

**NATIONAL ENERGY ASSISTANCE
DIRECTORS' ASSOCIATION**

**2018 NATIONAL ENERGY ASSISTANCE SURVEY
FINAL REPORT**

December 2018

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.

This report has been prepared by APPRISE for NEADA with support provided by the National Energy and Utility Affordability Coalition (NEUAC).

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The study would not have been possible without the participation of the directors and staff at the state LIHEAP offices in:

- California
- Connecticut
- Georgia
- Iowa
- Indiana
- Louisiana
- Pennsylvania

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Table of Contents

Executive Summary	i
I. Introduction	1
A. Low Income Home Energy Assistance Program (LIHEAP)	1
B. 2018 National Energy Assistance Survey.....	2
C. Organization of the Report.....	2
II. Survey Methodology	4
A. Survey Implementation	4
B. Sample Selection and Response Rates.....	4
C. Weights	6
III. LIHEAP Recipient Households	7
IV. Problems Meeting Energy Needs	14
A. Utility Bills and Energy Burden	14
B. Signs of the Problem.....	17
C. Inability to Remain Safe due to High Energy Costs	19
D. Inability to Pay Energy Bills.....	24
E. Housing Problems.....	33
F. Financial Problems.....	35
G. Food and Medical Insecurity	36
V. The Need for LIHEAP	40
A. History of LIHEAP Receipt.....	40
B. Utility Payment Arrangements	43
C. Problems that Would Have Been Faced in the Absence of LIHEAP	43
D. LIHEAP Restored Heat.....	44
VI. Regional Analysis.....	45
A. Demographic Characteristics	45
B. Energy Burden and Energy Bill Payment Problems.....	46
C. Housing, Health, Food, and Medical Problems	48
D. LIHEAP Receipt.....	50
VII. Conclusion.....	51
Appendix A: Survey Instrument	1
Screener.....	2
A. Experience with Energy Assistance.....	3
B. Actions taken to meet energy expenses.....	4
Past Year	4

Housing Problems	4
Other Expenses	4
Utility Payment	4
C. Energy Insecurity Scale.....	5

Executive Summary

The National Energy Assistance Directors' Association (NEADA), representing the state LIHEAP directors, received funding from the National Energy & Utility Affordability Coalition (NEUAC) to update the information about that was collected in the 2003, 2005, 2008, 2009, and 2011 National Energy Assistance (NEA) Surveys. This survey documented the need for LIHEAP, the choices that low-income households make when faced with unaffordable energy bills, and the impact of LIHEAP.

The 2018 Survey included seven states. Stratified samples of fiscal year 2018 LIHEAP recipients were chosen from each of the state LIHEAP databases. This report presents the findings from the 2018 NEA Survey and provides comparisons to the previous 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 challenges with their energy bills. While there are many anecdotal stories about households that forego basic needs and face tragedies due to a lack of electricity or heating fuel, this survey quantifies the problem. The survey showed that 26 percent of the LIHEAP recipients were unemployed at some point during the year, 82 percent had annual household income below \$20,000, and that 15 percent had their electric or gas service shut off in the past year.

LIHEAP Recipient Households

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

- 46 percent had a senior in the household aged 60 or older.
- 52 percent had a disabled household member.
- 36 percent had a child 18 or younger.
- 92 percent had at least one vulnerable household member.

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

- 26 percent were unemployed at some point during the previous year.
- 28 percent used medical equipment that requires electricity.

Energy Costs

LIHEAP recipients reported that they faced high energy costs.

- 39 percent reported that their energy bills were more than \$2,000 in the past year.
- Pre-LIHEAP energy burden averaged 23 percent and post-LIHEAP energy burden averaged 19 percent for these households, compared to 9 percent for all households in the U.S. and three percent for non low-income households in the U.S.¹

¹ Source: 2014 LIHEAP Notebook.

LIHEAP benefits decreased due to the smaller appropriation in FY 2018. Mean heating benefits were \$307 in FY 2018, compared to \$424 in FY 2011.

Inability to Remain Safe due to High Energy Costs

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

- 37 percent closed off part of their home.
- 25 percent kept their home at a temperature that was unsafe or unhealthy.
- 30 percent used their kitchen stove or oven to provide heat.
- 48 percent of respondents who had utilities shutoff had to use candles or lanterns and seven percent of all respondents had this problem.

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.
- 34 percent received a notice or threat to disconnect or discontinue their electricity or home heating fuel.
- 15 percent had their electric or natural gas service shut off in the past year due to nonpayment.
- 30 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.
- 27 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.

- 17 percent moved in with friends or family.
- 6 percent moved into a shelter or were homeless.

In the past year, LIHEAP recipients faced financial problems.

- 13 percent needed to obtain a payday loan.

Food and Medical Insecurity

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

- 36 percent went without food for at least one day.
- 41 percent went without medical or dental care.
- 31 percent did not fill a prescription or took less than the full dose of a prescribed medication in the past five years.

The Need for LIHEAP

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

- 54 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.
- 59 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 funding from the National Energy & Utility Affordability Coalition (NEUAC) to update the information about that was collected in the 2003, 2005, 2008, 2009, and 2011 National Energy Assistance (NEA) Surveys. This survey documented the need for LIHEAP, the choices that low-income households make when faced with unaffordable energy bills, and the impact of LIHEAP.

The 2018 Survey included seven states. Stratified samples of fiscal year 2018 LIHEAP recipients were chosen from each of the state LIHEAP databases. This report presents the findings from the 2018 NEA Survey and provides comparisons to the previous 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.
- 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

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.

³ Most states use the 150 percent of federal poverty level maximum as the guideline. 150 percent of federal poverty in FY2018 is \$18,210 for a single person and \$37,650 for a family of four.

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. 2018 National Energy Assistance Survey

The 2018 NEA Survey aimed to update the information about LIHEAP-recipient households that was collected in the previous NEA Surveys. Stratified samples of 2018 LIHEAP recipients were selected to collect new information about the consequences of high energy bills for low-income households. The 2018 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
- Impact and importance of LIHEAP benefits for recipient households

The 2018 Survey included seven states, representing each region of the U.S.

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 2018 NEA Survey.
- *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.

⁴ Description of LIHEAP information obtained from “Low Income Home Energy Assistance Program. Report to Congress for Fiscal Year 2014.” 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 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 2018 NEADA 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 seven participating states. This letter announced the survey, notified potential respondents that they would 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 staff conducted the telephone survey. A researcher from APPRISE trained interviewers on the survey instrument and monitored survey implementation. 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. In addition, interviewers were trained on how to use the computerized version of the survey to record customer responses.

Telephone interviews were conducted between June 22, 2018 and August 17, 2018. During this time period, 624 interviews were completed.

B. Sample Selection and Response Rates

LIHEAP recipients were selected from each of the seven states chosen to participate in the survey. 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:** Approximately 228 households were selected in each state. The final sample consisted of 1,594 cases.
- **Unusable:** There were 218 cases deemed unusable 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 228 cases classified as non-interviews because the qualified respondent refused to complete the interview, because the respondent couldn't complete the interview due to a language barrier, 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 524 cases that were determined to have unknown eligibility to complete the interview, due to answering machines and no answers. 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, 624 interviews were completed. Sixteen of these interviews were completed in Spanish.
- **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 backs⁵). Overall, this survey achieved a 77 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 48 percent response rate.
- **Completed Interview Rate:** The completed interview rate is the percentage of households selected that completed the survey. This survey attained a 39 percent completed interview rate.

**Table II-1
Sample and Response Rates**

	Total Sample Statistics
Number Selected	1,594
Unusable	218
Non-Interviews	228
Unknown Eligibility	524
Completed Interviews	624
Cooperation Rate	77%
Response Rate	48%
Completed Interview Rate	39%

Table II-2 displays the number of interviews completed by state. The response rate ranged from 37 percent in Connecticut to 53 percent in Indiana and Louisiana.

⁵ 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.

Table II-2
Number of Completed Interviews by State

State	Total Selected	Completed Interviews	Response Rate
California	215	83	46%
Connecticut	226	74	37%
Georgia	215	89	50%
Iowa	238	90	50%
Indiana	233	99	53%
Louisiana	232	93	53%
Pennsylvania	235	96	50%
TOTAL	1,594	624	48%

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 2018 LIHEAP recipients.

III. LIHEAP Recipient Households

The 2018 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 43 percent of LIHEAP recipients live in single person households and 66 percent have two or fewer household members.

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

Number of Household Members	Percent of Respondents
1	43%
2	23%
3	14%
4	9%
5	6%
6 or more	5%

Table III-2 displays information on the presence of vulnerable household members. The table shows that 46 percent have a senior in the home, 52 percent have a disabled household member, 36 percent have a child age 18 or younger, and 15 percent have a child age five or younger.

**Table III-2
Vulnerable Groups**

	Senior ≥60	Disabled	Child ≤18	Young Child ≤5	Single Parent
Yes	46%	52%	36%	15%	17%
No	54%	48%	64%	85%	83%
Don't Know/Refused	0%	0%	0%	0%	0%

Table III-3 shows that 92 percent of LIHEAP recipients have at least one vulnerable household member (elderly, disabled, or child 18 or younger) and 80 percent have a least one vulnerable household member when households with children five or younger are included.

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

	Elderly, Disabled, or Child ≤18	Elderly, Disabled, or Child ≤5
At Least One Vulnerable Member	92%	80%
No Vulnerable Members	8%	20%

Respondents were asked whether they own or rent their home. Table III-4 shows that 45 percent of LIHEAP recipients own their homes.

**Table III-4
Home Ownership**

Home Ownership	Percent of Respondents
Own	45%
Rent	54%
Other	1%
Don't Know/Refused	0%

Table III-5 displays the annual household income distribution for LIHEAP-recipient households based on information in the state LIHEAP databases. The table shows that 35 percent have income of less than or equal to \$10,000 and only three percent have income above \$40,000.

**Table III-5
Annual Income**

Annual Income	Percent of Respondents
≤ \$ 10,000	35%
\$ 10,001 - \$ 20,000	47%
\$ 20,001 - \$ 30,000	11%
\$ 30,001 - \$ 40,000	4%
More than \$ 40,000	3%

Table III-6A shows (from state LIHEAP databases) that 20 percent had income at or below 50 percent of the poverty level and 61 percent had income at or below the poverty level. Only nine percent had income above 150 percent of the poverty level.

**Table III-6A
Poverty Level**

Poverty Level	Percent of Respondents
0%-50%	20%
51%-100%	41%
101%-150%	30%
>150%	9%

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	294	347	212	85	98	48
0% - 50%	9%	15%	35%	37%	45%	31%
51% - 100%	46%	49%	32%	28%	36%	25%
101% - 150%	36%	29%	25%	23%	16%	34%
> 150%	10%	7%	9%	11%	3%	10%

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 27 percent reported that they received employment income, 39 percent said that they received retirement income, 65 percent reported that they received public assistance, and 61 percent received Medicaid or disability insurance. Public assistance included TANF, SSI, Food Stamps, and general and public assistance.

**Table III-7
Types of Income and Benefits Received**

	Wages or Self-Employment Income	Retirement Income	Public Assistance	Medicaid or Disability Assistance
Yes	27%	39%	65%	61%
No	73%	60%	35%	38%
Don't Know /Refused	<1%	1%	1%	1%

Respondents were asked whether they had been unemployed at some time during the year. Table III-8A shows that 26 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, 36 percent in 2009, and 35 percent in 2011, and 26 percent in 2018.

**Table III-8A
Unemployed during the Year**

	2003	2008	2009	2011	2018
Yes	31%	29%	36%	35%	26%
No	69%	70%	63%	62%	74%
Don't Know / Refused	0%	1%	1%	3%	0%

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. Forty-seven 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	294	347	212	48
Yes	12%	18%	47%	44%
No	88%	82%	54%	56%
Don't Know / Refused	0%	0%	0%	0%

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 51 percent of respondents with income at or below 50 percent of the poverty level reported that they had been unemployed, compared to 19 percent between 51 and 100 percent of poverty, 22 percent between 101 and 150 percent of poverty, and 24 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	104	274	186	60
Yes	51%	19%	22%	24%
No	49%	81%	78%	76%
Don't Know / Refused	0%	0%	0%	0%

Table III-8D displays the percent of respondents who reported that they had wages, retirement income, or had been unemployed in the past year. The table shows that 74 percent of all respondents fell into one of these categories. While only 63 percent of households with disabled members did, 82 percent of households with children fell into one of these categories.

Table III-8D
Working & Unemployed during the Year
By Vulnerable Group

	All	Senior	Disabled	Child ≤18	Non-Vulnerable
Number of Respondents	624	294	347	212	48
Wages	27%	7%	14%	49%	60%
Retirement Income	39%	69%	45%	17%	8%
Unemployed	26%	12%	18%	47%	44%
Either Wages, Retirement Income, or Unemployed	74%	78%	63%	82%	78%

Respondents were asked whether there was a veteran in the household, whether the veteran served abroad, and whether the veteran was disabled as a result of an injury sustained during service. Table III-9A shows that six percent of households had a veteran, three percent had a veteran who served abroad, and two percent had a veteran who was disabled as a result of an injury sustained during service.

**Table III-9A
Households with Veteran Members**

	Household with Veteran Member	Household with Veteran who Served Abroad	Household with Veteran Disabled as a Result of Injury During Service
Yes	6%	3%	2%
No	94%	97%	98%
Don't Know/ Refused	0%	<1%	0%

Table III-9B displays information on where the veterans served.

**Table III-9B
Households with Veteran Members
Where Did They Serve?⁶**

	Percent
Number of Respondents	36
Vietnam	11%
Germany	11%
Iraq	10%
Afghanistan	6%
Korea	6%
Other	19%
Did Not Serve Abroad	51%

Respondents were asked whether they use any medical equipment that requires the use of electricity. Table III-10A shows that 28 percent of respondents reported that they use such equipment.

⁶ Respondents could indicate more than one country where they had performed their service, so the percentages in this table add up to more than 100 percent.

Table III-10A
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	28%
No	72%
Don't Know/Refused	0%

Table III-10B displays the percent who reported the use of such medical equipment by vulnerable group. The table shows that 40 percent of households with a disabled member, 30 percent with a senior, and 29 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-10B
Member of Household Utilizes Medical Equipment that Requires Electricity By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Yes	30%	40%	29%	11%
No	70%	60%	71%	89%
Don't Know / Refused	0%	0%	0%	0%

Respondents were asked to report the primary fuel used to heat their home. Table III-11 shows that 41 percent use natural gas, 38 percent use electricity, nine percent use fuel oil or kerosene, and five percent use LPG or propane.

Table III-11
Primary Fuel Used for Home Heating

Primary Fuel Used for Home Heating	Percent of Respondents
Natural Gas	41%
Electricity	38%
Fuel Oil or Kerosene	9%
Bottled Gas (LPG or Propane)	5%
Wood	1%
Coal, Coke	1%
Other Fuel	<1%
No Fuel Used	<1%
Don't Know/Refused	4%

Table III-12 shows that 11 percent of respondents who do not own their own home have their heat included in their rent.

Table III-12
Heat included in Rent

Heat included in Rent	Percent of Respondents
Number of Respondents	335
Yes	11%
No	88%
Don't Know/Refused	1%

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. *Utility Bills and Energy Burden*

Respondents were asked to report their annual energy costs. Table IV-1 shows that 39 percent of the respondents reported that their bills were over \$2,000.^{7,8}

Table IV-1A
Annual Total Residential Energy Costs

Annual Energy Costs	Percent of Respondents
Less than \$500	2%
\$501 - \$1,000	11%
\$1,001 - \$1,500	17%
\$1,501 - \$2,000	17%
Over \$2,000	39%
Don't Know/Refused	13%

Table IV-2 displays the distribution of LIHEAP heating benefits as reported in the state LIHEAP data. While 11 percent received benefits of less than \$100, 21 percent received benefits between \$101 and \$250, 56 percent received benefits between \$251 and \$500, and 12 percent received benefits over \$500. Mean benefits in 2018 were lower than in the previous years.

⁷ LIHEAP benefit data were not obtained from California. California households are excluded from the tables that rely on these data, and the number of respondents is noted.

⁸ In this section, there are several instances where 476 respondents out of 624 respondents are included because LIHEAP benefit and energy expenditure information were not obtained. In these cases, the number of respondents is noted.

Table IV-2
LIHEAP Heating Benefits Distribution⁹

Benefit Amount	Percent Received			
	2008	2009	2011	2018
Number of Respondents	1,256	1,828	1,667	541
≤ \$100	6%	5%	7%	11%
\$101-\$250	25%	13%	21%	21%
\$251-\$500	39%	45%	43%	56%
\$501-\$750	11%	21%	16%	11%
\$751-\$1,000	6%	7%	7%	1%
≥ \$1,000	3%	6%	5%	0%
Did Not Receive Heating Benefit	9%	4%	2%	0%
Mean Benefits	\$388	\$483	\$424	\$307

Pre-LIHEAP energy burden was calculated by dividing the respondents' reported energy costs by their total household income from the state LIHEAP databases. 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, 39 percent of households had an energy burden higher than 15 percent. After receiving LIHEAP, 26 percent had an energy burden that was this high. Additionally, LIHEAP benefits increased the percentage with burdens at or below five percent from 12 percent of recipients to 21 percent.

Table IV-3A
Total Residential Energy Burden

	Total Residential Energy Burden	
	Pre-LIHEAP	Post-LIHEAP
Number of Respondents	476	476
0-5%	12%	21%
6%-10%	24%	31%
11-15%	25%	22%
16-20%	16%	11%
21-25%	9%	2%
>25%	14%	13%

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-

⁹ Iowa did not specify whether the benefit amount in their system corresponded to Heating Assistance, or to the Total LIHEAP benefit. The calculation of the percentages in Table IV-2 included Iowa recipients.

LIHEAP energy burden, averaging 35 and 36 percent. LIHEAP benefits reduced mean energy burden by between three and four percentage points for all groups of households. While the pre-LIHEAP energy burden average ranged from 16 percent to 36 percent, the post-LIHEAP energy burden average ranged from 12 percent to 32 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	476	207	264	176	71	88	39
Pre-LIHEAP Burden	23%	16%	19%	28%	28%	36%	35%
Post-LIHEAP Burden	19%	12%	15%	25%	24%	32%	31%

Table IV-3C displays the energy burden distribution by vulnerable group. The table shows that 20 to 26 of each group had an energy burden at or below five percent after receipt of LIHEAP except for the non-vulnerable.

Table IV-3C
Residential Energy Burden Distribution
By Poverty Level

	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	207	207	264	264	176	176	39	39
0-5%	9%	26%	8%	20%	12%	21%	2%	4%
6%-10%	25%	31%	21%	27%	23%	31%	14%	36%
11-15%	33%	24%	26%	26%	21%	15%	28%	26%
16-20%	15%	12%	21%	16%	12%	8%	22%	7%
21-25%	11%	3%	14%	3%	8%	3%	5%	0%
>25%	6%	4%	10%	8%	24%	22%	28%	27%

Louisiana was the only state that provided data on household energy costs. Table IV-4A displays the pre- and post-LIHEAP energy burden for the LIHEAP recipients in Louisiana. The table shows that while two percent had an energy burden below five percent prior to receipt of LIHEAP, ten percent had an energy burden below five percent after receipt of LIHEAP. Twenty-five percent still had an energy burden above 25 percent after receipt of LIHEAP.

Table IV-4A
Total Residential Energy Burden - Louisiana

	Total Residential Energy Burden	
	Pre-LIHEAP	Post-LIHEAP
Number of Respondents	93	93
0-5%	2%	10%
6%-10%	12%	20%
11-15%	21%	23%
16-20%	19%	14%
21-25%	15%	7%
>25%	31%	25%

Table IV-4B displays pre- and post-LIHEAP average energy burdens for Louisiana recipients by vulnerable group for those groups with at least 25 respondents. The table shows that households with children had the greatest energy burdens.

Table IV-4B
Mean Total Residential Energy Burden - Louisiana
By Vulnerable Group

	All	Senior	Disabled	Child Under 18
Number of Respondents	93	44	61	30
Pre-LIHEAP Burden	28%	18%	23%	32%
Post-LIHEAP Burden	23%	14%	17%	27%

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-5A shows that 72 percent said that they took this action.

Table IV-5A
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	32%
Some Months	29%
1 or 2 Months	11%
Never / No	26%
Don't Know	3%

Table IV-5B shows that households with elderly members were less likely to report that they reduced expenses for household necessities than other types of households. The table shows that 81 percent of households with children under 18, 75 percent of households without vulnerable members, 75 percent of households with disabled members, and 63 percent of households with seniors said that they faced this problem.

**Table IV-5B
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	294	347	212	48
Almost Every Month	23%	36%	37%	35%
Some Months	29%	30%	35%	18%
1 or 2 Months	11%	9%	9%	22%
Never / No	33%	22%	18%	24%
Don't Know	4%	2%	2%	0%

Table IV-5C shows that households with income below 50 percent of the poverty level were most likely to say that they reduced expenses for household necessities. Eighty-four percent of those with income below 50 percent of the poverty level said that they reduced these expenses.

**Table IV-5C
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	104	274	186	60
Almost Every Month	39%	32%	30%	21%
Some Months	34%	26%	28%	35%
1 or 2 Months	11%	12%	8%	16%
Never / No	15%	27%	32%	22%
Don't Know / Refused	1%	2%	2%	7%

Table IV-6 compares responses to questions about signs of unaffordable energy bills for the 2003, 2008, 2009, 2011, and 2018 surveys. The table shows that approximately the same percentage of respondents faced these problems in 2018 as in 2011, which was somewhat lower than in the previous years.

Table IV-6
Signs of the Problem
Comparison of Survey Results

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Reduced Expenses for Household Necessities	78%	80%	79%	72%	72%

C. Inability to Remain Safe due to High Energy Costs

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-7A shows that 36 percent of respondents said that they took this action.

Table IV-7A
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	10%
Some Months	16%
1 or 2 Months	10%
Never / No	63%
Don't Know / Refused	<1%

Table IV-7B 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 and non-vulnerable households were most likely to say they took this action.

Table IV-7B
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	294	347	212	48
Almost Every Month	10%	14%	8%	12%
Some Months	16%	22%	14%	14%
1 or 2 Months	11%	8%	11%	14%
Never / No	64%	57%	66%	59%
Don't Know/Refused	0%	0%	<1%	0%

Table IV-7C shows that households with income below 50 percent of the poverty level were most likely to report that they closed off part of their home. Forty-six percent of these households reported that they closed off part of their home because they did not have enough money for their energy bill during the past year.

Table IV-7C
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	104	274	186	60
Almost Every Month	10%	14%	7%	8%
Some Months	24%	13%	14%	20%
1 or 2 Months	12%	10%	11%	3%
Never / No	54%	63%	67%	69%
Don't Know	0%	0%	<1%	0%

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-8A shows that 26 percent of the respondents said that they took this action.

Table IV-8A
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	4%
Some Months	13%
1 or 2 Months	9%
Never / No	74%
Don't Know / Refused	1%

Table IV-8B shows the percent that kept their home at an unsafe or unhealthy temperature during the past year by vulnerable group. While 30 percent of households with disabled members reported that they did so, 27 percent of non-vulnerable households reported that they did so.

Table IV-8B
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	294	347	212	48
Almost Every Month	4%	5%	4%	5%
Some Months	11%	14%	12%	16%
1 or 2 Months	8%	11%	8%	6%
Never / No	76%	69%	74%	71%
Don't Know/Refused	1%	1%	1%	3%

Table IV-8C shows that households below 50 percent and above 150 percent of the poverty level were more 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-8C
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	104	274	186	60
Almost Every Month	8%	3%	3%	5%
Some Months	18%	12%	10%	13%
1 or 2 Months	7%	8%	9%	13%
Never / No	67%	76%	76%	69%
Don't Know/Refused	0%	1%	2%	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-9A shows that 30 percent of respondents said that they took this action during the past year.

Table IV-9A
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	1%
Some Months	11%
1 or 2 Months	18%
Never / No	70%
Don't Know	<1%

Table IV-9B shows that percent who said that they used their kitchen stove or oven for heat in the past year by vulnerable group. Households without vulnerable members were most likely to report that they did so. While 38 percent of non-vulnerable reported that they used their kitchen stove or oven for heat, 33 percent of households with children, 32 percent of households with disabled members, and 23 percent of households with seniors reported that they did so.

Table IV-9B
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	294	347	212	48
Almost Every Month	<1%	1%	2%	2%
Some Months	9%	12%	11%	15%
1 or 2 Months	14%	19%	20%	21%
Never / No	76%	67%	68%	62%
Don't Know/Refused	1%	1%	0%	0%

Table IV-9C shows that the percent who reported that they used their kitchen stove or oven for heat by poverty level. Households below 50 percent of the poverty level were most likely to report that they did so. The table shows that 37 percent of households with income below 50 percent of the poverty level reported that they used their kitchen stove or oven to provide heat.

Table IV-9C
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	104	274	186	60
Almost Every Month	1%	1%	1%	0%
Some Months	14%	11%	8%	14%
1 or 2 Months	22%	19%	14%	17%
Never / No	63%	69%	77%	69%
Don't Know	0%	0%	1%	0%

Table IV-10 compares the responses to these issues over the past several surveys. The percentages in 2018 were approximately the same as in 2011 and 2009.

**Table IV-10
Responses to the Problem
Comparison of Survey Results**

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Closed Off Part of Home	39%	44%	36%	39%	37%
Kept Home at Temperature You Felt was Unsafe or Unhealthy	25%	28%	26%	23%	25%
Used Kitchen Stove or Oven to Provide Heat	31%	33%	33%	33%	30%

D. Inability to Pay Energy Bills

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

Table IV-11A 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-11A
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	11%
Some Months	21%
1 or 2 Months	17%
Never / No	49%
Don't Know / Refused	2%

Table IV-11B shows that households with children were most likely to say that they skipped paying their home energy bill. Sixty-seven percent of households with children said that they skipped paying their home energy bill at least once in the past year.

Table IV-11B
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	294	347	212	48
Almost Every Month	4%	12%	19%	7%
Some Months	17%	21%	27%	20%
1 or 2 Months	16%	17%	21%	22%
Never / No	60%	48%	32%	47%
Don't Know / Refused	3%	2%	1%	4%

Table IV-11C 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. Fifty-nine 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-11C
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	104	274	186	60
Almost Every Month	17%	9%	11%	6%
Some Months	34%	17%	20%	15%
1 or 2 Months	8%	24%	12%	20%
Never / No	40%	47%	56%	57%
Don't Know / Refused	2%	3%	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 34 percent said that they received a notice or threat.

Table IV-12A
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	17%
Never / No	64%
Don't Know / Refused	2%

Table IV-12B shows the percent who received a threat of service termination by vulnerable group. The table shows that households with children and the non-vulnerable were most likely to face this problem. Forty-eight percent of households with children and 44 percent of non-vulnerable households received a notice or threat to disconnect or discontinue their service in the past year.

Table IV-12B
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	294	347	212	48
Almost Every Month	1%	5%	7%	6%
Some Months	8%	13%	19%	8%
1 or 2 Months	12%	15%	22%	30%
Never / No	76%	64%	50%	51%
Don't Know / Refused	2%	2%	1%	5%

Table IV-12C 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 47 percent of these households said that they faced this problem in the past year.

Table IV-12C
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	104	274	186	60
Almost Every Month	10%	3%	4%	0%
Some Months	17%	15%	9%	4%
1 or 2 Months	20%	18%	15%	12%
Never / No	50%	62%	70%	84%
Don't Know / Refused	4%	2%	1%	0%

Table IV-13A shows that 13 percent of respondents had their electricity shut off due to nonpayment, seven percent had their gas service shut off, and 15 percent had at least one of the two shut off during the past year.

Table IV-13A
Utility Service Was Shut Off Due to Nonpayment during the Past Year

	Percent of Respondents
Electricity	13%
Gas	7%
Electricity or Gas	15%

Table IV-13B 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. Twenty-six percent of households with children had their electricity and/or gas shut off due to nonpayment in the past year.

Table IV-13B
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	294	347	212	48
Electricity	6%	12%	22%	16%
Gas	4%	7%	13%	10%
Electricity or Gas	9%	15%	26%	20%

Table IV-13C 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-six 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-13C
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	104	274	186	60
Electricity	24%	12%	9%	5%
Gas	12%	6%	8%	2%
Electricity or Gas	26%	14%	13%	7%

Table IV-14A shows the percent of households who were unable to use their main source of heat during the past year. The table shows that 20 percent were unable to use their main source of heat due to the system being broken, eight percent due to an inability to pay for a fuel delivery, and seven percent due to an electric or gas service termination. Thirty percent of households were unable to use their main source of heat during the past year for any of the three reasons.

Table IV-14A
Unable to Use Main Source of Heat during the Past Year

	Percent of Respondents
Heating System Broken	20%
Unable to Pay for Fuel Delivery	8%
Gas or Electric Service Discontinued	7%
Any of the Three Reasons	30%

Table IV-14B 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-eight percent of households with children and thirty-two percent of 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-14B
Unable to Use Main Source of Heat during the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Heating System Broken	19%	23%	23%	21%
Unable to Pay for Fuel Delivery	5%	10%	8%	6%
Gas or Electric Service Discontinued	4%	6%	12%	8%
Any of the Three Reasons	24%	32%	38%	27%

Table IV-14C 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-six 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-14C
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	104	274	186	60
Heating System Broken	26%	21%	16%	22%
Unable to Pay for Fuel Delivery	6%	7%	8%	16%
Gas or Electric Service Discontinued	13%	5%	8%	0%
Any of the Three Reasons	36%	29%	27%	30%

Table IV-15A 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 25 percent could not use their air conditioner because it was broken and six percent could not use it because their electric service was discontinued. Twenty-seven percent could not use their air conditioner for at least one of those two reasons.

Table IV-15A
Unable to Use Air Conditioner during the Past Year

	Percent of Respondents
Air Conditioner Broken	25%
Electric Service Discontinued	6%
Either Reason	27%

Table IV-15B 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-15B
Unable to Use Air Conditioner during the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Air Conditioner Broken	18%	29%	34%	19%
Electric Service Discontinued	3%	6%	10%	6%
Either Reason	19%	30%	38%	21%

Table IV-15C 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. Thirty-nine 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-15C
Unable to Use Air Conditioner during the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Air Conditioner Broken	34%	24%	20%	26%
Electric Service Discontinued	13%	5%	3%	0%
Either Reason	39%	26%	22%	26%

Table IV-16A displays the percent of respondents who had to use candles or lanterns due to lack of lights. The table shows that 48 percent of respondents who had utilities shutoff in past 12 months had to go without lights at some point in the past year and seven percent of all respondents had this problem.

Table IV-16A
Had to Use Candles or Lanterns Due to Lack of Lights
During the Past Year

	Percent of Respondents With Utility Shutoff	Percent of All Respondents
Number of Respondents	83	624
Had to Use Candles or Lanterns Due to Lack of Lights	48%	7%

Table IV-18B displays the percent of respondents who had to go without lights during the past year by vulnerable group. Eleven percent of all recipients with children had to use candles or lanterns during the past year due to a lack of lights.

Table IV-16B
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	24	44	50	8
Had to Use Candles or Lanterns Due to Lack of Lights: Percent of those with Utility Shutoff	43%	56%	44%	43%
Percent of All Respondents	3%	8%	11%	7%

Table IV-16C displays the percent of households who had to go without lights during the past year by poverty group. Thirteen percent of all recipients with income below 50 percent of the poverty level had to use candles or lanterns during the past year due to a lack of lights.

Table IV-16C
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	26	34	30	3
Had to Use Candles or Lanterns Due to Lack of Lights: Percent of those with Utility Shutoff	49%	50%	46%	30%
Percent of All Respondents	13%	6%	5%	2%

Table IV-17A displays the percent of respondents who had their utility service shut off at the time of the survey. The table shows that three percent of respondents had their electricity or gas shut off at the time of the survey.

Table IV-17A
Utility Service Shut Off at Time of Survey

	Percent of Respondents
Electricity	1%
Gas	2%
Electricity or Gas	3%

Table IV-17B shows that four percent of households with children had their electricity or gas service shut off at the time of the survey.

Table IV-17B
Utility Service Shut Off at Time of Survey
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Electricity	<1%	1%	2%	0%
Gas	1%	2%	2%	3%
Electricity or Gas	1%	3%	4%	3%

Table IV-17C 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.

Table IV-17C
Utility Service Shut Off at Time of Survey
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Electricity	2%	2%	0%	0%
Gas	3%	2%	1%	0%
Electricity or Gas	4%	3%	1%	0%

Table IV-18 compares the responses about service disruptions across the surveys. The table shows that there was an increase in shutoffs and in the inability to use the heating and cooling systems because they were broken.

Table IV-18
Inability to Pay Energy Bills during Past Year
Comparison of Survey Results

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Skipped Paying or Paid Less than Entire Home Energy Bill	52%	47%	50%	49%	49%
Received Notice or Threat to Disconnect or Discontinue Electricity or Home Heating Fuel	38%	37%	36%	37%	34%
Electricity Shut off Due to Nonpayment	8%	9%	9%	9%	13%
Gas Shut off Due to Nonpayment	--	6%	7%	6%	7%
Electricity or Gas Shut off Due to Nonpayment	--	12%	12%	11%	15%
Heating System Broken and Unable to Pay for Repair or Replacement	10%	13%	13%	13%	20%
Unable to Use Main Heat Because Unable to Pay for a Fuel Delivery	10%	13%	11%	10%	8%
Unable to Use Main Source of Heat Because Utility Company Discontinued Gas or Electric Service Due to Nonpayment	11%	13%	11%	7%	7%
Unable to Use AC Because Broken and Unable to Pay Repair/Replace	12%	12%	12%	14%	25%
Unable to Use Air Conditioner Because Utility Company Discontinued Electric Service Due to Nonpayment	6%	7%	8%	5%	6%
Had to Use Candles or Lanterns Due to Lack of Lights	8%	7%	8%	5%	7%

E. Housing Problems

This section examines housing problems that respondents have faced due to unaffordable energy bills.

Table IV-19A shows that 17 percent moved in with friends or family and six percent moved into a shelter or were homeless in the past five years.

Table IV-19A
Housing Problems Due to Energy Bills in the Past Five Years

	Percent of Respondents
Moved in With Friends or Family	17%
Moved into Shelter or Was Homeless	6%

Table IV-19B displays the results by vulnerable group. The table shows that households with children and non-vulnerable households were most likely to face these problems.

Table IV-19B
Housing Problems Due to Energy Bills in the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Moved in With Friends or Family	13%	17%	24%	21%
Moved into Shelter or Was Homeless	3%	6%	8%	9%

Table IV-19C displays the results by poverty group. The table shows that the lowest poverty group was most likely to face these housing problems. Twenty-seven percent of households below 50 percent of the poverty level had to move in with friends or family at some point in the past five years and nine percent moved into a shelter or were homeless.

Table IV-19C
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	104	274	186	60
Moved in With Friends or Family	27%	18%	14%	8%
Moved into Shelter or Was Homeless	9%	4%	7%	3%

Table IV-19D 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-19D
Housing Problems Due to Energy Bills in the Past Five Years
By Home Ownership

	Own Home	Does Not Own Home
Number of Respondents	279	345
Moved in With Friends or Family	12%	22%
Moved into Shelter or Was Homeless	<1%	10%

Table IV-20 compares results with respect to housing problems from the surveys. The table shows that the prevalence of these issues have increased from the previous surveys.

Table IV-20
Housing Problems during Past Five Years
Comparison of Survey Results

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Moved in with Friends or Family	9%	11%	12%	14%	17%
Moved into Shelter or Was Homeless	4%	3%	3%	4%	6%

Table IV-21A shows that one percent had a mortgage foreclosure in the past year.

Table IV-21A
Mortgage Foreclosure Due to Energy Bills in the Past Year

	Percent of Respondents
Had Mortgage Foreclosure	1%

Table IV-21B shows that three percent of households with children had a mortgage foreclosure in the past year.

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

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Had Mortgage Foreclosure	1%	1%	3%	0%

Table IV-21C shows that percent of households that had a mortgage foreclosure in the past year by poverty level.

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

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Had Mortgage Foreclosure	2%	1%	1%	2%

F. Financial Problems

This section examines one particular financial problem that respondents may have faced in the past year due to their energy bills. Table IV-22A shows that 13 percent reported that they took out a payday loan in the past year.

Table IV-22A
Financial Problems Due to Energy Bills
In the Past Year

	Percent of Respondents
Payday Loan	13%

Table IV-22B displays the percent of respondents who took out a payday loan in the past year due to unaffordable energy bills by vulnerable group. The table shows that 20 percent of households with children reported that they obtained a payday loan.

Table IV-22B
Financial Problems Due to Energy Bills
In the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Payday Loan	10%	13%	20%	12%

Table IV-22C displays the percent of respondents who took out a payday loan due to unaffordable energy bills by poverty level. The table shows that those below 150 percent of the poverty level were more likely to do so.

Table IV-22C
Financial Problems Due to Energy Bills
In the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Payday Loan	14%	15%	12%	2%

G. Food and Medical Insecurity

This section examines food and medical insecurity that respondents faced in the past year due to unaffordable energy bills.

Table IV-23A shows that 36 percent went without food for at least one day and 41 percent went without medical or dental care.

Table IV-23A
Food and Medical Insecurity Due to Energy Bills
In the Past Year

	Percent of Respondents
Went Without Food for at Least One Day	36%
Went Without Medical or Dental Care	41%

Table IV-23B examines food and medical insecurity by vulnerable group. The table shows that households with a disabled member, with children, and without vulnerable members were more likely than those with seniors to face these problems.

Table IV-23B
Food and Medical Insecurity Due to Energy Bills
In the Past Year
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Went Without Food for at Least One Day	30%	41%	40%	45%
Went Without Medical or Dental Care	39%	43%	46%	47%

Table IV-23C displays responses to questions about food and medical insecurity by poverty group. The table shows that households below 50 percent of the poverty level were most likely to go without food for one day.

Table IV-23C
Food and Medical Insecurity Due to Energy Bills
In the Past Year
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Went Without Food for at Least One Day	47%	36%	36%	12%
Went Without Medical or Dental Care	44%	39%	45%	35%

Table IV-24A compares the percent of respondents who had food and medical insecurity in the surveys. The table shows that there were higher reports of these problems since the 2011 survey.

Table IV-24A
Food and Medical Insecurity during the Past Year
Comparison of Survey Results

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Went Without Food for At Least One Day	22%	32%	30%	24%	36%
Went Without Medical or Dental Care	38%	42%	41%	37%	41%

Table IV-24B compares the percent of respondents with seniors in the household who had food and medical insecurity. The table shows that these problems were higher for seniors in 2018 than in 2011 and 2009.

Table IV-24B
Food and Medical Insecurity during the Past Year
Comparison of Survey Results
Households with Seniors

	2003	2008	2009	2011	2018
Number of Respondents	888	542	757	705	294
Went Without Food for At Least One Day	11%	24%	20%	22%	30%
Went Without Medical or Dental Care	29%	32%	29%	36%	39%

Table IV-25A examines medical insecurity in the past five years. The table shows that 44 percent reported that they went without medical or dental care and 31 percent did not fill a prescription or took less than the full dose.

Table IV-25A
Medical Insecurity Due to Energy Bills
In the Past Five Years

	Percent of Respondents
Went Without Medical or Dental Care	44%
Didn't Fill Prescription or Took Less Than Full Dose	31%

Table IV-25B examines medical insecurity in the past five years by vulnerable group. The table shows that households with children and without vulnerable members were most likely to face these problems.

Table IV-25B
Medical Insecurity Due to Energy Bills
In the Past Five Years
By Vulnerable Group

	Senior	Disabled	Child Under 18	Non-Vulnerable
Number of Respondents	294	347	212	48
Went Without Medical or Dental Care	38%	47%	50%	51%
Didn't Fill Prescription or Took Less Than Full Dose	24%	35%	39%	38%

Table IV-25C displays responses to questions about medical and health problems in the past five years by poverty group.

Table IV-25C
Medical Insecurity Due to Energy Bills
In the Past Five Years
By Poverty Group

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Went Without Medical or Dental Care	48%	39%	50%	38%
Didn't Fill Prescription or Took Less Than Full Dose	36%	28%	33%	28%

Table IV-26 compares the percent of respondents who had medical and health problems in the past five years. The table shows an increase in the percent that went without medical or dental care.

Table IV-26
Medical Insecurity during the Past Five Years
Comparison of Survey Results

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Went Without Medical or Dental Care	38%	42%	41%	37%	44%
Did Not Fill Prescription or Took Less Than Full Dose	30%	38%	33%	34%	31%

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, 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 92 percent of the respondents reported that they had received LIHEAP in the past year.

Table V-1A
Received LIHEAP during Past Year¹⁰

	Percent of Respondents
Yes	92%
No	6%
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	294	347	212	48
Yes	90%	93%	91%	96%
No	7%	6%	8%	2%
Don't Know / Refused	2%	1%	2%	2%

¹⁰ 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 those above 150 percent of the poverty level were less likely to report that they received LIHEAP.

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

	Poverty Level			
	0-50%	51-100%	101-150%	>150%
Number of Respondents	104	274	186	60
Yes	95%	92%	93%	84%
No	4%	6%	6%	14%
Don't Know / Refused	2%	3%	1%	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 fifth said they only received benefits in one of the past five years, and about one quarter 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	21%
2	21%
3	15%
4	7%
5	26%
None	4%
Don't Know / Refused	7%

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. Households with seniors and disabled members were most likely to report that they received LIHEAP in each of the past five years.

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	294	347	212	48
1	15%	20%	26%	30%
2	16%	18%	26%	29%
3	16%	15%	14%	18%
4	7%	8%	8%	1%
5	32%	31%	19%	17%
None	5%	3%	4%	2%
Don't Know / Refused	10%	6%	3%	3%

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	104	274	186	60
1	25%	18%	20%	30%
2	27%	17%	22%	22%
3	21%	14%	13%	9%
4	6%	6%	8%	5%
5	15%	34%	23%	20%
None	2%	3%	4%	7%
Don't Know / Refused	3%	7%	9%	7%

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 2011 and 2018 than in previous years. This may relate to the timing of the survey, as it was conducted in Spring 2011 and Summer 2018, following the LIHEAP season, as opposed to prior to the season starting in previous years.

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

	2003	2008	2009	2011	2018
Number of Respondents	2,161	1,256	1,828	1,768	624
Recalled Receipt of LIHEAP	84%	86%	86%	93%	92%
Percent That Reported They Received LIHEAP in Each of the Past Five Years	21%	26%	25%	20%	26%

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 51 percent of respondents reported that they tried to work out a payment arrangement in the past year, and 81 percent of those who tried to work out a payment arrangement were able to do so. This is similar to the findings from the 2011 and 2009 surveys.

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

	2009 Survey		2011 Survey		2018 Survey	
	Tried to Work Out Payment Arrangement	Was Able to Work Out Payment Arrangement	Was Able to Work Out Payment Arrangement	Tried to Work Out Payment Arrangement	Tried to Work Out Payment Arrangement	Was Able to Work Out Payment Arrangement
Number of Respondents	1,828	976	1,768	966	624	313
Yes	51%	86%	52%	84%	51%	81%
No	48%	14%	47%	14%	48%	18%
Don't Know	1%	1%	1%	2%	1%	<1%

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 54 percent said they would have had to keep their home at an unsafe or unhealthy temperature if LIHEAP assistance had not been available, and 59 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	423	294
Yes	54%	59%
No	35%	36%
Don't Know / Refused	11%	5%

Table V-6 compares responses about problems that would have been faced in the absence of LIHEAP between the surveys. The table shows that respondents were somewhat less likely than in 2011 to report that they would have faced these problems 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	2008	2009	2011	2018
Kept Home at Unsafe or Unhealthy Temperature	54%	63%	64%	65%	54%
Had Electricity or Home Heating Fuel Discontinued	48%	59%	53%	63%	59%

D. LIHEAP Restored Heat

Respondents were asked whether LIHEAP helped to restore heat due to shutoff or broken equipment. The table shows that ten percent said that LIHEAP restored heat due to a shutoff and nine 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		
	2009	2011	2018	2009	2011	2018
Yes	12%	12%	10%	7%	7%	9%
No	6%	3%	10%	5%	5%	5%
Don't Know	<1%	<1%	<1%	<1%	1%	<1%
Did Not Experience Loss of Heat/or Did Not Receive LIHEAP	81%	84%	80%	87%	87%	86%

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 Midwest 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	170	189	182	83
Percent with Children	34%	39%	36%	32%
Single Parent Household	11%	21%	24%	7%

Table VI-2 displays the poverty level of LIHEAP recipients by region. Households in the Midwest and South are most likely to have income below 50 percent of the poverty level.

Table VI-2
Poverty Level
By Region

	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
0%-50%	14%	26%	22%	12%
51%-100%	36%	43%	48%	36%
101%-150%	35%	27%	26%	34%
>150%	15%	3%	5%	18%

Table VI-3 shows that recipients in the Northeast are most likely to have employment income, recipients in the West are most likely to have retirement income, recipients in the West are least likely to receive public assistance, and recipients in the Midwest and South are most likely to receive Medicaid or Disability.

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

	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
Wages or Self-Employment Income	34%	28%	21%	22%
Retirement Income	24%	40%	41%	47%
Public Assistance	67%	69%	65%	49%
Medicaid or Disability Insurance	55%	67%	69%	50%

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

Table VI-4
Unemployed during the Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
Yes	29%	24%	29%	20%
No	71%	76%	71%	80%
Don't Know / Refused	0%	0%	0%	0%

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 Midwest have the highest energy burdens on average. California was the only state included in the West region and did not provide data on LIHEAP benefit amount.

Table VI-5
Mean Energy Burden
By Region

	Northeast	Midwest	South	West
Number of Respondents	148	169	159	66
Pre-LIHEAP	16%	27%	25%	14%
Post-LIHEAP	12%	24%	21%	--

Table VI-6 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 21 percent in the Midwest to 39 percent in the South.

Table VI-6
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	170	189	182	83
Almost Every Month	<1%	0%	3%	1%
Some Months	10%	10%	13%	9%
1 or 2 Months	21%	11%	23%	13%
Never / No	67%	79%	61%	76%
Don't Know / Refused	1%	0%	0%	0%

Table VI-7 shows the percent who reported that they skipped paying or paid less than their entire home energy bill during the past year by region.

Table VI-7
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	170	189	182	83
Almost Every Month	10%	10%	13%	11%
Some Months	21%	24%	18%	21%
1 or 2 Months	16%	18%	15%	20%
Never / No	50%	47%	52%	46%
Don't Know / Refused	3%	1%	2%	3%

Table VI-8 shows that 24 to 39 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-8
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	170	189	182	83
Almost Every Month	<1%	6%	8%	2%
Some Months	11%	14%	14%	11%
1 or 2 Months	24%	14%	17%	11%
Never / No	63%	65%	58%	76%
Don't Know / Refused	1%	2%	3%	0%

Table VI-9 displays the percent of respondents who had their electricity and gas utility service terminated during the past year. Service termination ranged from nine percent in the West and Midwest to 26 percent in the South.

Table VI-9
Utility Service Terminations
During Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
Electricity	12%	8%	22%	6%
Gas	7%	5%	13%	4%
Electricity or Gas	15%	9%	26%	9%

C. Housing, Health, Food, and Medical Problems

Table VI-10 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 Midwest and South were most likely to report this problem.

Table VI-10
Went Without Food for at Least One Day Due to Energy Bills
In the Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
Yes	32%	40%	41%	28%
No	68%	58%	59%	72%
Don't Know /Refused	<1%	1%	<1%	1%

Table VI-11 shows that respondents in the Midwest and in the South were most likely to report that they went without medical or dental care due to their energy bills in the past year.

Table VI-11
Went Without Medical or Dental Care Due to Energy Bills
In the Past Year
By Region

	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
Yes	35%	50%	45%	29%
No	65%	50%	54%	71%
Don't Know /Refused	0%	0%	1%	0%

Table VI-12 shows that respondents in the Midwest 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-12
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	170	189	182	83
Yes	27%	35%	36%	23%
No	72%	64%	63%	76%
Don't Know /Refused	1%	1%	1%	1%

D. LIHEAP Receipt

Table VI-13 displays the number of years that respondents reported LIHEAP receipt out of the past five years. The table shows that respondents in the West 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-13
Number of Years Received LIHEAP
In the Past Five Years
By Region

	2018 Survey			
	Northeast	Midwest	South	West
Number of Respondents	170	189	182	83
1	20%	18%	23%	28%
2	24%	19%	20%	20%
3	12%	15%	22%	8%
4	8%	8%	7%	1%
5	28%	35%	16%	21%
None	1%	1%	5%	11%
Don't Know / Refused	7%	5%	7%	11%

VII. Conclusion

The 2018 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 92 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. Thirty-nine percent of the respondents reported energy costs over \$2,000 in the past year.

Responses to High Energy Costs

Households reported that they took several actions to make ends meet, including closing off part of the home. 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. Fifteen percent had their electric or natural gas service shut off in the past year due to nonpayment. Thirty percent 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. More than one quarter 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. Seventeen percent moved in with friends and family and 13 percent obtained a payday loan.

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. Thirty-six percent reported that they went without food, 41 percent sacrificed medical/dental care, and 31 percent did not fill a prescription or took less than a full dose.

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 2018 National Energy Assistance SURVEY FINAL INSTRUMENT

Screener

Hello. This is (INTERVIEWER) from APPRISE 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

{Interviewer: DO NOT READ, Enter your name}

A. Experience with Energy Assistance

A1. Did you receive (STATE SPECIFIC LIHEAP NAME) in the past 12 months?

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

A2. 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
- 06 NONE
- 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:

<u>Past Year</u>	01	02	07	08
B1. Had a foreclosure on your mortgage?	YES	NO	DON'T KNOW	REFUSED
B2. Got a payday loan to cover your expenses?	YES	NO	DON'T KNOW	REFUSED
B3. Went without food for at least one day?	YES	NO	DON'T KNOW	REFUSED
B4. 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:

<u>Housing Problems</u>	01	02	07	08
B5. Moved in with friends or family?	YES	NO	DON'T KNOW	REFUSED
B6. Moved into a shelter or been homeless?	YES	NO	DON'T KNOW	REFUSED

<u>Other Expenses</u>	01	02	07	08
B7. Went without medical or dental care?	YES	NO	DON'T KNOW	REFUSED
B8. Didn't fill a prescription or took less than the full dose of a prescribed medicine?	YES	NO	DON'T KNOW	REFUSED

<u>Utility Payment</u>	01	02	07	08
B9. 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
B10. (Ask if B9=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
C1.	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
C2.	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
C3.	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
C4.	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
C5.	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
C6.	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
C7.	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
C8.	ASK C8 if C7=01, YES. Is your electricity service shut off now?		YES	NO	DON'T KNOW		REFUSED
C9.	In the past 12 months, was your natural gas ever shut off because you were unable to pay your gas bill?		01 YES	02 NO	03 DOES NOT HAVE NATURAL GAS	07 DON'T KNOW	08 REFUSED
C10.	ASK C10 if C9=01, YES. Is your gas service shut off now?		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 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 wood because you were unable to pay for a delivery? | | | | |
| 01 YES | | | | |
| 02 NO | | | | |
| 03 DOES NOT HAVE DELIVERED FUEL | | | | |
| 07 DON'T KNOW | | | | |
| 08 REFUSED | | | | |
| 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)

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

- | | 01 | 02 | 07 | 08 |
|---|-----|----|------------|---------|
| C15. Your air conditioner was broken and you were unable to pay for its repair or replacement? | YES | NO | DON'T KNOW | REFUSED |
| C16. The utility company discontinued your electric service because you were unable to pay your bill? | YES | NO | DON'T KNOW | REFUSED |

(ASK C17 IF C7=1, YES OR C13=1, YES OR C16=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 electric service?

- | | 01 | 02 | 07 | 08 |
|--|-----|----|------------|---------|
| C17. Did you have to use candles or lanterns because you didn't have lights? | YES | NO | DON'T KNOW | REFUSED |

(READ IF A1=1 AND C5=4) OR (A1=1, YES AND C12=2, NO, AND C13=2, NO, AND C16=2, NO, AND C7=2, NO, AND C9=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.

- | | 01 | 02 | 07 | 08 |
|---|-----|----|------------|---------|
| C18. (ASK IF A1=1 AND C5=4) 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? | YES | NO | DON'T KNOW | REFUSED |

C19. ASK if (A1=1, YES AND C12=2, NO, AND C13=2, NO, AND C16=2, NO, AND C7=2, NO, AND C9=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. Demographics

D1. Do you own or rent your home?

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

D2. 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

D3. How many are 60 or older? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ OCCUPANTS OVER AGE 60

INTERVIEWER NOTE: DO NOT ASK D4 AND RECORD 0 FOR D4 IF D2=D3

D4. How many are 18 or under? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ CHILDREN 18 OR UNDER

(ASK D5 IF D4 ≠ 0)

D5. How many are 5 or under? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ CHILDREN 5 OR UNDER

D6. How many are disabled? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ DISABLED OCCUPANTS

D7. How many are veterans? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ VETERAN OCCUPANTS

ASK D8 IF D7>0

D8. How many served overseas? (USE CODES 97 FOR 'DON'T KNOW' AND 98 FOR 'REFUSED')

_____ OCCUPANTS SERVED OVERSEAS

ASK D9 IF D8>0

D9. Where did they serve? (MARK ALL THAT APPLY)

- 01 IRAQ
- 02 AFGHANISTAN
- 03 OTHER _____
- 07 DON'T KNOW
- 08 REFUSED

ASK D10 IF D7>0

D10. Was the veteran disabled as a result of an injury suffered during service?

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

D11. 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 D1 ≠ 01]

D12. Is heat included in your rent?

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

D13. 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

D14. 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 SUCH AS AN OXYGEN MACHINE, NEBULIZER, RESPIRATOR, DIALYSIS MACHINE, WHEELCHAIR OR OTHER MEDICAL DEVICE THAT NEEDS TO BE CHARGED, INSULIN OR OTHER MEDICATION THAT REQUIRES REFRIGERATION, ETC.)

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

D15. 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

D16. 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

D17. 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

D18. 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), Food Stamps, or general assistance or public assistance?

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

D19. In the past 12 months, did you or any member of your household receive Medicaid or disability assistance?

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

D20. 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

{Interviewer: DO NOT READ, Was this interview conducted in Spanish?}

- 01 YES
- 02 NO

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