INFANT AND EARLY CHILDHOOD RISKS AND SERVICES ASSESSMENT OF WISCONSIN COUNTIES

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OUTLINE

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INTRODUCTION

▪ The experiences of infants and young children have profound, lasting impacts on their physical and mental health, as well as on learning and behavior.

▪ Research has shown that certain factors place children at an increased risk for negative outcomes, not just during childhood but also into adulthood.

▪ Services that support a child’s health and early learning can improve outcomes for children who face adversity during the critical period of development from birth to age five.

Source: Center on Developing Child, 2016
Approximately 336,000 children under age five reside in Wisconsin’s 72 counties.

The risks to healthy development that these children face can vary widely depending on where they reside.

County-level data can provide a more accurate picture of the true level of need than statewide statistics.
Purpose

Risk assessment: Identifies the counties whose children are at the greatest and lowest risk of negative developmental outcomes based on 11 health, safety, and economic risk indicators.

Reach assessment: Examines the current availability and utilization of 5 programs aimed at improving outcomes for this age group in relation to the overall level of risk faced by children in each county.

This information is meant to inform conversations regarding how to best meet the developmental needs of Wisconsin’s youngest and most vulnerable population.
Risk Indicators & Programs were chosen based on:

- A review of current literature (33 journal articles & 9 publications with relevant research data) regarding the potential long-term negative impacts on a child’s health and functioning

- The availability of reliable and recent statewide county-level data
METHODS

Data sources used for the indicators and services:

American Community Survey: www.census.gov/programs-surveys/acs/
County Health Rankings: http://www.countyhealthrankings.org/
Feeding America’s Map the Meal Gap: http://map.feedingamerica.org/
Kids Count database: https://datacenter.kidscount.org/
Wisconsin Department of Children and Families (DCF)
Wisconsin Department of Public Instruction (DPI), Office of Early Learning
Wisconsin Food Security Project: http://www.foodsecurity.wisc.edu/
Wisconsin Interactive Statistics on Health (WISH): www.dhs.wisconsin.gov/wish
METHODS

- Z-scores (representing the number of standard deviations that an individual county’s rate falls above or below the state average) are used to determine the levels of risk and reach.

- Provides a more accurate representation of the true risk to the children in each county than dividing all counties into equal groups (such as quartiles).

**Low Risk/Reach:** Z-score of less than -1.00 (more than one standard deviation below the state average)

**Low-Moderate Risk/Reach:** Z-score of -1.00 to zero (equal to the state average)

**Moderate-High Risk/Reach:** Z-score of 0.01 (just above the state average) to 1.00

**High Risk/Reach:** Z-score greater than 1.00 (more than one standard deviation above the state average)
<table>
<thead>
<tr>
<th>RISK INDICATORS</th>
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<tbody>
<tr>
<td><strong>Health</strong></td>
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<tr>
<td>▪ Births to mothers who received inadequate prenatal care</td>
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<tr>
<td>▪ Low-weight births</td>
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<tr>
<td>▪ Births to teenage mothers</td>
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<tr>
<td>▪ Infant mortality rate</td>
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<tr>
<td>▪ Children under age 6 without medical insurance</td>
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<tr>
<td>▪ Children age 19 to 35 months lacking complete immunizations</td>
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<td><strong>Safety</strong></td>
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<tr>
<td>▪ Victimization rate for children under 6 years old</td>
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<td>▪ Out of home placement rate for children under 6 years old</td>
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<tr>
<td><strong>Economic</strong></td>
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<tr>
<td>▪ Births to mothers without a high school diploma</td>
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<tr>
<td>▪ Children under age 5 in poverty</td>
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<tr>
<td>▪ Children ages 0-18 who are food insecure</td>
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Percentage of births where the mother either first received prenatal care in the 3rd trimester or none at all

- Source: WISH
- Statewide: 4.6%
- Lowest: Bayfield (1.7%)
- Highest: Vernon (22%)
Percentage of infants born weighing less than 2,500 grams (5lbs 8oz)

- Source: WISH
- Statewide: 7.4%
- Lowest: Lafayette (2.9%)
- Highest: Langlade (10.5%)
Percentage of births to mothers under 20 years of age

- **Source:** WISH
- **Statewide:** 4.2%
- **Lowest:** Crawford (0.6%)
- **Highest:** Menominee (16.8%)
Number of infant deaths prior to 365 days of age per 1,000 live births

- Source: WISH
- Statewide: 6.2 per 1,000
- Lowest: Trempealeau (0.6)
- Highest: Pepin (37.0)
Estimated percentage of children under age 6 without medical insurance

- **Source:** American Community Survey
- **Statewide:** 4.0%
- **Lowest:** Florence (0.0%)
- **Highest:** Clark (40.7%)
Percentage of children aged 19 to 35 months who had not received the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella, and Pneumococcal conjugate

- **Source:** County Health Rankings
- **Statewide:** 28.5%
- **Lowest:** Florence (18%)
- **Highest:** Vernon (57%)
Number of children under 6 years old determined to be victims of maltreatment per 1,000 estimated population

- Source: WI DCF (data request)
- Statewide: 4.0 per 1,000
- Lowest: Kewaunee, Pepin, Rusk, Waushara (0.0)
- Highest: Burnett (16.9)
OUT OF HOME PLACEMENT RATE

Number of entries into out of home care for children under 6 years old per 1,000 estimated population

- Source: WI DCF (data request)
- Statewide: 5.1 per 1,000
- Lowest: Florence and Pepin (0.0)
- Highest: Iron (26.2)
Percentage of births to mothers without a high school diploma

- Source: WISH
- Statewide: 10.5%
- Lowest: Florence (0.0%)
- Highest: Clark (48.6%)
Estimated percentage of children under age 5 in poverty

- **Source:** American Community Survey
- **Statewide:** 20.5%
- **Lowest:** Washington (5%)
- **Highest:** Menominee (59%)
Estimated percentage of children ages 0-18 who are food insecure (lack consistent access to enough food for an active, healthy life)

- Source: Feeding America’s Map the Meal Gap
- Statewide: 17.0%
- Lowest: Ozaukee (13.5%)
- Highest: Menominee (33.3%)
OVERALL RISK

- Shows where Wisconsin counties fall along a continuum of risk
- Focuses attention on the counties (and the young children who reside in them) who face the greatest challenges and have the highest need for services and support
- Identifies the counties with the lowest-risk environments in the hope that knowledge of how these counties minimize risks to their youngest residents can inform efforts in other counties
An overall risk score (ORS) was calculated for each county by summing its z-scores for the 11 risk indicators, and then using this number (along with the state average and the standard deviation) to calculate a new, composite z-score which determined the overall risk level.

- Low Overall Risk Level: ORS of less than -1.0 (more than one standard deviation below the state average)
- Low-Moderate Risk Level: ORS between zero (equal to the state average) and -1.0
- Moderate-High Risk Level: ORS between 0.1 (just above the state average) and 1.0
- High Risk Level: ORS of greater than 1.0 (more than one standard deviation above the state average)
- Approximately 92,000 children under age 5 reside in Low Risk counties
- 111,000 in Low-Moderate Risk counties
- 60,000 in Moderate-High Risk counties
- 74,000 in High Risk counties

<table>
<thead>
<tr>
<th>Low</th>
<th>Low-Moderate</th>
<th>Moderate-High</th>
<th>High</th>
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<tbody>
<tr>
<td>Waukesha</td>
<td>Columbia</td>
<td>Oneida</td>
<td>Polk</td>
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<tr>
<td>Calumet</td>
<td>Winnebago</td>
<td>Manitowoc</td>
<td>Shawano</td>
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<tr>
<td>Ozaukee</td>
<td>Sheboygan</td>
<td>Eau Claire</td>
<td>Wood</td>
</tr>
<tr>
<td>Washington</td>
<td>Florence</td>
<td>Marathon</td>
<td>Fond du Lac</td>
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<td>Green</td>
<td>Pierce</td>
<td>Lafayette</td>
<td>Portage</td>
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<td>St. Croix</td>
<td>Door</td>
<td>Oconto</td>
<td>Grant</td>
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<td>Outagamie</td>
<td>La Crosse</td>
<td>Trempealeau</td>
<td>Waupaca</td>
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<tr>
<td>Kewaunee</td>
<td>Dodge</td>
<td>Dunn</td>
<td>Washburn</td>
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<td>Dane</td>
<td>Walworth</td>
<td>Chippewa</td>
<td>Buffalo</td>
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<td>Iowa</td>
<td>Brown</td>
<td>Waushara</td>
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<td>Jefferson</td>
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REACH ASSESSMENT

- Percent of children under age 5 enrolled in WIC
- Percent of children receiving services through Birth-to-3 Program
- Number of licensed child care slots per 100 children under age 5
- Number of Head Start & Early Head Start slots per 100 children under age 5 in poverty
- Percent of children eligible to receive free or reduced-price school meals

*Data presented along with each county’s Overall Risk Level*
Reach calculated by dividing infant and child enrollment by the estimated population of children under 5 years old.

- **Sources:** Kids Count, EZAPOP
- **Statewide:** 35%
- **Highest:** Menominee (98%); **Lowest:** Ozaukee (11%)
- 4 of 8 High ORS counties have High Reach while all 11 Low ORS counties have Low or Low-Moderate Reach
Reach determined by the percentage of children receiving services in each county.

- Source: DCF Annual Performance Report
- Statewide: 2.85%
- Highest: Adams (6.8%); Lowest: Ashland (1.1%)
- Little correlation between reach and overall risk
Reach calculated by first multiplying reported capacity by 1.3 (to account for part-time), then by 100, and dividing by estimated population of children under 5 years old.

- Sources: Kids Count, EZAPOP
- Statewide: 58 slots per 100 children under 5 years old
- Highest: Dane (85); Lowest: Richland (19)
- 6 of 8 High ORS counties have Low or Low-Mod Reach while 6 of 11 Low ORS counties have High or Mod-High Reach
Reach calculated by multiplying available slots by 100 then dividing by estimated number of children under the age of 5 in poverty.

- **Sources:** DPI, American Community Survey
- **Statewide:** 21.4 slots per 100 children under 5 in poverty
- **Highest:** Iron (313); **Lowest:** Pepin, Kewaunee, Calumet (0)
- **Little correlation between reach and overall risk**
Reach determined by percent of children (PreK-High School) eligible to receive free or reduced-price school meals.

- Sources: DPI via WI Food Security Project
- Statewide: 44.6%
- Highest: Menominee (100%); Lowest: Ozaukee (14%)
- 7 of 8 High ORS counties have High or Mod-High Reach while all 11 Low ORS counties have Low or Low-Mod Reach
LIMITATIONS

- County-level data does not reflect the differences in risk & reach that exist within counties
- Lack of disaggregated data by race/ethnicity
- Absence of tribal data for some indicators and services
- All the potential risks to healthy child development or all the services currently available in counties throughout the state are not included
- No data regarding protective factors
There exist both strengths to build upon and vulnerabilities to address within every county:

- Almost half of all counties are rated as low risk for at least one risk indicator.
- Every county was rated as low-moderate risk for at least two risk indicators.
- Over 90% of all counties have at least one moderate-high risk indicator.
- Nearly 75% of all counties are rated as high risk for at least one risk indicator.

Exposure to risk factors increases the likelihood of adverse outcomes but does not guarantee such outcomes will occur. Countless prevention and intervention strategies exist that can mitigate these effects, and any reduction of risk can lead to improved outcomes.