2020

Iowa Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program

Statewide Needs Assessment Preliminary Executive Summary of Community Risk Assessment

Disclaimer: This is a preliminary report and has not been reviewed or approved by HRSA.







If you have questions or comments about this report, please contact:

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Iowa Community Risk Assessment

As part of the 2020 MIECHV Statewide Needs Assessment Update¹, the Health Resources and Service Administration (HRSA) required the state of Iowa to identify communities with concentrations of risks that include, but are not limited to, the following²:

- Premature birth, low-birth
 weight infants, and infant
 mortality, including infant
 death due to neglect, or other
 indicators of at-risk prenatal,
 maternal, newborn, or child
 health
- · Poverty
- Crime
- · Domestic violence
- High rates of high-school drop-outs
- · Substance abuse
- Unemployment
- · Child maltreatment

A committee of early childhood stakeholders guided the needs assessment process, helping determine the indicators of risk and methodology for assessing risk. A guiding principle for the risk assessment was comparability to the 2010 MIECHV risk assessment³. Therefore, each indicator of risk from 2010 was used in the 2020 risk assessment except binge drinking. Also, a risk score based on quartiles of risk indicators was retained as a risk assessment method.

Risk Assessment Methods

The 2020 MIECHV risk assessment aggregated the results of two different methods to identify at-risk counties. The first method measured county risk based on prevalence of risk across 23 indicators from state and federal data sources. The second method measured county risk based on the proportion of births with multiple maternal and child risk factors present. County rankings based on these two methods were averaged to determine the final at-risk counties.

Risk Assessment Method 1

For the first risk assessment method, analysts compiled county-level data from federal and state sources. Each risk indicator was converted to a risk quartile. Indicator data above the 75th percentile received a 4; higher than the 50th percentile, but equal to or below the 75th percentile received a 3; higher than the 25th percentile, but equal to or below the 50th percentile received a 2; and equal to or below the 25th percentile received a 1. A higher score indicated higher risk. Missing data did not receive a quartile. The quartiles for indicators with data were averaged for each county to calculate the county risk score. Risk indicators included the following:

- 4th Grade reading proficiency
- Premature birth
- · Low birth weight
- · Infant mortality
- · Poverty
- · Child poverty
- Unemployment
- Child abuse and neglect

- · High school dropout
- Crime
- Juvenile crime
- Domestic violence
- 3rd Trimester smoking
- Maternal education
- · Income inequality

- · Alcohol and drug-related crime
- 3rd Trimester alcohol use
- · Medicaid-reimbursed births
- · Teen births
- School lunch program
- · No prenatal care in 1st trimester
- · Maternal depression

Years, measures, and sources for indicators used in method 1 are located in Appendix A. County-level data for risk indicators are located in Appendix B.1 and Appendix B.2.

Opioid-related hospitalizations

Risk Assessment Method 2

The second method used Iowa's recently developed Early Childhood Integrated Data System (IDS)⁴ to analyze anonymized state administrative datasets that included Iowa Department of Public Health Vital Statistics birth records. Analysts used Iowa Department of Public Health Vital Statistics birth records from 2013 and 2017 to examine individual and cumulative birth risk experiences. This approach identified the percentage of children born in each county with three or more of the following risks:

- Enrollment in Medicaid or WIC at the time of birth (proxy for poverty)
- · Mother not married
- Mother with less than high school education
- · Mother under the age of 20
- Mother smoked during pregnancy or in the three months prior to pregnancy
- Baby born with low birth weight (<2,500 grams) or preterm birth (<36 weeks)
- Inadequate prenatal care (no visits in the first trimester or less than four visits overall)

Communities with Concentrations of Risk

A county was identified as at-risk if it was ranked in the top 25 counties based on an average ranking across both risk assessment methods. In total, 26 counties were identified as at-risk. See Appendix C for the results and rankings for each risk assessment method and overall risk rankings. At-risk counties were bolded for emphasis. Figure 1 (below) highlights the 26 at-risk counties and the overall risk ranking for each.

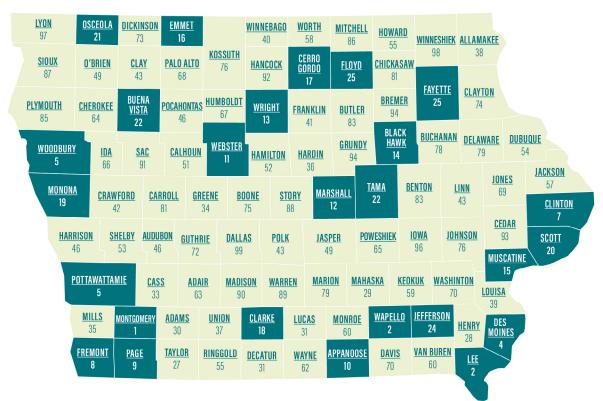


Figure 1: Map of Iowa At-Risk Counties and Overall Risk Rankings

Appendix A

Indicators, Years, Measures, and Sources

| 2010 Risk Indicators Used in Method 1 | Year(s) | Measure | Source |
|---------------------------------------|-----------|---|---|
| 4th Grade reading proficiency | 2018* | Percentage of students who are proficient in fourth grade reading on the Iowa Tests of Basic Skills and Iowa Alternate Assessment | Iowa Department of Education |
| Premature birth | 2018 | Premature singleton births as a percent of all live singleton births | Iowa Department of Public Health Vital Statistics |
| Low birth weight | 2018 | Percentage of live births weighing at less than 5.5 pounds at the time of birth | Iowa Department of Public Health Vital Statistics |
| Infant mortality | 2013-2017 | Infant mortality rate per 1000 live births | Iowa Department of Public Health Vital Statistics |
| Pouerty | 2017 | Percentage of population for all ages who live in poverty | United States Census Bureau |
| Child poverty | 2017 | Percentage of population under 18 who live in poverty | United States Census Bureau |
| Unemployment | June 2019 | Percentage of labor force population who are unemployed | Iowa Workforce Development |
| Child abuse and neglect | 2018 | Rate of children age 0-17 who are confirmed to have been abused or neglected during the year per 1,000 children | Iowa Department of Human Services |
| High school dropout | 2017-2018 | Percentage of students enrolled in grades 9-12 who dropped out | Iowa Department of Education |
| Crime | 2016 | Crime rate per 1,000 people | Iowa Department of Public Safety Uniform Crime Reporting |
| Juvenile crime | 2016 | Juvenile arrest rate per 1,000 juveniles | Iowa Department of Public Safety Uniform Crime Reporting |
| Domestic violence | 2016 | Domestic abuse rate per 100,000 people | Iowa Department of Public Safety Uniform Crime Reporting |
| 3rd Trimester smoking | 2018 | Percentage of mothers who gave birth who report smoking during 3rd trimester | Iowa Department of Public Health Vital Statistics |
| Maternal education | 2018 | Percentage of mothers who gave birth who have a high school education | Iowa Department of Public Health Vital Statistics |

^{*2017} for Jefferson County

| Additional Risk Indicators Used in Method 1 | Year(s) | Measure | Source |
|---|-----------|--|--|
| Income inequality | 2013-2017 | Ratio of household income at the 80th percentile to income at the 20th percentile | American Consumer Survey via countyhealthrankings.org |
| Opioid-related hospitalizations | 2018 | Opioid-related hospitalization rate per 1,000 hospitalizations | Iowa hospital discharge file |
| Alcohol and drug-related crime | 2016 | Alcohol or drug related crime rate per 1,000 people | Iowa Department of Public Safety Uniform Crime Reporting |
| 3rd Trimester alcohol use | 2015-2018 | Percentage of mothers who gave birth who report having one or more alcoholic drinks per week during the last 3 months of their pregnancy | Iowa Department of Public Health Barriers to Prenatal Care Survey |
| Medicaid-reimbursed births | 2018 | Percentage of Iowa resident births that were Medicaid reimbursed | Iowa Department of Public Health Vital Statistics |
| Teen births | 2011-2017 | Number of births per 1,000 female population ages 15-19 | Centers for Disease Control Natality File |
| School lunch program | 2018-2019 | Percentage of K-12 students eligible for free and reduced-price lunch | lowa Department of Education |
| No prenatal care in 1st trimester | 2018 | Percentage of live births to mothers who did not begin prenatal care during the first trimester of pregnancy | Iowa Department of Public Health Vital Statistics |
| Maternal depression | 2015-2017 | Percentage of women who gave birth who report a depression diagnosis before or during pregnancy | Iowa Department of Public Health Barriers to Prenatal Care Survey |

Appendix B.1Risk Assessment Method 1 County Data for Indicators Used in 2010

| Counties | Urban/ Rural | 4 th Grade reading proficiency | Premature birth | Low birth weight | Infant mortality | Poverty | Child poverty | Unemployment | Child abuse and neglect | High school dropout | Crime | Juvenile crime | Domestic violence | 3 rd Trimester smoking | Maternal education |
|-------------|-----------------|---|--------------------|------------------|---------------------|---------|------------------|--------------|-------------------------|------------------------|-------|-------------------|----------------------|--------------------------------------|--------------------|
| State Total | | 74.7% | 9.9% | 6.8% | 4.5 | 10.8% | 12.6% | 2.6% | 15.8 | 1.8% | 24.2 | 14.6 | 212.8 | 9.0% | 88.6% |
| Adair | Rural | 71.7% | - | 7.4% | 5.5 | 10.2% | 13.3% | 2.1% | 19.6 | 2.4% | 8.1 | 0.6 | 14.0 | 16.0% | 96.8% |
| Adams | Rural | 76.7% | 17.6% | - | - | 12.3% | 18.7% | 1.6% | 28.6 | 3.2% | 8.0 | 4.5 | 160.2 | - | 88.2% |
| Allamakee | Rural | 74.5% | 6.6% | 7.1% | - | 11.0% | 15.8% | 2.7% | 13.8 | 2.0% | 12.9 | 8.1 | 334.0 | 4.6% | 78.1% |
| Appanoose | Rural | 79.0% | 11.7% | 10.2% | 9.8 | 16.9% | 23.4% | 3.2% | 26.7 | 2.0% | 30.5 | 13.6 | 184.8 | 21.2% | 80.7% |
| Audubon | Rural | 83.8% | - | - | 5.8 | 10.7% | 15.4% | 2.3% | 21.3 | 2.1% | 10.4 | 3.4 | 105.3 | 13.3% | 95.0% |
| Benton | Rural | 81.4% | 10.1% | 5.6% | 4.0 | 7.8% | 9.0% | 2.6% | 12.5 | 2.7% | 3.3 | 1.4 | 66.6 | 8.7% | 94.4% |
| Black Hawk | Urban | 66.4% | 10.2% | 7.3% | 5.7 | 15.3% | 16.5% | 2.9% | 14.0 | 3.1% | 27.6 | 18.6 | 259.1 | 10.4% | 87.1% |
| Boone | Rural | 81.9% | 6.7% | 5.3% | 2.1 | 7.3% | 10.3% | 2.5% | 13.6 | 1.3% | 10.6 | 12.1 | 82.5 | 11.6% | 96.1% |
| Bremer | Rural | 77.3% | 10.3% | 6.2% | 2.3 | 7.1% | 6.2% | 2.1% | 7.2 | 1.4% | 11.5 | 16.1 | 0.0 | 6.3% | 98.2% |
| Buchanan | Rural | 70.9% | 8.7% | 6.6% | 5.7 | 9.0% | 12.6% | 2.4% | 13.2 | 1.1% | 7.3 | 1.5 | 0.0 | 8.9% | 75.3% |
| Buena Vista | Rural | 67.2% | 7.2% | 7.2% | 3.2 | 12.8% | 16.3% | 2.4% | 14.8 | 2.1% | 20.0 | 28.4 | 273.2 | 2.8% | 70.3% |
| Butler | Rural | 77.3% | - | 6.5% | 1.4 | 9.0% | 10.6% | 2.7% | 12.2 | 0.4% | 0.4 | 0.0 | 6.7 | 13.8% | 93.5% |
| Calhoun | Rural | 76.6% | 15.5% | 14.5% | 12.9 | 12.4% | 15.5% | 2.5% | 13.4 | 1.5% | 8.5 | 0.0 | 174.6 | 20.0% | 98.2% |
| Carroll | Rural | 81.9% | 7.9% | 5.7% | 2.3 | 9.1% | 10.5% | 2.0% | 17.2 | 1.6% | 12.3 | 4.9 | 78.4 | 8.3% | 95.2% |
| Cass | Rural | 78.8% | 8.3% | 6.4% | 1.4 | 12.1% | 16.5% | 2.5% | 28.1 | 6.0% | 11.9 | 12.7 | 7.5 | 13.4% | 90.4% |
| Cedar | Rural | 70.7% | 8.8% | 3.6% | 1.1 | 6.9% | 7.5% | 2.3% | 16.5 | 2.3% | 5.8 | 0.4 | 21.8 | 6.2% | 97.4% |
| Cerro Gordo | Rural | 73.5% | 8.3% | 6.4% | 5.2 | 10.8% | 13.1% | 2.7% | 26.0 | 2.8% | 33.9 | 33.0 | 313.6 | 17.2% | 90.7% |
| Cherokee | Rural | 84.0% | - | - | - | 9.6% | 11.5% | 2.6% | 15.4 | 0.7% | 10.1 | 11.7 | 0.0 | 9.6% | 94.2% |
| Chickasaw | Rural | 78.4% | 8.2% | 6.8% | 4.4 | 9.5% | 13.3% | 2.3% | 8.2 | 3.3% | 6.1 | 4.1 | 25.0 | 10.2% | 87.8% |
| Clarke | Rural | 77.5% | 12.6% | 9.4% | 1.6 | 11.0% | 15.4% | 2.6% | 18.9 | 2.8% | 19.2 | 3.3 | 216.6 | 11.7% | 82.7% |
| Clay | Rural | 79.3% | 11.1% | 7.6% | 2.0 | 9.3% | 11.6% | 2.6% | 16.7 | 1.9% | 17.7 | 17.8 | 170.2 | 11.2% | 92.4% |
| Clayton | Rural | 72.8% | 8.5% | 4.8% | 2.1 | 9.6% | 13.4% | 2.5% | 12.4 | 3.9% | 2.7 | 0.2 | 45.6 | 12.1% | 87.3% |
| Clinton | Rural | 77.5% | 13.0% | 9.1% | 5.0 | 13.4% | 16.4% | 3.6% | 28.5 | 2.8% | 35.9 | 12.9 | 375.3 | 15.0% | 89.1% |
| Crawford | Rural | 67.0% | 15.2% | 7.8% | 1.7 | 11.8% | 14.3% | 3.0% | 15.0 | 3.1% | 3.4 | 3.5 | 117.3 | 3.9% | 76.5% |
| Dallas | Urban | 83.7% | 9.5% | 5.3% | 2.6 | 4.4% | 4.8% | 2.0% | 5.0 | 0.8% | 11.1 | 8.3 | 85.7 | 2.2% | 94.6% |
| Davis | Rural | 69.4% | 7.4% | 6.7% | 4.0 | 12.1% | 16.7% | 2.3% | 7.2 | 2.4% | 1.0 | 5.9 | 114.2 | 6.1% | 46.0% |
| Decatur | Rural | 62.3% | 9.3% | 5.6% | 4.1 | 17.1% | 22.3% | 2.5% | 26.6 | 2.5% | 2.9 | 0.5 | 24.5 | 12.0% | 76.9% |
| Delaware | Rural | 80.2% | 17.5% | 8.5% | 3.8 | 9.3% | 12.2% | 2.1% | 9.9 | 1.3% | 11.8 | 8.1 | 52.8 | 9.0% | 89.0% |

| Counties | Urban/ Rural | 4 th Grade reading proficiency | Premature birth | Low birth weight | Infant mortality | Poverty | Child poverty | Unemployment | Child abuse and neglect | High school dropout | Crime | Juvenile crime | Domestic violence | 3 rd Trimester smoking | Maternal education |
|------------|-----------------|---|--------------------|---------------------|---------------------|---------|------------------|--------------|-------------------------|------------------------|-------|-------------------|----------------------|--------------------------------------|--------------------|
| Des Moines | Rural | 67.3% | 11.3% | 6.6% | 4.4 | 13.5% | 20.0% | 4.0% | 24.5 | 5.5% | 41.9 | 36.5 | 257.8 | 13.9% | 83.9% |
| Dickinson | Rural | 73.6% | 8.2% | 5.4% | 3.7 | 7.5% | 9.6% | 2.2% | 15.8 | 1.9% | 12.2 | 12.1 | 87.3 | 8.2% | 94.5% |
| Dubuque | Urban | 74.5% | 7.2% | 5.9% | 4.5 | 9.8% | 10.7% | 2.2% | 17.0 | 2.3% | 23.6 | 20.8 | 393.4 | 8.5% | 92.3% |
| Emmet | Rural | 77.0% | 8.1% | 5.4% | 5.4 | 10.3% | 13.9% | 3.0% | 43.4 | 1.2% | 18.5 | 13.7 | 248.6 | 15.3% | 86.5% |
| Fayette | Rural | 71.5% | 11.9% | 9.1% | 3.8 | 13.4% | 17.5% | 3.2% | 11.7 | 2.3% | 8.8 | 14.0 | 29.8 | 11.9% | 91.3% |
| Floyd | Rural | 72.4% | 9.8% | 9.2% | 2.0 | 11.8% | 16.5% | 2.8% | 24.5 | 2.7% | 12.8 | 12.3 | 12.6 | 13.8% | 86.2% |
| Franklin | Rural | 71.1% | 10.0% | 4.0% | 3.1 | 11.1% | 15.5% | 2.1% | 9.4 | 0.7% | 2.0 | 4.1 | 49.0 | 9.0% | 79.0% |
| Fremont | Rural | 59.4% | - | - | 7.5 | 12.2% | 15.9% | 3.5% | 19.1 | 1.5% | 13.8 | 11.7 | 14.7 | 16.4% | 91.0% |
| Greene | Rural | 79.3% | 8.2% | - | 7.3 | 10.4% | 14.9% | 3.2% | 26.9 | 3.1% | 16.4 | 3.1 | 89.4 | 8.2% | 93.8% |
| Grundy | Rural | 82.4% | 9.0% | 5.3% | 6.3 | 5.9% | 6.8% | 2.5% | 9.9 | 0.5% | 6.7 | 4.8 | 80.6 | 4.5% | 95.5% |
| Guthrie | Rural | 76.2% | 10.0% | 6.0% | 1.8 | 9.5% | 11.2% | 2.6% | 24.2 | 1.0% | 3.3 | 0.0 | 0.0 | 15.0% | 91.9% |
| Hamilton | Rural | 72.0% | 7.1% | 6.0% | 2.1 | 8.7% | 11.6% | 2.5% | 8.3 | 1.3% | 11.5 | 4.4 | 132.6 | 8.2% | 89.0% |
| Hancock | Rural | 82.2% | 8.0% | 4.8% | 5.2 | 8.4% | 10.9% | 2.5% | 7.7 | 1.0% | 7.4 | 0.7 | 56.8 | 10.4% | 92.8% |
| Hardin | Rural | 79.3% | 8.5% | 5.1% | 4.3 | 11.4% | 16.1% | 2.9% | 23.2 | 3.0% | 12.6 | 11.8 | 34.7 | 14.1% | 92.0% |
| Harrison | Rural | 74.4% | 13.0% | 8.0% | 2.4 | 10.0% | 11.9% | 2.3% | 15.9 | 1.3% | 8.6 | 2.4 | 92.1 | 11.7% | 94.4% |
| Henry | Rural | 68.1% | 8.7% | 6.8% | 5.2 | 11.6% | 14.8% | 2.5% | 27.9 | 2.5% | 16.3 | 23.2 | 145.8 | 9.6% | 89.5% |
| Howard | Rural | 72.8% | 8.1% | 5.4% | 5.1 | 10.1% | 13.5% | 2.3% | 13.6 | 1.1% | 10.8 | 17.4 | 245.6 | 13.5% | 79.3% |
| Humboldt | Rural | 82.5% | 5.3% | - | 1.8 | 9.4% | 11.8% | 2.0% | 6.7 | 2.4% | 9.3 | 13.4 | 158.0 | 12.3% | 91.2% |
| Ida | Rural | 85.2% | 20.0% | - | - | 9.1% | 10.6% | 1.8% | 16.9 | 1.2% | 6.6 | 0.0 | 14.3 | 12.3% | 96.9% |
| lowα | Rural | 77.8% | 8.5% | 3.4% | 3.2 | 7.2% | 7.7% | 2.0% | 13.6 | 1.1% | 6.3 | 3.0 | 91.5 | 10.2% | 97.7% |
| Jackson | Rural | 76.6% | 9.0% | 9.5% | 4.6 | 11.7% | 16.2% | 2.7% | 13.9 | 1.6% | 10.1 | 9.6 | 77.6 | 13.0% | 94.0% |
| Jasper | Rural | 81.4% | 10.1% | 7.4% | 3.9 | 9.0% | 10.8% | 2.6% | 17.1 | 1.6% | 19.9 | 9.0 | 65.3 | 12.1% | 91.6% |
| Jefferson | Rural | 67.0% | 6.7% | 5.4% | 3.8 | 14.0% | 18.0% | 2.5% | 23.1 | 4.7% | 22.9 | 11.3 | 220.6 | 10.1% | 84.6% |
| Johnson | Urban | 76.9% | 8.9% | 6.6% | 4.7 | 15.3% | 9.8% | 2.2% | 8.0 | 2.4% | 20.8 | 11.0 | 259.8 | 3.1% | 91.6% |
| Jones | Rural | 71.7% | 10.0% | 5.5% | 5.7 | 9.5% | 11.5% | 2.6% | 10.6 | 1.4% | 9.5 | 1.8 | 88.3 | 10.4% | 93.5% |
| Keokuk | Rural | 78.2% | 10.9% | 5.5% | 6.5 | 11.5% | 15.8% | 2.9% | 11.9 | 0.5% | 6.5 | 0.0 | 79.4 | 9.1% | 91.8% |
| Kossuth | Rural | 79.2% | 6.3% | 2.9% | 2.4 | 9.2% | 11.5% | 1.9% | 13.2 | 3.4% | 6.2 | 9.0 | 39.8 | 9.8% | 93.1% |
| Lee | Rural | 73.2% | 11.7% | 9.4% | 7.2 | 14.1% | 19.8% | 3.7% | 23.6 | 4.0% | 34.9 | 23.3 | 103.2 | 17.8% | 90.4% |
| Linn | Urban | 74.8% | 9.3% | 6.9% | 5.0 | 9.0% | 11.1% | 2.8% | 14.4 | 3.3% | 30.2 | 21.6 | 256.3 | 8.9% | 90.6% |
| Louisa | Rural | 76.1% | 9.1% | 6.1% | 7.1 | 9.9% | 12.8% | 2.8% | 21.4 | 2.4% | 9.2 | 0.0 | 26.9 | 8.3% | 84.8% |
| Lucas | Rural | 70.9% | _ | _ | 1.9 | 13.6% | 23.7% | 2.1% | 10.0 | 0.5% | 24.2 | 15.5 | 58.0 | 11.6% | 89.5% |
| | 100.00 | . 0.0 % | | | | .5.570 | 2070 | 2.170 | | 0.570 | 22 | .5.5 | 55.0 | | |

| Counties | Urban/ Rural | 4 th Grade reading proficiency | Premature birth | Low birth weight | Infant mortality | Poverty | Child poverty | Unemployment | Child abuse and neglect | High school dropout | Crime | Juvenile crime | Domestic violence | 3 rd Trimester smoking | Maternal education |
|---------------|-----------------|---|--------------------|---------------------|---------------------|---------|------------------|--------------|-------------------------|------------------------|-------|-------------------|----------------------|--------------------------------------|-----------------------|
| Lyon | Rural | 84.8% | 10.5% | 6.4% | - | 7.6% | 9.0% | 1.3% | 14.0 | 0.9% | 6.8 | 9.9 | 110.5 | 4.1% | 94.1% |
| Madison | Rural | 82.0% | 5.2% | - | 2.5 | 7.4% | 8.4% | 3.3% | 12.6 | 0.7% | 10.2 | 11.5 | 63.6 | 8.1% | 91.3% |
| Mahaska | Rural | 68.4% | 9.5% | 7.3% | 2.9 | 13.0% | 15.2% | 2.5% | 18.2 | 2.0% | 20.1 | 12.5 | 98.8 | 16.8% | 93.8% |
| Marion | Rural | 82.0% | 9.0% | 5.9% | 4.3 | 7.9% | 8.6% | 2.0% | 10.5 | 1.2% | 8.0 | 5.0 | 30.1 | 9.3% | 95.0% |
| Marshall | Rural | 61.9% | 9.8% | 6.2% | 5.0 | 12.7% | 15.5% | 3.8% | 21.6 | 3.6% | 27.5 | 21.3 | 272.8 | 7.7% | 75.8% |
| Mills | Rural | 81.2% | 9.0% | - | 1.3 | 9.2% | 10.6% | 2.2% | 14.6 | 1.2% | 16.4 | 13.7 | 209.8 | 14.0% | 96.7% |
| Mitchell | Rural | 84.1% | 7.9% | - | 4.9 | 9.1% | 13.9% | 1.8% | 11.6 | 0.6% | 6.9 | 2.7 | 83.2 | 6.4% | 83.6% |
| Monona | Rural | 69.7% | 17.2% | 10.3% | 9.0 | 11.6% | 15.4% | 2.9% | 11.5 | 2.1% | 9.4 | 2.4 | 56.1 | 17.4% | 90.8% |
| Monroe | Rural | 75.8% | 9.3% | 3.9% | 2.3 | 10.9% | 16.1% | 2.6% | 8.7 | 0.6% | 9.9 | 1.5 | 62.8 | 11.8% | 84.2% |
| Montgomery | Rural | 74.7% | 12.6% | 7.2% | 8.3 | 12.5% | 17.7% | 2.6% | 28.1 | 2.6% | 20.7 | 11.9 | 325.9 | 17.0% | 91.1% |
| Muscatine | Rural | 73.4% | 11.1% | 7.2% | 1.8 | 10.7% | 13.9% | 2.7% | 20.2 | 4.5% | 20.2 | 24.4 | 123.4 | 11.9% | 84.3% |
| O'Brien | Rural | 82.1% | 9.2% | 5.5% | 4.6 | 7.7% | 10.0% | 2.2% | 19.4 | 2.5% | 9.5 | 7.8 | 99.6 | 9.2% | 87.1% |
| Osceola | Rural | 76.7% | 13.5% | 3.9% | 2.7 | 10.1% | 14.8% | 1.9% | 22.2 | 2.5% | 10.7 | 3.8 | 32.9 | - | 86.5% |
| Page | Rural | 80.6% | 7.8% | 7.0% | 6.1 | 14.5% | 20.8% | 2.5% | 23.4 | 0.9% | 20.0 | 6.4 | 110.2 | 24.8% | 93.0% |
| Palo Alto | Rural | 74.8% | 10.6% | 12.5% | 1.8 | 10.4% | 13.5% | 2.0% | 21.6 | 1.7% | 10.1 | 18.5 | 88.2 | 10.6% | 94.2% |
| Plymouth | Rural | 78.1% | 11.3% | 7.2% | 2.8 | 7.2% | 8.6% | 2.1% | 12.1 | 0.9% | 11.1 | 7.7 | 36.4 | 7.1% | 93.2% |
| Pocahontas | Rural | 77.3% | 14.1% | - | 2.5 | 12.9% | 18.1% | 1.9% | 14.9 | 5.0% | 8.4 | 3.4 | 100.8 | - | 89.1% |
| Polk | Urban | 72.1% | 10.2% | 7.4% | 5.8 | 9.5% | 11.9% | 2.7% | 12.9 | 3.3% | 32.1 | 12.0 | 220.7 | 6.8% | 86.8% |
| Pottawattamie | Urban | 70.2% | 13.3% | 8.0% | 4.2 | 10.6% | 13.9% | 2.3% | 25.5 | 2.0% | 47.8 | 27.6 | 232.9 | 13.5% | 89.3% |
| Poweshiek | Rural | 89.9% | 13.5% | 6.5% | 3.5 | 11.5% | 11.9% | 2.3% | 12.9 | 1.3% | 19.0 | 7.7 | 157.2 | 10.6% | 92.9% |
| Ringgold | Rural | 88.1% | - | 0.0% | 10.3 | 14.7% | 22.2% | 2.7% | 13.7 | 1.7% | 6.7 | 0.0 | 19.8 | 10.0% | 86.4% |
| Sac | Rural | 82.9% | 5.6% | - | 5.2 | 10.1% | 14.0% | 2.1% | 14.2 | 0.8% | 3.2 | 3.4 | 10.1 | 6.5% | 94.4% |
| Scott | Urban | 74.5% | 10.7% | 7.6% | 3.6 | 11.3% | 14.2% | 3.3% | 19.3 | 3.5% | 38.2 | 14.0 | 464.8 | 8.7% | 91.0% |
| Shelby | Rural | 76.2% | 11.6% | 9.9% | 5.2 | 8.4% | 10.6% | 2.1% | 18.8 | 0.9% | 0.8 | 0.6 | 33.7 | 11.6% | 95.0% |
| Sioux | Rural | 80.9% | 9.4% | 6.7% | 4.0 | 7.1% | 7.2% | 1.8% | 7.3 | 3.0% | 4.8 | 0.3 | 57.2 | 2.6% | 83.4% |
| Story | Urban | 84.4% | 9.4% | 6.5% | 4.8 | 16.9% | 7.6% | 2.3% | 14.3 | 0.8% | 15.1 | 10.9 | 87.7 | 4.2% | 97.2% |
| Tama | Rural | 60.6% | 11.2% | 8.1% | 6.2 | 9.5% | 13.4% | 2.3% | 22.6 | 2.2% | 13.6 | 6.3 | 145.1 | 6.1% | 88.4% |
| Taylor | Rural | 85.5% | 11.6% | - | - | 11.6% | 15.5% | 2.0% | 17.9 | 0.8% | 4.5 | 0.0 | 48.6 | 15.9% | 95.7% |
| Union | Rural | 75.0% | 10.1% | 6.2% | 3.0 | 14.6% | 17.9% | 3.1% | 35.7 | 3.7% | 19.2 | 10.0 | 128.6 | 18.0% | 84.5% |
| Van Buren | Rural | 75.9% | 10.9% | 5.0% | 9.3 | 14.0% | 20.7% | 2.6% | 8.1 | 1.1% | 5.1 | 4.4 | 123.4 | 9.8% | 69.3% |

| Counties | Urban/ Rural | 4 th Grade reading proficiency | Premature birth | Low birth weight | Infant mortality | Poverty | Child poverty | Unemployment | Child abuse and neglect | High school dropout | Crime | Juvenile crime | Domestic violence | 3 rd Trimester smoking | Maternal education |
|------------|-----------------|---|--------------------|---------------------|---------------------|---------|------------------|--------------|-------------------------|------------------------|-------|-------------------|----------------------|--------------------------------------|--------------------|
| Wapello | Rural | 63.3% | 11.1% | 5.1% | 9.0 | 14.5% | 17.7% | 3.2% | 23.5 | 4.1% | 37.9 | 40.6 | 399.7 | 16.6% | 80.7% |
| Warren | Rural | 82.1% | 11.5% | 9.3% | 2.9 | 6.1% | 6.2% | 2.4% | 11.2 | 1.0% | 18.0 | 9.3 | 260.1 | 6.7% | 96.2% |
| Washington | Rural | 65.9% | 8.7% | 5.9% | 6.0 | 9.5% | 11.8% | 2.2% | 9.1 | 2.4% | 10.8 | 0.0 | 120.9 | 7.3% | 87.9% |
| Wayne | Rural | 78.1% | 9.3% | 6.9% | 6.8 | 16.6% | 24.7% | 2.5% | 21.5 | 2.5% | 9.7 | 0.0 | 47.1 | 11.5% | 57.5% |
| Webster | Rural | 67.9% | 8.1% | 5.3% | 3.2 | 15.0% | 16.5% | 3.3% | 25.9 | 5.5% | 34.0 | 31.3 | 38.0 | 17.9% | 90.2% |
| Winnebago | Rural | 81.0% | 11.7% | 10.7% | 3.4 | 9.4% | 13.0% | 3.5% | 24.1 | 1.9% | 3.0 | 2.3 | 0.0 | 6.8% | 93.2% |
| Winneshiek | Rural | 79.2% | 6.5% | 3.2% | 3.4 | 9.0% | 8.7% | 2.5% | 10.5 | 0.5% | 6.1 | 13.1 | 0.0 | 3.8% | 95.2% |
| Woodbury | Urban | 70.9% | 10.8% | 7.4% | 3.6 | 13.4% | 16.1% | 2.5% | 22.2 | 2.6% | 37.9 | 26.2 | 551.1 | 10.4% | 78.0% |
| Worth | Rural | 73.9% | 12.3% | 11.1% | 2.6 | 8.5% | 13.4% | 2.6% | 14.9 | 0.0% | 3.4 | 2.7 | 26.5 | 15.0% | 93.8% |
| Wright | Rural | 68.0% | 13.0% | 6.5% | 7.7 | 10.0% | 14.5% | 2.6% | 18.8 | 3.1% | 8.6 | 5.2 | 102.6 | 8.4% | 76.6% |

Appendix B.2Additional County-Level Data for Risk Assessment Method 1

| Counties | Urban/ Rural | Income inequality | Opioid-related hospitalizations | Alcohol and drug- related crime | 3 rd Trimester alcohol use | Medicaid– reimbursed births | Teen births | School lunch program | No prenatal care in 1st trimester | Maternal depression |
|-------------|-----------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|-------------|-------------------------|--------------------------------------|---------------------|
| State Total | | 4.3 | 1.3 | 11.6 | 2.0% | 43.4% | 20.0 | 43.0% | 16.7% | 11.3% |
| Adair | Rural | 4.0 | 1.1 | 4.3 | 2.3% | 41.5% | 17.1 | 52.3% | 17.6% | 15.7% |
| Adams | Rural | 3.7 | 1.0 | 12.0 | 0.0% | 52.9% | 19.3 | 51.3% | - | 10.1% |
| Allamakee | Rural | 4.6 | 0.3 | 9.9 | 2.7% | 39.8% | 28.3 | 61.3% | 28.2% | 13.2% |
| Appanoose | Rural | 4.6 | 2.3 | 14.4 | 2.6% | 57.7% | 33.5 | 61.9% | 28.2% | 16.2% |
| Audubon | Rural | 4.1 | 1.1 | 8.8 | 1.1% | 45.0% | 19.2 | 45.0% | 20.4% | 16.7% |
| Benton | Rural | 4.1 | 1.0 | 1.8 | 0.7% | 31.5% | 14.4 | 32.1% | 11.0% | 9.8% |
| Black Hawk | Urban | 4.4 | 1.4 | 9.8 | 2.6% | 50.7% | 18.3 | 48.2% | 20.2% | 10.9% |
| Boone | Rural | 3.9 | 2.1 | 11.9 | 1.9% | 31.6% | 18.7 | 37.2% | 13.5% | 11.2% |
| Bremer | Rural | 4.0 | 1.1 | 7.3 | 3.1% | 29.7% | 6.1 | 24.9% | 14.7% | 10.4% |
| Buchanan | Rural | 4.2 | 1.0 | 6.0 | 1.1% | 29.9% | 16.4 | 32.2% | 31.9% | 12.0% |
| Buena Vista | Rural | 3.8 | 0.5 | 14.4 | 3.7% | 67.6% | 34.8 | 61.2% | 24.7% | 6.1% |
| Butler | Rural | 3.6 | 1.3 | 3.6 | 1.9% | 36.2% | 12.5 | 33.5% | 14.0% | 9.9% |
| Calhoun | Rural | 4.4 | 0.7 | 2.5 | 1.8% | 40.0% | 22.5 | 41.7% | 9.1% | 11.8% |
| Carroll | Rural | 4.4 | 1.2 | 7.4 | 0.8% | 33.8% | 19.8 | 42.1% | 12.3% | 8.7% |
| Cass | Rural | 4.2 | 1.2 | 9.9 | 0.0% | 47.8% | 22.5 | 48.7% | 11.3% | 13.2% |
| Cedar | Rural | 3.4 | 1.1 | 3.4 | 1.4% | 27.8% | 13.2 | 28.9% | 7.8% | 9.7% |
| Cerro Gordo | Rural | 4.1 | 3.0 | 19.3 | 1.1% | 47.1% | 20.6 | 44.3% | 13.7% | 16.6% |
| Cherokee | Rural | 4.0 | 0.8 | 9.2 | 0.0% | 51.0% | 30.2 | 38.9% | 15.0% | 13.2% |
| Chickasaw | Rural | 4.2 | 0.4 | 6.2 | 1.5% | 34.0% | 12.6 | 35.3% | 16.0% | 11.3% |
| Clarke | Rural | 4.1 | 0.8 | 16.6 | 1.3% | 51.6% | 38.7 | 55.7% | 18.0% | 12.9% |
| Clay | Rural | 4.7 | 0.7 | 16.4 | 2.3% | 46.5% | 20.9 | 44.7% | 8.3% | 13.0% |
| Clayton | Rural | 3.9 | 1.1 | 3.3 | 1.2% | 41.2% | 14.7 | 38.6% | 23.6% | 13.1% |
| Clinton | Rural | 4.6 | 1.6 | 12.9 | 1.8% | 50.2% | 32.5 | 48.6% | 20.3% | 14.5% |
| Crawford | Rural | 4.2 | 0.7 | 3.8 | 3.2% | 57.4% | 32.8 | 66.4% | 20.5% | 10.6% |
| Dallas | Urban | 3.9 | 0.6 | 4.9 | 1.4% | 19.4% | 12.3 | 21.3% | 12.2% | 7.5% |
| Davis | Rural | 4.0 | 1.1 | 3.8 | 2.2% | 22.1% | 16.3 | 51.4% | 40.1% | 13.3% |
| Decatur | Rural | 4.7 | 1.0 | 2.0 | 1.8% | 51.9% | 22.7 | 59.0% | 23.7% | 11.0% |
| Delaware | Rural | 3.7 | 0.4 | 7.2 | 0.5% | 31.0% | 12.7 | 36.2% | 13.8% | 8.3% |
| Des Moines | Rural | 4.2 | 2.5 | 9.5 | 2.6% | 59.1% | 34.8 | 54.3% | 26.2% | 14.7% |

| Counties | Urban/ Rural | Income inequality | Opioid-related hospitalizations | Alcohol and drug- related crime | 3 rd Trimester alcohol use | Medicaid– reimbursed births | Teen births | School lunch program | No prenatal care in 1st trimester | Maternal depression |
|-----------|-----------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|-------------|-------------------------|--------------------------------------|---------------------|
| Dickinson | Rural | 4.3 | 0.4 | 11.2 | 3.1% | 34.7% | 18.0 | 34.2% | 15.0% | 10.0% |
| Dubuque | Urban | 4.0 | 1.9 | 15.2 | 1.8% | 38.4% | 18.1 | 40.9% | 16.6% | 10.1% |
| Emmet | Rural | 4.5 | 1.0 | 10.8 | 2.3% | 51.4% | 27.2 | 51.4% | 17.3% | 11.1% |
| Fayette | Rural | 3.8 | 0.8 | 5.5 | 1.7% | 41.1% | 20.8 | 51.4% | 18.2% | 10.6% |
| Floyd | Rural | 4.9 | 1.6 | 4.5 | 3.2% | 54.0% | 20.5 | 52.0% | 27.4% | 14.5% |
| Franklin | Rural | 4.0 | 1.4 | 4.4 | 3.5% | 54.0% | 29.2 | 61.1% | 16.0% | 15.4% |
| Fremont | Rural | 4.2 | 1.2 | 21.8 | 4.1% | 40.3% | 35.0 | 45.2% | - | 15.4% |
| Greene | Rural | 4.1 | 1.5 | 3.6 | 1.8% | 42.9% | 27.4 | 45.3% | 13.4% | 9.5% |
| Grundy | Rural | 3.5 | 1.0 | 3.6 | 2.5% | 27.6% | 9.9 | 29.7% | 17.3% | 14.3% |
| Guthrie | Rural | 3.9 | 1.4 | 0.6 | 0.8% | 41.0% | 18.5 | 39.8% | 19.6% | 8.6% |
| Hamilton | Rural | 3.8 | 2.7 | 6.2 | 1.3% | 37.4% | 24.1 | 46.4% | 12.2% | 15.9% |
| Hancock | Rural | 3.8 | 1.4 | 2.0 | 1.7% | 44.0% | 13.8 | 38.2% | 9.8% | 8.7% |
| Hardin | Rural | 4.1 | 1.7 | 10.2 | 2.6% | 44.6% | 19.2 | 43.5% | 12.0% | 10.2% |
| Harrison | Rural | 4.3 | 1.0 | 4.3 | 0.0% | 41.4% | 19.1 | 39.6% | 20.4% | 6.7% |
| Henry | Rural | 3.7 | 1.5 | 12.0 | 0.7% | 43.8% | 24.7 | 49.0% | 19.7% | 9.8% |
| Howard | Rural | 3.5 | 0.0 | 16.2 | 0.7% | 41.4% | 14.3 | 45.7% | 20.4% | 13.3% |
| Humboldt | Rural | 4.5 | 0.9 | 5.4 | 3.0% | 36.8% | 14.3 | 40.2% | 8.8% | 12.0% |
| ldα | Rural | 4.5 | 1.4 | 5.1 | 0.0% | 44.6% | 18.7 | 44.4% | - | 9.6% |
| lowα | Rural | 3.8 | 1.1 | 3.5 | 3.2% | 24.9% | 13.4 | 35.1% | 15.9% | 8.7% |
| Jackson | Rural | 4.0 | 1.4 | 7.5 | 1.2% | 38.0% | 18.4 | 47.7% | 18.5% | 9.9% |
| Jasper | Rural | 3.8 | 1.3 | 9.2 | 1.7% | 39.5% | 24.0 | 44.7% | 8.7% | 15.1% |
| Jefferson | Rural | 4.4 | 1.1 | 7.0 | 3.5% | 53.7% | 21.0 | 51.5% | 24.3% | 10.9% |
| Johnson | Urban | 5.5 | 1.0 | 15.1 | 2.4% | 31.3% | 7.0 | 33.9% | 18.8% | 10.5% |
| Jones | Rural | 3.6 | 0.9 | 3.4 | 2.3% | 39.8% | 13.7 | 41.8% | 16.1% | 13.9% |
| Keokuk | Rural | 4.2 | 1.3 | 2.6 | 0.0% | 42.7% | 25.5 | 30.3% | 6.4% | 8.5% |
| Kossuth | Rural | 4.0 | 0.9 | 5.6 | 3.4% | 40.2% | 11.7 | 44.7% | 13.6% | 9.4% |
| Lee | Rural | 4.0 | 1.4 | 10.2 | 2.1% | 58.5% | 40.1 | 54.0% | 19.0% | 16.2% |
| Linn | Urban | 4.0 | 1.4 | 15.8 | 2.1% | 44.6% | 17.5 | 37.7% | 14.0% | 11.8% |
| Louisa | Rural | 3.8 | 1.0 | 1.0 | 3.1% | 48.5% | 27.2 | 47.7% | 27.5% | 13.1% |
| Lucas | Rural | 3.9 | 1.3 | 12.2 | 1.8% | 50.5% | 29.2 | 55.6% | 23.7% | 12.9% |
| Lyon | Rural | 3.3 | 0.3 | 8.3 | 0.0% | 25.7% | 16.0 | 30.9% | - | 16.1% |
| Madison | Rural | 4.0 | 0.9 | 6.9 | 0.4% | 30.8% | 13.8 | 29.8% | 13.2% | 7.8% |

| Counties | Urban/ Rural | Income inequality | Opioid-related hospitalizations | Alcohol and drug- related crime | 3 rd Trimester alcohol use | Medicaid- reimbursed births | Teen births | School lunch program | No prenatal care in 1st trimester | Maternal depression |
|---------------|-----------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|-------------|-------------------------|--------------------------------------|---------------------|
| Mahaska | Rural | 4.8 | 1.5 | 15.5 | 1.3% | 45.4% | 21.7 | 47.4% | 17.9% | 12.8% |
| Marion | Rural | 3.7 | 1.4 | 5.1 | 1.6% | 29.5% | 14.0 | 31.5% | 10.3% | 14.3% |
| Marshall | Rural | 3.8 | 1.7 | 16.8 | 1.7% | 62.1% | 39.6 | 63.8% | 19.6% | 13.0% |
| Mills | Rural | 4.0 | 1.5 | 13.5 | 0.0% | 40.2% | 20.5 | 38.5% | - | 2.7% |
| Mitchell | Rural | 3.9 | 1.2 | 5.6 | 2.1% | 37.9% | 9.5 | 32.6% | 20.5% | 14.1% |
| Monona | Rural | 4.6 | 1.5 | 2.5 | 0.0% | 59.8% | 15.8 | 54.1% | 9.7% | 14.9% |
| Monroe | Rural | 3.4 | 1.0 | 4.6 | 1.7% | 35.5% | 23.4 | 37.4% | 18.4% | 13.9% |
| Montgomery | Rural | 4.4 | 1.1 | 12.3 | 4.8% | 52.7% | 31.1 | 58.4% | 21.7% | 16.9% |
| Muscatine | Rural | 3.9 | 0.8 | 11.8 | 2.9% | 51.9% | 31.0 | 50.3% | 13.1% | 17.5% |
| O'Brien | Rural | 4.1 | 0.7 | 6.8 | 1.7% | 38.7% | 22.0 | 44.7% | 16.1% | 16.8% |
| Osceola | Rural | 4.2 | 0.0 | 9.4 | 2.8% | 32.7% | 27.2 | 46.0% | 21.4% | 22.5% |
| Page | Rural | 4.5 | 1.1 | 6.8 | 3.0% | 56.6% | 34.7 | 48.9% | 16.3% | 21.0% |
| Palo Alto | Rural | 3.7 | 0.8 | 12.1 | 1.0% | 47.1% | 16.0 | 43.1% | 10.4% | 12.6% |
| Plymouth | Rural | 3.6 | 0.9 | 7.8 | 1.3% | 35.7% | 14.7 | 32.3% | 10.9% | 8.1% |
| Pocahontas | Rural | 4.4 | 0.7 | 6.9 | 0.8% | 34.4% | 17.5 | 57.2% | - | 15.1% |
| Polk | Urban | 4.2 | 1.6 | 11.7 | 2.2% | 44.6% | 24.3 | 48.3% | 16.6% | 9.5% |
| Pottawattamie | Urban | 4.0 | 1.8 | 16.2 | 3.3% | 54.8% | 29.6 | 40.7% | 15.6% | 12.7% |
| Poweshiek | Rural | 4.3 | 1.0 | 7.5 | 2.0% | 35.9% | 11.0 | 35.8% | 14.2% | 13.7% |
| Ringgold | Rural | 4.0 | 1.3 | 1.6 | 2.1% | 36.7% | 19.9 | 41.0% | 11.5% | 11.4% |
| Sac | Rural | 3.7 | 0.9 | 3.1 | 1.9% | 33.6% | 19.0 | 46.6% | 12.6% | 6.0% |
| Scott | Urban | 4.5 | 1.6 | 9.7 | 1.4% | 44.7% | 28.0 | 45.0% | 15.6% | 13.6% |
| Shelby | Rural | 4.2 | 0.6 | 3.0 | 3.4% | 52.9% | 16.2 | 39.8% | 12.0% | 11.2% |
| Sioux | Rural | 3.3 | 0.5 | 3.6 | 2.1% | 40.9% | 14.8 | 40.5% | 19.9% | 7.8% |
| Story | Urban | 5.8 | 1.1 | 13.7 | 1.7% | 28.4% | 4.2 | 26.5% | 13.5% | 9.4% |
| Tama | Rural | 3.9 | 1.1 | 7.4 | 2.2% | 50.5% | 26.7 | 52.8% | 20.5% | 10.2% |
| Taylor | Rural | 4.3 | 2.3 | 0.8 | 0.0% | 49.3% | 25.0 | 50.1% | 25.6% | 16.1% |
| Union | Rural | 3.9 | 0.9 | 10.5 | 0.0% | 53.5% | 26.9 | 60.9% | 18.5% | 10.7% |
| Van Buren | Rural | 3.7 | 1.7 | 1.9 | 0.0% | 34.3% | 16.8 | 48.7% | 23.1% | 8.2% |
| Wapello | Rural | 4.7 | 1.6 | 15.0 | 2.3% | 70.4% | 35.5 | 50.0% | 18.6% | 13.9% |
| Warren | Rural | 3.6 | 1.1 | 10.7 | 1.0% | 28.1% | 14.8 | 28.3% | 11.7% | 10.4% |
| Washington | Rural | 3.6 | 1.0 | 5.4 | 1.7% | 36.0% | 21.0 | 35.2% | 17.5% | 15.4% |
| Wayne | Rural | 3.8 | 2.0 | 1.3 | 2.8% | 27.6% | 20.0 | 51.1% | 41.0% | 10.0% |

| Counties | Urban/ Rural | Income inequality | Opioid-related hospitalizations | Alcohol and drug- related crime | 3 rd Trimester alcohol use | Medicaid- reimbursed births | Teen births | School lunch program | No prenatal care in 1st trimester | Maternal depression |
|------------|-----------------|-------------------|------------------------------------|------------------------------------|--|--------------------------------|-------------|-------------------------|--------------------------------------|---------------------|
| Webster | Rural | 4.7 | 0.9 | 9.2 | 1.7% | 54.3% | 26.3 | 56.5% | 16.6% | 15.0% |
| Winnebago | Rural | 3.8 | 1.7 | 5.9 | 3.8% | 41.7% | 15.5 | 37.8% | 9.8% | 16.3% |
| Winneshiek | Rural | 3.9 | 0.8 | 9.6 | 1.1% | 27.4% | 6.1 | 27.3% | 11.9% | 7.4% |
| Woodbury | Urban | 4.2 | 1.6 | 23.9 | 2.2% | 65.0% | 31.9 | 54.9% | 19.0% | 12.4% |
| Worth | Rural | 3.8 | 1.5 | 5.6 | 0.0% | 40.7% | 15.0 | 40.3% | 20.0% | 12.9% |
| Wright | Rural | 4.3 | 1.2 | 8.1 | 3.7% | 49.4% | 26.6 | 59.8% | 26.0% | 15.7% |

Appendix C

Risk Assessment Results and Rankings

Bold = Counties considered to be **at-risk**.

| County | Overall Rank | Average Rank | Method 1 Rank | Method 2 Rank | Method 1 Risk Assessment - Risk Score | Method 2 Risk Assessment - % of children born in 2013-2017 with 3+ risks |
|-------------|-----------------|--------------|---------------|---------------|---|--|
| Adair | 63 | 60.5 | 52 | 69 | 2.45 | 15.08% |
| Adams | 30 | 33 | 38 | 28 | 2.68 | 21.39% |
| Allamakee | 38 | 39 | 24 | 54 | 3.00 | 16.95% |
| Appanoose | 10 | 11.5 | 1 | 22 | 3.87 | 22.42% |
| Audubon | 46 | 46 | 43 | 49 | 2.62 | 18.12% |
| Benton | 83 | 83 | 93 | 73 | 1.61 | 14.95% |
| Black Hawk | 14 | 15 | 11 | 19 | 3.26 | 23.40% |
| Boone | 75 | 74 | 78 | 70 | 1.96 | 15.05% |
| Bremer | 94 | 90.5 | 84 | 97 | 1.87 | 8.15% |
| Buchanan | 78 | 76.5 | 66 | 87 | 2.22 | 12.19% |
| Buena Vista | 22 | 25.5 | 22 | 29 | 3.04 | 21.26% |
| Butler | 83 | 83 | 86 | 80 | 1.82 | 13.85% |
| Calhoun | 51 | 48 | 48 | 48 | 2.57 | 18.16% |
| Carroll | 81 | 80.5 | 84 | 77 | 1.87 | 13.99% |
| Cass | 33 | 34.5 | 44 | 25 | 2.61 | 21.75% |
| Cedar | 93 | 90 | 97 | 83 | 1.52 | 13.61% |
| Cerro Gordo | 17 | 20 | 19 | 21 | 3.13 | 22.44% |
| Cherokee | 64 | 61 | 69 | 53 | 2.15 | 16.98% |
| Chickasaw | 81 | 80.5 | 82 | 79 | 1.91 | 13.98% |
| Clarke | 18 | 21 | 22 | 20 | 3.04 | 23.18% |
| Clay | 43 | 43.5 | 36 | 51 | 2.74 | 17.93% |
| Clayton | 74 | 72 | 70 | 74 | 2.13 | 14.69% |
| Clinton | 7 | 8.5 | 4 | 13 | 3.61 | 25.59% |
| Crawford | 42 | 42.5 | 26 | 59 | 2.96 | 16.65% |
| Dallas | 99 | 98.5 | 98 | 99 | 1.43 | 5.97% |
| Davis | 70 | 68 | 48 | 88 | 2.57 | 11.92% |
| Decatur | 31 | 33.5 | 31 | 36 | 2.83 | 20.58% |
| Delaware | 79 | 80 | 78 | 82 | 1.96 | 13.73% |
| Des Moines | 4 | 5.5 | 2 | 9 | 3.78 | 27.18% |
| Dickinson | 73 | 71.5 | 71 | 72 | 2.09 | 14.95% |
| Dubuque | 54 | 51.5 | 41 | 62 | 2.65 | 15.75% |
| Emmet | 16 | 17.5 | 24 | 11 | 3.00 | 26.12% |
| Fayette | 25 | 29.5 | 36 | 23 | 2.74 | 22.10% |
| Floyd | 25 | 29.5 | 9 | 50 | 3.35 | 18.00% |
| Franklin | 41 | 41.5 | 44 | 39 | 2.61 | 20.28% |
| Fremont | 8 | 10.5 | 18 | 3 | 3.15 | 33.15% |
| Greene | 34 | 35.5 | 39 | 32 | 2.68 | 20.96% |
| Grundy | 94 | 90.5 | 91 | 90 | 1.65 | 11.09% |
| Guthrie | 72 | 70 | 76 | 64 | 2.04 | 15.65% |

| County | Overall Rank | Average Rank | Method 1 Rank | Method 2 Rank | Method 1 Risk Assessment - Risk Score | Method 2 Risk Assessment - % of children born in 2013-2017 with 3+ risks |
|---------------|-----------------|--------------|---------------|---------------|---|--|
| Hamilton | 52 | 48.5 | 64 | 33 | 2,26 | 20.82% |
| Hancock | 92 | 89 | 87 | 91 | 1.74 | 11.05% |
| Hardin | 36 | 37 | 34 | 40 | 2.78 | 20.20% |
| Harrison | 46 | 46 | 58 | 34 | 2.30 | 20.73% |
| Henry | 28 | 31 | 31 | 31 | 2.83 | 20.97% |
| Howard | 55 | 53.5 | 50 | 57 | 2.50 | 16.70% |
| Humboldt | 67 | 66 | 74 | 58 | 2.05 | 16.67% |
| Ida | 66 | 64 | 81 | 47 | 1.95 | 18.33% |
| Iowa | 96 | 91 | 93 | 89 | 1.61 | 11.65% |
| Jackson | 57 | 54.5 | 44 | 65 | 2.61 | 15.46% |
| Jasper | 49 | 47 | 53 | 41 | 2.43 | 20.00% |
| Jefferson | 24 | 27 | 12 | 42 | 3.22 | 19.77% |
| Johnson | 76 | 74.5 | 53 | 96 | 2.43 | 8.63% |
| Jones | 69 | 67 | 68 | 66 | 2.17 | 15.36% |
| Keokuk | 59 | 58.5 | 71 | 46 | 2.09 | 18.39% |
| Kossuth | 76 | 74.5 | 78 | 71 | 1.96 | 15.03% |
| Lee | 2 | 5 | 3 | 7 | 3.65 | 27.58% |
| Linn | 43 | 43.5 | 31 | 56 | 2.83 | 16.85% |
| Louisa | 39 | 39.5 | 41 | 38 | 2.65 | 20.29% |
| Lucas | 31 | 33.5 | 30 | 37 | 2.90 | 20.34% |
| Lyon | 97 | 92 | 89 | 95 | 1.71 | 10.05% |
| Madison | 90 | 88 | 90 | 86 | 1.68 | 13.24% |
| Mahaska | 29 | 31.5 | 20 | 43 | 3.09 | 19.51% |
| Marion | 79 | 80 | 93 | 67 | 1.61 | 15.26% |
| Marshall | 12 | 12.5 | 9 | 16 | 3.35 | 24.23% |
| Mills | 35 | 36 | 57 | 15 | 2.33 | 25.00% |
| Mitchell | 86 | 84 | 74 | 94 | 2.05 | 10.14% |
| Monona | 19 | 22 | 27 | 17 | 2.91 | 23.99% |
| Monroe | 60 | 59 | 66 | 52 | 2.22 | 17.13% |
| Montgomery | 1 | 2.5 | 4 | 1 | 3.61 | 35.54% |
| Muscatine | 15 | 17 | 16 | 18 | 3.17 | 23.71% |
| O'Brien | 49 | 47 | 64 | 30 | 2.26 | 21.20% |
| Osceola | 21 | 24 | 40 | 8 | 2.67 | 27.50% |
| Page | 9 | 11 | 20 | 2 | 3.09 | 33.53% |
| Palo Alto | 68 | 66.5 | 58 | 75 | 2.30 | 14.42% |
| Plymouth | 85 | 83.5 | 91 | 76 | 1.65 | 14.41% |
| Pocahontas | 46 | 46 | 47 | 45 | 2.60 | 18.72% |
| Polk | 43 | 43.5 | 27 | 60 | 2.91 | 16.60% |
| Pottawattamie | 5 | 6 | 8 | 4 | 3.39 | 32.16% |
| Poweshiek | 65 | 63 | 58 | 68 | 2.30 | 15.19% |
| Ringgold | 55 | 53.5 | 63 | 44 | 2.27 | 19.03% |
| Sac | 91 | 88.5 | 96 | 81 | 1.55 | 13.75% |
| Scott | 20 | 23.5 | 12 | 35 | 3.22 | 20.72% |
| Shelby | 53 | 49 | 71 | 27 | 2.09 | 21.41% |

| County | Overall Rank | Average Rank | Method 1 Rank | Method 2 Rank | Method 1 Risk Assessment - Risk Score | Method 2 Risk Assessment - % of children born in 2013-2017 with 3+ risks |
|------------|-----------------|--------------|---------------|---------------|---|--|
| Sioux | 87 | 85.5 | 87 | 84 | 1.74 | 13.51% |
| Story | 88 | 87 | 76 | 98 | 2.04 | 7.54% |
| Tama | 22 | 25.5 | 27 | 24 | 2.91 | 21.92% |
| Taylor | 27 | 30.5 | 51 | 10 | 2.48 | 26.61% |
| Union | 37 | 38.5 | 16 | 61 | 3.17 | 16.10% |
| Van Buren | 60 | 59 | 55 | 63 | 2.39 | 15.68% |
| Wapello | 2 | 5 | 4 | 6 | 3.61 | 27.65% |
| Warren | 89 | 87.5 | 82 | 93 | 1.91 | 10.43% |
| Washington | 70 | 68 | 58 | 78 | 2.30 | 13.98% |
| Wayne | 62 | 59.5 | 34 | 85 | 2.78 | 13.47% |
| Webster | 11 | 12 | 12 | 12 | 3.22 | 25.85% |
| Winnebago | 40 | 40.5 | 55 | 26 | 2.39 | 21.53% |
| Winneshiek | 98 | 95 | 98 | 92 | 1.43 | 10.55% |
| Woodbury | 5 | 6 | 7 | 5 | 3.52 | 27.92% |
| Worth | 58 | 56.5 | 58 | 55 | 2.30 | 16.93% |
| Wright | 13 | 13 | 12 | 14 | 3.22 | 25.10% |

Endnotes

- Maternal, Infant, and Early Childhood Home Visiting Program Supplemental Information Request (SIR) for the Submission of the Statewide Needs Assessment Update
- 2 Social Security Act, Title V, § 511(b)
- 3 Iowa's 2010 Maternal, Infant, and Early Childhood Home Visiting Program Needs Assessment.
- 4 Early Childhood Iowa 2019 Statewide Needs Assessment