

## AUTHORS:

**Jane L. Tavares**, Ph.D.,  
**Marc A. Cohen**, Ph.D.,  
LeadingAge LTSS Center  
@ UMass Boston

**Susan Silberman**, Ph.D.,  
**Lauren Popham**, Ph.D.,  
National Council on Aging

# Food Insecurity Among Older Adults and the Role of the Supplemental Nutrition Assistance Program (SNAP)

## Learnings from the Great Recession of 2008

The COVID-19 pandemic has taken a particularly hard toll on older Americans with higher mortality rates documented among the older population.<sup>1</sup> The pandemic has widened disparities between white older adults and older adults of color. Racial and ethnic minorities are dying from COVID-19 at higher rates.<sup>2</sup> Although Hispanic/Latinx persons represent 18.5% of the U.S. population, they account for nearly a quarter (24%) of COVID-19 deaths.<sup>3</sup> Black persons represent 12.5% of the U.S. population, yet account for nearly 19% of COVID-19 deaths. With social distancing being among the most recommended prevention practices, older adults may be at greater risk of social isolation and have difficulty accessing necessary goods and services. Of particular concern during a pandemic that has both economic and health consequences is the rising rate of food insecurity in the U.S. However, with the pandemic still unfolding and little current data available, its full impacts remain uncertain. Still, it is possible to examine food insecurity during the most recent economic downturn (The Great Recession 2008) in order to understand the extent to which food insecurity occurred during this time as well as the length of time it took for recovery. Further, we can explore the role of the Supplemental Nutrition Assistance Program (SNAP) in mitigating the rise of food insecurity during the recession. These analyses establish a base from which we might predict some of the impact of the current pandemic on food insecurity among older adults, how long recovery may take, and provide insights for the development of public policy recommendations.

## Purpose

In this data brief, we present information on the impacts of the 2008 Great Recession on the food insecurity status of older adults age 60 and over. Our purpose is to use that most recent recession experience to better understand the likely magnitude of food insecurity that may occur among older adults as a result of the pandemic and the length of time it may take to recover. We analyze the nationally representative, longitudinal data in the Health and Retirement Study (HRS) from 2006 to 2018 to assess the pre- and post-recession impacts on three groups of individuals age 60 and over (N=12,401). We also examine the role of the SNAP program in mitigating food insecurity among older adults during and post-recession.

<sup>1</sup> <https://doi.org/10.1111/jgs.16472>

<sup>2</sup> [https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370\(20\)30174-7.pdf](https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370(20)30174-7.pdf)

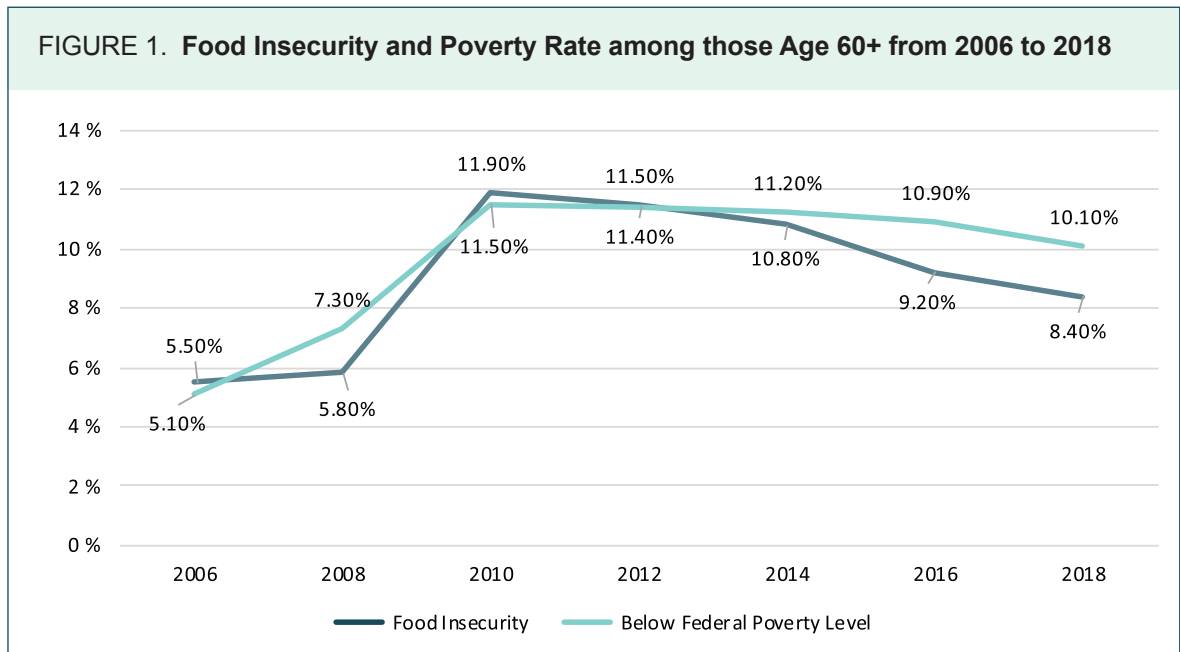
<sup>3</sup> <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6942e1-H.pdf>

# Method

We investigate rates of poverty and food insecurity from 2006 to 2018 in order to examine patterns of change and recovery from pre- to post-recession. We also analyze the following demographic, financial, and health characteristics for those who reported food insecurity versus those who did not from 2006 to 2018 in order to understand group differences over time: age, gender, race/ethnicity, marital status, education, total household income,<sup>4</sup> net value of total wealth,<sup>5</sup> poverty status, retirement status, self-reported health, chronic conditions, activities of daily living limitations (ADLs), instrumental activities of daily living limitations (IADLs), body mass index (BMI), and Medicare/Medicaid/Dual-Eligibility status. Finally, we employ longitudinal regression analyses to determine predictors of food insecurity during the economic downturn and evaluate whether SNAP plays a moderating role between poverty and food insecurity.

# Findings

Figure 1 shows that both poverty and food insecurity among older adults increase steadily from pre-recession (2006) through the recession itself (2008) and peak in 2010, both more than doubling (an over 200% increase from approximately 5% to 11%). Although both poverty and food insecurity begin to decrease after the recession period, the declines are slow and incremental. In 2018, ten years after the recession, poverty rate and food insecurity still have not returned to pre-recession levels, both are still over 150% higher than in 2006. This indicates that the impact of the economic downturn on poverty and food insecurity is long-lasting with a slow recovery and rates remaining elevated nearly a decade later.



<sup>4</sup> Total household income is the total sum of respondent and spousal earnings, pensions and annuities, Social Security Income (SSI) and Social Security Disability (SSDI), Social Security Retirement, unemployment and workers' compensation, other government transfers, household capital income and other income for the last calendar year.

<sup>5</sup> Net value of total wealth is the total sum of housing and financial assets less debts. The housing and financial assets are their primary residence, stocks, mutual funds, investment trusts, checking, savings, money market accounts, government savings bonds, T-bills, bonds, bond funds, other savings, and retirement plans such as IRA and Keogh accounts. The debt components include their mortgage, home loans, credit card debts, and any other debts. Pantoja, P., Bugliari, D., Campbell, N., Chan, C., Hayden, O., Hayes, J., Clair, P., S. (2018). RAND HRS Detailed Imputations File 2014 (V2) Documentation. Retrieved from [https://www.rand.org/content/dam/rand/www/external/labor/aging/dataproduct/randhrsmp1992\\_2014v2.pdf](https://www.rand.org/content/dam/rand/www/external/labor/aging/dataproduct/randhrsmp1992_2014v2.pdf).

Figure 2 presents the racial/ethnic distribution of those reporting food insecurity versus those not reporting food insecurity from pre-recession to post-recession. The findings reveal that racial/ethnic minorities make up greater percentages of those reporting food insecurity and are significantly more likely than non-Hispanic Whites to experience food insecurity during an economic downturn. Perhaps more striking is this disparity widens significantly during the recession period and remains stable ten years later. There is significant growth in the percentages of non-Hispanic Black, Hispanic, and non-Hispanic Other individuals reporting food insecurity, while percentages of non-Hispanic Whites shrink significantly over this same period. This highlights not only that minority older adults are disproportionately impacted during times of recession, but that the impact remains at least a decade later. This suggests that racial/ethnic disparities in food insecurity are widening.

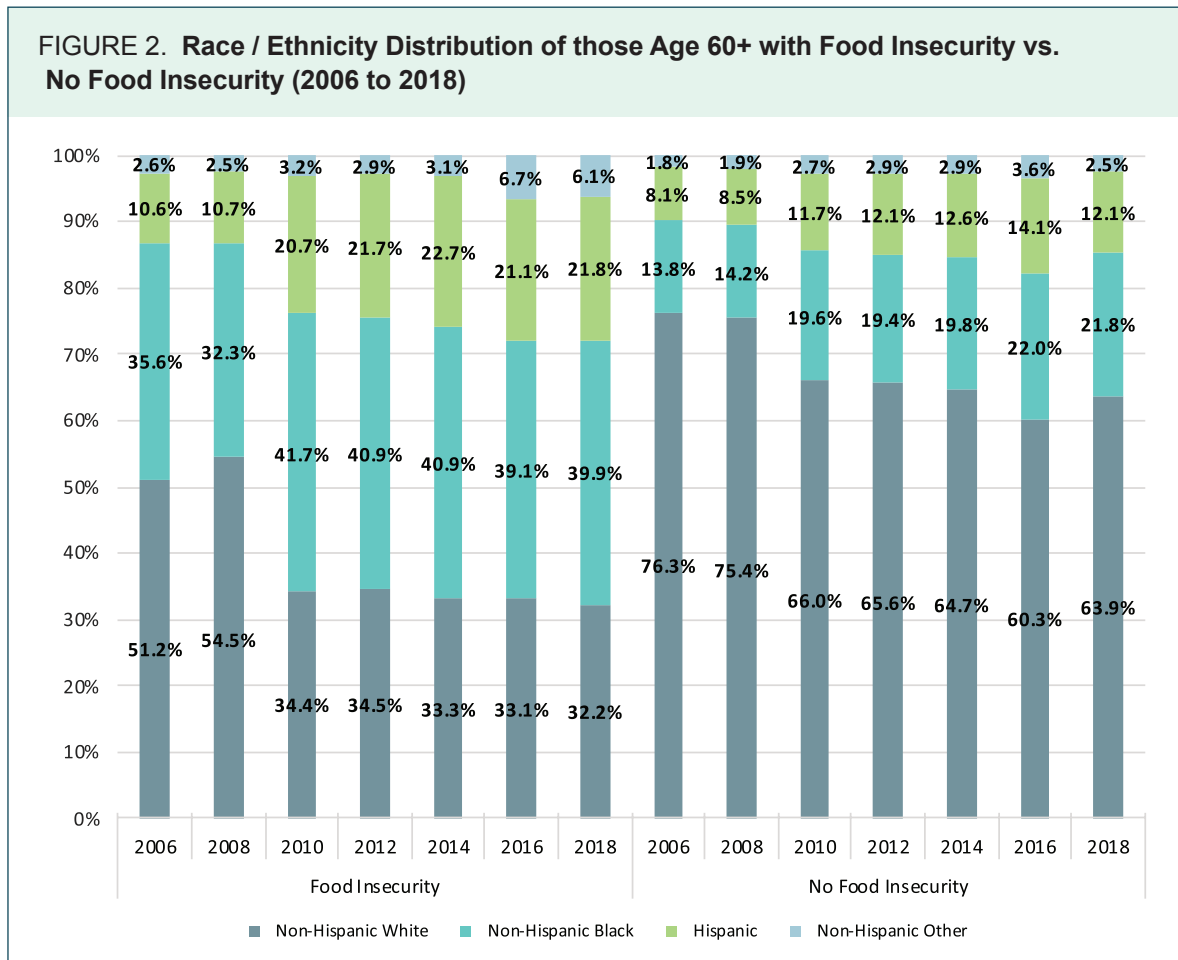


Table 1 presents the full descriptive characteristics for the 60 and older sample in 2010 (when food insecurity and poverty peaked during the recession period), comparing those who reported food insecurity to those who did not. The findings show that those who were younger, female, minority race/ethnicity, unmarried, and less educated were significantly more likely to report food insecurity during the recession. Further, not only did food insecure older adults have triple the poverty rate of those not reporting food insecurity, but they also had less than half the income and about 14% of the net total wealth of their counterparts as well. Older adults reporting food insecurity during the recession were also less likely to be retired. In terms of health, those reporting food insecurity were twice as likely to report poor or fair health and had higher chronic conditions, functional limitations, and had slightly higher BMI compared to those who were not food insecure. Finally, those who reported food insecurity during the recession had significantly higher percentages of Medicaid utilization and being dual eligible for both Medicare and Medicaid.

**TABLE 1. 2010 Descriptive Characteristics of those Age 60+ with Food Insecurity vs. No Food Insecurity**

<b>N = 12,401</b>	<b>Food Insecurity (N = 1,476)</b>	<b>No Food Insecurity (N = 10,925)</b>
<b>Age (Mean)</b>	<b>70.9</b>	<b>77.5</b>
<b>Gender</b>		
<b>Female</b>	<b>65.8%</b>	<b>57.3%</b>
<b>Male</b>	<b>38.1%</b>	<b>42.7%</b>
<b>Race/Ethnicity</b>		
<b>Non-Hispanic White</b>	<b>34.4%</b>	<b>66.0%</b>
<b>Non-Hispanic Black</b>	<b>41.7%</b>	<b>19.6%</b>
<b>Hispanic</b>	<b>20.7%</b>	<b>11.7%</b>
<b>Non-Hispanic Other</b>	<b>3.2%</b>	<b>2.7%</b>
<b>Marital Status</b>		
<b>Married</b>	<b>34.4%</b>	<b>51.5%</b>
<b>Unmarried</b>	<b>65.6%</b>	<b>48.5%</b>
<b>Education (Mean Yrs)</b>	<b>12.1</b>	<b>13.2</b>
<b>Household Income (Mean)</b>	<b>\$24,792</b>	<b>\$57,089</b>
<b>Net Wealth (Mean)</b>	<b>\$52,997</b>	<b>\$386,298</b>
<b>Below Federal Poverty Level (FPL)</b>	<b>32.3%</b>	<b>10.6%</b>
<b>Retired</b>	<b>38.8%</b>	<b>53.8%</b>
<b>Self-Reported Fair/Poor Health</b>	<b>54.2%</b>	<b>28.3%</b>
<b>Chronic Conditions (Mean)</b>	<b>2.4</b>	<b>2.2</b>
<b>Body Mass Index (Mean)</b>	<b>30.3</b>	<b>28.1</b>
<b>ADLs (Mean)</b>	<b>0.8</b>	<b>0.4</b>
<b>IADLs (Mean)</b>	<b>1.5</b>	<b>0.8</b>
<b>Medicare Only</b>	<b>20.1%</b>	<b>28.3%</b>
<b>Medicaid Only</b>	<b>9.7%</b>	<b>2.0%</b>
<b>Dual Eligible</b>	<b>17.3%</b>	<b>7.8%</b>

Table 2 below presents the results of a longitudinal regression analysis which examined predictors of food insecurity during the recession as well as the impact of using SNAP benefits on food insecurity. Specifically, the regression analysis utilized a subsample of those 60 and older who did not report food insecurity nor any SNAP use in 2006 (pre-recession); we then determined the predictors of whether they reported food insecurity during the recession impact period (2008 to 2012).

In Model 1 (Table 2), we observed that those reporting SNAP use between 2008 to 2012 had 2.9 times higher odds of reporting food insecurity during this same time period, an expected finding since those who are more likely to report food insecurity are more likely to utilize SNAP. Similar to the results of Table 1, the regression (Model 1) showed that being of younger age, female, minority race/ethnicity, less educated, in poorer health, in poverty, having fewer financial resources, and having only Medicare were predictive of reporting greater food insecurity during the recession period. Perhaps most striking were the gender, racial/ethnic, and poverty disparities. Older women had 1.2 times higher odds of reporting food insecurity than older men. Non-Hispanic Black older adults and Hispanic older adults had 1.6 times

and 1.2 times higher odds respectively of reporting food insecurity than their non-Hispanic White counterparts. Poverty was among the greatest predictor of food insecurity with those below the Federal Poverty Level (FPL) having 1.9 times higher odds of reporting food insecurity.

With poverty being such a strong predictor of food insecurity throughout our analyses, we explored whether using SNAP during the recession period mitigated the relationship between poverty and food insecurity in Model 2 (Table 2). We found that the interaction of SNAP use and poverty was significant in the regression model, such that SNAP use weakened the relationship between poverty and food insecurity. This suggests that utilizing SNAP decreases the likelihood of reporting food insecurity among those in poverty.

**TABLE 2. Logistic Regression: Association between Food Insecurity and SNAP Usage during the Recession Period (2008 to 2012) for those Age 60 and older**

N = 8,197 Covariates (measured in 2006)	Model 1		Model 2	
	Odds Ratio	p-value	Odds Ratio	p-value
<b>Any SNAP Use 2008 to 2012</b>	<b>2.92*</b>	<b>0.00</b>	<b>2.92*</b>	<b>0.00</b>
<b>Age (Years)</b>	<b>0.96*</b>	<b>0.00</b>	<b>0.96*</b>	<b>0.00</b>
<b>Female</b>	<b>1.23*</b>	<b>0.03</b>	<b>1.23*</b>	<b>0.03</b>
<b>Non-Hispanic Black</b>	<b>1.60*</b>	<b>0.00</b>	<b>1.60*</b>	<b>0.00</b>
<b>Hispanic</b>	<b>1.20*</b>	<b>0.02</b>	<b>1.20*</b>	<b>0.02</b>
<b>Non-Hispanic Other</b>	<b>1.52</b>	<b>0.14</b>	<b>1.51</b>	<b>0.14</b>
<b>Married</b>	<b>1.07</b>	<b>0.49</b>	<b>1.08</b>	<b>0.49</b>
<b>Education (Years)</b>	<b>0.95*</b>	<b>0.00</b>	<b>0.95*</b>	<b>0.00</b>
<b>Net Total Wealth (logged)</b>	<b>0.90*</b>	<b>0.00</b>	<b>0.90*</b>	<b>0.00</b>
<b>Below Federal Poverty Level (FPL)</b>	<b>1.91*</b>	<b>0.04</b>	<b>1.91*</b>	<b>0.04</b>
<b>Retired</b>	<b>0.87</b>	<b>0.12</b>	<b>0.87</b>	<b>0.12</b>
<b>Self-Reported Fair/Poor Health</b>	<b>1.44*</b>	<b>0.00</b>	<b>1.44*</b>	<b>0.00</b>
<b>Chronic Conditions</b>	<b>1.04*</b>	<b>0.03</b>	<b>1.04*</b>	<b>0.03</b>
<b>Body Mass Index (BMI)</b>	<b>1.01</b>	<b>0.33</b>	<b>1.01</b>	<b>0.33</b>
<b>ADLs</b>	<b>1.10*</b>	<b>0.01</b>	<b>1.10*</b>	<b>0.01</b>
<b>IADLs</b>	<b>1.14*</b>	<b>0.09</b>	<b>1.14*</b>	<b>0.09</b>
<b>Medicare Only</b>	<b>1.55*</b>	<b>0.00</b>	<b>1.55*</b>	<b>0.00</b>
<b>Medicaid Only</b>	<b>1.32</b>	<b>0.51</b>	<b>1.33</b>	<b>0.52</b>
<b>Dual Eligible</b>	<b>1.19</b>	<b>0.33</b>	<b>1.19</b>	<b>0.31</b>
<b>SNAP/Below FPL Interaction</b>	<b>—</b>	<b>—</b>	<b>0.69*</b>	<b>0.01</b>

\*Significant at p < 0.05

# Conclusions

The findings from this analysis highlight how the most recent recession affected food insecurity among the population over age 60. The results show that food insecurity levels had not recovered even 10 years later. Not surprisingly, there are major differences between those who experience food security during an economic downturn and those who do not, the greatest of which center around gender, racial/ethnic, and wealth disparities. It is reasonable to assume that many of the negative impacts experienced during the Great Recession will occur on a larger scale during the current pandemic related downturn. While all groups will experience increases in poverty and food insecurity during a recession, older women, and racial/ethnic minorities as well as those with fewer financial resources will be hardest hit. During a pandemic that has both grave health and economic consequences for older adults, these findings are staggering in light of the large pool of existing literature which shows that older women and people of color are already at greater risk for poorer health and fewer financial resources. In addition, the advised prevention method of social distancing during this pandemic may only serve to further compound the issue of food insecurity with less access to overall resources and services as a result of isolation.

Despite these grim findings, our study also demonstrated the role of SNAP benefits in combatting food insecurity. This underscores the importance of policies aimed at increasing both the inclusion criteria and amount of government benefits during times of economic recession. For many, benefit programs such as SNAP act as a buffer between the diminishing of financial resources and consequences like food insecurity that may lead to greater health problems. For this reason, it is critically important to maintain a strong social safety net and ensure that people who need to access benefits are able to do so, and to undertake policies that focus on narrowing disparities stemming from gender inequality and systemic racism.

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## About NCOA

The National Council on Aging (NCOA) is the national voice for every person's right to age well. NCOA empowers individuals with trusted solutions to improve their own health and economic security—and protects and strengthens federal programs that people depend on as they age. Working with a nationwide network of partners, NCOA's goal is to improve the lives of 40 million older adults by 2030. Learn more at [ncoa.org](https://ncoa.org) and [@NCOAging](https://twitter.com/NCOAging).