



The Experimental Household Pulse Survey

Responding to Data Needs During COVID-19 Era

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Annual Conference on Disability Statistics: Meeting Emerging Demands for Data

February 10, 2021

Any opinions and conclusions expressed herein are those of the author and do not represent the views of the U.S. Census Bureau. All results are from the Household Pulse Survey website that notes the following: *The U.S. Census Bureau reviewed this data product for unauthorized disclosure of confidential information and approved the disclosure avoidance practices applied to this release. CBDRB-FY21-091.*

Outline

- Process and Personnel Changes Due to COVID
- Changes to Existing Household and Business Surveys
- Examples of Non-Survey Data Products
- Pulse Surveys
- Health Impacts from the Household Pulse Survey



Process and Personnel

Surveys

In-person contact (CAPI) => telephone contact (CATI)

CATI from call-center => CATI from home

Paper surveys => online surveys

Paper invitation => email invitation

Sampling strategies adjusted

Administrative Data

New uses and enhanced uses

Personnel

Shift to telework where possible (at times mandatory)

Encouraged innovation and experimentation

Overview

Method	Businesses	Households
Existing Surveys (new methods, new content)	Annual Business Survey Annual Capital Expenditures Survey	American Community Survey
	Annual Survey of Manufactures Service Annual Survey	Current Population Survey
	Economic Indicators	Survey of Income and Program Participation
New Use of Data	Business Formation Statistics	Community Resilience Estimates
New Survey	Small Business Pulse Survey	Household Pulse Survey

Changes to Existing Surveys

Business Surveys and Economic Indicators

Annual Business Survey

- ABS 2019: ability of workers to work from home and factors affecting this ability
- ABS 2020: effect of the pandemic on sales, federal assistance

Annual Capital Expenditure Survey

- Receipt of, and uses of, federal assistance
- Impact to payroll

Annual Survey of Manufactures

- May ask days closed due to pandemic
- May ask additional detail for products related to pandemic (N95 respirators)
- Donation of products

Service Annual Survey

- May ask telemedicine revenue estimates for hospitals and nursing homes

Economic Indicators

- To assess impact on quality of responses, questions added temporarily to five economic indicator programs
- Questions asked whether changes in employment, temporary closures, or delays in the supply chain had an impact on reported revenues, sales, or inventories

Household Surveys

American Community Survey

- Revised messaging
- Altered mail out strategy
- Sampling adjustments
- Contact strategy shifted to telephone

Current Population Survey

- At request of the National Center for Education Statistics, added 7 questions about pandemic impact on schooling at individual child level (for example, availability of computers or other digital devices for educational purposes)
- Concerns about the coronavirus added as an answer category to two questions in the November Voting Supplement

Survey of Income and Program Participation

- Contact strategy shifted to telephone
- Answer lists and help text modified in various sections to specify how pandemic reasons should be handled
- New content added on the receipt and use of economic stimulus payments
- New content added on how the following were impacted by the pandemic: unemployment compensation, school meals, retirement planning, and missed or deferred rent or mortgage payments

Examples of Non-Survey Data Products

Business Formation Statistics

Goal

An experimental, public-use data product designed to fill a gap in the availability of high frequency, timely data on new business formation in the U.S. The quarterly BFS provide information on business applications and business formations 2 weeks after the close of a quarter. Weekly BFS is released approximately 5 days after week's end.

Process

The Census Bureau receives weekly information on applications for Employer Identification Numbers (EINs) on form SS-4 through the Internal Revenue Service. We clean these according to criteria.

Partners

Economists at Board of Governors of the Federal Reserve System, Federal Reserve Bank of Atlanta, University of Maryland, and University of Notre Dame.

Content

Business Applications

Excludes applications for tax liens, estates, trusts and for certain industries (private households, etc.).

High Propensity Business Applications

Business applications with a high-propensity of turning into a business with payroll (based upon a number of factors on the application such as sector).

Business Applications with Planned Wages

Applications that are high-propensity and that indicate a planned data for paying wages.

Business Applications from Corporations

Applications that are high-propensity and that come from corporations or personal service corporations.

Community Resilience Estimates

Goal

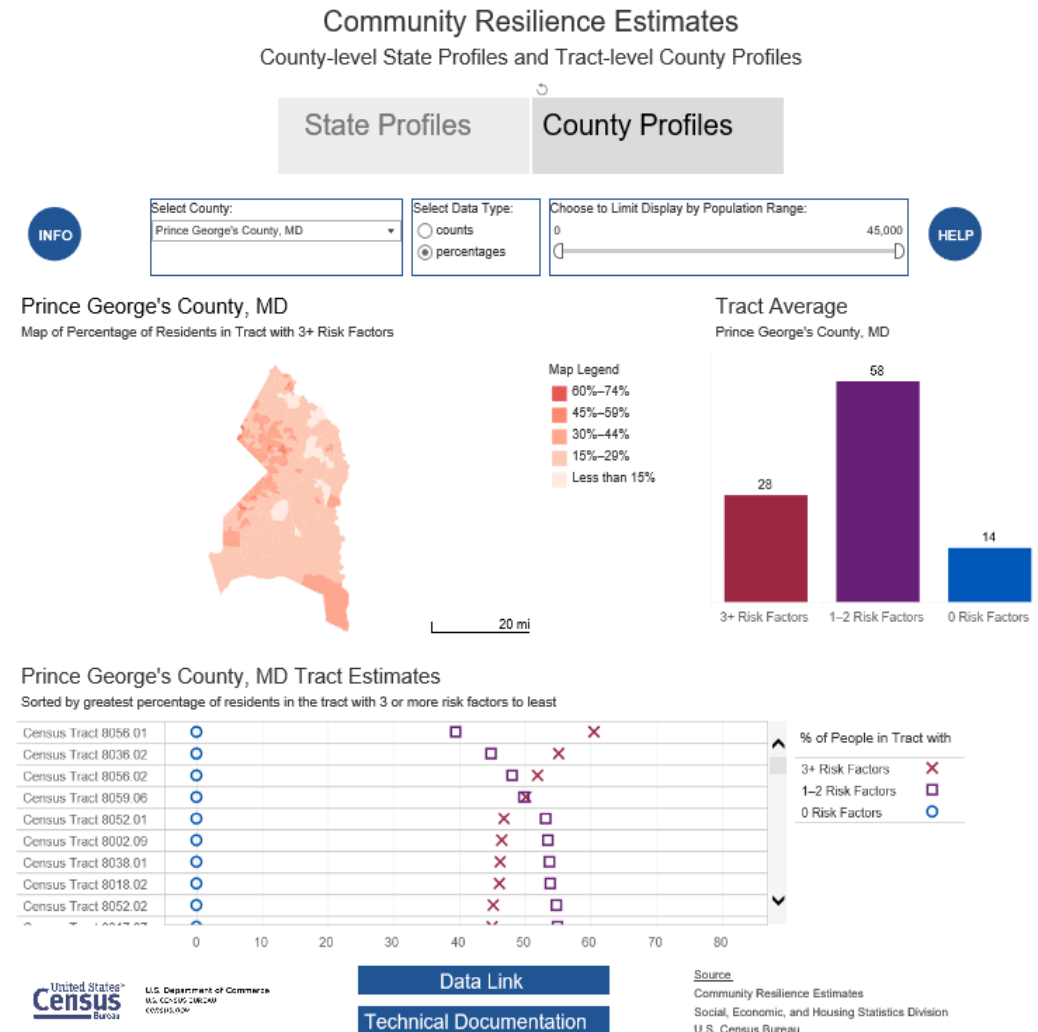
Provide tract-level and county-level information on a community's ability to withstand the health, social, and economic impacts of a disaster (such as the pandemic or a hurricane).

Process

Model combines individual and household characteristics from the American Community Survey with publicly available data from the National Health Interview Survey.

Example

Prince George's County Maryland (where headquarter for the Census Bureau is located). Figure shows some of the tract estimates (on website, the user can scroll down to see all tracts).



Pulse Surveys

Small Business Pulse Survey

Goal

Measure the effects of the pandemic on businesses overall and aspects of their operations and finances, leveraging existing infrastructure and producing high frequency geographic and industry detail.

Process

Email invitation to online survey using existing frame.
Response rate of >25%.
Three phases of collection, phase 4 being planned.

Partners

Small Business Administration; Federal Reserve Board of Governors; International Trade Administration; Minority Business Development Agency; Bureau of Transportation Statistics; National Telecommunications and Information Administration; Office of Tax Analysis, Department of Treasury; Bureau of Labor Statistics

Content

Overall

Overall effect of the pandemic with 5-bin response.

Operations

Change in revenue, change in number of employees, change in employee hours, temporary closures.

Challenges

Supply chain disruptions, factors impacting capacity, change in business's capacity, future needs

Finance

Cash on hand, loan or other payment defaults, requests for assistance, receipt of assistance.

Outlook

Expectations. How much time until the business returns to average/normal level of operations.

Household Pulse Survey

Goal

Deploy quickly and efficiently, collecting data on a range of ways in which people's lives have been impacted by the pandemic. Since the environment and circumstances are rapidly changing, designed to be able to quickly assess and report on critical issues.

Process

Qualtrics platform. Used existing email and cell-phone contact frames. Matched to Master Address File (MAF) records. Emails and phone numbers from respondent contacts and from third party vendors. Three phases.

Partners

Bureau of Labor Statistics; National Center for Health Statistics; Housing and Urban Development; National Center for Education Statistics; USDA Economic Research Service; Office of Management and Budget; Bureau of Transportation Statistics; Social Security Administration.

Content

Employment

Expected loss of employment income, ...

Food Security

Past and current food sufficiency, ...

Health

Health and mental health, delays in getting care, health insurance, vaccination and COVID status (new), ...

Housing

Confidence about paying rent/mortgage next month, ...

Education

Hours householder spent on educational activities, ...

Program Use

Social Security Programs, Unemployment Insurance

Spending

Series on expenditures

Health Impacts from the Household Pulse Survey

Mental Health

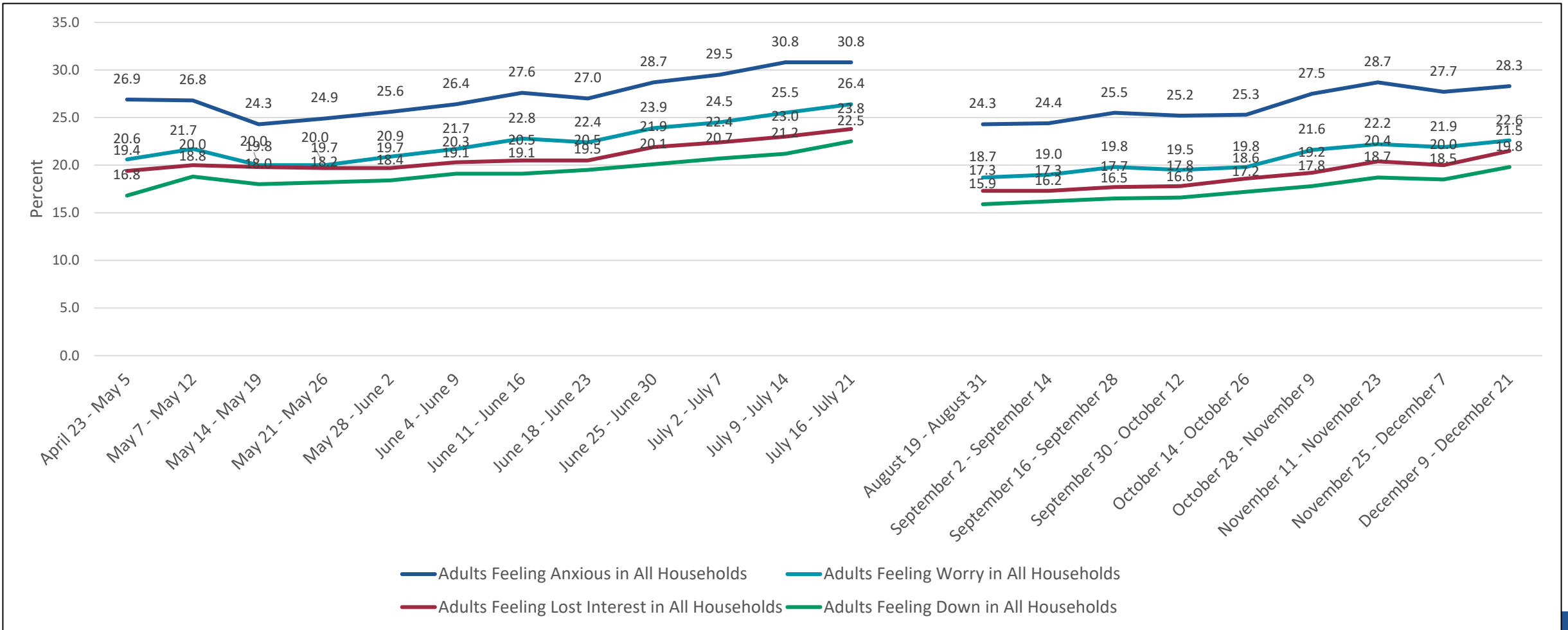
Patient Health Questionnaire (PHQ-2)

*Over the **last 7 days**, how often have you been bothered by*
... having little interest or pleasure in doing things?
... feeling down, depressed, or hopeless?

Generalized Anxiety Disorder (GAD-2) scale

*Over the **last 7 days**, how often have you been bothered by*
... feeling nervous, anxious, or on edge?
... not being able to stop or control worrying?

Mental Health Measures

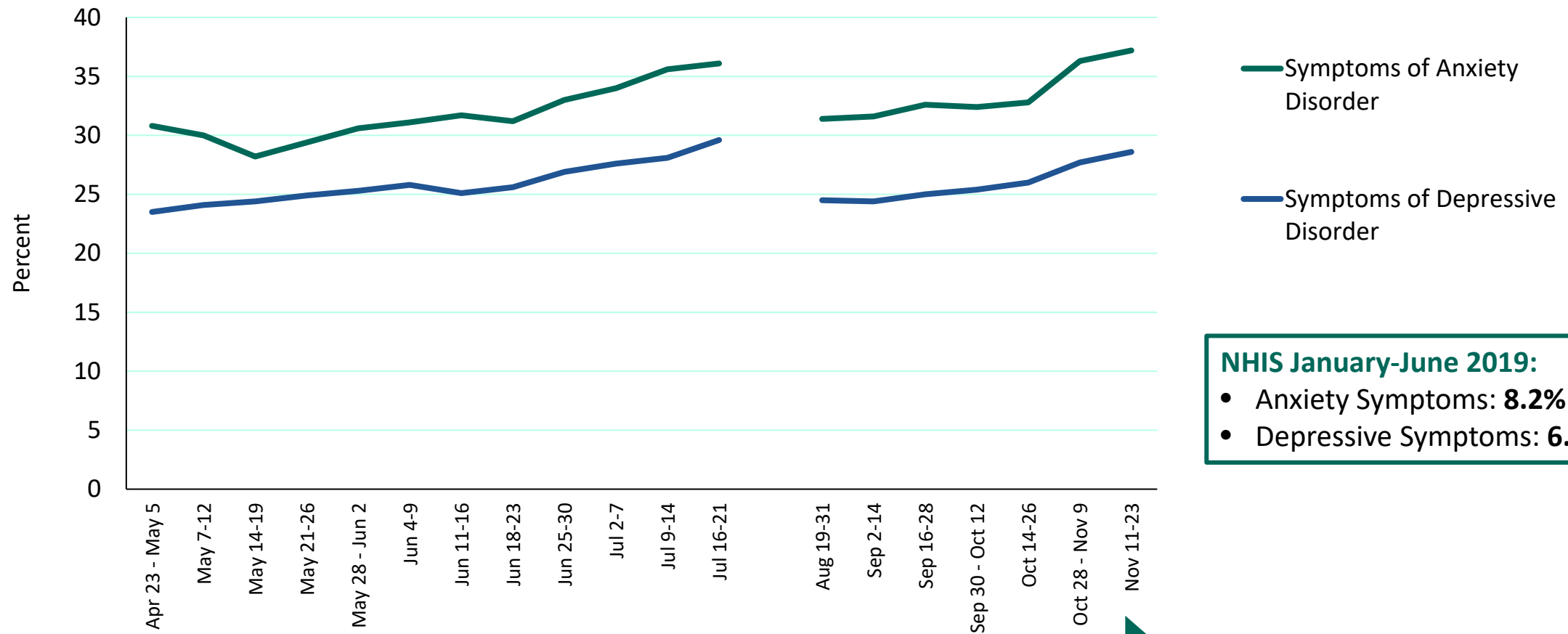


Source: Data from the Household Pulse Survey (April 23rd – December 21st, 2020).

Universe: 18+ Adults

Symptoms of Anxiety or Depression

Household Pulse Survey, April 23 – November 23, 2020



NHIS January-June 2019:

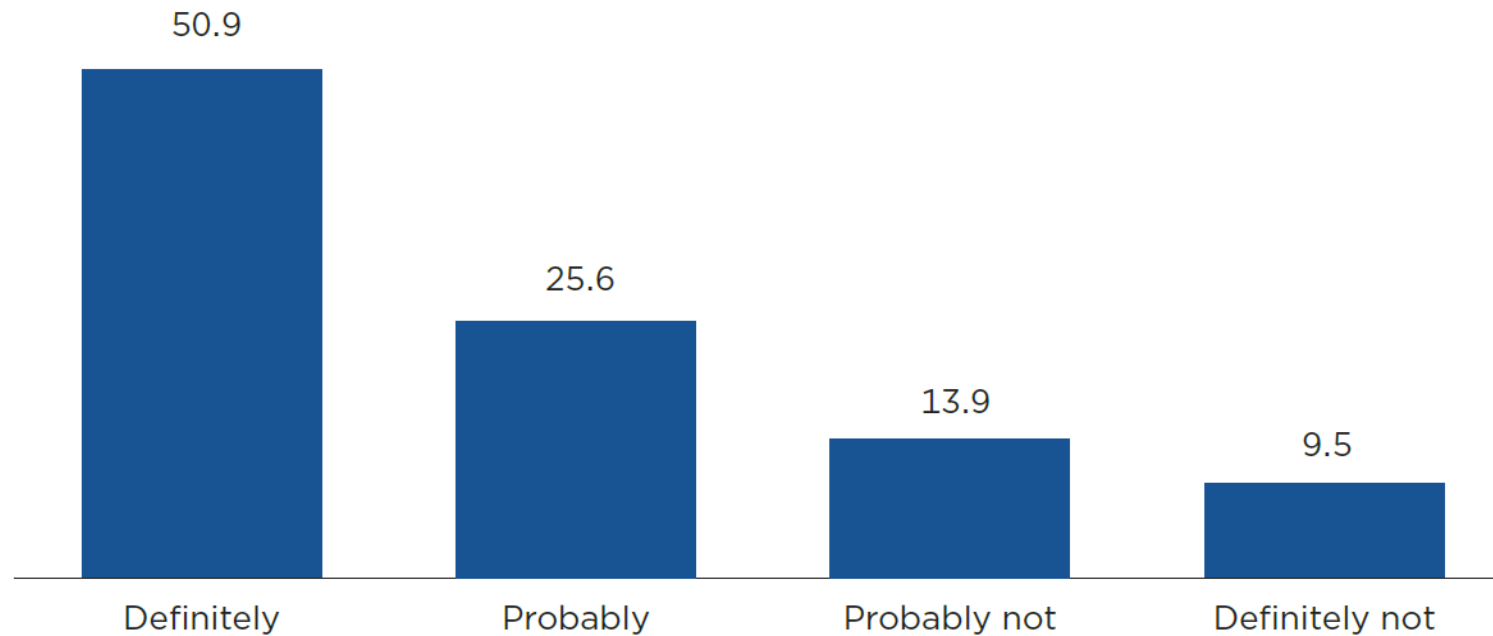
- Anxiety Symptoms: **8.2%**
- Depressive Symptoms: **6.6%**

PHASE 1

PHASES 2 & 3

Vaccinations

Likelihood of Receiving a COVID-19 Vaccine When Available (Percentage of unvaccinated adults)

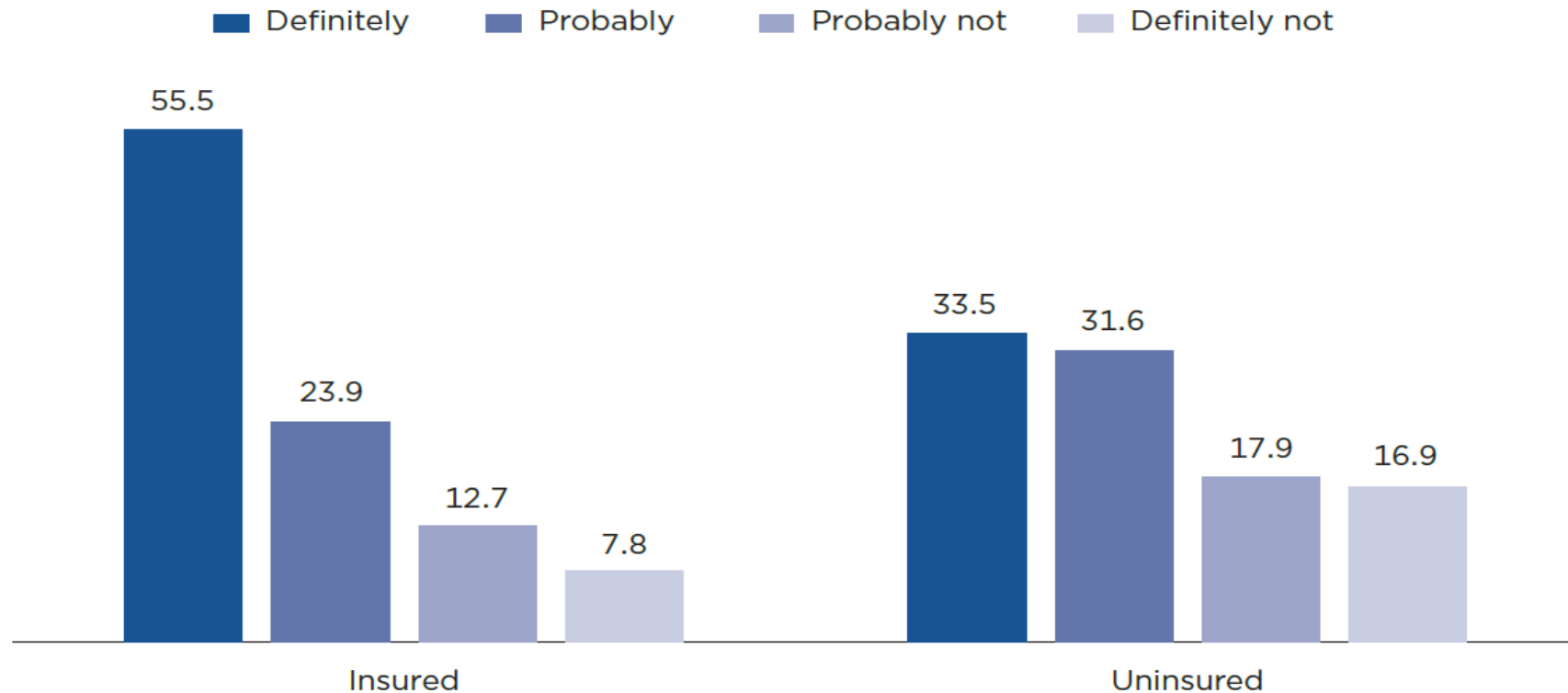


Source: U.S. Census Bureau, Household Pulse Survey (Public Use File, Week 22: January 6-18, 2021).

Vaccinations

Likelihood of Receiving a COVID-19 Vaccine When Available by Health Insurance Status

(Percentage of unvaccinated adults)



Source: U.S. Census Bureau, Household Pulse Survey (Public Use File, Week 22: January 6–18, 2021).

Disability Questions Coming to the Household Pulse Survey

- Do you have difficulty seeing, even when wearing glasses? Select one.
- Do you have difficulty hearing, even when using a hearing aid? Select one.
- Do you have difficulty remembering or concentrating? Select one.
- Do you have difficulty walking or climbing stairs? Select one.

1. No - no difficulty
2. Yes - some difficulty
3. Yes - a lot of difficulty
4. Cannot do at all

Lessons Learned

- High frequency data becomes even more important in crisis
- Existing data assets are invaluable (frames, benchmarking)
- Partnerships with other statistical agencies and outside stakeholders provide critical expertise (especially for content and design)
- Flexible platforms whose use can continue beyond the pandemic
- Resilient and innovative staff

Thank you!

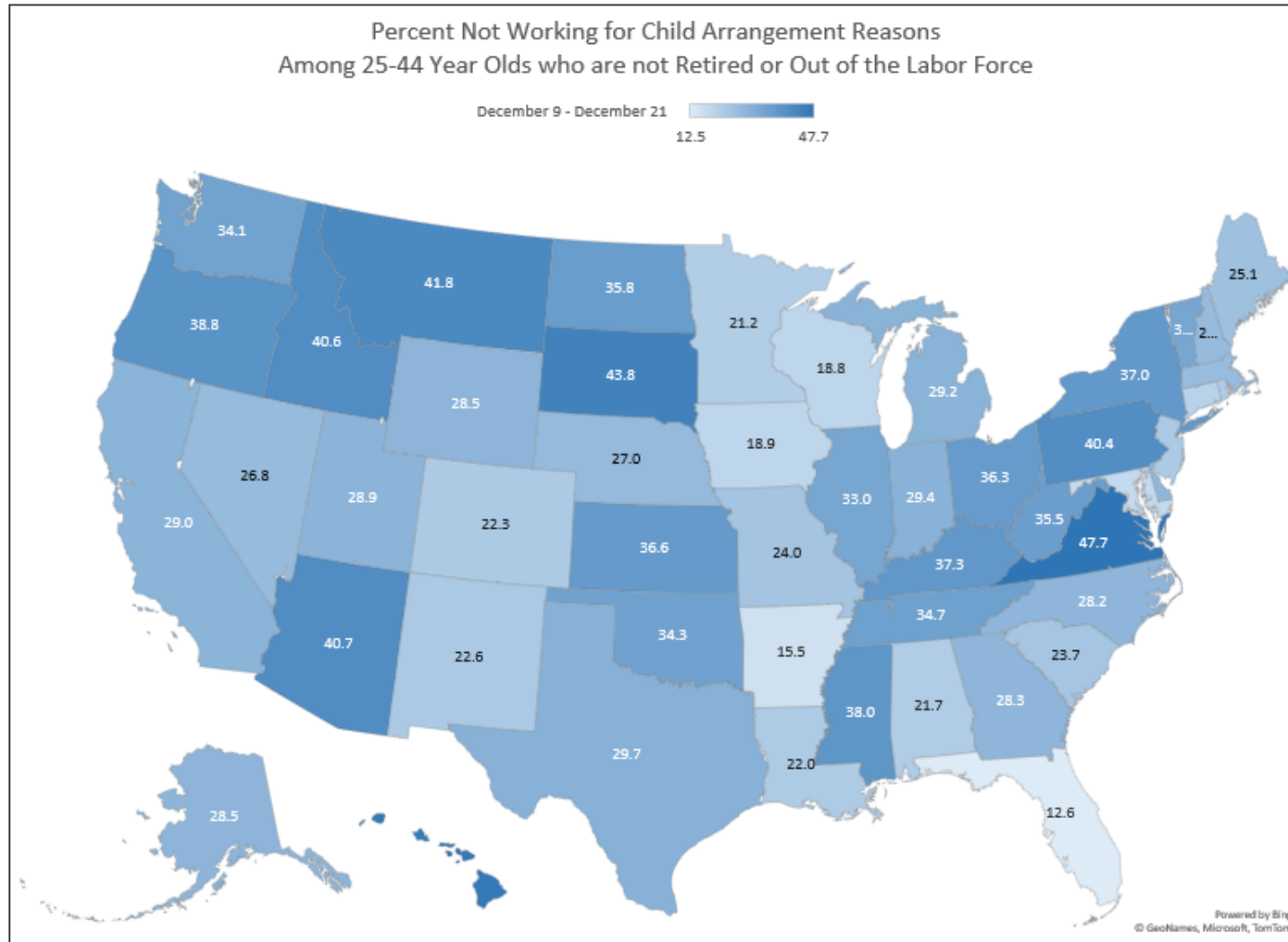
email:

jason.m.fields@census.gov

Household Pulse Survey

<https://www.census.gov/householdpulsedata>

Not Working Because of Children's Arrangements



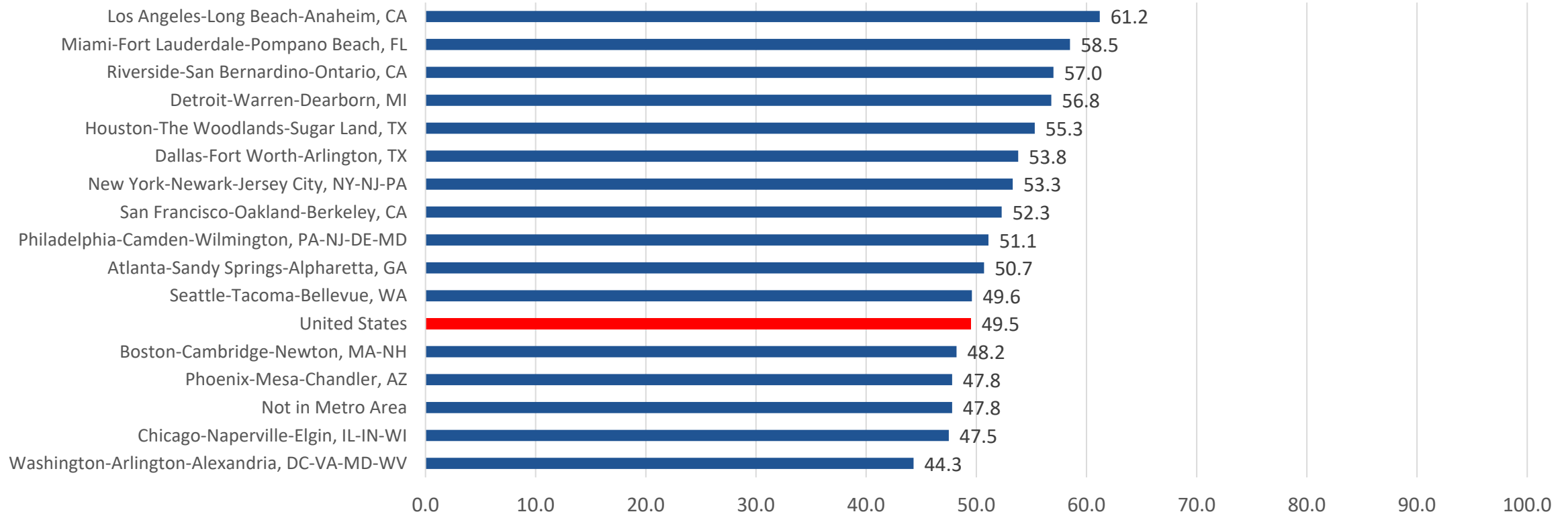
Source: Data from the Household Pulse Survey (April 23rd – December 21st, 2020).

Universe: 18+ Adults

Percentage of Adults in Households Where Someone Lost Employment Income Since March 13

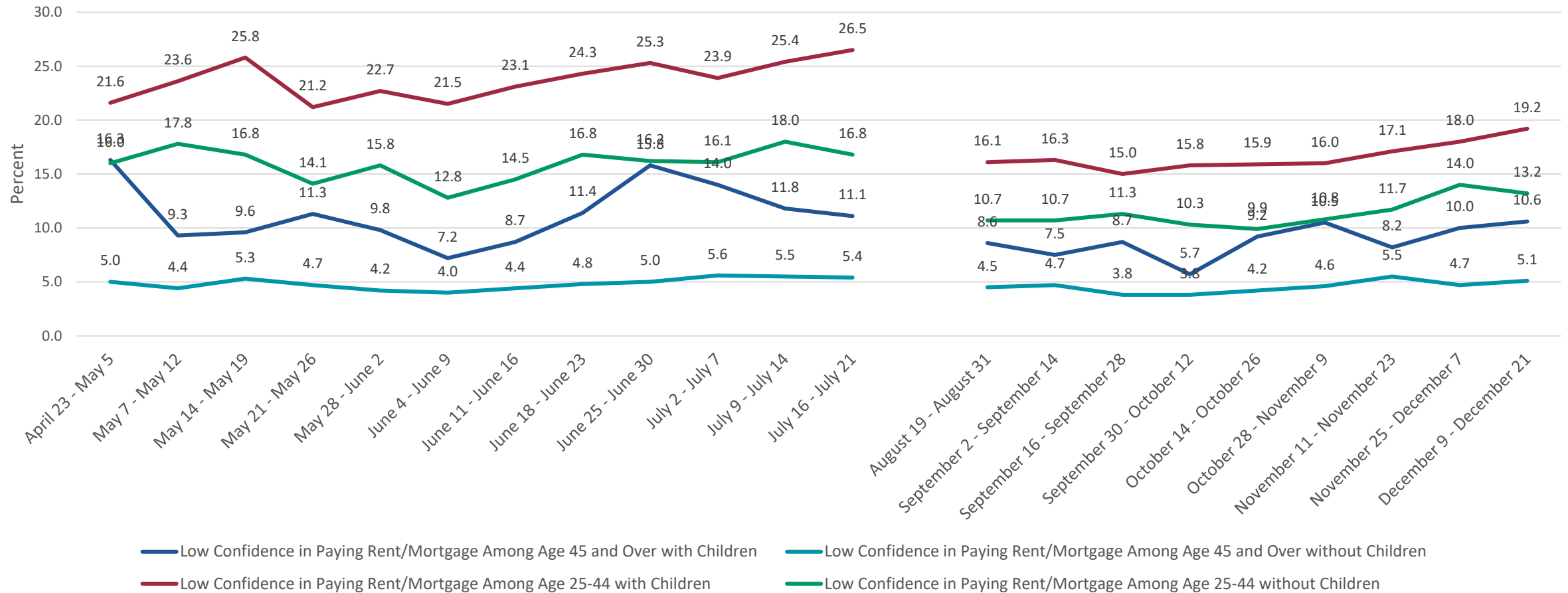
15 Largest Metros: December 9 - December 21

Percent of Adults in Households with a Loss in Employment Income
December 9 - December 21



Confidence in Paying Rent or Mortgage

Low or No Confidence in Paying Rent or Mortgage by Age and Presence of Children

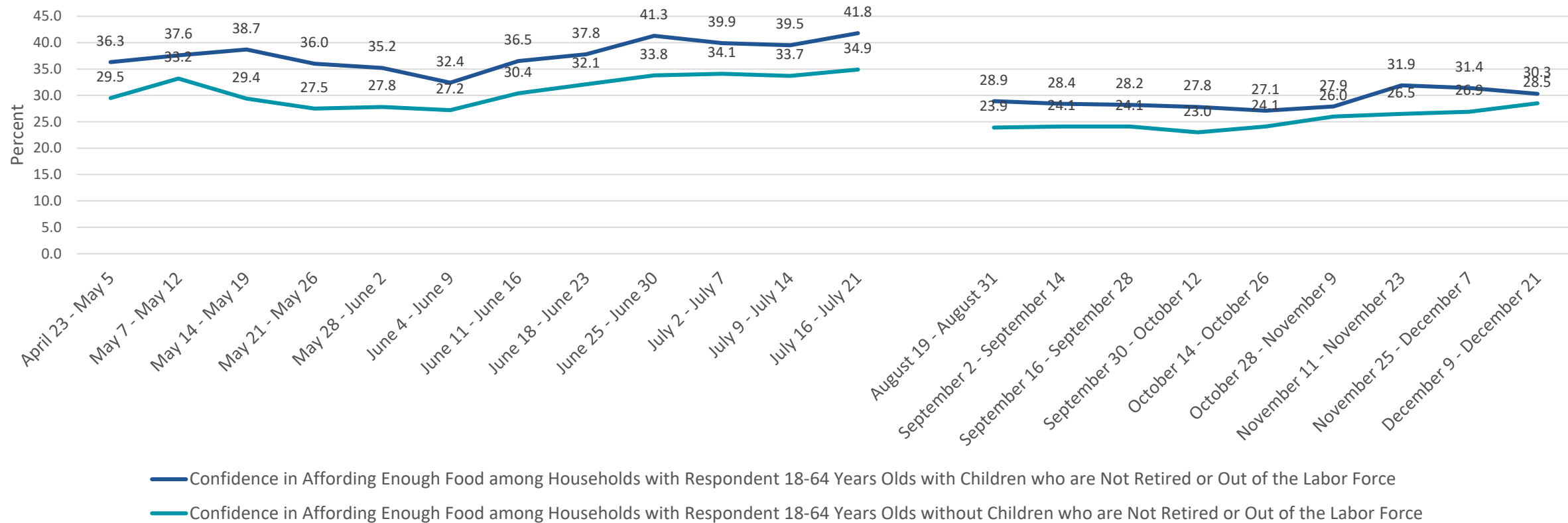


Source: Data from the Household Pulse Survey (April 23rd – December 21st, 2020).

Universe: 18+ Adults

Confidence in Affording Enough Food

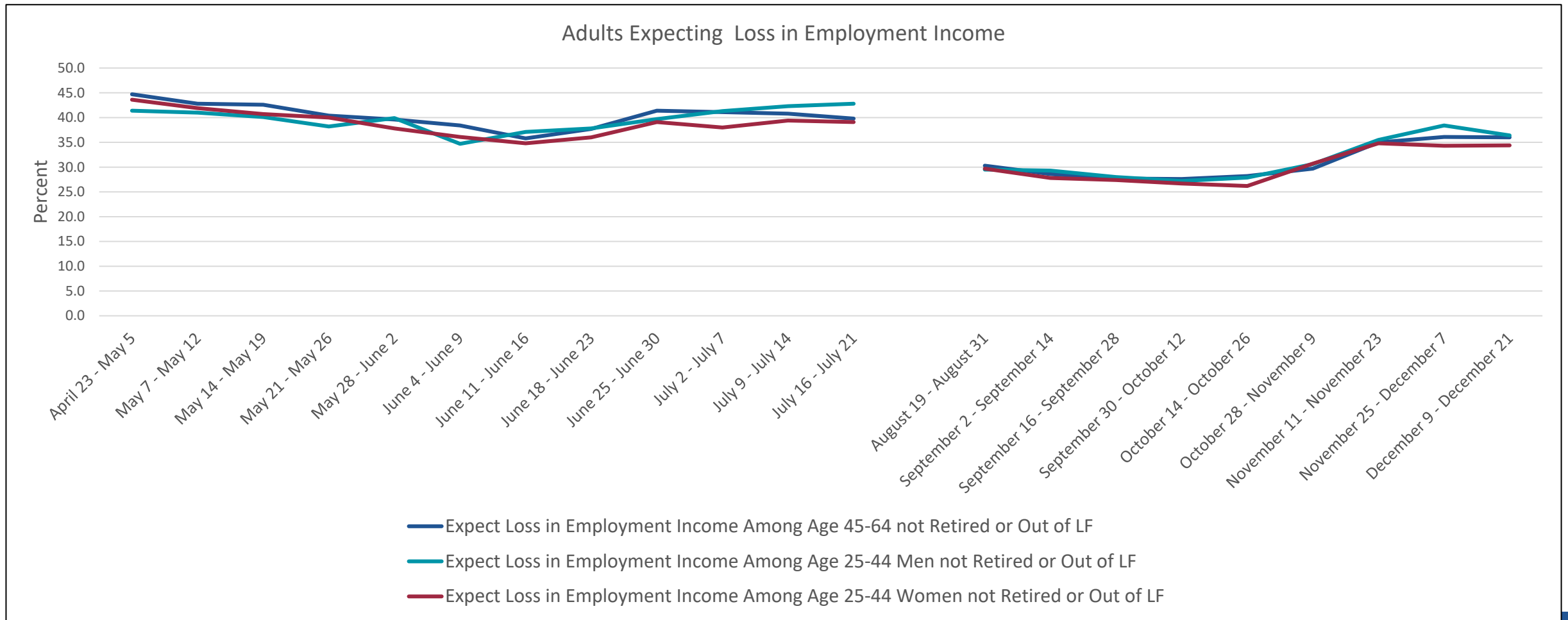
Low or No Confidence in Affording Enough Food among Households with Respondent 18-64 Years Old who are Not Retired or Out of the Labor Force by Presence of Children



Source: Data from the Household Pulse Survey (April 23rd – December 21st, 2020).

Universe: 18+ Adults

Expecting Loss in Employment Income

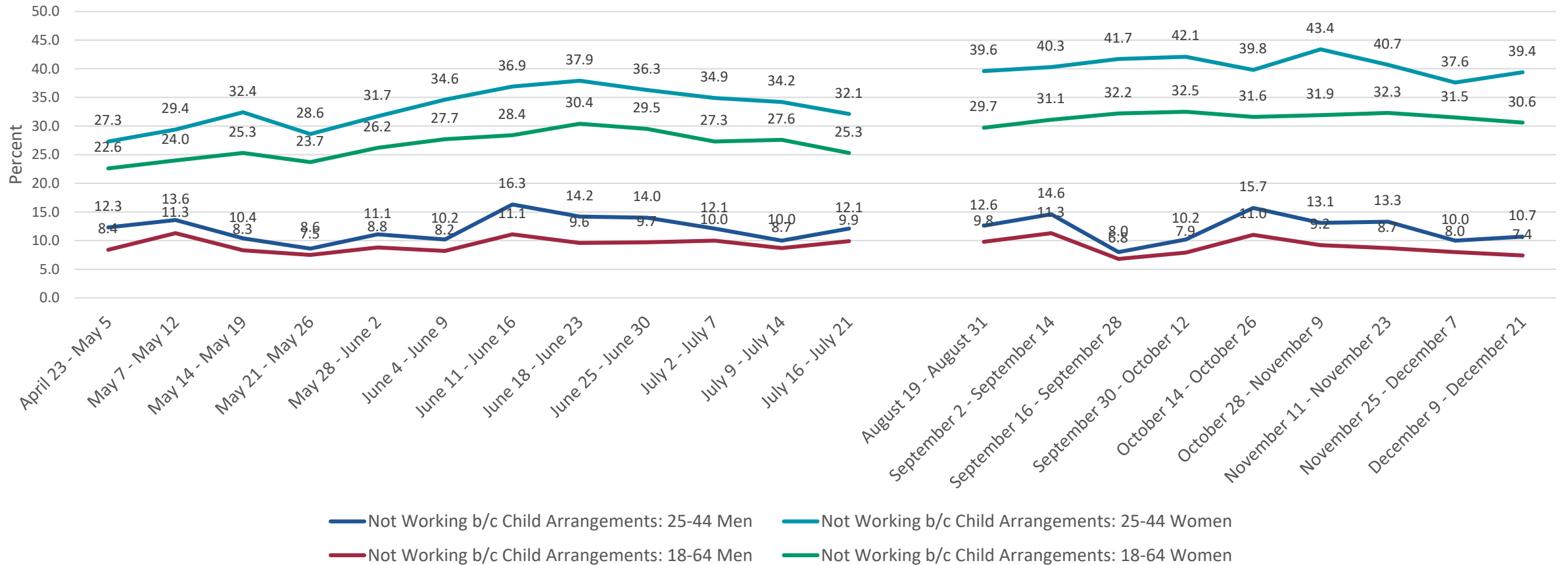


Source: Data from the Household Pulse Survey (April 23rd – December 21st, 2020).

Universe: 18+ Adults

Not Working Because of Children's Arrangements

Percent of Men and Women Not Working Because of Children's Arrangements among Adults who are Not Retired or Out of the Labor Force



Source: Data from the Household Pulse Survey (April 23rd – December 21st, 2020).
 Universe: 18+ Adults