# Food Insecurity and Mental Health Outcomes among Low Income, Minority Cohorts during the COVID-19 Pandemic

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### **Objective:**

To examine the impact of the COVID-19 shutdowns on food insecurity and mental health outcomes among low income, minority communities in Northwest Indiana.

### Methods:

Surveys were distributed to 160 households during the Northwest Indiana food bank distribution hours to assess food security mental health status. The survey assessed participant food security through questions adapted from the USDA food security survey module. Participant anxiety, depression, and stress scores were aggregated from questions adapted from the PHQ-4. A multiple logit regression model was utilized to estimate the risk associated with food security status and the surveyed variables. Anecdotal evidence was also collected to understand pandemic specific factors impacting participant food security.

### **Results:**

Food insecurity was linked to significantly increased risk of anxiety, depression and stress. Those who identify to be food insecure have an 811 % increased risk of anxiety, 411% increased risk of depression, and 535% increased risk of stress compared to those who are food secure. In addition, a significant correlation exists between median household income and poor mental health. Anecdotal evidence identifies poor job security, food distributions, and support networks as exacerbating factors towards participant's declining mental health.

## **Conclusions:**

Our findings highlights the exacerbated impact the pandemic has had on the food security and mental health of vulnerable populations. In the light of these results and anecdotal feedback, public health measures must focus on getting increased funding towards local food banks to increase the frequency of mobile distribution markets coupled with direct subsidies to allow for food purchases, especially for those households with children. Given its impact on mental health, food insecurity status should regularly be screened by physicians access to the right resources must be provided for those screening as high risk.