## **MEALS ON WHEELS**

### **Research Foundation**

# Supplement

## Senior Hunger in America 2010: An Annual Report

Prepared for the Meals On Wheels Research Foundation, Inc.

May 3, 2012

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#### **ACKNOWLEDGEMENTS**

This supplement to our report was made possible by a generous grant from the Meals On Wheels Research Foundation, Inc, which was underwritten by the Caesars Foundation. We owe a special debt of gratitude to Enid Borden and Peggy Ingraham of MOWRF for helpful comments on earlier versions of this report. The conclusions and opinions expressed herein are our own and do not necessarily represent the views of any sponsoring agency.

#### **EXECUTIVE SUMMARY**

This study is the first in a series of annual reports on the state of senior hunger in the United States. In the report we provide an overview of the extent and distribution of food insecurity in 2010, along with trends over the past decade using national and state-level data from the December Supplements to the Current Population Survey (CPS). In next year's report, and to be updated every other year, we also examine the health-related correlates of food insecurity using data from the National Health and Nutrition Examination Survey (NHANES).

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, we characterize a senior as facing the *threat of hunger* (i.e. marginally food insecure) if they answer affirmatively to at least one question on the CFSM; as facing the *risk of hunger* (i.e. food insecure) if they answer affirmatively to at least 3 questions; and as *facing hunger* (i.e. very low food secure) if they answer affirmatively to at least 8 questions in households with children and at least 6 questions in households without children.

The Great Recession has caused extreme hardship on many families in the United States, and senior Americans are no exception. Based on the barometer of food insecurity, this report demonstrates that our seniors may face more challenges than initially thought. Unlike the population as a whole, food insecurity (both the threat and the risk if hunger) among those age 60 and older actually increased between 2009 and 2010. These increases were most pronounced among the near poor, whites, widows, non-metro residents, the retired, women, and among households with no grandchildren present.

#### Specifically, in 2010 we find that

- 14.85% of seniors face the threat of hunger, 8.00% face the risk of hunger, and 2.77% are facing hunger. This translates into 8.3 million, 4.5 million, and 1.6 million seniors, respectively.
- 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 2010, the number of seniors experiencing the threat of hunger, the risk of hunger, and hunger has increased by 78%, 95%, and 152%, respectively.
- Since the onset of the recession in 2007 to 2010, the number of seniors experiencing the threat of hunger, the risk of hunger, and hunger has increased by 34%, 39%, and 24%, respectively.
- The growth in food insecurity over the past decade has been faster among white seniors, those living in metro areas, and those between the ages of 70 and 79.

That seniors in our country are going without enough food due to economic constraints is a serious problem in-and-of-itself. In addition, though, in previous work (Ziliak, et al. 2009) we showed that even after controlling for other confounding factors, food insecurity is associated with a host of poor health outcomes for seniors such as reduced nutrient intakes and limitations in activities of daily living. This implies that the recent increase in senior hunger will likely lead to additional nutritional and health challenges for our nation.

#### I. FOOD INSECURITY IN 2010

We document the state of hunger among senior Americans ages 60 and older in 2010 using data from the Current Population Survey (CPS). In December of each year, households respond to a series of 18 questions (10 if there are no children present) that make up the Core Food Security Module (CFSM) in the CPS. 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 Ziliak et al. (2008) and Ziliak and Gundersen (2009), we consider three characterizations of food insecurity: the *threat of hunger*, which obtains when a person is marginally food insecure by answering in the affirmative to one or more questions on the CFSM; the *risk of hunger*, which arises when a person is food insecure by answering in the affirmative to three or more questions on the CFSM; and *facing hunger*, which obtains when the person is very low food secure by answering in the affirmative to at least 8 questions in households with children and at least 6 questions in households without children. This means that 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 food insecure or very low food secure. This means that the most narrow, and in turn, most severe, category in our taxonomy is facing hunger. Box 1 summarizes the categories.

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 2010. Overall, 14.85% faced the threat of hunger (8.3 million seniors). In the more severe food insecurity categories, we find that 8.00% faced the risk of hunger, (4.5 million seniors) and 2.77% faced hunger (1.6 million seniors). 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, 47.06% face the threat of hunger, 28.27% face the risk, and just under 10 percent (9.88%) face hunger. In contrast, seniors with

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<sup>&</sup>lt;sup>1</sup> See the Data Appendix for details on the survey sample, including the full list of CFSM questions in Appendix Table 1.

incomes greater than twice the poverty line, these numbers fall dramatically to 6.97%, 3.44%, and 1.13%. Turning to race, white seniors have food insecurity rates that are dramatically lower than for African-American seniors. For threat of hunger African-Americans have rates that are 132% higher, for the risk of hunger, 188% higher, and hunger, 177% higher. Similarly, Hispanics (who can be of any racial category) have food insecurity rates which are substantially higher than non-Hispanics. For threat of hunger Hispanics have rates that are 131% higher, for the risk of hunger, 141% higher, and hunger, 156% higher. Although the threat of hunger in 2010 is significantly higher by about 1.5 percentage points for seniors in nometro areas, rates of hunger risk and of facing hunger are not statistically different for the other categories.

**Table 1.** The Extent of Senior Hunger in 2010

	Threat of	Risk of	Facing Hunger
	hunger	Hunger	
Overall	14.85%	8.00%	2.77%
By Income			
Below the Poverty Line	47.06	28.27	9.88
Between 100% and 200% of the Poverty Line	30.77	16.08	5.47
Above 200% of the Poverty Line	6.97	3.44	1.13
Income Not Reported	9.88	5.40	2.02
By Race			
White	13.39	6.94	2.41
Black	27.01	17.27	5.62
Other	16.38	8.51	3.55
By Ethnicity			
Non-Hispanic	13.52	7.24	2.48
Hispanic	31.17	17.38	6.34
By Marital Status			
Married	10.60	5.26	1.72
Widowed	18.83	9.85	3.37
Divorced or Separated	25.41	15.65	6.10
Never Married	19.43	11.94	3.77
By Metropolitan Location			
Non-Metro	15.96	7.66	2.68
Metro	14.58	8.08	2.80
By Age			
60-64	17.58	10.02	3.88
65-69	15.15	8.43	3.12
70-74	15.05	8.38	2.70
75-79	12.51	6.10	1.60
80 and older	11.39	5.10	1.41
By Employment Status			
Employed	10.89	5.55	1.87
Unemployed	30.52	17.54	6.37
Retired	12.46	6.32	2.07
Disabled	38.47	24.04	9.22
By Gender			
Male	13.15	7.18	2.84
Female	16.22	8.67	2.72
By Grandchild Present			
No Grandchild Present	13.99	7.50	2.70
Grandchildren Present	30.86	17.44	4.24

Source: Authors' calculations. The numbers in the table show the rates of food insecurity for various groups. Food insecurity among divorced or separated seniors is two to three times greater than married seniors, and younger seniors, especially those under 75, are at heightened risk in comparison to those over age 75. Likewise, the threat and risk of hunger is 3-4 times higher among the disabled than the retired, and if a grandchild is present, the prospects for being food insecure greatly exceed those households with no grandchild present.

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

As seen in Table 2, the majority of seniors in any food insecurity category have incomes above the poverty line. For example, out of those reporting income, 68.31% of seniors at risk of hunger have incomes above the poverty line. A similar story holds for race – while African-Americans are at greater risk of hunger than whites, about 3 in 4 food insecure seniors are white. As discussed above, there is a decline in food insecurity rates for older seniors. It still remains, however, that 13.80% of seniors facing the threat of hunger are over age 80 and for the risk of hunger and facing hunger, the figures are 11.47% and 9.17%.

**Table 2.** The Distribution of Senior Hunger in 2010

	Threat of	Risk of	Facing Hunger
	hunger	Hunger	
By Income			
Below the Poverty Line	22.86%	25.48%	25.68%
Between 100% and 200% of the Poverty Line	36.08	34.99	34.35
Above 200% of the Poverty Line	21.74	19.94	18.81
Income Not Reported	19.32	19.59	21.16
By Race			
White	76.96	73.94	74.10
Black	17.32	20.54	19.27
Other	5.72	5.52	6.63
By Ethnicity			
Non-Hispanic	84.16	83.62	82.77
Hispanic	15.84	16.38	17.23
By Marital Status			
Married	42.56	39.16	36.90
Widowed	27.77	26.95	26.57
Divorced or Separated	23.14	26.45	29.74
Never Married	6.53	7.44	6.79
By Metropolitan Location			
Non-Metro	21.10	18.78	18.95
Metro	78.90	81.22	81.05
By Age			
60-64	36.16	38.25	42.76
65-69	22.14	22.87	24.37
70-74	16.75	17.31	16.06
75-79	11.15	10.09	7.64
80 and older	13.80	11.47	9.17
By Employment Status			
Employed	19.55	18.50	18.01
Unemployed	4.15	4.42	4.64
Retired	51.99	48.89	46.16
Disabled	24.31	28.19	31.19
By Gender			
Male	39.60	40.11	45.76
Female	60.40	59.89	54.24
By Grandchild Present			
No Grandchild Present	89.53	89.02	92.31
Grandchildren Present	10.47	10.98	7.69

Source: Authors' calculations. The numbers in the table sum to 100 percent within each subcategory.

In Table 3 we present state level estimates of senior hunger for 2010. The range for the threat of hunger spans from 5.52% in North Dakota to 21.53% in Mississippi; the risk of hunger

**Table 3.** State-Level Estimates of Senior Hunger in 2010

Table 3	State-Level I			21 111 2010			
	Threat of	Risk of	Facing		Threat of	Risk of	Facing
_	Hunger	Hunger	Hunger		Hunger	Hunger	Hunger
AL	17.29	9.82	3.11	MT	13.21	6.47	1.98
AK	16.02	7.95	1.82	NE	7.65	3.26	1.32
AZ	12.81	5.87	2.68	NV	16.50	9.06	1.89
AR	19.42	12.66	3.56	NH	9.18	4.19	1.50
CA	16.48	8.90	2.99	NJ	12.31	6.68	2.95
CO	11.48	5.89	1.71	NM	21.24	9.96	4.24
CT	10.63	5.86	2.09	NY	13.79	7.23	2.42
DE	8.93	4.59	1.48	NC	15.66	8.30	2.05
DC	14.70	8.28	0.94	ND	5.52	2.33	0.59
FL	16.64	9.36	3.75	OH	15.78	7.72	2.79
GA	17.12	8.05	2.85	OK	15.97	7.37	4.17
HI	15.90	7.37	2.56	OR	12.49	5.67	2.69
ID	8.09	3.98	0.55	PA	14.80	8.18	2.92
IL	12.47	7.11	1.69	RI	15.28	8.30	3.54
IN	10.14	4.66	1.03	SC	17.10	9.48	2.21
IA	11.20	5.61	2.53	SD	11.05	5.69	1.83
KS	12.77	6.19	2.05	TN	17.57	10.85	3.29
KY	15.30	6.54	2.17	TX	18.14	10.62	4.23
LA	13.95	7.05	1.74	UT	14.22	6.14	2.08
ME	12.16	5.57	1.71	VT	11.60	4.53	1.76
MD	12.85	5.94	2.66	VA	9.27	4.91	2.34
MA	10.52	6.15	1.45	WA	14.27	8.27	3.21
MI	14.36	7.08	2.65	WV	15.35	8.25	2.94
MN	7.41	3.47	1.59	WI	10.60	5.37	1.80
MS	21.53	12.03	6.14	WY	12.82	7.46	2.69
MO	15.51	9.92	4.01				

Source: Authors' calculations. The numbers are two-year averages found by summing the number of food insecure seniors in each category by state across the 2009-2010 December Current Population Surveys and dividing by the corresponding total number of seniors in each state across the two years.

spans from 2.33% in North Dakota to 12.66% in Arizona; and the rate of those facing hunger spans from 0.55% in Idaho to 6.14% in Mississippi. In Table 4 we highlight the ten states with

the highest rates of senior hunger in 2010. With the lone exceptions of Rhode Island and Washington in the facing hunger category, seniors living in states located in the south and southwest face the greatest unmet food need in 2010.

**Table 4.** Top Ten States in Terms of Senior Hunger in 2010

Threat of	Hunger	Risk o	of Hunger	Facing	g Hunger
MS	21.53	AR	12.66	MS	6.14
NM	21.24	MS	12.03	NM	4.24
AR	19.42	TN	10.85	TX	4.23
TX	18.14	TX	10.62	OK	4.17
TN	17.57	NM	9.96	МО	4.01
AL	17.29	MO	9.92	FL	3.75
GA	17.12	AL	9.82	AR	3.56
SC	17.10	SC	9.48	RI	3.54
FL	16.64	FL	9.36	TN	3.29
NV	16.50	NV	9.06	WA	3.21

#### II. FOOD INSECURITY OVER TIME

To help place the 2010 estimates into perspective, we now examine trends in food insecurity over the past decade. We describe the trends for the full population of seniors along with select subgroups of seniors. In Figure 1 we display results for the full population in terms of the proportion (left-hand axis) and number (right-hand axis) of households in millions within each of our food insecurity categories. As seen there, across all categories there was substantial increase in food insecurity since the start of the recession in 2007. Indeed the fraction of seniors under the threat of hunger or at risk of hunger, increased by one-quarter from 2007-2010. And reflecting the fact that an increasing number of the U.S. population is over age 60, the numbers of seniors threatened or at risk of hunger has increased by over one-third since 2007.

In a striking difference from the total population, between 2009 and 2010, the percentage

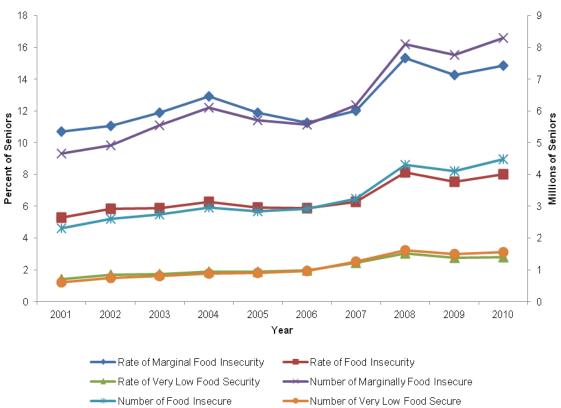


Figure 1. Trends in Food Insecurity among Senior Americans

of seniors threatened by or at risk of hunger increased by a statistically significant amount—from 14.26% to 14.85% (p=0.062) and 7.56% to 8.00% (p=0.056), respectively. (Those facing hunger also increased albeit this increase was not statistically significant at usual confidence levels.) Table 1A of Coleman-Jensen, et al. (2011) shows an actual decline in the risk of hunger (i.e. food insecurity) from 16.6% to 16.1%, and a decline in very low food security from 5.9% to 5.3%, for the U.S. population overall. <sup>2</sup> This suggests that the Great Recession had more enduring effects with respect to food insecurity for older Americans than for the general population. For the decade as a whole, there was a 39% increase in the fraction under the threat of hunger, a 52% increase at risk of hunger, and a 97% increase facing hunger. In terms of the numbers of seniors affected, the corresponding increases are 78%, 95%, and 152%.

In Table 5 we take a deeper look into underlying changes in the composition of seniors facing food insecurity from 2009 to 2010. The table presents percentage point changes in each

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<sup>&</sup>lt;sup>2</sup> For the general population, the decline in food insecurity was not statistically significant but the decline in very low food security was statistically significant.

of the three categories of food insecurity by the same set of socioeconomic characteristics in Table 1. In the first row, the results for the full population of seniors are reported and, as discussed above, the increases in food insecurity rates from 2009 to 2010 are evident there. As seen in the subsequent rows, the statistically significant increases in the threat of hunger and the risk of hunger are not shared equally by the different categories. For the threat of hunger, we see that the increases were primarily among near-poor seniors with income between one and two

**Table 5.** Changes in the Composition of Senior Hunger from 2009 to 2010

Table 3. Changes in the Composition of Scine	Threat of	Risk of	Facing Hunger
	hunger	Hunger	
Overall	0.58*	0.44*	0.04
By Income			
Below the Poverty Line	0.49	-0.65	-2.82***
Between 100% and 200% of the Poverty Line	2.42***	1.68**	0.83**
Above 200% of the Poverty Line	0.35	0.34*	0.18*
Income Not Reported	0.60	0.59	0.25
By Race and Ethnicity			
White	1.17***	0.62***	0.07
Black	-2.90*	-0.35	-0.70
Other	-3.67**	-1.50	0.69
By Ethnicity			
Non-Hispanic	0.52*	0.47**	-0.03
Hispanic	1.23	0.10	0.81
By Marital Status			
Married	0.02	0.32	0.33
Widowed	1.84***	0.75	-0.21
Divorced or Separated	0.04	-0.60	-1.41***
Never Married	1.15	1.82	0.75
By Metropolitan Location			
Non-Metro	1.56***	0.10	0.25
Metro	0.35	0.52**	-0.01
By Age			
60-64	0.24	0.37	-0.14
65-69	1.02	0.82*	0.56*
70-74	0.16	0.52	0.37
75-79	0.59	-0.21	-0.52
80 and older	0.83	0.38	-0.27
By Employment Status			
Employed	0.02	-0.03	-0.19
Unemployed	0.41	0.49	-1.63
Retired	0.82**	0.45*	0.14
Disabled	1.50	2.22*	0.60
By Gender			
Male	0.34	0.49	0.52**
Female	0.78*	0.41	-0.35*
By Grandchild Present			
No Grandchild Present	0.81***	0.56***	0.08
Grandchildren Present	-4.95***	-2.55	-0.96

Source: Authors' calculations. The numbers in the table reflect percentage point changes from 2009-2010. The asterisks denote statistical significance at the following levels: \*\*\* p<0.01; \*\* p<0.05; \* p<0.1

times the poverty line, by whites, by widows, by non-metro residents, by the retired, by women, and among households with no grandchildren present. In contrast there were statistically significant declines in the threat of hunger among African Americans and other races, and among households with grandchildren present. For the risk of hunger, the patterns are slightly different with statistically significant increases from 2009 to 2010 for those with incomes above the poverty line, whites, those in metro areas, those between the ages of 65 and 69, the retired, persons with disabilities, and households with no grandchildren present. The third column helps understand why the percent of those facing hunger did not change between 2009 and 2010 because there were several subgroups that increased while others decreases, leaving the overall level unchanged.

In the next set of figures we examine trends in food insecurity over the past decade 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 general, there were not important differences in food insecurity rates between seniors living in metro and non-metro areas.

Percent of Seniors Year Metro Threat of Hunger Nonmetro Threat of Hunger ——Metro Risk of Hunger Nonmetro Risk of Hunger Metro Facing Hunger Nonmetro Facing Hunger

Figure 2. Trends in Food Insecurity among Senior Americans by Metropolitan Status

Figure 3a depicts trends in the threat of hunger across difference races, while 3b and 3c present similar trends for those at risk of hunger and for those facing hunger. As discussed above, the rates of food insecurity are substantially higher among blacks than whites. These figures reveal that these differences were present in each year from 2001 to 2010. In addition, for all years for the threat of hunger and the risk of hunger and all years except one for facing hunger, seniors of other races have higher rates of food insecurity than whites.<sup>3</sup> While the rates of food insecurity are higher for other groups, the growth in food insecurity among seniors after the Great Recession has primarily been pushed upward by white seniors.

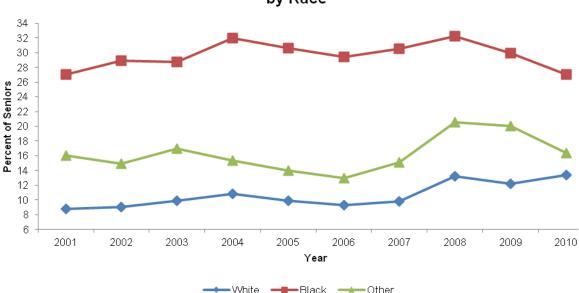


Figure 3a. Trends in Threat of Hunger among Senior Americans, by Race

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<sup>&</sup>lt;sup>3</sup> This category includes those American Indians, Asians, and Pacific Islanders.

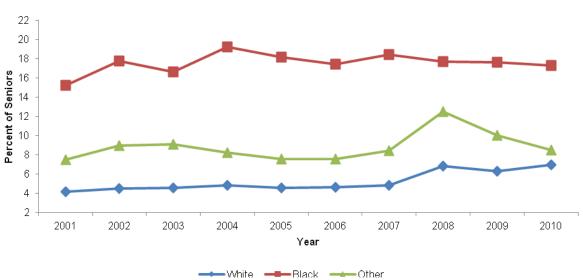
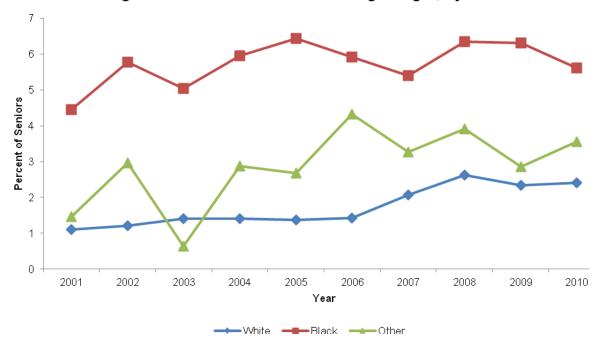


Figure 3b. Trends in Risk of Hunger among Senior Americans, by Race

Figure 3c. Trends in Seniors Facing Hunger, by Race



In Figures 4a-4c we present trends based on Hispanic ethnicity. In most years Hispanics face rates of food insecurity 2-3 times higher than non-Hispanics. Along with having higher rates than non-Hispanics, the patterns over time have differed for this group. In particular, unlike non-Hispanics, Hispanics saw declines in food insecurity after the sharp increase in 2008.

Figure 4a. Trends in Threat of Hunger among Senior Americans, by Hispanic Ethnicity

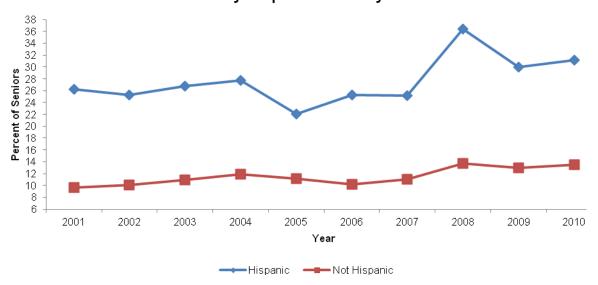
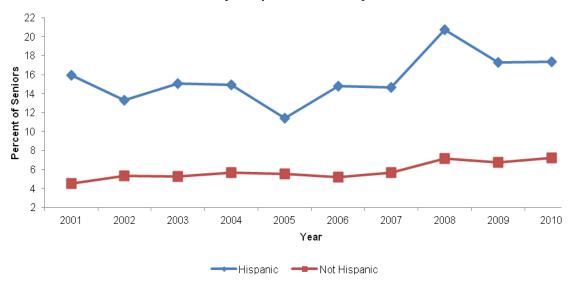


Figure 4b. Trends in Risk of Hunger among Senior Americans, by Hispanic Ethnicity



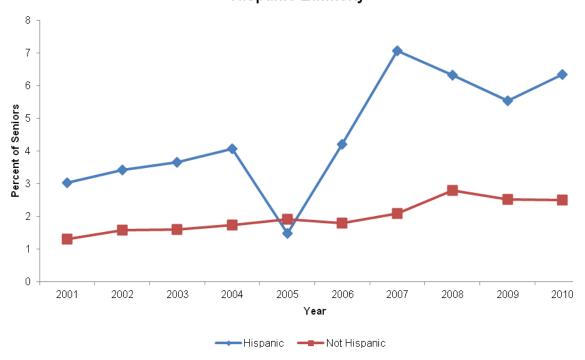


Figure 4c. Trends in Senior Americans Facing Hunger, by Hispanic Ethnicity

Figures 5a-5c present a parallel set of charts for seniors of three broad age groups—60-69 years old, 70-79 years old, and age 80 and older. As seen in Figure 5a, there were sharp increases in the threat of hunger from 2007 to 2008 across all three age groups and these rates remain, in 2010, substantially above those found in 2007. In Figures 5b and 5c, for the risk of hunger and facing hunger, the pattern is similar to Figure 5a for seniors between 60 and 69 and over 80. However, for those between 70 and 79, there was a steady increase beginning in 2005 rather than a sharp upturn in 2008.

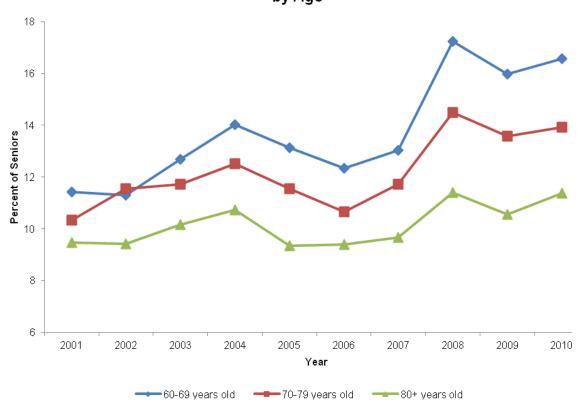


Figure 5a. Trends in Threat of Hunger among Senior Americans, by Age

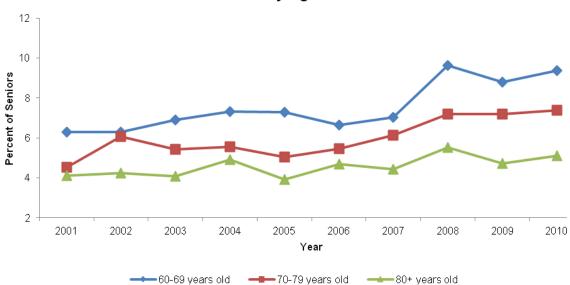
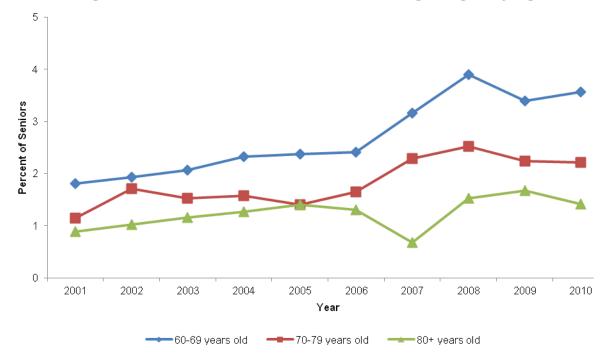


Figure 5b. Trends in Risk of Hunger among Senior Americans, by Age





#### III. CONCLUSION

This report demonstrates that the threat of hunger and the risk of hunger among seniors in America is a growing crisis facing the nation. Many in the policy community were alarmed when we released our initial study that showed that as of 2005 1 in 9 seniors faced the threat of

hunger (Ziliak, et al. 2008). In the aftermath of the Great Recession, as of 2010, over 1 in 7 seniors faced the threat. Given the compelling evidence that food insecurity is associated with a host of poor nutrition and health outcomes among seniors, this report implies that the recent increase in senior hunger will likely lead to additional public health challenges for our country. This suggests that a potential avenue to stem the growth of health care expenditures on older Americans is to ameliorate the problem of food insecurity.

#### DATA APPEXDIX

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. Given the rotating sequence of participation in the CPS, upwards of 50 percent of the sample is observed in two consecutive years. In past reports (e.g. Ziliak, Gundersen, and Haist 2008; Ziliak and Gundersen 2009, 2011) we have only utilized information from the second interview because many of our analyses involved pooling observations across many years and we did not want to use repeat households. For this report, however, our focus is on representative cross sections and thus we use the entire sample for each wave (whether the person is a first interview or a second interview). Because our focus is on hunger among seniors, our CPS sample is of persons age 60 and older. In 2010 this results in 21,675 sample observations. Appendix Table 2 presents selected summary statistics for the CPS sample.

**Appendix Table 1:** Ouestions 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 <b>often</b> , <b>sometimes</b> , or never true for you in the last 12 months?	x	х
2. "The food that we bought just didn't last and we didn't have money to get more." Was that <b>often, sometimes</b> , or never true for you in the last 12 months?	X	X
3. "We couldn't afford to eat balanced meals." Was that <b>often</b> , <b>sometimes</b> , 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 <b>often</b> , <b>sometimes</b> , 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? ( <b>Yes/No</b> )	X	X
6. "We couldn't feed our children a balanced meal, because we couldn't afford that." Was that <b>often, sometimes</b> , 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? ( <b>Yes/No</b> )	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 <b>often, sometimes</b> , 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	X	
children's meals because there wasn't enough money for food?		
(Yes/No)		
13. In the last 12 months did you or other adults in your household	X	X
ever not eat for a whole day because there wasn't enough money		
for food? (Yes/No)		
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	X	X
<b>month, some months but not every month</b> , or in only 1 or 2 months?		
16. In the last 12 months, did any of the children ever skip a meal	X	
because there wasn't enough money for food? (Yes/No)		
17. (If yes to Question 16) How often did this happen—almost every	X	
<b>month, some months but not every month</b> , or in only 1 or 2 months?		
18. In the last 12 months did any of the children ever not eat for a	X	
whole day because there wasn't enough money for food?		
(Yes/No)		

Appendix Table 2: Selected Characteristics of Senior Americans Age 60 and older in 2010

	Percent
Income Categories	
Below 50% of the Poverty Line	1.62
Between 50% and 100% of the Poverty Line	5.59
Between 100% and 200% of the Poverty Line	17.41
Above 200% of the Poverty Line	46.34
Missing Income	29.04
Racial Categories	
White	85.3
African American	9.52
Other	5.18
Hispanic Ethnicity	7.54
Marital Status	
Married	59.59
Widowed	21.9
Divorced or Separated	13.52
Never Married	4.99
Homeowner	83.54
Non-Metro	19.63
Region	
Northeast	19.84
Midwest	21.74
South	36.58
West	21.85

Age	
60 to 64	30.55
65 to 69	21.7
70 to 74	16.53
75 to 79	13.23
80 and older	18
Employment Status	
Employed	26.66
Unemployed	2.02
Retired	61.94
Disabled	9.38
Education Level	
Less Than High School	17.07
High School Diploma	34.66
Some College	22.59
College Degree	25.68
Food Stamp Recipient	5.16
Grandchild or Parent Present	
No Grandchild and Parent Present	94.96
Grandchild and Parent Present	3.33
Grandchild Present	1.7
Female	55.3
Living Alone	26.25

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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 (2011).

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