

## Regional differences in child food insufficiency during the second year of the coronavirus pandemic

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## **ABSTRACT**

**Objectives:** Prior to the pandemic food insecurity rates were higher in the South than in other regions, but the status of this disparity during the pandemic and its potential causes, particularly with respect to children, is not known. To address this gap in knowledge, we examined regional differences in child food insufficiency between the Deep South states and the rest of the United States during the second year of the coronavirus pandemic. A secondary objective was to examine potential explanations for these differences.

**Methods:** The U.S. Census Bureau's Household Pulse Survey is a massive, online, and rapid interagency effort to provide data on the social consequences of COVID-19. Here, data on child food insufficiency (N=229,246), were taken from phases 3.1 (4/15-7/5/2021) and 3.2 (7/21-10/11/2021). The main predictor was living in a Deep South state (Alabama, Georgia, Louisiana, Mississippi, South Carolina). Logistic regression models were run separately for each phase, adjusting for household head's age, gender, race/ethnicity, marital status, and educational attainment; number of children in the household; and household income-to-poverty ratio. Differences in these variables between the regions were also assessed. Survey weights included with Pulse were used in all analyses.

**Results:** The overall prevalence of child food insufficiency for all households was 12.2% in phase 3.1, with a prevalence of 14.9% for Deep South states and of 12% for non-Deep South states (p<.0001). Child food insufficiency prevalence decreased in phase 3.2 for all households (11.5%) and among those living in states other than the Deep South (11.2%), but not for those in Deep South states (15.1%). Households in Deep South states had 35% and 46% higher odds of child food insufficiency in phases 3.1 and 3.2, respectively. Factors associated with child food insufficiency, including lower income and lower educational status, were more common in the South, but after adjusting for these and other covariates, the odds of child food insufficiency in Deep South states were still greater and significantly so in phase 3.2 (OR=1.20, 95%CI=1.04-1.38).

**Conclusions:** Regional inequities in child food insufficiency were present in the second year of the COVID-19 pandemic, with Deep South states suffering from disproportionally high rates. Many of the factors associated with this problem were worse in the Deep South, but they did not fully explain the differences between regions. Future studies should investigate the reasons for these inequities.

Funding Source: Supported in part by HRSA-MCHB T79MC31883