Fact Sheet

Older Consumers: Especially Vulnerable to Utility Price Increases

William Shiflett* and Lori A. Trawinski
AARP Public Policy Institute

In 2015, an estimated 3.3 million households could not afford to heat their homes with heating fuel, electricity, or natural gas, and as a result they had their fuel deliveries discontinued or their natural gas or electricity disconnected. Approximately 1.6 million of these households were headed by someone ages 50 or older.[1]

Home heating is vital for the health of people of all ages, particularly for older adults. The National Institutes of Health recommend indoor temperatures of at least 68 degrees for people ages 65+ during winter months.[2] Because older people are more vulnerable to hypothermia than younger ones,[3] unaffordable heating costs pose a particular health risk to older populations. Colder temperatures, expensive heating fuel and electricity, and decreases in funding for heating assistance amplify this health risk.[4]

EXHIBIT 1
Households That Could Not Afford Heat in 2015

Source: AARP Public Policy Institute tabulation of the Energy Information Administration's 2015 Residential Energy Consumption Survey data.

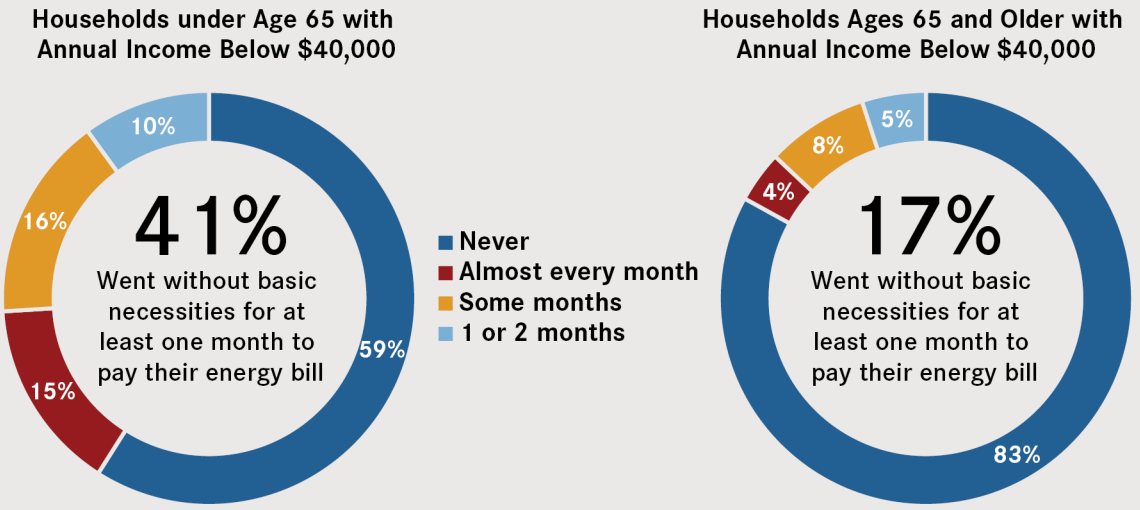
SURVEY QUESTION: In the last year, was there ever a time your household was unable to use your main source of heat because you couldn't pay for electricity and it was disconnected, or you couldn't pay for natural gas and it was disconnected, or you ran out of fuel oil, propane, kerosene, or wood because you couldn't afford a delivery?

* Formerly of AARP Public Policy Institute.

AARP® Real Possibilities

EXHIBIT 2

Comparison of Households That Reduced or Went Without Necessities to Pay Energy Bills



Source: AARP Public Policy Institute tabulation of EIA's 2015 Residential Energy Consumption Survey data.

SURVEY QUESTION: In the last year, how many months did your household reduce or forego expenses for basic household necessities, such as medicine or food, in order to pay an energy bill?

Households that had trouble paying their energy bills may have reduced the use of or foregone basic necessities like medicine or food in order to make ends meet. An estimated 25.4 million households—just under 22 percent of all households—did so for at least one month in 2015.[5] For low-income households (less than $40,000 in annual income) ages 65+, about 17 percent (around 2.6 million households) reduced the use of or went without basic necessities for at least one month, while 41 percent (about 14.2 million households) of low-income households younger than 65 did the same.

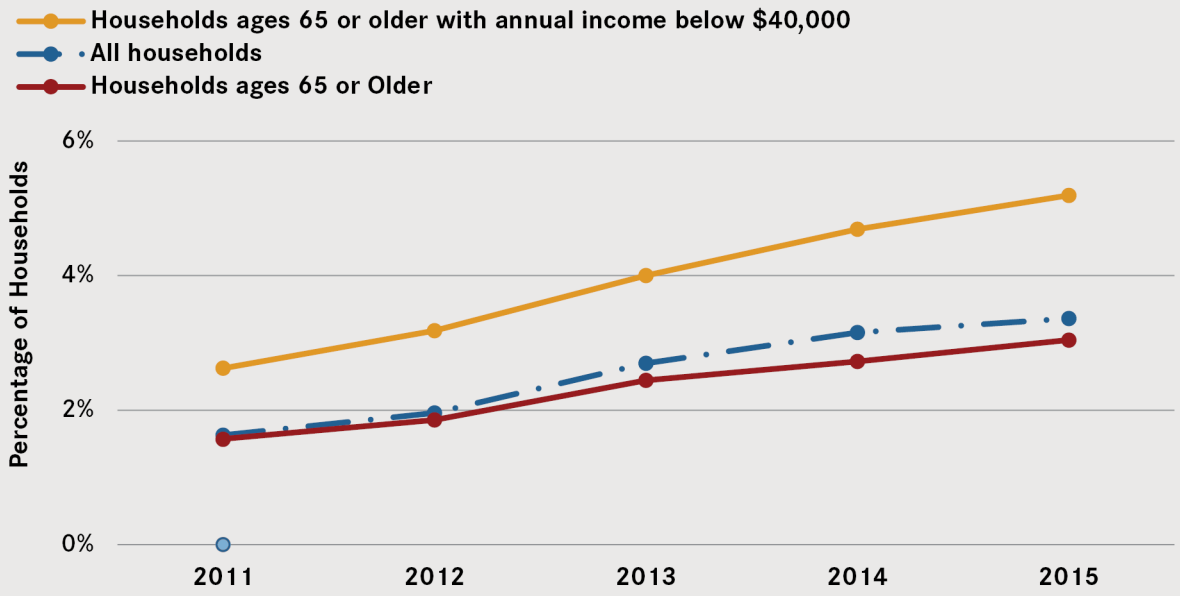
Available Assistance

Energy assistance can help offset the cost of heating and cooling for those least able to afford it. An estimated 7.3 million households reported having participated in home energy assistance programs that helped pay energy bills or fix broken equipment at some point in their household's history. In 2015, around 2.7 million households received energy assistance following a disconnect notice in the previous year, while approximately 876,000 received assistance to restore heating after it had been shut off.

Households ages 65 or older with income less than $40,000 per year consistently received energy assistance at rates above the general population for the years 2011 through 2015. This may be because older households usually receive higher priority for energy subsidy programs like the Low Income Home Energy Assistance Program (LIHEAP).[6]

LIHEAP is intended to assist the most vulnerable populations, including low-income households, the elderly, and people with disabilities. Eligibility is limited to households with incomes below 150 percent of the federal poverty guideline or 60 percent of a state's median income.[7] Recipients can use the funds to cover energy costs, weatherize, or otherwise repair their homes. The congressionally appropriated funds go to states, territories, and tribal governments, which distribute them (they are given some implementation latitude) and may also add to them. Each state determines how to allocate the funds, and most states give priority to households age 60 and older. But being eligible for LIHEAP does not guarantee that funds will be available. The program's key limitation is that disbursements are typically issued on a first come, first served basis, until funds run out.

EXHIBIT 3
Percentage of Households Receiving Any Energy Assistance by Year



Source: AARP Public Policy Institute tabulation of EIA's 2015 Residential Energy Consumption Survey data.

SURVEY QUESTION: In which of the following years did your household receive home energy assistance?

Heating Fuel Usage of Households Ages 65+

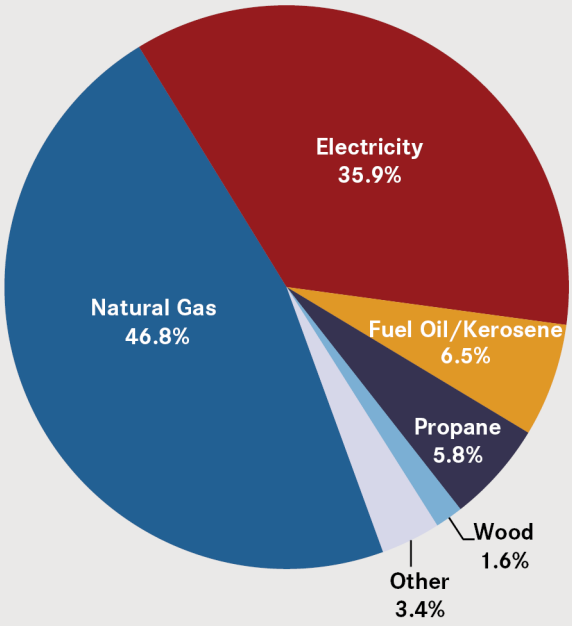
About 82.7 percent of American households ages 65 and older use natural gas or electricity as their main space heating fuel, with around 17.3 percent using fuel oil, propane, wood, or some other fuel.[8] A central furnace fueled by natural gas is the most popular way to heat a home in all climates except for hot and humid ones in the south of the country, where electric furnaces were more common.[9]

Fuel Usage Varies by Geography

There were approximately 118.2 million housing units occupied as a primary residence in the United States[10] in 2015, and an estimated 29.8 million of those included a person age 65 or older.

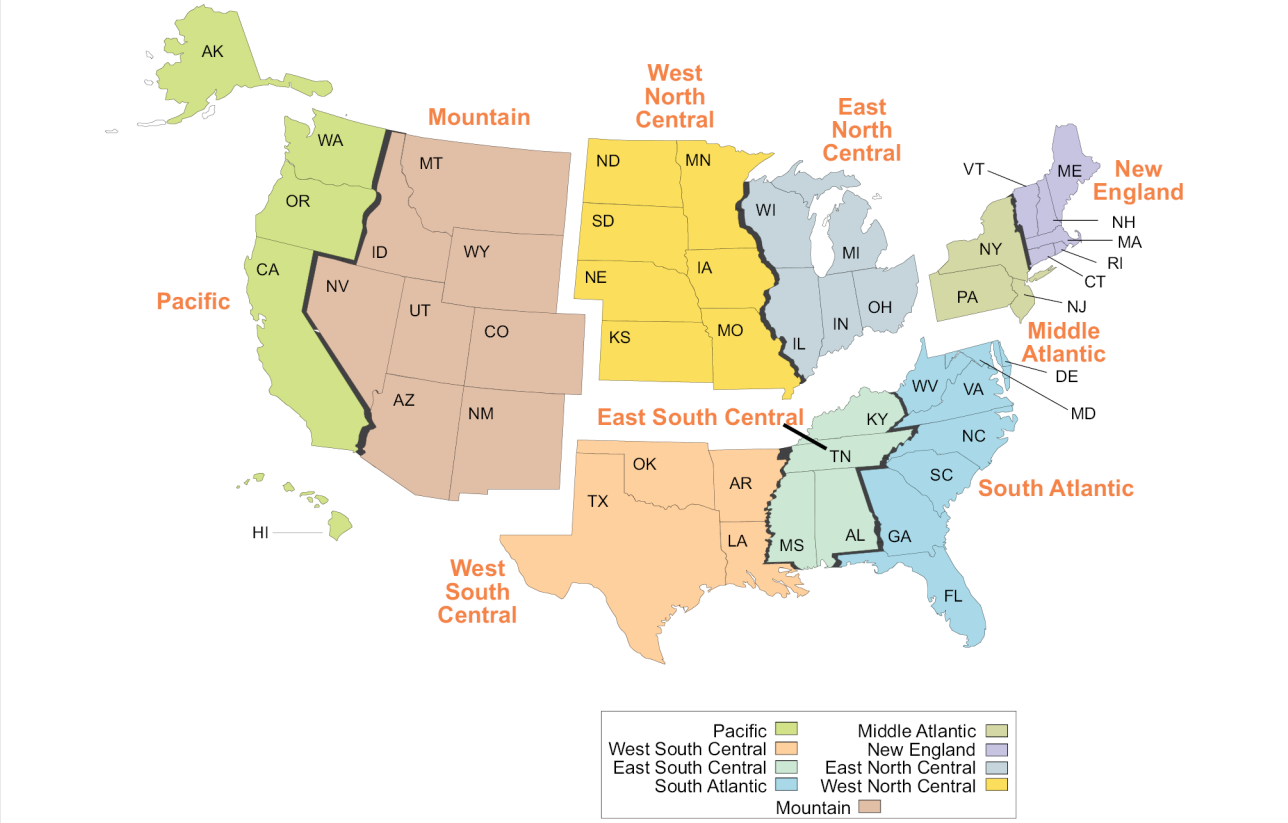
The availability of heating fuels is not uniform across the country, so most American consumers do not choose how they heat their homes. This limited choice is associated with the availability of certain fuels in particular census divisions, most notably fuel oil in New England, natural gas in the North, and electricity in the South. This suggests that geography is strongly associated with the fuel

EXHIBIT 4
Main Heating Fuels Used by Households Ages 65+



Source: AARP Public Policy Institute tabulation of EIA's 2015 Residential Energy Consumption Survey data.

EXHIBIT 5
United States Census Divisions



Source: U.S. Energy Information Administration, Office of Energy Analysis

Note: The Residential Energy Consumption Survey splits the Mountain division into Mountain North (Montana, Idaho, Wyoming, Utah, and Colorado) and Mountain South (Nevada, Arizona, and New Mexico).

a household uses. Thus, it follows that changes to costs of a given heating fuel can affect certain parts of the country differently than others.

Natural gas: For households ages 65 and older, natural gas is the most common home heating fuel by a wide margin, with an estimated 14 million households (or 46.8 percent) using it. The East North Central census division has the most concentrated usage of natural gas at 3.2 million households (or 74.5 percent).

Fuel oil: Fuel oil predominates in New England, where an estimated 40.7 percent of households ages 65 or older use it to heat their homes. The Middle Atlantic, which includes New Jersey, New York, and Pennsylvania, has an estimated 789,000 households (or 21.8 percent) that use fuel oil. Either region is much more likely to use fuel oil for space heating than the rest of the country combined. The Middle Atlantic region is more than three times more likely to use fuel oil than the South Atlantic region, which is the next most frequent user.

Electricity: Around 10.7 million US households ages 65 or older (or 35.9 percent) use electricity as their primary heating fuel. The South Atlantic region had the highest concentration of households using electricity to heat their homes, 63.1 percent or about 3.8 million households, followed by West South Central (51 percent or about 1.7 million households), Mountain South (50.5 percent or about 782,000 households), and East South Central (48.1 percent or about 925,000 households). Households in the southern divisions use electricity more frequently than the northern ones.

EXHIBIT 6

2015 Heating Fuel Type by Census Division: Households with Respondent Ages 65+
(Thousands of Households, Rounded to Nearest Thousand)

Census Region	Natural Gas		Propane		Fuel		Electricity		Wood		Total
	HH	%	HH	%	HH	%	HH	%	HH	%	HH
New England	532	32.4	108	6.6	669*	40.7*	302	18.4	20	1.2	1,645
Middle Atlantic	1,908*	52.8*	147	4.1	789	21.8	590	16.3	77	2.1	3,612
East North Central	3,189*	74.5*	343	8.0	71	1.6	588	13.7	89	2.1	4,280
West North Central	1,317*	60.1*	249	11.4	11	0.5	595	27.2	17	0.8	2,190
South Atlantic	1,178	19.4	184	3.0	353	5.8	3,834*	63.1*	61	1.0	6,077
East South Central	755	39.2	198	10.3	18	0.9	925*	48.1*	18	0.9	1,924
West South Central	1,388	40.8	187	5.5	0	0.0	1,737*	51.0*	50	1.5	3,404
Mountain North	749*	72.3*	90	8.7	0	0.0	161	15.5	36	3.4	1,035
Mountain South	708	45.8	33	2.1	0	0.0	782*	50.5*	25	1.6	1,547
Pacific	2,213*	54.6*	173	4.3	34	0.8	1,161	28.7	94	2.3	4,049
Total	13,937*	46.8*	1,712	5.8	1,944	6.5	10,677	35.9	486	1.6	29,763

Source: AARP Public Policy Institute tabulation of EIA's 2015 Residential Energy Consumption Survey data.

Note: Percentages may not sum to 100 percent due rounding.

** Indicates the most frequently used heating fuel for a census division.*

Heating Fuel Usage for Very Low-Income** Households Ages 65 and Older by Race/ Ethnicity

The heating fuel types used by very low-income households ages 65 and older do not vary much with those of the population at large. An estimated 6.1 million White, African American, and Hispanic or Latino households ages 65 and older had incomes less than $20,000 annually.[11] Electricity was the most common heating fuel type used across all racial and ethnic groups. Natural gas was the second most frequently used heating fuel for White and African American households, while fuel oil was the second most frequently used heating fuel for Hispanic or Latino households.

EXHIBIT 7

2015 Heating Fuel Type by Race and Ethnicity: Households Ages 65+ with Annual Income Less than $20,000 *(Thousands of Households, Rounded to Nearest Thousand)*

Race	Natural Gas		Propane		Fuel		Electricity		Wood		TOTAL
	HH	%	HH	%	HH	%	HH	%	HH	%	HH
White, non-Hispanic	1,687	38.4	169	3.9	331	7.5	2,064*	47.0*	38	0.9	4,392
African American, non-Hispanic	264	34.1	52	6.7	0	0.0	440*	56.8*	8	1.0	774
Hispanic or Latino	144	15.2	32	4.0	158	16.7	511*	54.0*	0	0.0	946
Total	2,095	34.3	253	4.2	489	8.0	3,015*	49.3*	46	0.7	6,112

Source: AARP Public Policy Institute tabulation of EIA's 2015 Residential Energy Consumption Survey data.

Note: Percentages may not sum to 100 percent due to omission of "Not Applicable" and "Some Other Fuel" responses.

** Indicates the most frequently used heating fuel by race/ethnicity.*

** *Very-low income* is defined as less than $20,000 in annual income.

Conclusion

Older consumers are exceptionally vulnerable to cold weather, and many of them have difficulty heating their homes during winter months. This difficulty is evident in the increasing use of energy assistance programs by households ages 65 and older. The percentage of these households receiving any kind of energy assistance during winter months doubled from 2.6 percent 2011 to 5.2 in 2015. An increase this large suggests unmet demand for heating assistance exists, demand which will continue to increase as household budgets become tighter, energy for heating fuel becomes more expensive, and if winters become colder.

---

1 These figures come from the Energy Information Administration's 2015 Residential Energy Consumption Survey. They refer to households with functional heating equipment. Since some homes do not have functional heating equipment, the number of households unable to use their main source of heat in 2015 may be higher.

2 National Institutes of Health, *Hypothermia and Older Adults* (Bethesda, Maryland: National Institutes of Health, January 2016), https://www.nih.gov/news-events/news-releases/hypothermia-older-adults-0.

3 This vulnerability may be due to "underlying medical conditions such as diabetes, some medicines including over-the-counter cold remedies, and aging itself," according to the National Institutes of Health, *Hypothermia and Older Adults* (Bethesda, Maryland: National Institutes of Health, January 2016), https://www.nih.gov/news-events/news-releases/hypothermia-older-adults-0.

4 U.S. Energy Information Administration, *Winter Fuels Outlook* (Washington, D.C.: U.S. Energy Information Administration, October 2017), https://www.eia.gov/outlooks/steo/report/winterfuels.php.

5 The Residential Energy Consumption Survey uses the primary residence as its unit of measurement. A primary residence is one that a survey respondent lives in, as opposed to a property they own and rent out.

6 "While [LIHEAP] is not specifically designed for seniors, it does help those over the age of 60 disproportionately, as seniors receive priority in situations with limited funding," according to the American Elder Care Research Organization, *Low Income Home Energy Assistance Program (LIHEAP)* (Reno, NV: The American Elder Care Research Organization, June 2018), https://www.payingforseniorcare.com/longtermcare/resources/liheap_financial_aid.html.

7 The Department of Health and Human Services' poverty guideline for a two-person household was $16,460 as of January 13, 2018 according to The U.S. Department of Health and Human Services, *U.S. Federal Poverty Guidelines* (Washington, D.C.: U.S. Department of Health and Human Services, January 2018), https://aspe.hhs.gov/poverty-guidelines.

8 We define households ages 65+ as those with a survey respondent age 65 or older. In other words, if a three-person household includes one person 65 or older and two people younger than 65, we categorize the household as 65 or older.

9 U.S. Energy Information Administration, *U.S. Households' Heating Equipment Choices Are Diverse and Vary by Climate Region* (Washington, D.C.: U.S. Energy Information Administration, April 2017), https://www.eia.gov/todayinenergy/detail.php?id=30672.

10 U.S. Energy Information Administration, *About the RECS* (Washington, D.C.: U.S. Energy Information Administration), https://www.eia.gov/consumption/residential/about.php.

11 Small sample sizes do not permit reliable comparisons for low-income households by race/ethnicity across census divisions. However, when considering the lowest-income households ages 65+ in aggregate, the most frequently used method for space heating was electricity across all races/ethnicities. The lowest income bracket available in the Residential Energy Consumption Survey is less than $20,000.

Fact Sheet 644, September 2018

601 E Street, NW
Washington DC 20049

Follow us on Twitter @AARPpolicy
on facebook.com/AARPpolicy
www.aarp.org/ppi

For more reports from the Public Policy Institute, visit http://www.aarp.org/ppi/.

AARP® Real Possibilities