

Survey of Household Energy Insecurity in Time of COVID
Preliminary Results of Wave-4, and Waves 1 through 4 Combined
July 5, 2021

Energy Insecurity in the United States

Energy insecurity is a widespread problem among low-income households in the U.S. When families are unable to meet their energy needs because they cannot afford to pay their bill or their power has been disconnected, they will struggle to keep their bodies at comfortable temperatures and/or be unable to power electronic devices and appliances. As a result of these conditions, those who face energy insecurity are likely to suffer from adverse mental and physical health consequences.

Recognizing the severity of such conditions and the possibility that the COVID-19 pandemic could present an unprecedented challenge for vulnerable populations across the U.S., our research team followed over 1,000 low-income families over the course of the pandemic, from May 2020 to May 2021.

The Survey of Household Energy Insecurity in Time of COVID

The survey was administered to a nationally-representative sample of households with incomes at or below 200% of the federal poverty line (FPL). The survey is the fourth wave of a four-wave panel (Wave-1 of the panel had 2,381 respondents and was administered from April 30 to May 25, Wave-2 of the panel had 1,815 respondents, Wave-3 of the panel had 1,672 respondents). The survey was administered online from May 24 through June 5 on behalf of an Indiana University research team, by YouGov, a private polling and market research firm. The survey was taken by 1,342 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 approximately 3%.

Summary of Key Findings

From May 2020 through May 2021 (Wave-1, Wave-2, Wave-3, and Wave-4 data combined):

- Since the beginning of the pandemic (May 2020), more than 24% of respondents indicated that they could not pay an energy bill, more than 18% received a shutoff notice, and almost 8% had their service disconnected. These findings suggest that roughly 23.5 million Americans (4.6 million households) could not pay an energy bill in at least one month since May 2020, 17.7 million (3.5 million households) received a shutoff notice, and more than 7.5 million (1.5 million households) had their electricity disconnected.
- Approximately 38% of Black and 34% of Hispanic respondents could not pay an energy bill since May 2020. In addition, 28% of Black respondents and 29% of Hispanic reported receiving a disconnection notice. Approximately 10% of Black

respondents went on to be disconnected, and the same was true for 13% of Hispanic households.

- While energy insecurity has improved over the late winter/spring months (February through May 2021), with fewer low-income Americans facing the inability to pay their energy bill, the number of people that were disconnected from their service increased to 3.4%. This may be a result of COVID-specific disconnection moratoriums expiring in many states.

Within the winter and spring months (February, March, April, and May):

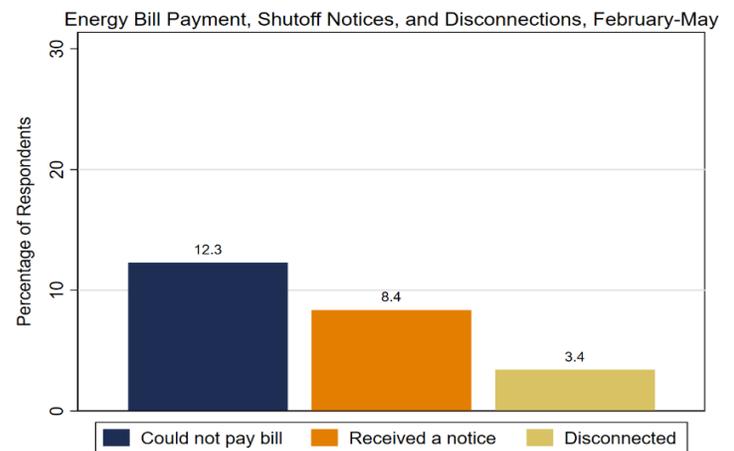
- 12% indicated that they could not pay an energy bill during these four months, over 8% received a shutoff notice, and 3.4% had their service disconnected.
- 13% indicated that they had to reduce or forgo expenses for basic household needs, such as medicine or food, to pay an energy bill. About 22% said the pandemic harmed their ability to obtain medical care.
- Nearly 19% of Black and over 15% of Hispanic households could not pay an energy bill during the last four months, compared to 8% of low-income white households.
- During the prior four 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, over 4 times as many Black and Hispanic households reported having their electricity shut off due to nonpayment.
- 15% of households with income at or below the poverty line did not pay an energy bill during the last four months, compared to 8% of households with income between 150-200% FPL. In addition, households at or below 100% FPL were approximately 4 times more likely (compared to households between 150-200% FPL) to both receive a disconnection notice and go on to be disconnected.
- Households with children under 5 years of age, households with someone requiring use of an electronic medical device, households where someone either lost their job or had their hours reduced since the COVID-19 pandemic, and households that did not receive a COVID stimulus check all experience more energy insecurity over the past four months.
- 22% of survey respondents reported having some utility debt, with 15% owing their utility company \$100 or more.
- About a quarter of respondents indicated that, since February – as a result of the pandemic – they had lost their jobs (2%), had their hours reduced (6%), or were furloughed without pay (1%). An additional 1% were furloughed with pay and almost 5% noted that they had opted not to work at all.
- Over 4% of respondents were evicted from their homes.
- Approximately 3% of respondents lost their health insurance since February 2021 and another 2% had their health insurance benefits reduced. Another 20% of the respondents did not previously have insurance.

- Nearly 16% of respondents reported that they reduced the size of their meals or skipped meals because there was not enough money for food; among these individuals, nearly 40% said they did so “every month” and nearly 48% said they did so “some months.” In addition, over 5% said they could not pay their water bill since February.

Detailed Results

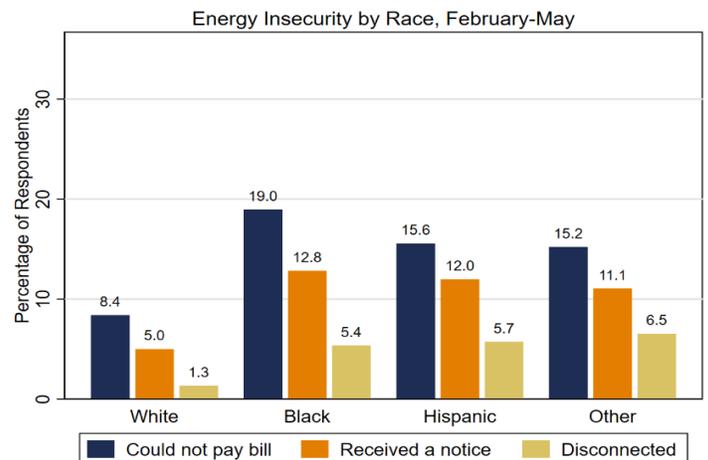
Energy bill payment, shutoff notices, and disconnections

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 February-May 2021, over 12% of respondents indicated that they could not pay an energy bill in a prior month, over 8% received a shutoff notice, and over 3.4% had their service disconnected.



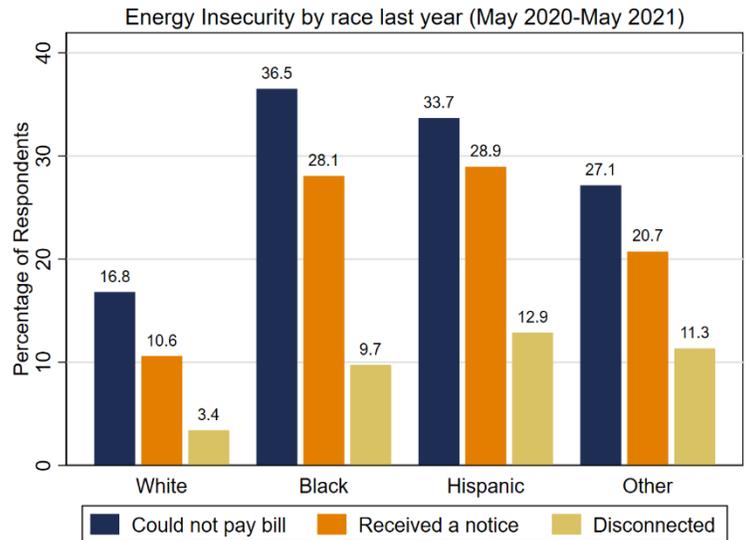
Energy bill payment, shutoff notices, and disconnections, by race

From February-May 2021 19% of Black respondents and nearly 16% of Hispanic respondents could not pay an energy bill. In addition, almost 13% of Black respondents and 12% of Hispanic respondents reported receiving a disconnection notice, and over 5% of Black and Hispanic respondents reported that their electricity service was disconnected.



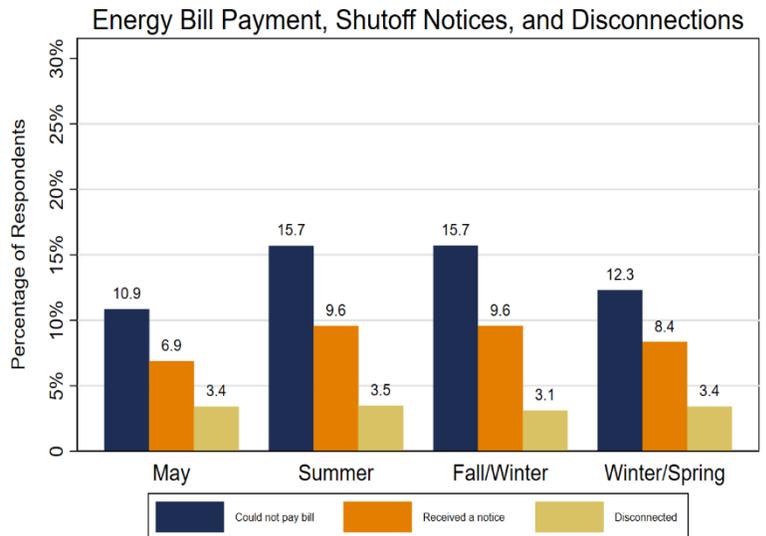
Energy bill payment, shutoff notices, and disconnections since the beginning of the pandemic

We combine responses from all four waves to measure total energy insecurity from May 2020 to May 2021. Of our survey population, over 24% could not pay a bill in at least one month, over 18% received a disconnection notice in at least one month, and almost 8% of our survey population had their electricity service disconnected in at least one month.



Energy insecurity has persisted through pandemic, especially utility disconnections

Energy insecurity has endured through the pandemic. In May 2020, 11% of respondents reported not being able to pay an energy bill; 16% during summer and fall/winter months, and 12% during winter/spring months. In May 2020, 7% of respondents reported receiving a shutoff notice; 10% during summer and fall/winter months, and over 8% for winter/spring months. In each wave of the survey, about 3% of the respondents reported having their service disconnected.



Energy bill payment, shutoff notices, and disconnections, by race since the beginning of the pandemic

From May 2020 to May 2021 there have been considerable racial disparities in rates of energy insecurity. From May 2020 to May 2021, 36% of Black and 34% of Hispanic respondents could not pay their energy bill, compared to less than 17% of white respondents. In addition, 28% of Black and 29% of Hispanic respondents received a disconnection notice, compared to less than 11% of white respondents. After receiving a disconnection notice, 10% of Black and 13% of Hispanic respondents reported that their electricity service was disconnected, compared to less than 4% of white respondents.

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.