



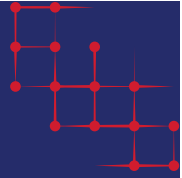
# All County Needs Assessment ~ 2019

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# ALL COUNTY NEEDS ASSESSMENT ~ 2019

The 2019 Early Childhood Iowa (ECI) Statewide Needs Assessment was completed in September 2019 as part of a Preschool Development Grant B-5 (see [www.earlychildhoodiowa.iowa.gov](http://www.earlychildhoodiowa.iowa.gov) for full report). It included seven data collection efforts and a series of stakeholder learning sessions with diverse partners including families, community members, executive leaders, private businesses, program managers, and providers. It included information from Iowa's Integrated Data System for Decision Making (I2D2) that analyzed administrative records from public programs operated by Iowa Departments of Public Health, Education, Human Services, Human Rights, and Workforce Development. This brief uses data from an I2D2 cohort of 27,321 children who were born in Iowa and enrolled in kindergarten during the 2017-2018 year. This cohort represents 78% of all Iowa kindergarteners during that school year. Integrated data included Vital Statistics birth records (IDPH), kindergarten and preschool enrollment (DE), and receipt of child care assistance (DHS).

## Individual birth risks relate to school readiness.

Statewide Needs Assessment findings using the I2D2 2018 kindergarten cohort (n=27,321) identified important birth risks with known associations to early health and school readiness outcomes. As shown in Table 1, compared to national estimates, Iowa evidenced higher percentages of children born to a teen mother and to a mother who smoked during pregnancy. Findings also showed that children born to teen mothers, mothers without a high school education, families in poverty, or were exposed to prenatal smoking were more likely born in rural counties compared to urban counties. (Variables presented in Table 1 columns 1 and 2 were derived from the Iowa Department of Public Health Vital Statistics birth records.) See also Appendix Figures A1-A7 and Table A2 for county-level estimates of each individual birth risk.

Table 1. Percentage of individual birth risks for children enrolled in kindergarten statewide in the 2017-2018 school year.

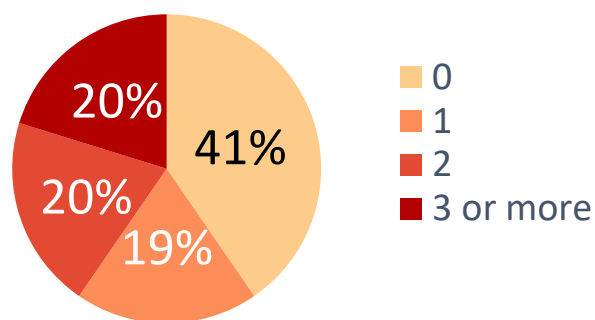
Risks	Definitions	Iowa Estimates	Rural Iowa <sup>d</sup>	National Estimates
	<b>Poverty</b> (receiving Medicaid or WIC at time of birth)	49	57	41 <sup>a</sup>
	<b>Unmarried mother</b> (mother was not married at time of child birth)	33	34	40 <sup>b</sup>
	<b>Low maternal education</b> (completed < 12 years)	10	13	14 <sup>a</sup>
	<b>Teen mother</b> (< age 20 at time of child birth)	4	5	2 <sup>b</sup>
	<b>Preterm OR Low Birth Weight</b> (< 36 weeks gestation or < 2,500 grams)	8	5	10 <sup>b</sup>
	<b>Inadequate Prenatal Care</b> (no visit in 1 <sup>st</sup> trimester and < 4 visits overall)	1	2	6 <sup>c</sup>
	<b>Prenatal Smoking</b> (mother smoked during the 3 months preceding pregnancy or during pregnancy)	23	27	7 <sup>c</sup>

**Notes:** National estimates used the following references: (a) U.S. Census Bureau; poverty definition includes children in families under 200% FPL; (b) Centers for Disease Control and Prevention; (c) National Center for Health Statistics; smoking definition includes mothers who smoked during pregnancy only; (d) U.S. Census Bureau; Woods & Poole (2017), Iowa has 88 rural counties (out of 99), assessed as geographic units outside of urban areas where census block groups have a population density less than 1,000 people per square mile.

## Cumulative birth risks.

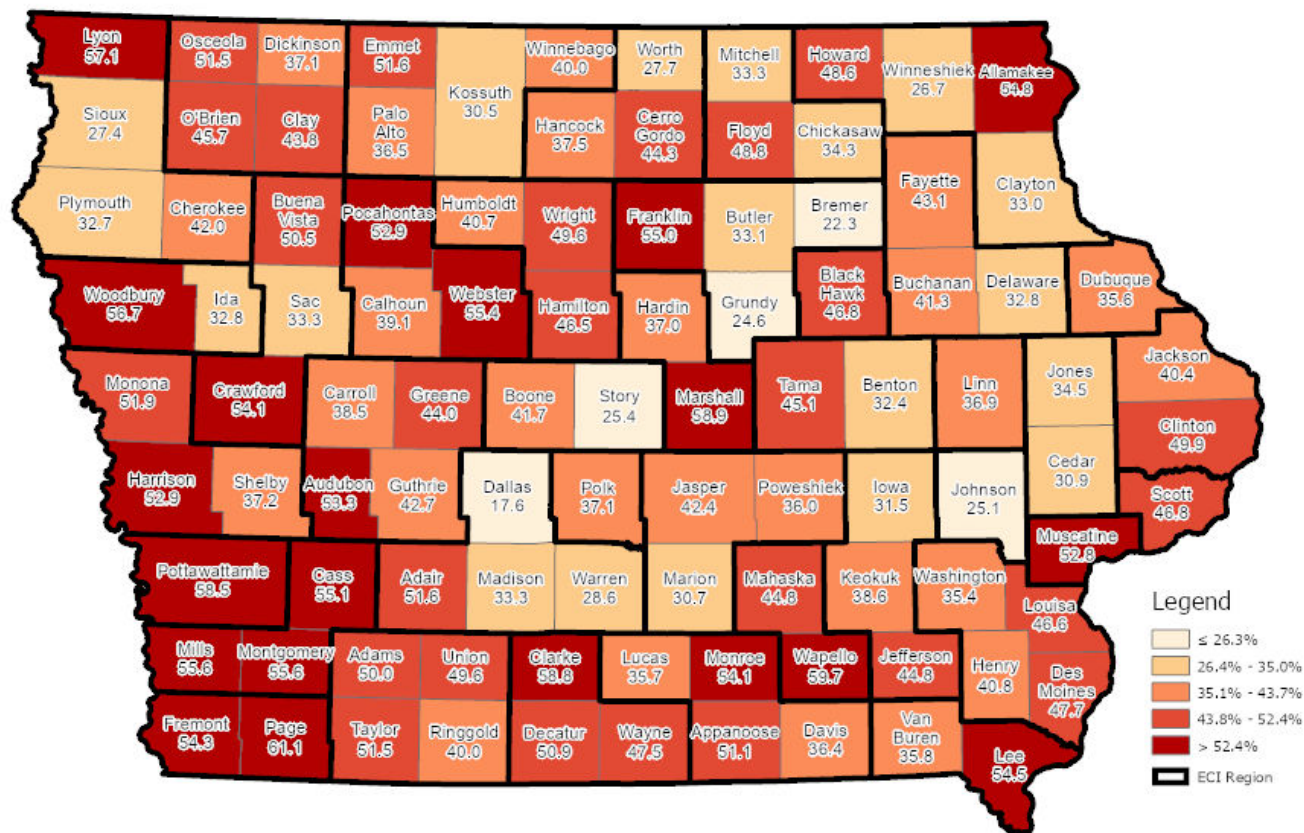
As children often face multiple risks that are highly correlated and accumulate over time, a cumulative risk approach was utilized to understand the multiple risk context and provide deeper insights into how agencies might address the needs of vulnerable children. A cumulative risk measure was constructed as a sum of the 7 individual birth risks identified above (i.e., poverty, unmarried mother, low maternal education, teen mother, preterm/low birth weight, inadequate prenatal care, and prenatal smoking). See Figure 1 for a depiction of the amount of cumulative risk experienced across the 2018 I2D2 cohort (n=27,321)

Figure 1. Statewide cumulative risk



Findings from the 2019 Statewide Needs Assessment revealed that children living in rural areas had disproportionately more cumulative risks than other children, with 49% experiencing 2 or more risks compared to 40% in the rest of the cohort. Children with more cumulative risks were less likely to participate in a formal, preschool program during the year before kindergarten. Figure 2 presents the percentage of children in each county with 2 or more birth risks using the 2018 I2D2 cohort (n=27,321 children).

Figure 2. Percent of children with 2 or more cumulative birth risks (2018 I2D2 kindergarten cohort, n=27,321).





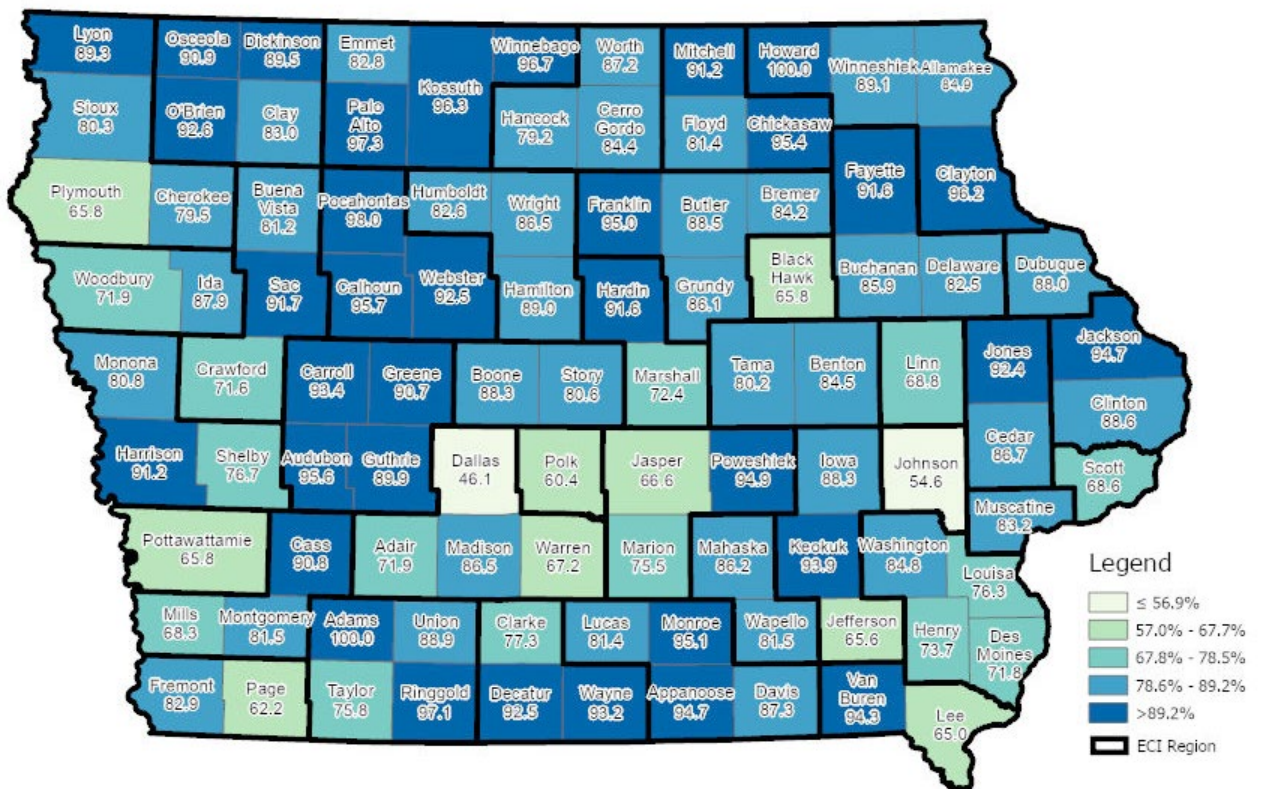
## Unduplicated percentage of children with prekindergarten center-based experiences.

I2D2 analyses documented unduplicated counts of children across different types of center-based programs. It is the first time our state was able to see a more refined count of how many children have access to and participate in publicly-visible center-based experiences during the year before kindergarten, because it used administrative records from across programs including the Department of Education, Department of Human Services (child care assistance data), Head Start, and private centers that participate in Teaching Strategies GOLD (TS GOLD) statewide assessments. Findings using these data indicated that 73% of Iowa children experienced at least 1 center-based program the year before kindergarten, with many having more than one experience.

For this analysis, a center-based experience was defined by participation in a Department of Education funded program (e.g., Statewide Voluntary Preschool, Shared Visions, or IDEA), receiving child care assistance from DHS that funded a center-based program, and/or who completed a TS GOLD assessment (which indicated that the child attended a center that participated in TS GOLD assessments through the State of Iowa license and included Head Start programs and many other privately funded preschool centers).

Figure 3 presents county level estimates of the percent of children who were living in each county at the time of their birth and who later attended public school kindergarten in Iowa (*note – some children may NOT have attended kindergarten in the same county where they were born. These estimates are aggregated at the county in which children were born*).

Figure 3. Percentage of children from the 2018 I2D2 cohort who were born in each county and had at least one center-based experience the year before kindergarten (statewide = 73%).

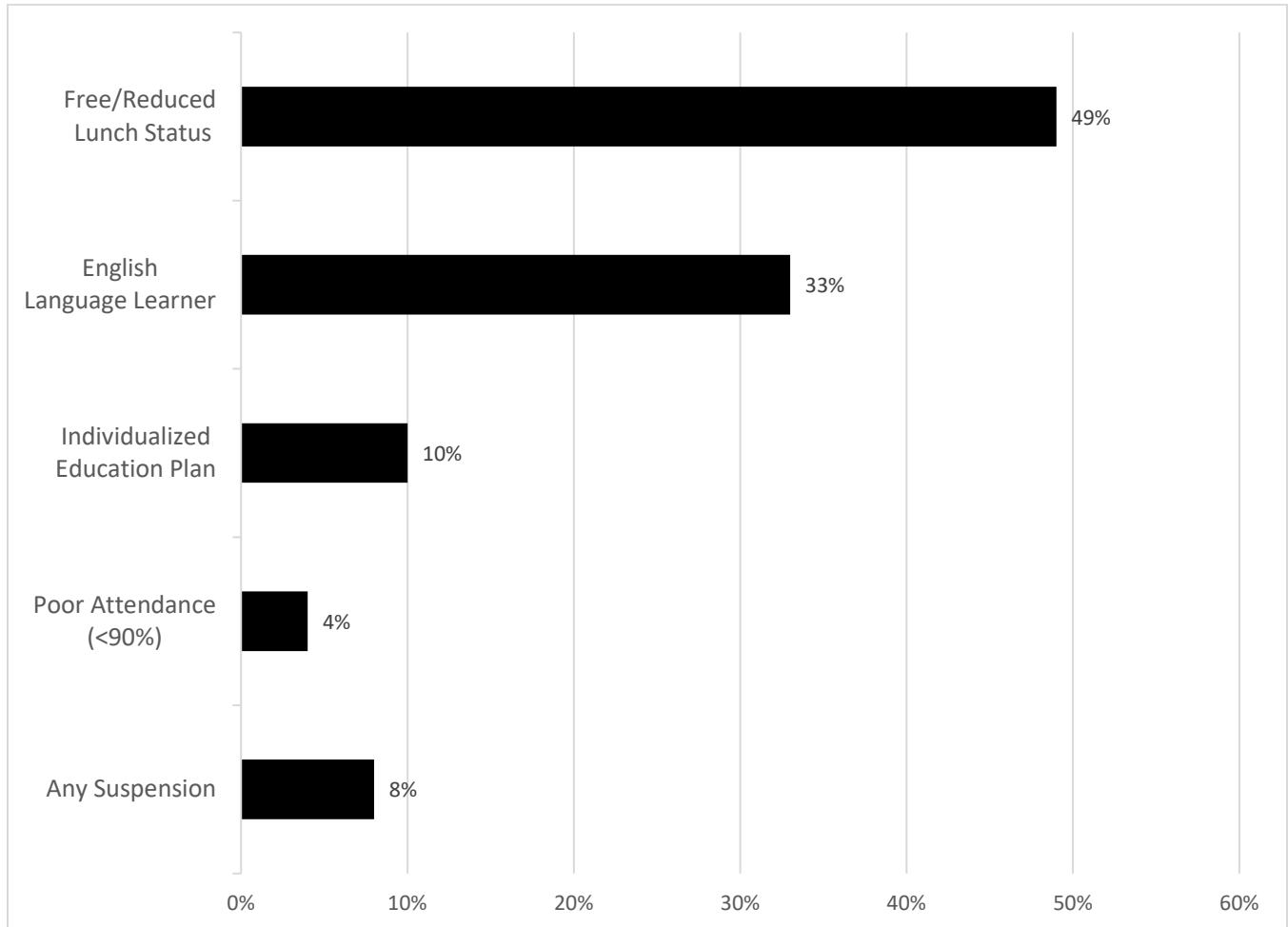


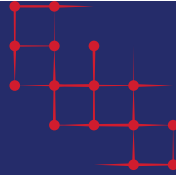
### Kindergarten indicators.

The 2018 I2D2 cohort study documented that some populations of children were more likely to evidence poor kindergarten attendance or be suspended from school, including children born in low-income families; born to unmarried, low educated, or teen mothers; children of minority racial status (i.e., Black, Hispanic, Asian, or multiple races); and children whose mothers smoked during pregnancy. Boys were also significantly more likely than girls to have identified needs for special education (e.g., an IEP) and to be suspended from school in kindergarten.

Figure 4 shows the distribution of children statewide with each of the five indicators in kindergarten using the I2D2 2018 Kindergarten cohort. See also Appendix Figures A8-A12 and Table A3 for county-level estimates of these indicators.

*Figure 4. Percentage of children with kindergarten indicators statewide (2018 I2D2 cohort; n=27,321).*





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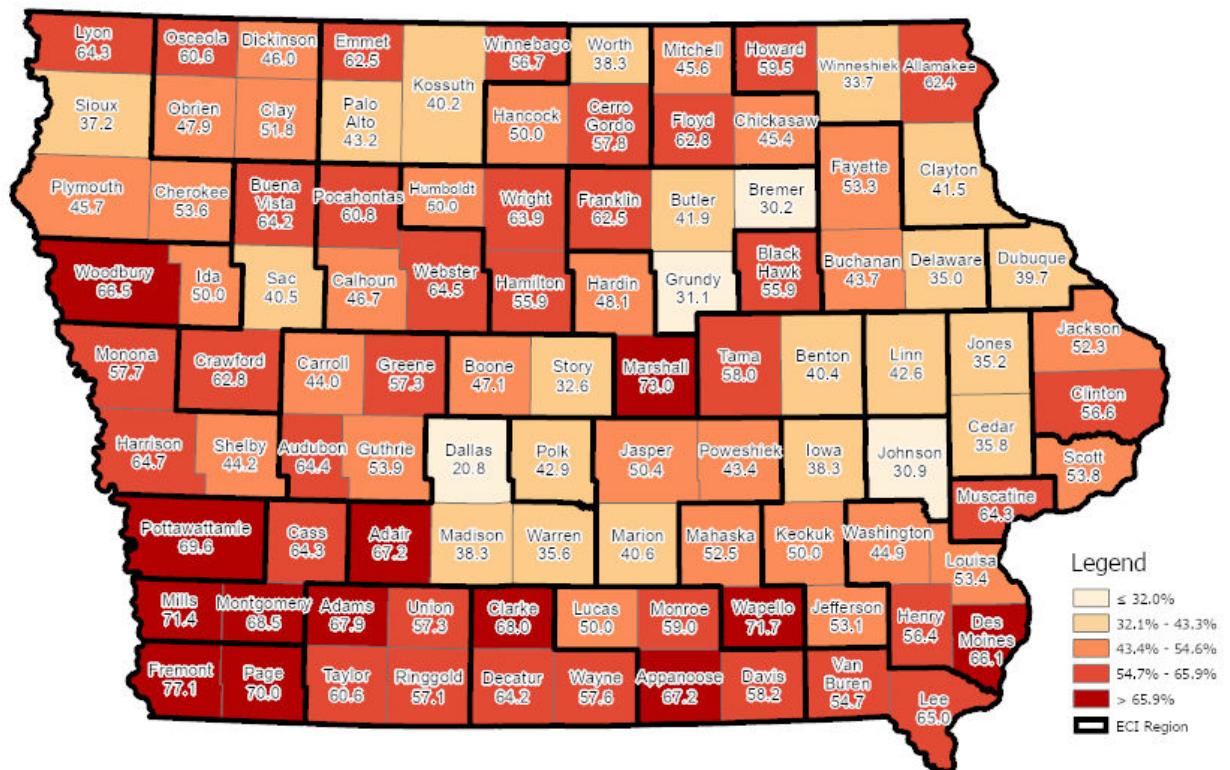
**Table A1. Statewide descriptive statistics (n=27,321).**

Risk and Indicators	Total	Mean	Standard Deviation	By County Range
<i>Vital Statistics</i>				
Poverty	27,319	48.7%	0.50	20.8 - 77.1%
Unmarried mother	27,321	32.6%	0.47	15.8 - 49.0%
Low maternal education	27,315	9.6%	0.29	0.0 - 32.4%
Teen mother	27,321	3.8%	0.19	0.0 - 10.9%
Preterm or low birthweight	27,312	7.7%	0.27	0.0 - 15.7%
Inadequate prenatal care	27,264	1.0%	0.10	0.0 - 6.8%
Tobacco	27,321	22.6%	0.42	9.7 - 50.8%
0 Risks	27,321	40.1%	0.49	5.7 - 66.7%
1 Risk	27,321	19.2%	0.39	11.7 - 40.0%
2 Risks	27,321	20.3%	0.40	9.4 - 33.3%
3+ Risks	27,321	20.4%	0.40	7.0 - 34.3%
<i>Preschool and Kindergarten Indicators</i>				
Any Preschool Experience	27,321	73.1%	0.44	46.1 - 100.0%
Individualized Education Plan	27,321	7.4%	0.26	1.4 - 18.9%
English Language Learner	27,321	7.0%	0.25	0.0 - 45.9%
Free or Reduced Price Lunch Status	27,321	39.2%	0.49	18.1 - 68.6%
Any Suspensions	27,321	1.0%	0.10	0.0 - 4.8%
Poor (<90%) Attendance	27,321	7.5%	0.26	0.0 - 14.8%



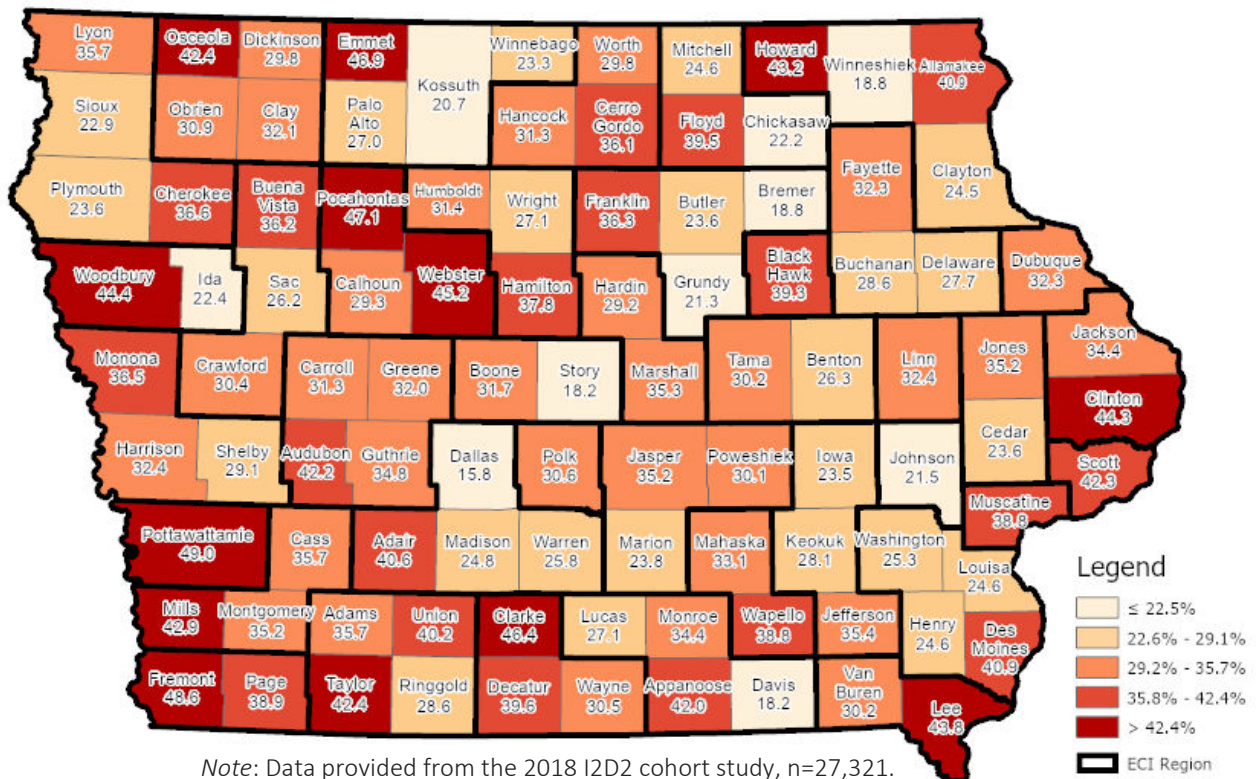
## Figures A1-A7. Individual risks.

Figure A1. Percentage of children born to a mother receiving WIC or Medicaid at birth (statewide = 49%)



Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

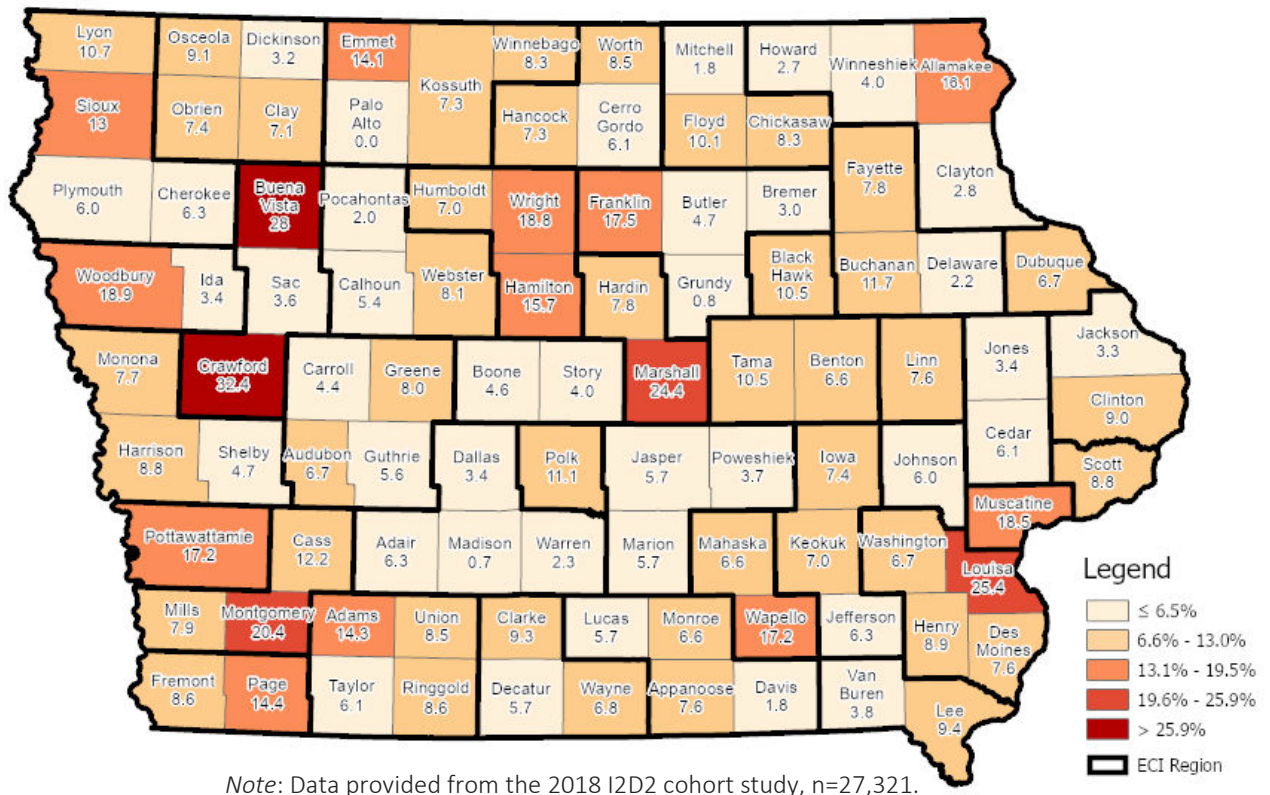
Figure A2. Percentage of children born to an unmarried mother (statewide = 33%)



Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

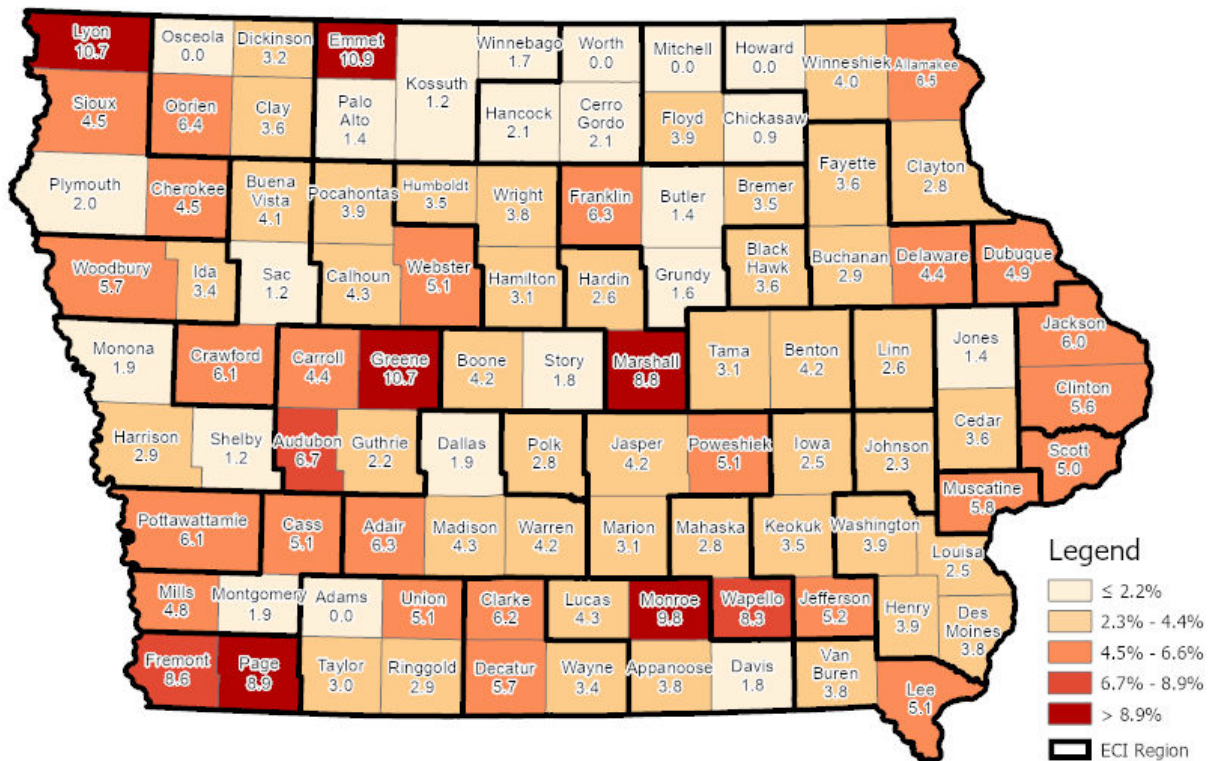


Figure A3. Percentage of children born to a mother without a high school education (statewide = 10%)



Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

Figure A4. Percentage of children born to a teenage mother (statewide = 4%)



Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

Figure A5. Percentage of children born preterm or with a low birthweight (statewide = 8%)

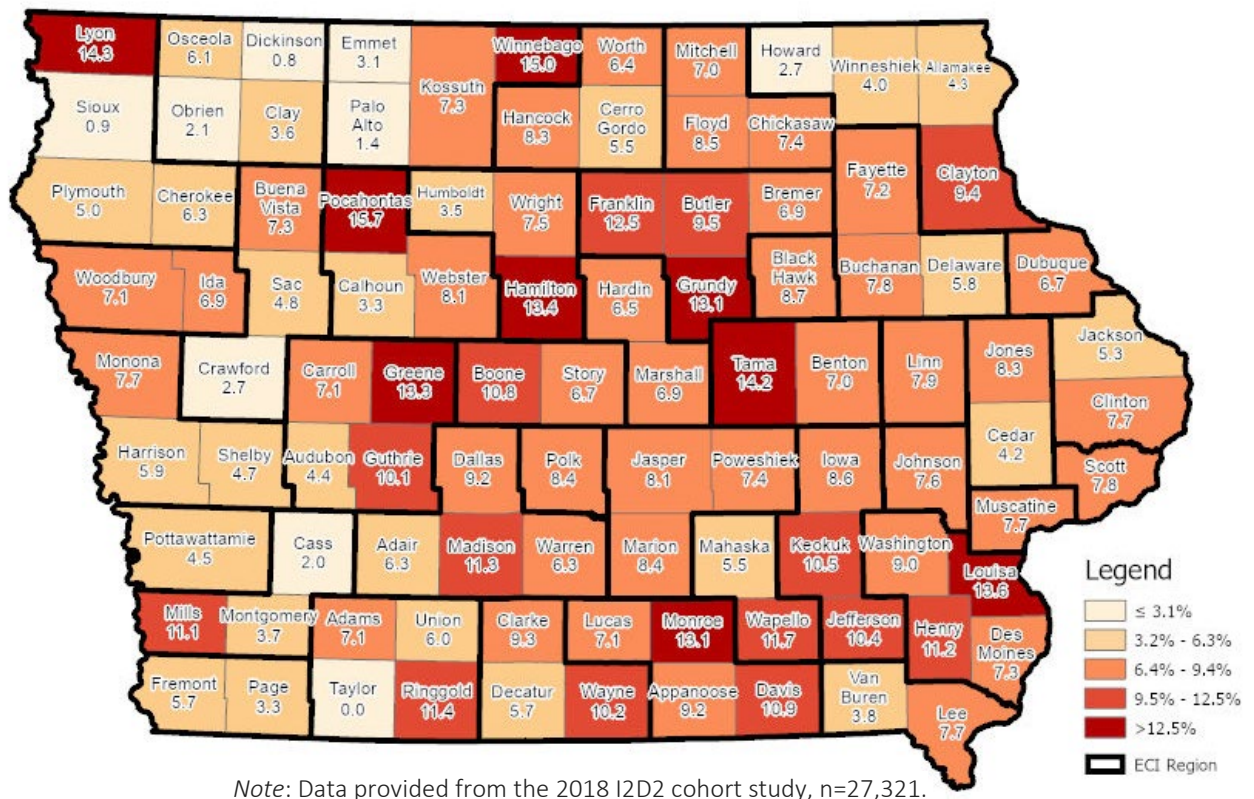


Figure A6. Percentage of children born to a mother who received inadequate prenatal care (statewide = 1%)

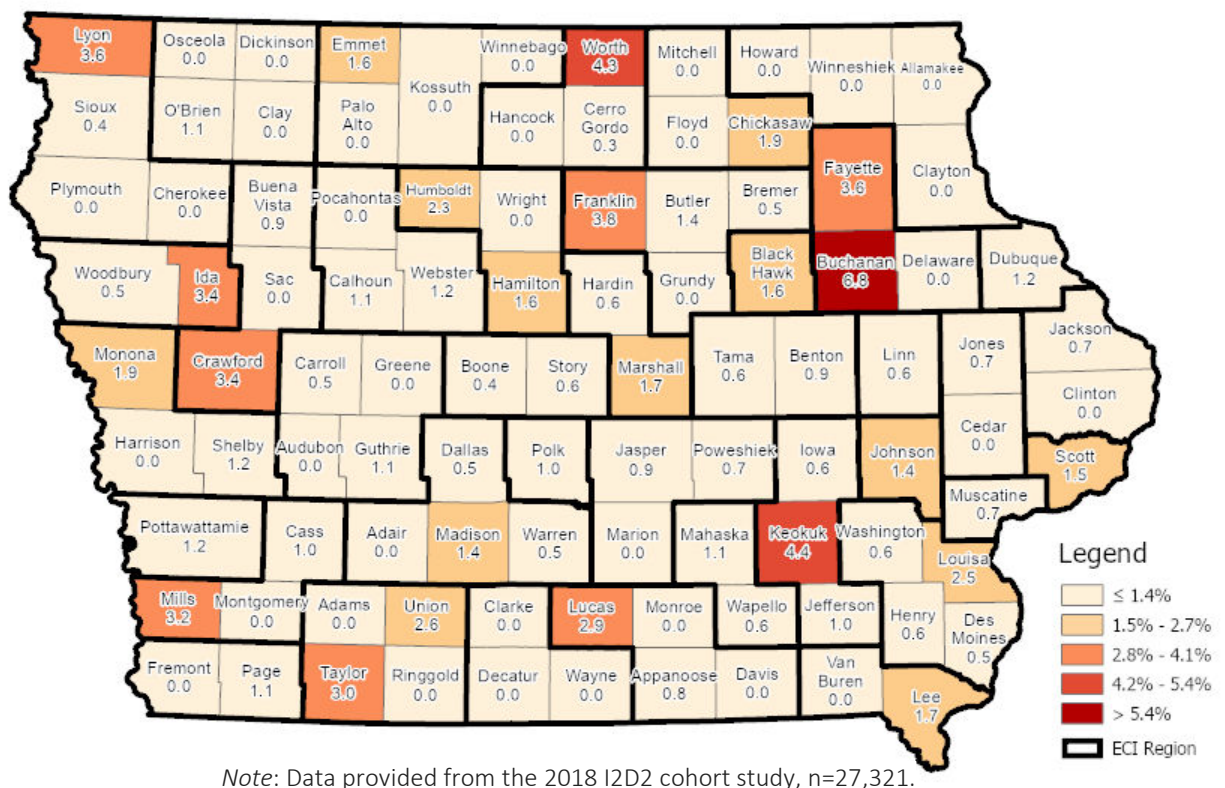
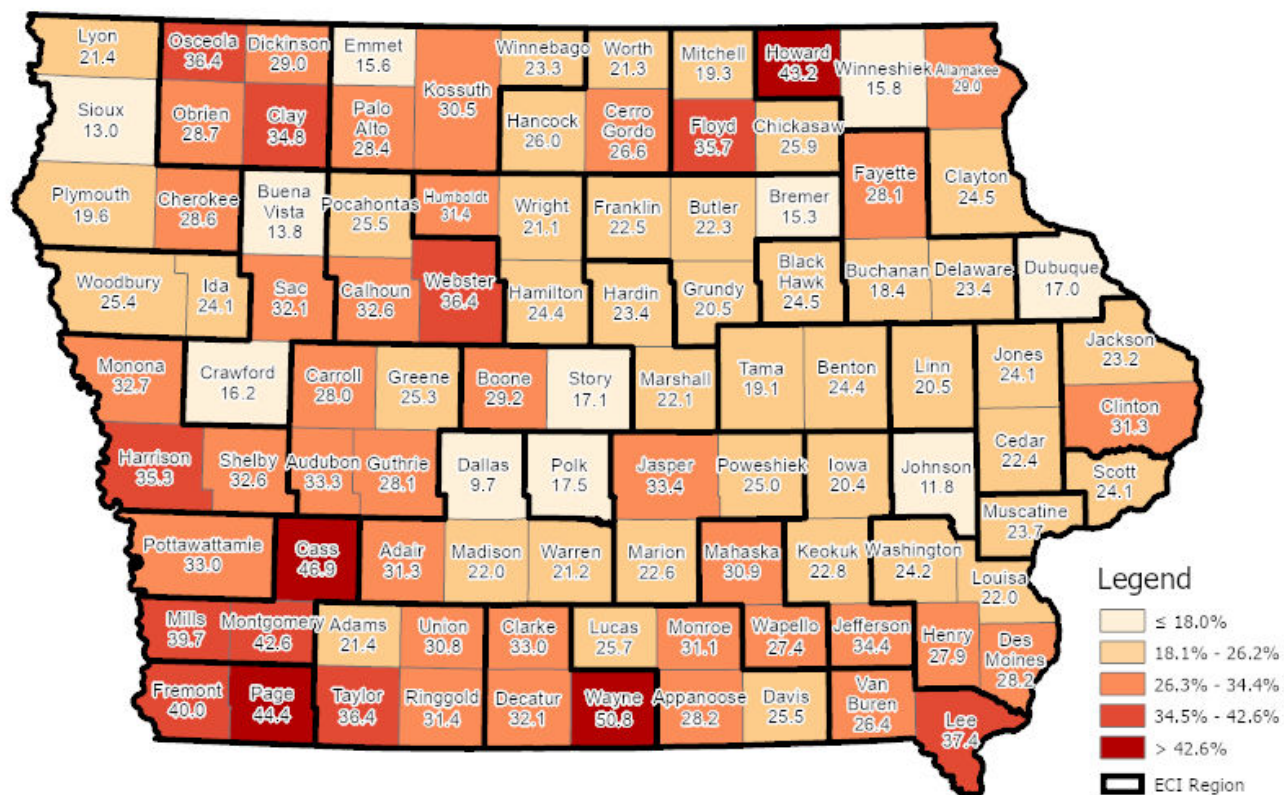




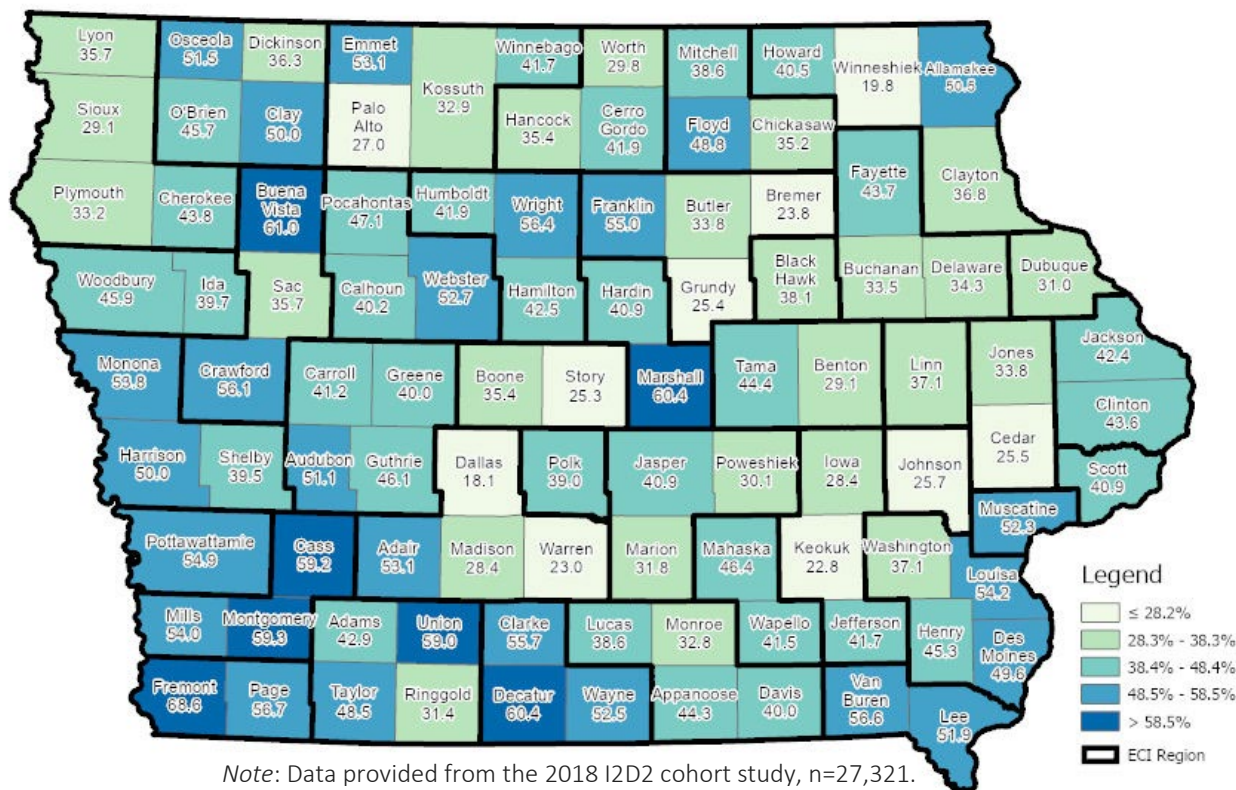
Figure A7. Percentage of children born to a mother who smoked during pregnancy (statewide = 23%)



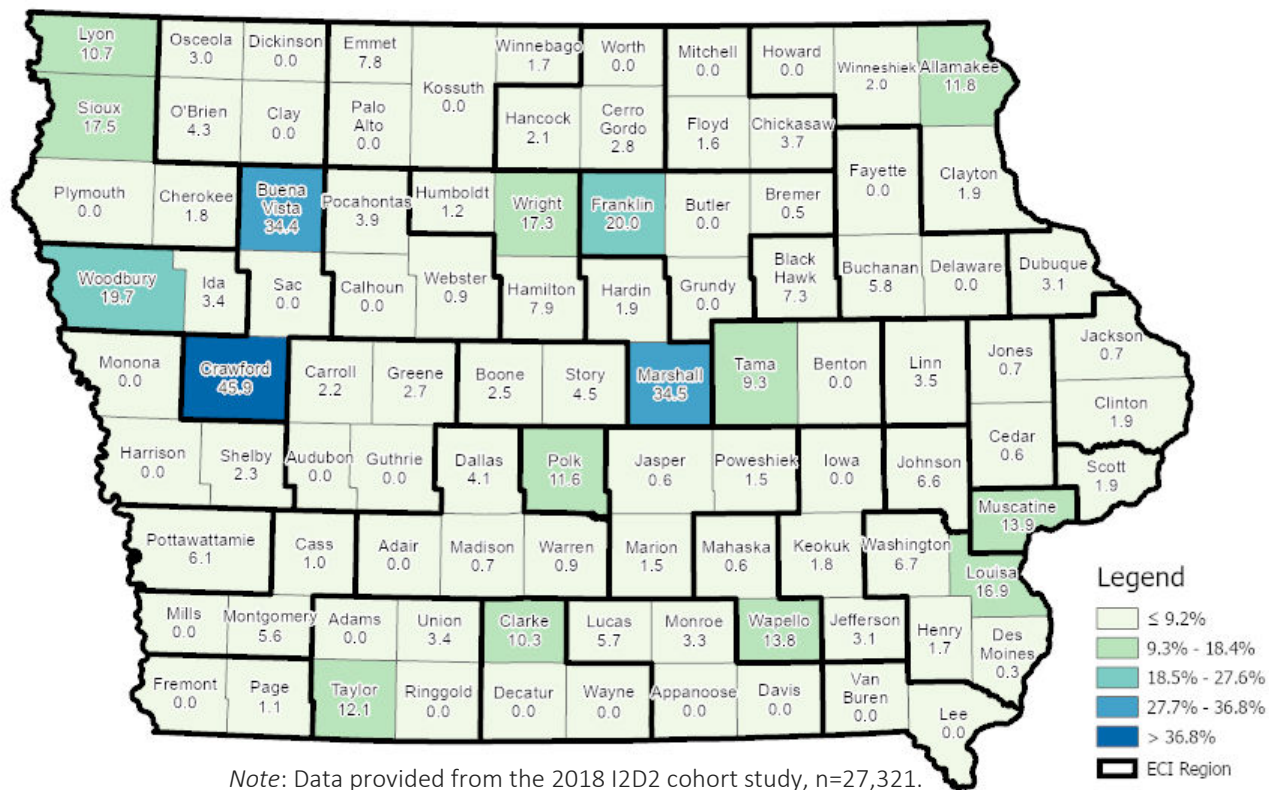
Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

## Figures A8-A12. Kindergarten indicators.

**Figure A8. Percentage of children born in each county and received free or reduced lunch in kindergarten in the 2017-2018 school year.**

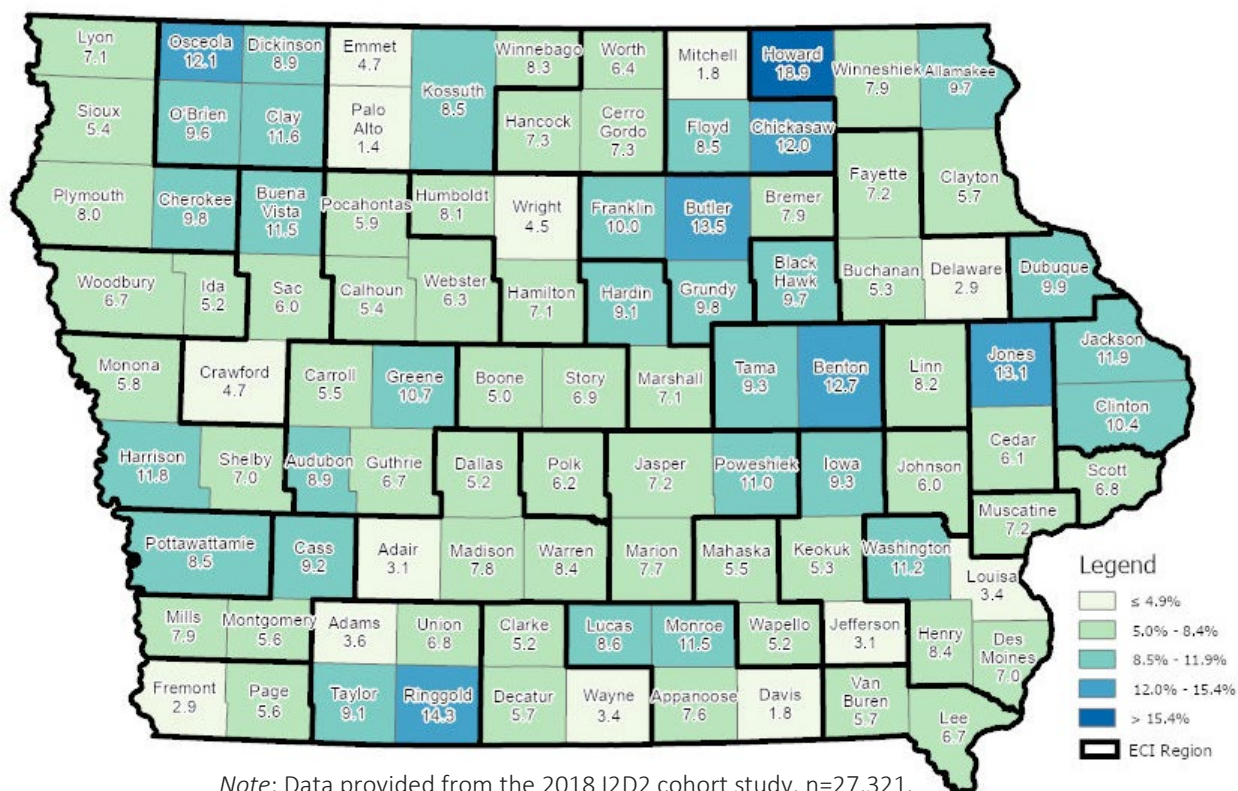


**Figure A9. Percentage of children born in each county and who are English language learners in kindergarten in the 2017-2018 school year.**



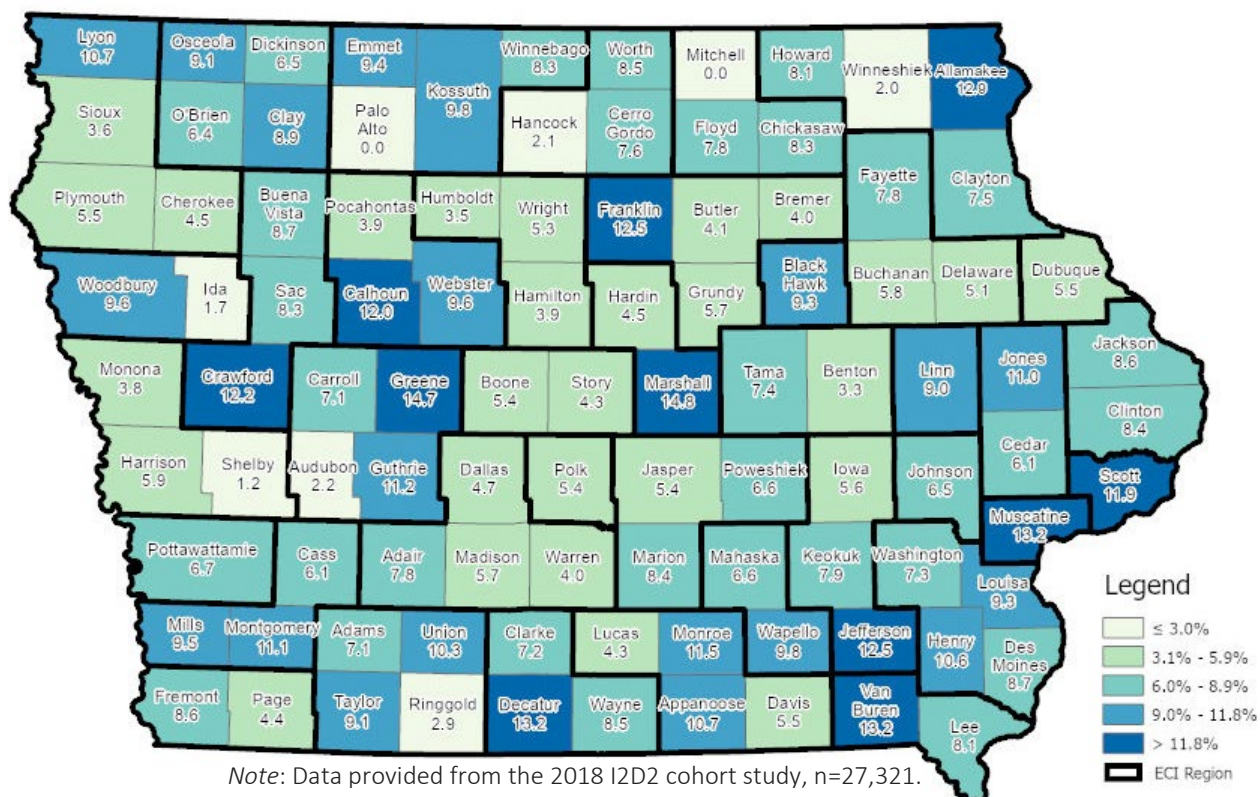


**Figure A10. Percentage of children born in each county and with an IEP in kindergarten in the 2017-2018 school year.**



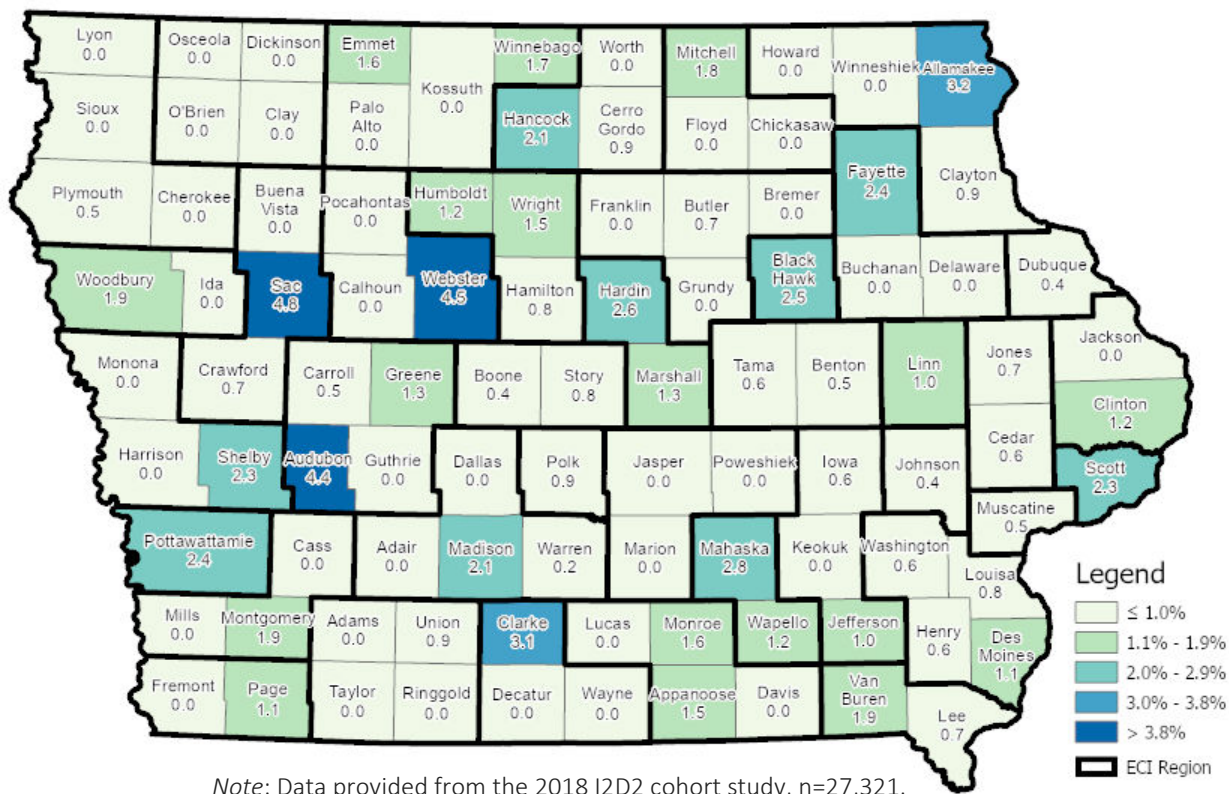
Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

**Figure A11. Percentage of children born in each county and attending less than 90% of days in kindergarten in the 2017-2018 school year.**



Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

**Figure A12. Percentage of children born in each county and experiencing a suspension in kindergarten in the 2017-2018 school year.**



Note: Data provided from the 2018 I2D2 cohort study, n=27,321.

**Table A2. Percentage of individual and cumulative birth risks for children born in each county (2018 I2D2 cohort; n=27,321).**

<i>Individual Birth Risks</i>								<i>Cumulative Birth Risks</i>			
County	Poverty	Un-married Mom	Low Maternal Education	Teen Mom	Preterm OR Low Birthweight	Inadequate Prenatal Care	Prenatal Smoking	0 Risks	1 Risk	2 Risks	3+ Risks
Adair	67.2%	40.6%	6.3%	6.3%	6.3%	0.0%	31.3%	26.6%	21.9%	25.0%	26.6%
Adams	67.9%	35.7%	14.3%	0.0%	7.1%	0.0%	21.4%	28.6%	21.4%	32.1%	17.9%
Allamakee	62.4%	40.9%	16.1%	6.5%	4.3%	0.0%	29.0%	30.1%	15.1%	28.0%	26.9%
Appanoose	67.2%	42.0%	7.6%	3.8%	9.2%	0.8%	28.2%	24.4%	24.4%	28.2%	22.9%
Audubon	64.4%	42.2%	6.7%	6.7%	4.4%	0.0%	33.3%	24.4%	22.2%	31.1%	22.2%
Benton	40.4%	26.3%	6.6%	4.2%	7.0%	0.9%	24.4%	47.9%	19.7%	13.1%	19.2%
Black Hawk	55.9%	39.3%	10.5%	3.6%	8.7%	1.6%	24.5%	34.6%	18.6%	21.6%	25.2%
Boone	47.1%	31.7%	4.6%	4.2%	10.8%	0.4%	29.2%	39.2%	19.2%	20.8%	20.8%
Bremer	30.2%	18.8%	3.0%	3.5%	6.9%	0.5%	15.3%	57.4%	20.3%	10.9%	11.4%
Buchanan	43.7%	28.6%	11.7%	2.9%	7.8%	6.8%	18.4%	35.9%	22.8%	28.6%	12.6%
Buena Vista	64.2%	36.2%	28.0%	4.1%	7.3%	0.9%	13.8%	22.0%	27.5%	28.4%	22.0%
Butler	41.9%	23.6%	4.7%	1.4%	9.5%	1.4%	22.3%	45.9%	20.9%	18.9%	14.2%
Calhoun	46.7%	29.3%	5.4%	4.3%	3.3%	1.1%	32.6%	43.5%	17.4%	17.4%	21.7%
Carroll	44.0%	31.3%	4.4%	4.4%	7.1%	0.5%	28.0%	44.5%	17.0%	17.6%	20.9%
Cass	64.3%	35.7%	12.2%	5.1%	2.0%	1.0%	46.9%	28.6%	16.3%	25.5%	29.6%
Cedar	35.8%	23.6%	6.1%	3.6%	4.2%	0.0%	22.4%	56.4%	12.7%	14.5%	16.4%
Cerro Gordo	57.8%	36.1%	6.1%	2.1%	5.5%	0.3%	26.6%	35.2%	20.5%	22.9%	21.4%
Cherokee	53.6%	36.6%	6.3%	4.5%	6.3%	0.0%	28.6%	34.8%	23.2%	19.6%	22.3%
Chickasaw	45.4%	22.2%	8.3%	0.9%	7.4%	1.9%	25.9%	40.7%	25.0%	16.7%	17.6%
Clarke	68.0%	46.4%	9.3%	6.2%	9.3%	0.0%	33.0%	21.6%	19.6%	25.8%	33.0%
Clay	51.8%	32.1%	7.1%	3.6%	3.6%	0.0%	34.8%	37.5%	18.8%	22.3%	21.4%
Clayton	41.5%	24.5%	2.8%	2.8%	9.4%	0.0%	24.5%	52.8%	14.2%	11.3%	21.7%
Clinton	56.6%	44.3%	9.0%	5.6%	7.7%	0.0%	31.3%	31.8%	18.3%	22.7%	27.1%
Crawford	62.8%	30.4%	32.4%	6.1%	2.7%	3.4%	16.2%	27.0%	18.9%	29.1%	25.0%
Dallas	20.8%	15.8%	3.4%	1.9%	9.2%	0.5%	9.7%	66.7%	15.7%	9.5%	8.1%
Davis	58.2%	18.2%	1.8%	1.8%	10.9%	0.0%	25.5%	36.4%	27.3%	23.6%	12.7%
Decatur	64.2%	39.6%	5.7%	5.7%	5.7%	0.0%	32.1%	26.4%	22.6%	28.3%	22.6%






Delaware	35.0%	27.7%	2.2%	4.4%	5.8%	0.0%	23.4%	54.0%	13.1%	16.8%	16.1%
Des Moines	66.1%	40.9%	7.6%	3.8%	7.3%	0.5%	28.2%	26.6%	25.7%	21.1%	26.6%
Dickinson	46.0%	29.8%	3.2%	3.2%	0.8%	0.0%	29.0%	45.2%	17.7%	21.0%	16.1%
Dubuque	39.7%	32.3%	6.7%	4.9%	6.7%	1.2%	17.0%	48.6%	15.8%	18.8%	16.8%
Emmet	62.5%	46.9%	14.1%	10.9%	3.1%	1.6%	15.6%	28.1%	20.3%	28.1%	23.4%
Fayette	53.3%	32.3%	7.8%	3.6%	7.2%	3.6%	28.1%	36.5%	20.4%	21.0%	22.2%
Floyd	62.8%	39.5%	10.1%	3.9%	8.5%	0.0%	35.7%	23.3%	27.9%	20.9%	27.9%
Franklin	62.5%	36.3%	17.5%	6.3%	12.5%	3.8%	22.5%	31.3%	13.8%	22.5%	32.5%
Fremont	77.1%	48.6%	8.6%	8.6%	5.7%	0.0%	40.0%	5.7%	40.0%	20.0%	34.3%
Greene	57.3%	32.0%	8.0%	10.7%	13.3%	0.0%	25.3%	30.7%	25.3%	18.7%	25.3%
Grundy	31.1%	21.3%	0.8%	1.6%	13.1%	0.0%	20.5%	50.0%	25.4%	13.1%	11.5%
Guthrie	53.9%	34.8%	5.6%	2.2%	10.1%	1.1%	28.1%	34.8%	22.5%	21.3%	21.3%
Hamilton	55.9%	37.8%	15.7%	3.1%	13.4%	1.6%	24.4%	30.7%	22.8%	17.3%	29.1%
Hancock	50.0%	31.3%	7.3%	2.1%	8.3%	0.0%	26.0%	43.8%	18.8%	14.6%	22.9%
Hardin	48.1%	29.2%	7.8%	2.6%	6.5%	0.6%	23.4%	41.6%	21.4%	17.5%	19.5%
Harrison	64.7%	32.4%	8.8%	2.9%	5.9%	0.0%	35.3%	32.4%	14.7%	29.4%	23.5%
Henry	56.4%	24.6%	8.9%	3.9%	11.2%	0.6%	27.9%	34.1%	25.1%	22.3%	18.4%
Howard	59.5%	43.2%	2.7%	0.0%	2.7%	0.0%	43.2%	27.0%	24.3%	21.6%	27.0%
Humboldt	50.0%	31.4%	7.0%	3.5%	3.5%	2.3%	31.4%	34.9%	24.4%	18.6%	22.1%
Ida	50.0%	22.4%	3.4%	3.4%	6.9%	3.4%	24.1%	41.4%	25.9%	13.8%	19.0%
Iowa	38.3%	23.5%	7.4%	2.5%	8.6%	0.6%	20.4%	51.2%	17.3%	15.4%	16.0%
Jackson	52.3%	34.4%	3.3%	6.0%	5.3%	0.7%	23.2%	40.4%	19.2%	19.2%	21.2%
Jasper	50.4%	35.2%	5.7%	4.2%	8.1%	0.9%	33.4%	35.5%	22.1%	18.5%	23.9%
Jefferson	53.1%	35.4%	6.3%	5.2%	10.4%	1.0%	34.4%	34.4%	20.8%	16.7%	28.1%
Johnson	30.9%	21.5%	6.0%	2.3%	7.6%	1.4%	11.8%	58.6%	16.3%	13.4%	11.7%
Jones	35.2%	35.2%	3.4%	1.4%	8.3%	0.7%	24.1%	48.3%	17.2%	17.2%	17.2%
Keokuk	50.0%	28.1%	7.0%	3.5%	10.5%	4.4%	22.8%	38.6%	22.8%	17.5%	21.1%
Kossuth	40.2%	20.7%	7.3%	1.2%	7.3%	0.0%	30.5%	45.1%	24.4%	18.3%	12.2%
Lee	65.0%	43.8%	9.4%	5.1%	7.7%	1.7%	37.4%	26.6%	18.9%	22.9%	31.6%
Linn	42.6%	32.4%	7.6%	2.6%	7.9%	0.6%	20.5%	45.5%	17.6%	18.7%	18.2%
Louisa	53.4%	24.6%	25.4%	2.5%	13.6%	2.5%	22.0%	29.7%	23.7%	27.1%	19.5%
Lucas	50.0%	27.1%	5.7%	4.3%	7.1%	2.9%	25.7%	35.7%	28.6%	18.6%	17.1%





Lyon	64.3%	35.7%	10.7%	10.7%	14.3%	3.6%	21.4%	28.6%	14.3%	32.1%	25.0%
Madison	38.3%	24.8%	0.7%	4.3%	11.3%	1.4%	22.0%	46.1%	20.6%	18.4%	14.9%
Mahaska	52.5%	33.1%	6.6%	2.8%	5.5%	1.1%	30.9%	39.8%	15.5%	19.3%	25.4%
Marion	40.6%	23.8%	5.7%	3.1%	8.4%	0.0%	22.6%	45.6%	23.8%	14.2%	16.5%
Marshall	73.0%	35.3%	24.4%	8.8%	6.9%	1.7%	22.1%	19.9%	21.2%	33.0%	25.9%
Mills	71.4%	42.9%	7.9%	4.8%	11.1%	3.2%	39.7%	22.2%	22.2%	23.8%	31.7%
Mitchell	45.6%	24.6%	1.8%	0.0%	7.0%	0.0%	19.3%	42.1%	24.6%	26.3%	7.0%
Monona	57.7%	36.5%	7.7%	1.9%	7.7%	1.9%	32.7%	26.9%	21.2%	32.7%	19.2%
Monroe	59.0%	34.4%	6.6%	9.8%	13.1%	0.0%	31.1%	31.1%	14.8%	27.9%	26.2%
Montgomery	68.5%	35.2%	20.4%	1.9%	3.7%	0.0%	42.6%	25.9%	18.5%	24.1%	31.5%
Muscatine	64.3%	38.8%	18.5%	5.8%	7.7%	0.7%	23.7%	27.8%	19.4%	24.5%	28.3%
O'Brien	47.9%	30.9%	7.4%	6.4%	2.1%	1.1%	28.7%	42.6%	11.7%	25.5%	20.2%
Osceola	60.6%	42.4%	9.1%	0.0%	6.1%	0.0%	36.4%	27.3%	21.2%	27.3%	24.2%
Page	70.0%	38.9%	14.4%	8.9%	3.3%	1.1%	44.4%	18.9%	20.0%	30.0%	31.1%
Palo Alto	43.2%	27.0%	0.0%	1.4%	1.4%	0.0%	28.4%	47.3%	16.2%	25.7%	10.8%
Plymouth	45.7%	23.6%	6.0%	2.0%	5.0%	0.0%	19.6%	47.7%	19.6%	17.6%	15.1%
Pocahontas	60.8%	47.1%	2.0%	3.9%	15.7%	0.0%	25.5%	23.5%	23.5%	33.3%	19.6%
Polk	42.9%	30.6%	11.1%	2.8%	8.4%	1.0%	17.5%	43.9%	19.0%	19.9%	17.1%
Pottawattamie	69.6%	49.0%	17.2%	6.1%	4.5%	1.2%	33.0%	22.3%	19.2%	25.3%	33.2%
Poweshiek	43.4%	30.1%	3.7%	5.1%	7.4%	0.7%	25.0%	42.6%	21.3%	16.9%	19.1%
Ringgold	57.1%	28.6%	8.6%	2.9%	11.4%	0.0%	31.4%	25.7%	34.3%	20.0%	20.0%
Sac	40.5%	26.2%	3.6%	1.2%	4.8%	0.0%	32.1%	44.0%	22.6%	16.7%	16.7%
Scott	53.8%	42.3%	8.8%	5.0%	7.8%	1.5%	24.1%	35.8%	17.4%	21.8%	25.0%
Shelby	44.2%	29.1%	4.7%	1.2%	4.7%	1.2%	32.6%	41.9%	20.9%	20.9%	16.3%
Sioux	37.2%	22.9%	13.0%	4.5%	0.9%	0.4%	13.0%	55.6%	17.0%	9.4%	17.9%
Story	32.6%	18.2%	4.0%	1.8%	6.7%	0.6%	17.1%	57.8%	16.8%	14.7%	10.7%
Tama	58.0%	30.2%	10.5%	3.1%	14.2%	0.6%	19.1%	34.6%	20.4%	24.7%	20.4%
Taylor	60.6%	42.4%	6.1%	3.0%	0.0%	3.0%	36.4%	24.2%	24.2%	27.3%	24.2%
Union	57.3%	40.2%	8.5%	5.1%	6.0%	2.6%	30.8%	27.4%	23.1%	29.1%	20.5%
Van Buren	54.7%	30.2%	3.8%	3.8%	3.8%	0.0%	26.4%	32.1%	32.1%	18.9%	17.0%
Wapello	71.7%	38.8%	17.2%	8.3%	11.7%	0.6%	27.4%	21.8%	18.5%	28.0%	31.7%
Warren	35.6%	25.8%	2.3%	4.2%	6.3%	0.5%	21.2%	50.5%	20.9%	13.0%	15.6%



Washington	44.9%	25.3%	6.7%	3.9%	9.0%	0.6%	24.2%	42.1%	22.5%	15.7%	19.7%
Wayne	57.6%	30.5%	6.8%	3.4%	10.2%	0.0%	50.8%	22.0%	30.5%	23.7%	23.7%
Webster	64.5%	45.2%	8.1%	5.1%	8.1%	1.2%	36.4%	27.7%	16.9%	22.3%	33.1%
Winnebago	56.7%	23.3%	8.3%	1.7%	15.0%	0.0%	23.3%	30.0%	30.0%	25.0%	15.0%
Winneshiek	33.7%	18.8%	4.0%	4.0%	4.0%	0.0%	15.8%	59.4%	13.9%	15.8%	10.9%
Woodbury	66.5%	44.4%	18.9%	5.7%	7.1%	0.5%	25.4%	24.1%	19.2%	27.0%	29.7%
Worth	38.3%	29.8%	8.5%	0.0%	6.4%	4.3%	21.3%	40.4%	31.9%	10.6%	17.0%
Wright	63.9%	27.1%	18.8%	3.8%	7.5%	0.0%	21.1%	32.3%	18.0%	27.1%	22.6%



**Table A3. Percentage of preschool enrollment and kindergarten indicators for children born in each county (2018 I2D2 cohort; n=27,321).**

County	Any Preschool Experience (CCA, DE, PreK, or GOLD)	Free or Reduced Lunch Status	English Language Learner	Individualized Education Plan	Poor (<90%) Attendance	Any Suspension
Adair	71.9%	53.1%	0.0%	3.1%	7.8%	0.0%
Adams	100.0%	42.9%	0.0%	3.6%	7.1%	0.0%
Allamakee	84.9%	50.5%	11.8%	9.7%	12.9%	3.2%
Appanoose	94.7%	44.3%	0.0%	7.6%	10.7%	1.5%
Audubon	95.6%	51.1%	0.0%	8.9%	2.2%	4.4%
Benton	84.5%	29.1%	0.0%	12.7%	3.3%	0.5%
Black Hawk	65.8%	38.1%	7.3%	9.7%	9.3%	2.5%
Boone	88.3%	35.4%	2.5%	5.0%	5.4%	0.4%
Bremer	84.2%	23.8%	0.5%	7.9%	4.0%	0.0%
Buchanan	85.9%	33.5%	5.8%	5.3%	5.8%	0.0%
Buena Vista	81.2%	61.0%	34.4%	11.5%	8.7%	0.5%
Butler	88.5%	33.8%	0.0%	13.5%	4.1%	0.7%
Calhoun	95.7%	40.2%	0.0%	5.4%	12.0%	0.0%
Carroll	93.4%	41.2%	2.2%	5.5%	7.1%	0.5%
Cass	90.8%	59.2%	1.0%	9.2%	6.1%	0.0%
Cedar	86.7%	25.5%	0.6%	6.1%	6.1%	0.6%
Cerro Gordo	84.4%	41.9%	2.8%	7.3%	7.6%	0.9%
Cherokee	79.5%	43.8%	1.8%	9.8%	4.5%	0.0%
Chickasaw	95.4%	35.2%	3.7%	12.0%	8.3%	0.0%
Clarke	77.3%	55.7%	10.3%	5.2%	7.2%	3.1%
Clay	83.0%	50.0%	0.0%	11.6%	8.9%	0.0%
Clayton	96.2%	36.8%	1.9%	5.7%	7.5%	0.9%
Clinton	88.6%	43.6%	1.9%	10.4%	8.4%	1.2%
Crawford	71.6%	56.1%	45.9%	4.7%	12.2%	0.7%
Dallas	46.1%	18.1%	4.1%	5.2%	4.7%	0.0%
Davis	87.3%	40.0%	0.0%	1.8%	5.5%	0.0%
Decatur	92.5%	60.4%	0.0%	5.7%	13.2%	0.0%
Delaware	82.5%	34.3%	0.0%	2.9%	5.1%	0.0%
Des Moines	71.8%	49.6%	0.3%	7.0%	8.7%	1.1%

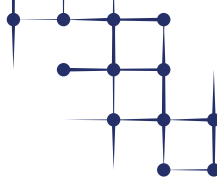


Dickinson	89.5%	36.3%	0.0%	8.9%	6.5%	0.0%
Dubuque	88.0%	31.0%	3.1%	9.9%	5.5%	0.4%
Emmet	82.8%	53.1%	7.8%	4.7%	9.4%	1.6%
Fayette	91.6%	43.7%	0.0%	7.2%	7.8%	2.4%
Floyd	81.4%	48.8%	1.6%	8.5%	7.8%	0.0%
Franklin	95.0%	55.0%	20.0%	10.0%	12.5%	0.0%
Fremont	82.9%	68.6%	0.0%	2.9%	8.6%	0.0%
Greene	90.7%	40.0%	2.7%	10.7%	14.7%	1.3%
Grundy	86.1%	25.4%	0.0%	9.8%	5.7%	0.0%
Guthrie	89.9%	46.1%	0.0%	6.7%	11.2%	0.0%
Hamilton	89.0%	42.5%	7.9%	7.1%	3.9%	0.8%
Hancock	79.2%	35.4%	2.1%	7.3%	2.1%	2.1%
Hardin	91.6%	40.9%	1.9%	9.1%	4.5%	2.6%
Harrison	91.2%	50.0%	0.0%	11.8%	5.9%	0.0%
Henry	73.7%	45.3%	1.7%	8.4%	10.6%	0.6%
Howard	100.0%	40.5%	0.0%	18.9%	8.1%	0.0%
Humboldt	82.6%	41.9%	1.2%	8.1%	3.5%	1.2%
Ida	87.9%	39.7%	3.4%	5.2%	1.7%	0.0%
Iowa	88.3%	28.4%	0.0%	9.3%	5.6%	0.6%
Jackson	94.7%	42.4%	0.7%	11.9%	8.6%	0.0%
Jasper	66.6%	40.9%	0.6%	7.2%	5.4%	0.0%
Jefferson	65.6%	41.7%	3.1%	3.1%	12.5%	1.0%
Johnson	54.6%	25.7%	6.6%	6.0%	6.5%	0.4%
Jones	92.4%	33.8%	0.7%	13.1%	11.0%	0.7%
Keokuk	93.9%	22.8%	1.8%	5.3%	7.9%	0.0%
Kossuth	96.3%	32.9%	0.0%	8.5%	9.8%	0.0%
Lee	65.0%	51.9%	0.0%	6.7%	8.1%	0.7%
Linn	68.8%	37.1%	3.5%	8.2%	9.0%	1.0%
Louisa	76.3%	54.2%	16.9%	3.4%	9.3%	0.8%
Lucas	81.4%	38.6%	5.7%	8.6%	4.3%	0.0%
Lyon	89.3%	35.7%	10.7%	7.1%	10.7%	0.0%
Madison	86.5%	28.4%	0.7%	7.8%	5.7%	2.1%





Mahaska	86.2%	46.4%	0.6%	5.5%	6.6%	2.8%
Marion	75.5%	31.8%	1.5%	7.7%	8.4%	0.0%
Marshall	72.4%	60.4%	34.5%	7.1%	14.8%	1.3%
Mills	68.3%	54.0%	0.0%	7.9%	9.5%	0.0%
Mitchell	91.2%	38.6%	0.0%	1.8%	0.0%	1.8%
Monona	80.8%	53.8%	0.0%	5.8%	3.8%	0.0%
Monroe	95.1%	32.8%	3.3%	11.5%	11.5%	1.6%
Montgomery	81.5%	59.3%	5.6%	5.6%	11.1%	1.9%
Muscatine	83.2%	52.3%	13.9%	7.2%	13.2%	0.5%
O'Brien	92.6%	45.7%	4.3%	9.6%	6.4%	0.0%
Osceola	90.9%	51.5%	3.0%	12.1%	9.1%	0.0%
Page	62.2%	56.7%	1.1%	5.6%	4.4%	1.1%
Palo Alto	97.3%	27.0%	0.0%	1.4%	0.0%	0.0%
Plymouth	65.8%	33.2%	3.0%	8.0%	5.5%	0.5%
Pocahontas	98.0%	47.1%	3.9%	5.9%	3.9%	0.0%
Polk	60.4%	39.0%	11.6%	6.2%	5.4%	0.9%
Pottawattamie	65.8%	54.9%	6.1%	8.5%	6.7%	2.4%
Poweshiek	94.9%	30.1%	1.5%	11.0%	6.6%	0.0%
Ringgold	97.1%	31.4%	0.0%	14.3%	2.9%	0.0%
Sac	91.7%	35.7%	0.0%	6.0%	8.3%	4.8%
Scott	68.6%	40.9%	1.9%	6.8%	11.9%	2.3%
Shelby	76.7%	39.5%	2.3%	7.0%	1.2%	2.3%
Sioux	80.3%	29.1%	17.5%	5.4%	3.6%	0.0%
Story	80.6%	25.3%	4.5%	6.9%	4.3%	0.8%
Tama	80.2%	44.4%	9.3%	9.3%	7.4%	0.6%
Taylor	75.8%	48.5%	12.1%	9.1%	9.1%	0.0%
Union	88.9%	59.0%	3.4%	6.8%	10.3%	0.9%
Van Buren	94.3%	56.6%	0.0%	5.7%	13.2%	1.9%
Wapello	81.5%	41.5%	13.8%	5.2%	9.8%	1.2%
Warren	67.2%	23.0%	0.9%	8.4%	4.0%	0.2%
Washington	84.8%	37.1%	6.7%	11.2%	7.3%	0.6%
Wayne	93.2%	52.5%	0.0%	3.4%	8.5%	0.0%



Webster	92.5%	52.7%	0.9%	6.3%	9.6%	4.5%
Winnebago	96.7%	41.7%	1.7%	8.3%	8.3%	1.7%
Winneshiek	89.1%	19.8%	2.0%	7.9%	2.0%	0.0%
Woodbury	71.9%	45.9%	19.7%	6.7%	9.6%	1.9%
Worth	87.2%	29.8%	0.0%	6.4%	8.5%	0.0%
Wright	86.5%	56.4%	17.3%	4.5%	5.3%	1.5%

*Data Note: All numbers in data graphics were rounded to the nearest percentage, so the figures may not appear to be exact.*

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