

Minnesota Early Childhood Risk, Reach, and Resilience

Summary of Key Indicators of Early Childhood Development in Minnesota, County by County



The 2018 Minnesota Early Childhood Risk, Reach, and Resilience report was produced by a partnership of Wilder Research; Institute of Child Development, University of Minnesota; and the Minnesota Departments of Education, Health, and Human Services, supported by a grant from the Irving Harris Foundation to the University of Minnesota.

Methodology

For every **risk indicator**, each county was assigned to one of four risk categories, based on comparisons to the statewide average of all the counties. These comparisons were based on z-scores, which represent the number of standard deviations that an individual county-level indicator falls above or below the statewide average. Each county also has a **composite risk score**, one of four risk categories assigned bases which sums the z-scores for each county across all indicators, calculates the average and standard deviation, and then assigns each county another z-score. This composite score was then used to assign counties to one of the four risk categories.

Indicators of reach measure the proportion of eligible children served by eight publicly-funded programs in Minnesota. Similar to the risk indicators, each county was assigned to one of four reach categories, based on comparisons to the statewide average of all the counties for every reach indicator. In addition to being reported in tables, the reach indicators are also mapped onto the composite risk score map to provide readers with a sense of each program's coverage in relation to the overall level of risk or need.

Purpose

Researchers across disciplines and specialties agree. The physical, social, and economic health and well-being of adults and society are strongly influenced by experiences in early childhood. The most cost-efficient time to build foundational skills, to assure the healthy development of all young children, to break the cycle of disadvantage for vulnerable children, and to prevent achievement and health inequities is in the very early stages of development.

This report describes potential risks to the healthy development of young children and the extent of coverage of publicly-funded services to meet their early learning, health, and basic needs. This report also includes new and emerging indicators of risk, reach, and resilience.

Finally, this 2018 report reviews and notes changes since the 2015 Minnesota Early Childhood Risk and Reach report in the indicators of early childhood well-being and the availability and accessibility of key services from a county-level perspective. It is intended to be a resource for all early childhood stakeholders in order to guide and inform resource allocation and policy.

Key findings: Risk indicators

Economic risks

- In 2016, 10.5 percent of all births in the state were to mothers with less than a high school degree, up from nearly 8 percent in 2012. Twelve of Minnesota's counties (three more than in 2012) fall in the high-risk category on this indicator, all of which are located in greater Minnesota. Mahnomon County has the highest rate (27%).
- Statewide, 5.4 percent of children under age 6 have no parent in the labor force, ranging from 14.5 percent in Hubbard County to 1.5 percent in Carver County.
- About 16 percent of children are living in poverty in Minnesota (poverty level is about \$20,000 per year for a family of three and about \$24,000 for a family of four). Fourteen counties spread throughout the state fall in the highest risk category on this indicator.

Health risks

- The teen birth rate in Minnesota is 14 births per 1,000 girls age 15 to 19, down from 20 births since 2012. Eleven counties are high risk, 4 more than in 2012. Mahnomon, Watonwan, Nobles, and Cass counties have the highest rates at 59, 44, 38, and 34 births per 1,000 teen girls, respectively.
- In 2016, an estimated 21 percent of births in Minnesota lacked adequate prenatal care, similar to the percentage in 2012 (22%). Most counties are low to moderate risk on this indicator. The 11 high-risk counties are scattered throughout the state, including multiple counties in the southeast and northwest regions.
- In 2016, 5 percent of births were low-weight births (under 5.5 pounds). The 14 counties in the high-risk category are spread throughout the state.
- Minnesota's infant mortality rate is 5 deaths per 1,000 births. The rate in Cook County (16.3) and Mahnomon County (11.9) are the highest.
- Four percent of children in Minnesota under age 6 lacked health care coverage (2012-2016), with the range stretching from under 2 percent in Jackson County to a high of 18 percent in Watonwan.
- About 39 percent of 2-year-old children (age 24 through 35 months) lacked the recommended childhood immunizations in 2017. Immunization levels range from 50 percent in Roseau County to 89 percent in Traverse County. Thirteen counties fall into the high-risk category.

Family stability risks

- Eighteen percent of children under age 5 changed residences at least once in the past year (2012-2016). Six counties fall in the high-risk category, down from 11 in the prior time period.
- In 2016, 38 in 1,000 children under age 5 statewide had a maltreatment report filed during the year, up from 25 in 2013. Traverse County has the state's highest rate, at 141 per 1,000 children.
- In 2016, 13 in 1,000 children under age 6 statewide were in foster care, up from about 8 in 2013. Beltrami has the state's highest rate, at 99 per 1,000 children.

Overall risk status

Each county was assigned to one of the four risk categories, based on its average score across all indicators relative to other counties. This single score is meant to focus attention and begin conversations about where counties fall along the continuum of risk, which counties are in greatest need, and what we might learn from counties with the lowest-risk environments for young children.

Minnesota has an estimated 423,100 children age 5 and younger living in 87 counties, about 13,000 fewer than in 2015. (Three counties with about 900 children under age 6 lack sufficient data to assess overall risk).

- About 131,000 (31%) children (up from 80,000 in 2015) live in 14 (up from 12 in 2015) counties categorized low risk. The counties with the most indicators at low risk levels are Carver, Washington, Scott, Wright, Morrison, and Nicollet.
- About 74,000 (18%) children (down from 155,000 children in 2015) live in 29 (down from 37) counties categorized as low to moderate risk.
- About 199,000 (47%) children (up from 132,000 children in 2015) live in 30 (up from 19) moderate-to-high risk counties, including Hennepin and Ramsey counties. Ramsey County fell in the high-risk category overall in 2015.
- About 18,500 (4%) children (down from 68,000 children in 2015) live in 11 (down from 15) high-risk counties. The counties with the most indicators at high risk levels are Beltrami, Mahnomon, Cass, Pine, Mille Lacs, and Nobles.

Key findings: Reach indicators

Reach of health programs

- Fifty-nine percent of eligible children under age 6 are served by the Special Supplemental Nutrition Program for Women, Infants, and children (WIC). That percentage is down from 70 percent in 2013 due to both an expansion in the number eligible and a reduction in the number served. In general, greater Minnesota counties have higher levels of WIC reach than counties in the metro area.
- The Family Home Visiting Program reaches 13 percent of the targeted low-income families (at or below 200% of poverty level) with children under age 5. In general, high-reach counties tend to be in greater Minnesota.

Reach of human services

- Nearly half of children under age 6 in low-income families (at or below 125% of poverty level) are covered by Minnesota Family Investment Program. The coverage ranges from 12 percent in Fillmore County to 100 percent in Red Lake County. In the Twin Cities metro area, Hennepin (61%) and Ramsey Counties (57%) have relatively high coverage levels.
- Thirteen percent of children under age 6 in low-income families (at or below 200% of poverty level) are served by the Child Care Assistance Program, the same as in 2014. The coverage ranges from 3 percent in Todd County to 25 percent in Brown County. Counties in the southeast Minnesota, near Rochester, have high levels of CCAP reach, while counties in the northwest have lower levels.
- Statewide, 49 per every 1,000 children under age 6 enrolled in Minnesota Health Care Programs were assessed and treated for mental health issues, up from 40 in 2013. The 10 low-reach and 10 high-reach counties are scattered across greater Minnesota.

Reach of education programs

- About 38 percent of kindergartners received developmental screenings at age 3 by the Early Childhood Screening Program in 2016. The reach ranges from 21 percent in Hubbard County to about 75 percent in Big Stone, Douglas, Murray, and Red Lake counties. In the metro area, Hennepin (29%) and Ramsey (23%) counties have low reach levels.

- Statewide, about 28 percent of eligible children under age 6 living in poverty are served by Head Start and Early Head Start. The coverage ranges from 11 percent or below in Carver and Washington counties in the metro area and Fillmore, Isanti, Rock, St. Louis, and Sibley counties in greater Minnesota to 80 percent or higher in Big Stone, Hubbard, Lac qui Parle, Marshall, Pennington, and Roseau counties.
- In 2017, 7 percent of all children under age 5 were served by early intervention and early childhood special education services, up from 4 percent in 2014, ranging from 1 to 14 percent of children per county.
- We added three early education programs in this report. In 2016-17, Early Childhood Family Education (ECFE) served about 5 percent of children under age 5; the School Readiness Program served 14-15 percent of children age 3 and 4; and Voluntary Pre-kindergarten served about 5 percent of 4-year olds.

Emerging indicators

The 2018 Risk, Reach, and Resilience report also provides data at the state level, as available, and research information on how the following emerging risk, reach, and resilience indicators affect child development. It includes the rationale for adding three indicators of resilience.

The emerging indicators are:

- **Risk:** Maternal depression, substance use by parents and related fetal and early childhood health issues, parental incarceration, housing cost burden and homelessness, food insecurity
- **Reach:** Dental and oral health check-ups, mental health consultation to child care programs, early learning scholarships
- **Resilience:** Positive social and instrumental support, healthy attachment relationships, father involvement



Conclusions and implications

Nearly 217,500 children in Minnesota live in moderate-to-high or high-risk counties, representing 51 percent of all children under age 6 with potential risks to healthy development, up from 46 percent in 2015.

Eight of the 11 high-risk counties are also high risk for children living in poverty, and 5 of the 11 have high proportions of American Indian children, who tend to experience more inequities in access to services and in well-being.

The reach of publicly funded early childhood programs in Minnesota varies by county and ranges overall from about 5 percent to about 60 percent of eligible children. In some counties, the greater availability of services may contribute to a lower risk level; in other counties, a greater level of services may have resulted from efforts to target the higher risk levels that are present in the county.

Throughout Minnesota, developmental risk levels are likely to rise without concerted efforts to rectify income inequality and racial inequities and to improve the reach of early childhood health, family support, and education programs.

Although every early childhood risk factor is a concern, no single risk factor determines a child's developmental trajectory. Development is probabilistic, not deterministic. Nevertheless, cumulative risk has been found to be the most predictive of adverse outcomes in childhood and across the lifespan. Models of child development and concepts of vulnerability and resilience suggest that child development is a process of continuous, dynamic, and bidirectional interactions between the child and his or her environment, including relationships within families, culture, and social systems. Importantly, each of these models emphasizes the importance of stable and nurturing early relationships in the developmental process. Supporting and restoring fundamental adaptive relationships and systems for human development are top priorities for promoting competence and resilience in young children and their families. These theories imply that the opportunities for intervention are as numerous as the consequences of cumulative risk. There is no threshold at which intervention is futile.

Finally, this report is a useful tool to describe and compare indicators of early childhood development at the county level. This version, updated from 2015, adds data on three early education reach indicators and research-based rationale for adding other indicators of developmental risk and resilience. Despite its contributions, incomplete data and a lack of comprehensive, cross-agency, integrated early childhood data management systems leave many questions unanswered about access to services, cumulative early childhood risks, and the relationship between risk and reach over time. Moreover, data on child and family strengths and resilience would provide a more complete picture of early child development in Minnesota. We hope that this and other reports encourage integrative data collection on the range of early childhood experiences as well as services and community supports that promote resilience.

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For more information

This summary presents highlights of the *Minnesota Early Childhood Risk, Reach, and Resilience Report*, available at www.wilderresearch.org. Results by county available at www.mncompass.org. For more information, contact Richard Chase at Wilder Research or Elizabeth Carlson, Institute of Child Development, University of Minnesota.

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SEPTEMBER 2018



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