

WHAT *it will* TAKE:

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Risk and Protective Factors Related to Child Abuse and Neglect

Research on child maltreatment has identified characteristics of families, children, and communities that can heighten or diminish the risk of maltreatment. Most families experience some combination of risk and protective factors. The balance between risk and protective factors appears to be critical to how well a family fares. For a family under stress or facing many risk factors, protective factors may act as buffers to minimize the damage of that stress on children, parents, and their relationships.

Protective factors are the fundamental characteristics of strong families. These strengths are a set of relationships and processes that support and protect families, particularly during times of adversity and change. Although no single characteristic makes one family strong and another weak, there is a cluster of attributes that are critical: nurturing caregivers and healthy attachment between children and their parents or caregivers; stable family relationships; parental understanding of child development; social connections; parental resilience; and community supports.¹ Each of these protective factors is reviewed in this brief.

Unfortunately, there are also certain characteristics of parents, families, children, and communities that put children at greater risk of abuse and neglect. Understanding these risk factors is an important step in identifying families who may need support to prevent child maltreatment. The risk factors reviewed in this brief include: parental substance abuse and mental health problems, domestic violence, single parenthood, teen parenthood, low maternal education, low birth weight, child disability, child emotional or behavioral problems, poverty, and unemployment. Other risk factors for maltreatment include parental history of maltreatment, parental attitudes and beliefs about children and parenting, and child age (younger children are more likely to be maltreated and be removed from the home²). No meaningful data were available on the prevalence of these

additional risk factors in Wisconsin, so they are not included in this brief. (Note: Although data regarding child age are available by county, these data are also excluded because all children face this risk factor.)

It is important to note that some families with multiple risk factors will thrive, and some families with no apparent risk factors will maltreat their children. However, as the number of risk factors present in a family increases, their likelihood of being involved in the child welfare system also increases.

This brief combines the known Wisconsin-specific data on both risk and protective factors in an effort to paint a picture of conditions for families and children in our state.³ In addition, available county-level data related to risk factors were used to assign risk levels to each county in the state, as described in the box on page 2.



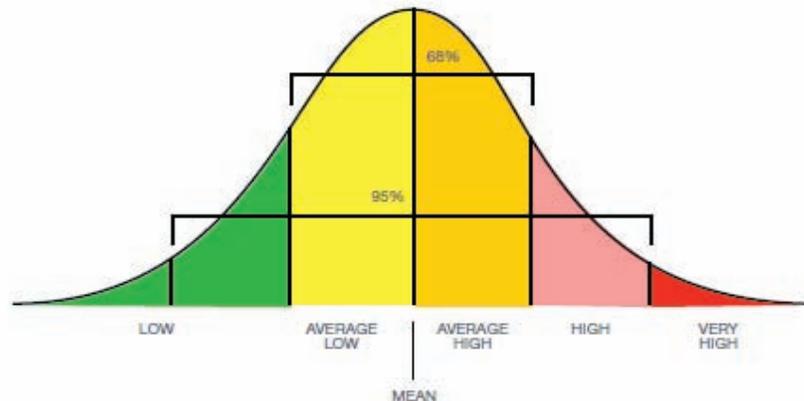
CALCULATING RISK LEVELS BY COUNTY

For each grouping of risk factors (parental, familial, child, and economic), county-level data were gathered from various sources, such as the Wisconsin Interactive Statistics for Health (WISH) and Wisconsin's Behavioral Risk Factor Survey, to determine risk levels across counties. The process for assigning risk levels was as follows:

1. Categorize risk factors into four domains: parent characteristics, family situations, child characteristics, and economic circumstances.
2. Gather and standardize county-level data on each risk factor.
3. Average standardized scores across risk factors to achieve a mean score for each domain.
4. Average the domain scores to achieve an overall county risk score, and assign risk levels according to standard deviations from the mean.

In the maps throughout this brief, counties are color-coded based on their risk level. As shown in the chart below, the risk levels were assigned and color-coded as follows:

- low - green: more than 1 standard deviation below the mean;
- average/low - yellow: within 1 standard deviation below the mean;
- average/high - orange: at the mean or within 1 standard deviation above the mean;
- high - pink: between 1 and 2 standard deviations above the mean; and
- very high - red: more than 2 standard deviations above the mean.



Please see http://www.wccf.org/what_it_will_take.php for the rates of each risk factor in each county.

FACTORS RELATED TO PARENTS

RISK FACTORS

Research demonstrates that a number of parent characteristics increase the risk of child maltreatment, including teen parenting, low educational attainment,⁴ substance abuse,⁵ and mental health issues.⁶

Teen parenting and low educational attainment

Teen mothers and mothers with low educational attainment may lack knowledge of appropriate parenting behaviors,⁷ and teen mothers face the additional challenge of adjusting to the adult role of a parent in the midst of their own adolescent development.⁸ A recent study by researchers at the University of Chicago's Chapin Hall Center for Children found that more than 60 percent of children entering foster care in Illinois were

children of mothers who first gave birth as teenagers.⁹ In 2008, 8 percent of children in Wisconsin were born to teen mothers. At the county level, the rate ranged from less than 1 percent to 26 percent of all births. Births to mothers with less than a high school education ranged from 3 to 44 percent of all births in the county, while the average county rate was 13 percent.

Substance abuse

Substance abuse is thought to put children at additional risk for maltreatment because of the impaired and maladaptive behaviors associated with it.¹⁰ Alcohol use in Wisconsin is quite prevalent, with 65 percent of Wisconsin residents age 18 and older reporting that they are

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currently alcohol users; counties range from 51 to 77 percent on this indicator.

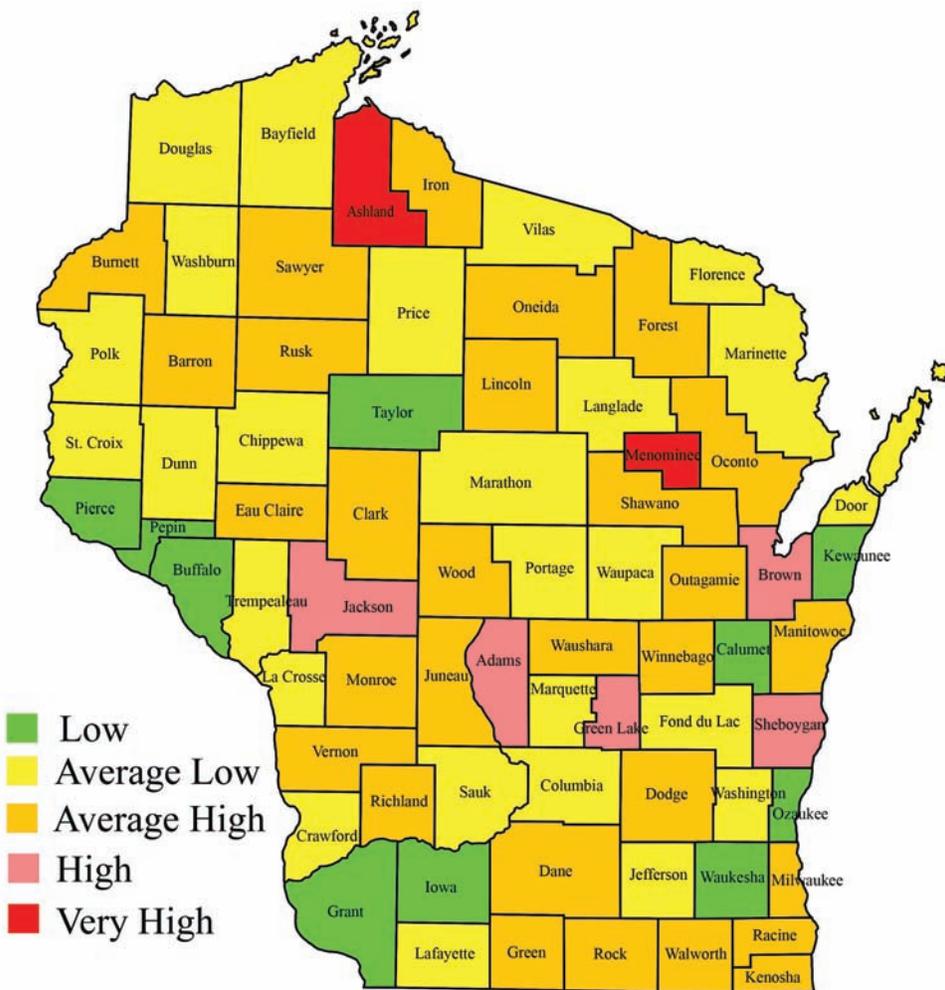
Mental health issues

Depression may be related to feelings of helplessness in which every day parenting stressors are not dealt with and therefore continue to escalate until the parent maltreats.¹¹ There are currently no county data to directly measure the prevalence of depression; however, the Centers for Disease Control Wisconsin Behavioral Risk Factor Survey (2008) asked respondents to report what percentage of the last 30 days they would consider to be a “bad mental health day.” County averages ranged from 5 to 16 percent of days, while the average county

rate was 10 percent. Additionally, the Wisconsin Department of Health Services Burden of Suicide Report (2008) provided county data regarding the number of inpatient hospitalizations due to self-inflicted injuries, and reported that the average county rate was about .9 per 1,000 people. County rates ranged from .01 to .27 per 1,000 people. Although these two measures do not directly capture depression, they do provide some indication of county differences in depression-related issues.

Figure 1 illustrates the 2008 rates of parental characteristics that have been found to be associated with child maltreatment, by county.

Figure 1: Parental risk factors map



- Parental risk factor indicators:*
- Births to teen mothers¹²
 - Births to mothers with low educational attainment¹³
 - Rates of alcohol use¹⁴
 - Responses to a Department of Health Services survey in which individuals were asked to estimate how many days in the past month they had what they considered to be a “bad mental health day”¹⁵
 - Inpatient hospitalizations due to self-inflicted injuries¹⁶

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PROTECTIVE FACTORS

A number of parental attributes are considered protective factors for child well-being and thus put children at less risk for child maltreatment. These factors include nurturing caregivers, healthy relationships between parents and children, parental resilience, and social connections.

Nurturing caregivers and healthy relationships

A child's relationships with her parents, caregivers and other significant adults form the basis of how she experiences the world. Experience and research underscore the critical importance of attachment bonds as the foundation for all future relationships. When a child experiences a warm and nurturing relationship; a safe environment; unconditional love; and appropriate guidance and discipline with the adults in her life, she will develop self-confidence, the capacity to control her own emotions, and empathy for others – all skills critical for later success. This relationship between children and their parents is perhaps the most intuitive of all protective factors for children, but also extremely difficult to measure. It can also be argued that the protective nature of nurturing overlaps with several other protective factors we discuss in this brief.

Breastfeeding has significant benefits for both mothers and babies. In addition to important health benefits, including supporting brain development, breastfeeding promotes attachment between mother and baby that has lasting implications. The American Academy of Pediatrics (AAP) recommends that breastfeeding continue for at least a year, and continue for as long as mother and baby would like. Data from the Centers for Disease Control indicates that in Wisconsin, 76 percent of babies are breastfed for some of their infancy and 49 percent of children were breastfed for six months or more.¹⁷

According to AAP, reading to children beginning in infancy has a direct influence on children's brain development. In addition, reading encourages an emotional bond between parent and child. The AAP recommends initiating a daily routine of reading for infants as well as older children. Data from Snapshots of America's Families indicates that 87 percent of preschoolers in Wisconsin have parents who read to them or tell them stories at least three times a week.¹⁸ Along with reading, sharing

time with each other is also critical to healthy families. According to the National Longitudinal Survey of Youth, 84 percent of preschoolers go on outings frequently with their families, and half of 12- to 14-year-olds in Wisconsin report that they do something fun with their families three or more days per week

As children reach school age, most studies show a high correlation between the level of parent involvement and the educational achievement of children. Research shows that when parents and other family members take an interest in what children are learning, provide opportunities to do learning activities at home, and offer encouragement to a child's learning efforts, they have higher self confidence and greater vocabulary.¹⁹ It appears that the earlier parents are engaged in their children's learning, the more likely that pattern will continue.

Positive two-way communication can encourage healthy behavior among adolescents. The vast majority of adolescents have mothers and fathers who usually or always praise them for doing well, and more than half of teens report that they turn to one of their parents rather than to a friend when they have problems. Most adolescents report that their parents (most often their mothers) know their friends, teachers and school activities and where they are spending their time. The 2009 Wisconsin Youth Risk Behavior Survey found high levels of social support among high school students.²⁰ Ninety percent of boys and 87 percent of girls reported that their families give them love and support. Furthermore, regular family routines such as dinner times, bed times, chores and running errands are linked to several positive child outcomes. Eighty-one percent of adolescents live in households where routines are maintained at least five days a week, and 72 percent eat dinner with their families at least five days a week.²¹

Parental resilience & social connections

The US Department of Health and Human Services defines parental resilience as the ability of parents to deal with the stresses of everyday parenting as well as the occasional crisis.²² Parents are more likely to be resilient if they are not burdened with multiple issues such as poor mental health, financial duress, or their own history as a victim of abuse.

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Findings from the National Survey of America’s Families indicate that the majority of children in Wisconsin live with a parent who reports that they felt calm or peaceful all or most of the past month (57 percent) and the majority of parents described themselves as being happy all or most of the past month (71 percent).²³ Additionally, parents need social resources outside of their immediate family from which to draw parenting ideas, emotional support and simply as an outlet for fun. Work, volunteer activities and involvement in religious services often provide opportunities for this important social networking. Data from the Urban Institute demonstrate that three quarters of school-age children in Wisconsin have parents who do some volunteer work, and 84 percent of children have parents who regularly attend religious services.

FACTORS RELATED TO FAMILIES

RISK FACTORS

As mentioned in previous sections, the risk for child maltreatment increases with additional stress within a family. Families headed by single parents²⁴ and families in which domestic violence is present are also at a higher

risk for child maltreatment.²⁵

Single parents

Single parents may struggle with fewer resources to deal with the tasks of child rearing.²⁶ In 2008, the percentage of county births to single mothers ranged from 17 to 84 percent, with the average county rate at 34 percent.

Domestic violence

In households where domestic violence is present, children are at greater risk for abuse. They may be traumatized by witnessing domestic abuse, and their needs may not be met by parents who are preoccupied with domestic violence and struggle to focus attention on their children.²⁷ The Wisconsin Department of Justice releases annual reports on the number of domestic abuse incidents reported to law enforcement. In 2008, the rate of domestic abuse incidents per 1,000 county residents ranged from 0 to 10, with an average county rate of 4 per 1,000.²⁸ Figure 2 provides a map of the 2008 rates of family characteristics that have been found to be associated with child maltreatment, by county.

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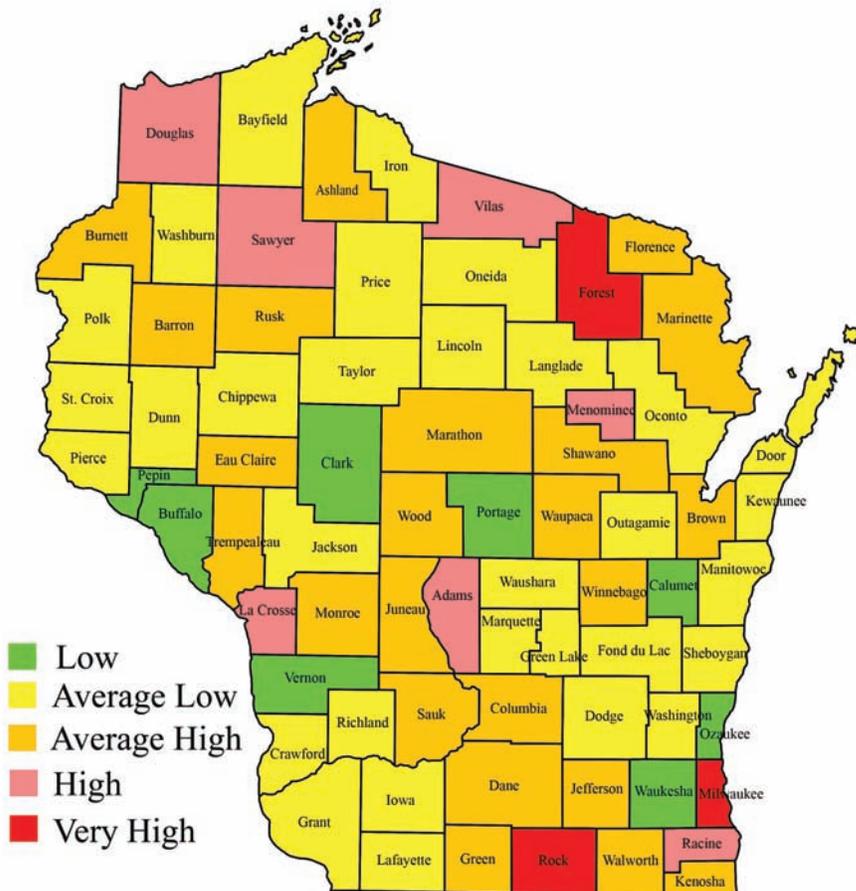


Figure 2: Family risk factors map
 Family risk factors indicators
 - Single parents²⁹
 - Domestic abuse reports to law enforcement³⁰

PROTECTIVE FACTORS

Research has shown that certain characteristics of families are associated with lower rates of maltreatment and increased child well-being, including healthy and supportive family relationships.

Family structure

Two-parent households generally have a higher standard of living and greater economic resources than one-parent families. Parents raising children together tend to have more money, more flexibility and more time for supervision; offer emotional support; take an active part in their children's education; and arrange other activities for them. Data from the US Census Bureau's American Community Survey indicates that 78 percent of children in Wisconsin live in a two-parent household, either married or in domestic partnership, as shown in Figure 3.

FACTORS RELATED TO CHILDREN

RISK FACTORS

While abuse and neglect can never be blamed on a child, there are certain characteristics that make a child more vulnerable to being maltreated. Children with disabilities and health challenges, including low birth-weight infants, are at greater risk of maltreatment. (As noted earlier, younger children are also more vulnerable to child maltreatment.)

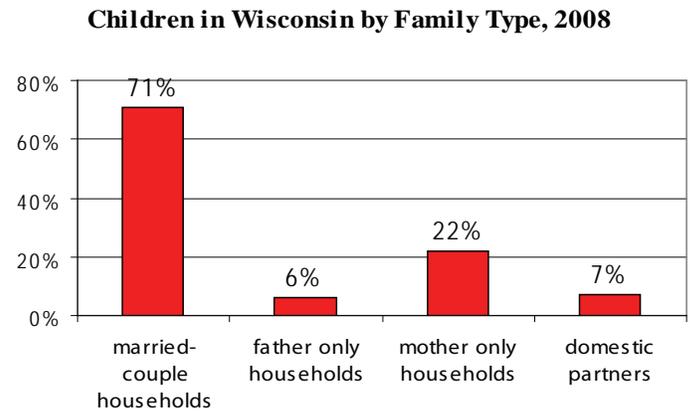
Low birth-weight infants

Children who are born at a small gestational age are at a higher risk of being maltreated, which is thought to be related to the additional challenges in caring for low birth-weight infants.³² In 2008, county rates of low birth-weight newborns ranged from 3 to 10 percent of all births, while the average county rate was 6 percent.

Children with physical and emotional disabilities

Children with disabilities have also been found to be at considerable risk for maltreatment,³³ and children with emotional and behavioral problems are more likely to be

Figure 3: Children in Wisconsin by family type, 2008³¹



Source: AECF Data Center

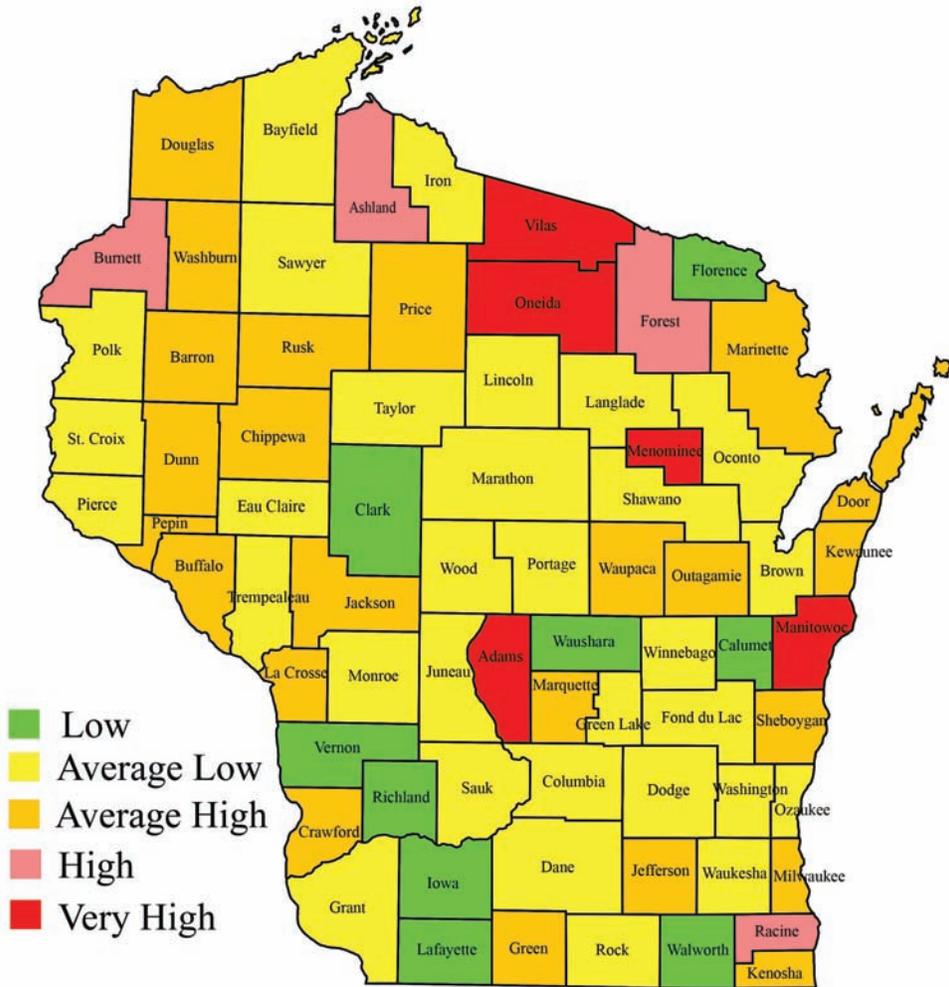
Note: Some children in domestic partner households are also counted in single parent households.

physically abused by their parents.³⁴ Caring for these children can be more demanding, making them more likely to be abused or neglected. One study found that this held true for white children with disabilities,³⁵ but not for African American children with disabilities. Other researchers have found that these risk factors only play a role when other parent, family, or community risk factors are also present.³⁶ Although there are currently no data on the rate of all children with emotional and behavioral problems, the county rates of children in special education with a primary emotional or behavioral disability range from 3 to 28 per 1,000 children, with an average county rate of 12 per 1,000. In terms of other disabilities, county Birth to 3 enrollment rates ranged from 10 to 68 per 1,000 children aged zero to three, with an average county rate of 29 per 1,000.

Figure 4 illustrates the 2008 rates of child characteristics that have been found to be associated with child maltreatment, by county.

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Figure 4: Child risk factors map



Child risk factors indicators

- Low birth weight infants³⁷
- Birth to 3 participation³⁸
- Special education participation among children ages 3-20 who have a primary diagnosis of an emotional/behavioral disability³⁹

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PROTECTIVE FACTORS

Factors that render families at lesser risk for maltreatment include healthy attachment, appropriate supervision, positive communication and parental school involvement. In addition, children's social-emotional competency is considered a protective factor for child maltreatment. When children struggle with emotional regulation, it places stress on the parent-child relationship; when parents and children get support to deal with

those issues, children and families are more likely to thrive.⁴⁰ Agencies such as the Center on the Social Emotional Foundations of Early Learning (<http://www.vanderbilt.edu/csefel/>) are currently working to promote the social emotional development of young children birth to age 5.

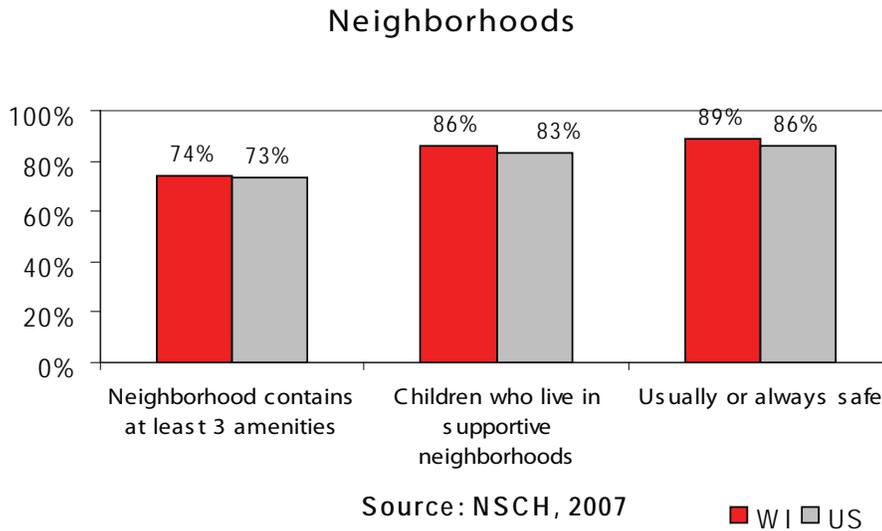
PROTECTIVE FACTORS

Supportive communities and schools

The communities in which children and families live can affect children in a positive or negative fashion. Research has shown that there are significant reductions in crime and violence, for example, when recreational facilities exist in neighborhoods.⁴⁶ High traffic areas, abandoned homes, and lack of grocery stores or libraries are nega-

tively correlated with children’s well being.⁴⁷ Child Trends developed a neighborhood support index using positive attributes that have been shown to support children’s growth and development.⁴⁸ Figure 6 shows that the vast majority of Wisconsin children live in neighborhoods that are considered supportive.

Figure 6: Comparison of Wisconsin and U.S. neighborhood protective factors⁴⁹



According to the Centers for Disease Control and Prevention (CDC), children who feel connected to school and have adults at school and friends who are interested in them and care about their success exhibit healthier behaviors and school success.⁵⁰ Data from the Wisconsin Youth Risk Behavior Survey indicates that close to three quarters of teens feel that they “belong” at school and have adults other than their parents that they can seek assistance from.

Table 1: Adolescent reported high levels of social support⁵¹

	Males	Females
Teachers really care, give support and encouragement	64%	66%
Feel like you belong at school	75%	71%
Other adults (2 or more) you could seek help from	70%	75%

Source: 2009 Wisconsin Youth Risk Behavioral Survey

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Adequate housing

Quality safe, affordable housing anchors families in their communities, contributes to children’s school success and health, and provides the permanency necessary to maintain stable employment or engage in education and training activities. In Wisconsin, 74 percent of children live in a house owned by their parents.⁵² Although home ownership is not necessary to ensure that housing is safe and of good quality, these data were readily available as a proxy for housing stability.

Access to health care

While health insurance alone is not a guarantee of health care services, it is an essential first step in gaining access to affordable care. Families without quality health insur-

ance are financially vulnerable. One of the leading causes of bankruptcy is lack of access to good, affordable health insurance. In Wisconsin, 89 percent of the population was insured all of 2008.⁵³

Financial stability

The financial inability to meet their children’s basic material needs can be a major source of stress for parents. In Wisconsin, 71 percent of children live in families considered to have secure employment – that is, at least one parent employed full-time, year-round.⁵⁴ Median family income in Wisconsin in 2008 was \$64,203, and Wisconsin is ranked 18th nationally for median net worth of families at \$96,329.⁵⁵

OVERALL RISK

Many researchers have found that the accumulation of the above risk factors is more predictive of child maltreatment than any risk factor in isolation.⁵⁶ Therefore, the data on the above risk factors were combined to determine the overall risk by county, shown in Figure 7.

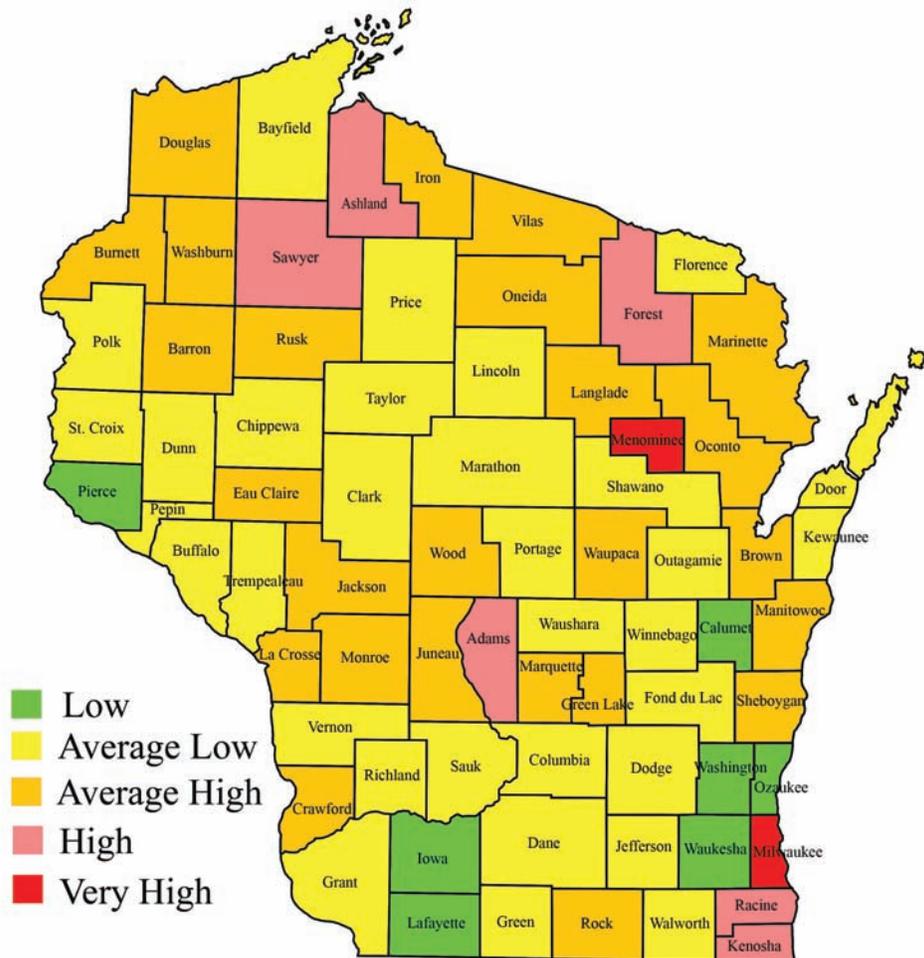


Figure 7: Overall risk factors map

- Overall risk factor includes:*
- Parent characteristics
 - Family situations
 - Child characteristics
 - Community circumstances

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CONCLUSION

The majority of children in Wisconsin grow up in loving families who support them in positive and productive ways, leading to their optimal growth and development as people and as successful members of the community. Unfortunately, too many other children are raised in families and communities that face multiple risk factors, and these children struggle to receive the care and resources they need. Understanding the risk and protective factors for child maltreatment is an important step toward preventing its occurrence and ensuring healthy and productive futures for all of Wisconsin's children.

Endnotes

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What it will take: Investing in Wisconsin's future by keeping kids safe today

This report is one in a series published by the Children's Trust Fund (CTF), Wisconsin's state agency for the prevention of child maltreatment, and the Wisconsin Council on Children and Families, a private, not-for-profit research and advocacy organization.

The series includes "Child maltreatment prevention: Where we stand and directions for the future" which summarizes research conducted by CTF, the state Department of Children & Families, and the University of Wisconsin–Madison School of Social Work and the Institute for Research on Poverty; and five background briefs:

1. Child abuse and neglect prevention: What is it and how do we know when it works?
2. Best practices in child abuse and neglect prevention
3. Current trends in approaches to child abuse and neglect prevention
4. Risk and protective factors related to child abuse and neglect
5. Prevalence of child abuse and neglect in Wisconsin

All materials can be downloaded from www.wccf.org/what_it_will_take.php.

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Children's Trust Fund



What it will take: Investing in Wisconsin's future by keeping kids safe today

Appendices for "Risk and protective factors related to child abuse and neglect"

The brief "Risk and protective factors related to child abuse and neglect" contains information on commonly cited risk factors for child abuse and neglect by researchers. The box at the right describes the process for determining risk levels across counties, and the brief provides maps of each category of risk factors as well as the overall risk for child maltreatment across Wisconsin counties. The appendices that follow provide county-level data on indicators for each of the risk factors that were discussed in the brief.

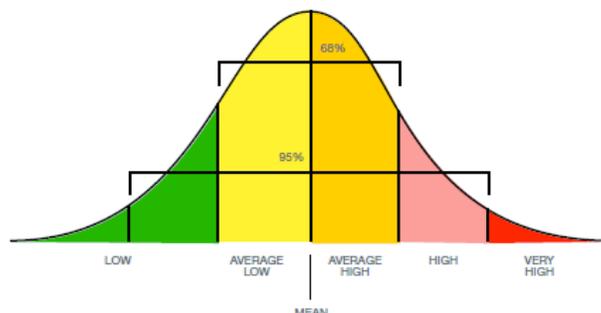
CALCULATING RISK LEVELS BY COUNTY

For each grouping of risk factors (parental, familial, child, and economic), county-level data were gathered from various sources, such as the Wisconsin Interactive Statistics for Health (WISH) and Wisconsin's Behavioral Risk Factor Survey, to determine risk levels across counties. The process for assigning risk levels was as follows:

1. Categorize risk factors into four domains: parent characteristics, family situations, child characteristics, and economic circumstances.
2. Gather and standardize county-level data on each risk factor.
3. Average standardized scores across risk factors to achieve a mean score for each domain.
4. Average the domain scores to achieve an overall county risk score, and assign risk levels according to standard deviations from the mean.

In the maps throughout the brief, counties are color-coded based on their risk level. As shown in the chart below, the risk levels were assigned and color-coded as follows:

- low – green: more than 1 standard deviation below the mean;
- average/low – yellow: within 1 standard deviation below the mean;
- average/high – orange: at the mean or within 1 standard deviation above the mean;
- high – pink: between 1 and 2 standard deviations above the mean; and
- very high – red: more than 2 standard deviations above the mean.



Appendix I: Parent Characteristics

	Adult alcohol use (% of total population) ⁱ	Inpatient hospitalization due to self-inflicted injury (% of total population) ⁱⁱ	Bad mental health days (average percent of days last month) ⁱⁱⁱ	Low maternal educational attainment (% of births to mothers who had less than high school education) ^{iv}	Births to teen mothers (% of births to teen mothers) ^v
	<i>DHS Behavioral Risk Survey 2004-06</i>	<i>DHS Burden of Suicide Report 2001-2006</i>	<i>DHS Behavioral Risk Survey 2005-2007</i>	<i>DHS WISH System 2008</i>	<i>DHS WISH System 2008</i>
Adams	64%	0.06%	10.00%	18.03%	19.13%
Ashland	64%	0.27%	12.67%	15.66%	12.12%
Barron	51%	0.07%	16.33%	16.04%	8.71%
Bayfield	64%	0.15%	8.00%	7.14%	6.35%
Brown	75%	0.11%	10.33%	15.65%	8.87%
Buffalo	66%	0.06%	7.67%	7.97%	n/a
Burnett	64%	0.03%	9.67%	17.57%	12.16%
Calumet	70%	0.05%	8.00%	7.11%	4.11%
Chippewa	61%	0.10%	10.33%	10.60%	7.27%
Clark	53%	0.07%	8.00%	44.44%	3.82%
Columbia	65%	0.08%	10.33%	9.51%	5.83%
Crawford	57%	0.10%	10.33%	8.67%	10.71%
Dane	74%	0.10%	9.33%	9.96%	5.06%
Dodge	66%	0.09%	13.67%	10.69%	7.13%
Door	70%	0.07%	7.67%	11.07%	5.93%
Douglas	62%	0.01%	11.67%	8.30%	8.72%
Dunn	71%	0.09%	n/a	8.24%	7.76%
Eau Claire	68%	0.16%	10.00%	9.74%	6.69%
Florence	58%	0.04%	9.33%	n/a	n/a
Fond du Lac	72%	0.11%	6.33%	11.86%	6.96%
Forest	53%	0.19%	8.67%	18.37%	11.22%
Grant	55%	0.07%	8.00%	11.90%	7.44%
Green	63%	0.08%	13.00%	8.46%	7.69%
Green Lake	69%	0.06%	14.67%	23.39%	9.63%
Iowa	54%	0.06%	9.00%	6.15%	3.38%
Iron	70%	0.08%	7.67%	n/a	n/a
Jackson	68%	0.10%	14.67%	21.49%	8.68%
Jefferson	59%	0.08%	12.67%	11.77%	6.13%
Juneau	64%	0.08%	11.33%	15.64%	10.55%
Kenosha	63%	0.09%	12.33%	15.87%	11.10%
Kewaunee	71%	0.07%	6.67%	8.49%	4.72%
La Crosse	60%	0.16%	9.67%	6.22%	6.45%
Lafayette	62%	0.06%	8.00%	13.08%	6.54%
Langlade	56%	0.06%	14.00%	9.27%	10.73%
Lincoln	61%	0.07%	14.00%	13.88%	9.15%
Manitowoc	67%	0.11%	8.33%	14.70%	7.73%
Marathon	67%	0.05%	9.33%	9.92%	6.95%
Marinette	63%	0.09%	8.33%	12.88%	8.59%
Marquette	61%	0.09%	10.67%	16.45%	6.58%
Menominee	66%	0.16%	10.67%	18.46%	26.15%
Milwaukee	56%	0.08%	12.33%	23.24%	13.23%

	Adult alcohol use (% of total population)	Inpatient hospitalization due to self-inflicted injury (% of total population)	Bad mental health days (average percent of days last month)	Low maternal educational attainment (% of births to mothers who had less than high school education)	Births to teen mothers (% of births to teen mothers)
	<i>DHS Behavioral Risk Survey</i> 2004-06	<i>DHS Burden of Suicide Report</i> 2001-2006	<i>DHS Behavioral Risk Survey</i> 2005-2007	<i>DHS WISH System</i> 2008	<i>DHS WISH System</i> 2008
Monroe	60%	0.12%	10.67%	22.85%	8.90%
Oconto	68%	0.10%	15.00%	11.40%	7.69%
Oneida	74%	0.14%	9.33%	9.06%	10.00%
Outagamie	77%	0.09%	9.00%	8.26%	5.91%
Ozaukee	62%	0.07%	7.67%	3.77%	3.16%
Pepin	62%	0.06%	9.67%	18.29%	n/a
Pierce	71%	0.05%	5.67%	3.21%	3.70%
Polk	73%	0.05%	7.67%	6.69%	8.66%
Portage	63%	0.12%	9.67%	8.48%	7.37%
Price	66%	0.07%	10.67%	6.48%	6.48%
Racine	60%	0.13%	10.33%	20.69%	10.85%
Richland	63%	0.08%	12.33%	20.17%	10.73%
Rock	56%	0.08%	12.00%	18.88%	10.21%
Rusk	74%	0.07%	5.33%	18.13%	10.63%
Saint Croix	75%	0.02%	11.33%	2.78%	3.52%
Sauk	65%	0.08%	6.33%	15.78%	8.28%
Sawyer	57%	0.18%	10.67%	11.86%	9.79%
Shawano	65%	0.08%	11.67%	13.97%	8.43%
Sheboygan	76%	0.18%	10.67%	10.83%	8.20%
Taylor	57%	0.06%	9.33%	14.57%	3.94%
Trempealeau	64%	0.09%	8.67%	17.71%	6.48%
Vernon	67%	0.07%	8.33%	34.23%	3.38%
Vilas	63%	0.15%	5.67%	7.43%	10.29%
Walworth	76%	0.06%	8.00%	18.89%	7.56%
Washburn	69%	0.05%	9.33%	10.12%	9.52%
Washington	75%	0.05%	6.33%	6.23%	5.97%
Waukesha	59%	0.06%	8.33%	4.40%	2.93%
Waupaca	69%	0.07%	8.33%	11.62%	9.07%
Waushara	68%	0.09%	8.00%	27.80%	10.24%
Winnebago	62%	0.13%	11.00%	10.49%	6.91%
Wood	68%	0.09%	13.00%	7.01%	9.67%

Note: Values of “n/a” indicate that no data was available for that county in that particular year. For the purposes of calculating risk levels, in counties where any data was available between 2005 and 2009, the county’s mean across years in which data was available was used as an estimate for 2008. In counties where no data was available between 2005 and 2009, the average county mean across the state was used.

Appendix II: Family Situations

	Births to single moms (% of all births) ^{vi}	Domestic abuse incidents per 1,000 people ^{vii}
	<i>DHS WISH System</i>	<i>DOJ Domestic Abuse Report</i>
	<i>2008</i>	<i>2008</i>
Adams	46%	4.92%
Ashland	39%	4.97%
Barron	38%	3.36%
Bayfield	28%	3.28%
Brown	38%	5.02%
Buffalo	28%	2.11%
Burnett	45%	4.51%
Calumet	20%	2.12%
Chippewa	31%	3.84%
Clark	17%	2.59%
Columbia	31%	7.37%
Crawford	43%	2.25%
Dane	28%	6.75%
Dodge	30%	4.44%
Door	28%	2.45%
Douglas	43%	6.42%
Dunn	30%	3.33%
Eau Claire	32%	5.86%
Florence	43%	3.65%
Fond du Lac	34%	3.39%
Forest	48%	7.21%
Grant	30%	2.50%
Green	35%	5.82%
Green Lake	30%	3.88%
Iowa	23%	3.94%
Iron	42%	1.29%
Jackson	40%	2.21%
Jefferson	32%	5.52%
Juneau	36%	5.63%
Kenosha	44%	4.45%
Kewaunee	27%	2.65%
La Crosse	30%	8.43%
Lafayette	29%	4.47%
Langlade	42%	1.39%
Lincoln	36%	2.78%
Manitowoc	30%	4.02%
Marathon	28%	5.16%
Marinette	38%	3.71%
Marquette	29%	3.65%
Menominee	84%	n/a
Milwaukee	55%	9.91%
Monroe	32%	5.65%
Oconto	28%	2.93%
Oneida	32%	3.41%

	Births to single moms (% of all births)	Domestic abuse incidents per 1,000 people
	<i>DHS WISH System</i>	<i>DOJ Domestic Abuse Report</i>
	<i>2008</i>	<i>2008</i>
Outagamie	25%	4.65%
Ozaukee	17%	1.46%
Pepin	20%	2.72%
Pierce	26%	3.38%
Polk	38%	3.12%
Portage	25%	0.79%
Price	31%	3.15%
Racine	48%	5.62%
Richland	34%	3.11%
Rock	47%	7.48%
Rusk	31%	7.37%
Saint Croix	21%	5.35%
Sauk	34%	5.05%
Sawyer	51%	3.86%
Shawano	38%	3.59%
Sheboygan	29%	4.33%
Taylor	29%	3.37%
Trempealeau	34%	4.17%
Vernon	20%	n/a
Vilas	45%	5.29%
Walworth	37%	4.26%
Washburn	30%	3.71%
Washington	23%	3.44%
Waukesha	19%	2.50%
Waupaca	34%	5.80%
Waushara	28%	2.38%
Winnebago	31%	5.29%
Wood	36%	4.15%

Note: Values of "n/a" indicate that no data was available for that county in that particular year. For the purposes of calculating risk levels, in counties where any data was available between 2005 and 2009, the county's mean across years in which data was available was used as an estimate for 2008. In counties where no data was available between 2005 and 2009, the average county mean across the state was used.

Appendix III: Child Characteristics

	Low birth weight (% of all births) ^{viii}	Birth to 3 participation (% of total child population) ^{ix}	Special education participation for children with primary emotional/behavioral disability (% of total child population) ^x
	<i>DHS WISH System</i> 2008	<i>DHS</i> 2008	<i>DPI</i> 2008
Adams	6.56%	4.17%	2.11%
Ashland	4.55%	4.18%	2.78%
Barron	6.34%	3.61%	1.11%
Bayfield	3.97%	2.66%	1.55%
Brown	6.29%	2.49%	1.44%
Buffalo	10.14%	1.85%	0.66%
Burnett	7.43%	3.08%	1.93%
Calumet	5.37%	3.12%	0.58%
Chippewa	6.91%	3.69%	1.07%
Clark	5.21%	2.40%	0.65%
Columbia	7.36%	1.68%	1.18%
Crawford	10.20%	3.18%	0.74%
Dane	6.03%	2.49%	1.17%
Dodge	6.29%	3.74%	0.77%
Door	6.72%	2.21%	1.23%
Douglas	7.02%	2.99%	1.14%
Dunn	4.47%	4.03%	1.41%
Eau Claire	4.95%	3.23%	1.10%
Florence	n/a	1.92%	0.27%
Fond du Lac	6.53%	2.46%	1.14%
Forest	9.18%	3.31%	2.01%
Grant	5.79%	1.37%	1.09%
Green	7.69%	2.33%	0.99%
Green Lake	5.50%	2.19%	0.94%
Iowa	4.31%	2.01%	1.10%
Iron	n/a	1.47%	1.05%
Jackson	6.61%	1.07%	1.75%
Jefferson	6.63%	4.57%	1.10%
Juneau	5.45%	1.59%	1.03%
Kenosha	8.63%	3.08%	0.88%
Kewaunee	5.66%	1.52%	0.97%
La Crosse	6.60%	2.91%	1.06%
Lafayette	4.21%	1.63%	0.41%
Langlade	4.88%	2.68%	1.29%
Lincoln	5.36%	2.52%	0.96%
Manitowoc	8.26%	6.03%	1.08%
Marathon	6.00%	2.81%	0.98%
Marinette	6.57%	2.29%	1.19%
Marquette	6.58%	2.09%	1.95%
Menominee	n/a	2.73%	2.42%
Milwaukee	8.95%	2.70%	0.75%
Monroe	5.64%	2.72%	0.89%

	Low birth weight (% of all births)	Birth to 3 participation (% of total child population)	Special education participation for children with primary emotional/behavioral disability (% of total child population)
	<i>DHS WISH System</i> 2008	<i>DHS</i> 2008	<i>DPI</i> 2008
Oconto	5.98%	3.10%	0.98%
Oneida	7.81%	5.08%	1.28%
Outagamie	8.35%	2.74%	0.93%
Ozaukee	5.60%	4.27%	0.89%
Pepin	6.10%	2.53%	1.62%
Pierce	5.19%	1.81%	1.25%
Polk	4.33%	2.65%	1.19%
Portage	6.12%	2.71%	0.76%
Price	6.48%	3.08%	1.23%
Racine	9.47%	2.43%	1.39%
Richland	3.00%	3.21%	0.93%
Rock	5.49%	1.81%	1.33%
Rusk	6.88%	2.53%	1.10%
Saint Croix	6.11%	1.83%	1.46%
Sauk	4.79%	2.25%	1.37%
Sawyer	6.70%	3.76%	0.97%
Shawano	5.76%	2.44%	1.09%
Sheboygan	6.13%	4.82%	1.36%
Taylor	7.09%	1.40%	0.82%
Trempealeau	4.24%	1.98%	1.15%
Vernon	5.18%	1.53%	0.86%
Vilas	8.00%	4.58%	1.73%
Walworth	5.12%	3.03%	0.69%
Washburn	6.55%	3.06%	1.24%
Washington	6.43%	2.80%	0.83%
Waukesha	6.55%	3.04%	0.85%
Waupaca	7.62%	2.77%	1.01%
Waushara	3.90%	0.82%	0.63%
Winnebago	6.85%	2.09%	1.15%
Wood	6.91%	2.37%	1.21%

Note: Values of "n/a" indicate that no data was available for that county in that particular year. For the purposes of calculating risk levels, in counties where any data was available between 2005 and 2009, the county's mean across years in which data was available was used as an estimate for 2008. In counties where no data was available between 2005 and 2009, the average county mean across the state was used.

Appendix IV: Economic Circumstances

	W-2 Recipients (% of total population) ^{xi}	Unemployment Rate (% of total population) ^{xii}	Food Share Participation (% of total population) ^{xiii}	Percent Below Poverty (% of total population) ^{xiv}
	<i>DCF 2008</i>	<i>DWD 2008</i>	<i>DHS 2008</i>	<i>US Census 2007</i>
Adams	0.24%	6.80%	16.92%	14.40%
Ashland	0.25%	5.90%	21.14%	17.50%
Barron	0.14%	5.60%	15.02%	11.90%
Bayfield	0.09%	6.50%	9.17%	11.50%
Brown	0.17%	4.40%	10.37%	10.30%
Buffalo	0.03%	4.10%	9.33%	8.90%
Burnett	0.06%	7.00%	14.84%	13.20%
Calumet	0.07%	4.20%	6.40%	5.30%
Chippewa	0.09%	5.10%	12.90%	10.20%
Clark	0.07%	5.40%	8.36%	11.50%
Columbia	0.08%	4.90%	9.47%	7.00%
Crawford	0.12%	5.70%	11.84%	11.70%
Dane	0.21%	3.30%	8.07%	10.90%
Dodge	0.14%	4.90%	8.24%	8.30%
Door	0.08%	5.20%	7.37%	7.40%
Douglas	0.27%	5.10%	15.40%	14.60%
Dunn	0.19%	4.20%	12.43%	14.00%
Eau Claire	0.13%	4.00%	11.74%	13.00%
Florence	0.13%	5.70%	12.90%	11.60%
Fond du Lac	0.09%	4.70%	8.88%	8.40%
Forest	0.13%	6.70%	11.01%	16.50%
Grant	0.04%	4.60%	7.91%	11.70%
Green	0.06%	4.50%	9.00%	7.70%
Green Lake	0.08%	5.40%	9.89%	9.10%
Iowa	0.03%	4.50%	9.18%	8.50%
Iron	0.15%	7.70%	12.38%	11.60%
Jackson	0.17%	5.50%	11.78%	13.10%
Jefferson	0.07%	4.70%	7.89%	7.10%
Juneau	0.08%	5.80%	12.04%	11.60%
Kenosha	0.60%	5.30%	15.73%	11.80%
Kewaunee	0.05%	4.30%	6.62%	7.30%
La Crosse	0.09%	3.80%	10.81%	13.20%
Lafayette	0.06%	4.10%	8.55%	9.00%
Langlade	0.15%	5.90%	17.82%	11.70%
Lincoln	0.09%	5.60%	11.10%	9.90%
Manitowoc	0.03%	4.90%	7.85%	8.60%
Marathon	0.11%	4.40%	10.31%	8.00%
Marinette	0.06%	5.90%	12.80%	11.20%
Marquette	0.09%	6.20%	13.88%	10.20%
Menominee	0.50%	10.40%	39.84%	34.10%
Milwaukee	1.29%	5.50%	22.36%	18.20%
Monroe	0.12%	4.50%	11.19%	12.80%
Oconto	0.04%	6.10%	10.26%	9.90%

	W-2 Recipients (% of total population)	Unemployment Rate (% of total population)	Food Share Participation (% of total population)	Percent Below Poverty (% of total population)
	<i>DCF</i> <i>2008</i>	<i>DWD</i> <i>2008</i>	<i>DHS</i> <i>2008</i>	<i>US Census</i> <i>2007</i>
Oneida	0.12%	6.00%	11.72%	9.80%
Outagamie	0.11%	4.50%	7.40%	6.70%
Ozaukee	0.06%	3.70%	3.85%	4.50%
Pepin	0.01%	4.60%	9.95%	10.60%
Pierce	0.04%	4.20%	5.29%	7.30%
Polk	0.03%	5.70%	9.75%	8.70%
Portage	0.11%	4.40%	9.30%	12.10%
Price	0.11%	4.90%	13.82%	11.10%
Racine	0.34%	5.60%	14.56%	9.20%
Richland	0.08%	4.60%	13.21%	11.50%
Rock	0.25%	6.10%	15.33%	10.70%
Rusk	0.05%	6.90%	18.44%	14.40%
Saint Croix	0.04%	4.30%	13.71%	5.30%
Sauk	0.06%	4.80%	7.82%	9.10%
Sawyer	0.07%	6.80%	35.22%	12.30%
Shawano	0.20%	5.10%	7.69%	10.70%
Sheboygan	0.18%	4.40%	3.53%	7.90%
Taylor	0.10%	6.40%	12.11%	11.10%
Trempealeau	0.09%	4.40%	10.54%	9.50%
Vernon	0.03%	4.70%	9.76%	13.60%
Vilas	0.03%	6.30%	9.07%	10.50%
Walworth	0.08%	4.60%	9.56%	9.60%
Washburn	0.04%	6.50%	15.53%	12.40%
Washington	0.08%	4.20%	5.66%	5.20%
Waukesha	0.06%	3.90%	3.27%	4.10%
Waupaca	0.11%	5.20%	9.35%	8.90%
Waushara	0.06%	5.70%	12.82%	12.60%
Winnebago	0.15%	4.30%	9.52%	9.30%
Wood	0.33%	5.30%	13.52%	9.10%

Note: Values of "n/a" indicate that no data was available for that county in that particular year. For the purposes of calculating risk levels, in counties where any data was available between 2005 and 2009, the county's mean across years in which data was available was used as an estimate for 2008. In counties where no data was available between 2005 and 2009, the average county mean across the state was used.

What it will take: Investing in Wisconsin's future by keeping kids safe today

These appendices are for the brief "Risk and protective factors related to child abuse and neglect." That report is one in a series published by the Children's Trust Fund (CTF), Wisconsin's state agency for the prevention of child maltreatment, and the Wisconsin Council on Children and Families, a private, not-for-profit research and advocacy organization.

The series includes "Child maltreatment prevention: Where we stand and directions for the future" which summarizes research conducted by CTF, the state Department of Children & Families, and the University of Wisconsin–Madison School of Social Work and the Institute for Research on Poverty; and five background briefs:

1. Child abuse and neglect prevention: What is it and how do we know when it works?
2. Best practices in child abuse and neglect prevention
3. Current trends in approaches to child abuse and neglect prevention
4. Risk and protective factors related to child abuse and neglect
5. Prevalence of child abuse and neglect in Wisconsin

All materials can be downloaded from www.wccf.org/what_it_will_take.php.

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