

# Impacts of COVID-19 on Food Security in Arizona

Food insecurity has increased among Arizona households since the beginning of the COVID-19 pandemic

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## Introduction

The coronavirus (COVID-19) pandemic has affected employment and food security globally<sup>1,2</sup> and in the United States.<sup>3,4</sup> To understand the impacts of COVID-19 on food security in Arizona, a representative survey of Arizona households was launched online from July 1 to August 10, 2020. This brief provides an overview of changes in food security rate, perceived worries and challenges about food security, as well as behavioral changes and strategies adopted since the pandemic. Additional briefs from the Arizona survey covering topics on economic consequences, food access, and participations in food assistance programs during the pandemic are also available.<sup>5</sup>

## Food Security

The U.S. Department of Agriculture (USDA) defines food insecurity as a lack of consistent access to enough food for an active, healthy life.<sup>6</sup> We measured food insecurity using the USDA's validated six-item household food security survey module.<sup>7</sup> Respondents who answered affirmatively to two or more of the food insecurity questions were considered food insecure.<sup>7</sup> Respondents who were food insecure both in the 12 months prior to the pandemic (March 2019 – March 2020) and since the pandemic (since March 2020) were classified as *persistently food insecure*. Those who were food secure pre-COVID-19 but became food insecure since the pandemic were classified as *newly food insecure*. The food secure category includes households that were food secure since COVID, regardless of their food security status prior to the pandemic.

## Key Findings

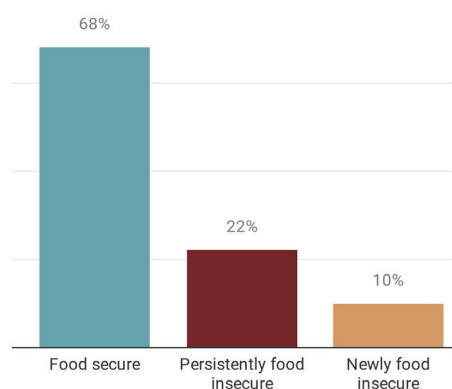
1. Almost one in three (32%) Arizona households experienced food insecurity since COVID-19—a 28% increase from the year prior to the pandemic, when the food insecurity rate was 25%.
2. Hispanic households, households with children, and households that experienced a job disruption were more likely to be both persistently and newly food insecure.
3. The majority of Arizona households were worried about food becoming too expensive. They also expressed concerns about availability of food, access to food assistance programs, as well as food safety.
4. Most households reported having changed some of their food-related habits. Behavioral changes included spending more time cooking at home, throwing away less food than normal, and keeping a two-week supply of groceries in the household.
5. About one in eight households bought food on credit (14%), borrowed money from friends and family for food (12%), and/or received food from food pantries (13%) during the pandemic.

## One in Three Arizona Households Experienced Food Insecurity since COVID-19

Since the pandemic, food insecurity increased among Arizona households.

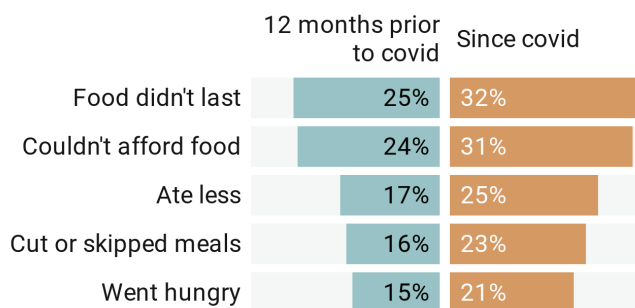
- 32% of Arizona households were food insecure since the pandemic. In particular, 22% of households were persistently food insecure, and another 10% were newly food insecure (Figure 1).
- Prior to the pandemic (March 2019 – March 2020), the food insecurity rate was 25%.

**Figure 1.** Food security status among Arizona households



- Since the pandemic, 32% of the respondents indicated that food in their household did not last long enough and they did not have the money to buy more food. Similarly, 31% of households could not afford food. 25% reported eating less, 23% cut the size of or skipped meals, and 21% went hungry (Figure 2). All of these different aspects of food insecurity were reported more frequently since COVID-19.

**Figure 2.** Percent of respondents experiencing changes in food insecurity, by USDA Food Security items



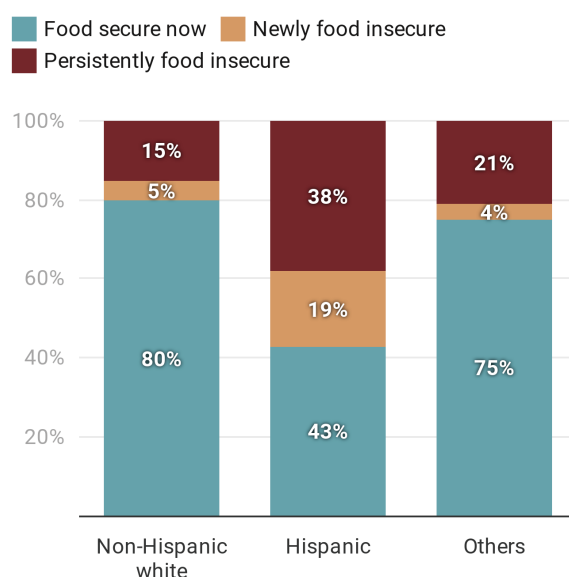
- Of the households that said that since the pandemic they had to cut the size of or skipped meals because there wasn't enough money for food, 40% had to do so almost every week, 45% some weeks but not all weeks, and 15% only one or two weeks.

## Varying Impacts of COVID-19 on Food Security for Arizona Households

The food insecurity rates were greater among Hispanic households, households with children, and households that experienced a job disruption.

- Hispanic households experienced much higher food insecurity since the pandemic (38% were persistently food insecure; 19% were newly food insecure) than non-Hispanic white households (15% persistently food insecure and 5% newly food insecure) (Figure 3).
- 66% of households with at least one child under age 5, and 56% of households with at least one child under age 18 were food insecure since the pandemic (Figure 4).
- Households with children experienced the highest rates of new food insecurity since the pandemic, 20% for households with at least one child under 18 and 24% for households with at least one child under 5.

**Figure 3.** Food security status by race and Hispanic origin

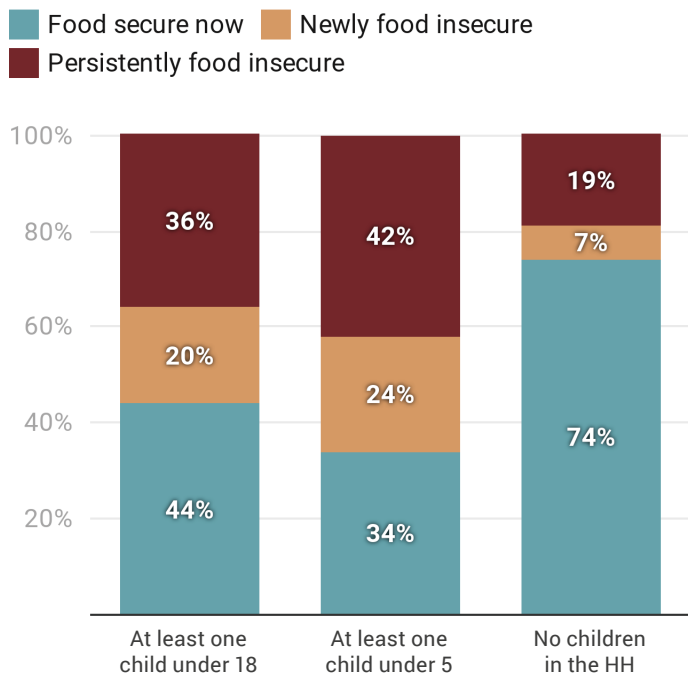


Note: The sample for non-Hispanic African Americans, Asians, Hawaiian and other Pacific Islanders, American Indians and Alaska Natives, and other/multiple races was too small. These groups have been combined into the “other” category.

*“I hope things get better; I am worried about some people not having enough food during this time.”*

—Survey respondent

**Figure 4.** Food security status by presence of children in households

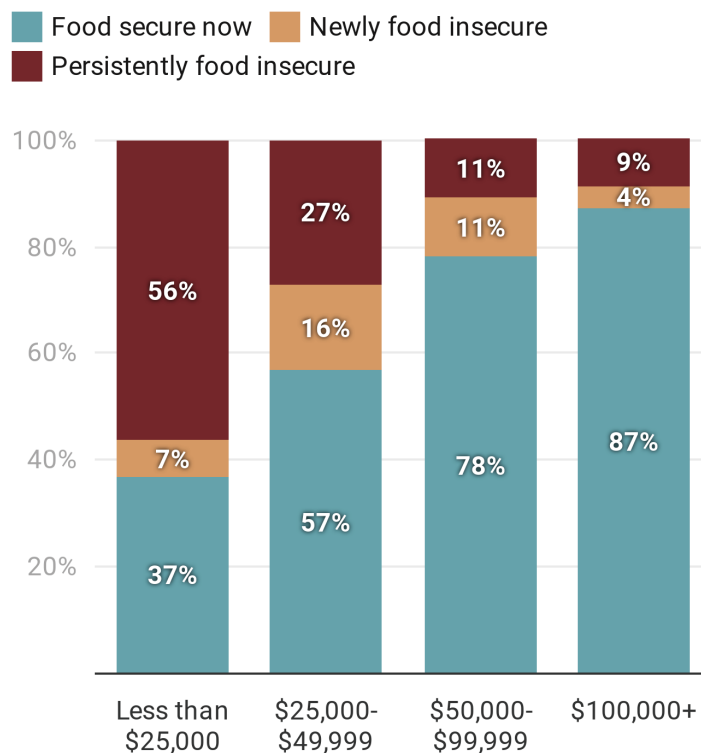


- While households earning less than \$25,000 (in 2019) experienced the most overall food insecurity (63%) since COVID-19, only 7% of them were newly food insecure, while 56% were persistently food insecure. Households earning \$25,000-49,999 experienced a higher rate of new food insecurity (16%) than the other income groups (Figure 5).
- About 36% of households experienced a job disruption since the pandemic. Job disruption included job loss, reduced hours/income, or being furloughed. 56% of these households experienced food insecurity (20% newly and 36% persistently food insecure) (Figure 6). Food insecurity was considerably lower for households that did not experience a job disruption.

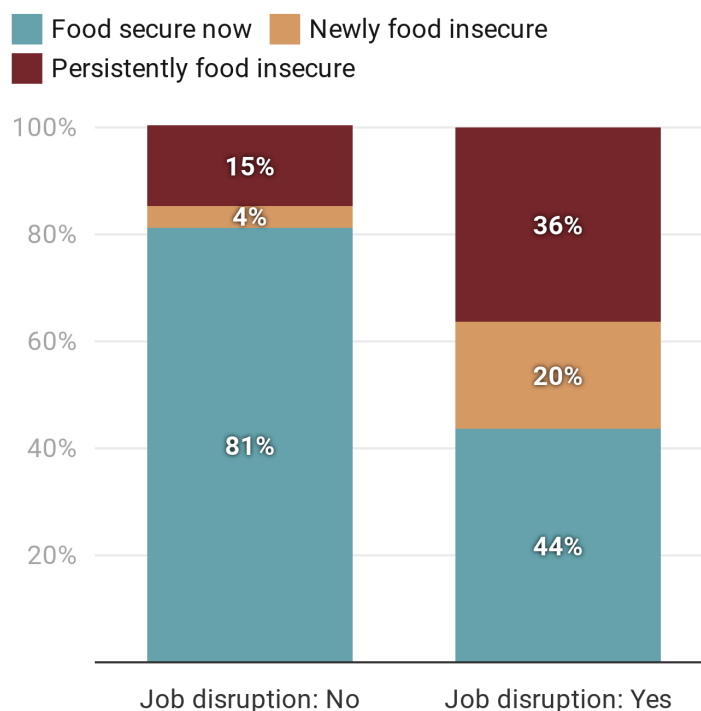
*“I wish that grocery stores would enforce social distancing.”*

—Survey respondent

**Figure 5.** Food security status by race and household income



**Figure 6.** Food security status by job disruption status since the pandemic

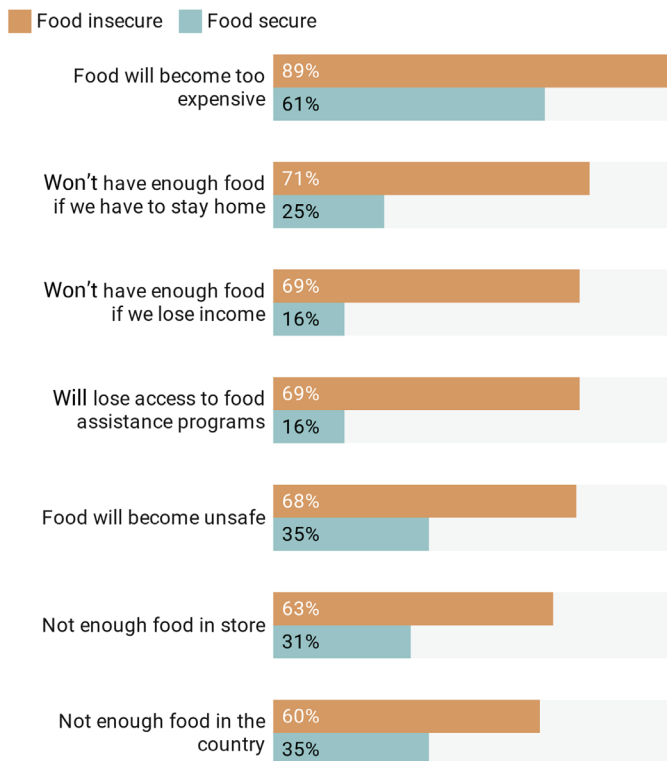


## Arizona Households Worried About Food Availability and Procurement

Arizona households were worried about food cost, availability of food, access to food assistance programs, as well as food safety.

- The majority of the respondents, regardless of their food security status, were worried about food becoming too expensive for them to afford, with 61% of food secure respondents and 89% of food insecure respondents expressing that concern (Figure 7). This shows that the pandemic impacted the perceptions of food affordability for the majority of Arizona households.
- 69% of respondents who were food insecure worried about losing access to food assistance programs, while this was less of a concern for food secure respondents.
- Most food insecure respondents were worried about the availability of food, access to food, and safety of food.

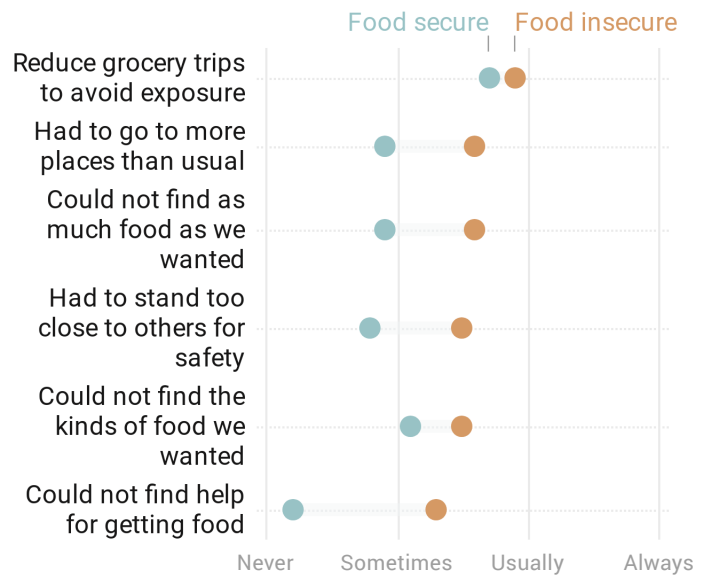
**Figure 7.** Different types of worry Arizona households experienced, by food insecurity status since the pandemic.



Note: Food insecure since the pandemic includes newly food insecure and persistently insecure

- Food insecure household find getting food more challenging. In particular, they were more likely to go to more places than usual for food; at the same time, they were less likely to find as much food as they wanted or their preferred kinds of food, compared to food secure households (Figure 8).
- Both food secure and food insecure households have reduced their grocery trips to minimize their exposure.

**Figure 8.** Challenges experienced getting food, by food insecurity status since the pandemic



Note: The respondents indicated the frequencies of challenges from a scale of 1 (Never) to 4 (Always).

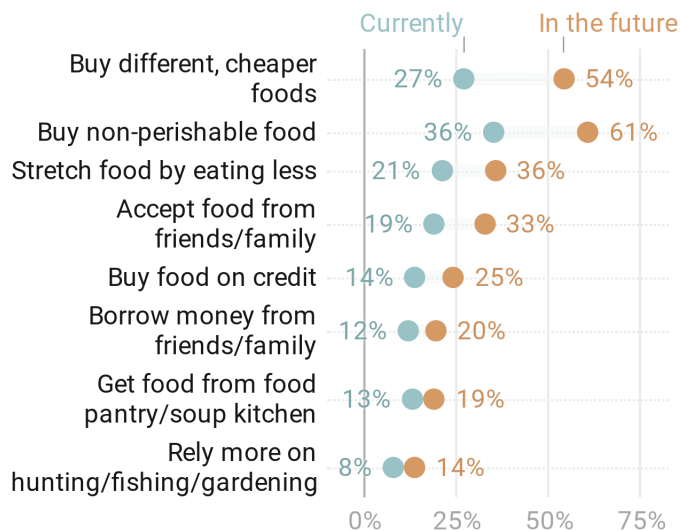
## Staying Resilient Through Strategies for Food Security

Many Arizona households are worried about the impact of the pandemic on their food security, and relied on diverse strategies to meet their food needs.

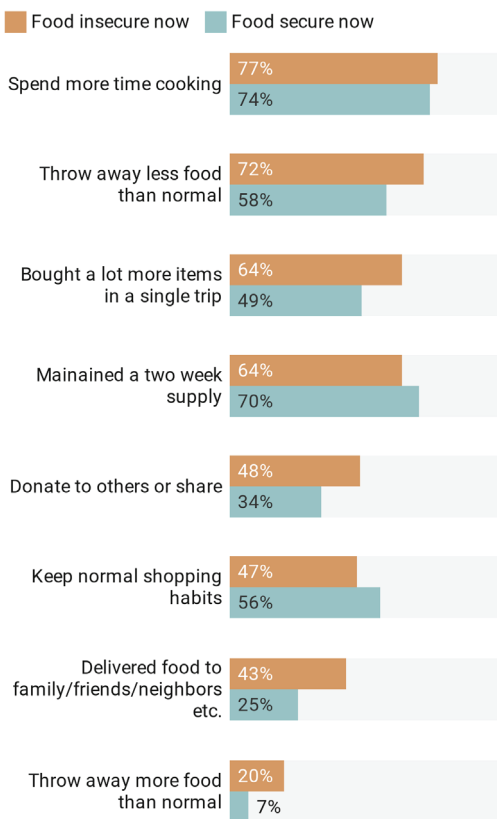
- Purchasing patterns have changed since the pandemic. 27% of the respondents indicated that they were buying cheaper food, and 36% indicated they were buying non-perishable food items (Figure 9).
- About one in eight households bought food on credit (14%), borrowed money from friends and family for food (12%), and received food from food a pantry or a soup kitchen (13%) during the pandemic (Figure 9).

- For all the different strategies that are currently used, the expectation is that they are also likely to be used in the future, and more frequently.

**Figure 9.** Different strategies used for food security: currently using and considering using in the future



**Figure 10.** Food- and shopping-related behavioral changes since the pandemic

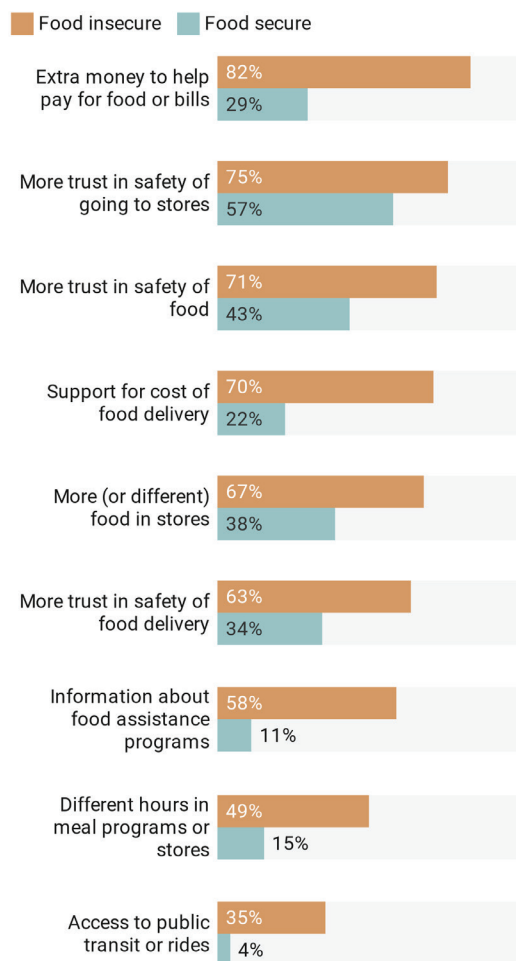


- Since COVID-19, most households, regardless of food security status, have spent more time cooking at home; have maintained a two-week supply of groceries; and have thrown away less food than normal.
- 64% of food insecure households and 49% of food secure households have bought a lot more items in a single shopping trip.
- 82% of the respondents who were food insecure identified “extra money to help pay for food or bills” as the main factor to help address food insecurity (Figure 11).

*“I think the food supply chain has adapted and food isn’t as big of an issue as it was earlier during the pandemic.”*

—Survey respondent

**Figure 11.** Different ideas of what would help meet one’s household’s food needs



- The second most helpful factor for those who were food insecure (75%) was “more trust in safety of going to stores,” which was also the primary factor that would help food secure households (57%).
- Over one out of three food insecure households indicated that more trust in the safety of food (71%), support for food delivery costs (70%), and more (or different) food in store (67%) would be helpful.

## Policy Implications

Since the pandemic, food insecurity in Arizona increased by 28%. The *groups that were most impacted* and in need of *immediate support* during these unprecedented times include: Hispanic households, households making less than \$50,000 per year, households with children, and households that experienced job disruptions. Food insecure households were concerned about the cost of food and loss of income to procure food, coupled with the fear of losing access to food assistance programs. There is an urgent need to ensure food is affordable and available to vulnerable households. These households seek financial assistance and assurance about availability and safety of food. This can be accomplished through income support programs and expansion of benefits for food safety net programs. Such programs should encourage participation by relaxing their eligibility criteria, while following personal safety guidelines, to ensure that the households most impacted by the pandemic have the resources to meet their food and nutritional needs.

## Methods

In July-August 2020, a sample of 620 adult Arizona residents responded to an online survey of households contacted through a survey research firm (Qualtrics). Survey respondents were selected to be representative of Arizona population, with an over-sampling of respondents from low-income households. The respondents in the sample reside in 75 different towns, from 14 out of the 15 counties in AZ. Most respondents lived in Maricopa county (60%), followed by Pima (17%), and Pinal (6%) counties. Respondents were 18-86 years old, with the average age being 47. Half (49%) of the respondents were from low-income households (i.e., with an annual income in 2019 lower than \$50,000); 54% were non-Hispanic white and 34% were Hispanic; 39% had a college degree; 17% were foreign-born. Participants were asked to answer questions on a variety of topics including food security,

food access, food assistance program participation, as well as households and individual demographic characteristics. All analyses were adjusted for sampling weights so that results can be generalized to all Arizona households. The period from March 2019 to March 10, 2020 was referred to as prior to the pandemic while the period after March 11, 2020 aims at capturing what has changed since the pandemic. A series of briefs from this survey are available at [asufoodpolicy.org](http://asufoodpolicy.org) and [nfactresearch.org](http://nfactresearch.org).

## Acknowledgments

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## About NFACT

This research is conducted as part of The National Food Access and COVID Research Team (NFACT). NFACT is a national collaboration of researchers committed to rigorous, comparative, and timely food access research during the time of COVID-19. We do this through collaborative, open access research that prioritizes communication to key decision-makers while building our scientific understanding of food system behaviors and policies. To learn more visit [nfactresearch.org](http://nfactresearch.org).

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