

Survey of Household Energy Insecurity in Time of COVID

Preliminary Results of Wave-3, and Waves 1-3 Combined

March 4, 2021

(Note: this report updates a previous report issued on March 1, 2021)

Energy Insecurity in the United States

Energy insecurity is a widespread problem among low-income households in the U.S. When families, especially those with young children or disabled household members, are unable to meet their energy demands, their mental and physical wellbeing likely suffers. This is particularly true under conditions of extreme weather like the freezing cold temperatures seen around much of the country this winter.

The COVID-19 pandemic continues to present an unprecedented challenge for vulnerable populations. Early in the pandemic, several federal, state, and local government protections were put in place to protect low-income Americans from facing economic hardship and energy insecurity, including eviction and utility disconnection moratoriums. Many of these protections did not extend into the winter months, pushing more families into uncertainty and insecurity. These shocks will continue to strain the ability of low-income households to afford their basic expenses and keep on top of debt burdens. In addition, as families continue to stay home because of the pandemic, they will need to power their energy sources, including heating, refrigeration, cooking, online learning devices, and medical devices. This increased energy demand will exacerbate insecurity and leave low-income families vulnerable to decreased health, debt accumulation, and eviction.

The Survey of Household Energy Insecurity in Time of COVID

The survey was administered to a nationally-representative sample of households at or below 200% of the federal poverty line (FPL). The survey is the third wave of a four-wave panel during 2020-2021 (Wave-1 of the panel had 2,381 respondents and was administered from April 30-May 25, 2020, Wave-2 of the panel had 2,247 respondents and was administered from August 4-20, 2020). The survey was administered online from January 15 through January 22 on behalf of an Indiana University research team, by YouGov, a private polling and market research firm. The survey was taken by 1,672 respondents, and includes questions about energy expenses, household energy behavior, and activities since the onset of the COVID-19 pandemic. Responses to the survey have a margin of error of about 2%.

Summary of Key Findings

During the five-month period between September and January:

- 16% of low-income households indicated that they could not pay an energy bill during at least one month, 11% received a shutoff notice, and 3% had their service disconnected.
- 18% of low-income households indicated that they had to reduce or forgo expenses for basic household needs, such as medicine or food, to pay an energy

bill. About 30% of those surveyed indicated that the pandemic had harmed their ability to obtain medical care.

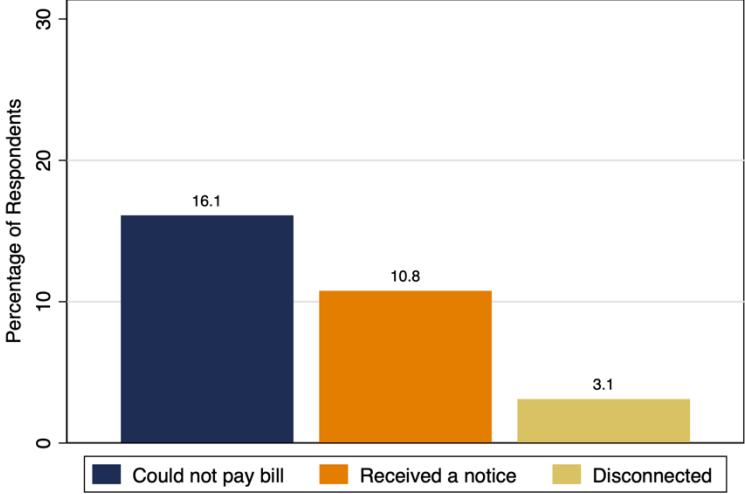
- Over 24% of Black and 21% of Hispanic households could not pay an energy bill during the last five months, compared to 12% of low-income white households.
- During the prior five months, compared to low-income white households, more than 2 times as many low-income Black and Hispanic households received a disconnection notice. Similarly, compared to white households, 3.5 times as many Black households and 2.5 times as many Hispanic households reported having their electricity shut off due to nonpayment.
- 23% of households with income at or below the poverty line did not pay their energy bill during the last five months, compared to 15% of households with income between 100-150% FPL, and 10% of households with income between 150-200% FPL. In addition, households at or below 100% FPL were approximately 2 times more likely (compared to households between 150-200% FPL) to receive a disconnection notice and about 4 times more likely to go on to be disconnected.
- 29% of survey respondents reported having some utility debt, with 20% owing their utility company \$100 or more.
- Respondents engaged in several coping strategies to stay warm during the cold winter months: 4% burned trash or other items, 5% of low-income households reported using their dryer to stay warm, nearly 8% used a wood stove, and 9% used a fireplace, 13% reported that they turned on their kitchen stove for warmth, 23% took hot showers, 29% used a space heater, and 43% reported that they wore a heavy coat or warm blanket.
- Energy insecurity has endured throughout the pandemic. During each wave of the survey, respondents report similar rates of being unable to pay bills, receiving a shutoff notice, and having service disconnected.

Detailed Results

Energy bill payment, shutoff notices, and disconnections

The survey asked respondents about their ability to pay their energy bill, as well as whether they had received a shutoff notice and/or had been disconnected from service. From September-January, 16% of respondents indicated that they could not pay an energy bill during the prior month, 11% received a shutoff notice, and over 3% had their service disconnected.

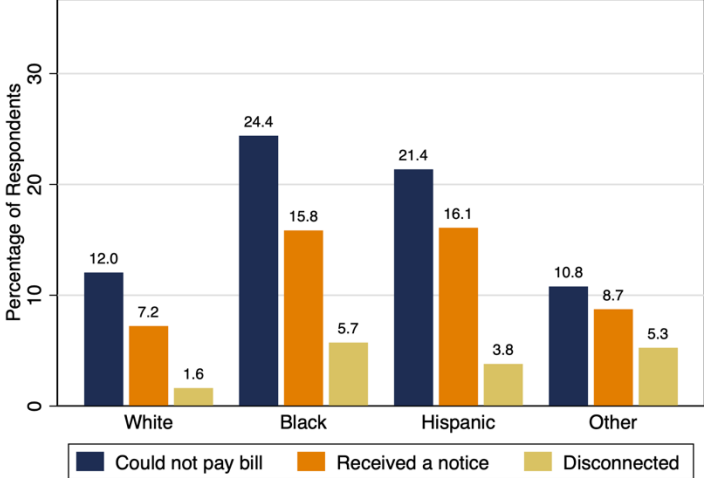
Energy Bill Payment, Shutoff Notices, and Disconnections, September-January



Racial disparities in energy insecurity

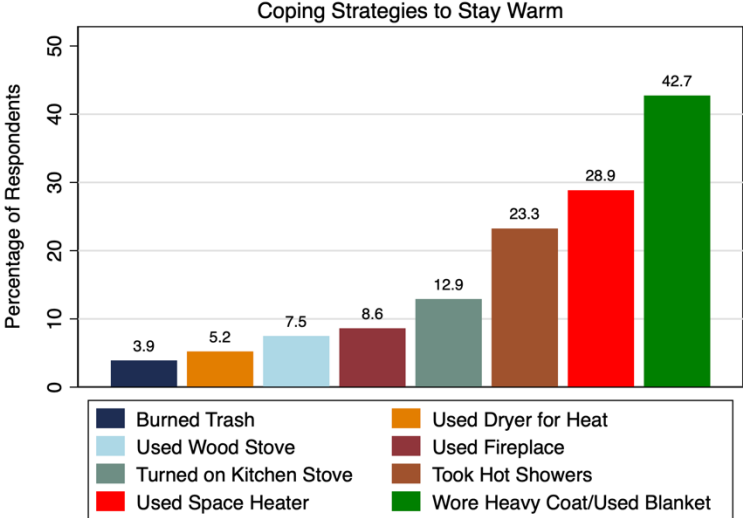
From September-January approximately 24% of Black and 21% of Hispanic respondents could not pay their energy bill. In addition, approximately 16% of Black and Hispanic received a disconnection notice, and nearly 6% of Black and 4% of Hispanic respondents reported that their electricity service was disconnected. These rates were 2 to 3 times that of white households.

Energy Insecurity by Race, September-January



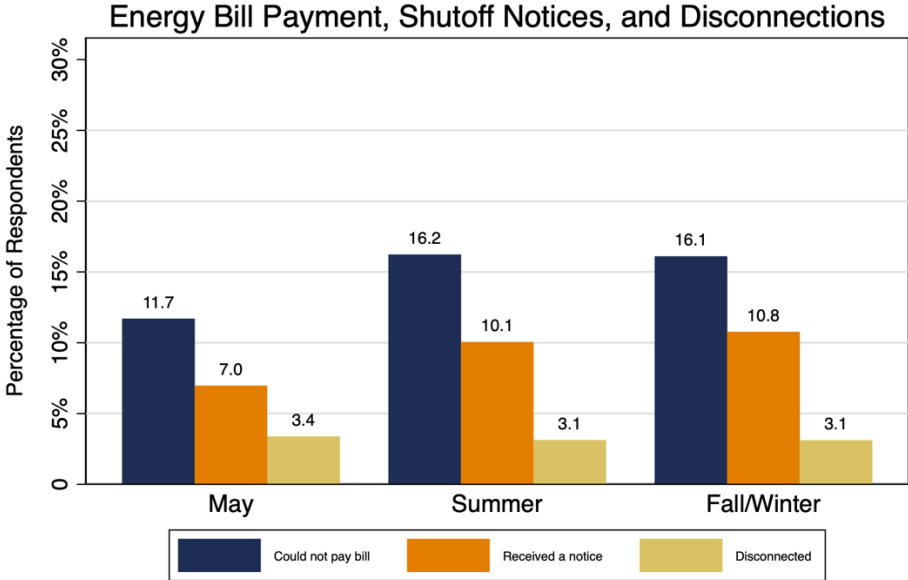
Low-income households have adopted a variety of coping strategies to stay warm

Respondents indicated that they used several strategies, other than traditional heat, to stay warm during cold winter months, including potentially dangerous practices such as burning trash (4%), using a clothes dryer (5%), using the kitchen stove (13%) or fireplace (9%), and using space heaters (29%).



Energy insecurity has persisted throughout pandemic

Energy insecurity has endured throughout the pandemic. In May, 12% of respondents reported not being able to pay an energy bill; 16% during summer months, and 16% during the fall/winter. In May, 7% of respondents reported receiving a shutoff notice; 10% during summer, and 11% during fall/winter. In May, 3% reported having service disconnected in May, 3% during summer months, and 3% during fall/winter.



Note: Summer includes June, July, August, and Fall/Winter includes September, October, November, December, and January.

About the Research Team

This study was conducted by a [research team](#) at the O'Neill School of Public and Environmental Affairs at Indiana University, led by principal investigators David Konisky and Sanya Carley. The team studies energy justice issues that relate to the ongoing energy transition in the U.S. and across the world. This research effort was supported by grants provided by the National Science Foundation, the Alfred P. Sloan Foundation, Indiana University's Office of the Vice President of Research, and Indiana University's Environmental Resilience Institute. The lead authors can be contacted at dkonisky@indiana.edu and scarley@indiana.edu.