



The Impact of SNAP Emergency Allotments on SNAP Benefits and Food Insufficiency

Diane Whitmore Schanzenbach

Institute for Policy Research, Northwestern University

SUGGESTED CITATION: Schanzenbach, D. W. 2023 (January 27). The impact of SNAP emergency allotments on SNAP benefits and food insufficiency. Institute for Policy Research Rapid Research Report <https://www.ipr.northwestern.edu/documents/reports/ipr-rapid-research-report-snap-emergency-allotments-impact-27-january-2023.pdf>.

Photo credit: iStockphoto

“The Impact of SNAP Emergency Allotments on SNAP Benefits and Food Insufficiency”¹

by **Diane Whitmore Schanzenbach**

at the Institute for Policy Research, Northwestern University

Introduction

Since April 2020, states have been able to award Emergency Allotment, or EA, payments to SNAP recipients to supplement the formula-based SNAP benefits that they otherwise would have received. Take, for example, families with two members in 2020, prior to COVID-19. Maximum monthly SNAP benefits for such a family were \$355, and average benefits were \$229. EA payments increase these benefits by an average of \$126 during phase 1 of the policy and by \$166 during phase 2. Increases for individual households over the formula-based benefit amount range from a low of \$95 to a high of over \$340. Nationwide, EA payments will be eliminated after the February 2023 payment, and SNAP benefits will revert for each family to the value that the SNAP benefit formula allocates.

This rapid research report estimates the amount and impact of EA benefits. As described in more detail below, some states opted to terminate EA payments while they were still allowable. This variation provides an opportunity to estimate the impact of EA payments on the share of households reporting that they sometimes or often did not have enough to eat over the previous week. On average, EA payments reduce the likelihood that a household experiences food insufficiency by about 9%, with larger impacts for households with children with a Black or Hispanic respondent.

¹ I am very grateful to Nick Fleming for excellent research assistance, and to Patricia Anderson, Lauren Bauer, Lauren Hall, Joseph Llobrera, Dottie Rosenbaum, and James Ziliak for helpful comments.

Background

Under normal circumstances, SNAP benefits are calculated according to the SNAP benefit formula, which awards benefits as a function of a household's monthly income after adjusting for allowable deductions such as out-of-pocket childcare costs, a portion of earnings to incentivize work, and excess housing costs. For every additional dollar of net income that a household has, its SNAP benefits are reduced by 30 cents. As a result, most SNAP participants receive benefits that are less than the maximum allowable monthly benefit. For example, in 2019, the maximum SNAP benefit for a family of three was \$505, but the average benefit was \$370.²

In response to the COVID-19 economic crisis, the Families First Coronavirus Response Act (FFCRA), enacted March 18, 2020, authorized states to increase benefits for all SNAP participants to the maximum benefit—a provision known as the Emergency Allotment, or EA. Initially, this policy only affected families not receiving the maximum benefit—those families reporting positive net income after deductions. This response helped streamline program administration during the public health emergency and was intended to “address temporary food needs” according to the statute. Under usual rules, if a family participating in SNAP suffers an income loss, they can report their new income and provide documentation to have their SNAP benefit adjusted accordingly. Because of the widespread job losses caused by the pandemic, many participating families would have been eligible for benefit adjustments that would have increased the value of their benefits. The EA policy eliminated the need for benefit adjustments in response to income losses and allowed SNAP offices—which were running at diminished capacity due to the need to socially distance and implement remote work—to prioritize enrolling new cases.³ Many additional families became newly eligible for benefits due to income loss, and the number of people receiving SNAP increased by over 16% between February and June 2020 as families turned to the program for help in the midst of the pandemic (Bitler, Hoynes and Schanzenbach, 2020).

There were two phases of the EA policy. During phase 1, the EAs paid all SNAP participants the maximum benefit, providing increased benefits to SNAP participants who were not already receiving the maximum benefit. Phase 1 EAs provided no additional resources to the approximately 36% of households on SNAP who were receiving the maximum benefit. Subsequently, phase 2 of EA payments started in April or May 2021 (depending on the state). Phase 2 increased all EA payments to a

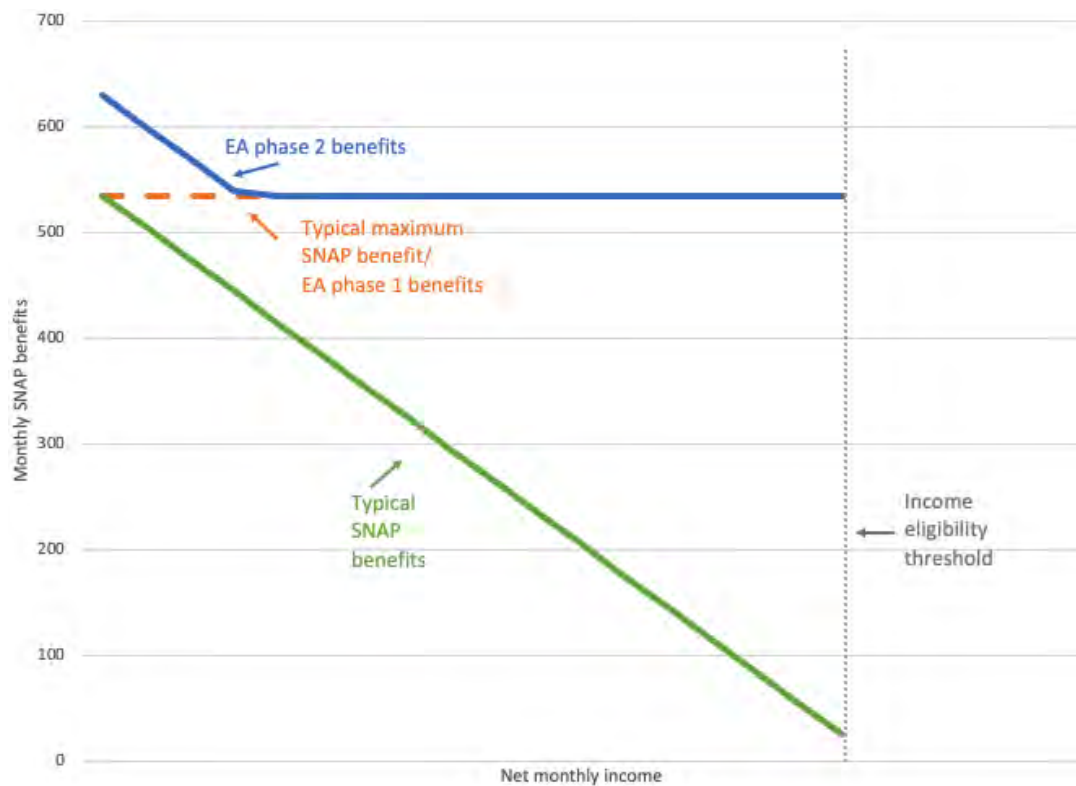
² All calculations exclude Alaska and Hawaii, where maximum benefits are higher. Maximum benefits in Alaska and Hawaii in 2019 averaged \$839 per month, and SNAP allotment averaged \$609. U.S. territories are also excluded.

³ See CBPP (2022) and CBPP (2023) for more details.

minimum of \$95 per month, providing EA increases to the lowest-income SNAP participants (those who are eligible by the SNAP benefit formula to receive the maximum amount).⁴

Figure 1 provides an illustration of monthly SNAP benefits for a household with three members. The horizontal axis represents a household’s net income used to calculate SNAP benefits, and the vertical axis is monthly benefit amount. Under normal SNAP rules, benefits for those with no net income are equal to the maximum benefit, and as income increases, SNAP benefits decrease by 30 cents for every dollar of net income, as illustrated by the solid green line. Families with net incomes above the eligibility threshold receive no benefits. Phase 1 EAs increased SNAP benefits for all participants to the maximum benefit, as illustrated by the orange dashed line. Phase 2 EA benefits, with a \$95 minimum EA payment, are illustrated by the solid blue line.⁵

Figure 1: SNAP Benefits, EA Payments, and Maximum Benefits



Note: Author’s calculations.

⁴ In addition, maximum benefits were increased temporarily by 15% in January-September 2021, and in October of each year maximum benefits are adjusted.

⁵ Note how the policies differ in terms of the drop in payments at the income eligibility threshold. Under normal rules (illustrated by the green solid line), SNAP benefits are low near the income eligibility threshold with minimum SNAP payments equal to \$16 in 2020. Under EA payments, moving from just eligible to just ineligible would entail loss of hundreds of dollars per month in benefits. The potential incentive effects of a large benefits cliff makes the EA payment schedule inadvisable for non-emergency periods.

How Much Are EA Payments?

Table 1, below, displays average SNAP benefits and predicted EA payments, separately by household size and presence of children, calculated from 2020 SNAP Quality Control data collected prior to the COVID-19 pandemic.⁶ Panel A displays results for all households overall, and separately for household sizes of one through five (a size range that includes 97% of all SNAP households). Column (2) shows the share of the caseload that falls into each household size; note that the majority of cases have household size of one. As shown in column (3), maximum benefits increase as household size increases. Most households receive less than the maximum monthly benefit, with average monthly benefits shown in column (4), and average benefits as a share of the maximum benefit calculated in column (5). The share of households receiving the maximum benefit varies across household size as shown in column (6), and the overall average share of households receiving the maximum benefit is 36%. Recall these families already receiving maximum benefits did not receive an increase in benefits in phase 1 of EA payments.⁷

Column (7) uses the phase 1 EA payment rules to simulate the expected EA payment in 2020. This calculation takes the difference between monthly and maximum SNAP benefits and averages those increases by household size. Under the phase 1 EA rules, benefits would have increased by an average of \$110 per month, ranging across household sizes from an average of \$65 for a household of one to \$249 for a household of five. Phase 2 EA payments ensured that all households would receive a minimum of a \$95 monthly benefit increase, and simulated benefits are calculated as the phase 1 EA payment or \$95, whichever is larger. As shown in column (8), phase 2 EA rules imply an average benefit boost of \$154 per month.

⁶ Alaska, Hawaii, and the U.S. territories are excluded from these calculations.

⁷ Overall, 11% of households received the minimum SNAP payment of \$16 per month. In a household of one, their EA benefit increase would be \$178 per month.

Table 1: Benefits and Predicted Emergency Allotment Payments in 2020 Data, by Household Size and Presence of Children

SNAP Unit Size	% of HHs	Max. Ben. (\$)	Avg. Ben. (\$)	Ben. % Max.	% at Max. Ben.	Sim. EA Increase 1 (\$)	Sim. EA Increase 2 (\$)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: All Households</i>							
1	57	194	129	66	41	65	115
2	17	355	229	65	35	126	166
3	12	509	371	73	31	138	177
4	8	646	432	67	25	214	243
5	4	768	519	68	24	249	278
Total	100	338	228	67	36	110	154
<i>Panel B: Households with Children</i>							
1	3	194	168	86	65	26	101
2	29	355	256	72	44	99	149
3	31	509	372	73	31	137	176
4	21	646	435	67	25	211	241
5	10	768	519	68	24	249	277
Total	100	543	381	71	33	162	201

Note: Author's calculations from the 2020 SNAP Quality Control Database (October 2019–February 2020). Calculations are weighted by household weights. The overall row is calculated across all household sizes. Households with children with only one member occur when the child receives SNAP but lives in a household where other members are not eligible for SNAP.

Panel B repeats the exercise for households with children, which of course tend to be larger than households overall. On average, 33% of households with children receive the maximum SNAP benefit under normal rules, and the average monthly benefit is \$381. Under phase 1 EA payment rules, households with children would expect to receive, on average, an additional \$162 per month. Under phase 2 EA rules, the benefit boost would be \$201. Bitler, Hoynes, and Schanzenbach (2023) find that predicted EA payments are larger for households with a White respondent than for households with a Black or Hispanic respondent. Consistent with those results, Appendix Table 2 shows that predicted EA payments—both overall and for households with children—are larger for households with White or Asian respondents than for households with Black or Hispanic respondents.

Maximum SNAP benefits increase annually to reflect cost of living adjustments, and EA payments increased in tandem. Calculating average EA benefits requires data on individual SNAP cases, but unfortunately, such data are not yet available after 2020. In the absence of more recent microdata, to predict EA payments in year X, I inflate the 2020 predictions by the percentage increase in maximum benefits between 2020 and year X, separately for each household size.⁸ To inflate the average increase, I take the weighted average of the increase for one-to-five person households, with weights equal to the share of the caseload in each size (where the weights sum to 1).

Predicted EA payments are displayed in Table 2, below. Column (2) repeats estimates for phase 1 EA payments received in 2020 as shown in column (7) of Table 1. Column (3) estimates EA payments in fiscal year 2021 while phase 1 EA payments were still in place. In these months, estimated EA payments averaged \$116 per month overall, and \$170 per month in households with children. After phase 2 payments were introduced (in April or May 2021, depending on the state), estimated EA payments rose to \$162 overall and \$211 for households with children. EA payments increased along with increases in maximum benefits in 2022 and 2023, as shown in columns (5) and (6) below.

Table 2: Predicted Emergency Allotment Payments Over Time, by Household Size, in Dollars

SNAP HH Size	Predicted Emergency Allotments				
	2020	2021 Phase 1	2021 Phase 2	2022	2023
(1)	(2)	(3)	(4)	(5)	(6)
<i>Panel A: All Households</i>					
1	65	69	121	149	167
2	126	132	175	215	241
3	138	145	186	228	257
4	214	226	256	314	353
5	249	262	292	359	403
Overall	110	116	162	199	223

⁸ Maximum SNAP benefits by household size from 2020–2023 are shown in Appendix Table 1.

Panel B: Households with Children

1	26	28	106	130	146
2	99	104	157	192	216
3	137	143	185	227	255
4	211	223	253	311	350
5	249	261	292	358	403
Overall	162	170	211	259	292

Note: Data in fiscal years, which run from October in year X–1 through September in year X. Phase 1 payments moved all households to the maximum benefit for their household size, while monthly phase 2 payments were the minimum of phase 1 payments, or \$95.

A limitation of this approach is that it relies on administrative SNAP caseload data collected prior to the COVID pandemic. During COVID, participation in SNAP increased. To the extent that new cases are systematically different from prior cases, the predictions in Tables 1 and 2 may be biased. For example, if new cases enrolling during COVID are more likely to be relatively high-income—within the SNAP population—job losers, then their calculated SNAP benefits would be lower and their EA payments would be higher. More and better data will be available in the future to test this directly. At the time of this writing, four months of post-COVID administrative data (June–September 2020) are available for a subset of states.

Appendix Table 3 calculates predicted phase 1 and phase 2 EA payments based on data from three time periods: pre-COVID 2020 data (October 2019–February 2020), post-COVID 2020 data (June–September 2020), and fiscal year 2019 data. Predicted benefits are similar across data from all three time periods, with average predicted phase 1 EA payments of \$110, \$115, and \$107 and phase 2 payments of \$154, \$158, and \$150, respectively.

Estimating the Impact of EA Payments

Some states opted to terminate their EA payments early, as shown in Table 3 (see also CBPP 2023). As described in more detail below, the regression analysis uses this variation across states and over time to conduct a difference-in-differences analysis of the termination of EA payments on food insufficiency using the Census Household Pulse Survey (HPS) data.

Table 3: First Month Without EA Benefits

Month	State(s)
May 2021	Idaho
June 2021	North Dakota
July 2021	Arkansas
Aug. 2021	Florida, Montana, Nebraska, South Dakota
Sept. 2021	Missouri
Jan. 2022	Mississippi, Tennessee
Apr. 2022	Iowa
May 2022	Arizona
June 2022	Indiana, Georgia

Note: Data from Food and Nutrition Service, USDA, SNAP COVID-10 Emergency Allotments Guidance and CBPP (2023). While Georgia has an acknowledged extension for June 2022 according to USDA's website, there was a sharp decline in payments consistent with the ending of EA payments in June 2022. Results recoding Georgia to July 2022 are little changed and are available upon request.

The impact of the EA policy on food hardship is estimated using data from May 2020 to August 2022 drawn from the HPS.⁹ Food hardship is measured using a variable that asks respondents to describe their household's food supply over the prior seven days, choosing between the following options:

- enough of the kinds of food (I/we) wanted to eat,
- enough, but not always the kinds of food (I/we) wanted,
- sometimes not enough to eat, or
- often not enough to eat.

A household is coded as experiencing food insufficiency if the respondent answered that there was sometimes or often not enough to eat in the previous seven days.

The analysis leverages the cross-state variation in the timing of EA termination by comparing changes in measures of food hardship within a state after EA termination relative to states that did not have a

⁹ When the HPS began in April 2020, it was conducted on a weekly basis. The survey shifted to bi-monthly releases in August 2020, and once-monthly as of December 2021. We assign a survey wave to be in month X if five or more days of a collection period occurred during month X. We drop the first week of data. See Appendix Table 4 for a full coding.

change in EA status during the HPS reference month in a difference-in-differences framework. Specifically, for family i living in state s at time t , the following equation is estimated:

$$y_{ist} = \beta EA_{st} + X_{ist}\gamma + \eta_s + \delta_t + \varepsilon_{ist}$$

The treatment variable, EA_{st} , is an indicator for whether EA payments were in place in the state and month of observation. As a result, β should be interpreted as the impact of the additional EA payments on food sufficiency, and $-\beta$ is the impact of the termination of EA payments. X_{ist} is a vector of household characteristics, including respondent age, indicators for race/ethnicity and educational attainment, employment status, and the number of children in the household. η_s and δ_t are state and survey-month fixed effects, respectively. State fixed effects account for time-invariant state characteristics such as the policy environment, while month fixed effects account for time-varying factors affecting all states at the same time, such as federal relief payments, the across-the-board 15% SNAP benefit increase that started in January 2021, the adoption of new benefits due to the reevaluation of the Thrifty Food Plan in October 2021, and other COVID-related policy changes. All analyses use household weights, and standard errors are clustered at the state level.

Impacts of EA Payments

Results are shown in Table 4, below. Panel A reports impacts of EA payments for households overall, and Panel B limits the analysis to households with children. Overall, the presence of EA benefits reduces food insufficiency by 0.9 percentage point, as shown in column (1). Since the mean rate of food insufficiency is 10.1%, this represents a 9% decline in food insufficiency. The impact on households with a White respondent is a 0.6 percentage point decline (column 2), also a 9% decline relative to their mean rate of 7%. Households with Black or Hispanic respondents have higher rates of food insufficiency, at 19.3% and 16.8%, respectively. The estimated impact on households with a Black respondent (column 3) is a statistically insignificant 0.9 percentage point. For households with a Hispanic respondent, the impact is a statistically significant 2.8 percentage points decline (column 4). Results for households with an Asian respondent are a statistically insignificant 0.7 percentage point; these households also have a lower base rate of food insufficiency at 5.6% (column 5).

Table 4: Effect of Emergency Allotments on Food Insufficiency

	Overall (1)	White (2)	Black (3)	Hispanic (4)	Asian (5)
<i>Panel A: All Households</i>					
EA benefits	-0.009*** (0.002)	-0.006** (0.003)	-0.009 (0.009)	-0.028*** (0.006)	0.007 (0.007)
Mean food insufficiency	0.101	0.070	0.193	0.168	0.056
N	3,303,457	2,516,112	227,734	288,714	152,291
<i>Panel B: Households with Children</i>					
EA benefits	-0.012*** (0.003)	-0.004 (0.007)	-0.026* (0.015)	-0.027** (0.011)	0.006 (0.015)
Mean food insufficiency	0.135	0.090	0.237	0.195	0.066
N	1,117,167	771,307	97,828	134,773	64,383

*Note: All columns include state and month-of-survey fixed effects. Covariates include age, number of children, educational attainment indicators, any work last week, and an indicator for whether the respondent is married. Standard errors (in parentheses) are clustered by state. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$*

Results limited to households with children are generally similar to those of the overall population. EA payments reduce food insufficiency among households with children by 1.2 percentage points, relative to a mean of 13.5%. EA payments reduce food insufficiency by a statistically significant 2.6 percentage points among Black households with children (column 3), and 2.7 percentage points among Hispanic households with children (column 4)—a reduction of 11% and 14% relative to their means, respectively. Estimated impacts on White and Asian households with children are not statistically different from zero (columns 2 and 5).

Conclusions

SNAP EA payments substantially raised monthly SNAP benefits during the pandemic. In turn, EA payments reduced food insufficiency by approximately 9%. These findings are consistent with growing evidence that pandemic relief payments reduced poverty and material hardship (Parolin, et al., 2021; Llobrera, 2022; Wheaton and Kwon, 2022; Bitler, et al., 2023). While the recent reevaluation of the Thrifty Food Plan, on which SNAP benefits are based, has improved the adequacy of SNAP benefits, high rates of inflation and other factors continue to impose hardship on families. As EA benefits are terminated in March 2023 and SNAP benefits nationwide revert to levels determined by the usual SNAP benefits formula, we will expect to see an increase in food insufficiency.

References

- Bitler, M., H. Hoynes, and D. Schanzenbach. 2020. [The social safety net in the wake of COVID-19](#). *Brookings Papers on Economic Activity*, 119–45.
- Bitler, M., H. Hoynes, and D. Schanzenbach. Forthcoming. Suffering, the safety net, and disparities during COVID-19. *RSF: The Russell Sage Foundation Journal in the Social Sciences*.
- Center on Budget and Policy Priorities (CBPP). 2023 (January 24). [A quick guide to SNAP eligibility and benefits](#).
- Center on Budget and Policy Priorities (CBPP). 2022 (February 24). [Robust COVID relief achieved historic gains against poverty and hardship, bolstered economy](#).
- Llobrera, J. 2022 (September 9). [Food insecurity at a two-decade low for households with kids, signaling successful relief efforts](#). Center on Budget and Policy Priorities (CBPP) blog.
- Parolin, Z., E. Ananat, S. Collyer, M. Curran, and C. Wimer. 2021. [The initial effects of the expanded Child Tax Credit on material hardship](#). National Bureau of Economic Research Working Paper 29285.
- Wheaton, L., and D. Kwon. 2022 (August 1). [Effect of the reevaluated Thrifty Food Plan and Emergency Allotments on Supplemental Nutrition Assistance Program benefits and poverty](#). Urban Institute Brief.

Appendix Table 1: Maximum Monthly SNAP Benefits, by Fiscal Year

SNAP HH Size	2020	2021	2022	2023
(1)	(2)	(3)	(4)	(5)
1	194	204	250	281
2	355	374	459	516
3	509	535	658	740
4	646	680	835	939
5	768	807	992	1116

Note: Fiscal years run from October in year X-1 through September in year X. Data from SNAP – Fiscal Year Cost-of-Living Adjustments policy memos, from 2020–2023.

Appendix Table 2: Predicted EA Payments, by Race/Ethnicity of Household Respondent

SNAP HH Size	White Respondent		Black Respondent		Hispanic Respondent		Asian Respondent	
	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: All Households</i>								
1	72	118	62	114	41	106	53	108
2	129	168	115	159	121	161	176	201
3	140	181	145	181	131	168	77	132
4	226	253	175	209	234	263	260	261
5	296	315	207	243	208	243	284	292
Overall	114	156	101	148	102	152	112	154
<i>Panel B: Households with Children</i>								
1	41	101	20	97	26	102	18	103
2	96	147	101	150	97	148	118	155
3	136	178	146	181	131	168	72	127
4	220	248	175	209	233	262	260	261
5	296	315	207	243	208	243	284	292
Total	172	210	152	191	147	188	202	229

Note: Respondents coded as Black (Asian) if they report Black (Asian) alone or Black (Asian) and another race. Hispanic respondents are of any race.

Appendix Table 3: Sensitivity of Predicted EA Payments to Timing of Quality Control Data

SNAP HH Size	2020: Pre-COVID		2020: Post-COVID		2019	
	Phase 1 EA	Phase 2 EA	Phase 1 EA	Phase 2 EA	Phase 1 EA	Phase 2 EA
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	65	115	74	120	66	116
2	126	166	130	173	116	159
3	138	177	130	175	136	175
4	214	243	181	218	194	226
5	249	278	269	294	240	268
Overall	110	154	115	158	107	150

Note: Columns (2) and (3) are calculated from SNAP Quality Control data, from October 2019–February 2020; Columns (4) and (5) are calculated from June–September 2020; Columns (6) and (7) are calculated from 2019 fiscal year data (October 2018–September 2019) and are inflated to 2020 dollars using the change in maximum benefit schedules between 2019 and 2020.

Appendix Table 4: Assignment of Household Pulse Waves to Months

Pulse Wave Dates	Coded Month
May 7 – May 12 May 14 – May 19 May 21 – 26 May 28 – June 2	May 2020
June 4 – June 9 June 11– June 16 June 18 – June 23 June 25 – June 30	June 2020
July 2 – July 7 July 9 – July 14 July 16 – July 21	July 2020
August 19 – August 31	August 2020
September 2 – September 14 September 16 – September 28	September 2020

September 30 – October 12 October 14 – October 26	October 2020
October 28 – November 9 November 11 – November 23	November 2020
November 25 – December 7 December 9 – December 21	December 2020
January 6 – January 18 January 20 – February 1	January 2021
February 3 – February 15 February 17 – March 1	February 2021
March 3 – March 15 March 17 – March 19	March 2021
April 14 – April 26	April 2021
April 28 – May 10 May 12 – May 24	May 2021
May 26 – June 7 June 9 – June 21	June 2021
June 23 – July 5 July 21 – August 2	July 2021
August 4 – August 16 August 18 – August 30	August 2021
September 1 – September 13 September 15 – September 27	September 2021
September 29 – October 11	October 2021
December 1 – December 13	December 2021
December 29 – January 10	January 2022
January 26 – February 7	February 2022
March 2 – March 14	March 2022

March 30 – April 11	April 2022
April 27 – May 9	May 2022
June 1 – June 13	June 2022
June 29 – July 11	July 2022
July 27 – August 8	August 2022

Note: The first wave of the Household Pulse Survey collected data from April 23–May 5, 2020 and is dropped in the analysis.

Northwestern University’s **Institute for Policy Research** (IPR) is one of the country’s oldest and most prominent interdisciplinary social science research institutes. The Institute’s more than 160 award-winning faculty are among the top experts in their fields. Using rigorous methods, they conduct innovative, policy-relevant research, tackling some of the nation’s most pressing social issues—from education and inequality to social safety nets and gun violence. IPR faculty experts train policy-minded scholars and doers, and they share their research widely with policymakers, foundations, nonprofits, and the media to support sound policy decisions. Find out more on its website, www.ipr.northwestern.edu.