USDA Food and Nutrition Service
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Early Months of the COVID-19 Pandemic in Fiscal Year 2020: Characteristics of Supplemental Nutrition Assistance Program Households

Abstract

During the COVID-19 pandemic the Supplemental Nutrition Assistance Program (SNAP), among other programs, helped support low-income families in the United States weather the negative economic effects of the pandemic. The U.S. Department of Agriculture's Food and Nutrition Service (FNS) annually reports on the demographic and economic characteristics of SNAP households using Quality Control (QC) data—a nationally representative sample of SNAP administrative data. For fiscal year (FY) 2020, these data were split between the prepandemic period (October 2019 through February 2020) and the early pandemic months (June through September 2020)—providing a snapshot of how SNAP households' circumstances changed in the first months of the pandemic.

This analysis finds that there was an increase in the proportion of households reporting zero gross income, a decrease in the proportion of households with income from earnings, and an overall decrease in average gross income. Average gross income for households with children fell more than for other household groups. Regular SNAP benefits fell on average, but with the addition of Emergency Allotments (EA), average monthly benefits increased, especially for households with children or employed individuals. When regular SNAP benefits and EA are combined with cash income, these two FNS benefits were sufficient to move nearly 40 percent of SNAP households above the poverty level and, thus, increase food budgets for low-income households during a time of general economic hardship in the United States.

Key Findings

Finding #1: Due to supplemental changes in sources of income, average gross income remained statistically unchanged while net income rose.

Finding #2: The percentage of SNAP households reporting earnings fell. The percentage reporting zero gross income rose.

Finding #3: Monthly Unemployment Insurance income, averaged across all SNAP participants, increased nearly fivefold in the early pandemic, from $8.70 to $42.80.

Finding #4: The proportion of households receiving either the minimum or maximum benefit increased in the early pandemic period.

Finding #5: An overall decrease in deductions was driven primarily by the average earned income and shelter deductions.

Finding #6: Average household size did not significantly change overall or for any subgroups.

Finding #7: Except for households with children, all subgroups saw an increase in average gross income.

Finding #8: On average, the increase in net income led to a fall in non-EA SNAP benefits.

Finding #9: Households received an average of nearly $115 in EA each month, but amounts received varied by household composition.

Finding #10: When added to cash income, regular SNAP and EA moved nearly 4-in-10 households out of poverty.

(1) Introduction

SNAP is the Nation's largest food assistance program and provided benefits to an average of over 21.6 million low-income households each month, at a cost of around $113.4 billion in fiscal year (FY) 2021 (Food and Nutrition Service, 2022). In March 2020, at the onset of the COVID-19 pandemic in the United States, Congress passed the Families First Coronavirus Response Act (FFCRA) (Public Law 116-127), which authorized Emergency Allotments (EA) to increase SNAP households' monthly benefits to the maximum amount for their household size. At the same time, FNS waived Quality Control (QC) review requirements from March to May 2020. Passage of the Consolidated Appropriations Act, 2021 (P.L. 116-260) subsequently extended the QC review waiver until June 30, 2021.

Suspension of QC review requirements created a unique situation with the QC data collected in FY 2020. Complete data were collected for the first 5 months of the fiscal year, October 2019 to February 2020 (hereafter called the prepandemic period). Very few States collected data from March to May 2020, so those months are not examined in this report. However, all but six State SNAP agencies—California, Delaware, the District of Columbia, Maine, Maryland, and New York—completed QC reviews between June and September 2020 (hereafter called the early pandemic period). Analysis by Cronquist and Eiffes (2022) determined that sample sizes for the initial 5 months were sufficient for producing precise estimates of SNAP caseload characteristics for the prepandemic period. Although FNS was unable to provide its usual level of oversight of the sampling procedures, and State agencies were not required to perform face-to-face interviews with applicants, Cronquist and Eiffes determined that the sample sizes and reliability of the June to September data were sufficient for producing equivalent estimates for the early pandemic period. Thus, FNS can compare SNAP caseload characteristics of the prepandemic and early pandemic periods for States that reported data in both periods (hereafter referred to as all States, unless otherwise specified).

This report supplements the *Characteristics of SNAP Households: Fiscal Year 2020* annual report (Cronquist & Eiffes, 2022) with a descriptive analysis of the differences between the prepandemic and early pandemic periods of FY 2020, focusing on key characteristics of interest at the household level.

This report is organized as follows: the next section provides background on the economic challenges of the period shortly after the declaration of the pandemic and a brief description of the methods; the third section examines differences between the two periods for all SNAP households in States that reported data in both periods; the fourth section examines those same differences for select household subgroups; the fifth section looks at the impact of EA during the early pandemic; and the final section summarizes the findings.

(2) The Immediate Economic Impact of the COVID-19 Pandemic and Methods of Analysis

The COVID-19 pandemic caused economic hardship throughout the United States, negatively affecting low-income households in the months immediately following the March 2020 Federal declaration of a public health emergency. The Federal Reserve estimated that 13 percent of all adults lost or were furloughed from a job in March and April 2020, with low-income workers being the most likely to lose a job (Zabek & Larrimore, 2020). In an April 2020 Federal Reserve survey, only 37 percent of respondent mothers reported they could cover a $400 expense with cash, credit, or savings (Lloro, 2021). Based on historical data before the pandemic, the Census Bureau estimated the employment-to-population ratio (the percentage of the U.S. population actively employed) would have been 61.3 percent by April 2020. However, the actual ratio was only 51.5 percent, meaning it fell by an equivalent of 9.9 individuals per 100 below Census estimates (Udalova, 2021). Overall, 26.4 million people experienced unemployment at some point during 2020—12.9 million more than in 2019—and those with a GED or less than a high-school diploma were more likely to report pandemic-induced unemployment and reduced labor hours and earnings a full year after the pandemic officially began in the United States (Auginbaugh & Rothstein, 2022; Bureau of Labor Statistics, 2021).

A serious possible outcome of general economic hardship is food insecurity. In early May 2020, 1-in-10 adults reported not having enough food to eat often or sometimes within the past 7 days (Hodges, Jones, & Toossi, 2021). This is consistent with USDA's Economic Research Service estimate of around 10.5 percent of households reporting food insecurity in 2020. However, this percentage was unchanged from their previous estimate of food insecurity in 2019 (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2021). This suggests that impacts on food security were relatively muted.

The pandemic's toll also affected social services. After 6 years of decline, USDA's inflation-adjusted spending on food and nutrition assistance programs reached its highest point ever in FY 2020 (Toossi, Jones, & Hodges, 2021). Additionally, average SNAP participation from April to September 2020 increased by nearly 5 million and monthly average redemptions of EBT benefits (when including Pandemic-EBT[i] with SNAP) increased 86.4 percent, compared to the same period the previous year (Jones, 2021; Toossi, Jones, & Hodges, 2021). Meanwhile, State and local governments saw a $61 billion reduction in revenues in the second quarter of calendar year 2020 compared to the same period in 2019, causing some States to implement staffing reductions and furloughs (Government Accountability Office, 2021). Additionally, many organizations supporting low-income communities reported "significant disruptions" to their operations, including the closure of offices and use of alternative work models (Kaplan, 2020). Federal flexibilities were offered in response to these difficult circumstances.

State SNAP agencies utilized increased administrative flexibilities offered by Congress through the FFCRA, including adjustments to interview requirements, extended certification periods, and changes to reporting requirements (Center for Budget and Policy Priorities, 2021; Food and Nutrition Service, 2019). In March 2020, FNS helped ease pandemic-related operational strains by waiving SNAP State agency QC regulatory requirements, a policy that Congress subsequently extended until July 2021. Thus, few States undertook normal QC review procedures from March to May 2020. However, from June to September of 2020, most State agencies completed QC reviews and reported QC data to FNS. Of the 53 State SNAP agencies (including the District of Columbia, Guam, and the U.S. Virgin Islands), all except California, Delaware, District of Columbia, Maine, Maryland, and New York continued to conduct QC reviews during this later period.

Analysis conducted by Mathematica Policy Research—on behalf of FNS—demonstrated that the prepandemic data were reliable, precise, and reasonable when compared against previous years of QC data, although standard errors were higher due to a lower sample size (Franckle, Vigil, & Leftin, 2021, p. 1). The annual report, *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2020*, presents full descriptive statistics of the SNAP caseload using the entire available QC sample for both the prepandemic and early pandemic periods (Cronquist & Eiffes, 2022). Because data are not available for all States in the early pandemic period, the *Characteristics* report does not directly compare household characteristics during those periods.

This supplementary analysis uses the FY 2020 QC data for the prepandemic period—October 2019 to February 2020—and the early pandemic period—June to September 2020—for States that reported data in both periods. To make estimates for both periods comparable, States that did not report data during the early pandemic period are excluded from the prepandemic sample in this report. Therefore, estimates in the following tables and figures will not match those in the *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2020* report. For ease of interpretation, this report focuses on percentage and average changes between the 2 periods in these 47 States. References to "all" SNAP households in this report refer to all SNAP households in the 47 States for which data are available in both periods. Additionally, because SNAP eligibility is determined based on monthly characteristics, estimates below are monthly averages.

Point estimates, standard errors, and differences between the two periods are reported in the tables below. Estimates of statistical significance are indicated in the tables using asterisks, with a p-value of 0.10 being the minimum significance level noted. Significance levels for univariate analyses are calculated using Welch's unequal variance t-test for Tables 1, 2, 4, 6, 7, 8, and 9 and Z-test of proportions for Tables 3 and 5.

(3) Differences in Income Between Prepandemic and Early Pandemic Periods for All SNAP Households

Table 1 provides a general picture of the SNAP caseload for the prepandemic and early pandemic periods. The first row shows that average monthly SNAP participation increased by over 2.6 million households in the States reporting in both periods—going from 14.82 prepandemic to 17.41 million early pandemic. Average household size did not significantly change. The small decline in average gross income was not statistically significant, but income net of deductions (more detail below) rose nearly $30 between the two periods. Average SNAP benefits (excluding EA benefits) and the percentage of SNAP households living at or below poverty fell.

Key Finding #1: *Due to supplementary changes in sources of income, average gross income remained statistically unchanged while net income rose.*

Table 1: Comparison of Headline SNAP Statistics, Prepandemic vs Early Pandemic (FY2020)

	Prepandemic Period		**Early Pandemic Period**		**Difference**†
Variable	*Mean Values*	*SE*	*Mean Values*	*SE*	
Monthly Participation (millions)††	14.82	N/A	17.41	N/A	2.59
Household Size	1.98	0.02	1.96	0.02	-0.02
Monthly Gross Income ($)	881.27	8.20	876.54	13.40	-4.73
Monthly Net Income ($)	414.98	5.91	444.45	10.15	29.47***
Monthly Non-EA Benefit Amount ($)	231.08	2.18	225.65	3.09	-5.44**
% at or below the poverty level	81.37	0.44	79.39	0.68	-1.97***

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences; ††These data are from the FNS National Data Bank and only include States reporting in both periods.

The distribution of SNAP households by monthly gross income (all income measures in this report are monthly unless otherwise stated) was similar between the two periods, with the exception of a noticeably higher percentage of zero-income households during the early pandemic. Figure 1 shows the proportional distribution of SNAP households by $200-per-month increments of gross income (before deductions) for both periods. Both distributions show peaks at both the zero and $601–$1,000 gross income ranges. The share of households with zero gross income rose from 19 percent to 22 percent. The proportion of households with incomes of $1–$1,000 per month were generally similar between the two periods. However, a slightly higher percentage of households had gross incomes of $801–$1,000 in the early pandemic and a slightly lower percentage had incomes in the $601–$800 range. The higher income tail of the distributions shows little difference between the two periods.

Figure 1: Proportional Distribution of SNAP Households by Monthly Gross Income (FY2020)

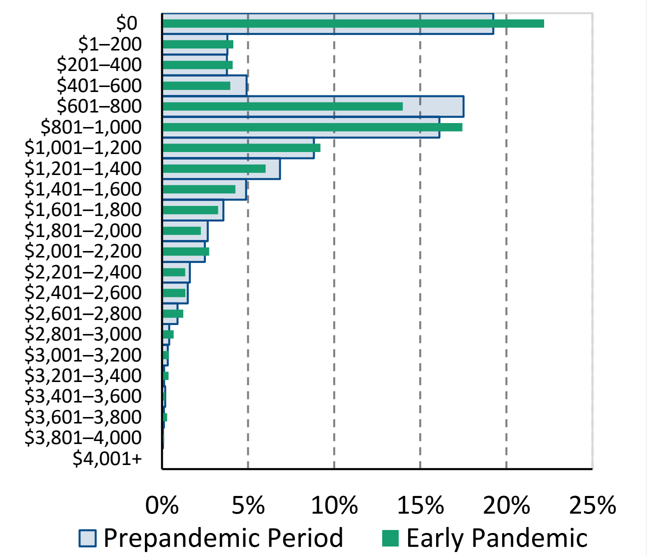


Table 2: Proportion of SNAP Households by Poverty Groups (FY2020)

	Prepandemic Period		Early Pandemic Period		Difference†
Household Poverty Group	*% of SNAP HHs*	*Standard Error*	*% of SNAP HHs*	*Standard Error*	
0% of Poverty Line	19.24%	0.43%	22.19%	0.70%	2.95%**
1-50% of Poverty Line	16.53%	0.41%	16.64%	0.60%	0.11%
51-100% of Poverty Line	45.60%	0.55%	40.56%	0.80%	-5.04%***
101-130% of Poverty Line	12.27%	0.37%	12.80%	0.55%	0.53%
130% or more of Poverty Line	6.37%	0.29%	7.81%	0.47%	1.45%

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences

Table 2 shows the change in the distribution of households by poverty groups. There were only two changes that were statistically significant: an approximately 3-percent increase in those at zero percent of the poverty line and an approximately 5-percent decrease in those between 51–100 percent of the poverty line. This aligns with what is seen in Figure 1, which shows an increase in the percentage of households reporting zero income in the early pandemic.

Table 3: Key Sources of Monthly Gross Income Across All SNAP Households (FY2020)					
	Prepandemic Period		**Early Pandemic Period**		**Difference**†
Source of income	*Mean Income ($)*	*SE*	*Mean Income ($)*	*SE*	
Total Gross Income††	881.27	8.20	876.54	13.40	-4.73
Total Earned	348.96	8.28	329.04	11.80	-19.92***
Total Unearned income†††	532.34	6.08	547.56	10.14	15.22***
Social Security Income	298.91	5.37	293.85	8.05	-5.06
Unemployment insurance income	8.70	1.50	42.80	4.85	34.11***
Workers compensation income	0.81	0.27	1.23	0.71	0.42
Supplemental Security Income	153.32	3.47	142.23	5.17	-11.10***
Temporary Assistance for Needy Families Income	9.15	0.69	6.89	0.71	-2.26*
General Assistance Income	3.83	0.34	3.20	0.61	-0.63

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences; ††Gross income is slightly lower than the sum of all earned and unearned income because nine States exclude child support payments from gross income, see (Cronquist & Eiffes, 2022, p. 41); †††Not all sources of unearned income are listed in the table.

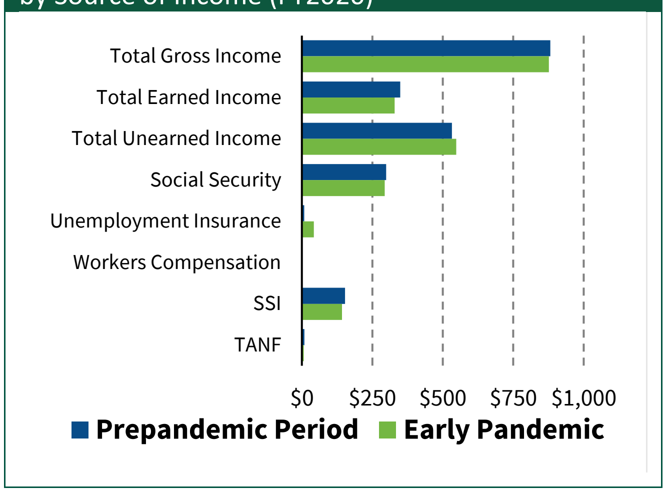
Key Finding #2: *The percentage of SNAP households reporting earnings fell. The percentage reporting zero gross income rose.*

We can better grasp how income changed in the first months of the pandemic by examining sources of income. Income can be roughly categorized into two types: earned income (income from employment) and unearned income (income from nonemployment sources such as Social Security, Supplemental Security Income [SSI], and unemployment insurance [UI]). Table 3 and Figure 2 compare income by earned and select unearned sources. Averages shown are calculated across all households regardless of whether they received income from a particular income source.

Average earned income in SNAP households dropped by about $20 between the two periods. The decline in earned income is reflective of the general reduction in employment levels across the United States in the beginning months of the public health emergency, especially among low-income Americans (Auginbaugh & Rothstein, 2022; Bureau of Labor Statistics, 2021; Zabek & Larrimore, 2020). This is corroborated by the -2.61-percentage point decline in the proportion of SNAP households reporting earnings during the early pandemic (Figure 3).

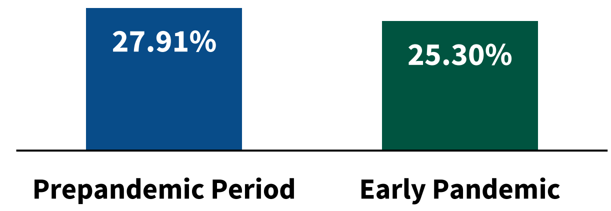
In contrast, average unearned income in SNAP households rose by about $15. It is worth noting that the increase in unearned income did not fully offset the decline in earned income, resulting in a small net *decrease* in gross household income.

Figure 2: Average Monthly SNAP Household Income, by Source of Income (FY2020)



Turning to specific sources of unearned income, average monthly Social Security, SSI, Temporary Assistance for Needy Families Income (TANF), and General Assistance (GA) all decreased in the early pandemic (Table 3). Average Social Security and GA income decreased by relatively small amounts and neither of these changes were statistically significant. The largest decline was in SSI by about $11. These changes largely reflected changes in the size and composition of the SNAP caseload. The proportion of SNAP households composed only of working-age adults—who are generally not eligible for Social Security, SSI, or TANF—increased significantly during the early pandemic period (see Table 6).

Figure 3: Proportion of SNAP Households With Earned Income (FY2020)†



†The difference is statistically significant at the 0.05 level.

In addition to the decline in SSI, the increase in average net income is largely driven by the large increase in UI income. Average UI income increased by nearly *fivefold*, going from $8.70 prepandemic to $42.80 in the early pandemic. This $34.11 increase was the greatest source of increase in unearned income for SNAP households. This reflects both the decrease in employment and work hours for low-income households (Zabek & Larrimore, 2020), a fall in the proportion of employed SNAP households with earnings (see Figure 3), and the Federal Government's supplementation of State UI programs during the pandemic through the Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 (P.L. 116-136). Thus, the average UI amount increased as more people became eligible for the program and subsequently received higher payment amounts—the average UI benefit increased by nearly $300 per month amongst those who received it.[ii]

Key Finding #3: *Monthly Unemployment Insurance income, averaged across all participants, increased nearly fivefold in the early pandemic, from $8.70 to $42.80.*

Despite the rise in UI benefits, the program still accounted for a relatively small proportion (roughly 8 percent) of average unearned income across all households in the early pandemic period. Social Security comprised the largest portion of average unearned income in both periods (approximately 56 percent prepandemic and 54 percent in the early pandemic period), and SSI comprised the second largest source (approximately 29 prepandemic and 26 percent in the early pandemic period). Together, Social Security, SSI, and UI accounted for 87 percent of unearned income in the early pandemic. When including earned income, these three programs still account for nearly 55 percent of gross income.

Table 4: Proportion of SNAP Households Receiving Minimum, Maximum, and Other Monthly Benefit Amounts (Excluding EA) (FY2020)

	Prepandemic Period		**Early Pandemic Period**		**Difference†**
SNAP benefit level	*Proportion of SNAP HHs*	*SE*	*Proportion of SNAP HHs*	*SE*	
Minimum benefit (%)	11.79	0.36	14.12	0.58	2.33*
Other benefit amounts (%)	53.63	0.55	49.30	0.82	-4.33**
Maximum benefit (%)	34.58	0.52	36.58	0.79	2.00*
Average Benefit Amount ($)	231.08	2.18	225.65	3.09	-5.44**

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences

There were also differences in the distribution of SNAP benefits over the two periods. Changes in the proportion of households receiving the minimum and maximum benefits (excluding EA) can be seen in Table 4, along with the average non-EA benefit amounts in the bottom row. The proportion of households receiving either the minimum or maximum benefit levels each increased by about 2 percent, and the proportion of households receiving other benefit amounts fell accordingly. At the same time, the average benefit amount per household fell by -$5.44. These changes are all statistically significant and indicate some polarization in SNAP household benefits to both the maximum and minimum during the early pandemic, which is consistent with the changes in the higher income distribution of SNAP households and the increase in the proportion of households with zero gross income (see Figure 1).

Key Finding #4: *The proportion of households receiving either the minimum or maximum benefit increased in the early pandemic period.*

Table 5: Average Monthly Deduction Amount, by Deduction Type (FY2020)

	Prepandemic Period		**Early Pandemic Period**		**Change†**
Deduction Type	*Mean Amount ($)*	*SE*	*Mean Amount ($)*	*SE*	*($)*
All Deductions	562.54	3.85	548.34	5.80	-14.20***
Dependent Care Deduction	9.87	0.80	8.70	1.18	-1.17
Medical Expense Deduction	10.58	0.65	9.17	0.81	-1.41
Earned Income Deduction	71.56	1.69	66.96	2.40	-4.61**
Shelter Deduction	294.79	2.95	288.56	4.71	-6.23**
Standard Deduction	172.31	0.18	171.48	0.26	-0.83
Homeless Shelter Deduction	0.67	0.09	0.46	0.12	-0.21
Child Support Deduction††	4.49	0.58	4.55	0.82	0.06

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences; ††States may exclude out-going child support payments from income in lieu of a deduction. In FY 2020, nine States did so.

Table 5 lists SNAP deductions and their average values for both periods. Average total deductions decreased by about $14 from the prepandemic to early pandemic period. This overall decrease was driven primarily by the earned income and shelter deductions, which respectively fell by -$4.61 and -$6.23—both statistically significant. A decrease in the earned income deduction is expected given the decline in average earned income (Table 3). The decrease in the shelter deduction is mostly explained by a slight fall in the share of households claiming the deduction (from 70.70 to 69.11 percent). The changes in the other deductions were small and not statistically significant.

Key Finding #5: *An overall decrease in deductions was driven primarily by the earned income and shelter deductions.*

To summarize the analysis in this section, relative to the prepandemic period, the early pandemic had a higher proportion of households with zero income and a lower proportion reporting earned income. Overall, average gross income fell slightly due primarily to a large decrease in earned income, which was only partially offset by an increase in unearned income. Among unearned income sources examined in the analysis, UI saw the largest increase. The average deduction amount decreased, mainly due to decreases in the average earned income and shelter deductions. As a result, the average non-EA benefit declined by more than $5.

(4) Differences Between Prepandemic and Early Pandemic Periods for Select Subgroups

This section examines how the composition of the overall SNAP caseload changed, as well as household changes for select subgroups between the prepandemic and early pandemic periods. These different subgroups of SNAP households experienced different magnitudes of change between the two periods.

Table 6: Proportion of SNAP Households by Key Subgroups (FY2020)

	Prepandemic Period		**Early Pandemic Period**		**Difference**†
Household Composition	*% of SNAP HHs*	*Standard Error*	*% of SNAP HHs*	*Standard Error*	
With Elderly Individuals	27.64	0.50	27.22	0.73	-0.43
With Nonelderly Individuals With Disabilities	23.58	0.46	21.71	0.69	-1.87
With Children	39.09	0.55	38.28	0.80	-0.81
Only Adults Ages 18–49 Without Disabilities	10.81	0.31	13.46	0.54	2.65**
With an Employed Individual	27.91	0.51	25.30	0.71	-2.60***
With Zero Gross Income	19.24	0.43	22.19	0.70	2.95**

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences

Table 6 shows the proportion of SNAP households that belong to six key subgroups: those with an elderly individual, with nonelderly individuals with disabilities, with children, composed only of adults ages 18–49 without disabilities (hereafter referred to as working-age adult households), with an employed individual, and with zero gross income. These groups are not mutually exclusive. Of the subgroups, the only statistically significant changes between the two periods were increases in the percentage of SNAP households composed only of working-age adults or with zero income—by 2.65 and 2.95 percent, respectively—and the percentage of households with an employed individual fell by 2.6 percent.

The other changes in household composition were not statistically significant. Thus, only the subgroups directly related to economic characteristics (i.e., working-age adult, zero-income, and employed households) had statistically significant changes in the early pandemic months. The proportion of households belonging to subgroups based on *demographic* characteristics (i.e., households with the elderly, disabled, or children) did not significantly differ between the two periods.

Table 7: Average Size of SNAP Households by Key Subgroups (FY2020)

	Prepandemic Period		**Early Pandemic Period**		**Difference**†
Household Composition	*Mean HH Size*	*Standard Error*	*Mean HH Size*	*Standard Error*	
All Households	1.98	0.02	1.96	0.02	-0.02
With Elderly Individuals	1.21	0.01	1.21	0.02	0.00
With Nonelderly Individuals With Disabilities	1.80	0.03	1.86	0.06	0.06
With Children	3.34	0.03	3.32	0.04	-0.02
Only Adults Ages 18–49 Without Disabilities	1.07	0.01	1.05	0.01	-0.02
With an Employed Individual	2.90	0.03	2.90	0.06	0.00
With Zero Gross Income	1.63	0.03	1.65	0.04	0.01

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences

Table 7 displays the changes in household size (number of people in the household) for all SNAP households and the select subgroups. On average, households with children were the largest of the selected subgroups. Households with an employed individual were the second largest, which can be partially explained by the greater likelihood of households with children to also contain an employed individual (Cronquist & Eiffes, 2022). Households composed of only working-age adults were the smallest in both periods. We find no evidence of statistically significant changes in household size overall or for the subgroups.

Table 8 shows changes in average gross income—earned and unearned income summed before deductions and exclusions—for the select subgroups and all households. Average gross income for all SNAP households fell by nearly $5, but this change was not statistically significant. However, except for households with children, all subgroups saw an increase in average gross income, meaning that the overall decline was driven primarily by households with children. Households with only working-age adults saw the largest increase ($92.01) of any subgroup. These changes reflect conditions in the early pandemic that likely increased the number of working adult households eligible for SNAP, including increased unemployment rates (Auginbaugh & Rothstein, 2022) and the temporary suspension of certain SNAP work requirements (Center for Budget and Policy Priorities, 2021), as well as increased unearned income from Federal supplements to UI payments under the CARES Act. In terms of relative changes between the two periods, average gross income increased for all subgroups except households with children, which saw a decrease of about $13 in the early pandemic. Households with employed individuals saw an *increase* of nearly $78 in average gross income which, when combined with the fact that the proportion of employed SNAP households decreased (Table 6), may indicate that individuals who became unemployed were disproportionately lower income. Given the overlap between these two subgroups (Cronquist & Eiffes, 2022), these findings suggest a negative economic impact on SNAP households with children during the pandemic, which is supported by evidence of increased financial fragility for mothers during the pandemic (Lloro, 2021).

***Key Finding #6:** Average household size did not significantly change overall or for any subgroups.*

Table 8: Average Monthly Gross Income of SNAP Households by Key Subgroups (FY2020)

	Prepandemic Period		Early Pandemic Period		Difference†
Household Composition	*Mean Income ($)*	*SE ($)*	*Mean Income ($)*	*SE ($)*	*($)*
All Households	881.27	8.20	876.54	13.40	-4.73
With Elderly Individuals	945.01	10.49	950.24	16.07	5.23
With Nonelderly Individuals With Disabilities	1,052.68	11.19	1,080.67	22.01	27.99***
With Children	1,109.41	16.63	1,096.37	27.04	-13.05**
Only Adults Ages 18–49 Without Disabilities	275.34	16.54	367.35	33.10	92.01***
With an Employed Individual	1,429.85	17.74	1,507.85	31.37	77.99***

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences

***Key Finding #7:** Except for households with children, all subgroups saw an increase in average gross income.*

Mean gross income for households with elderly individuals increased slightly, but this increase was not statistically significant. These findings likely reflect the relatively fixed incomes of elderly individuals. Additionally, households that contained nonelderly individuals with disabilities saw their gross incomes increase on average by about $28 between the two periods, which was a statistically significant change.

Table 9: Average Net Income of SNAP Households by Key Subgroups (FY2020)					
	Prepandemic Period		Early Pandemic Period		Change†
Household Composition	*Mean Income ($)*	*SE ($)*	*Mean Income ($)*	*SE ($)*	*($)*
All Households	414.98	5.91	444.45	10.15	29.47***
With Elderly Individuals	469.88	9.57	481.97	14.64	12.08**
With Nonelderly Individuals With Disabilities	498.58	11.81	562.41	21.99	63.84***
With Children	552.27	11.81	577.39	19.70	25.12***
Only Adults Ages 18–49 Without Disabilities	105.37	9.25	195.14	26.45	89.78***
With an Employed Individual	687.87	13.90	778.32	25.43	90.46***

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences

While gross income gives us clearer insight into the financial situation of SNAP households, net income is the basis for household benefit amounts. Table 9 reports average net income across the select subgroups and all SNAP households. Unlike with gross income, all select subgroups experienced statistically significant increases in average net income.

Employed households saw the largest average increase in net income (of about $90) in the early pandemic period. The second largest increase occurred for households composed of working-age adults, which nearly doubled their net income from about $105 to $195; the third largest increase was for households containing an individual with a disability (about $64). For the first two subgroups noted above, this average increase was mostly due to increased UI income; for disabled households, this was mostly due to increased UI and SSI income for those households specifically.

Key Finding #8: *On average, the increase in net income led to a fall in non-EA SNAP benefits.*

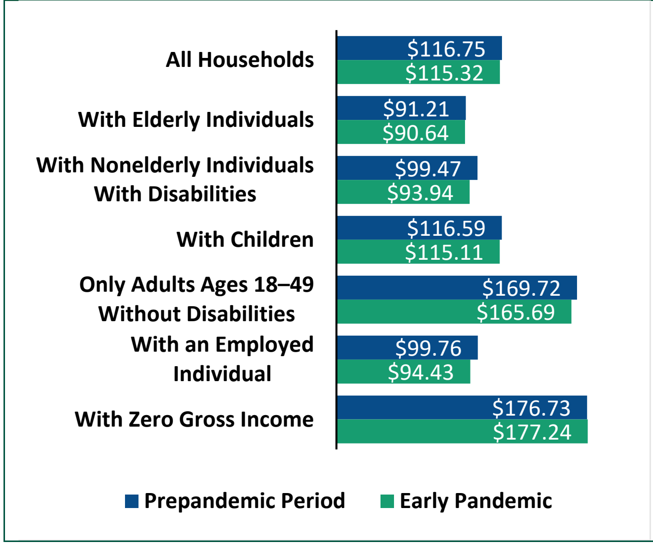
Among the select subgroups, households with elderly individuals or children experienced the smallest increases in net income. Both had lower average increases than SNAP households overall: all households increased their average net income by around $29 versus around $25 for those with children and close to $12 for those with elderly individuals. This is not unexpected for the latter subgroup because, as mentioned previously, elderly SNAP participants tend to have a relatively fixed income.

Table 10: Average Benefits of SNAP Households by Key Subgroups, Excluding Emergency Allotments (FY2020)					
	Prepandemic Period		Early Pandemic Period		Change
Household Composition	*Mean Income ($)*	*SE ($)*	*Mean Income ($)*	*SE ($)*	*($)*
All Households	231.08	2.18	225.65	3.09	-5.44**
With Elderly Individuals	110.28	1.89	109.29	3.25	-0.99
With Nonelderly Individuals With Disabilities	179.24	3.83	174.76	6.81	-4.47
With Children	389.36	3.90	382.31	5.42	-7.04**
Only Adults Ages 18–49 Without Disabilities	181.86	2.04	174.72	2.63	-7.15***
With an Employed Individual	289.32	4.37	273.63	6.50	-15.69***
With Zero Gross Income	288.87	4.48	292.18	5.99	3.31

* = p<0.10; ** = p<0.05; *** = p<0.01; †Differences are rounded and may not match column differences.

Table 10 compares average non-EA benefits between the two periods for key subgroups, including zero-income households, and Figure 4 makes this comparison on a per-person basis. Overall, changes in non-EA benefits were relatively muted between the two periods. This was especially true for per-person non-EA benefits estimates, which fell by $1.42 on average (see Figure 4). As noted previously, the general increase in net income led to a fall in average non-EA SNAP benefits. On average, households' non-EA SNAP benefit fell by $5.44.

Figure 4: Average Per-Person Benefits of SNAP Households by Key Subgroups ($) (FY2020)



Most household types experienced a decline in SNAP benefit, the largest of which was a nearly $16 decline among households with an employed individual. This amounts to a decrease in non-EA benefits of more than 5 percent. The fall in benefits for this subgroup is explained by it having the largest increase in net income (Table 9) and no significant change in household size between the two periods (Table 7).

Households with elderly individuals or nonelderly individuals with disabilities saw small decreases in non-EA benefits that were not statistically significant. The minimal change in the elderly benefits is consistent with this subgroup's minimal change in net income and household size. Although disabled households' average net income increased by about $63, this subgroup also had the greatest rise in average household size, which, although not statistically significant, may help explain the relatively small reduction in benefits.

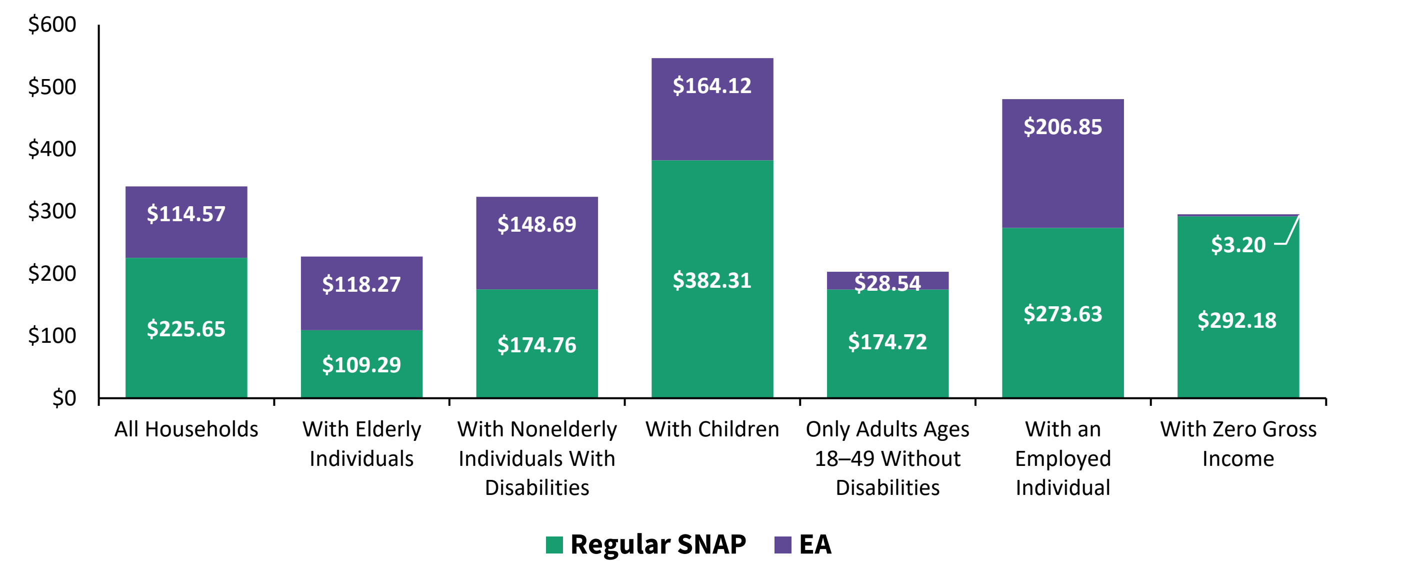
Households with children and those composed only of working-age adults both experienced similar declines in average non-EA SNAP benefits of about $7 per household; the declines were less similar on a per-person basis, about $1.5 and $4 declines, respectively.

In summary, there was an increase in households with zero income and those composed only of working-age adults and a decrease in households with employed individuals. However, average net income increased between the prepandemic and early pandemic periods for most of the select subgroups, which led to a decrease in non-EA SNAP benefits. Household size did not change for any subgroup to a statistically significant extent. Elderly households, which tend to have more stable circumstances, saw limited changes in income and benefits between the two periods. Households with children were the only subgroup to see a significant reduction in average gross income, but they remained the household subgroup with the highest average benefits for both periods due to their larger household size.

(5) Emergency Allotments

Up to this point the analyses have only examined changes in benefit amounts under regular SNAP rules. We will now briefly examine how EA benefits were distributed amongst the selected subgroups. Congress established EA under the FFCRA in response to the COVID-19 pandemic. During the early pandemic, States were permitted to provide EA to SNAP households if two criteria were met: (1) the declaration of a Federal public health emergency under Section 319 of the Public Health Service Act; and (2) an emergency having been declared in the State (Aussenberg & Billings, 2022). EA benefits were calculated in this manner: households that were not already receiving the maximum SNAP benefit for their household size were eligible to receive a supplemental benefit equal to the difference between their benefit as certified under normal SNAP rules and the maximum allotment based on their household size.[iii] Thus, the dollar amount of EA each household received was a function of both household net income and household size.

Figure 5: Average Emergency Allotments of SNAP Households by Key Subgroups ($) (FY2020)



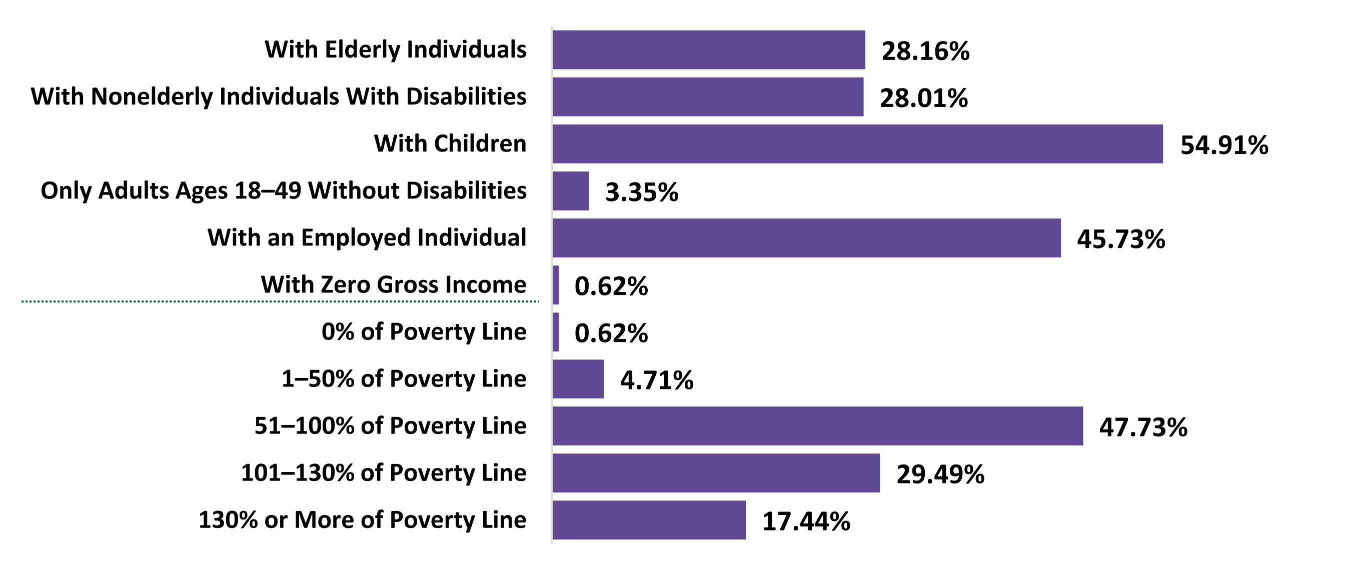
In Figure 5, we see the average EA benefits for each of the select household subgroups along with their regular SNAP benefits.[iv] Households on average received nearly $115 in EA each month, but amounts received varied by household subgroup. Only zero-income and working-age adult households had lower than average EA benefits because their regular SNAP benefit is generally close to the maximum allotment for their household size. Over 97 percent of zero-income households were certified for the maximum benefit under normal SNAP rules in the early pandemic period.[v] In addition, households composed only of working-age adults had relatively lower average income and were the smallest (1.05 people on average) of the selected subgroups.

Key Finding #9: *Households received an average of nearly $115 in EA each month, but amounts received varied by household composition.*

Households with employed individuals or children received the highest average EA benefits. In the early pandemic period, both subgroups had larger than average household sizes (2.90 and 3.32 people, respectively) and a smaller percentage received the maximum benefit under regular SNAP procedures (20.39 and 37.19 percent, respectively). Households with elderly individuals received an average of $118 in EA whereas households with nonelderly disabled individuals received about $149. This is primarily because the former subgroup tends to be smaller (1.21 people on average) compared to the latter (1.80 people on average).

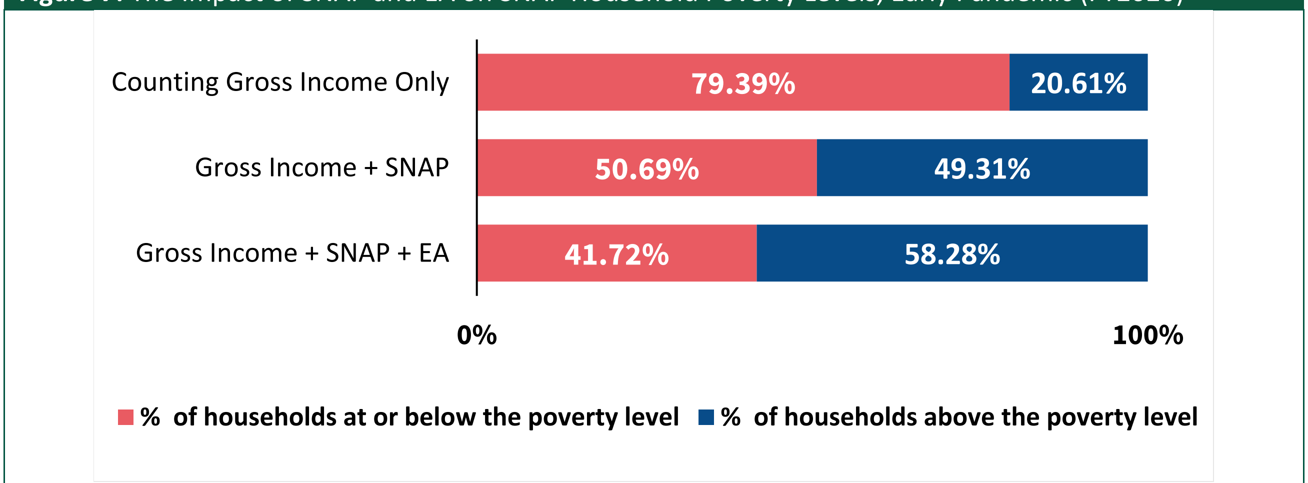
Figure 6 shows the distribution of total EA benefits allocated across different household groups and households by poverty level. Starting with the household groups, those with children received the largest portion of EA benefits (nearly 55 percent of the total), and households with employed individuals received the second most with around 46 percent. Households with zero income received the least with less than 1 percent of EA benefits, and working-age adults received slightly more at around 3 percent. Households with elderly disabled individuals made up the middle. This distribution results unambiguously from the information in Table 6 and Figure 5, which show that households with children and/or employed individuals comprise a relatively large proportion of the SNAP caseload as well as receiving relatively high average EA benefits, while working adult household and those with zero income received small average EA benefits.

Figure 6: Proportion of Total EA Benefits Going to Household and Poverty Groups, Early Pandemic (FY2020)



Distribution of total EA benefits by poverty groups followed a similar logic. Households in the lower-income brackets received the lowest proportion of total EA benefits, with households at zero and 1–50-percent of poverty receiving less than one percent and around 5 percent, respectively. Households in the 51–100-percent of poverty range received the largest share of EA benefits (around 48 percent). As income increased, the share fell: the 101–130-percent group took away around 29.5 percent of EA benefits, while the 130-percent-or-more group received approximately 17.5 percent. Like with the household groups, these findings are unsurprising considering that nearly half of SNAP cases are in the 51–100-percent range. Meanwhile, those households with higher incomes received relatively smaller portions despite being eligible for larger EA benefits because there are less of these households.

Figure 7: The Impact of SNAP and EA on SNAP Household Poverty Levels, Early Pandemic (FY2020)



The impact of EA can perhaps best be seen in its impact on poverty. When added to gross income, regular SNAP and EA moved nearly 4-in-10 households out of poverty. Figure 7 shows the impact of SNAP and EA on poverty levels amongst SNAP households in the early pandemic period. When only counting gross income, about 79 percent of SNAP households were at or below poverty. When we add SNAP benefits to cash income, that percentage drops to just over half (51 percent), a decrease of nearly 29 percentage points. When EA benefits are further added, the percentage of SNAP households living in poverty falls to about 42 percent. Thus, SNAP and EA benefits were able to move 38 percent of households over the poverty line in the early pandemic.

(6) Conclusion

This report examined changes in SNAP household characteristics observed in the early months of the COVID-19 pandemic (June to September 2020) in 47 States that reported QC data during that time-period. Using descriptive analytical techniques, changes in means and proportions of various characteristics for this SNAP caseload were calculated using common statistical significance tests.

***Key Finding #10:** When added to cash income, regular SNAP and EA moved nearly 4-in-10 households out of poverty.*

These analyses show that although earned income fell in the early pandemic period, overall mean gross income did not statistically change due to a rise in unearned income, particularly UI benefits. However, when looking at changes among select subgroups, all subgroups except households with children saw a rise in average gross income. The decrease in earned income was accompanied by an increase in the proportion of SNAP households reporting zero gross income, which is consistent with other research indicating a significant rise in unemployment during the early months of the pandemic (Auginbaugh & Rothstein, 2022; Bureau of Labor Statistics, 2021; Zabek & Larrimore, 2020).

The early pandemic period also saw a slight increase in the distribution of households with relatively higher income and households with zero income compared to other SNAP households. Thus, there were more households receiving both the maximum and minimum SNAP benefits when excluding EA. Due to decreases in the earned income and shelter deductions, the average amount of deductions applied to SNAP cases fell, and mean net income rose for all subgroups examined in this report. Meanwhile, household size remained relatively stable. This led to a general fall in non-EA benefits for all SNAP households and subgroups, except for zero-income households, which had a small but not statistically significant increase in benefits.

However, EA benefits were designed to respond to the economic impacts of the pandemic by providing households with supplemental benefits, calculated as the difference between their regular SNAP benefit and the maximum benefit for their household size. Thus, while households saw decreases in average non-EA benefits due to changing economic circumstances, EA provided additional assistance to SNAP households that were not already receiving the maximum allotment, which may have contributed to stability of food security between 2019 and 2020 (Coleman-Jensen, Rabbitt, Gregory, & Singh, 2021). This was especially evident for households with an employed individual or children, which saw larger decreases in regular SNAP benefits but also received the highest average amounts of EA benefits due to their relatively large household sizes. The impact of SNAP and EA on households' financial circumstances is demonstrated by the fact that those benefits, when combined with cash income, were sufficient to move nearly 40 percent of SNAP households above the poverty level. Thus, this evidence indicates that SNAP and EA accomplished their intended anti-poverty goals during the pandemic, increasing family food budgets for low-income households during a time of general economic hardship in the U.S.

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End Notes

[i] Pandemic-EBT was a program authorized under the FFCRA to provide school children with food assistance funds through EBT cards meant to replace free and reduced-price school meals that weren't being served during the pandemic.

[ii] Note that the Consolidated Appropriations Act of 2021 (P.L. 116-159) excludes Federal Pandemic Unemployment Compensation from consideration as income and from consideration as resources in the month of receipt and the following 9 months for the purposes of determining SNAP eligibility. However, this did not impact FY2020.

[iii] This policy changed on April 1, 2021, which is beyond the period examined here.

[iv] EA benefits were not recorded in the QC data. Thus, Mathematica calculated EA benefits based on the difference between the household's certified benefit and the maximum benefit the household would have been eligible for based on household size.

[v] The remainder of these households participating in a combined application project, in which FNS collaborates with the Social Security Administration to provide fixed SNAP benefit levels for SSI recipients.

For More Information:

Burt, Kameron (2022). Early Months of the COVID-19 Pandemic in Fiscal Year 2020: Characteristics of Supplemental Nutrition Assistance Program Households, Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support, Available online at: www.fns.usda.gov/research-and-analysis.