

# The State of Senior Hunger in America 2013: An Annual Report

---

April 2015

Professor James P. Ziliak  
University of Kentucky

Professor Craig Gundersen  
University of Illinois



# Acknowledgements

This report was made possible by a generous grant from the National Foundation to End Senior Hunger. The conclusions and opinions expressed herein are our own and do not necessarily represent the views of any sponsoring agency.

## Executive Summary

In this report we provide an overview of the extent and distribution of food insecurity in 2013 among seniors, along with trends over the past decade using national and state-level data from the December Supplements to the Current Population Survey (CPS). Based on the full set of 18 questions in the Core Food Security Module (CFSM), the module used by the USDA to establish the official food insecurity rates of households in the United States, our emphasis here is on quantifying the senior population facing the threat of hunger (i.e. marginally food insecure). A supplement to this report also presents evidence on seniors at risk of hunger (i.e. food insecure) and on seniors facing hunger (i.e. very low food secure).

This report demonstrates that seniors in 2013 continued to face increasing challenges meeting food need. Specifically, we find that

- 15.5% of seniors face the threat of hunger. This translates into 9.6 million seniors.
- Those living in states in the South and Southwest, those who are racial or ethnic minorities, those with lower incomes, and those who are younger (ages 60-69) are most likely to be threatened by hunger.
- Out of those seniors who face the threat of hunger, the majority have incomes above the poverty line and are white.
- From 2001 to 2013, the fraction of seniors experiencing the threat of hunger increased by 45%. The number of seniors rose by 107% which also reflects the growing population of seniors.
- Since the onset of the recession in 2007 until 2013, the number of seniors experiencing the threat of hunger has increased by 56%.

Despite an improving economy and financial markets, a high proportion of seniors in the United States are going without enough food due to economic constraints. Based on the findings regarding food insecurity and health in Ziliak and Gundersen (2013), this stubbornly high proportion of food insecure seniors continues to pose a threat to the health of millions of seniors.

# I. FOOD INSECURITY IN 2013

We document the state of hunger among senior Americans ages 60 and older in 2013 using data from the Current Population Survey (CPS). In December of each year, households respond to a series of 18 questions (10 questions if there are no children present) that make up the Core Food Security Module (CFSM) in the CPS. (See the Appendix for more details on the CPS and CFSM.) Each question is designed to capture some aspect of food insecurity and, for some questions, the frequency with which it manifests itself. Respondents are asked questions about their food security status in the last 30 days as well as over the past 12 months. We focus on the questions referring to the past year.

Consistent with the nomenclature and categorizations in our past reports (Ziliak and Gundersen 2014, 2013, 2012, 2009; Ziliak et al., 2008), we consider three characterizations of food insecurity: the threat of hunger, when a person is defined as marginally food insecure due to having answered affirmatively to one or more questions on the CFSM; the risk of hunger, when a person is food insecure (three or more affirmative responses to questions on the CFSM); and facing hunger, when a person is very low food secure (8 or more affirmative responses to questions in households with children; 6 or more affirmative responses in households without children). The threat of hunger is the broadest category of food insecurity since it encompasses those responding to at least one question on the CFSM. The next broadest category is the risk of hunger since this group encompasses those who are either low food secure or very low food secure. The most narrow, and in turn, most severe, category in our taxonomy is facing hunger. Box 1 summarizes the categories. For the purpose of this report we focus on the threat of hunger, but a supplement to the report provides a parallel analysis for seniors at risk of hunger and those facing hunger.

Box 1: Categories of Food Insecurity		
	USDA Classification	Number of Affirmative Responses to CFSM
Fully Food Secure	Fully Food Secure	0
Threat of Hunger	Marginally Food Insecure	1 or more
Risk of Hunger	Food Insecure	3 or more
Facing Hunger	Very Low Food Secure	8 or more (households with children) 6 or more (households without children)

In Table 1 we present estimates of food insecurity among seniors in 2013. Overall, 15.5% faced the threat of hunger, which translates into 9.6 million seniors, or 300,000 more than last year (Ziliak and Gundersen, 2014). The table also presents estimates of food insecurity across selected socioeconomic categories. Here we see great heterogeneity across the senior population. For example, for those with incomes below the poverty line, 49.6% face the threat of hunger. In contrast, seniors with incomes above twice the poverty line, this number falls to 7.3%. Turning to race, white seniors have food insecurity rates that are less than half the rates for African-American seniors. (The category of “other race” includes those American Indians, Asians, and Pacific Islanders.) Similarly, Hispanics (of any racial category) have food insecurity rates which are more than double the rates of non-Hispanics.

**Table 1. The Extent of the Threat of Senior Hunger in 2013**

	Threat of hunger
Overall	15.48%
By Income	
Below the Poverty Line	49.56
Between 100% and 200% of the Poverty Line	29.52
Above 200% of the Poverty Line	7.25
Income Not Reported	10.42
By Race and Ethnicity	
White	13.42
Black	32.87
Other	16.31
By Hispanic Status	
Hispanic	31.44
Non-Hispanic	14.06
By Marital Status	
Married	11.27
Widowed	17.79
Divorced or Separated	27.05
Never Married	24.30
By Metropolitan Location	
Non-Metro	16.60
Metro	15.22
By Age	
60-64	18.62
65-69	15.24
70-74	14.97
75-79	13.37
80 and older	12.54
By Employment Status	
Employed	10.61
Unemployed	37.36
Retired	13.33
Disabled	39.71
By Gender	
Male	14.02
Female	16.69
By Grandchild Present	
No Grandchild Present	14.59
Grandchildren Present	32.60

Source: Authors' calculations of December 2013 Current Population Survey.  
The numbers in the table show the rates of marginal food insecurity.

The threat of hunger among divorced or separated seniors is two to three times greater than married seniors while another group of seniors living alone, those who are widowed, have rates more similar to married seniors. As age increases, rates of the threat of hunger fall. For example, seniors between the ages of 60 and 64 have rates that are roughly 50 percent higher than those over the age of 80. The threat of hunger is 3-4 times higher among the disabled in comparison to the retired or employed, and if a grandchild is present, food insecurity is more than twice as likely as among households with no grandchildren present.

Table 1 allows us to see the proportions of persons within any category who are facing the threat of hunger and, with this information, we can make statements about who are more likely to fall into this category. For example, those with lower incomes are substantially more likely to face the threat of hunger in than those with higher incomes. Also of interest, though, is the distribution of senior hunger. In other words, out of those who face the threat of hunger, what proportion fall into a particular category? We present these results in Table 2.

As seen in Table 2, the majority of seniors facing the threat of hunger have incomes above the poverty line. For example, out of those reporting income, nearly 2 in 3 seniors facing the threat of hunger have incomes above the poverty line. A similar story holds for race – while African-Americans are at greater risk than whites, almost 3 in 4 seniors facing the threat of hunger are white. Despite the decline in food insecurity rates among older seniors, 14.2% of seniors facing the threat of hunger are over age 80. And while the rates of food insecurity are lowest for retired persons, they make up half of the population under the threat of hunger.

**Table 2. The Distribution of the Threat of Senior Hunger in 2013**

By Income	
Below the Poverty Line	29.06%
Between 100% and 200% of the Poverty Line	29.40
Above 200% of the Poverty Line	21.26
Income Not Reported	20.28
By Race	
White	73.26
Black	20.67
Other	6.07
By Hispanic Status	
Non-Hispanic	83.39
Hispanic	16.61
By Marital Status	
Married	44.02
Widowed	23.28
Divorced or Separated	23.95
Never Married	8.75
By Metropolitan Location	
Non-Metro	20.42
Metro	79.58
By Age	
60-64	35.24
65-69	23.39
70-74	16.47
75-79	10.72
80 and older	14.19
By Employment Status	
Employed	20.00
Unemployed	3.84
Retired	52.65
Disabled	24.51
By Gender	
Male	41.04
Female	58.96
By Grandchild Present	
No Grandchild Present	89.61
Grandchildren Present	10.39

Source: Authors' calculations from 2013 December Current Population Survey.  
The numbers in the table sum to 100 percent within each subcategory.

In Table 3 we present state level estimates of the threat of senior hunger for 2013. These range from 8.3% in Minnesota to 26.1% in Arkansas. In Table 4 we highlight the ten states, including the District of Columbia, with the highest rates of senior hunger in 2013. This is the same group of states as in 2012, except that DC and Missouri have replaced Georgia and Nevada, and in most cases the rates are higher than in previous years. Indeed, in five jurisdictions more than 1 in 5 seniors is under the threat of hunger.

**Table 3. State-Level Estimates of Threat of Senior Hunger in 2013**

AL	17.21	HI	14.36	MI	15.28	NC	18.40	UT	13.36
AK	8.87	ID	10.41	MN	8.30	ND	11.98	VT	15.27
AZ	15.44	IL	13.58	MS	24.34	OH	16.32	VA	13.93
AR	26.10	IN	11.74	MO	19.06	OK	17.10	WA	11.93
CA	16.33	IA	11.51	MT	11.62	OR	14.85	WV	12.08
CO	14.62	KS	15.63	NE	15.33	PA	11.77	WI	11.00
CT	15.42	KY	15.82	NV	14.75	RI	12.59	WY	15.59
DE	12.55	LA	24.39	NH	10.30	SC	18.77		
DC	20.27	ME	15.51	NJ	11.82	SD	14.02		
FL	14.05	MD	13.60	NM	9.54	TN	19.67		
GA	15.95	MA	10.98	NY	16.33	TX	20.26		

Source: Authors' calculations. The numbers are two-year averages found by summing the number of marginally food insecure seniors by state across the 2012-2013 December Current Population Surveys and dividing by the corresponding total number of seniors in each state across the two years.

**Table 4. Top Ten States in Terms of Threat of Senior Hunger in 2013**

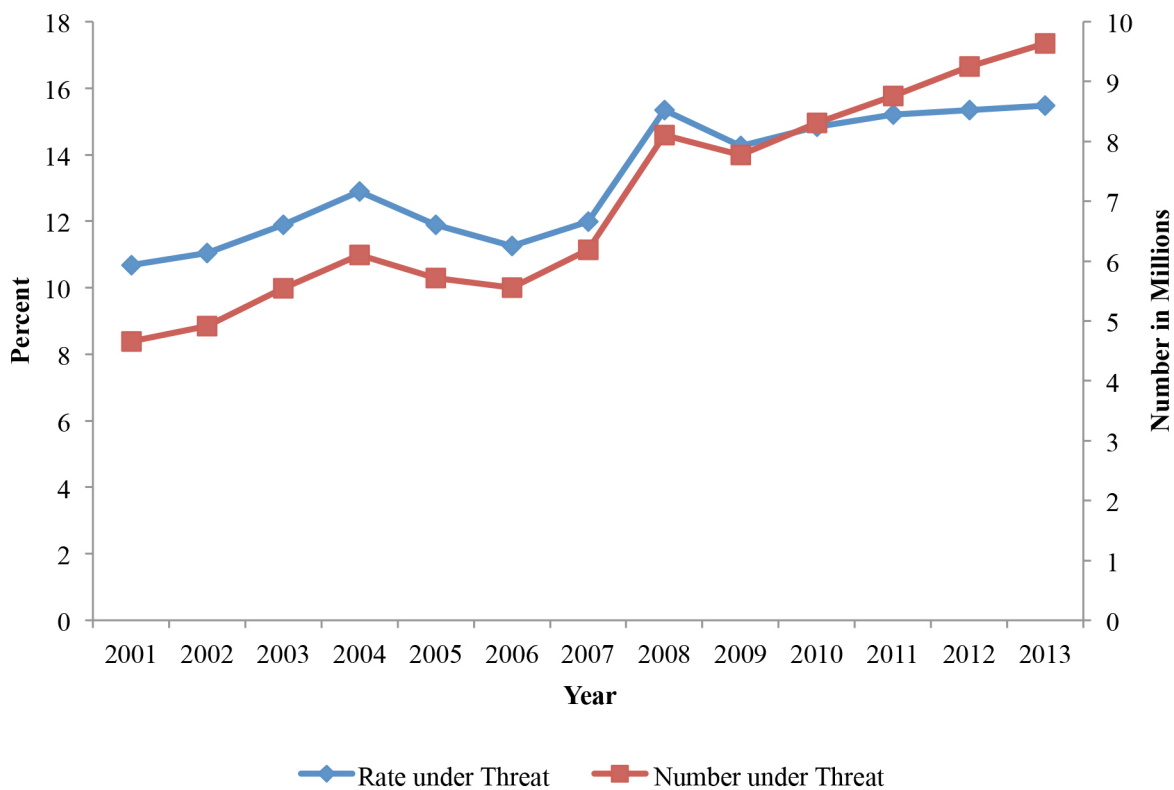
AR	26.10
LA	24.39
MS	24.34
DC	20.27
TX	20.26
TN	19.67
MO	19.06
SC	18.77
NC	18.40
AL	17.21



## II. FOOD INSECURITY OVER TIME

To place the 2013 estimates into perspective, we now examine trends in the threat of hunger since 2001. We describe the trends for the full population of seniors along with select subgroups. In Figure 1 we display results for the full population in terms of the percentage of seniors (left-hand axis) and number of seniors in millions (right-hand axis). As seen there, there was a substantial increase in the threat of hunger since the start of the recession in 2007; an increase of about 30% from 2007-2013. And reflecting the fact that an increasing percentage of the U.S. population is over age 60, the number of seniors facing the threat of hunger rose 56% since 2007. Overall, from 2001 to 2013 the fraction of seniors experiencing the threat of hunger increased by 45%, while the number of seniors rose 107%.

**Figure 1. Trends in Threat of Senior Hunger**



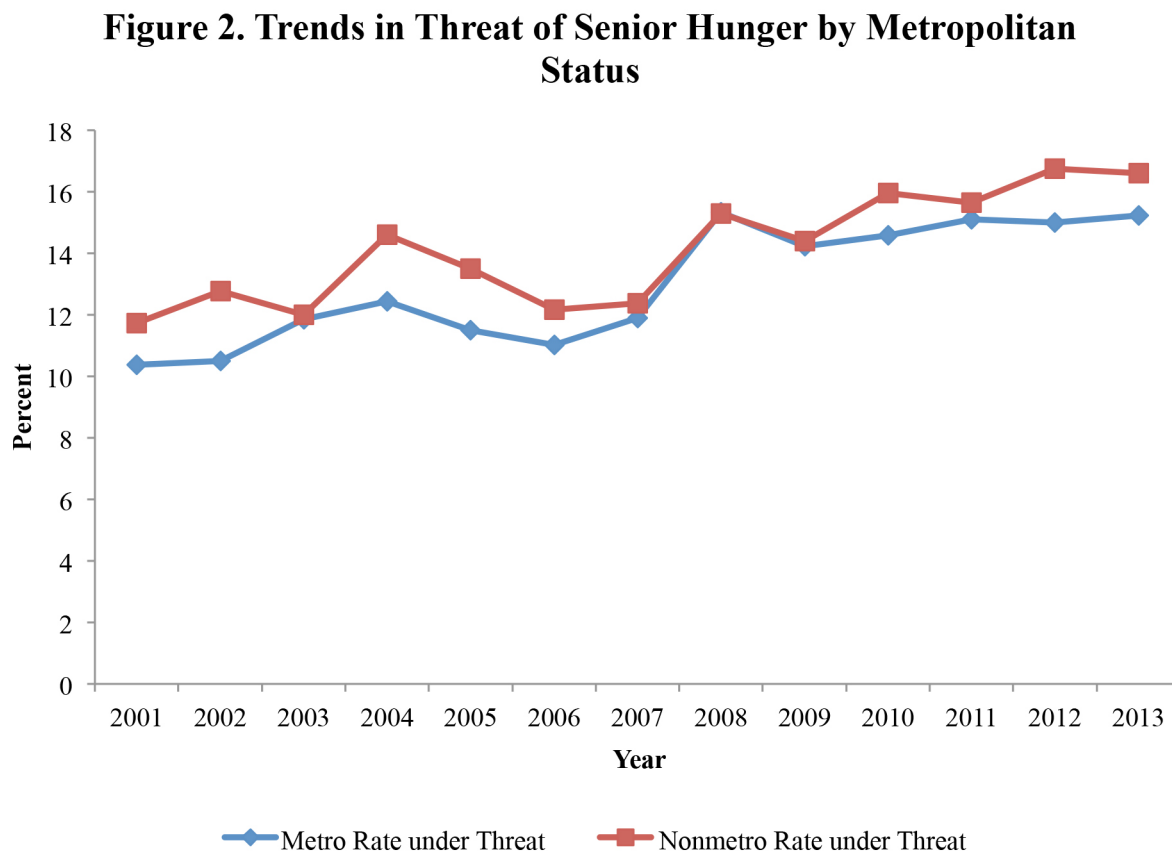
In Table 5 we take a deeper look into underlying changes in the composition of seniors facing the threat of hunger from 2012 to 2013. The table presents percentage point changes by the same set of socioeconomic characteristics from Table 1. In the first row, the results for the full population of seniors show a small 0.15 percentage points from 2012 to 2013. However, in the subsequent rows we see a wide degree of variation in terms of changes that are masked by the overall changes. Some of the changes are qualitatively large, e.g. the 2.2 percentage point increase among African-American seniors, but are statistically indistinguishable from no change. Those ages 65-69 and the employed saw statistically significant declines in the threat of hunger, while the unemployed and retired saw statistically significant increases, and the increase among the unemployed was quite large.

**Table 5. Changes in the Composition of Threat of Senior Hunger from 2012 to 2013**

Overall	0.15%
By Income	
Below the Poverty Line	0.78
Between 100% and 200% of the Poverty Line	-0.45
Above 200% of the Poverty Line	0.37
Income Not Reported	0.54
By Race	
White	-0.03
Black	2.23
Other	-1.33
By Hispanic Status	
Non-Hispanic	0.12
Hispanic	-0.42
By Marital Status	
Married	0.18
Widowed	-0.51
Divorced or Separated	0.13
Never Married	2.34
By Metropolitan Location	
Non-Metro	-0.15
Metro	0.22
By Age	
60-64	0.39
65-69	-1.16*
70-74	0.99
75-79	0.23
80 and older	0.97
By Employment Status	
Employed	-1.17**
Unemployed	7.23**
Retired	0.72**
Disabled	-1.59
By Gender	
Male	0.22
Female	0.09
By Grandchild Present	
No Grandchild Present	0.24
Grandchildren Present	-2.07

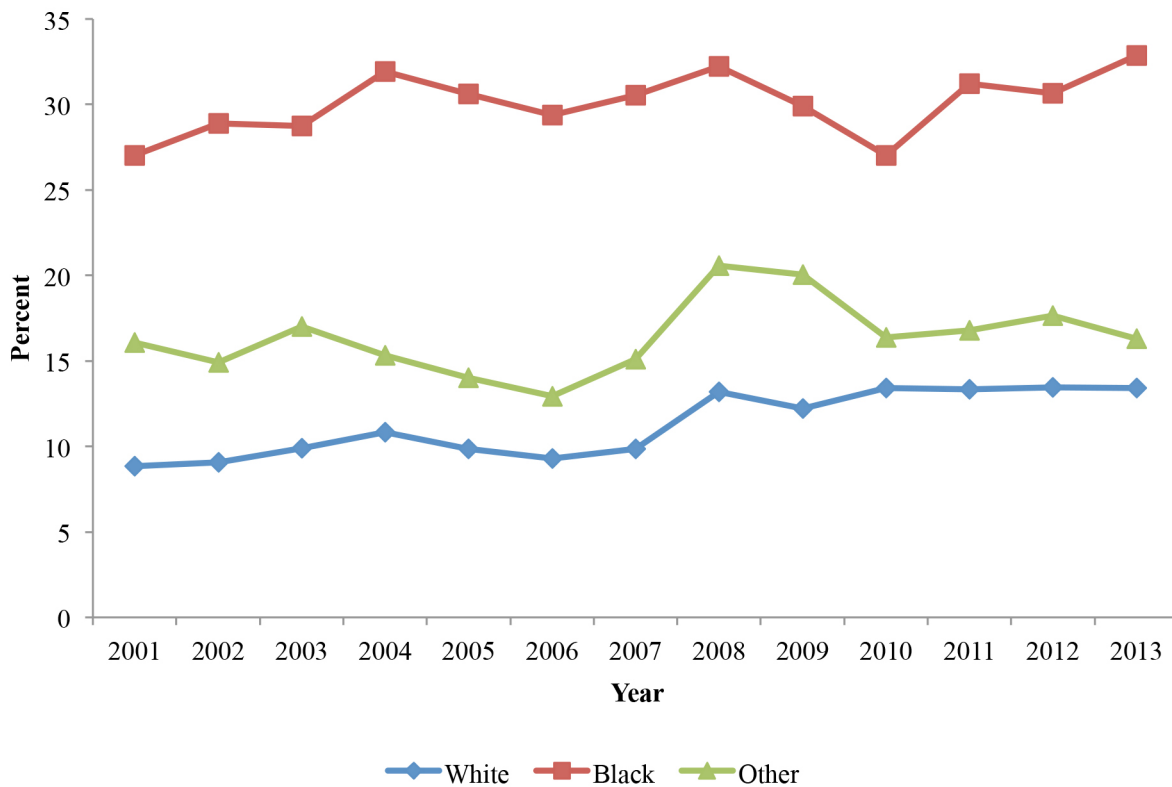
Source: Authors' calculations. The numbers in the table reflect percentage point changes from 2012-2013. The asterisks denote statistical significance at the following levels: \*\*\* p<0.01; \*\* p<0.05; \* p<0.1

In the next set of figures we examine trends in the threat of hunger since 2001 across a variety of subpopulations found in Tables 1 and 5. We begin in Figure 2 with trends in food insecurity for seniors living in metropolitan areas versus nonmetropolitan areas. The figure shows that, in the years leading up to the Great Recession there were differences between metro and non-metro areas in terms of the threat of hunger, but this seemed to dissipate during the recession. This gap, however, has re-emerged in recent years, reaching almost 2 percentage points in 2013, similar to 2004.



Figures 3 and 4 depict trends in the threat of hunger across different races and ethnicity. As discussed above, the rates of food insecurity for blacks are substantially higher than whites. Figure 3 reveals that these differences were present in each year from 2001 to 2013. The proportion of seniors facing a threat to hunger were fairly stable among blacks over the past decade. Among whites, however, the trend increased after the Great Recession and remained elevated, while for members of the “other” racial category the rate in 2013 appears to be converging back to the pre-recession level in 2007.

**Figure 3. Trends in Threat of Senior Hunger by Race**



In Figure 4 we present trends broken down by Hispanic status. In most years Hispanics face rates of the threat of hunger that are 2 to 3 times higher than non-Hispanics. One key difference in the trajectories over time is with respect to what occurred after the sharp increase in 2008. After this increase, in 2009 for Hispanics there was a fall to levels just above those in 2007 in contrast to non-Hispanics who did not see such a sharp fall.

**Figure 4. Trends in Threat of Senior Hunger by Hispanic Ethnicity**

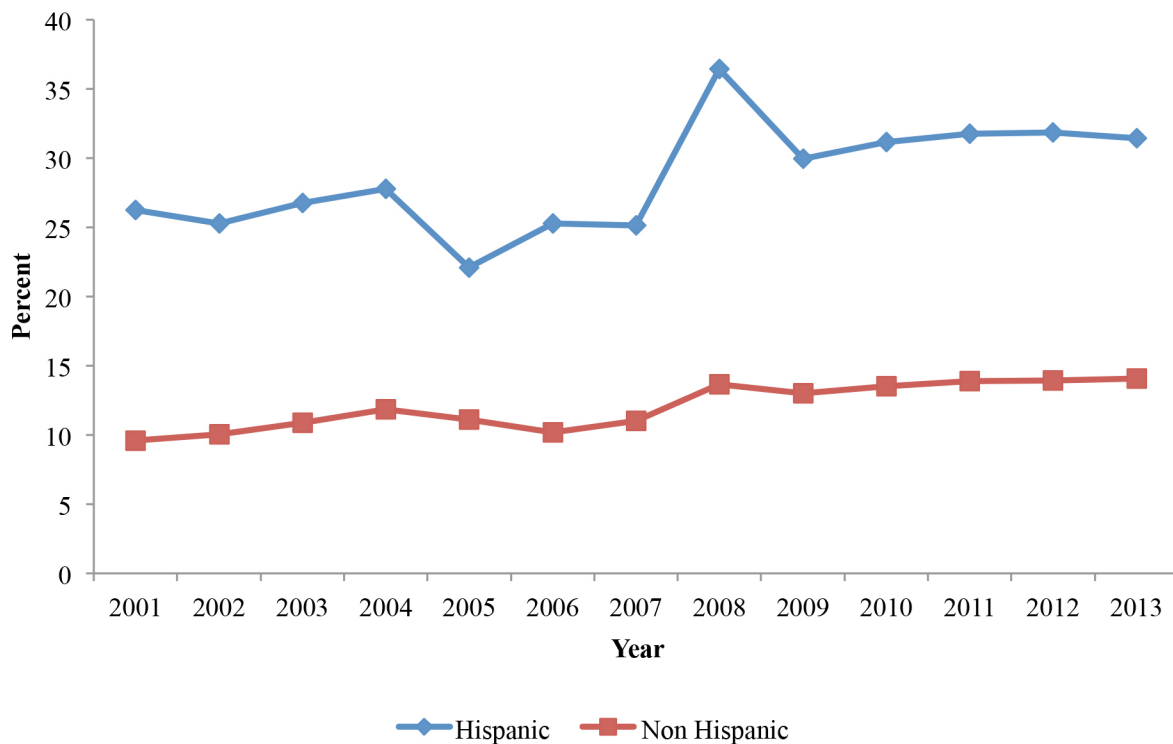
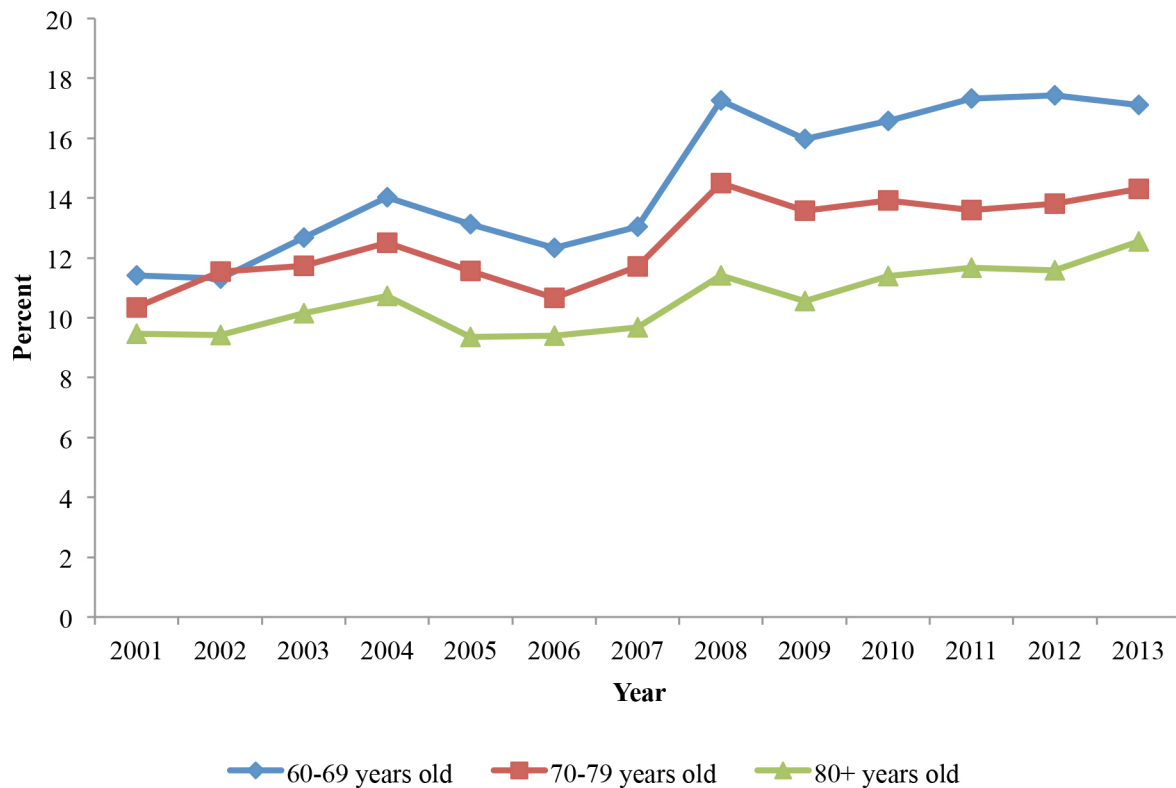


Figure 5 presents results for seniors of three age groups—60-69 years old, 70-79 years old, and age 80 and older. There were sharp increases in the threat of hunger from 2007 to 2008 across all three age groups and these rates remain, in 2013, substantially above those found in 2007. Indeed, there was an additional noticeable increase in the threat of hunger among those age 80 and older in 2013, which has closed, to some extent, the negative age gradient noted above.

**Figure 5. Trends in Threat of Senior Hunger by Age**



### III. CONCLUSION

This report demonstrates that the threat of hunger among seniors in America is a continued crisis facing the nation. Despite the end of the Great Recession in 2009, almost 1 in 6 seniors faced the threat of hunger in 2013. And, even more troubling is the more than doubling in the number of seniors facing the threat of hunger in 2013 compared to 2001. Given the compelling evidence in Ziliak and Gundersen (2013) that food insecurity is associated with a host of poor nutrition and health outcomes among seniors, this report implies that these high rates of food insecurity among seniors will likely lead to additional public health challenges for our country. This suggests that a key potential avenue to stem the growth of health care expenditures on older Americans is to ameliorate the problem of food insecurity.

## APPENDIX

The CPS is a nationally representative survey conducted by the Census Bureau for the Bureau of Labor Statistics, providing employment, income and poverty statistics. Households are selected to be representative of civilian households at the state and national levels, using suitably appropriate sampling weights. The CPS does not include information on individuals living in group quarters including nursing homes or assisted living facilities. For this report and previous reports, we use data from the December Supplement which contains the Core Food Security Module (CFSM). The questions from the CFSM are found in Appendix Table 1. Because our focus is on hunger among seniors, our CPS sample is of persons age 60 and older. In 2013 this results in 22,616 sample observations. Appendix Table 2 presents selected summary statistics for the CPS sample.



**Appendix Table 1: Questions on the Core Food Security Module**

Food Insecurity Question	Asked of Households with Children	Asked of Households without Children
1. “We worried whether our food would run out before we got money to buy more.” Was that often, sometimes, or never true for you in the last 12 months?	x	x
2. “The food that we bought just didn’t last and we didn’t have money to get more.” Was that often, sometimes, or never true for you in the last 12 months?	x	x
3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for you in the last 12 months?	x	x
4. “We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food.” Was that often, sometimes, or never true for you in the last 12 months?	x	
5. In the last 12 months, did you or other adults in the household ever cut the size of your meals or skip meals because there wasn’t enough money for food? (Yes/No)	x	x
6. “We couldn’t feed our children a balanced meal, because we couldn’t afford that.” Was that often, sometimes, or never true for you in the last 12 months?	x	
7. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food? (Yes/No)	x	x
8. (If yes to Question 5) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?	x	x
9. “The children were not eating enough because we just couldn’t afford enough food.” Was that often, sometimes, or never true for you in the last 12 months?	x	
10. In the last 12 months, were you ever hungry, but didn’t eat, because you couldn’t afford enough food? (Yes/No)	x	x
11. In the last 12 months, did you lose weight because you didn’t have enough money for food? (Yes/No)	x	x
12. In the last 12 months, did you ever cut the size of any of the children’s meals because there wasn’t enough money for food? (Yes/No)	x	
13. In the last 12 months did you or other adults in your household ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)	x	x
14. In the last 12 months, were the children ever hungry but you just couldn’t afford more food? (Yes/No)	x	
15. (If yes to Question 13) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?	x	x
16. In the last 12 months, did any of the children ever skip a meal because there wasn’t enough money for food? (Yes/No)	x	
17. (If yes to Question 16) How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?	x	
18. In the last 12 months did any of the children ever not eat for a whole day because there wasn’t enough money for food? (Yes/No)	x	

Note: Responses in bold indicate an “affirmative” response.

**Appendix Table 2: Selected Characteristics of Senior Americans Age 60 and older in 2013**

	Percent
Income Categories	
Below the Poverty Line	9.18%
Between 100% and 200% of the Poverty Line	15.41
Above 200% of the Poverty Line	45.37
Missing Income	30.14
Racial Categories	
White	84.51
Black	9.74
Other	5.76
Hispanic Status	
Hispanic	8.18
Non-Hispanic	91.82
Marital Status	
Married	60.46
Widowed	20.27
Divorced or Separated	13.71
Never Married	5.57
Metropolitan Location	
Non-Metro	19.05
Metro	81.95
Age	
60 to 64	29.30
65 to 69	23.75
70 to 74	17.03
75 to 79	12.42
80 and older	17.51
Employment Status	
Employed	27.72
Unemployed	1.60
Retired	61.14
Disabled	9.55
Education Level	
Less Than High School	15.41
High School Diploma	33.21
Some College	23.84
College Degree	27.54
Food Stamp Recipient	6.28
Grandchild Present	
No Grandchild Present	95.07
Grandchild Present	4.92
Female	54.69
Living Alone	25.25

## References

Ziliak, J., and C. Gundersen. 2013. The Health Consequences of Senior Hunger in the United States: Evidence from the 1999-2010 NHANES. Report submitted to National Foundation to End Senior Hunger.

Ziliak, J., and C. Gundersen. 2014. The State of Senior Hunger in America 2012: An Annual Report. Report submitted to National Foundation to End Senior Hunger.

Ziliak J. and C. Gundersen. 2013. The State of Senior Hunger in America 2011: An Annual Report. Report submitted to National Foundation to End Senior Hunger.

Ziliak, J. and C. Gundersen. 2012. The State of Senior Hunger in America: Food Insecurity in 2010. Report submitted to Meals on Wheels Association of America Foundation.

Ziliak, J. and C. Gundersen. 2009. Senior Hunger in the United States: Differences across States and Rural and Urban Areas. Report submitted to Meals on Wheels Association of America Foundation.

Ziliak, J., C. Gundersen, and M. Haist. 2008. The Causes, Consequences, and Future of Senior Hunger in America. Report submitted to Meals on Wheels Association of America Foundation.

## About the Authors

**James P. Ziliak**, Ph.D., holds the Carol Martin Gatton Endowed Chair in Microeconomics in the Department of Economics and is Founding Director of the Center for Poverty Research at the University of Kentucky. He earned received his BA/BS degrees in economics and sociology from Purdue University, and his Ph.D. in Economics from Indiana University. He served as assistant and associate professor of economics at the University of Oregon, and has held visiting positions at the Brookings Institution, University College London, University of Michigan, and University of Wisconsin. His research expertise is in the areas of labor economics, poverty, food insecurity, and tax and transfer policy. Recent projects include the causes and consequences of hunger among older Americans; trends in earnings and income volatility in the U.S.; trends in the antipoverty effectiveness of the social safety net; the origins of persistent poverty in America; and regional wage differentials across the earnings distribution. He is editor of *Welfare Reform and its Long Term Consequences for America's Poor* published by Cambridge University Press (2009) and *Appalachian Legacy: Economic Opportunity after the War on Poverty* published by Brookings Institution Press (2012), and co-editor of the forthcoming book *SNAP Matters: How Food Stamps Affect Health and Well Being* at Stanford University Press.

**Craig Gundersen**, Ph.D., is Soybean Industry Endowed Professor of Agricultural Strategy in the Department of Agricultural and Consumer Economics at the University of Illinois and Executive Director of the National Soybean Research Laboratory. Previously, he was at the Economic Research Service (ERS) of the USDA and at Iowa State University. Dr. Gundersen's research is primarily focused on the causes and consequences of food insecurity and on evaluations of food assistance programs, especially the Supplemental Nutrition Assistance Program (SNAP, formerly known as the Food Stamp Program). Among other journals, he has published in *Journal of the American Statistical Association*, *Journal of Human Resources*, *Journal of Health Economics*, *Journal of Econometrics*, *American Journal of Agricultural Economics*, *Journal of Nutrition*, *Pediatrics*, *Demography*, *Obesity Reviews*, *Journal of the American Dietetic Association*, and *American Journal of Public Health*.

### Contact information:

Professor James P. Ziliak  
Center for Poverty Research  
University of Kentucky  
Mathews Building  
Suite 300  
Lexington, KY 40506-0047  
(859) 257-6902  
Email: [jziliak@uky.edu](mailto:jziliak@uky.edu)

Professor Craig Gundersen  
Department of Agriculture and Consumer Economics  
University of Illinois  
323 Mumford Hall  
1301 W. Gregory Dr.  
Urbana, IL 61801  
(217) 333-2857  
Email: [cggunder@illinois.edu](mailto:cggunder@illinois.edu)