

**NATIONAL ENERGY ASSISTANCE
DIRECTORS' ASSOCIATION**

**2011 NATIONAL ENERGY ASSISTANCE SURVEY
FINAL REPORT**

November 2011

The National Energy Assistance Directors' Association

The National Energy Assistance Directors' Association (NEADA) represents the state directors of the Low Income Home Energy Assistance Program (LIHEAP). NEADA is a nonprofit educational and policy organization based in Washington, DC. Its mission is to support the delivery of LIHEAP services by state agencies and programs.

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California	Iowa	Montana	New York
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Executive Summary

The National Energy Assistance Directors' Association (NEADA), representing the state LIHEAP directors, received a grant through the Administration for Children and Families (ACF), U.S. Department of Health and Human Services to update the information about LIHEAP-recipient households that was collected in the 2003, 2005, 2008 and 2009 NEA Surveys. This survey documented changes in the affordability of energy bills, the need for LIHEAP, and the choices that low-income households make when faced with unaffordable energy bills.

The 2011 Survey included 13 states with an oversample in Connecticut, as in the 2009 Survey. Stratified samples of fiscal year 2011 LIHEAP recipients were chosen from each of the state LIHEAP databases. This report presents the findings from the 2011 NEA Survey and provides comparisons to the 2003, 2008, and 2009 NEA Surveys. The survey and report were prepared for NEADA by APPRISE.

During the period of study, low-income households across the country continued to face a difficult economic climate and continued to deal with high energy costs. The survey substantiated these issues – showing that 35 percent were unemployed at some point during the year and that 52 percent reported it was more difficult to pay energy bills than it was the previous year.

LIHEAP Recipient Households

The study confirmed that LIHEAP recipient households are likely to be vulnerable to temperature extremes.

- 40 percent had a senior in the household aged 60 or older.
- 42 percent had a disabled household member.
- 41 percent had a child 18 or younger.
- 89 percent had at least one vulnerable household member.

The study also provided information on challenges that these households faced.

- 35 percent were unemployed at some point during the previous year.
- 72 percent had a serious medical condition.
- 26 percent used medical equipment that requires electricity.

Energy Costs

LIHEAP recipients reported that they faced high energy costs.

- 45 percent reported that their energy bills were more than \$2,000 in the past year.
- Pre-LIHEAP energy burden averaged 16 percent and post-LIHEAP energy burden averaged 12 percent for these households, compared to 7 percent for all households in the U.S. and 4 percent for non low-income households in the U.S.¹
- 52 percent said that energy bills were more difficult to pay than in the previous year.

¹ Source: 2008 LIHEAP Notebook.

- 48 percent of those who said that it was more difficult to pay their energy bills reported that the main reason was their financial situation.

LIHEAP benefits decreased due to the smaller appropriation in FY 2011. Mean heating benefits were \$424 in FY 2011, compared to \$483 in FY 2009.

Responses to High Energy Costs

Households reported that they took several actions to make ends meet.

- 39 percent closed off part of their home.
- 23 percent kept their home at a temperature that was unsafe or unhealthy.
- 21 percent left their home for part of the day.
- 33 percent used their kitchen stove or oven to provide heat.

Inability to Pay Energy Bills

Many LIHEAP recipients were unable to pay their energy bills.

- 49 percent skipped paying or paid less than their entire home energy bill.
- 37 percent received a notice or threat to disconnect or discontinue their electricity or home heating fuel.
- 11 percent had their electric or natural gas service shut off in the past year due to nonpayment.
- 24 percent were unable to use their main source of heat in the past year because their fuel was shut off, they could not pay for fuel delivery, or their heating system was broken and they could not afford to fix it.
- 17 percent were unable to use their air conditioner in the past year because their electricity was shut off or their air conditioner was broken and they could not afford to fix it.

Housing and Financial Problems

Many LIHEAP recipients had problems paying for housing in the past five years, due at least partly to their energy bills.

- 31 percent did not make their full mortgage or rent payment.
- 6 percent were evicted from their home or apartment.
- 4 percent had a foreclosure on their mortgage.
- 14 percent moved in with friends or family.
- 4 percent moved into a shelter or were homeless.
- 13 percent got a payday loan in the past five years.

Medical and Health Problems

Many of the LIHEAP recipients faced significant medical and health problems in the past five years, partly as a result of high energy costs.

- 24 percent went without food for at least one day.
- 37 percent went without medical or dental care.

- 34 percent did not fill a prescription or took less than the full dose of a prescribed medication.
- 19 percent had someone in the home become sick because the home was too cold.

The Need for LIHEAP

Households reported enormous challenges despite the fact that they received LIHEAP. However, they reported that LIHEAP was extremely important.

- 65 percent of those who did not keep their home at unsafe or unhealthy temperatures said they would have done so if LIHEAP had not been available.
- 63 percent of those who did not have their electricity or home heating fuel discontinued said that they would have if it had not been for LIHEAP.

It is clear that many of these households will continue to need LIHEAP to meet their energy and other essential needs.

I. Introduction

The National Energy Assistance Directors' Association (NEADA), representing the state LIHEAP directors, received a grant through the Administration for Children and Families (ACF), U.S. Department of Health and Human Services to update the information about LIHEAP-recipient households that was collected in the 2003, 2005, 2008, and 2009 NEA Surveys. This survey documented changes in the affordability of energy bills, the need for LIHEAP, and the choices that low-income households make when faced with unaffordable energy bills.

The 2011 NEA Survey selected a new sample of 2011 LIHEAP recipients to document changes in the need for LIHEAP and changes in the choices that low-income households make when faced with unaffordable energy bills. This report presents the findings from the 2011 NEA Survey and provides comparisons to the 2003, 2008 and 2009 NEA Surveys. The survey and report were prepared for NEADA by APPRISE.

A. *Low Income Home Energy Assistance Program (LIHEAP)*

The Low Income Home Energy Assistance Program (LIHEAP) is administered by the U.S. Department of Health and Human Services (HHS). The purpose of LIHEAP is “to assist low-income households, particularly those with the lowest incomes, that pay a high proportion of household income for home energy, primarily in meeting their immediate home energy needs.” The LIHEAP statute defines home energy as “a source of heating or cooling in residential dwellings.”²

Federal dollars for LIHEAP are allocated by the U.S. Department of Health and Human Services to the grantees (i.e., the 50 states, District of Columbia, 128 tribes and tribal organizations, and five insular areas) as a block grant. Program funds are distributed by a formula, which is weighted towards relative cold-weather conditions.

Program funds are disbursed to LIHEAP income-eligible households under programs designed by the individual grantees. Section 2605(b)(2) allows LIHEAP grantees to use two income-related standards in determining household eligibility for LIHEAP assistance:

- Categorical eligibility for households with one or more individuals receiving Temporary Assistance for Needy Families, Supplemental Security Income payments, Food Stamps, or certain needs-tested veterans' and survivors' payments, without regard for household income.

² The statutory intent of LIHEAP is to reduce home heating and cooling costs for low-income households. However, information on total residential energy costs is more accessible and more apparent to LIHEAP-recipient respondents. Moreover, any reduction in home heating and cooling costs leads to a direct reduction in total residential energy costs. Therefore, this report addresses total residential energy costs.

- Income eligibility for households with incomes that do not exceed the greater of an amount equal to 150 percent of the federal poverty level³, or an amount equal to 60 percent of the state median income. Grantees may target assistance to poorer households by setting lower income eligibility levels. Grantees are prohibited from setting income eligibility levels lower than 110 percent of the poverty level. Eligibility priority may be given to households with high energy burden or need.⁴

B. 2011 National Energy Assistance Survey

The 2011 NEA Survey aimed to update the information about LIHEAP-recipient households that was collected in the 2003, 2008, and 2009 NEA Surveys. Stratified samples of 2011 LIHEAP recipients were selected to collect new information about the consequences of high energy bills for low-income households. The 2011 National Energy Assistance Survey collected the following information from LIHEAP-recipient households:

- Demographic, energy expenditure, and income information
- Healthy home behaviors
- History of LIHEAP participation
- Constructive actions taken to meet energy expenses
- Signs of unaffordable energy bills
- Health and safety consequences of unaffordable energy bills
- Effects of unaffordable energy bills on housing
- Changes in financial situation and affordability of home energy bills
- Impact and importance of LIHEAP benefits for recipient households

The 2011 Survey included the 13 states that were included in the 2009 Survey and a larger sample of CT LIHEAP recipients, as a result of additional funding that was allocated for a special study in CT.

C. Organization of the Report

This report has six sections that follow this introduction.

- *Section II: Survey Methodology* – Presents the methodology used.
- *Section III: LIHEAP Recipients* – Presents demographic and income information for LIHEAP-recipient households that completed the 2011 NEA Survey.

³ Most states use the 150 percent of federal poverty level maximum as the guideline. 150 percent of federal poverty in FY2011 is \$16,470 for a single person and \$33,660 for a family of four. The 60 percent-of-SMI limit was raised to 75 percent of SMI for Federal Fiscal Years (FFYs) 2009 and 2010.

⁴ Description of LIHEAP information obtained from “Low Income Home Energy Assistance Program. Report to Congress for Fiscal Year 2001.” U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Division of Energy Assistance. Additional information regarding the LIHEAP program can be found on the World Wide Web at: <http://www.acf.hhs.gov/programs/liheap/>.

- *Section IV: Problems Faced in Meeting Energy Needs* – Presents information about actions that LIHEAP-recipient households take to meet their energy needs, household necessities, and health and wellness in the face of significant financial constraints.
- *Section V: The Need For LIHEAP* – Presents information about the impact and importance of LIHEAP on recipient households.
- *Section VI: Regional Analysis* – Presents analysis of the problems faced by low-income households in the Northeast, Midwest, West, and South.
- *Section VII: Conclusion* – Presents a summary of the key findings in this report.

II. Survey Methodology

This section describes the methodology for the 2011 NEA Survey, including procedures for sample selection, survey implementation, and weighting.

A. *Survey Implementation*

A survey advance letter was sent to the sample of selected LIHEAP recipients from the 13 participating states. This letter announced the survey, notified potential respondents that they might be called to participate in the survey, explained the purpose of the survey, and gave potential respondents the option to call the phone center to complete the survey at their convenience.

APPRISE retained Issues and Answers to conduct the telephone survey through its call center. A researcher from APPRISE trained Issues and Answers' employees on the survey instrument and monitored survey implementation. I&A's manager in charge of the survey instructed interviewers how to use the computerized version of the survey to record customer responses.

Interviewer training consisted of two hour-long sessions – one for English-language interviews and one for the Spanish-language interviewer. This training session provided interviewers with an overview of the project, purpose behind questions asked, and strategies to provide accurate clarification and elicit acceptable responses through neutral probing techniques.

Interviewer monitoring allowed APPRISE researchers to both listen to the way interviewers conducted surveys and see the answers they chose on the computerized data entry form. I&A's manager facilitated open communication between the monitors and interviewers, which allowed the monitors to instruct interviewers on how to implement the survey and accurately record customer responses.

Telephone interviews were conducted between May 2, 2011 and July 3, 2011. During this time period, 1,768 interviews were completed.

B. *Sample Selection and Response Rates*

LIHEAP recipients were selected from each of the 13 states chosen to participate in the survey. Because of a congressional earmark for Connecticut, a special study was conducted for Connecticut. Table II-1 details the number of LIHEAP recipients selected to complete the survey, number of completed interviews, cooperation rates, and response rates for the national sample. Table II-1 presents the following information.

- **Number selected:** Initially, approximately 220 households were selected in each state, or for each district in Connecticut. An additional sample of 180 was initially selected for New York because of lower response rates experienced for that state in previous studies.

Due to the high number of non-interviews and unusable telephone numbers, an additional sample of 40 cases were selected for California, 50 for New York, and 50 for North Carolina. In Connecticut, an additional sample of 50 was selected for Districts 1, 3 and 4, and an additional sample of 40 was selected for District 5. The final sample consisted of 4,250 cases.

- **Unusable:** There were 1,066 cases deemed unusable because no one was present in the home during the survey who was able to complete the survey, or because phone numbers were missing, unavailable, disconnected, or incorrect. These households are not included in the denominator of the response rate or the cooperation rate. They are included in the denominator of the completed interview rate.
- **Non-Interviews:** There were 128 cases classified as non-interviews because the qualified respondent refused to complete the interview, or because the respondent asked the interviewer to call back to complete the interview at a later time, but did not complete the interview during the field period. These households are included in the denominator of the cooperation rate, the response rate, and the completed interview rate.
- **Unknown eligibility:** There were 1,288 cases that were determined to have unknown eligibility to complete the interview, due to answering machines, no answers, and language barriers.⁵ These households are not included in the denominator of the cooperation rate. They are included in the denominator of the response rate and the completed interview rate.
- **Completed interviews:** The completed interviews are households that were reached and that answered the full set of survey questions by telephone. In total, 1,768 interviews were completed.
- **Cooperation rate:** The cooperation rate is the percent of eligible households contacted who completed the survey. This is calculated as the number of completed interviews divided by the interviews plus the number of non-interviews (refusals plus non-completed call backs⁶). Overall, this survey achieved a 93 percent cooperation rate.
- **Response rate:** The response rate is the number of completed interviews divided by the number of completed interviews plus the number of non-interviews (refusals plus non-completed call backs) plus all cases of unknown eligibility (due to answering machines and language barriers). This survey attained a 56 percent response rate.

⁵ The telephone interview center conducted interviews with respondents with a language barrier who spoke Spanish, in all but two cases. However, there were 104 cases in which an interview could not be completed due to a language barrier for a language other than Spanish.

⁶ Non-completed callbacks include respondents who asked the interviewer to call back at a later time to complete the interview, but did not complete the interview by the end of the field period.

- **Completed Interview Rate:** The completed interview rate is the percentage of households selected that completed the survey. This survey attained a 42 percent completed interview rate.

Table II-1
Sample and Response Rates

	Total Sample Statistics
Number Selected	4,250
Unusable	1,066
Non-Interviews	128
Unknown Eligibility	1,288
Completed Interviews	1,768
Cooperation Rate	93%
Response Rate	56%
Completed Interview Rate	42%

Table II-2 displays the number of interviews completed by state. The response rate ranged from 41 percent in New York to 69 percent in New Mexico.

Table II-2
Number of Completed Interviews by State

State	Total Selected	Completed Interviews	Response Rate
California	260	103	48%
Connecticut	1,290	495	48%
Delaware	220	100	63%
Georgia	220	105	59%
Iowa	220	102	65%
Maine	220	133	68%
Minnesota	220	105	60%
Montana	220	102	62%
New Mexico	220	102	69%
New York	450	101	41%
North Carolina	270	97	60%
Ohio	220	111	67%
Pennsylvania	220	112	62%
TOTAL	4,250	1,768	56%

Table II-3 displays the number of interviews completed by district in CT. The response rate ranged from 44 percent in District 1 to 52 percent in District 2.

Table II-3
Connecticut Number of Completed Interviews by District

Connecticut	Total Selected	Completed Interviews	Response Rate
District 1	270	95	44%
District 2	220	102	52%
District 3	270	93	45%
District 4	270	103	48%
District 5	260	102	50%

C. Weights

Two sets of weights were used to ensure that state-level data represents each state and that the overall findings are representative of the national LIHEAP population. First, weights were applied within states. The purpose of these weights was to adjust for selection and response rate variation within poverty group and vulnerable status. A second set of weights was used so that the sum of the state weights was proportional to the strata size from which it was drawn. In the estimates presented in this report, the total weight, comprised of these two separate weights, is used. This results in a nationally representative sample of 2011 LIHEAP recipients.

III. LIHEAP Recipient Households

The 2011 National Energy Assistance Survey included a series of questions about household demographics.

Table III-1 displays information on the number of household members. The table shows that 36 percent of LIHEAP recipients live in single person households and 58 percent have two or fewer household members.

**Table III-1
Number of Household Members**

Number of Household Members	Percent of Respondents
1	36%
2	22%
3	14%
4	12%
5	8%
6 or more	7%

Table III-2 displays information on the presence of vulnerable household members. The table shows that 40 percent have a senior in the home, 42 percent have a disabled household member, 41 percent have a child age 18 or younger, and 21 percent have a child age five or younger. Eight-nine percent had at least one vulnerable member (elderly, disabled, or child).

**Table III-2
Vulnerable Groups**

	Senior ≥ 60	Disabled	Child ≤ 18	Young Child ≤ 5	Single Parent
Yes	40%	42%	41%	21%	15%
No	59%	56%	58%	78%	85%
Don't Know/ Refused	2%	2%	2%	2%	--

Table III-3 shows that 89 percent of LIHEAP recipients have at least one vulnerable household member.

**Table III-3
Households with at Least One Vulnerable Member**

	Percent of Respondents
At Least One Vulnerable Member	89%
No Vulnerable Members	11%

Respondents were asked whether they own or rent their home. Table III-4 shows that 46 percent of LIHEAP recipients own their homes.

**Table III-4
Home Ownership**

Home Ownership	Percent of Respondents
Own	46%
Rent	49%
Other	3%
Don't Know/Refused	2%

Table III-5 displays the annual household income distribution for LIHEAP-recipient households. The table shows that 36 percent have income of less than or equal to \$10,000 and only two percent have income above \$40,000.

**Table III-5
Annual Income**

Annual Income	Percent of Respondents
≤ \$ 10,000	36%
\$ 10,001 - \$ 20,000	41%
\$ 20,001 - \$ 30,000	16%
\$ 30,001 - \$ 40,000	5%
More than \$ 40,000	2%
Don't Know	1%

Table III-6A shows that 19 percent had income at or below 50 percent of the poverty level and 61 percent had income at or below the poverty level. Only 11 percent had income above 150 percent of the poverty level.

**Table III-6A
Poverty Level**

Poverty Level	Percent of Respondents
0%-50%	19%
51%-100%	42%
101%-125%	15%
126%-150%	13%
>150%	11%

Table III-6B displays the household poverty level by vulnerable group. The table shows that households with children and non-vulnerable households are more likely than households with seniors and with disabled members to have income at or below 50 percent of the poverty level.

Table III-6B
Poverty Level by Vulnerable Group

	Senior	Disabled	Child 18 or Younger	Child 5 or Younger	Single Parent Household ¹	Non-Vulnerable
Number of Respondents	705	738	722	344	275	195
0% - 50%	9%	13%	28%	35%	36%	32%
51% - 100%	42%	49%	36%	38%	33%	36%
101% - 150%	36%	29%	25%	19%	17%	20%
> 150%	13%	10%	11%	8%	13%	11%

¹ Defined as households with only one adult residing with one or more children.

Respondents were asked about the type of income and benefits received in the past year. Table III-7 shows that 33 percent reported that they received employment income, 38 percent said that they received retirement income, 32 percent reported that they received public assistance, and 63 percent reported that they received non-cash benefits, including food stamps or public housing.

Table III-7
Types of Income and Benefits Received

	Wages or Self-Employment Income	Retirement Income	Public Assistance	Non-cash benefits
Yes	33%	38%	32%	63%
No	65%	58%	63%	34%
Don't Know /Refused	2%	3%	4%	3%

Respondents were asked whether they had been unemployed at some time during the year. Table III-8A shows that 35 percent reported that they had been unemployed at some point during the past year. This compares to 31 percent in 2003, 29 percent in 2008, and 36 percent in 2009.

Table III-8A
Unemployed During the Year

	2003	2008	2009	2011
Yes	31%	29%	36%	35%
No	69%	70%	63%	62%
Don't Know / Refused	0%	1%	1%	3%

Table III-8B displays the percent of respondents who were unemployed during the past year by vulnerable group. The table shows that households with children under 18 and non-vulnerable households were most likely to report that they had been unemployed. Fifty-three percent of households with children reported that they had been unemployed.

Table III-8B
Unemployed During the Year
By Vulnerable Group

	Senior	Disabled	Child ≤18	Non-Vulnerable
Number of Respondents	705	738	722	195
Yes	17%	26%	53%	49%
No	81%	72%	46%	35%
Don't Know / Refused	2%	1%	1%	15%

Table III-8C displays the percent of respondents who reported that they had been unemployed in the past year by poverty level. The table shows that 59 percent of respondents with income at or below 50 percent of the poverty level reported that they had been unemployed, compared to 30 percent between 51 and 100 percent of poverty, 28 percent between 101 and 150 percent of poverty, and 32 percent above 150 percent of poverty.

Table III-8C
Unemployed During the Year
By Poverty Level

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Yes	59%	30%	28%	32%
No	33%	68%	71%	66%
Don't Know / Refused	7%	2%	1%	2%

Respondents were asked several questions about different medical conditions that members of their households had. Table III-9A shows that 40 percent had asthma, 22 percent had breathing-related conditions, and 52 percent had heart disease.

Table III-9A
Medical Conditions: Someone in the Household Had or
Had Symptoms of These Medical Conditions

	Asthma or Symptoms of Asthma	Chronic Bronchitis, Emphysema, COPD	Hypertension, Heart Disease, Heart Attack, or Stroke
Yes	40%	22%	52%
No	59%	77%	47%
Don't Know/ Refused	1%	2%	1%

Table III-9B displays the percent of respondents who had each of these medical conditions, by vulnerable group. The table shows that the rates of these conditions vary by vulnerable group.

Households with disabled members and households with children under 18 are most likely to have asthma and breathing conditions. Households with seniors and disabled members are most likely to have heart disease.

Table III-9B
Medical Conditions: Someone in the Household Had, or
Had Symptoms of These Medical Conditions
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Asthma or Symptoms of Asthma	35%	50%	50%	22%
Chronic Bronchitis, Emphysema, COPD	26%	36%	18%	11%
Hypertension, Heart Disease, Heart Attack, or Stroke	74%	67%	33%	38%

Table III-9C displays the percent of respondents who had medical conditions by poverty level. The table shows that there is not a clear relationship between poverty level and these symptoms.

Table III-9C
Medical Conditions: Someone in the Household Had, or
Had Symptoms of These Medical Conditions
By Poverty Level

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Asthma or Symptoms of Asthma	44%	42%	34%	42%
Chronic Bronchitis, Emphysema, COPD	19%	26%	19%	18%
Hypertension, Heart Disease, Heart Attack, or Stroke	40%	54%	59%	51%

Table III-10A displays the percent of respondents who reported that they had any of the conditions shown in the previous tables. The table shows that 72 percent reported that someone in the household had at least one of these conditions.

Table III-10A
Medical Conditions: Someone in the Household Had, or Had Symptoms of Allergies, Asthma, Chronic Bronchitis, Emphysema, COPD, High Blood Pressure, Heart Disease, a Heart Attack, or Stroke

	Presence of Medical Condition
Yes	72%
No	28%
Don't Know/ Refused	<1%

Table III-10B shows the percent of respondents who reported any of these conditions by vulnerable group. The table shows that households with seniors and households with disabled members were most likely to report these conditions. Eighty-five percent of households with a senior reported that they had one of these conditions and 87 percent with a disabled household member reported that they had one of these conditions.

Table III-10B
Medical Conditions: Someone in the Household Had, or Had Symptoms of Allergies, Asthma, Chronic Bronchitis, Emphysema, COPD, High Blood Pressure, Heart Disease, a Heart Attack, or Stroke By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Yes	85%	87%	62%	48%
No	15%	13%	38%	48%
Don't Know/Refused	0%	0%	0%	4%

Table III-10C displays the percent of respondents who reported any of these conditions by poverty group. The table shows that households in the middle poverty level groups have a slightly higher prevalence of these conditions.

Table III-10C
Medical Conditions: Someone in the Household Had, or Had Symptoms of Allergies, Asthma, Chronic Bronchitis, Emphysema, COPD, High Blood Pressure, Heart Disease, a Heart Attack, or Stroke By Poverty Level

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Yes	63%	75%	74%	70%
No	35%	25%	26%	29%
Don't Know/Refused	2%	0%	0%	1%

Table III-11 displays the percent of respondents who had a breathing condition and who needed to go to the hospital for the condition during the past year. This table shows that 19 percent had the condition and needed to go to the hospital for the condition. Of those who had the condition, 42 percent needed to go to the hospital.

Table III-11
Medical Conditions: Someone in the Household Had Asthma, Symptoms of Asthma, or had Chronic Bronchitis, Emphysema, or Chronic Obstructive Pulmonary Disease (COPD) And Needed to Go to the Hospital for This Health Problem in the Past Year

	Needed to Go to Hospital	Of those whose household have condition
Number of Respondents	1,768	816
Yes	19%	42%
No	27%	57%
Don't Know / Refused	<1%	1%
Does Not Have Condition	54%	--

Respondents were asked whether they use any medical equipment that requires the use of electricity. Table III-12A shows that 26 percent of respondents reported that they use such equipment.

Table III-12A
Someone in the Household Utilizes Necessary Medical Equipment that Uses Electricity

Someone in the Household Utilizes Necessary Medical Equipment that Uses Electricity	Percent of Respondents
Yes	26%
No	72%
Don't Know/Refused	2%

Table III-12B displays the percent who reported the use of such medical equipment by vulnerable group. The table shows that 36 percent of households with a disabled member and 32 percent of households with children reported that they use this equipment. Households that did not have vulnerable members were least likely to report the use of this equipment.

**Table III-12B
Member of Household Utilizes Medical Equipment that Requires Electricity
By Vulnerable Group**

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Yes	24%	36%	32%	7%
No	76%	63%	67%	78%
Don't Know / Refused	1%	1%	<1%	15%

Respondents were asked to report the primary fuel used to heat their home. Table III-13 shows that 43 percent use natural gas, 23 percent use electricity, 16 percent use fuel oil or kerosene, and nine percent use LPG.

**Table III-13
Primary Fuel Used for Home Heating**

Primary Fuel Used for Home Heating	Percent of Respondents
Natural Gas	43%
Electricity	23%
Fuel Oil or Kerosene	16%
Bottled Gas (LPG or Propane)	9%
Wood	2%
Solar Energy	0%
Other Fuel	1%
No Fuel Used	<1%
Don't Know/Refused	3%

Table III-14 shows that seven percent of respondents who do not own their own home have their heat included in their rent.

Table III-14
Heat included in Rent

Heat included in Rent	Percent of Respondents
Number of Respondents	978
Yes	7%
No	87%
Do Not Pay Rent	3%
Don't Know/Refused	3%

IV. Problems Meeting Energy Needs

This section examines the financial challenges and difficult choices made by the LIHEAP recipients to manage their total residential energy costs.

A. *Increased Utility Bills and Increased Need*⁷

Respondents were asked to report their annual energy costs. Table IV-1 shows that 45 percent of the respondents reported that their bills were over \$2,000.

Table IV-1
Annual Total Residential Energy Costs

Annual Energy Costs	Percent of Respondents
Less than \$500	2%
\$501 - \$1,000	8%
\$1,001 - \$1,500	10%
\$1,501 - \$2,000	12%
Over \$2,000	45%
Don't Know/Refused	22%

Table IV-2 displays the distribution of LIHEAP heating benefits in FY2008, FY2009 and FY2011. Twenty-eight percent received \$250 or less in FY2011, compared with 18 percent who received \$250 or less in FY2009. Mean heating benefits were lower than in 2009 but higher than in 2008.

Table IV-2
LIHEAP Heating Benefits Distribution

Benefit Amount	Percent Received		
	2008	2009	2011
Number of Respondents	1,256	1,828	1,667
≤ \$100	6%	<u>5%</u>	<u>7%</u>
\$101-\$250	<u>25%</u>	<u>13%</u>	<u>21%</u>
\$251-\$500	<u>39%</u>	45%	<u>43%</u>
\$501-\$750	<u>11%</u>	<u>21%</u>	<u>16%</u>
\$751-\$1,000	6%	7%	7%
≥ \$1,000	<u>3%</u>	6%	<u>5%</u>
Did Not Receive Heating Benefit	<u>9%</u>	4%	<u>2%</u>

⁷ In this section, there are several instances where 1,667 respondents out of 1,768 respondents are included because LIHEAP benefit information could not be obtained. In these cases, the number of respondents is noted.

Benefit Amount	Percent Received		
	2008	2009	2011
Number of Respondents	1,256	1,828	1,667
Mean Benefits	\$388	\$483	\$424

Note: 2011 statistically significant differences at the 95% level from 2008 and 2009 are underlined.

Pre-LIHEAP energy burden was calculated by dividing the respondents' energy costs by their total household income and post-LIHEAP energy burden was calculated by subtracting LIHEAP benefits from energy costs and then dividing these net energy costs by total household income. Table IV-3A shows that LIHEAP benefits had a big impact on the households' energy burden. Prior to receiving LIHEAP, 22 percent of households had an energy burden higher than 20 percent. After receiving LIHEAP, 13 percent had an energy burden that was this high. Additionally, LIHEAP benefits increased the percentage with burdens below five percent from 9 percent of recipients to 26 percent.

Table IV-3A
Total Residential Energy Burden

	Total Residential Energy Burden	
	Pre-LIHEAP	Post-LIHEAP
Number of Respondents	1,275	1,275
0-5%	9%	26%
6%-10%	32%	32%
11-15%	23%	20%
16-20%	13%	9%
21-25%	9%	5%
>25%	13%	8%

Table IV-3B displays pre and post LIHEAP average energy burdens by vulnerable group. The table shows that non-vulnerable and single parent households had the greatest pre-LIHEAP energy burden, averaging 21 percent. LIHEAP benefits reduce mean energy burden by between four and five percentage points for all groups of households. While the pre-LIHEAP energy burden average ranged from 14 percent to 21 percent, the post-LIHEAP energy burden average ranged from 10 percent to 16 percent.

Table IV-3B
Mean Total Residential Energy Burden
By Vulnerable Group

	All	Senior	Disabled	Child Under 18	Child Under 6	Single Parent	Non-Vulnerable
Number of Respondents	1,275	469	533	563	271	216	127
Pre-LIHEAP Burden	16%	14%	16%	16%	16%	21%	21%
Post-LIHEAP Burden	12%	10%	12%	12%	12%	16%	16%

Table IV-3C displays the energy burden distribution by vulnerable group. The table shows that about a quarter of each group had an energy burden at or below five percent after receipt of LIHEAP. However, nine to 25 percent of all groups had an energy burden of more than 20 percent even after receipt of LIHEAP.

Table IV-3C
Residential Energy Burden Distribution
By Vulnerable Group

	Senior		Disabled		Child Under 18		Non-Vulnerable	
	Pre-LIHEAP	Post-LIHEAP	Pre-LIHEAP	Post-LIHEAP	Pre-LIHEAP	Post-LIHEAP	Pre-LIHEAP	Post-LIHEAP
Number of Respondents	469	469	533	533	563	563	127	127
0-5%	10%	25%	9%	26%	12%	31%	6%	24%
6%-10%	31%	32%	29%	29%	38%	33%	22%	23%
11-15%	25%	25%	21%	20%	20%	16%	24%	19%
16-20%	16%	9%	17%	12%	9%	6%	14%	9%
21-25%	11%	6%	14%	6%	7%	4%	6%	8%
>25%	8%	3%	11%	6%	14%	10%	28%	17%

Respondents were asked whether they had a more or less difficult time paying their energy bills in the past year, as compared to the previous year. Table IV-4A shows that 52 percent said they had a more difficult time and 12 percent said they had a less difficult time.

Table IV-4A
Change in Difficulty in Paying Energy Bills

Change in Difficulty in Paying Energy Bills	Percent of Respondents
More Difficult	52%
Same	31%
Less Difficult	12%
Don't Know/Refused	5%

Table IV-4B displays the change in difficulty paying energy bills by vulnerable group. The table shows that households with children were most likely to say they had a more difficult time and households with seniors were least likely to say they had a more difficult time.

Table IV-4B
Change in Difficulty in Paying Energy Bills

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
More Difficult	48%	55%	58%	51%
Same	37%	29%	24%	35%
Less Difficult	10%	13%	14%	4%
Don't Know/ Refused	4%	3%	5%	10%

Respondents who said that they had a more difficult time paying their energy bills were asked why it was more difficult. Table IV-5A shows that 48 percent said it was due to a worse financial situation and 42 percent said it was due to an increased energy bill.

Table IV-5A
Reasons for Increased Difficulty in Paying Energy Bills

	Main Reason (Unprompted)
Number of Respondents	940
Lower Income/Lost Job/ Worse Economic Situation	48%
Increased Energy Bill	42%
Increased Other Bills	6%
Increased Medical Expenses	2%
Other	1%
Don't Know/Refused	1%

Table IV-5B compares responses for 2008, 2009 and 2011. Table IV-5B shows that 37 percent said they had increased difficulty paying their energy bills due to their economic situation in FY 2008, compared with 60 percent in FY 2009 or 48 percent in FY 2011. Households were more likely to say the cause of their difficulty was their high energy bills in FY 2008 than in FY 2009 or FY 2011.

Table IV-5B
Reasons for Increased Difficulty in Paying Energy Bills

	2008	2009	2011
Number of Respondents	543	747	940
Lower Income/Lost Job/Worse Economic Situation	<u>37%</u>	<u>60%</u>	<u>48%</u>
Increased Energy Bill	<u>50%</u>	<u>21%</u>	<u>42%</u>

Note: Differences are statistically significant at the 99 percent level.

B. Signs of the Problem

Respondents were asked whether they reduced expenses for household necessities due to not having enough money to pay their energy bill during the past year. Table IV-6A shows that 72 percent said that they took this action.

Table IV-6A
Reduced Expenses for Household Necessities Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	37%
Some Months	26%
1 or 2 Months	9%
Never / No	25%
Don't Know	2%

Table IV-6B shows that households with children and households without vulnerable members were most likely to report that they reduced expenses for household necessities. The table shows that 82 percent of households with children under 18 and 77 percent of households without vulnerable members said that they faced this problem.

Table IV-6B
Reduced Expenses for Household Necessities Due to Not Having Enough Money for the Energy Bill During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	31%	36%	43%	41%
Some Months	24%	29%	29%	26%
1 or 2 Months	9%	9%	10%	10%
Never / No	34%	25%	16%	20%
Don't Know	2%	2%	2%	3%

Table IV-6C shows that households with income below 50 percent of the poverty level were most likely to say that they reduced expenses for household necessities. Seventy-nine percent of those with income below 50 percent of the poverty level said that they reduced these expenses.

Table IV-6C
Reduced Expenses for Household Necessities Due to Not Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	44%	33%	38%	39%
Some Months	27%	26%	27%	26%
1 or 2 Months	8%	10%	9%	11%
Never / No	19%	30%	24%	23%
Don't Know / Refused	2%	2%	2%	1%

Table IV-7 compares responses to questions about signs of unaffordable energy bills for the 2003, 2008, 2009 and 2011 surveys. The table shows that approximately the same percentage of respondents faced these problems in all three years.

Table IV-7
Signs of the Problem
Comparison of Survey Results

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Reduced Expenses for Household Necessities	78%	80%	79%	72%

C. Responses to the Problem

This section examines how households have responded to the problem of unaffordable energy bills.

Respondents were asked whether they closed off part of their home during the past year because they could not afford to heat or to cool it. Table IV-8A shows that 39 percent of respondents said that they took this action.

Table IV-8A
Closed Off Part of Home Because Could Not Afford to Heat or Cool It
Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	11%
Some Months	22%
1 or 2 Months	6%
Never / No	61%
Don't Know / Refused	<1%

Table IV-8B displays the percent of respondents who said that they closed off part of their home because they could not afford to heat or to cool it. Households with disabled members were most likely to say they took this action.

Table IV-8B
Closed Off Part of Home Because Could Not Afford to Heat or Cool It
Due to Not Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	12%	15%	8%	13%
Some Months	23%	25%	22%	20%
1 or 2 Months	5%	6%	7%	5%
Never / No	58%	53%	63%	62%
Don't Know/Refused	1%	<1%	0%	<1%

Table IV-8C shows that the percent of respondents who closed off part of their home does not vary by poverty level.

Table IV-8C
Closed Off Part of Home Because Could Not Afford to Heat or Cool It
Due to Not Having Enough Money for the Energy Bill During Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	9%	13%	10%	10%
Some Months	23%	20%	23%	27%
1 or 2 Months	6%	6%	6%	4%
Never / No	62%	60%	61%	59%
Don't Know	<1%	<1%	<1%	<1%

Respondents were asked whether they kept their home at a temperature that they felt was unsafe or unhealthy due to not having enough money for the energy bill during the past year. Table IV-9A shows that 23 percent of the respondents said that they took this action.

Table IV-9A
Kept Home at Temperature You Felt Was Unsafe or Unhealthy Due to Not
Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	5%
Some Months	11%
1 or 2 Months	7%
Never / No	77%
Don't Know / Refused	1%

Table IV-9B shows the percent that kept their home at an unsafe or unhealthy temperature during the past year by vulnerable group.

Table IV-9B
Kept Home at Temperature You Felt Was Unsafe or Unhealthy Due to Not
Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	4%	5%	4%	8%
Some Months	10%	12%	13%	8%
1 or 2 Months	6%	9%	7%	9%
Never / No	78%	72%	74%	75%
Don't Know/Refused	1%	2%	2%	1%

Table IV-9C shows that households above 150 percent of the poverty level were less likely to keep home at a temperature that they felt was unsafe or unhealthy due to not having enough money for the energy bill during the past year.

Table IV-9C
Kept Home at Temperature You Felt Was Unsafe or Unhealthy Due to Not
Having Enough Money for the Energy Bill During Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	3%	6%	5%	3%
Some Months	13%	10%	11%	5%
1 or 2 Months	8%	7%	8%	5%
Never / No	75%	76%	75%	85%
Don't Know/Refused	1%	2%	1%	2%

Table IV-10A shows that 21 percent of respondents said that they left their home for part of the day because it was too hot or too cold in the past year.

Table IV-10A
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill During the Past Year

	Left Home for Part of the Day Because Home was Too Hot or Too Cold
Almost Every Month	2%
Some Months	10%
1 or 2 Months	9%
Never / No	78%
Don't Know / Refused	1%

Table IV-10B shows that households with disabled members and households with children were most likely to leave home for part of the day because the home was too hot or cold.

Table IV-10B
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	1%	2%	2%	4%
Some Months	7%	11%	14%	7%
1 or 2 Months	6%	11%	11%	4%
Never / No	85%	76%	73%	84%
Don't Know	<1%	1%	1%	2%

Households with income below the poverty level were more likely to say that they left their home because it was too hot or too cold. Table IV-10C shows that 23 percent of those with income below the poverty level said that they took this action.

Table IV-10C
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill During Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	2%	2%	2%	<1%
Some Months	11%	10%	10%	9%
1 or 2 Months	10%	11%	6%	6%
Never / No	77%	76%	82%	84%
Don't Know	<1%	1%	<1%	0%

Households sometimes take the dangerous action of using their kitchen oven or stove to provide heat when they cannot afford their energy bill. Table IV-11A shows that about one third of respondents said that they took this action during the past year.

Table IV-11A
Used Kitchen Stove or Oven to Provide Heat Due to Not
Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	2%
Some Months	15%
1 or 2 Months	16%
Never / No	67%
Don't Know	1%

Table IV-11B shows that percent who said that they used their kitchen stove or oven for heat in the past year by vulnerable group.

Table IV-11B
Used Kitchen Stove or Oven to Provide Heat Due to Not
Having Enough Money for the Energy Bill During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	<1%	2%	2%	5%
Some Months	11%	17%	19%	15%
1 or 2 Months	16%	17%	18%	17%
Never / No	73%	63%	62%	62%
Don't Know/Refused	<1%	1%	0%	1%

Table IV-11C shows that the percent who reported that they used their kitchen stove or oven for heat by poverty level.

Table IV-11C
Used Kitchen Stove or Oven to Provide Heat Due to Not
Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	2%	2%	2%	2%
Some Months	18%	16%	13%	10%
1 or 2 Months	16%	15%	16%	19%
Never / No	63%	67%	69%	69%
Don't Know	1%	<1%	<1%	0%

Table IV-12 compares the responses to these issues over the past several surveys. The percentages in 2011 were approximately the same as in 2009.

Table IV-12
Responses to the Problem
Comparison of Survey Results

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Closed Off Part of Home	39%	<u>44%</u>	36%	<u>39%</u>
Kept Home at Temperature You Felt was Unsafe or Unhealthy	<u>25%</u>	<u>28%</u>	<u>26%</u>	<u>23%</u>
Left Home for Part of the Day	<u>24%</u>	23%	20%	<u>21%</u>
Used Kitchen Stove or Oven to Provide Heat	31%	33%	33%	33%

Note: 2011 statistically significant differences at the 95% level from 2003, 2008 and 2009 are underlined.

D. Inability to Pay Energy Bills

Respondents were asked several questions about the inability to pay their home energy bill.

Table IV-13A shows that 49 percent of respondents said that they skipped paying or paid less than their entire home energy bill during the past year due to not having enough money to pay the bill.

Table IV-13A
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill During Past Year

	Percent of Respondents
Almost Every Month	13%
Some Months	21%
1 or 2 Months	15%
Never / No	51%
Don't Know	1%

Table IV-13B shows that households with children were most likely to say that they skipped paying their home energy bill. Sixty-three percent of households with children said that they skipped paying their entire home energy bill at least once in the past year.

Table IV-13B
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	8%	12%	17%	13%
Some Months	11%	22%	29%	26%
1 or 2 Months	13%	14%	17%	15%
Never / No	67%	51%	36%	45%
Don't Know	1%	2%	1%	2%

Table IV-13C shows that households with income below 50 percent of the poverty level were most likely to say that they skipped paying the home energy bill. Sixty-three percent of these households said that they skipped paying or paid less than the entire amount on their energy bill sometime in the past year.

Table IV-13C
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	19%	12%	11%	10%
Some Months	27%	18%	19%	24%
1 or 2 Months	17%	14%	15%	11%
Never / No	35%	54%	55%	54%
Don't Know / Refused	1%	1%	1%	2%

Respondents were asked whether they received a notice or threat to disconnect or discontinue their electricity or home heating fuel due to not having enough money for the energy bill during the past year. The table shows that 37 percent said that they received a notice or threat.

Table IV-14A
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to Not Having Enough Money for the Energy Bill During the Past Year

	Percent of Respondents
Almost Every Month	4%
Some Months	13%
1 or 2 Months	20%
Never / No	62%
Don't Know	1%

Table IV-14B shows the percent who received a threat of service termination by vulnerable group. The table shows that households with children were most likely to face this problem. Over half of these households received a notice or threat to disconnect or discontinue their service in the past year.

Table IV-14B
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to Not Having Enough Money for the Energy Bill During Past Year By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Almost Every Month	1%	4%	6%	6%
Some Months	6%	13%	16%	18%
1 or 2 Months	10%	17%	31%	18%
Never / No	82%	64%	46%	58%
Don't Know	1%	2%	1%	1%

Table IV-14C shows that households with income below 50 percent of poverty were most likely to report that they received a notice or threat to disconnect or discontinue their electricity or home heating fuel. The table shows that 53 percent of these households said that they faced this problem in the past year.

Table IV-14C
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel Due to Not Having Enough Money for the Energy Bill During the Past Year By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Almost Every Month	6%	3%	5%	2%
Some Months	19%	11%	8%	16%
1 or 2 Months	28%	19%	19%	14%
Never / No	45%	66%	68%	67%
Don't Know / Refused	2%	1%	<1%	2%

Table IV-15A shows that nine percent of respondents had their electricity shut off due to nonpayment, six percent had their gas service shut off, and 11 percent had at least one of the two shut off during the past year.

Table IV-15A
Utility Service Was Shut Off Due to Nonpayment During the Past Year

	Percent of Respondents
Electricity	9%
Gas	6%
Electricity or Gas	11%

Table IV-15B displays the percent that had their utility service shut off by vulnerable group. The table shows that households with children were most likely to face these problems. Nineteen percent of households with children had their electricity and/or gas shut off due to nonpayment in the past year.

Table IV-15B
Utility Service Was Shut Off Due to Nonpayment During the Past Year By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Electricity	3%	8%	16%	9%
Gas	2%	5%	9%	9%
Electricity or Gas	5%	10%	19%	14%

Table IV-15C displays the percent of households who had utility service terminated by poverty group. The table shows that households with income below 50 percent of the poverty level were most likely to have had their service terminated. Twenty percent of

households with income below 50 percent of the poverty level had their gas and/or electric utility service terminated in the past year.

Table IV-15C
Utility Service Was Shut Off Due to Nonpayment During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Electricity	16%	9%	6%	7%
Gas	9%	5%	4%	4%
Electricity or Gas	20%	11%	7%	8%

Table IV-16A shows the percent of households who were unable to use their main source of heat during the past year. The table shows that 13 percent were unable to use their main source of heat due to the system being broken, 10 percent due to an inability to pay for a fuel delivery, and seven percent due to an electric or gas service termination. Twenty-four percent of households were unable to use their main source of heat during the past year for any of the three reasons.

Table IV-16A
Unable to Use Main Source of Heat During the Past Year

	Percent of Respondents
Heating System Broken	13%
Unable to Pay for Fuel Delivery	10%
Gas or Electric Service Discontinued	7%
Any of the Three Reasons	24%

Table IV-16B displays the percent of respondents who said that they were unable to use their main source of heat during the past year by vulnerable group. The table shows that households with children and households with disabled members were most likely to face this problem. Thirty-one percent of households with children and households with disabled members could not use their main source of heat during the past year because their heating system was broken, they were unable to pay for a fuel delivery, or their gas or electric service was discontinued due to nonpayment.

Table IV-16B
Unable to Use Main Source of Heat During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Heating System Broken	11%	17%	15%	11%
Unable to Pay for Fuel Delivery	8%	14%	12%	9%
Gas or Electric Service Discontinued	3%	8%	11%	8%
Any of the Three Reasons	18%	31%	31%	24%

Table IV-16C displays the percent of respondents who were unable to use their main source of heat during the past year by poverty group. The table shows that households with income below 50 percent of the poverty level were most likely to face this problem. Thirty-one percent of households with income below 50 percent of the poverty level were unable to use their main source of heat at some point during the past year.

Table IV-16C
Unable to Use Main Source of Heat During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Heating System Broken	18%	12%	12%	9%
Unable to Pay for Fuel Delivery	8%	12%	9%	12%
Gas or Electric Service Discontinued	12%	7%	5%	6%
Any of the Three Reasons	31%	24%	21%	22%

Table IV-17A displays the percent of respondents who were unable to use their air conditioner during the past year because it was broken or they had their electric service discontinued for nonpayment. The table shows that 14 percent could not use their air conditioner because it was broken and five percent could not use it because their electric service was discontinued. Seventeen percent could not use their air conditioner for at least one of those two reasons.

Table IV-17A
Unable to Use Air Conditioner During the Past Year

	Percent of Respondents
Air Conditioner Broken	14%
Electric Service Discontinued	5%
Either Reason	17%

Table IV-17B displays the percent of respondents who were unable to use their air conditioner in the past year by vulnerable group. The table shows that households with children and disabled members were most likely to face this problem.

**Table IV-17B
Unable to Use Air Conditioner During the Past Year
By Vulnerable Group**

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Air Conditioner Broken	11%	17%	19%	11%
Electric Service Discontinued	2%	4%	8%	5%
Either Reason	11%	20%	23%	14%

Table IV-17C displays the percent of households that were unable to use their air conditioner during the past year by poverty group. The table shows that households below 50 of the poverty level were most likely to face this problem. Twenty-one percent of households with income below 50 percent of poverty were unable to use their air conditioner at some point during the past year.

**Table IV-17C
Unable to Use Air Conditioner During the Past Year
By Poverty Group**

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Air Conditioner Broken	17%	14%	12%	10%
Electric Service Discontinued	8%	5%	3%	5%
Either Reason	21%	17%	14%	14%

Table IV-18A displays the percent of respondents who had to use candles or lanterns due to lack of lights. The table shows that 26 percent of respondents who had utilities shutoff in past 12 months had to go without lights at some point in the past year.

**Table IV-18A
Had to Use Candles or Lanterns Due to Lack of Lights
During the Past Year**

	Percent of Respondents
Number of Respondents	378
Had to Use Candles or Lanterns Due to Lack of Lights	26%

Table IV-18B displays the percent of respondents who had to go without lights during the past year by vulnerable group.

Table IV-18B
Had to Use Candles or Lanterns Due to Lack of Lights During the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	93	167	214	49
Had to Use Candles or Lanterns Due to Lack of Lights	22%	27%	25%	29%

Table IV-18C displays the percent of households who had to go without lights during the past year by poverty group. The table shows that households below the poverty level are somewhat more likely to face this problem. Thirty-six percent of those below 50 percent of the poverty level had to use candles or lanterns due to lack of lights during the past year.

Table IV-18C
Had to Use Candles or Lanterns Due to Lack of Lights During the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	80	149	89	57
Had to Use Candles or Lanterns Due to Lack of Lights	36%	25%	17%	24%

Table IV-19A displays the percent of respondents who had their utility service shut off at the time of the survey. The table shows that two percent of respondents had their electricity or gas shut off at the time of the survey.

Table IV-19A
Utility Service Shut Off at Time of Survey

	Percent of Respondents
Electricity	1%
Gas	1%
Electricity or Gas	2%

Table IV-19B shows that four percent of households without vulnerable members had their electricity or gas service shut off at the time of the survey.

Table IV-19B
Utility Service Shut Off at Time of Survey
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Electricity	<1%	1%	1%	2%
Gas	<1%	1%	2%	3%
Electricity or Gas	1%	1%	2%	4%

Table IV-19C shows that households below 50 percent of the poverty level were more likely to have their utility service shut off at the time of the survey. Four percent of those below 50 percent of the poverty level had their electric and/or gas shut off at the time of the survey, compared with one to two percent for the other poverty level groups.

Table IV-19C
Utility Service Shut Off at Time of Survey
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Electricity	3%	1%	3%	0%
Gas	3%	1%	1%	1%
Electricity or Gas	4%	1%	2%	1%

Table IV-20 compares the responses about service disruptions across the 2003, 2008, 2009, and 2011 surveys. The table shows that in most cases there has not been a significant change, but there are a few declines in the incidence of some of these problems.

Table IV-20
Inability to Pay Energy Bills During Past Year
Comparison of Survey Results

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Skipped Paying or Paid Less than Entire Home Energy Bill	52%	47%	50%	49%
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel	38%	37%	36%	37%
Electricity Shut off Due to Nonpayment	8%	9%	9%	9%
Gas Shut off Due to Nonpayment	--	6%	7%	6%
Electricity or Gas Shut off Due to Nonpayment	--	12%	12%	11%

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Heating System Broken and Unable to Pay for Repair or Replacement	<u>10%</u>	13%	13%	<u>13%</u>
Unable to Use Main Source of Heat Because Unable to Pay for a Fuel Delivery	10%	13%	11%	10%
Unable to Use Main Source of Heat Because Utility Company Discontinued Gas or Electric Service Due to Nonpayment	<u>11%</u>	<u>13%</u>	11%	<u>7%</u>
Unable to Use Air Conditioner Because it was Broken and Unable to Pay for Repair or Replacement	12%	12%	12%	14%
Unable to Use Air Conditioner Because Utility Company Discontinued Electric Service Due to Nonpayment	6%	<u>7%</u>	<u>8%</u>	<u>5%</u>
Had to Use Candles or Lanterns Due to Lack of Lights	<u>8%</u>	<u>7%</u>	<u>8%</u>	<u>5%</u>

Note: 2011 statistically significant differences at the 95% level from 2003, 2008, and 2009 are underlined.

E. Housing Problems

This section examines housing problems that respondents have faced in the past five years due to unaffordable energy bills.

Table IV-21A shows that 31 percent skipped a mortgage payment, 14 percent moved in with friends or family, six percent were evicted, and four percent moved into a shelter or were homeless. While four percent reported that they had a mortgage foreclosure in the past five years, three percent reported that they had a foreclosure in the past year.

**Table IV-21A
Housing Problems Due to Energy Bills in the Past Five Years**

	Percent of Respondents
Did not Make Full Rent or Mortgage Payment	31%
Moved in With Friends or Family	14%
Evicted from Home or Apartment	6%
Had Mortgage Foreclosure	4%
Moved into Shelter or Was Homeless	4%

Table IV-21B displays the results by vulnerable group. The table shows that households with children were most likely to face these problems. Forty-five percent of households with children did not make a full rent or mortgage payment, 18 percent moved in with friends or family at some point in the past five years, and eight percent were evicted.

Table IV-21B
Housing Problems Due to Energy Bills in the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Did not Make Full Rent or Mortgage Payment	16%	30%	45%	32%
Moved in With Friends or Family	8%	14%	18%	11%
Evicted from Home or Apartment	4%	5%	8%	6%
Had Mortgage Foreclosure	3%	5%	7%	3%
Moved into Shelter or Was Homeless	2%	5%	6%	4%

Table IV-21C displays the results by poverty group. The table shows that the lowest poverty group was most likely to face these housing problems. Thirty-eight percent of households below 50 percent of the poverty level did not make a full rent or mortgage payment in the past five years and 24 percent had to move in with friends or family at some point in the past five years.

Table IV-21C
Housing Problems Due to Energy Bills in the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Did not Make Full Rent or Mortgage Payment	38%	31%	24%	37%
Moved in With Friends or Family	24%	12%	9%	12%
Evicted from Home or Apartment	12%	6%	3%	3%
Moved into Shelter or Was Homeless	8%	4%	1%	4%
Had Mortgage Foreclosure	6%	3%	4%	5%

Table IV-21D displays the percent of respondents with housing problems by whether or not they own their home. The table shows that respondents who do not own their homes were more likely to face these problems.

Table IV-21D
Housing Problems Due to Energy Bills in the Past Five Years
By Home Ownership

	Own Home	Does Not Own Home
Number of Respondents	790	920
Did not Make Full Rent or Mortgage Payment	26%	36%
Evicted from Home or Apartment	3%	8%
Had Mortgage Foreclosure	5%	3%
Moved in With Friends or Family	9%	18%
Moved into Shelter or Was Homeless	2%	6%

Table IV-22 compares results with respect to housing problems from the 2003, 2008, 2009 and 2011 surveys. The table shows that the prevalence of these issues are about the same as in the 2009 survey, but somewhat higher than in the 2008 survey.

Table IV-22
Housing Problems During Past Five Years
Comparison of Survey Results

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Did Not Make Full Rent or Mortgage Payment	<u>28%</u>	28%	31%	<u>31%</u>
Evicted from Home or Apartment	<u>4%</u>	<u>4%</u>	5%	<u>6%</u>
Moved in with Friends or Family	<u>9%</u>	<u>11%</u>	12%	<u>14%</u>
Moved into Shelter or Was Homeless	4%	3%	3%	4%

Note: 2011 statistically significant differences at the 95% level from 2003, 2008 and 2009 are underlined.

F. Financial Problems

This section examines one particular financial problem that respondents may have faced in the past five years due to their energy bills. Table IV-23A shows that 13 percent reported that they took out a payday loan in the past five years, compared to 11 percent who said they took out a payday loan in the past year.

Table IV-23A
Financial Problems Due to Energy Bills
In the Past Five Years

	Percent of Respondents	
	Past Year	Past Five Years
Payday Loan	11%	13%

Table IV-23B displays the percent of respondents who had financial problems in the past five years due to unaffordable energy bills by vulnerable group. The table shows that households with children were most likely to report that they obtained a payday loan.

Table IV-23B
Financial Problems Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Payday Loan	9%	14%	17%	11%

Table IV-23C displays the percent of respondents who had financial problems in the past five years due to unaffordable energy bills by poverty level. The table shows that there is not significant variation by poverty level.

Table IV-23C
Financial Problems Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Payday Loan	14%	14%	11%	12%

G. Medical and Health Problems

This section examines the medical and health problems that respondents faced in the past five years due to unaffordable energy bills.

Table IV-24A shows that 24 percent went without food for at least one day, 37 percent went without medical or dental care, and 34 percent did not fill a prescription or took less than their full dose of prescribed medication.

Table IV-24A
Medical and Health Problems Due to Energy Bills
In the Past Year and the Past Five Years

	Percent of Respondents	
	Past Year	Past Five Years
Went Without Food for at Least One Day	25%	24%
Went Without Medical or Dental Care	41%	37%
Didn't Fill Prescription or Took Less Than Full Dose	--	34%

Table IV-24B examines medical and health problems by vulnerable group. The table shows that households with a disabled member and without vulnerable members were most likely to go without food for at least one day.

Table IV-24B
Medical and Health Problems Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Went Without Food for at Least One Day	22%	31%	23%	29%
Went Without Medical or Dental Care	36%	41%	38%	42%
Didn't Fill Prescription or Took Less Than Full Dose	28%	41%	37%	35%

Table IV-24C displays responses to questions about medical and health problems by poverty group. The table shows that for the most part there is not a strong relationship between poverty level and the presence of these problems. However, higher poverty level groups were more likely to report that they went without medical or dental care.

Table IV-24C
Medical and Health Problems Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Went Without Food for at Least One Day	24%	28%	21%	18%
Went Without Medical or Dental Care	24%	36%	38%	43%
Didn't Fill Prescription or Took Less Than Full Dose	33%	33%	34%	36%
Unable to Pay Energy Bill Due to Medical Expenses	19%	20%	22%	21%

Table IV-25A displays the percent of respondents who became sick and needed to go to the doctor or hospital because the home was too cold. The table shows that 13 percent became sick and needed to go to the doctor or hospital because the home was too cold, and 3 percent became sick and needed to go to the doctor or hospital because the home was too hot.

Table IV-25A
Someone in Household Became Sick Because Home was Too Cold or Too Hot
In the Past Five Years

	Became Sick	Became Sick and Needed to Go to the Doctor or Hospital
Home Was Too Cold	19%	13%
Home Was Too Hot	6%	3%

Table IV-25B displays the percent of those who became sick and needed to go to the doctor or hospital because the home was too cold by vulnerable group. The table shows that households with children and disabled members were most likely to become sick and need to go to the doctor or hospital because the home was too cold.

Table IV-25B
Someone in Household Became Sick Because Home was Too Cold
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Became Sick	13%	23%	25%	15%
Became Sick and Needed to Go to the Doctor or Hospital	7%	17%	19%	10%

Table IV-26A compares the percent of respondents who had medical and health problems in the 2003 survey, the 2008 survey, the 2009 survey, and the 2011 survey. The table shows that for the most part, the medical and health problems are less prevalent than in 2009 and 2008.

Table IV-26A
Medical and Health Problems During the Past Five Years
Comparison of Survey Results

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Went Without Food for At Least One Day	22%	<u>32%</u>	<u>30%</u>	<u>24%</u>
Went Without Medical or Dental Care	38%	<u>42%</u>	<u>41%</u>	<u>37%</u>
Did Not Fill Prescription or Took Less Than Full Dose	<u>30%</u>	<u>38%</u>	33%	<u>34%</u>
Became Sick Because Home was Too Cold	21%	<u>24%</u>	<u>25%</u>	<u>19%</u>
Became Sick Because Home was Too Hot	7%	6%	<u>4%</u>	<u>6%</u>

Note: 2011 statistically significant differences at the 95% level from 2003, 2008 and 2009 are underlined.

Table IV-26B compares the percent of respondents with seniors in the household who had medical and health problems in the 2003 survey, the 2008 survey, the 2009 survey, and the 2011 survey. The table shows that the medical and health problems are significantly higher for seniors than in 2009.

Table IV-26B
Medical and Health Problems During the Past Five Years
Comparison of Survey Results
By Vulnerable Group – Senior Member in Household

	2003	2008	2009	2011
Number of Respondents	888	542	757	705
Went Without Food for At Least One Day	<u>11%</u>	24%	20%	<u>22%</u>
Went Without Medical or Dental Care	<u>29%</u>	32%	<u>29%</u>	<u>36%</u>
Did Not Fill Prescription or Took Less Than Full Dose	<u>23%</u>	31%	26%	<u>28%</u>
Became Sick Because Home was Too Cold	<u>11%</u>	15%	<u>15%</u>	<u>19%</u>
Became Sick Because Home was Too Hot	<u>6%</u>	5%	4%	<u>3%</u>

Note: 2011 statistically significant differences at the 95% level from 2003, 2008 and 2009 are underlined.

V. The Need For LIHEAP

This section examines the history of LIHEAP receipt, utility bill payment problems and payment arrangements, and the importance of LIHEAP in helping recipients meet their needs.

A. History of LIHEAP Receipt

Respondents were asked whether they had received LIHEAP benefits in the year prior to the survey. Since the survey sample was drawn from state LIHEAP databases FY 2011 LIHEAP recipients, all respondents received LIHEAP in the past year. However, because LIHEAP is often paid directly on the household's utility bill, respondents are often not aware that they received these benefits. Table V-1A shows that 93 percent of the respondents reported that they had received LIHEAP in the past year.

Table V-1A
Received LIHEAP During Past Year⁸

	Percent of Respondents
Yes	93%
No	5%
Don't Know	2%

Table V-1B displays the percent of respondents who reported that they received LIHEAP during the past year by vulnerable group. Households with no vulnerable members were more likely than some of the other groups to report that they received LIHEAP, perhaps because they are less likely to have received these benefits automatically through participation in another program.

Table V-1B
Received LIHEAP During Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
Yes	91%	92%	94%	96%
No	7%	6%	5%	3%
Don't Know / Refused	2%	2%	1%	1%

⁸ Interviewers used the name for the LIHEAP program particular to the state of the recipient interviewed. If the respondent was initially confused or did not recall the program based on the state-designated name, interviewers were trained to assist their memory by describing energy assistance benefits, and using the term energy assistance throughout the survey instead of the state-designated LIHEAP name.

Table V-1C displays the percent of respondents who reported that they received LIHEAP in the past year by poverty level. The table shows that there are not significant differences by poverty group.

Table V-1C
Received LIHEAP During Past Year
By Poverty Level

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
Yes	94%	94%	93%	91%
No	6%	5%	5%	8%
Don't Know / Refused	<1%	2%	2%	1%

Respondents were asked to report the number of times in the past five years that they received LIHEAP. Table V-2A shows that about one quarter said they only received benefits in one of the past five years, and about one fifth said that they received benefits in each of the past five years.

Table V-2A
Number of Years Received LIHEAP in the Past Five Years

Number of Years Received LIHEAP	Percent of Respondents
1	23%
2	22%
3	17%
4	7%
5	20%
Don't Know / Refused	11%

Table V-2B displays the number of years that respondents reported LIHEAP receipt by vulnerable group. The table shows that households without vulnerable members were most likely to report that they only received benefits in one of the past five years and were least likely to report that they received LIHEAP in each of the past five years. These households appeared to be more likely to be facing temporary financial problems.

Table V-2B
Number of Years Received LIHEAP in the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	705	738	722	195
1	16%	17%	27%	37%
2	20%	20%	26%	23%
3	15%	17%	18%	11%
4	8%	8%	5%	7%
5	26%	28%	15%	11%
Don't Know / Refused	15%	11%	9%	10%

Table V-2C displays the number of years respondents reported they received LIHEAP by poverty group. The table shows that households with income above 150 percent of poverty were most likely to report that they received LIHEAP in only one of the past five years.

Table V-2C
Number of Years Received LIHEAP in the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	306	648	523	283
1	24%	21%	22%	32%
2	28%	19%	22%	26%
3	15%	19%	17%	13%
4	6%	9%	5%	6%
5	14%	23%	21%	14%
Don't Know / Refused	13%	10%	12%	9%

Table V-3 compares recall of LIHEAP benefits across the surveys. The table shows that a greater percentage of recipients were aware of the benefit in the current year than in previous years. This may relate to the timing of the survey, as it was conducted in the Spring, immediately following the LIHEAP season, as opposed to prior to the season starting, as in previous years.

**Table V-3
LIHEAP Receipt
Comparison of Survey Results**

	2003	2008	2009	2011
Number of Respondents	2,161	1,256	1,828	1,768
Recalled Receipt of LIHEAP	<u>84%</u>	<u>86%</u>	<u>86%</u>	<u>93%</u>
Percent That Reported They Received LIHEAP in Each of the Past Five Years	21%	<u>26%</u>	<u>25%</u>	<u>20%</u>

Note: 2011 statistically significant differences at the 95% level from 2003, 2008 and 2009 are underlined.

B. Utility Payment Arrangements

This section examines respondents' need for utility payment arrangements and resources available to assist with preventing service terminations. Table V-4 shows that 52 percent of respondents reported that they tried to work out a payment arrangement in the past year, and 84 percent of those who tried to work out a payment arrangement were able to do so. This is similar to the findings from the 2008 and 2009 surveys.

**Table V-4
Payment Arrangement with Gas or Electric Company
In the Past Year**

	2008 Survey		2009 Survey		2011 Survey	
	Tried to Work Out Payment Arrangement	Was Able to Work Out Payment Arrangement	Tried to Work Out Payment Arrangement	Was Able to Work Out Payment Arrangement	Tried to Work Out Payment Arrangement	Was Able to Work Out Payment Arrangement
Number of Respondents	1,256	682	1,828	976	1,768	966
Yes	54%	84%	51%	86%	52%	84%
No	45%	15%	48%	14%	47%	14%
Don't Know	1%	1%	1%	1%	1%	2%

C. Problems that Would Have Been Faced in the Absence of LIHEAP

Respondents who said that they did not face some problems with their energy bills were asked whether they felt they would have faced such problems if LIHEAP assistance had not been available. Table V-5 shows that 65 percent said they would have had to keep their home at an unsafe or unhealthy temperature if LIHEAP assistance had not been available, and 63 percent said they would have had their electricity or home heating fuel discontinued if LIHEAP assistance had not been available.

Table V-5
If LIHEAP Had Not Been Available, Problems that May Have Been Faced

	Kept Home at Unsafe or Unhealthy Temperature	Had Electricity or Home Heating Fuel Discontinued
Number of Respondents	1,250	1,267
Yes	65%	63%
No	30%	32%
Don't Know / Refused	4%	5%

Table V-6 compares responses about problems that would have been faced in the absence of LIHEAP between 2003, 2008, 2009 and 2011. The table shows that respondents were more likely in 2011 than in 2009 to say that they would have had their electricity or home heating fuel discontinued in the absence of LIHEAP.

Table V-6
If LIHEAP Had Not Been Available, Problems that May Have Been Faced
Comparison of Survey Results

	2003 Survey		2008 Survey		2009 Survey		2011 Survey	
	Respondents	%	Respondents	%	Respondents	%	Respondents	%
Kept Home at Unsafe or Unhealthy Levels	1,392	<u>54%</u>	761	63%	1,134	64%	1,250	<u>65%</u>
Had Electricity or Home Heating Fuel Discontinued	1,555	<u>48%</u>	845	59%	1,175	<u>53%</u>	1,267	<u>63%</u>

Note: 2011 statistically significant differences at the 95% level from 2003, 2008 and 2009 are underlined.

D. LIHEAP Restored Heat

Respondents were asked whether LIHEAP helped to restore heat due to shutoff or broken equipment. The table shows that 12 percent said that LIHEAP restored heat due to a shutoff and seven percent said that LIHEAP restored heat due to broken equipment.

Table V-7
LIHEAP Helped to Restore Heat Due to Shutoff or Broken Equipment

	Restored Heat Due to Shutoff			Restored Heat Due to Broken Equipment		
	2008	2009	2011	2008	2009	2011
Yes	12%	12%	12%	<u>9%</u>	7%	<u>7%</u>
No	<u>8%</u>	<u>6%</u>	<u>3%</u>	5%	5%	5%
Don't Know	<1%	<1%	<1%	<1%	<1%	1%
Did Not Experience Loss of Heat/or Did Not Receive LIHEAP	<u>81%</u>	81%	<u>84%</u>	86%	87%	87%

Note: 2011 statistically significant differences at the 95% level from 2008 and 2009 are underlined.

VI. Regional Analysis

This section provides a regional analysis of some of the information that was presented in this report.

A. Demographic Characteristics

Table VI-1 displays the percent of respondents with children and the percent in single family households. The table shows that households in the West are most likely to include children, but households in the South are most likely to be single parent households.

Table VI-1
Presence of Children Under 18 and Single-Parent Households
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Percent with Children	38%	39%	43%	46%
Single Parent Household	14%	12%	20%	14%

Table VI-2 displays the poverty level of LIHEAP recipients by region.

Table VI-2
Poverty Level
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
0%-50%	19%	16%	22%	20%
51%-100%	39%	41%	47%	42%
101%-150%	30%	32%	21%	27%
>150%	13%	11%	9%	11%

Table VI-3 shows that recipients in the West are most likely to have employment income, recipients in the Northeast are most likely to have retirement income, recipients in the West are most likely to receive public assistance, and recipients in the South are most likely to receive non-cash benefits.

**Table VI-3
Types of Income and Benefits Received
By Region**

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Wages or Self-Employment Income	34%	34%	28%	37%
Retirement Income	42%	39%	36%	34%
Public Assistance	27%	34%	33%	41%
Non-Cash Benefits	59%	61%	68%	64%

Table VI-4 displays the percent of respondents who were unemployed during the year. The table shows that LIHEAP recipients in the West were most likely to be unemployed.

**Table VI-4
Unemployed During the Year
By Region**

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Yes	31%	34%	38%	44%
No	64%	65%	60%	53%
Don't Know / Refused	5%	<1%	2%	2%

B. Energy Burden and Energy Bill Payment Problems

Table VI-5 displays mean pre- and post-LIHEAP energy burden by region. The table shows that recipients in the South have the highest energy burdens on average.

**Table VI-5
Mean Energy Burden
By Region**

	Northeast	Midwest	South	West
Number of Respondents	543	255	239	238
Pre-LIHEAP	14%	16%	19%	13%
Post-LIHEAP	9%	12%	15%	10%

Table VI-6 shows that LIHEAP recipients in the West, South, and Northeast were more likely than those in the Midwest to report that they left their home for part of the day because it was too hot or too cold.

Table VI-6
Left Home for Part of the Day Because it was Too Hot or Too Cold
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Almost Every Month	2%	1%	3%	1%
Some Months	12%	6%	12%	12%
1 or 2 Months	8%	7%	9%	13%
Never / No	78%	85%	75%	74%
Don't Know / Refused	1%	1%	1%	<1%

Table VI-7 shows that the percentage of respondents who reported that they used their kitchen oven or stove to provide heat in the past year ranged from 28 percent in the West to 37 percent in the South.

Table VI-7
Used Kitchen Stove or Oven to Provide Heat
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Almost Every Month	2%	1%	3%	2%
Some Months	17%	11%	18%	11%
1 or 2 Months	16%	17%	16%	15%
Never / No	64%	70%	63%	72%
Don't Know / Refused	<1%	1%	<1%	<1%

Table VI-8 shows that respondents in the West were most likely to report that they skipped paying or paid less than their entire home energy bill during the past year.

Table VI-8
Skipped Paying or Paid Less than Entire Home Energy Bill
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Almost Every Month	12%	9%	14%	21%
Some Months	21%	18%	22%	25%
1 or 2 Months	14%	16%	15%	13%
Never / No	52%	56%	48%	40%
Don't Know / Refused	1%	1%	1%	2%

Table VI-9 shows that 33 to 42 percent of respondents reported that they received a notice or threat to disconnect their electricity or home heating fuel in the past year.

Table VI-9
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel
Due to Not Having Enough Money for the Energy Bill
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Almost Every Month	6%	2%	6%	3%
Some Months	12%	13%	12%	13%
1 or 2 Months	19%	18%	21%	26%
Never / No	62%	65%	61%	58%
Don't Know / Refused	1%	2%	<1%	<1%

Table VI-10 displays the percent of respondents who had their electricity and gas utility service terminated during the past year. Service termination ranged from eight percent in the Midwest to 16 percent in the South.

**Table VI-10
Utility Service Terminations
During Past Year
By Region**

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Electricity	8%	6%	14%	9%
Gas	5%	5%	6%	7%
Electricity or Gas	10%	8%	16%	12%

C. Housing, Health, and Medical Problems

Table VI-11 displays the percent of those who did not make their full rent or mortgage payment in the past five years. The table shows that respondents in the South and West were somewhat more likely to report this problem.

**Table VI-11
Did Not Make Full Rent or Mortgage Payment Due to Energy Bills
In the Past Five Years
By Region**

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Yes	30%	29%	34%	34%
No	67%	70%	65%	65%
Don't Know /Refused	3%	1%	1%	1%

Table VI-12 displays the percent of respondents who reported that they went without food for at least one day in the past five years. The table shows that respondents in the West and South were most likely to report this problem.

**Table VI-12
Went Without Food for at Least One Day Due to Energy Bills
In the Past Five Years
By Region**

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Yes	22%	21%	28%	30%
No	77%	79%	72%	70%
Don't Know /Refused	1%	<1%	0%	<1%

Table VI-13 shows that respondents in the South were most likely to report that they went without medical or dental care due to their energy bills in the past five years.

Table VI-13
Went Without Medical or Dental Care Due to Energy Bills
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Yes	30%	33%	48%	42%
No	70%	67%	51%	57%
Don't Know /Refused	0%	<1%	1%	1%

Table VI-14 shows that respondents in the West and South were most likely to report that they did not fill their prescription or took less than the full dose of a prescribed medication due to their energy bills in the past five years.

Table VI-14
Didn't Fill Prescription or Took Less Than the Full Dose of
Prescribed Medicine Due to Energy Bills
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Yes	30%	33%	37%	39%
No	69%	66%	62%	60%
Don't Know /Refused	1%	<1%	1%	2%

Table VI-15 shows that respondents in the West were most likely to report that someone in the home became sick because the home was too cold.

Table VI-15
Someone in Household Became Sick Because Home was Too Cold
In the Past Five Years
By Region

	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
Yes	19%	16%	20%	24%
No	80%	83%	79%	75%
Don't Know /Refused	2%	1%	1%	2%

D. LIHEAP Receipt

Table VI-16 displays the number of years that respondents reported LIHEAP receipt out of the past five years. The table shows that respondents in the South were most likely to report that they received LIHEAP in only one of the past five years and respondents in the Northeast and Midwest were most likely to report that they received LIHEAP in each of the past five years.

**Table VI-16
Number of Years Received LIHEAP
In the Past Five Years
By Region**

	2011 Survey			
	Northeast	Midwest	South	West
Number of Respondents	841	318	302	307
1	19%	18%	33%	26%
2	19%	23%	25%	23%
3	19%	15%	16%	19%
4	7%	11%	3%	5%
5	24%	23%	11%	18%
Don't Know / Refused	12%	9%	9%	10%

VII. Conclusion

The 2011 NEADA study confirmed that LIHEAP recipient households are likely to be vulnerable to temperature extremes. They are likely to have seniors, disabled members, or children in the home. Over 89 percent of LIHEAP recipients had at least one of these vulnerable household members. The study also showed that these households face many challenges in addition to their energy bills, including unemployment, unhealthy home conditions, and medical issues.

Energy Costs

LIHEAP recipients reported that they faced high energy costs. Forty-five percent of the respondents reported energy costs over \$2,000 in the past year and 52 percent said that their energy bills were more difficult to pay. Almost half of those who said that their energy bills were more difficult to pay said that the increased difficulty was due to a worsened financial situation.

Responses to High Energy Costs

Households reported that they took several actions to make ends meet, including closing off part of the home and leaving the home for part of the day. Some of the actions were unsafe and could lead to injury or illness, such as keeping the home at a temperature that was unsafe or unhealthy or using the kitchen stove or oven to provide heat.

Inability to Pay Energy Bills

Despite the assistance that they received, many LIHEAP recipients were unable to pay their energy bills. Almost half of the respondents reported that they had skipped paying or paid less than their entire home energy bill in the past year and more than one third said that they received a notice or threat to disconnect or discontinue their electricity or home heating fuel.

Households went without utility service and sacrificed heating and cooling their home. Eleven percent had their electric or natural gas service shut off in the past year due to nonpayment. Almost one quarter reported that they were unable to use their main source of heat in the past year because their fuel was shut off, they could not pay for fuel delivery, or their heating system was broken and they could not afford to fix it. Seventeen percent reported that they were unable to use their air conditioner in the past year because their electricity was shut off or their air conditioner was broken and they could not afford to fix it.

Housing and Financial Problems

Many LIHEAP recipients had problems paying for housing in the past five years, due at least partly to their energy bills. Almost one third did not make their full mortgage or rent payment. Six percent were evicted from their home or apartment and four percent had a foreclosure on their mortgage.

Medical and Health Problems

Many of the LIHEAP recipients faced significant medical and health problems in the past five years, partly as a result of high energy costs. Nearly one quarter reported that they went without

food, 37 percent sacrificed medical/dental care, and one fifth had someone in the home become sick because the home was too cold.

The Need for LIHEAP

Households reported enormous challenges despite the fact that they received LIHEAP. However, they reported that LIHEAP was extremely important. Many reported that they would have kept their home at unsafe or unhealthy temperatures and/or had their electricity or home heating fuel discontinued if it had not been for LIHEAP.

It is clear that many of these households will continue to need LIHEAP to meet their energy and other essential needs.

Appendix A: Survey Instrument



NEADA 2011 National Energy Assistance SURVEY FINAL INSTRUMENT

Screener

Hello. This is (INTERVIEWER) from Issues and Answers calling for (NAME) regarding the National Energy Assistance study.

{Interviewer Note: The goal is to conduct the survey with either (NAME) or that person's spouse/partner. If (NAME) is not home / unavailable, politely ask, "May I speak with the spouse or partner of (NAME)".}

You should have received a letter in the mail from the National Energy Assistance Directors' Association about this survey. I'm calling to ask you a few brief questions about your energy bills. In the survey, we will also talk about (**state specific LIHEAP name**). By (**state specific LIHEAP name**), we mean the home energy assistance benefits that your household received through your Community-Based Organization. Your responses will help us better understand the need for (**state specific LIHEAP name**) energy assistance, and the problems caused by high energy bills. All your responses will be kept confidential and will not affect your energy assistance benefits.

S1. {Interviewer: DO NOT READ, Whom are you speaking to?}

- 01 NAME
- 02 Spouse/Partner
- 03 Caretaker/Guardian
- 04 Other/Don't Know

[ASK if S1=04]

S2. When can I call back to speak with (NAME) or the spouse or partner of (NAME)? _____ WRITE DATE AND TIME FOR CALLBACK

S3. Did you receive (**STATE SPECIFIC LIHEAP NAME**) in the past 12 months?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

A. Experience with Energy Assistance

A1. In how many of the past 5 years have you received (**STATE SPECIFIC LIHEAP NAME**)?

- 01 ONE YEAR
- 02 TWO YEARS
- 03 THREE YEARS
- 04 FOUR YEARS
- 05 FIVE YEARS
- 07 DON'T KNOW
- 08 REFUSED

B. Actions taken to meet energy expenses

Energy bills can take up a large part of a family's budget, and households often find it necessary to make choices about what bills they will pay or what needs they will meet. In this section of the survey, we ask some questions about actions that your household may have taken when it was difficult to meet all of your expenses.

In the past year, have you or any member of your family taken any of the following actions or experienced any of the following due to your energy bills:

1. Past Year	01	02	07	08
B3a. Had a foreclosure on your mortgage?	YES	NO	DON'T KNOW	REFUSED
B6a. Got a payday loan to cover your expenses?	YES	NO	DON'T KNOW	REFUSED
B7a. Went without food for at least one day?	YES	NO	DON'T KNOW	REFUSED
B8a. Went without medical or dental care?	YES	NO	DON'T KNOW	REFUSED

In the past 5 years, have you or any member of your family taken any of the following actions or experienced any of the following due to your energy bills:

2. Housing Problems	01	02	07	08
B1. Didn't make full rent or mortgage payment?	YES	NO	DON'T KNOW	REFUSED
B2. Was evicted from home or apartment?	YES	NO	DON'T KNOW	REFUSED
B3. Had a foreclosure on your mortgage?	YES	NO	DON'T KNOW	REFUSED
B4. Moved in with friends or family?	YES	NO	DON'T KNOW	REFUSED
B5. Moved into a shelter or been homeless?	YES	NO	DON'T KNOW	REFUSED

3. Financial	01	02	07	08
B6. Got a payday loan to cover your expenses?	YES	NO	DON'T KNOW	REFUSED

4. Other Expenses	01	02	07	08
B7. Went without food for at least one day?	YES	NO	DON'T KNOW	REFUSED
B8. Went without medical or dental care?	YES	NO	DON'T KNOW	REFUSED
B9. Didn't fill a prescription or took less than the full dose of a prescribed medicine?	YES	NO	DON'T KNOW	REFUSED

5. Utility Service and Health	01	02	07	08
B10. Had someone in your household get sick	YES	NO	DON'T KNOW	REFUSED

B11.	because your home was too cold? (Ask if B10=1, YES) Did someone in the household need to go to the doctor or hospital because of this illness?	YES	NO	DON'T KNOW	REFUSED
B12.	Had someone in your household get sick because your home was too hot?	YES	NO	DON'T KNOW	REFUSED
B13.	(Ask if B12=1, YES) Did someone in the household need to go to the doctor or hospital because of this illness?	YES	NO	DON'T KNOW	REFUSED
6. Utility Payment		01	02	07	08
B14.	In the past year, have you tried to work out a payment arrangement with your gas or electric utility company?	YES	NO	DON'T KNOW	REFUSED
B15.	(Ask if B14=1, YES) Were you able to work out a payment arrangement?	YES	NO	DON'T KNOW	REFUSED

C. Energy Insecurity Scale

In the past 12 months, did you almost every month, some months, only in 1 or 2 months, or never do the following because there wasn't enough money for your energy bill?

(INTERVIEWER NOTE: IF ASKED, ALMOST EVERY MONTH MEANS 10 OR MORE MONTHS, AND SOME MONTHS MEANS 3 TO 9 MONTHS.)

	01	02	03	04	07	08
C2. Did you reduce your expenses for what you consider to be basic household necessities?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C4. Did you skip paying your home energy bill or pay less than your whole home energy bill?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C5. Did you have a supplier of your electric or home heating service threaten to disconnect your electricity or home heating fuel service, or discontinue making fuel deliveries?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C6. Did you close off part of your home because you could not afford to heat or cool it?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C7. Did you keep your home at a temperature that you felt was unsafe or unhealthy at any time of the year?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C8. Did you leave your home for part of the day because it was too hot or too cold?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C9. Did you use your kitchen stove or oven to provide heat?	ALMOST EVERY MONTH	SOME MONTHS	1 OR 2 MONTHS	NEVER/NO	DON'T KNOW	REFUSED
C10a. In the past 12 months, was your electricity ever shut off because you were unable to pay your electric bill?		01 YES	02 NO	07 DON'T KNOW	08 REFUSED	
C10b. ASK C10b if C10a=01, YES. Is your electricity service shut off now?		YES	NO	DON'T KNOW	REFUSED	
C10c. In the past 12 months, was your natural gas ever shut off because you were unable to pay your gas bill?		YES	NO	DON'T KNOW	REFUSED	
C10d. ASK C10d if C10c=01, YES. Is your gas service shut off now?		YES	NO	DON'T KNOW	REFUSED	

Was there ever a time during the past 12 months when you wanted to use your main source of heat, but could not for one or more of the following reasons?

	01	02	07	08
C11. Your heating system was broken and you were unable to pay for its repair or replacement?	YES	NO	DON'T KNOW	REFUSED
C12. You ran out of fuel oil, kerosene, LPG, propane, coal, or	YES	NO	DON'T KNOW	REFUSED

wood because you were unable to pay for a delivery?
 C13. The utility company discontinued your gas or electric service because you were unable to pay your bill? YES NO DON'T KNOW REFUSED

(Ask C14 if C11=1, YES, OR C12=1, YES, OR C13=1, YES)

C14. Did (STATE SPECIFIC LIHEAP NAME) help you to restore use of your main source of heat? 01 YES 02 NO 07 DON'T KNOW 08 REFUSED

Was there ever a time during the past 12 months when you wanted to use your air conditioner, but could not for one or more of the following reasons?

C15. Your air conditioner was broken and you were unable to pay for its repair or replacement? 01 YES 02 NO 07 DON'T KNOW 08 REFUSED

C16. The utility company discontinued your electric service because you were unable to pay your bill? YES NO DON'T KNOW REFUSED

(ASK C19 IF C12=1, YES OR C13=1, YES, OR C16=1, YES, OR C10A=1, YES, OR C10C=1, YES)

Was there ever a time during the past 12 months when you had to do the following because the utility company discontinued your gas or electric service or because you ran out of fuel and could not pay for a delivery?

C19. Did you have to use candles or lanterns because you didn't have lights? 01 YES 02 NO 07 DON'T KNOW 08 REFUSED

(READ IF S3=1 AND [C7=4, NEVER OR [C12=2, NO, AND C13=2, NO, AND C16=2, NO, AND C10A=2, NO, AND C10C=2, NO]]) ELSE SKIP TO NEXT SECTION

You stated that you did not face some of these problems that we asked about in the past year. In the next few questions we ask whether you think you may have had some of these problems if (STATE SPECIFIC LIHEAP NAME) assistance had not been available.

C21. (Ask if C7=4, NEVER) Would you have needed to keep your home at a temperature that you felt was unsafe or unhealthy at any time of the year if (STATE SPECIFIC LIHEAP NAME) assistance had not been available? 01 YES 02 NO 07 DON'T KNOW 08 REFUSED

C22. (Ask if [C12=2, NO, AND C13=2, NO, AND C16=2, NO, AND C10A=2, NO, AND C10C=2, NO]) Would you have had your electricity or home heating fuel shut off or discontinued during a time when you needed it to heat or cool your home if (STATE SPECIFIC LIHEAP NAME) assistance had not been available? YES NO DON'T KNOW REFUSED

D. Change in Circumstances

D4. How difficult is it for you to pay your energy bills compared to last year? (DO NOT READ LIST EXCEPT TO PROMPT) **VARY THE ORDER OF RESPONSES

- 01 SAME
- 02 MORE DIFFICULT
- 03 LESS DIFFICULT
- 07 DON'T KNOW
- 08 REFUSED

(Ask D5 if D4=2, "More difficult")

D5. What do you feel is the main reason that it is more difficult to pay your energy bills this year? (DO NOT PROMPT. INTERVIEWER NOTE: IF RESPONDENT SAYS "BILLS/RATES WENT UP", SAY: "Are you referring to your energy bills/rates or some other bill?")

- 01 INCREASED ENERGY BILL
- 02 INCREASED OTHER BILLS
- 03 INCREASED PROPERTY TAXES
- 04 INCREASED RENT
- 05 INCREASED MEDICAL EXPENSES
- 06 INCREASED PRESCRIPTION DRUGS
- 07 LOWER INCOME/LOST JOB/WORSE ECONOMIC SITUATION
- 95 OTHER _____**
- 97 DON'T KNOW**
- 98 REFUSED

E. Healthy Homes

E7. Does anyone in the home have symptoms of asthma, including coughing, wheezing, shortness of breath, chest tightness, or phlegm production?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

E8. Does anyone in the home have chronic bronchitis, emphysema, or chronic obstructive pulmonary disease (COPD)?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

(Ask E9 if E7=1, YES OR E8=1, YES)

E9. Has anyone in the home gone to the emergency room or urgent care center for asthma, bronchitis, emphysema, or chronic obstructive pulmonary disease (COPD) in the past year?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

E10. Does anyone in the home have high blood pressure (hypertension), heart disease, heart attack, or stroke?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F. Demographics

F1. Do you own or rent your home?

- 01 OWN
- 02 RENT
- 03 OTHER _____
- 07 DON'T KNOW
- 08 REFUSED

F2. Including yourself, how many people normally live in this household? (Interviewer instruction: if someone asks if a child who is away at college should be included, instruct them that the child should only be included if he/she is listed as a dependent on the household's tax form.) (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ OCCUPANTS

F3. How many are 60 or older? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ OCCUPANTS OVER AGE 60

SKIP IF F2=F3

F4. How many are 18 or under? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ CHILDREN 18 OR UNDER

(ASK F5 IF F4 ≠ 0, SKIP IF F2=F3)

F5. How many are 5 or under? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ CHILDREN 5 OR UNDER

F6. How many are disabled? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ DISABLED OCCUPANTS

F7. Which fuel is used most for heating your home? (DO NOT READ LIST EXCEPT TO PROMPT)

- 01 GAS; FROM UNDERGROUND PIPES SERVING THE NEIGHBORHOOD
- 02 GAS: BOTTLED, TANK OR LPG, OR PROPANE

- 03 ELECTRICITY
- 04 FUEL OIL, KEROSENE, ETC.
- 05 COAL OR COKE
- 06 WOOD
- 07 SOLAR ENERGY
- 08 OTHER FUEL
- 09 NO FUEL USED
- 97 DON'T KNOW
- 98 REFUSED

[ASK IF F1 ≠ 01]

F8. Is heat included in your rent?

- 01 YES
- 02 NO
- 03 DO NOT PAY RENT
- 07 DON'T KNOW
- 08 REFUSED

F10. In the past 12 months, what was the cost of electricity, gas, and other fuels (oil, coal, kerosene, wood, etc.) for your home? (IF NECESSARY: Please provide your best guess. IF RESPONDENT STILL STRUGGLES: give option to provide average monthly cost) (DO NOT READ LIST EXCEPT TO PROMPT.)

- 01 ≤\$500 (MONTHLY: ≤41.67)
- 02 \$501 - \$1,000 (MONTHLY: 41.68 – 83.33)
- 03 \$1,001 - \$1,500 (MONTHLY: 83.34 – 125.00)
- 04 \$1,501 - \$2,000 (MONTHLY: 125.01 – 166.67)
- 05 \$2001 OR MORE (MONTHLY: 166.68 OR MORE)
- 07 DON'T KNOW
- 08 REFUSED

F11. In the past 12 months, did you not pay your home energy bill or not pay your bill in full because of expenses for medical bills or prescription medicine?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F12. In the past 12 months, did any member of your household have any necessary medical equipment that uses electricity?

(OPTIONAL INTERVIEWER NOTE: I WOULD LIKE YOU TO THINK ABOUT ANY NECESSARY MEDICAL EQUIPMENT THAT USES ELECTRICITY, SUCH AS AN OXYGEN MACHINE OR A NEBULIZER.)

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F13. In the past 12 months, did you or any member of your household receive employment income from wages and salaries or self-employment income from a business or farm?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F14. In the past 12 months, was any member of your household unemployed and looking for work?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F15. In the past 12 months, did you or any member of your household receive retirement income from Social Security or pensions and other retirement funds?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F16. In the past 12 months, did you or any member of your household receive benefits from Temporary Assistance for Needy Families (TANF), Supplemental Security Income (SSI), or general assistance or public assistance?

- 01 YES
- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F17. In the past 12 months, did you or any member of your household receive Food Stamps or live in public or subsidized housing?

- 01 YES

- 02 NO
- 07 DON'T KNOW
- 08 REFUSED

F18. What is your household's annual income? (give option to provide monthly income) (DO NOT READ LIST EXCEPT TO PROMPT.)

- 01 ≤\$5,000 (MONTHLY: ≤416.67)
- 02 \$5,001 - \$10,000 (MONTHLY: 416.68 – 833.33)
- 03 \$10,001 - \$15,000 (MONTHLY: 833.34 - 1,250.00)
- 04 \$15,001 - \$20,000 (MONTHLY: 1,250.01 – 1,666.67)
- 05 \$20,001 - \$25,000 (MONTHLY: 1,666.68 – 2,083.33)
- 06 \$25,001 - \$30,000 (MONTHLY: 2,083.34 – 2,500.00)
- 07 \$30,001 - \$35,000 (MONTHLY: 2,500.01 – 2,916.67)
- 08 \$35,001 - \$40,000 (MONTHLY: 2,916.68 – 3,333.33)
- 09 >\$40,000 (MONTHLY: >3,333.33)
- 97 DON'T KNOW
- 98 REFUSED

That was my last question. Thank you very much for your time and cooperation. Have a pleasant day/evening.