# Early Childhood Minnesota

*Spotlight on disparities in income, race, and geography*

**Wilder Research**
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CONTENTS



The full report and indicator data sources are available at http://www.wilder.org/report.html?id=2114

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## About the study

This snapshot highlights disparities in income, race, and geography that adversely affect the health and well-being of Minnesota children under age 6 and their families.

It identifies disparities by looking at statewide indicators used to monitor the current status of Minnesota's early childhood care and education system. The indicators are categorized by four interconnected themes: early learning, family support, health/mental health, and special needs/early intervention (page 9). For each indicator, information includes a statewide overview, and when data are available, shows disparities by income, race, and between those who live in the Twin Cities and greater Minnesota.

For several indicators, disparities data are not available, or are very limited, and this lack of data is noted in the chart at the end of the snapshot (pages 22-23). A second section presents evidence-based or promising strategies to prevent or reduce disparities.

This snapshot is from a larger study conducted by Wilder Research for the Build Initiative of Ready 4 K and the Minnesota Early Childhood Comprehensive Systems (MECCS) initiative of the Minnesota Department of Health. The study is part of a joint effort to develop a comprehensive early childhood system that will connect Minnesota children and families with culturally and linguistically appropriate information, services, and supports that will put all children on the path to success.

**DEFINITIONS USED TO DETERMINE DISPARITIES**

- **Income disparities – differences between families above 200 percent of the federal poverty rate (higher income) and families at or below 200 percent (lower income).**
- **Racial disparities – differences between the white population and populations of color.**
- **Geographic disparities – differences between 7-county metropolitan area and greater Minnesota.**

***The racial/ethnic categories provide a general overview, but do not represent the varied experiences of immigrants, refugees, and families from numerous nationalities and tribes that make up the racial/ethnic groupings.***

# Disparities in income, race, and geography

## *Early learning*

### Kindergarten proficiency

The Minnesota Department of Education (MDE) tracks school readiness of kindergarteners across five domains: personal and social development, language and literacy, mathematical thinking, the arts, and physical development and health. For the fall 2007 class of kindergartners, at most half of the entering children exhibited proficiency across the five domains.

Higher income positively influences school readiness in all five domains.

Racial/ethnic identity does not significantly influence school readiness in any of the domains after adjusting for differences in income, language, and parental education. However, children in English-speaking families have higher levels of mathematical thinking and language and literacy skills when they enter kindergarten.

Though kindergartners from greater Minnesota were more likely to be school ready in all the domains of school readiness, these results were strongly related to demographic factors, indicating geography does not significantly influence school readiness.

### Quality early childhood programs

There are two indicators of quality: providers with bachelor's degrees and centers with accreditation. Statewide, 15 percent of infant and toddlers and 22 percent of preschool-age children are enrolled in child care centers or preschools with one of these two indicators of quality according to the Minnesota Child Care Resource and Referral Network (CCR&R) survey.

Children in the Twin Cities have greater access to formal child care with indicators of quality; 22 percent of infants in the Twin Cities are enrolled in formal child care with an indicator of quality, compared with 10 percent in greater Minnesota. The gap is smaller for preschoolers; 25 percent in the Twin Cities compared with 20 percent in greater Minnesota.

### Maternal education status (new indicator)

Across the state, 10 percent of babies are born to mothers with a low educational status (based on their age and number of completed school years) as reported by the Minnesota Department of Health (MDH).

Most populations of color have a higher percentage of mothers with a low educational status, although this varies widely by race. In 2007, the percentage of births to mothers of low educational status by race/ethnicity were:

- Hispanic or Latina 48%
- American Indian 30%
- African American 20%
- Asian 11%
- White 5%

There is no difference between the Twin Cities metro area and greater Minnesota for this indicator.

## *Family support*

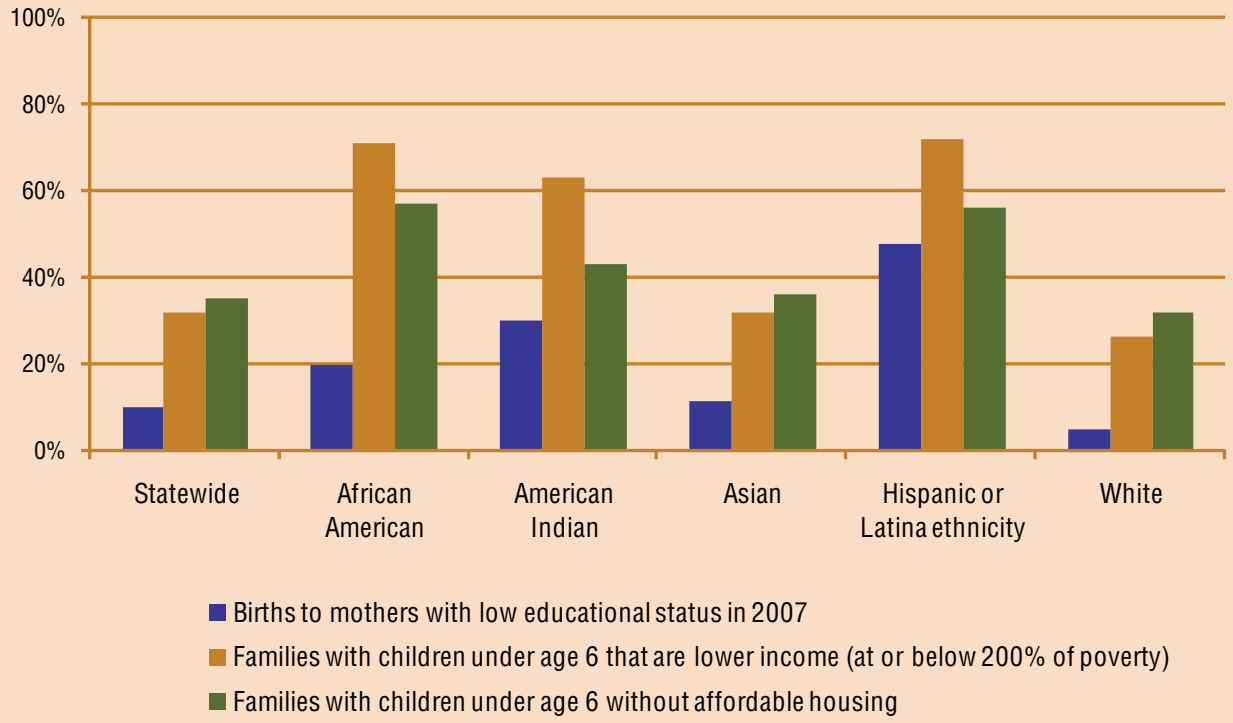
### Families with higher incomes

Family income makes a difference in the lives of young children. Higher incomes positively influence school readiness, health, and other indicators of well-being. In Minnesota, 68 percent of families with children under age 6 have higher incomes.

Families with children under age 6 who have higher income by race/ethnicity:

- White 74%
- Asian 68%
- American Indian 37%
- African American 29%
- Hispanic or Latino 28%

**SUMMARY EARLY LEARNING AND FAMILY SUPPORT BY RACE/ETHNICITY**



## INDICATORS WITH NO GAPS BETWEEN GREATER MINNESOTA AND THE TWIN CITIES METRO AREA

- The percentage of babies born to mothers with a low educational status (10%)
- The percentage of households with children under age 6 with affordable housing (65%)
- The rate of health insurance coverage for children under age 6 (about 95%)
- Obesity rates for young children served by WIC (12-14%)
- The percentage of pregnant women receiving adequate or better prenatal care in 2006 (79%)

In greater Minnesota, 64 percent of families with children under age 6 are higher-income, compared with 73 percent of families in the Twin Cities. However, it is likely that the standard of living in the Twin Cities is higher than in greater Minnesota, reducing the effect of this disparity. For example, the living wage in Minneapolis is 25 percent higher than the living wage in Wilmar.

### Affordable housing

Households that spend 30 percent or more of their income on housing costs are considered to be housing cost-burdened. Statewide, 35 percent of households with children under age 6 are housing cost-burdened. However, this varies greatly by income and race.

Sixty-eight percent of lower-income households with children under age 6 are housing cost-burdened, compared with 20 percent of higher-income households.

Looking at families with children under age 6 who are housing cost-burdened finds these racial gaps:

| | |
|---|---|
| African American | 57% |
| Hispanic or Latino | 56% |
| American Indian | 43% |
| Asian | 36% |
| White | 32% |

The proportion of households with children under age 6 in the Twin Cities and greater Minnesota who are housing cost-burdened are similar.

### Early Childhood Family Education (ECFE)

Early Childhood Family Education (ECFE) provides education and support to expectant parents and parents with young children. During the 2003-04 school year, 40 percent of Minnesota children from birth to kindergarten and their families participated in ECFE.

Though data are limited, there do not seem to be disparities in ECFE participation. In 2006, 21 percent of families in ECFE were families with incomes of less than $30,000 per year, fairly similar to the percentage of all families in Minnesota with children under age 6 with incomes of less than $30,000 (19%).

Eighteen percent of families in ECFE were families of color, similar to the percentage of families of color in Minnesota with children under age 6 (17%). Likewise, 64 percent of families of young children in the Twin Cities participate in ECFE, similar to the percent of ECFE families in greater Minnesota with young children (66%).

### Paid parental leave

Due to lack of data on the availability of parental leave from employers, employed parents of infants who use parental leave is used as a proxy measure. Over 7 percent of employed parents in Minnesota used parental leave in 2005-07.

During this period, higher-income employed parents of infants were twice as likely to use parental leave, 8 percent compared with 4 percent of lower-income employed parents of infants.

And, 7 percent of white parents of infants used parental leave compared with 11 percent of Hispanic or Latino.

### Out-of-home placements

Children are removed from their homes on a temporary or permanent basis when they face unsafe conditions at home or are in need of behavioral health services.

In 2006, 9 out of every 1,000 children under age 6 living in Minnesota were placed in out-of-home care. Children of color under age 22 were placed in out-of-home care at disproportionately higher rates than white children, even after controlling for income differences. American Indian and African American children had particularly high out-of-home placement rates; however, data were not available by race for children under age 6.

In greater Minnesota, 10 out of every 1,000 children under age 8 were placed in out-of-home care compared with 8 out of every 1,000 children under age 8 in the Twin Cities.

## *Health and mental health*

### Children with elevated blood-lead levels

Young children are especially vulnerable to the toxic effects of lead. However, information is limited about lead levels in children. Less than a quarter of children under age 6 were tested in 2006. Of those, 1.5 percent had elevated blood-lead levels (10 µg/dL or greater).

Lead exposure is exacerbated by societal conditions associated with poverty. Though information is not available by income, MDH reports blood-lead levels among Medicaid-enrolled children. In 2006, 2.1 percent of tested Medicaid-enrolled children under age 6 had elevated blood-lead levels, compared with 1.0 percent of those not enrolled in Medicaid.

Data are also limited on racial/ethnic groups; however, MDH reports blood-lead levels among refugee groups. In 2006, 6.5 percent of tested refugee children under age 6 had elevated blood-lead levels, compared with 1.5 percent of all children tested statewide.

### Health insurance coverage

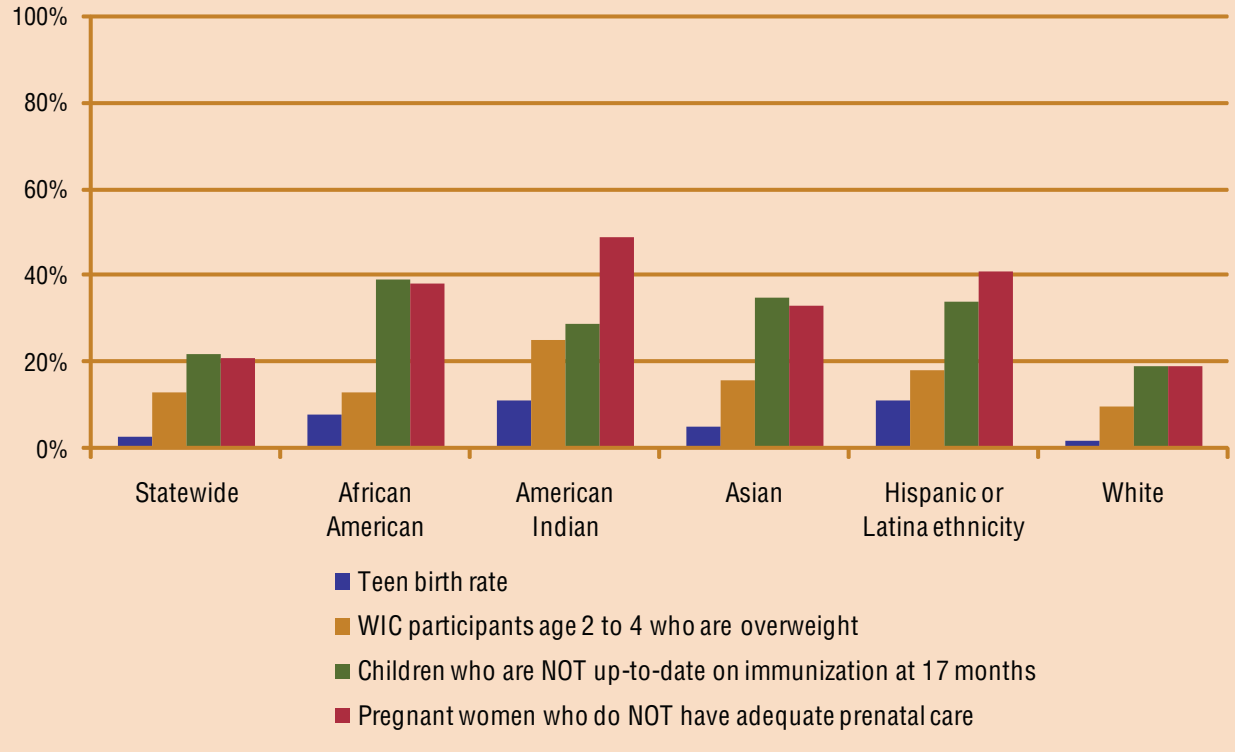
Health insurance enables families to access needed health care services for both preventative care and treatment. Across Minnesota, 95 percent of children under age 6 are covered by health insurance.

Ninety-one percent of children under age 6 in lower-income families are covered by health insurance, compared with 97 percent of children in higher-income families.

Ninety-five percent of white children under age 18 in Minnesota are covered by health insurance, compared with 87 percent of children of color.

Children under age 6 in the Twin Cities are only slightly more likely to be covered by health insurance – 96 percent are, compared with 94 percent of children under age 6 in greater Minnesota.

**SUMMARY HEALTH AND MENTAL HEALTH BY RACE/ETHNICITY**



### Well-child visits

Regular medical check-ups support the health and well-being of young children. According to the 2002 Behavioral Risk Factor Surveillance System (BRFSS) child health module, 72 percent of children under age 18 in Minnesota were meeting the American Academy of Pediatrics' (AAP) well-child visit guidelines.

There were no significant differences in well-child visits among lower and higher income children in Minnesota.[1]

Among those surveyed, 83 percent of children of color and/or Hispanic or Latino ethnicity under age 18 were meeting AAP's well-child visit guidelines in 2002, compared with 69 percent of white, non-Hispanic children under age 18.

*The Child and Teen Checkups Program* (C&TC) provides preventive health visits to children from birth to age 21 who are enrolled in Medicaid and MinnesotaCare. Screening and participation ratios are determined by how many screenings a child had relative to how many the child should have had during the time the child was eligible for the program. The screening ratio is based on having at least one screening and the participation ratio is based on having all the recommended screenings during the time period. In 2008, for children birth to age 5, the overall statewide screening ratio was .90; the participation ratio was .68. American Indian children birth to age 5 had lower screening and participation ratios than any other race or ethnic group reported on.

| | Participation ratio | Screening ratio |
|---|---|---|
| • American Indian | .56 | .70 |
| • White | .63 | .84 |
| • Asian | .70 | .90 |
| • African American | .74 | .94 |
| • Hispanic or Latino | .77 | 1.0 |

### Immunizations

Immunizations are important for protecting the individual health of children. The 2000-2001 Retrospective Kindergarten Survey showed 78 percent of children in Minnesota were up-to-date for primary series immunization levels at 17 months of age.

However, immunization levels showed race/ethnic disparities.

- African American 61%
- Asian 65%
- Hispanic or Latino 66%
- American Indian 71%
- White 81%

### Teen birth rate

Delaying pregnancy until adulthood contributes to the health and prosperity of both parents and their children. In 2007, the teen birth rate in Minnesota was 28 births per every 1,000 female teens.

Among teens age 15 to 19, the birth rate is higher for populations of color:

- American Indian 108
- Hispanic or Latino 108
- African American 79
- Asian 50
- White 17

Teen birth rate is slightly higher in the Twin Cities, 30 births per 1,000 teens, than in greater Minnesota, 27 births per 1,000 teens.

## Obesity

Childhood obesity is a modern epidemic exacerbated by physical inactivity, built environments, market forces, and agricultural policies. Minnesota does not have a statewide monitoring system for tracking the prevalence of overweight children. In lieu of statewide data, data from MDH on low-income children who participate in Women, Infants, & Children (WIC) are used. Children in WIC are classified as overweight if they fall into the top five percentage-adjusted body weights. In Minnesota, 13 percent of WIC participants age 2-4 are overweight. Rates for racial/ethnic populations are:

- American Indian 25%
- Hispanic or Latino 18%
- Asian 16%
- African American 13%
- White 10%

## Children served through publicly-funded mental health services

Mental health service disparities are difficult to estimate for the under age 6 population because the entire population is relatively underserved. The State of Minnesota and local mental health and screening programs estimate that approximately 5 percent of children under age 6 (20,000) have a serious emotional disturbance (SED) and could benefit from mental health services.

Over 4,000 children under age 6 enrolled in Minnesota Health Care Programs (MHCP) in 2006 received services from mental health professionals (2.6% of all the children under age 6 enrolled in MHCP). Of those, Asian and Hispanic children received mental health services at rates significantly lower than statewide rates. Nationally, Hispanic and African American children are more likely to have SEDs.[2]

## Prenatal care

Early and regular prenatal checkups enable timely and preventive care to enhance the health of mothers and their babies. In 2006, 79 percent of mothers in Minnesota who gave birth had adequate or better prenatal care.

From 2001-05, the percentage of pregnant women with adequate or better prenatal care among racial and ethnic populations was:

- American Indians 51%
- Hispanic or Latina 59%
- African American 62%
- Asian 67%
- White 82%

## *Special needs*

### Special health care needs met

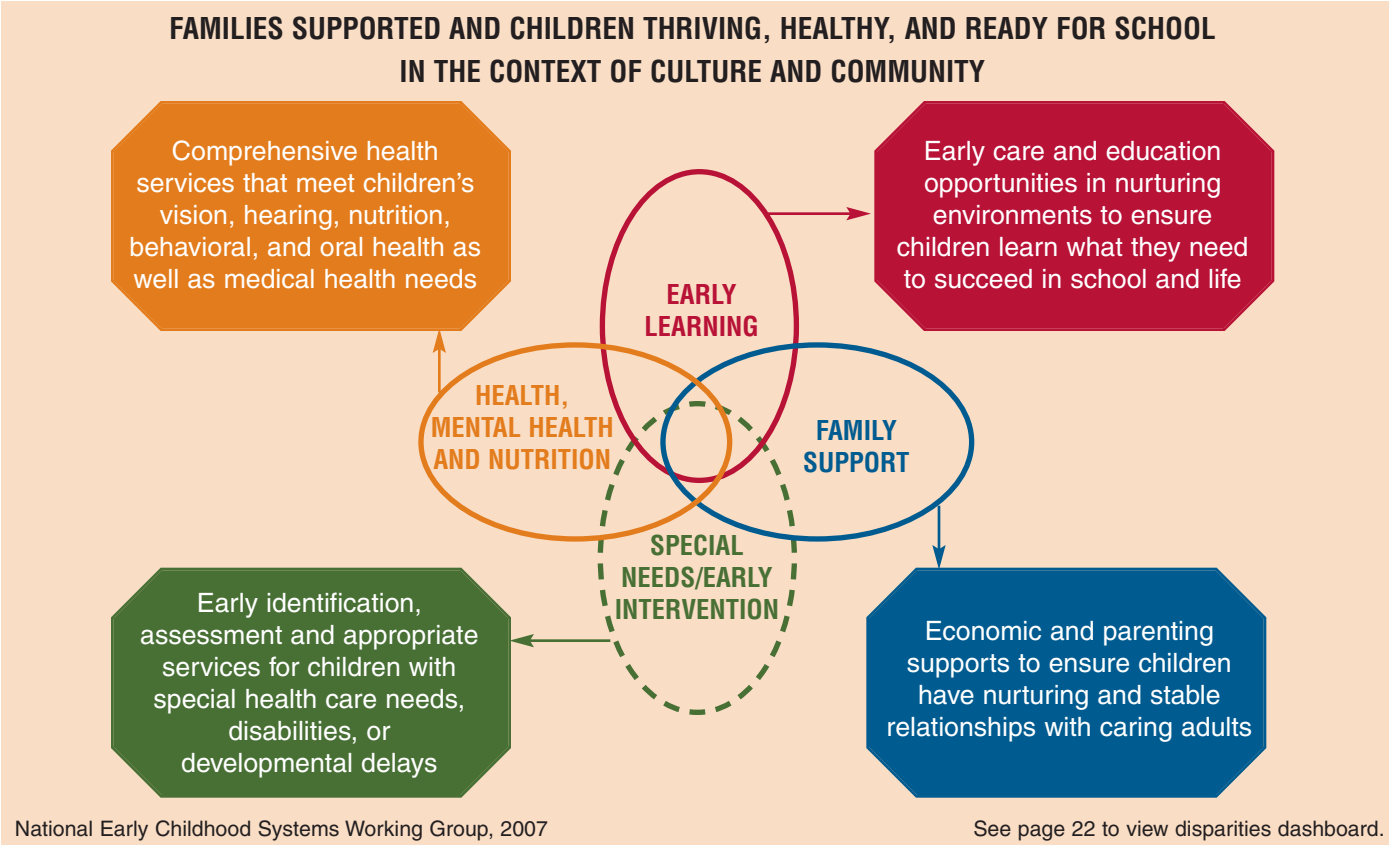
Children that exhibit certain health conditions, such as asthma, diabetes, sickle cell disease, autism, or Down syndrome, require specialized health care services. Among children under age 18 with special health care needs, 87 percent had all needs met, according to the 2005/2006 National Survey of Children with Special Health Care Needs.

Among children under age 18 with special health care needs in lower income families, 73 percent had all needs met, compared with 92 percent of those in higher income families.

The percentages of children with special health care needs who had all needs met by race/ethnicity were fairly similar, ranging from 78 percent for African American children to 89 percent for white children.

### Early intervention (Part C)

The federal Individuals with Disabilities in Education Act (IDEA) Part C requires states to provide special education services to infants and toddlers. In Minnesota, 4,579 children were enrolled in special education services in 2008 (approximately 2 percent of the birth to age 2 population). In comparison, 4 percent of African American children birth to age 2 and 5 percent of American Indian children birth to age 2 are enrolled in special education. These children are receiving services at higher rates than the general population, though more data are necessary to understand why.




National Early Childhood Systems Working Group, 2007

See page 22 to view disparities dashboard.

### Advancing early literacy

**Words Work!™ is an early literacy program aimed at closing the achievement gap early. The program, implemented in over 40 Head Start classrooms in Ramsey and Dakota counties, uses an integrated approach to support learning and teaching. Words Work!™ uses four key principles:**

- **Surround children with literacy.**
- **Respect home language and culture.**
- **Teach the teachers, helping them stay engaged, motivated, and satisfied as members of learning teams.**
- **Use assessment for continual improvement, empowering teachers to understand, plan, and implement strategies that meet student needs.**

**For more information go to: http://www.saintpaulfoundation.org/giving_opportunities/find_funds_by_issue/words_work/**

# Strategies for reducing disparities

## *Strategies to reduce income disparities*

Children in higher-income families fare better than children in lower-income families with regard to kindergarten readiness, affordable housing, use of parental leave, toxic levels of lead exposure, meeting special health care needs, and access to health insurance. The strategies below aim to address these disparities.

### Early learning strategies

Research has shown that children improve their cognitive, language, and fine motor skills in preparation for kindergarten when they attend quality early care and education programs. Low-income children, in particular, make greater gains in Title 1 supported pre-kindergarten programs in the public schools than in private child care centers.[3] In addition, mixed-income preschool environments are shown to have greater impact on low-income children's language growth than classrooms with children of similar income.[4]

Initial research has also shown some success in using "mobile crèches" – creating ECE classrooms in buses – to reach low-income children who may not be able to travel to ECE programs or access other opportunities in their larger communities.[5] Mobile classrooms can also serve as a link to identifying children's special health care needs early on, as children who do not attend early childhood programs often are not screened for health, mental health, or developmental delays.

### Family support strategies

One way to better support low-income families is to consider changes in the tax code. First, changes to the Earned Income Tax Credit (EITC) could provide support to low-income families in multiple ways. Providing public awareness campaigns and tax and financial education, along with free tax preparation services to low-income workers, would ensure more eligible workers claim EITC benefits. Some states supplement EITC to provide the credit to low-income workers who do not pay taxes, and to noncustodial parents who make their child support payments on time. Minnesota can also help working families by lowering the income tax thresholds and increasing deductions.

The Earned Income Tax Credit is also a potential strategy for reducing disparities in affordable housing. Basing the EITC on the median price of appropriate-sized housing units for eligible families, rather than on income, would reduce the number of housing-burdened families by 510,000 families across the nation.[6]

In addition, the Center for Disease Control Task Force on Community Preventive Services recommends rental vouchers as a way to improve families' access to affordable housing.[7]

The current Family Medical Leave Act (FMLA) of 1993 provides for 12 weeks of "job-protected" unpaid leave for employees of companies with 50 or more employees.[8] Taking the full 12 weeks has been shown to be best for children's development.

In Minnesota, higher income employed parents of infants are twice as likely to use parental leave. To reduce this disparity, the National Center for Children in Poverty and Zero to Three Policy Center recommend a number of policy changes to better support low-wage working parents:

- Extend access to family leave to part-time workers and employees at small businesses allowing more low-income workers to qualify for benefits.[9]
- Provide 12 weeks paid leave to full-time workers.

In addition, employers may need to provide a higher share of lost earnings to lower paid employees. This can be done through state policies legislating paid leave or through expansion of unemployment and disability benefits to cover temporary absences due to births or adoptions.[10]

### Health and mental health strategies

Prevention efforts are invaluable to eliminate elevated blood-lead levels in children, which are particularly high among Minnesota's lower income refugee children.[11] The CDC recommends increased collaboration between government agencies and community-based organizations. Government agencies have a role in establishing laws, enforcing regulations, testing homes, and monitoring populations at higher risk for lead exposure. Rental housing, particularly units rented by lower income families, should be inspected for safety and lead exposure. Government can also prevent lead exposure by directing resources to renovate homes in neighborhoods with high concentrations of lower income families. Parent education programs can also help parents know

### Increasing housing stability

**Community Action Agencies throughout Minnesota serve as the "last local line of defense" for families in need of stable housing and provide the following services:**

- **Foreclosure and homelessness prevention**
- **Energy assistance**
- **Homeownership classes**
- **Shelter for the homeless**
- **Housing grants and loans**
- **Rental assistance and tenant information**
- **Housing development and weatherization**

**Housing stability improved at a rate of 5 to 1 among people who got housing services compared to those who did not.**

**For more information go to: http://www.minncap.org/**

### Improving oral and mental health

**The Minnesota Head Start Association (MHSA), with input from stakeholders, developed an action plan to address the fact that a majority of Head Start children have problems accessing oral health prevention and treatment, which affects their ability to grow in language and literacy. The plan lays out approaches for the association to advocate for a community-based public health delivery system for oral health services, changes in regulation to increase access, funding for oral health services, and public education. MHSA is also working with MN Head Start grantees to strengthen Head Start's mental health prevention activities, screening, referral processes, and systems to assure mental health treatment services.**

**To more information go to: http://www.mnheadstart.org**

where to look for lead hazards, how to protect their children, and to ensure their children are tested. Health care providers should provide education on lead hazards during well-child visits.

#### Special needs and early intervention strategies

Many of the disparities in meeting minority children's special health care needs are related to lack of access. Strategies for addressing gaps in services between lower and higher income children are similar to those for addressing other health disparities. Increasing health insurance coverage of lower income children, access to care through community clinics, and transportation options enable families with children with special needs conditions to get necessary care.

## *Strategies to reduce racial and ethnic disparities*

Children of color in Minnesota are more likely to be born to mothers with low educational status, to be in lower-income families, to lack affordable housing, to have elevated blood-levels, and to experience out-of-home placement. In addition, children of color in Minnesota are less likely to be covered by health insurance, up-to-date on their immunizations, served by public mental health services, and have all identified special health care needs met. The teen birth rate is also higher among teens of color, and pregnant women of color are less likely to have adequate or better prenatal care. These strategies are proving effective in addressing racial and ethnic disparities.

#### Early learning strategies

Preschool attendance has been shown to improve the school readiness gap of children from households where English is not the primary language; however, language-minority children are less likely to attend preschool programming.[12] As a result, improving access and quality of early care and education programming can help address the school readiness gap of language-minority children.

Strategies to address the higher rate of teen pregnancy in minority communities likely will address the high rate of low maternal educational status among mothers of color.

### Family support strategies

African Americans and American Indians face particularly high rates of poverty in Minnesota. A number of state policies reduce child and family poverty. Policies that expand benefits for unemployment and medical leave to cover part-time employees, and provide benefits for a longer period of time, help families of color deal with unexpected job losses or family emergencies.[13] Lower income families can also be helped through asset accumulation, such as incentives for banks to open in underserved neighborhoods, and individual development account programs, which provide matching funds to individuals when they open bank accounts and take courses in financial management. Regulations, such as anti-predatory lending legislation, protect low-income consumers, especially those with limited English proficiency. Increasing coordination among and the cultural sensitivity of the various state and federal benefits programs can also help families access the programs already available. Finally, financial aid and training that is provided with employment programs help those who are accessing public services obtain higher-paying employment with more opportunities for advancement.

Parents need access to child care in order to work. The Minnesota Child Care Assistance Program (CCAP) provides financial subsidies to help low-income parents pay for child care.[14] However if child care options are not available in a parent's community, the financial assistance cannot help. Subsidies to communities and transportation may provide alternative ways for cultural communities to get their children to high quality care. The state's pre-kindergarten allowance also provides continuity of care not always available through CCAP.

In Minnesota, Adult Basic Education helps participants improve their economic condition. Increasing literacy skills through adult education programs, such as GED, ESL and workplace literacy, leads adults to job attainment and job retention. In addition, adult education helps new Americans become proficient in English, which increases their employment opportunities and their earnings. As a result, new Americans are able to own and rent properties and to buy groceries, clothes, shoes, and other essentials.[15]

### Providing culturally responsive training

**The Early Childhood Resource and Training Center (ECRTC) is training new assistant child care teachers through its IMPACT program. The program provides support for new immigrants, caregivers from cultural communities, and others, and emphasizes culturally responsive care to ensure the cultural competence of child care workers. The 12-month, 12-credit course is taught at ECRTC by instructors from Minneapolis Community and Technical College and St. Paul College. It includes coursework and work-related experience that are supplemented with opportunities for technical assistance and mentoring.**

**ECRTC also provides training and support to FFN child care providers in American Indian, Somali, and East African communities, with a focus on early literacy and school readiness.**

**ECRTC was established in 1973 for building up families and communities to ensure the healthy development of all children.**

**For more information go to: http://www.ecrc1.org/**

### Supporting tribal programs

**White Earth Child Care Program received a grant from the Minnesota Department of Human Services to provide outreach, training, and support to FFN caregivers on the White Earth reservation and surrounding counties. Funds are used to purchase:**

- **First aid items such as safety gates, smoke detectors, and door latches.**
- **CHELLO Assessment tool/user's guide and the Minnesota Ounce scale; CHELLO evaluations have started on home visits.**
- **Theme-based developmentally appropriate items for literacy kits to distribute during home visits. Items include books, art/craft supplies, and child development information.**

**White Earth also provides a Readmobile, which visits FFN homes and brings books and other resources, particularly in the Ojibwe language, to FFN caregivers and children in their care.**

**For more information go to: http://www.whiteearthchildcare.com**

Ensuring eligible families of color access the Earned Income Tax Credit (EITC) and Child Tax Credit are also effective ways of addressing racial/ethnic disparities in poverty rates. (See information on EITC above.)

Basing the Earned Income Tax Credit on the median price of appropriate-sized housing units for eligible families and providing rental vouchers can help reduce the number of families of color who lack affordable housing.

Strategies to address the disproportionate number of minority children in out-of-home care include developing partnerships between child welfare and public school systems, and engaging fathers and other relatives in a child's life.[16] By working together, agencies can identify and address needs before families need to be removed from their homes. Engaging fathers and extended families in children's lives provides additional support to families and mothers, and other caring adults who can care for children, when necessary. To address the high level of out-of-home care among American Indian children, tribal child welfare systems need access to the same funding sources as non-tribal agencies.

Minnesota could also consider putting together a statewide committee, like the Indiana Disproportionality Committee (IDC) that had 5 objectives: to research issues of disproportionality in the welfare system, to increase awareness of the issues, to train professionals, to promote a service delivery agenda, and public policies to address disproportionality.[17]

### Health and mental health strategies

Health and mental health disparities can be addressed through a variety of policies that increase access to health care for low-income, ethnically diverse, and rural populations that may not have adequate access. In addition to community clinics and decreasing the number of uninsured children, providing transportation or covering the costs of transportation for low-income neighborhoods can also improve access.[18] Using informal care, such as traditional healers, and lifestyle changes, can also be avenues to providing care to minority populations.[19] In addition, health disparities can be addressed by integrating health services with early childhood intervention programs, and using home visiting programs to reach disadvantaged children and families early on.[20]

Home visiting programs are a strategy for addressing a variety of health and mental health issues. Children whose parents receive nurse-home visiting services are more likely to be up-to-date on their well-child

visits and immunizations, have fewer emergency room visits, early identification of mental health and special health care needs, and better prepared for kindergarten.[21] Mothers are more likely to receive prenatal care, have fewer subsequent births, and less likely to experience postpartum depression.[22] Nurse-Family Partnership is a national nurse home visiting program; Ramsey County is currently one of many implementing agencies. The Metro Alliance for Healthy Families is another evidenced-based, intensive home-visiting strategy targeted at first-time vulnerable parents whose children are at risk of poor developmental and health outcomes. The home visits, which emphasize child development within the context of positive parent-child attachment, are provided by degreed professionals from public health nursing, social work, early childhood development, family counseling, and infant and maternal mental health

***Blood-lead levels:*** Prevention efforts are invaluable to eliminate elevated blood-lead levels in children, which is particularly high among Minnesota's refugee children. The CDC recommends increased collaboration between government agencies and community-based organizations.[23] Government agencies have a role in establishing laws, enforcing regulations, testing homes, and monitoring populations at higher risk for lead exposure. Government can also prevent lead exposure by directing resources to renovate homes in neighborhoods with high concentrations of refugee populations. Health care providers should provide education on lead hazards during well-child visits, and community-based organizations should provide culturally appropriate education to pregnant women and families with young children. In addition, The Centers for Disease Control and Prevention has a toolkit, *Lead Poisoning Prevention in Newly Arrived Refugee Children*, for Minnesota organizations that work with refugee communities.

***Health-insurance coverage:*** Although Minnesota has a very high number of children and families covered by health insurance, a larger proportion of minority children are not. Recent legislation aims to reduce these disparities in the upcoming fiscal year by decreasing the income requirements to 250 percent of the federal poverty line and reducing sliding-fee premiums.[24] Yet in many cases, eligible families are not accessing existing programs. Improving public awareness campaigns and media outreach efforts, particularly in communities of color, could bridge the gap. Programs that pay community-based organizations to enroll eligible individuals help families overcome cultural barriers to access public health insurance.[25]

### Promoting early screening

**To identify learning or health problems earlier and provide help sooner, Screen at 3 encourages more Minneapolis children to have their early childhood screening done at age three. Screen at 3 is a joint campaign of the Minneapolis Public Schools, the City of Minneapolis, and Hennepin County.**

**Outreach flyers for Screen at 3 are available in 4 languages: English, Hmong, Somali, and Spanish and direct parents to call 612-348-TOTS to make an appointment for screening.**

**For more information go to: http://www.ycb.org/schoolsreadiness.asp**

***Immunization rates:*** Most studies that have examined the effects of interventions aimed at increasing well-child exams and immunization rates have found that intensive recall/reminder systems increase immunization rates. However, such techniques have not been as effective with low-income or minority households. A multifaceted approach that includes recall/reminder systems along with patient and staff education, and clinic incentives, has greater success in increasing well-child exams and immunization rates.[26]

In cultural communities, it is important to involve the entire community in raising awareness of the importance and safety of immunizations through culturally-specific media messages. Developing community clinics increases community members' access to primary care providers and immunizations.[27] Along with community clinics, it is important to recruit and provide financial assistance to members of various cultural communities to enter the medical profession.

***Teen-birth rates:*** Although rates for teen births are decreasing in Minnesota and nationwide, a wide disparity between race/ethnicity remains. For example, teen birth rates among Minnesota's Hispanic/Latina girls have increased over the past two years.[28] Research shows that longer periods of unsupervised time are associated with more risky sexual behaviors, resulting in unintended pregnancies and/or acquiring sexually-transmitted infections.[29] Sustainable adult-supervised after-school and evening programming for youth is an effective method to prevent teen pregnancy. Effective teen pregnancy prevention programs are those that are of sufficient length, have well-trained and passionate staff, actively engage participants, address peer pressure, teach communication skills, have clear messages about what is the right thing to do, and reflect participants' culture and age.[30] In a recent report, the Teen Outreach Program (TOP) was identified as a cost-effective strategy to improve early childhood well-being.[31] TOP combines in-school discussions on youth development

topics with after-school activities focused on voluntary service-learning and community service. Structured learning does not specifically focus on sexual education, yet outcomes of TOP have shown reductions in teen pregnancy.

Research has also shown that school-based health centers are effective at decreasing pregnancy rates among high school youth, even when contraception is not available.[32] School-based health centers provide health services to populations that may face barriers to accessing health care elsewhere, and can identify and provide early intervention to teens engaging in risky sexual behaviors.

***Childhood obesity:*** Family-based programs designed for specific cultural communities can help address increased rates of childhood obesity among populations of color.[33] Successful programs partner with trusted organizations already in the community; involve entire families; include healthy eating and exercise components; are group focused; and incorporate music, spirituality, and other cultural practices appropriate for the community of focus.

Other strategies to promote healthy weight include providing safe play areas, sidewalks, and bike paths in neighborhoods with large populations of families of color to encourage physical activity. For low-income families of color, promoting breastfeeding and healthy eating at WIC appointments and offering more choices for fruits and vegetables on vouchers can help address disparities in childhood obesity.

***Mental health:*** To address disparities in mental health services, more children's mental health professionals are needed. Programs that encourage medical students to pursue this field can help address this issue.[34] Pediatricians also need to be thoroughly trained to provide developmental guidance to families regarding the social and emotional development of their children and to recognize mental health conditions in both children and mothers.[35] This can be done by integrating mental health into curriculum for pediatricians. Reforming public assistance programs to make it easier for clinics to be reimbursed for providing mental health services would enable more community clinics to provide these services.[36] Use of culturally appropriate and validated developmental and mental health screening instruments is another effective strategy.

**Providing timely information**

**Emergency and Community Health Outreach (ECHO) provides life-saving health and safety information to people with limited English skills. Using phone, fax, TV, and web technologies, ECHO provides information about disaster and health emergencies – from the accidental release of chemicals to outbreak of pandemic flu, to traffic safety tips, to getting your child ready for kindergarten. ECHO offers information in English, Spanish, Somali, Hmong, Lao, Khmer and Vietnamese, and has a partnership with Twin Cities Public Television (TPT) to broadcast shows in various languages.**

**For more information go to: http://www.echominnesota.org**

### Ensuring healthy social and emotional development

Greater St. Cloud Area Thrive is a community project focusing on the healthy social emotional development of children birth to age five. Hosted by Sauk Rapids-Rice ECFE and St. Cloud State University, Thrive has developed a number of projects to build capacity in early childhood mental health. One example is a professional learning community that brings together university faculty across disciplines and community practitioners to embed infant mental health research theory and practice into curriculum. A Thrive clinician's group also meets monthly to develop skills and receive training in early childhood mental health. This program is part of the Minnesota Thrive Initiative underway in six Minnesota Initiative Foundation communities.

For more information go to: http://www.mcf.org/MCF/whatsnew/

***Prenatal care:*** In Minnesota, minority populations are less likely to receive prenatal care regularly or early on in their pregnancies. Community-based strategies may help address this disparity. In a recent study, researchers found that using a mobile clinic van that offered health care to pregnant mothers resulted in mother's accessing regular prenatal care earlier, compared to patients who sought care in a community center.[37] Other techniques to address disparities in prenatal care include providing community health workers, providing in-home visits to pregnant mothers, and creating partnerships with local faith communities and early childhood intervention programs.[38]

#### Strategies for special needs and early intervention

Many of the disparities in meeting minority children's special health care needs are related to lack of access. Strategies for addressing the gaps in services between children of color and white children are similar to those of addressing other health disparities including increasing health insurance coverage of minority children, access to care through community clinics, and transportation to enable families to get necessary care.

## *Strategies to reduce geographic disparities*

Families in greater Minnesota with young children are more likely to be lower-income. Children in greater Minnesota are less likely to be enrolled in quality early childhood programs and less likely to receive regular well-child examinations.

In some cases, families and children in greater Minnesota appear to be doing better than their counterparts in the Twin Cities. However, this is likely related to race/ethnicity make-up more than geography.

#### Early learning strategies

Quality rating systems (QRS) provide resources to increase the quality of care and education for children, parents' understanding and demand for higher quality care, and the professional development of child care providers. They can reduce geographic disparities among early childhood providers and programs.[39] For example, Kentucky's STARS for KIDS NOW QRS provides financial awards and grants to providers to make quality improvements or for professional development.[40]

Increasing the quality of care provided by family, friend, and neighbor (FFN) providers increases high quality options to families in greater Minnesota. A new grant program funded in 2007 with state appropriations to the Minnesota Department of Human Services provides one-time funding to six local partnerships, including Indian tribes, libraries, ECFE programs and school districts, and other non-profit organizations working with FFN providers.

### Strategies for family support

State policies can help address rural poverty. In particular, expanding unemployment and medical leave policies to cover part-time workers and to provide benefits for a longer period of time can help families in crisis.[41] Reforming state and federal programs to increase coordination among the different benefits' programs can help families access programs that are already available. This may be particularly important for rural families who may face transportation barriers to accessing the programs. Increasing educational and training opportunities in rural areas, and associated financial aid, can help parents obtain higher paying jobs.

If child care options are not available in a parent's community, financial assistance cannot help. Providing subsidies to communities and transportation may be alternative ways to ensure quality care options are available in sparsely populated areas and that parents can access them.

### Strategies for health and mental health

Health care can be more difficult to access in smaller communities or rural areas. Often families must travel long distances to clinics and hospitals for preventive care and treatment, which may prevent children from receiving their well-child examinations on schedule. Other ways to increase access to preventive care in rural areas include loan repayment programs and financial incentives for doctors that choose to practice in smaller communities, and mobile clinics. Medical practitioners can also consider partnering with child care providers and early education programs to provide well-child exams on site.

### Preventing teen pregnancy

**New Beginnings program for pregnant and parenting teens in the Scott and Carver counties school district is implementing a pregnancy prevention outreach program based on the national Teen Outreach Program (TOP).The program will serve middle school and junior high school boys and girls in the district. It is being developed through a training and technical assistance partnership with the Minnesota Organization on Adolescent Pregnancy, Prevention and Parenting.**

**New Beginnings, a program of The Scott Carver Educational Cooperative, has a 30-year track record in helping pregnant and parenting teens receive their diploma and become independent and contributing members of society.**

**For more information go to: http://www.moappp.org**

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## INDICATORS WITH DISPARITIES

### Child and family indicators of health and well-being

Children entering kindergarten proficient across five learning domains:
**Income:** Yes
**Race:** Yes
**Geography:** No

Families with young children with incomes greater than 200% of poverty:
**Income:** Not applicable
**Race:** Yes
**Geography:** Limited data

Children in out-of-home placement:
**Income:** Not available
**Race:** Limited data
**Geography:** No

Families with young children who have affordable housing:
**Income:** Yes
**Race:** Yes
**Geography:** No

Children referred for possible developmental problems at Early Childhood Screening:
**Income:** Not available
**Race:** Not available
**Geography:** Not available

Children with elevated blood-lead levels:
**Income:** Limited data
**Race:** Limited data
**Geography:** No

Teen birth rates and subsequent births to teen parents:
**Income:** Not available
**Race:** Yes
**Geography:** No

Rates of obesity for 2-5 year olds (overweight WIC participants age 2-4):
**Income:** Not available
**Race:** Limited data
**Geography:** No

Children with possible vision and hearing problems:
**Income:** Not available
**Race:** Not available
**Geography:** Not available

Children with disabilities who demonstrate improved knowledge and skills and demonstrate the use of appropriate behaviors:
**Income:** Not available
**Race:** Limited data
**Geography:** Not available

Children with special health care needs with 'all needs' met for specific health care services:
**Income:** Yes
**Race:** Yes
**Geography:** Not available

Children with possible social-emotional problems:
**Income:** Not available
**Race:** Not available
**Geography:** Not available

## INDICATORS WITH DISPARITIES

### System indicators of quality and access

Children enrolled in quality EC programs (enrolled spaces in Head Start or child care sites with an indicator of quality):
**Income:** Not available
**Race:** Not available
**Geography:** Yes

Participation rates in ECFE and other parent education and support models:
**Income:** Limited data
**Race:** Limited data
**Geography:** Limited data

Children covered by health insurance:
**Income:** No
**Race:** Yes
**Geography:** No

Quality EC programs:
**Income:** Not available
**Race:** Not available
**Geography:** Not available

Children participating in Early Childhood Screening:
**Income:** Not available
**Race:** Not available
**Geography:** Not available

Children who receive regular well-child examinations and immunizations:

**Examinations:**
**Income:** No
**Race:** Limited data
**Geography:** Yes

**Immunizations:**
**Income:** Not available
**Race:** Yes
**Geography:** Limited data

Young children being served through publicly funded mental health services compared to estimated need:
**Income:** Not available
**Race:** Yes
**Geography:** Not available

Businesses offering living wages and paid parental leave (% of employed parents of infants using parental leave):
**Income:** Yes
**Race:** No
**Geography:** Not available

Pregnant women receiving early and regular prenatal visits:
**Income:** Not available
**Race:** Yes
**Geography:** No

Children birth to 3 who are served through Part C Early Intervention:
**Income:** Not available
**Race:** Not available
**Geography:** Not available

Newborns identified with hearing problems and diagnosis by 3 months of age; and enrolled in early intervention by 6 months of age :
**Income:** Not available
**Race:** Not available
**Geography:** Not available

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**Learn more about this report:**
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