

Minnesota MIECHV Needs Assessment Phase II Findings

Introduction and Rationale

A main requirement of the 2020 MIECHV Needs Assessment identified communities (i.e., counties) with concentrations of risk. To accomplish this, MDH employed a three-phase process that used quantitative methodology. Phase I identified 17 counties of families with young children who are at greatest risk for poor outcomes connected low socio-economic status, adverse perinatal outcomes, substance use disorder, child maltreatment, and crime.

County-level data often masks health disparities among groups of people living in the same county, particularly when counties have large non-Hispanic white communities. Further, Minnesota consistently ranks as one of the healthiest states in the nation, but also has large health disparities between White residents and communities of colorⁱ. Phase II employed a health equity approach to examine racial and ethnic health disparities in the following perinatal risk indicators: preterm birth, low birth weight, births funded by Medicaid, and births to teen parents.

Methods

For each county, disparity ratios for the four perinatal risk indicators were calculated by racial and ethnic groups using MDH Vital Records data from 2013-2017ⁱⁱ. MDH-FHV replicated the methodology used by the Center for Health Statistics at MDHⁱⁱⁱ where disparity ratios were calculated by dividing the rate for each racial/ethnic group by the rate of the racial/ethnic group with the lowest rate for each county. The racial or ethnic group that was the lowest for many of the indicators was often, though not always, non-Hispanic White. The five counties with the highest disparity ratio for each risk measure were included for each racial or ethnic group. Counties with the highest disparities ratios across each race/ethnic group were identified as “at-risk” in Phase II. See the full methodology in the full [2020 MIECHV Needs Assessment Narrative \(www.health.state.mn.us/docs/communities/fhv/miechvanarrative.pdf\)](http://www.health.state.mn.us/docs/communities/fhv/miechvanarrative.pdf) for additional detail.

Findings

Below is a series of tables that display the counties with the highest disparity ratio by race or ethnic group. For example, a rate of 2.5 for a race/ethnic group in a risk indicator would indicate the race/ethnic group is 2.5 times more likely to be at risk for a perinatal risk indicator in a particular county.

As a result of Phase II, 22 additional counties were added to Phase I for a total of 39 counties identified as “at risk” in Phase I & II.

Questions? Email Health.FHVdata@state.mn.us

Table 1. Top 5 Counties with Highest Preterm Birth Disparity Ratios by Race/ Ethnicity

Race	County	Ratio
African American	Wright	2.3
	Mower	1.9
	St. Louis	1.6
	Anoka	1.4
	Washington	1.3
American Indian/Alaska Native	Carlton	1.9
	Becker	1.8
	Hennepin	1.8
	Mahnomen	1.7
	St. Louis	1.7
Asian/ Pacific Islander	Freeborn	2.5
	Mower	2.1
	Wright	1.6
	Carver	1.6
	Blue Earth	1.5
Hispanic	Steele	2.4
	Brown	2.0
	Renville	1.9
	Kandiyohi	1.7
	Clay	1.5

Table 2. Top 5 Counties with Highest Low Birth Weight Disparity Ratios by Race/Ethnicity

Race	County	Ratio
African American	Winona	2.5
	Mower	2.2
	Washington	1.9
	Wright	1.8
	Hennepin	1.6
American Indian/Alaska Native	Pine	2.0
	Becker	1.8
	Carlton	1.8
	Hennepin	1.8
	Mille Lacs	1.8
Asian/ Pacific Islander	Carver	1.9
	Olmsted	1.8
	Mower	1.7
	Nobles	1.7
	Blue Earth	1.7
Hispanic	Renville	2.2
	Otter Tail	2.2
	Cottonwood	2.0
	Clay	2.0
	Steele	1.6

Table 3. Top 5 Counties with Highest Births to Teen Parents Disparity Ratios by Race/Ethnicity

Race	County	Ratio
African American	Hennepin	6.1
	Winona	4.8
	Washington	3.9
	Ramsey	3.6
	Scott	3.2
American Indian/Alaska Native	Hennepin	11.1
	Dakota	10.2
	Ramsey	4.2
	Clay	3.9
	Beltrami	3.7
Asian/ Pacific Islander	Ramsey	3.4
	Nobles	2.6
	Hennepin	2.1
	Mower	1.5
	Anoka	1.0
Hispanic	Hennepin	8.6
	Scott	6.8
	Carver	6.6
	Washington	6.4
	Lyon	6.0

Table 4. Top 5 Counties with Highest Medicaid Births Disparity Ratios by Race/Ethnicity

Race	County	Ratio
African American	Carver	5.2
	Hennepin	4.8
	Scott	4.0
	Dakota	3.5
	Olmsted	3.3
American Indian/Alaska Native	Hennepin	4.7
	Dakota	3.2
	Ramsey	3.0
	Scott	2.9
	Pennington	2.7
Asian/ Pacific Islander	Ramsey	2.7
	Lyon	2.2
	Hennepin	2.1
	Redwood	2.0
	Nobles	2.0
Hispanic	Hennepin	4.6
	Carver	4.5
	Scott	3.5
	Dakota	3.3
	Ramsey	2.9

ⁱ Minnesota Department of Health. (2014). Advancing Health Equity in Minnesota: Report to the Legislature. Retrieved from <https://www.health.state.mn.us/communities/equity/reports/aheexecutivesummary.pdf>

ⁱⁱ Minnesota Department of Health, Minnesota Center for Health Statistics. (2019). Data file of vital recordsevents 2013-2017. St. Paul, MN.

ⁱⁱⁱ Minnesota Department of Health. (2009). Health Disparities by Racial/Ethnic Populations in Minnesota. Center for Health Statistics, Division of Health Policy. <https://www.health.state.mn.us/data/mchs/pubs/raceethn/rankingbyratio20032007.pdf>