200 percent of the Federal Poverty Level (FPL) also had higher reporting rates of asthma relative to children from higher-income families (see figure 7).¹⁹

Figure 6. Percent of Children in Poverty versus Percentage of Babies Born at Low Birthweight (2006): 20 Most-Populated Ohio Counties



Sources: US Census Bureau Small Area Income and Poverty Estimate, 2006; Ohio Department of Health, Center for Vital and Health Statistics, 2007; 2007 American Community Survey, US Census Bureau.



Figure 7. Children (0-17 yrs.) Reported to be Affected by One or More Asthma-related Health Issues by Income Level*



* Ohio children reported to be affected by one or more asthma-related health issues during the past 12 months of the survey interview.

Note: National Survey of Children's Health data is gathered through telephone interviews. Randomly sampled telephone numbers are called to find households with children ages 0-17. One child in each household is randomly selected to be the subject of the interview. The interview is conducted with the adult in the household who knows the most about child's health and health care. National survey of Children's Health results are weighted to represent the population of non-institutionalized children. Source: The National Survey of Children's Health, 2003.

Oral Health

Oral health is inextricably linked to overall physical well-being. Research indicates a correlation between poor oral health and a variety of other health complications including failure to thrive (FTT) in children, pre-term low-birthweight babies and stroke, respiratory disease and heart disease in adulthood.²⁰ Through this research it is becoming increasingly apparent that oral health cannot be separated from physical well-being.

In general, a diagnosis of FTT is reserved for children under three who demonstrate low weight and height for their age, and is often attributed to medical problems or inadequate nutritional intake. While oral health is not a primary contributing factor to FTT, numerous studies are beginning to indicate the heightened presence of poor oral health among children who demonstrate FTT. This association can be partially explained by the link between oral health and what we choose to eat.²¹ The case of FTT highlights the significance that poor oral health can have on children during their critical years of development.

Children in Ohio with a family income below 100 percent and 200 percent of the FPL are ten times more likely to be identified as having teeth in fair or poor condition relative to children from families with an income over 400 percent of the FPL (see figure 8).²² And the incidence of preventative dental care is lower for Black children and Hispanic children than for White children, as indicated by both national and Ohio data (see figure 9).²³

Childhood Obesity

Childhood obesity is linked with a multitude of adverse physical and mental health outcomes. Immediate risks for obese children include higher rates of asthma, bone and joint problems, high cholesterol and early growth and puberty.²⁴ In addition, diseases which previously had been found almost exclusively in adults, such as Type II Diabetes and high blood pressure, are being found increasingly among the nation's children.²⁵ Psychologically, obese children also may have lower self-esteem, which can impact academic and social functioning.²⁶

In the United States, the percentage of overweight children tripled between 1980 and 2002.²⁷ A recent National Health and Nutrition Examination Survey (NHANES) found that not only have rates of obesity increased, but the heaviest children were markedly heavier than those in previous surveys.²⁸

Moreover, obesity is found disproportionately among certain minority youth populations. NHANES found that non-Hispanic Black children and Mexican American children ages 6-11 were more likely to be overweight, at 20 percent and 22 percent respectively, than their non-Hispanic White peers, at 14 percent.²⁹ And trends in Ohio mirror national data. For instance, 39.3 percent of Black children in Ohio are considered overweight, higher than the 28.5 percent of children who are White.³⁰

Ohio children from families with incomes less than100 percent of the FPL were also reported to have higher rates of childhood

4



Figure 8. Children (1-17 yrs.) Reported to Have Fair/Poor Teeth Condition by Income Level



Source: The National Survey of Children's Health, 2003.



Figure 9. Children (1-17 yrs.) Reported to have Not Received Needed Preventive Dental Care by Race/Ethnicity*

* Children reported to have not received all needed preventive dental care during the past 12 months of the survey interview.

Source: The National Survey of Children's Health, 2003.



Figure 10. Childhood Obesity by Income Level

Source: CAHMI/Data Resource Center analysis of the 2008 National Health Survey of Children's Health as cited by Childhood Obesity Action Network.

obesity relative to children from higher income families, as evidenced in figure 10.³¹ In fact, a study conducted by the Ohio Department of Health found higher rates of obesity amongst children that were eligible for the school lunch program within each Ohio County, as well as children from the Appalachia area of Southeastern Ohio, often considered the most impoverished region of the state.³²



Unmet Health and Mental Health Needs

Equitable access to primary care has been widely endorsed as the most effective strategy to address the issue of health disparities. Regrettably, children from low-income families, racial minorities and the uninsured are less likely to receive adequate primary health care.³³ In fact, national data from the Centers for Disease Control and Prevention (CDC) indicate that low-income children are two to three times more likely to lack a usual health care source than children from higher income families (see figure 1).³⁴

Disproportionately, these children are also less likely to have access to mental health services. For instance, White children are twice as likely as Hispanic and Black children to receive necessary mental health care (see figure 11).³⁵ And White children affected by ADD/ADHD are four times more likely to take medication than Black children affected by the same condition (see figure 12).³⁶

Similarly, 10.5 percent of children from families with incomes less than 100 percent of the FPL, that were affected by ADD/ADHD, were not taking medication for their condition, relative to 4.4 percent of children from higher income families (see figure 13).³⁷

Figure 11. Ohio Children (1-17 yrs.) Who did not Receive Needed Mental Health Care by Race/Ethnicity*



* Ohio children/youth with current emotional, developmental or behavioral problems that did not receive needed mental health care during the past 12 months of the survey interview.

Source: The National Survey of Children's Health, 2003.



According to the National Institute of Mental Health, ADHD is one of the most common childhood mental health disorders.³⁸ Nationally, it affects 4 to 12 percent of school-aged children and about three times more boys than girls.³⁹ It is often characterized by hyperactive and impulsive behavior and can have far reaching effects into adulthood.⁴⁰ In fact, almost a third of children with ADHD will drop out of high school, and only 5 percent will complete a university degree, relative to 40 percent of their peers.⁴¹ Fortunately however, these secondary outcomes can be prevented through close observation of the child's behavior to identify the appropriate intervention.⁴² This reinforces the need to ensure all children equal access to necessary mental health services.

Figure 12. Ohio Children (2-17 yrs.) Reported to be Affected by ADD/ADHD, Taking Medication versus Not Taking Medication by Race/Ethnicity*



* Ohio children whose parents have ever been told child has ADD/ADHD currently taking medication for the condition versus not taking medication. Source: The National Survey of Children's Health, 2003.

Figure 13. Ohio Children (2-17 yrs.) Reported to Be Affected by ADD/ADHD, Not Taking Medication for the Condition*



* Ohio children whose parents have ever been told child has ADD/ADHD currently taking medication for the condition versus not taking medication. Source: The National Survey of Children's Health, 2003.



Figure 14. Children (0-17 yrs.) Reported to Have No Health Insurance by Race/Ethnicity

Source: The National Survey of Children's Health, 2003.

Barriers to an Equitable System of Care

There are a number of factors that contribute to inequitable access to care among children from low-income families and racial minorities. For instance, lack of health insurance obviously accounts for some of this disparity. In Ohio alone, there are 224,000 children without health insurance and an estimated 8.9 million across the United States.⁴³ And, studies have consistently shown that Black and Hispanic children are more likely to lack health insurance than their White counterparts, as evidenced both in Ohio and at the national level (see figure 14).⁴⁴

While significant, lack of health insurance is not the only implicating factor. An association has also been found between parents' English language ability and the likelihood that a child has a usual source of care.⁴⁵ As a result, the provision of adequate interpreter services and bilingual health care providers as a strategy to increase access to care for children from non-English speaking families cannot be overstated, and numerous studies have consistently reinforced this need.⁴⁶

Finally, there is an alarming shortage of physicians,⁴⁷ dentists,⁴⁸ and mental health professionals⁴⁹ in rural communities. As a result, children that reside in these underserved regions are confronted with significant barriers in terms of access to care. In fact, according to the 2008 Ohio KIDS COUNT Data Book, only 3-7 percent

of dentists practice in rural areas.

The implications of this become apparent when considering the number of dentists that work in rural Ohio counties. For example, Vinton County has one dentist for every 6,715residents and Meigs has one for every $7,744.5^{0}$ It should be noted, however, that it is not only residents of rural communities that are implicated by access to care. Data indicates that residents of poor urban neighborhoods also fall victim to these same trends⁵¹ and regrettably experience poorer health status relative to those that reside in suburban communities.⁵²





Recommendations

It has been established that children from low-income families and racial minorities are less likely to receive adequate primary care. While the implications of this can be devastating to the health of the child, there is also a broader economic impact that needs to be considered. As the American Public Health Association identifies, reliance on the health care system increases when individuals lack access to quality care. Ultimately, medical conditions that are left untreated are likely to become worse (and more expensive) to treat in the long term.⁵³ As such, a strategic approach is necessary, not only to ensure the provision of equitable access to care for all children, but also to divert the economic impact these disparities have on the community as a whole.

1. Guarantee Every Child and Pregnant Woman Comprehensive Health and Mental Health Coverage

In order to increase access to comprehensive health coverage, Ohio must establish an eligibility floor for child health coverage at 300 percent of the federal poverty level, with graduated cost-sharing based on a family's income, in order to ensure that coverage is affordable.

All children also must be guaranteed access to *all medically necessary* services now covered under Medicaid, known as Early and Periodic Screening, Diagnostic and Treatment Services (EPSDT), which include hearing, mental health, dental and vision services, when needed. Children must have screening necessary for early identification and preventive treatment.

Pregnant women also need health coverage throughout their pregnancy to ensure a healthy birth for the mother and the child and reduce the number of pre-term and low-birthweight babies, and subsequently, the rate of infant mortality. Every year, roughly 750,000 pregnant women are uninsured at the national level.⁵⁴

2. Enhance Community Coordination

A coordinated community effort to bring about the necessary systemic change has been widely espoused as critical to the realization of health equity.⁵⁵ In Ohio, the Ohio Statewide Health Disparities Collaborative demonstrates community coordination as a strategy to address health disparities. The collaborative was convened by Children's Defense Fund – Ohio in 2007, with direction from the Ohio Commission on Minority Health. Specifically, the infrastructure considers the relationships and resources allocated to organizations to tackle these inequities, at the state and local level; and works to establish a comprehensive policy agenda. The collaborative also functions to stimulate research and raise awareness of the issues as they pertain to health disparities of children in Ohio.

As the Institute of Medicine identifies, education is paramount to any efforts geared towards the elimination of health disparities.⁵⁶

The Ohio State University Rural Program, located in Lorain County, Ohio, and affiliated with The OSU Department of Family Medicine and The OSU Medical Center, further exemplifies enhanced community coordination through a professional training strategy for increasing the provision of health services in underserved rural communities. Each year two resident physicians are recruited for a three-year residency program in family medicine during which they live and work in a particular rural community. Since June 2004 the program has graduated 11 physicians, all of whom are serving in rural or underserved communities. Medical students and family nurse practitioner students from the University also have the opportunity to work and learn in this interprofessional practice setting for periods of time ranging from one to three months.⁵⁷

3. Improve Cultural Competence

As discussed, research indicates a positive association between a parent's ability to speak English and the likelihood that a child has a usual source of care.⁵⁸ As such, it is critical that medical practices make service provisions to enhance cultural competency and address language barriers. The national Office of Minority Health notes that cultural competency is one of the main ingredients in reducing health care disparities. For example, cultural beliefs can have a major impact on how an illness or disease and its causes are perceived.⁵⁹ Symptoms may be presented in ways that are quite different from the language in medical textbooks, and willingness to follow through with providers recommendations will be influenced by cultural beliefs.⁶⁰ Also, providers' own cultural biases can limit understanding and access to care for populations whose belief systems may be different.

As such, providers of health care services should be respectful and responsive to the beliefs, practices and linguistic needs of diverse populations.⁶¹ The ultimate goal is to create a health care system that delivers high quality care to everyone regardless of ethnicity, culture or language proficiency.⁶² Specifically, this can be facilitated through enhanced cultural diversity among health care providers⁶³ and increased access to interpretter services.⁶⁴

4. Increase Provider Payment Rates for Ohio Medicaid Recipients Low provider payment rates have influenced the number of doctors and hospitals willing to treat recipients of Medicaid.⁶⁵ A survey of members of the American Academy of Pediatrics cites low provider rates and burdensome paperwork as the two



main reasons that many do not participate.⁶⁶ As a result, community health centers have become a critical support for many of these families. However, these centers often do not have access to the same resources and standard of technology available in many private care settings.⁶⁷ Consequently, Medicaid recipients receive lower quality of care than private insurance holders.

*Ohio Medicaid provides health insurance for eligible children up to the age of 19, pregnant women, families with underage children, people with disabilities, adults age 65 or older and certain women screened for breast and/or cervical cancer. In Ohio, families must have income levels at 90 percent or below of the federal poverty level to qualify for Medicaid.⁶⁸

Acknowledgements

Special thanks to Tzu-Ju Hung, Sarah Ziems, Andrew Harris and Sonja Shute for their help with the research and development of this Issue Brief and David Browning, Browning Design.

Thanks to the Annie E. Casey Foundation, the Health Foundation of Cincinnati, CareSource Foundation and Brentwood Foundation for their support.



Footnotes

- ¹ Gregory D. Stevens, et al., "Disparities in Primary Care for Vulnerable Children: The Influence of Multiple Risk Factors," *Health Research and Educational Trust* 41, No. 2 (2006): 507-531.
- ² Centers for Disease Control and Prevention (CDC), National Data for All Ages (NDAA), *Health care, no usual source, all ages: US, 1998-2006.* Retrieved from the Internet at 205.207.175.93/HDAA/TableViewer/tableView.aspx on November 13, 2008.
- 3 Ibid.
- 4 Richard Hofrichter, *Health and Social Justice* (San Francisco, CA: Wiley & Sons, Ins., 2003).
- ⁵ CDC, Office of Minority Health & Health Disparities. *Eliminate Disparities in Infant Mortality*. Retrieved from the Internet at www.cdc.gov/omhd/AMH/factsheets/infant .htm on February 19, 2009.
- 6 Nancy E. Reichman, et al., "Racial and Ethnic Disparities in Low Birthweight among Urban Unmarried Mothers," *Maternal Child Health J* 12 (2008): 204-215.
- ⁷ MacDorman and Atkinson 1999 as cited in Jason D. Boardman, et al., "Low Birth Weight, Social Factors, and Developmental Outcomes among Children in the United States," *Demography* 39, No. 2 (2002): 353-368.
- ⁸ The Annie E. Casey Foundation, 2008 Ohio's Kids Count Data Book (Baltimore, MD: Annie E. Casey Foundation, 2008).
- ⁹ CDC, NDAA, Low birthweight: US/State, 1997-2005. Retrieved from the Internet at http://205.207.175.93/HDAA/TableViewer/tableView.aspx on December 16, 2008.
- 10 T.J. Matthews and Marian F. MacDorman, "Infant Mortality Statistics from the 2005 Period Linked Birth/Infant Death Data Set," *National Vital Statistics Report* 57, No.2 (2008):1-32.
- 11 The Henry J. Kaiser Family Foundation. Preterm Births as a Percent of All Births by Race/Ethnicity, 2006. Retrieved from the Internet at www.statehealthfacts.kff.org/ comparecat.jsp?cat=2 on January 18, 2009.
- 12 March of Dimes, "Nation Gets a "D" as March of Dimes Releases Premature Birth Report Card," (White Plains, N.Y.: March of Dimes, November 12, 2008). Retrieved from the Internet at www.marchofdimes.com on February 23, 2009.
- 13 See note 11.
- $^{14}\,$ Jason D. Boardman, et al., see note 7.
- 15 David Locker and David Matear, "Oral Disorders, Systemic Health, Well-being and the Quality of Life," University of Toronto, Faculty of Dentistry. Retrieved from the Internet at www.caphd-acsdp.org on February 13, 2009.
- ¹⁶ eMedicineHealth, Asthma in Children. Retrieved from the Internet at www.emedicine health.com/asthma_in_children/article_em.htm on February 24, 2009.
- 17 National Survey of Children's Health, 2003, as cited by Ohio Asthma Coalition, Asthma Profile in Ohio. Retrieved from the Internet at www.ohioasthmacoalition .org/asthma/profile.htm on February 17, 2009.
- 18 Ohio Family Health Survey, 2004 as cited in Children's Defense Fund-Ohio, Ohio's Kids Count: 2008 Data Book (Columbus, Ohio: Children's Defense Fund-Ohio, 2008).
- 19 Child and Adolescent Health Measurement Initiative, National Survey of Children's Health, 2003. Retrieved from the Internet at www.nschdata.org on November 26, 2008.
- 20 See note 15.
- ²¹ Elice, C.E. and Fields, H.W., "Failure to thrive: review of the literature, case reports and implications for dental treatment," *Pediatric Dentistry* 12 (3) (1990): 185-189.
- 22 See note 19. 23 See note 19.
- 24 Children's Defense Fund Ohio, *Ohio's Kids Count Data Book* (Columbus, Ohio: Children's Defense Fund – Ohio, 2008).
- ²⁵ CDC, *Childhood Overweight and Obesity*. Retrieved from the Internet at www.cdc.gov/ nccdphp/dnpa/obesity/childhood/ on February 20, 2009.
- 26 Ibid.
- 27 Ohio Department of Health, Division of Family and Community Health Services, A Report on Body Mass Index of Ohio's Third Graders, 2004-2005. Retrieved from the Internet at http://74.125.47.132/search?q=
- cache:INEjVdXDDKoJ:healthyohioprogram.org/ASSETS on February 21, 2009. 28 National Center for Health Statistics, *Prevalence of Overweight Among Children and*
- Adolescents: United States: 1999-2002. Retrieved from the Internet at http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm on February 20, 2009
- 29 Ibid
- 30 National Initiative for Children's Healthcare Quality, Childhood Obesity Action Network, How Much do You Know About the Childhood Obesity Epidemic in OHIO? Retrieved from the internet at http://nschdata.org/Viewdocument.aspx?item=234 on February 20, 2009.
- 31 Ibid.
- ³² See note 27.
- ³³ Gregory D. Stevens, "Racial and Ethnic Disparities in the Primary Care Experiences of Children: A Review of the Literature," *Medical Care Research and Review*, 60, (2003): 3-30.
- 34 See note 2.
- 35 See note 19.

- 36 See note 19.
- 37 See note 19.
- 38 National Institute of Mental Health, Attention Deficit Hyperactivity Disorder (ADHD). Retrieved from the Internet at www.nimh.nih.gov/health/topics/attention -deficithyperactivity-disorder-adhd/index.shtml on February 25, 2009.
- 39 American Academy of Pediatrics, Understanding ADHD: Information for Parents About Attention-Deficit/Hyperactivity Disorder. Retrieved from the Internet at www.aap.org on February 25, 2009.
- 40 Ibid.
- 41 David Rabiner, "Long-Term Outcomes for Children with ADD/ADHD," ATTENTION RESEARCH UPDATE. Retrieved from the Internet at www.helpforadd.com/long-termoutcomes/ on February 25, 2009.
- 42 Ibid.
- 43 U.S. Census Bureau, State Single Year of Age and Sex Population Estimates: April 1, 2000 to July 1, 2007, calculated by Children's Defense's Fund, Uninsured Children Younger than 19 in the States, 2005-2007 (Washington, D.C.: Children's Defense Fund, 2008).
- 44 See note 19.
- ⁴⁵ Robin M. Weinick and Nancy A. Krauss, "Racial/Ethnic Differences in Children's Access to Care," *American Journal of Public Health*, 90, No. 11 (2000): 1771-1774.
- 46 Ibid.
- 47 James P. Marcin, et al., "Using Telemedicine to Provide Pediatric Subspecialty Care to Children with Special Health Care Needs in an Underserved Rural Community," *Pediatrics*, 113, No. 1 (2004): 1-6.
- 48 See note 24.
- ⁴⁹ Michael Hendryx, "Mental Health Professional Shortage Areas in Rural Appalachia," *The Journal of Rural Health, 24, No. 2 (2008): 179-82.*
- 50 See note 24.
- ⁵¹ Miriam Komaromy, et al., "The Role of Black and Hispanic Physicians in Providing Health Care for Underserved Populations," *The New England Journal of Medicine*, 334, No. 20 (1996): 1305-1310.
- ⁵² Mark S. Eberhardt and Elsie R. Pamuk, "The Importance of Place of Residence: Examining Health in Rural and Nonrural Areas," *Rural Health and Health Care Disparities*, 94, No. 10 (2004): 1682-1686.
- ⁵³ Kristen Suthers, American Public Health Association, Evaluating the Economic Causes and Consequences of Racial and Ethnic Health Disparities (Washington, D.C.: American Public Health Association, November, 2008). Retrieved from the Internet at http://www.apha.org/NR/rdonlyres/EF3D92F8-4F58-4E49-85A1-D6EB8A08CA89/0/Econ2_ Disparities_Final.pdf on March 13, 2009.
- 54 Children's Defense Fund, Health Coverage for All Children Campaign (Washington, D.C.: Children's Defense Fund, 2008). Retrieved from the Internet at www.childrens defense.org/healthychild on October 20, 2008.
- 55 See note 4.
- ⁵⁶ Institute of Medicine, "What Healthcare Providers Need to Know About Racial And Ethnic Disparities in Healthcare," *Unequal Treatment* (Washington, D.C.: National Academy of Sciences, 2002). Retrieved from the Internet at www.iom.edu/?id=16740 on January 16, 2009.
- ⁵⁷ Dr. Randall Longenecker, e-mail to the author, March 12, 2009.
- 58 See note 45.
- 59 U.S. Department of Health and Human Services, Office of Minority Health, What is Cultural Competency? Retrieved from the Internet at www.omhrc.gov/templates/ browse.aspx?lvl=2&lvlid=11 on March 4, 2009.
- 60 Bentacourt, Joseph, R., Alexander R. Green, J. Emilio Carrill, and Elyse R. Park. (2005) "Cultural Competence and Health Care Disparities: Key Perspectives and Trends," *Health Affairs* 24, no. 2.
- 61 See note 59.
- 62 See note 60.
- ⁶³ Kate Meyers, Kaiser Permanente Institute for Health Policy, Issue Brief: Racial and Ethnic Health Disparities." Retrieved form the Internet at http://www.kpihp.org/publications/docs/ disparities_highlights.pdf on March 11, 2009.
- 64 See note 45.
- 65 Kate Meyers, Kaiser Permanante Institute for Health Policy, Issue Brief: Racial and Ethnic Health Disparities (Oakland, CA: Kaiser Permanente Institute for Health Policy, 2007). Retrieved from thee Internet at http://www.kpihp.org/publications/docs/ disparities_highlights.pdf on March 13, 2009.
- ⁶⁶ Cindy Mann, Diane Rowland, Rachel Garfield, "Historical Overview of Children's Health Care Coverage." *Health Insurance for Children: Issues and Ideas*, 13, no. 1 (2003). Retrieved from the Internet at http://www.futureofchildren.org/information2826/ information_show.htm? doc_id=161395 on March 13, 2009.
- 67 See note 65.
- 68 Ohio Department of Job and Family Services, Ohio Medicaid, Programs for Children, Families and Pregnant Women. Retrieved from the Internet at http://jfs.ohio.gov/OHP/ consumers/familychild.stm on March 13, 2009.

CDF Mission Statement

The Children's Defense Fund Leave No Child Behind[®] mission is to ensure every child a Healthy Start, a Head Start, a Fair Start, a Safe Start and a Moral Start in life and successful passage to adulthood with the help of caring families and communities.



Children's Defense Fund онго kids count

Columbus395 E. Broad St., Suite 330, ColumbusOH43215Cleveland1422 Euclid Ave., Suite 972, ClevelandOH44115National Office25 E Street, NW, Washington DC20001

p (614) 221-2244 p (216) 298-4480 p (202) 628-8787 f (614) 221-2247 f (216) 298-4481 f (202) 662-3510 www.childrensdefense.org/ohio www.childrensdefense.org/ohio www.childrensdefense.org