Changes in 5-Year Estimates of Concentrated Disadvantage Between 2012 and 2017 by State

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Background

Concentrated disadvantage (CD) is an indicator that measures progress based on the Life Course approach to improving maternal and child health.

- Provides a community-level look at geographically concentrated poverty and economic and racial segregation

Living in communities with high CD is particularly harmful for low-income and racial/ethnic minority children through:

- Poorer quality schools
- Exposure to environmental hazards (e.g. lead) and adverse childhood experiences (e.g. violence)
- Lack of safe outdoor spaces
- Reduced economic mobility

Objective

Identify state-level changes in CD between 2008-2012 and 2013-2017

Methodology

- CD was calculated using two 5-year estimates (2008-2012 and 2013-2017) of American Community Survey data using methods published by AMCHP
- 5 census variables were used in the calculation:
  - Percent below the poverty line
  - Percent on public assistance
  - Percent female-headed households with children (age <18)
  - Percent unemployed (age 16+)
  - Percent less than age 18

Methodology, cont'd

- A census tract was labeled disadvantaged if its averaged z-scores fell within the 75th percentile of values in the nation
- Data were aggregated to the state level by summing the population of "disadvantaged" census tracts and dividing by the population of all census tracts for each state
- Census tracts with incomplete data were excluded
- Statistical analyses were performed using STATA v15.1

Results

- Nationally, the percentage of households in areas of CD increased from 23.9% to 27.0%

State variation

- The disparity of households in areas of CD has widened since 2008-2012:
  - CD was 18 times higher in Mississippi (45.5%) than Vermont (2.5%) in 2013-2017
  - CD was 13 times higher in Mississippi (38.8%) than Wyoming (2.9%) in 2008-2012

- CD increased in 27 states, decreased in 11 states, and had little or no change in 12 states and the District of Columbia *(relative %-change based on a 5% threshold)*:
  - Largest increases were in North Dakota (203.1%), Idaho (119.4%), and West Virginia (82.1%)
  - Largest decreases were in New Hampshire (-23.5%), Vermont (-21.9%), and South Dakota (-20.2%)

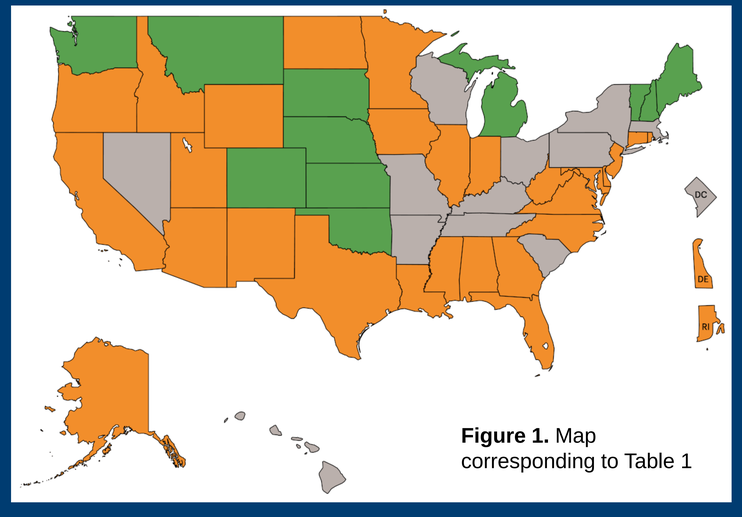

Figure 1. Map corresponding to Table 1

Legends:

Quintile
1
2
3
4
5

Decrease (%-change <-5%)
Little/no change
Increase (%-change >5%)

Table 1. Percentage of households located in census tracts with a high level of CD; 2008-2012 and 2013-2017 (by quintile), %-point change, and sorted by %-change, by state

State	CD % (2008-2012)	CD % (2013-2017)	%-Change	%-Point Change
New Hampshire	5.1	3.9	-23.5	-1.2
Vermont	3.2	2.5	-21.9	-0.7
South Dakota	10.9	8.7	-20.2	-2.2
Maine	7.7	6.2	-19.5	-1.5
Michigan	26.9	22.1	-17.8	-4.8
Nebraska	12.4	10.7	-13.7	-1.7
Colorado	15.1	13.1	-13.2	-2.0
Oklahoma	20.8	18.3	-12.0	-2.5
Montana	8.1	7.3	-9.9	-0.8
Kansas	13.5	12.2	-9.6	-1.3
Washington	17.5	16.1	-8.0	-1.4
Missouri	18.8	18.2	-3.2	-0.6
Arkansas	26.0	25.5	-1.9	-0.5
New York	26.6	26.4	-0.8	-0.2
Kentucky	28.0	28.1	0.4	0.1
Hawaii	14.4	14.5	0.7	0.1
South Carolina	32.8	33.5	2.1	0.7
Pennsylvania	17.2	17.6	2.3	0.4
Ohio	22.5	23.1	2.7	0.6
Tennessee	25.2	26.0	3.2	0.8
Wisconsin	12.8	13.3	3.9	0.5
Massachusetts	17.2	17.9	4.1	0.7
Nevada	26.4	27.7	4.9	1.3
Arizona	32.7	35.1	7.3	2.4
Alabama	30.2	32.5	7.6	2.3
Oregon	23.4	25.4	8.5	2.0
Indiana	20.4	22.2	8.8	1.8
California	32.4	35.7	10.2	3.3
Rhode Island	23.0	25.5	10.9	2.5
Connecticut	17.9	19.9	11.2	2.0
North Carolina	26.2	29.3	11.8	3.1
Illinois	21.9	24.8	13.2	2.9
Mississippi	38.8	45.5	17.3	6.7
New Mexico	37.0	43.6	17.8	6.6
New Jersey	17.0	20.2	18.8	3.2
Iowa	8.8	10.5	19.3	1.7
Maryland	14.4	17.6	22.2	3.2
Utah	13.6	16.7	22.8	3.1
Minnesota	8.3	10.3	24.1	2.0
Louisiana	30.4	38.3	26.0	7.9
Georgia	32.9	42.0	27.7	9.1
Texas	32.2	41.6	29.2	9.4
Alaska	13.7	17.7	29.2	4.0
Virginia	10.5	13.8	31.4	3.3
Wyoming	2.9	3.9	34.5	1.0
Delaware	19.3	26.2	35.8	6.9
Florida	26.3	37.3	41.8	11.0
West Virginia	11.7	21.3	82.1	9.6
Idaho	13.4	29.4	119.4	16.0
North Dakota	3.2	9.7	203.1	6.5
District of Columbia	45.5	40.4	-0.1	-5.1
United States	23.9	27.0	0.1	3.1

Results, cont'd

Average change from 2008-2012 to 2013-2017 by quintile show:

- States with the highest percentage of CD experienced:
  - The largest absolute increases (Q5: 4.9 %-points)
  - The smallest relative increases (Q5: 14.6% and Q4: 6.3%), *due to proportionally small increases in states with large initial percentages*

- States with the lowest percentage of CD experienced:
  - The smallest absolute increases (Q1: 0.8 %-points)
  - The largest relative increases (Q1: 21.8% and Q2: 24.4%), *due to increases in states with small initial percentages*

Conclusion

- CD has increased nationally and in the majority of states (27 of which increased > 5%)
- Greatest absolute increases were seen in states with high percentages of CD
- Greatest relative increases were seen in states with low percentages of CD
- CD is decreasing with no clear geographic pattern, however
  - Is not decreasing among states most challenged by CD

Limitations

- Inferences at the individual level due to aggregated data
- Effect of potential modifiers such as age, race/ethnicity, sex and varying density of metropolitan cities by state

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Acknowledgments
We thank the advisory committee, who provided guidance in the development of the *Health of Women and Children Report*, and United Health Foundation for their continued support of this project.

Disclosure
Arundel Metrics receives funding from United Health Foundation to produce America's Health Rankings. Arundel Metrics (arundelmetrics.com) is a small, data-driven consulting firm specializing in public health measurement and index generation.

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