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. 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), and the same holds true for some racial minorities (see figure 2). 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. 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.

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. 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), and the same holds true for some racial minorities (see figure 2). 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.
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. Low birthweight (<2500 grams) is one of the leading risk factors for infant mortality. 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. Nationally, Ohio ranked 36th out of 50 states, or 14th worst, for the percent of low-birthweight babies born in 2005. 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. 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. 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. In 2006 pre-term birth rates in Ohio were slightly higher than the national average at 13.3 percent and 12.8 percent, respectively. 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 outcomes and often require increased hospitalization after birth and during the first year. 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.
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 5. Percent of Pre-term Births by Race/Ethnicity


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

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 than 100 percent of the FPL were also reported to have higher rates of childhood obesity than children from families with higher incomes.
Figure 8. Children (1-17 yrs.) Reported to Have Fair/Poor Teeth Condition by Income Level


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.


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. 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. 

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. 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). 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). 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).

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).

* 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.

According to the National Institute of Mental Health, ADHD is one of the most common childhood mental health disorders. It affects 4 to 12 percent of school-aged children and about three times more boys than girls. It is often characterized by hyperactive and impulsive behavior and can have far reaching effects into adulthood. 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. Fortunately however, these secondary outcomes can be prevented through close observation of the child’s behavior to identify the appropriate intervention. 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.

**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.
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. 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 6,715 residents and Meigs has one for every 7,744.50 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 regretfully 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.\textsuperscript{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 baby, and subsequently, the rate of infant mortality. Every year, roughly 750,000 pregnant women are uninsured or underinsured in Ohio.

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.\textsuperscript{54} 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.

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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{62} Specifically, this can be facilitated through enhanced cultural diversity among health care providers\textsuperscript{63} and increased access to interpreter services.\textsuperscript{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.\textsuperscript{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. 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. 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 the federal poverty level to qualify for Medicaid.

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.
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.