

The Experimental Household Pulse Survey



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Presented at the Census Bureau's National Advisory Committee Meeting
April 30, 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, CBDRB-FY21-POP001-0123.*

The Experimental Household Pulse Survey

Development of Household Pulse Survey

- Coordinated at the Census Bureau
- Designed to deploy quickly and efficiently
- Collecting data on ways in which people’s lives have been impacted by the pandemic
- Since the environment and circumstances rapidly changing, design meant to be able to quickly assess and report on critical issues, as fast as possible

Experimental Rapid Response Survey

- Proof of Concept

Platform: Qualtrics

- FedRAMP Moderate authorization.
- Census Bureau Authority to Operate.
- Could be programmed in-house
- Facilitates multiple distribution modes

Email and Text Invitations to Take an Online Survey

- National Processing Center was shut down due to COVID19.
- We could not mail an invitation.
- Use a new resource that includes email addresses and cell-phone numbers and associates them with addresses

Timeline

- Development: March 23–April 23, 2020
- Phase 1: April 23-July 21, 2020
- Phase 2: August 19-October 2020
- Phase 3: October – December 2020 (shift from OMB emergency clearance to regular clearance)
- Phase 3 update: January 6-March 1, 2021
- Phase 3.1 In the field April 14, 2021

Partners

Phase 1

- *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

Phase 2/3 Additional Agencies

- *Bureau of Transportation Statistics
- *Social Security Administration

January 2021 update Phase 3

- *Centers for Disease Control

Phase 3.1 Additional Agencies

- *National Institute of Occupational Health and Safety
- *Maternal and Child Health Bureau
- *Department of Defense
- *Energy Information Administration (expected)

Basics of the Contact Frame

Frames: Used Existing Email and Cell-Phone Contact Frames

Matched to Census Bureau's Master Address File (MAF) records.

Emails and phone numbers from respondent contacts and from third party vendors.

Phone Frame

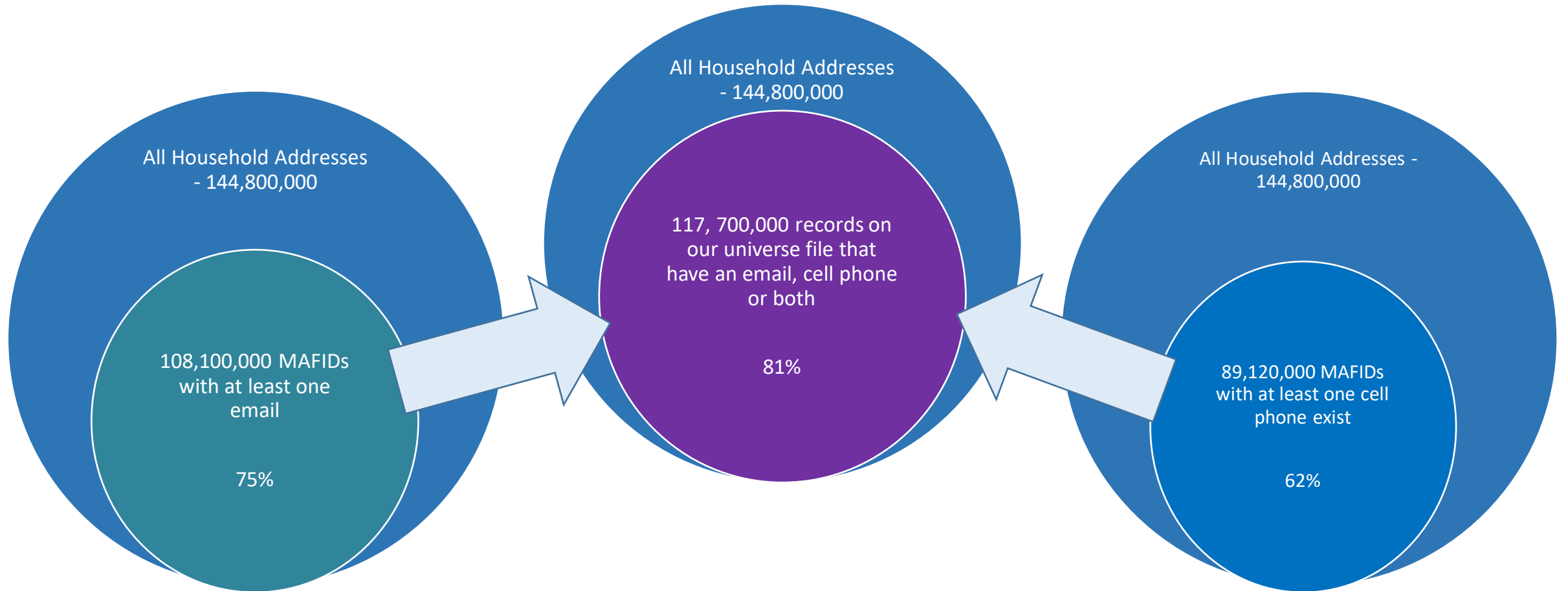
- The phone frame contains over a billion phone/address pairs.
- The phone frame contains cell-phone/address pairs for over 79% of ACS eligible addresses in the country
- Three quarters of those phones were acquired in the past two years

Email Frame

- The email frame contains over 686 million well-formed email/address pairs.
- The email frame contains email/address pairs for almost 74% of ACS eligible addresses in the country.
- Two thirds of those emails were acquired in past two years.

Updates to the contact frame are made multiple times per year

Frame



Responses

PHASE 1 Week	Interviews	Weighted Response Rate	PHASE 2/3 Week	Interviews	Weighted Response Rate	PHASE 3 Week	Interviews	Weighted Response Rate
April 23 – May 5 : Week 1	74,413	3.8	August 19 – August 31: Week 13	109,051	10.3	January 6 – January 18: Week 22	68,348	6.4
May 7 – May 12 : Week 2	41,996	1.3	September 2 – September 14: Week 14	110,019	10.3	January 20 – February 1: Week 23	80,567	7.5
May 14 – May 19 : Week 3	132,961	2.3	September 16 – September 28: Week 15	99,302	9.2	February 3 – February 15: Week 24	77,122	7.3
May 21 – May 26 : Week 4	101,215	3.1	September 30 – October 12: Week 16	95,604	8.8	February 17 – March 1: Week 25	77,788	7.3
May 28 – June 2 : Week 5	105,066	3.5	October 14 – October 26: Week 17	88,716	8.1	March 3 – March 15: Week 26	78,306	7.4
June 4 – June 9 : Week 6	83,302	3.1	October 28 – November 9: Week 18	58,729	5.3	March 17 – March 29: Week 27	77,104	7.2
June 11 – June 16: Week 7	73,472	2.3	November 11 – November 23: Week 19	71,939	6.6			
June 18 – June 23: Week 8	108,062	2.9	November 25 – December 7: Week 20	72,484	6.7	TOTAL 29,738,950 Sampled Units 2,388,021 Interviews		
June 25 – June 30: Week 9	98,663	3.3	December 9 – December 21: Week 21	69,944	6.5			
July 2 – July 7: Week 10	90,767	3.2						
July 9 – July 14: Week 11	91,605	3.1						
July 16 – July 21: Week 12	86,792	2.9						

Content: Phase 1, Phase 2/3, Phase 3.1

Basic demographics

Age, sex, race, Hispanic origin, marital status, educational attainment

Disability status (NCHS/CDC)

Armed forces status (DOD)

Employment questions

Employment and employment income (BLS/Census)

Spending source of funds (BLS)

Series on expenditures (BLS)

Commuting and Telework series (BTS)

Transportation Questions (BTS)

Essential worker occupations (NIOSH)

Food security questions

Past and current food sufficiency (USDA-ERS)

Free meals (USDA-ERS)

Money spent on groceries and prepared foods (USDA-ERS)

SNAP receipt (USDA-ERS)

Program use

Social Security programs (SSA)

Unemployment Insurance (BLS)

Health questions

Overall health (NCHS)

Mental health and mental health services use (NCHS)

Health insurance (NCHS/Census)

Access and delays in health care (NCHS)

Vaccination receipt, intentions, and COVID diagnosis (CDC: January 2021)

Telehealth (NCHS/MCHB)

Children's preventive health care (MCHB)

Housing questions

Tenure (HUD)

Living quarters (HUD)

Rent and mortgage current payment status (HUD)

Confidence about paying rent/mortgage next month (HUD)

Eviction and foreclosure expectations (HUD)

Education questions

Effects of COVID on how K-12 children received education (NCES)

Access to computer/digital device and internet availability (NCES)

Time spent with teachers, spent on educational activities, and studying (NCES)

Post-Secondary questions (NCES)

Childcare (MCHB)

Questionnaire Design

- Expert Review
 - English and Spanish
 - Included contact scripts
- Web Probing
 - English only
 - Content focused
- Cognitive Testing
 - English only
 - Content focused
- Field Experiments
 - English and Spanish
 - Content and Contact scripts

Cognitive Testing and Field Experiments

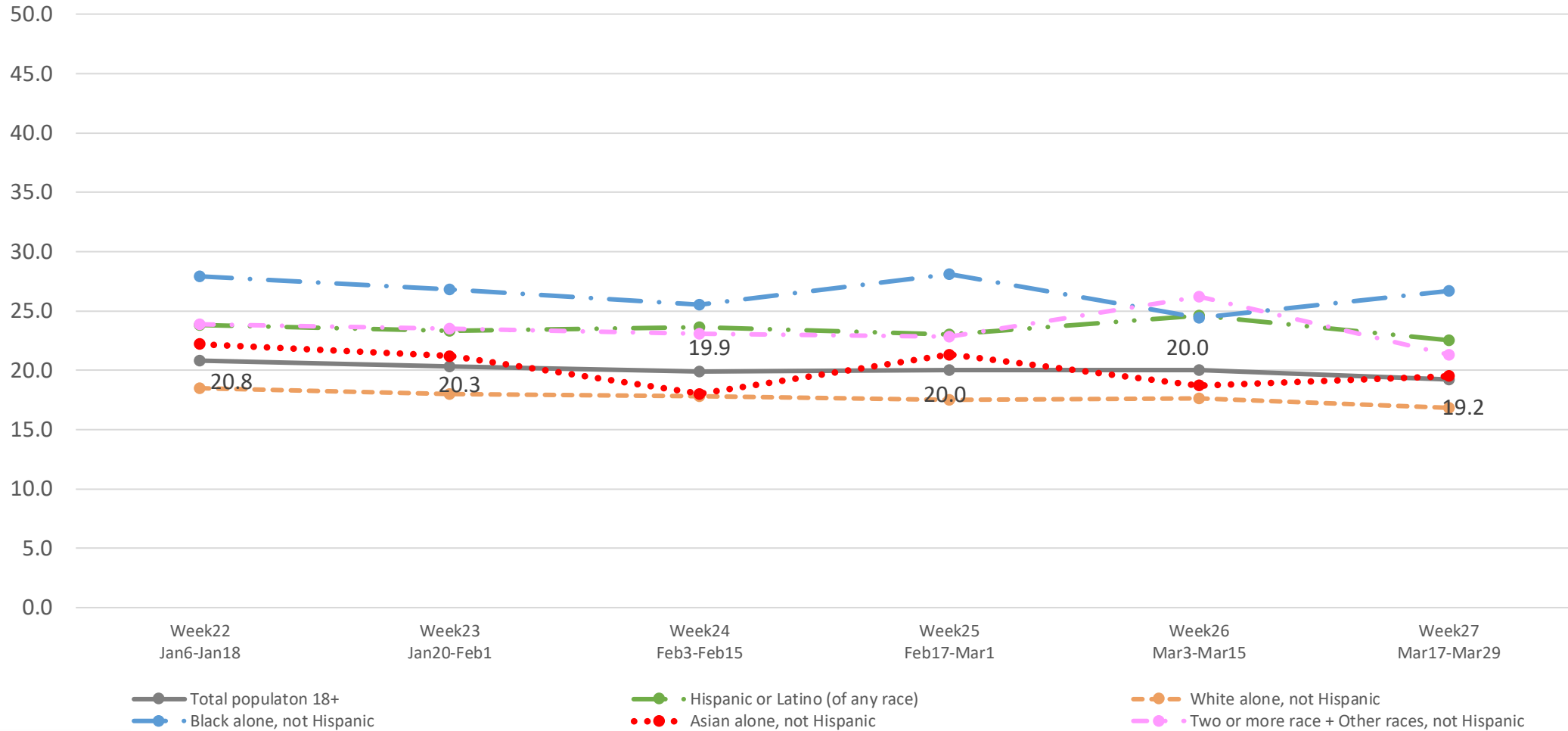
- **Cognitive Testing**

- Before each phase
- Remote interviewing delayed (COVID)
- Findings are somewhat different from Web probing

- **Field Experiments**

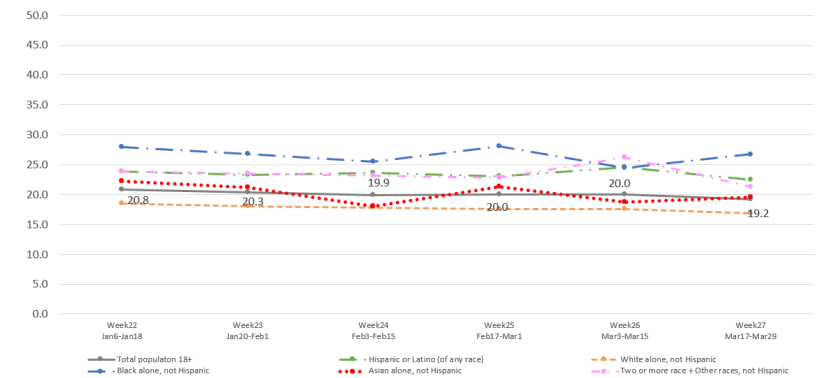
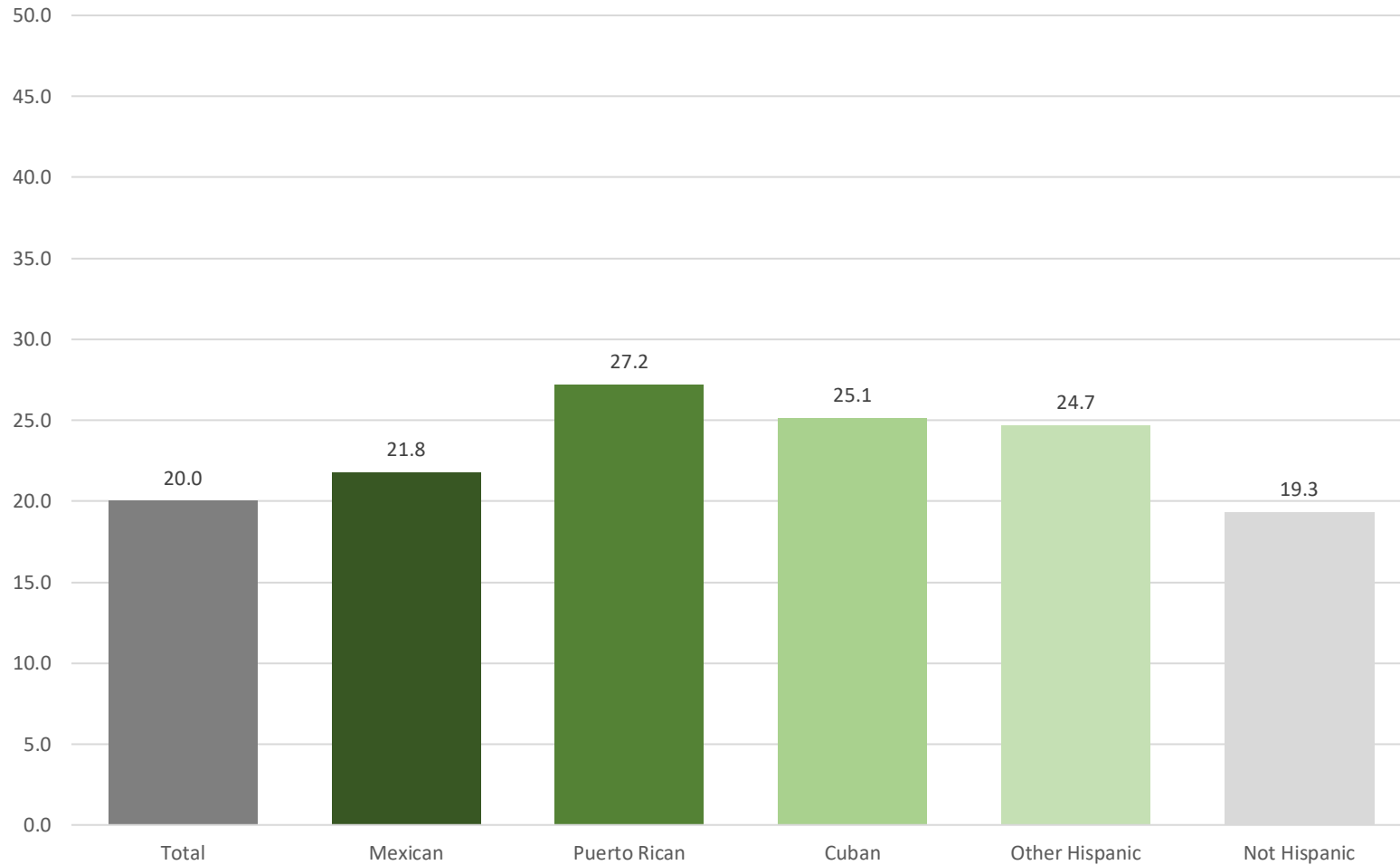
- How to access Spanish translation
- How to invite to a bilingual survey on email
- How to measure “homeschooled” in COVID-times

Applied for Unemployment Insurance by Weeks and Hispanic Origin and Race

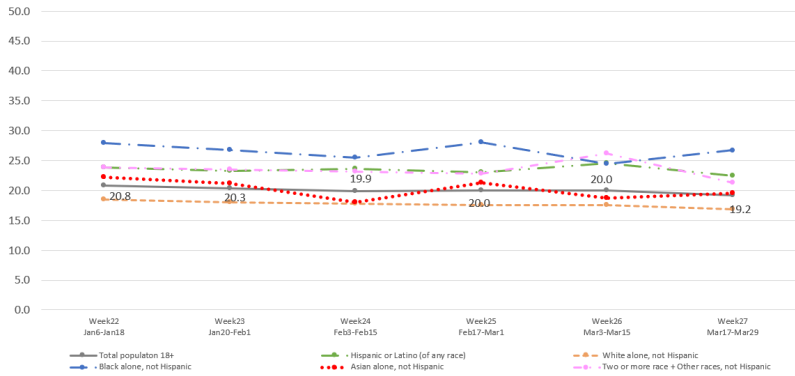
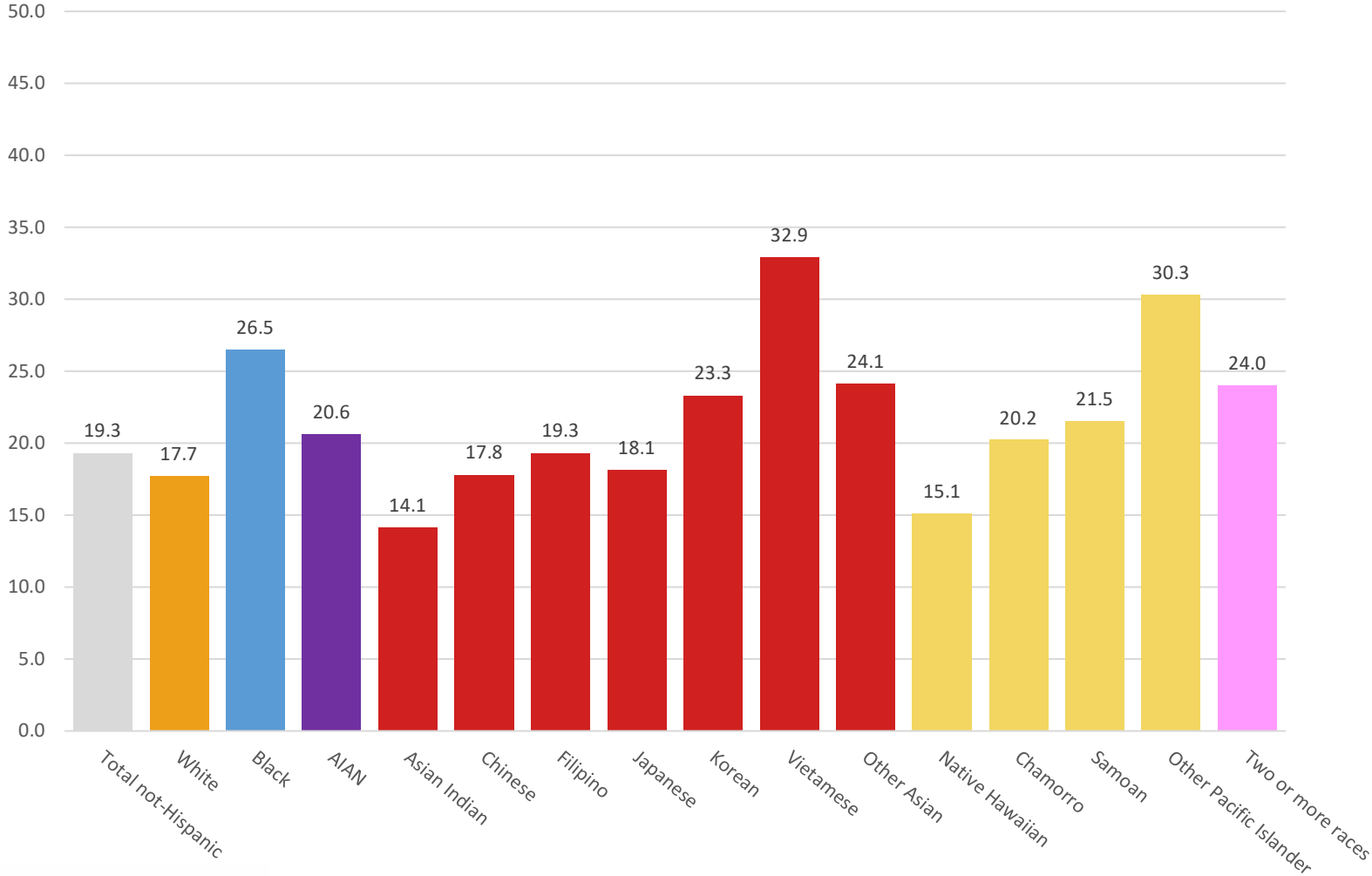


Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Applied for Unemployment Insurance by Hispanic Origin

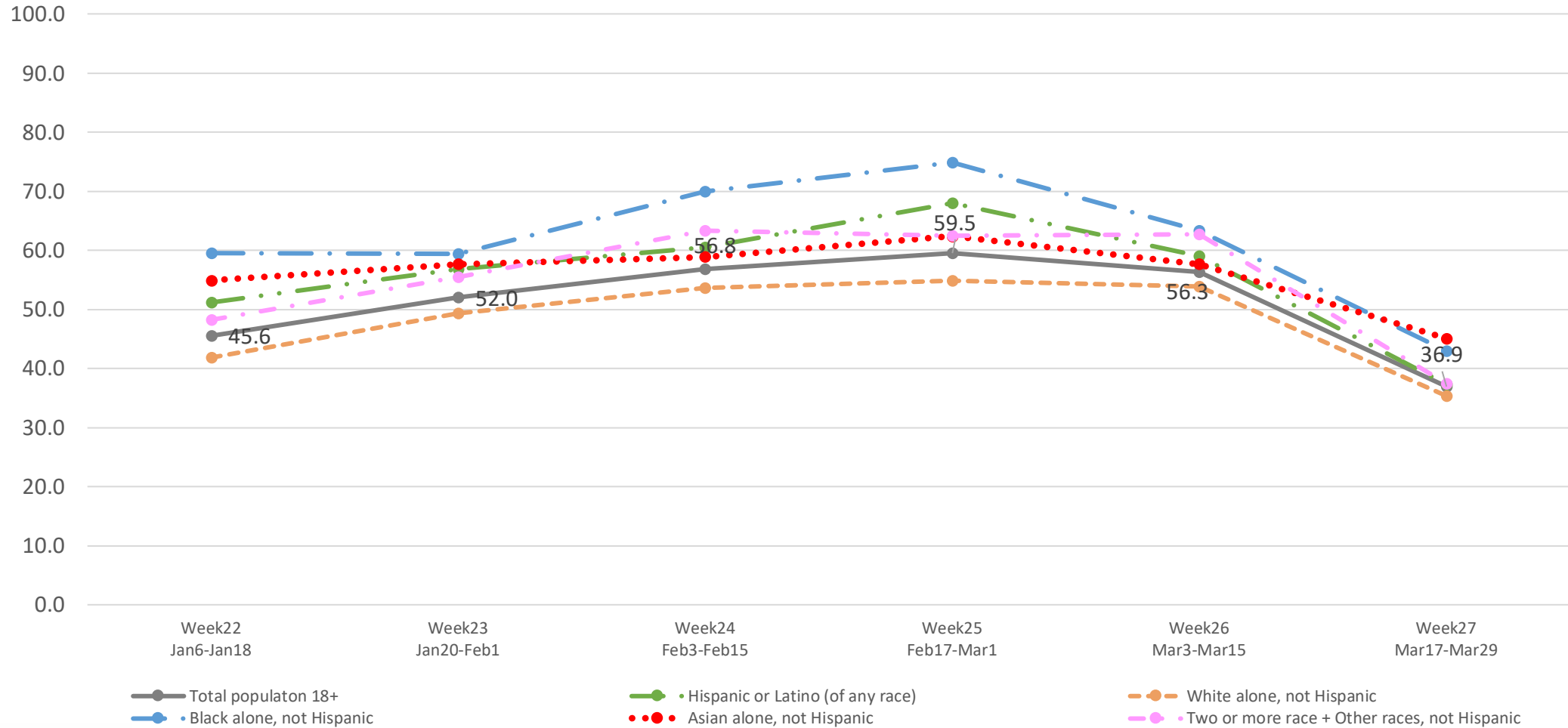


Applied for Unemployment Insurance by Race



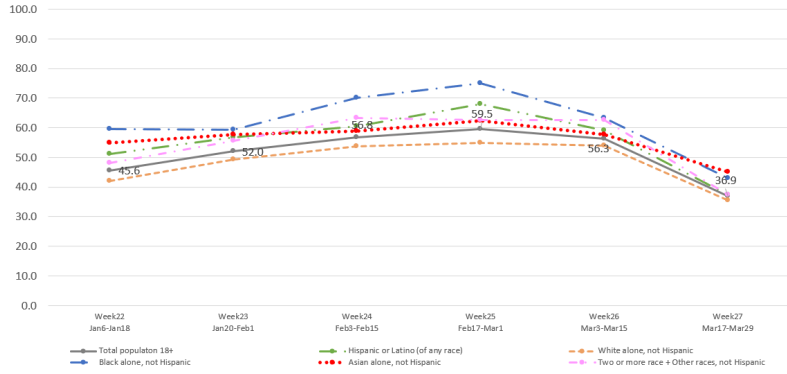
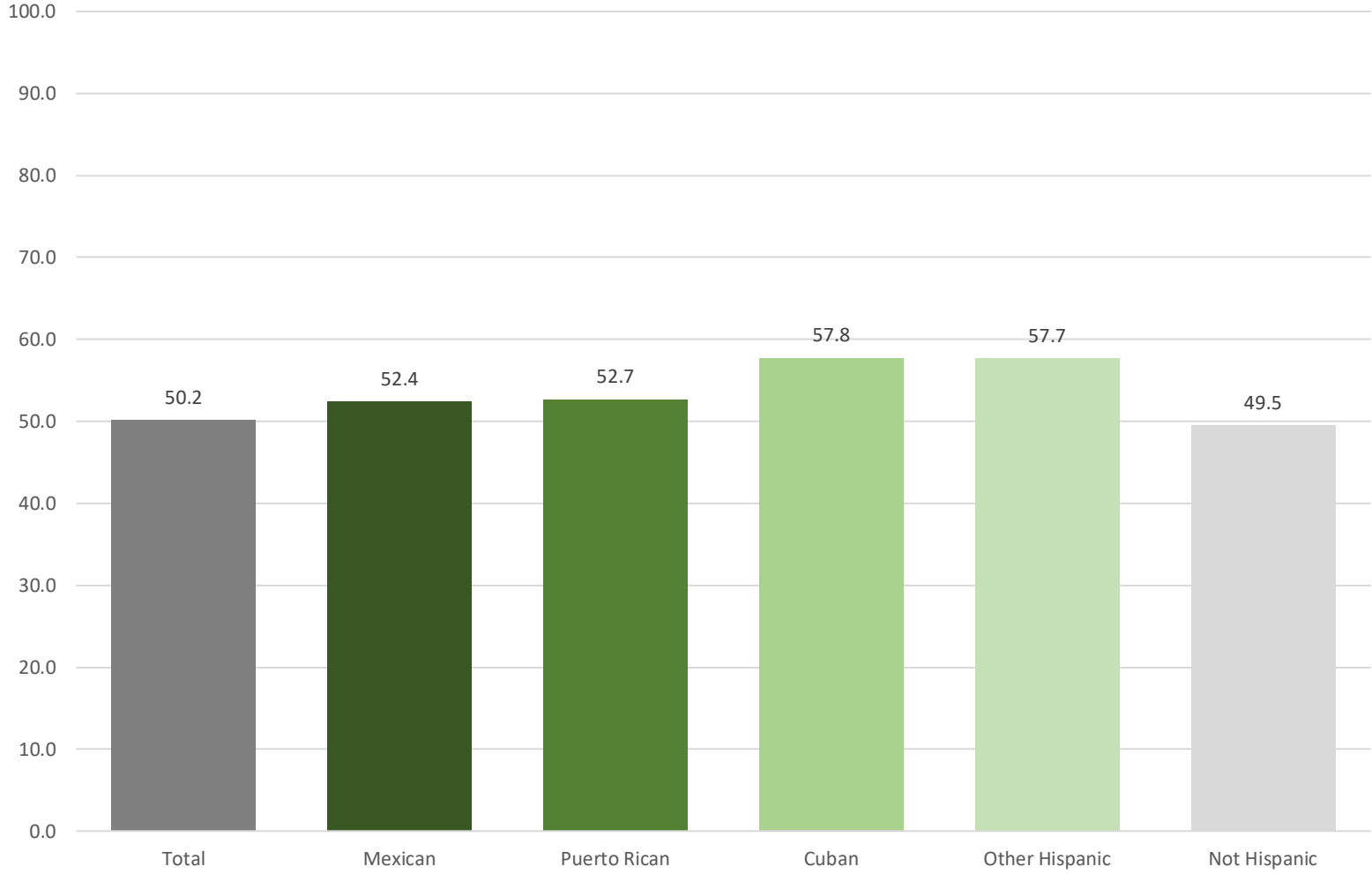
Note: Race groups are the not-Hispanic population, alone population.
 Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Received Stimulus Payment by Weeks and Hispanic Origin/Race



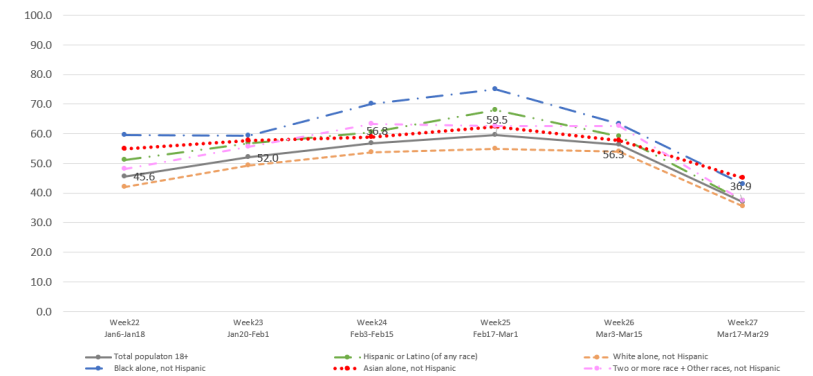
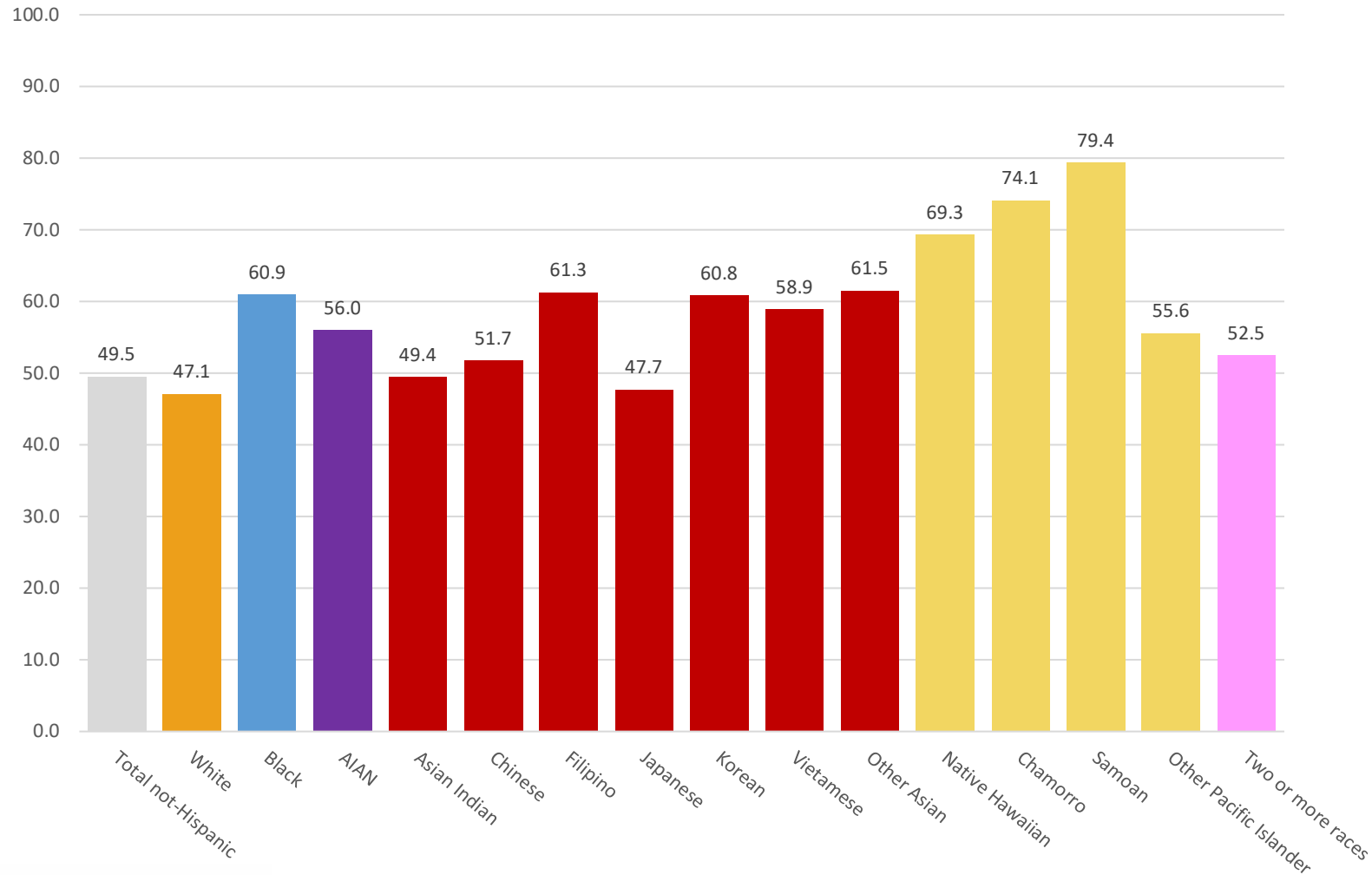
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Received a Stimulus Payment by Hispanic Origin

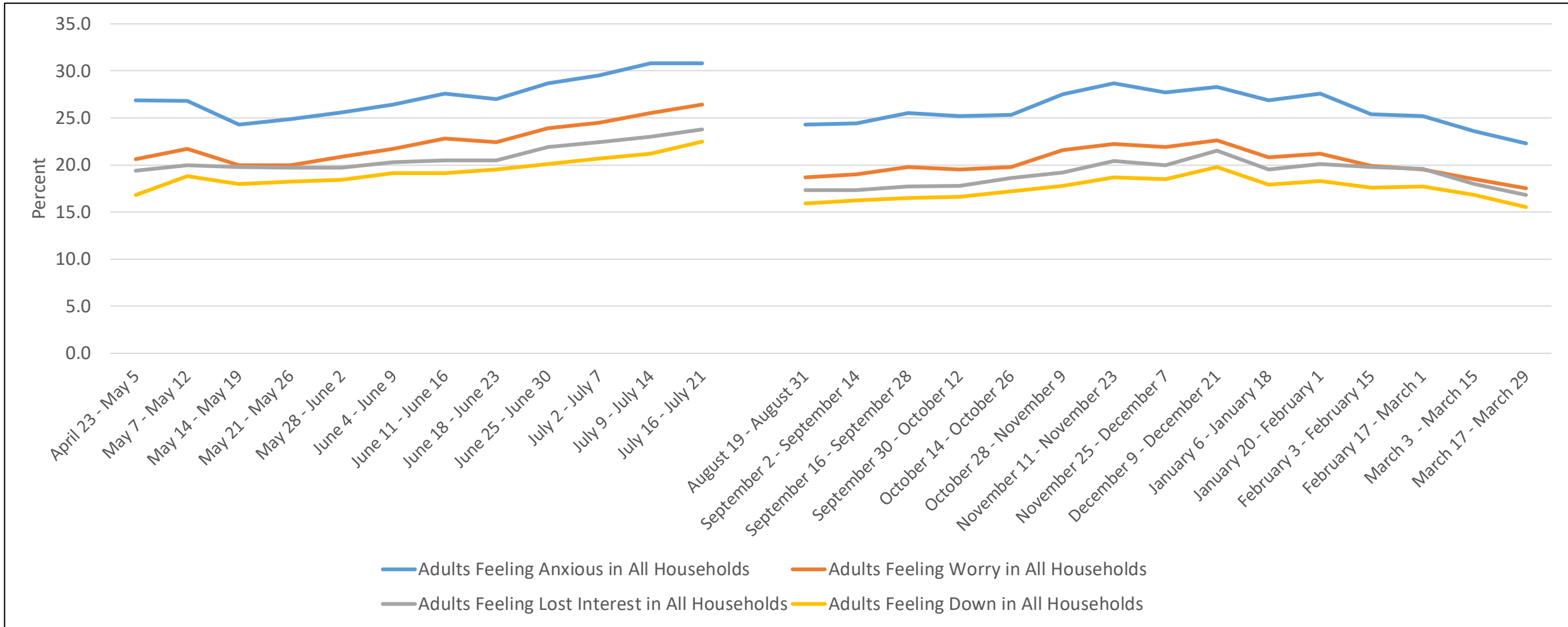


Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Received Stimulus Payment by Race



Mental Health Measures



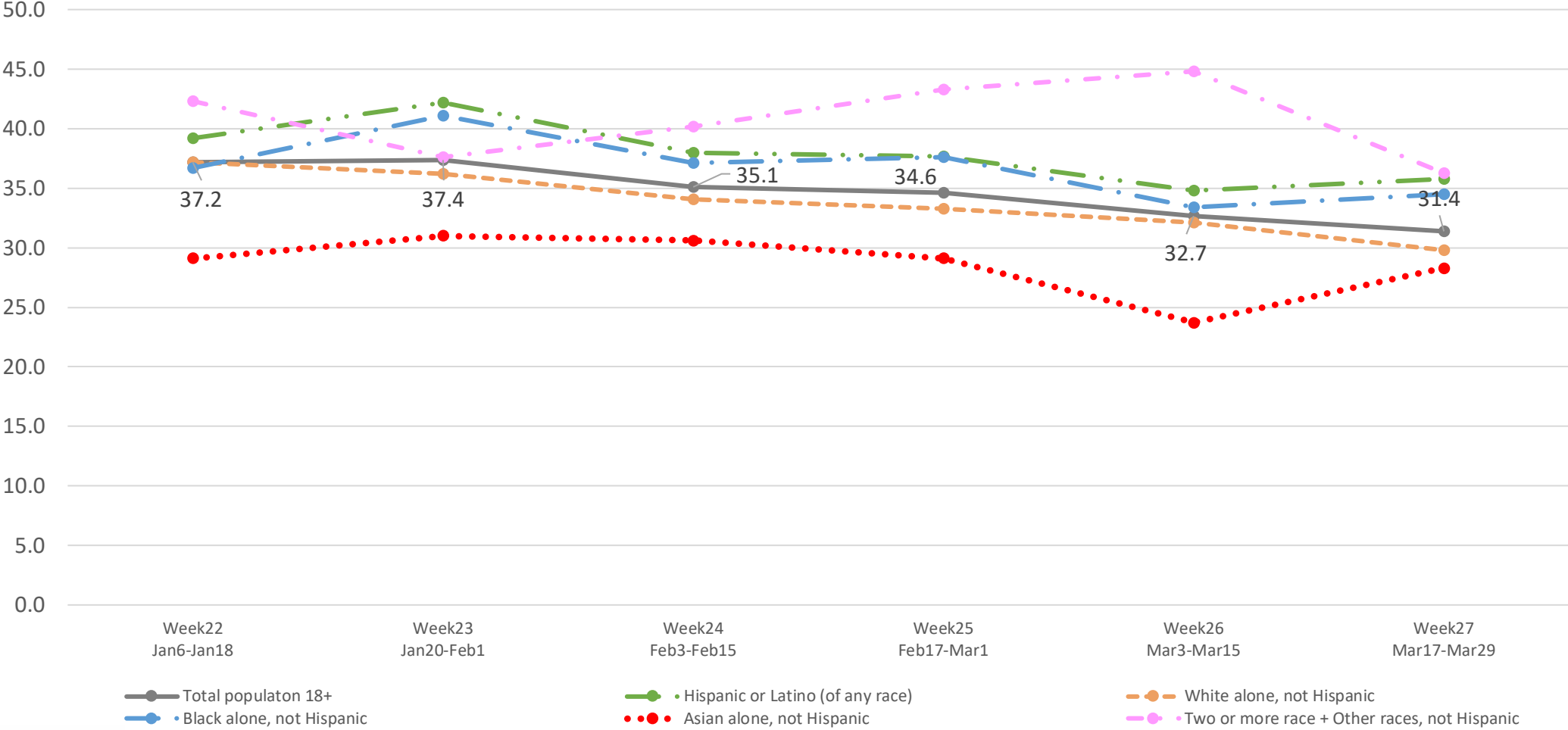
Source: Data from the Household Pulse Survey (April 23rd, 2020 – March 29th, 2021).
 Universe: 18+ Adults



NHIS January-June 2019:

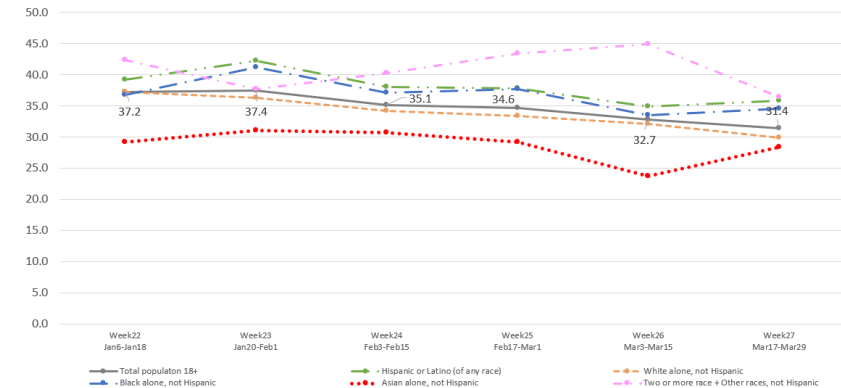
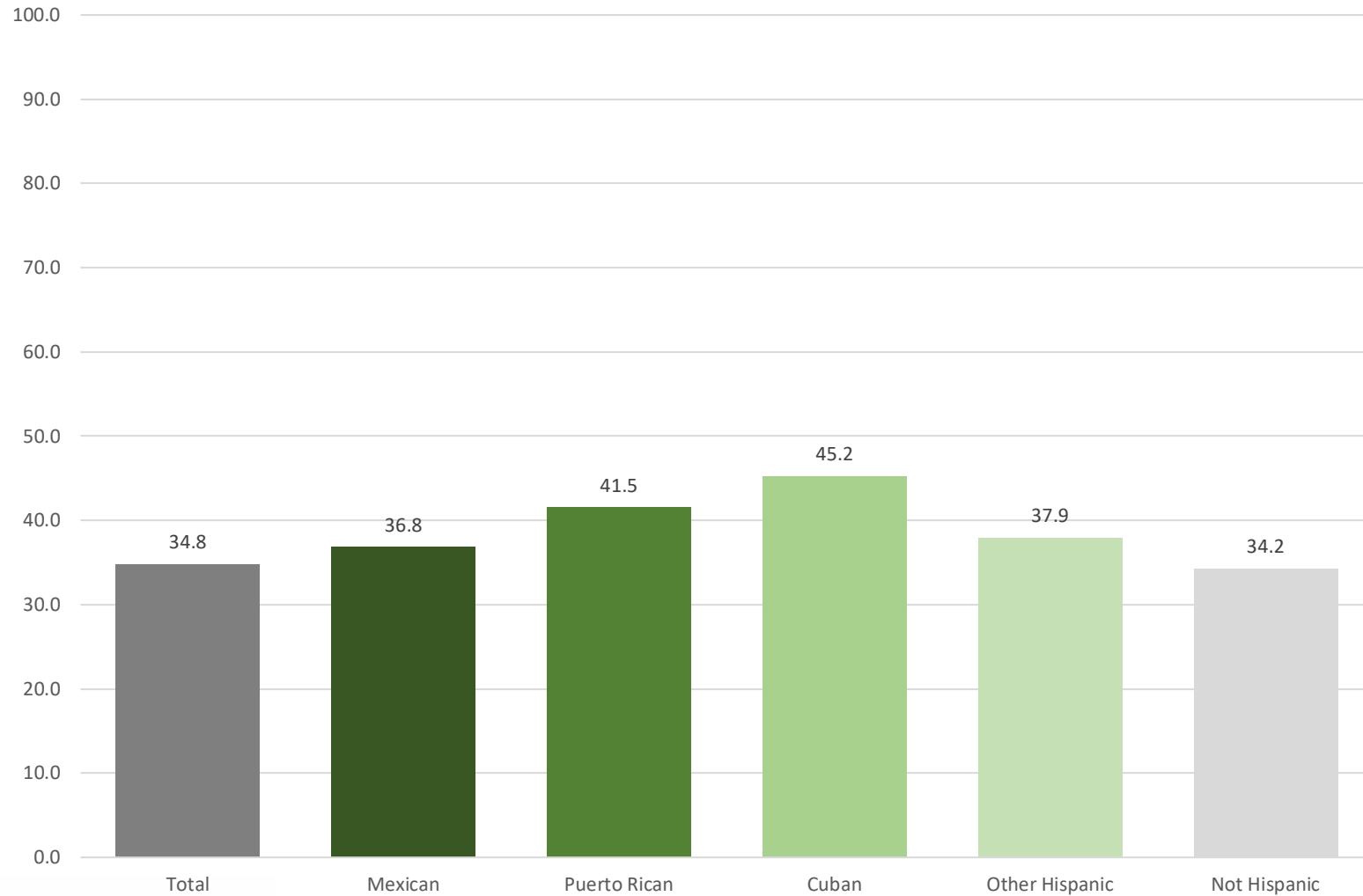
- Anxiety Symptoms: **8.2%**
- Depressive Symptoms: **6.6%**

Symptoms of Anxiety by Weeks and Hispanic Origin and Race

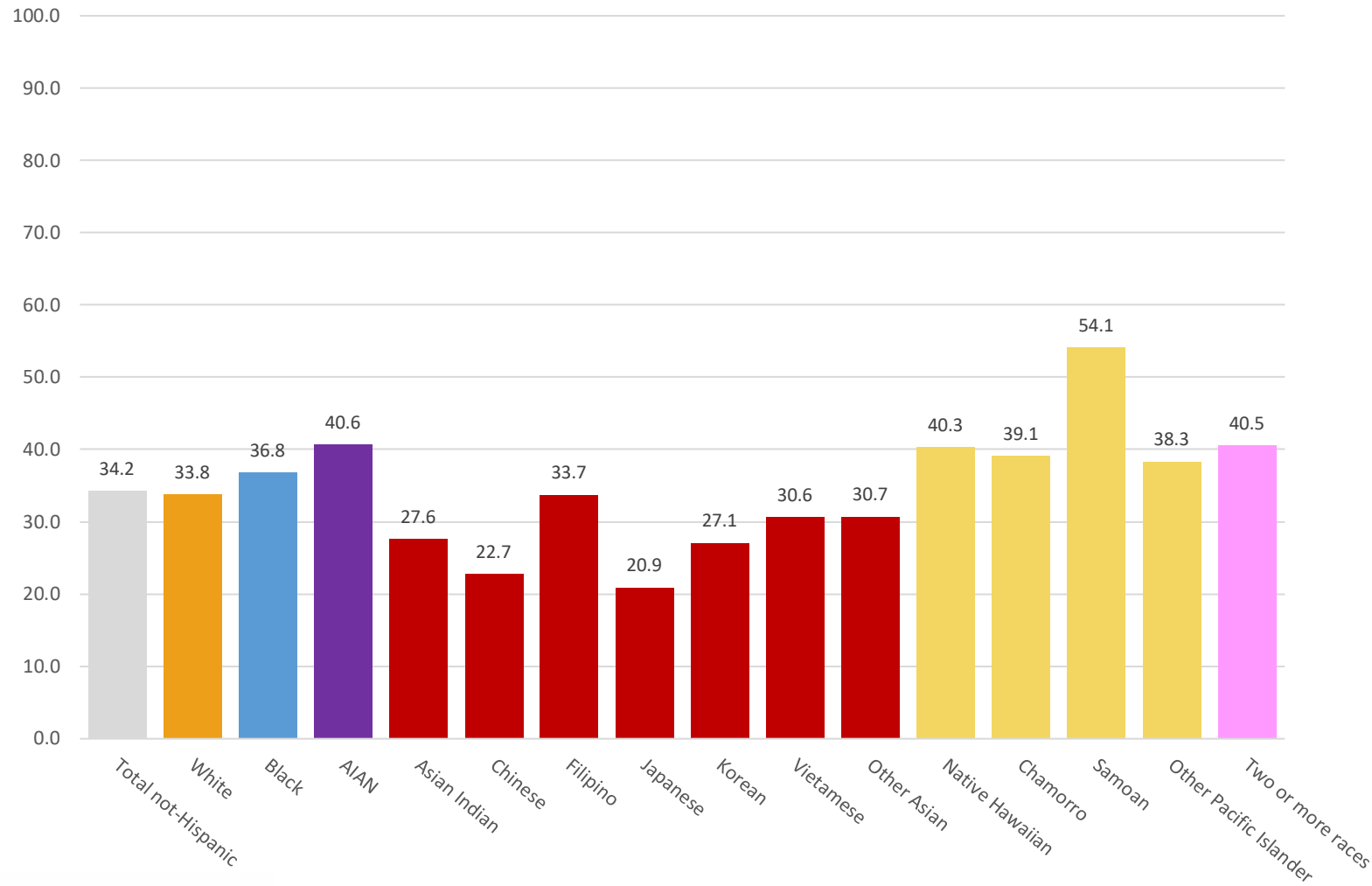


Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Symptoms of Anxiety by Hispanic Origin

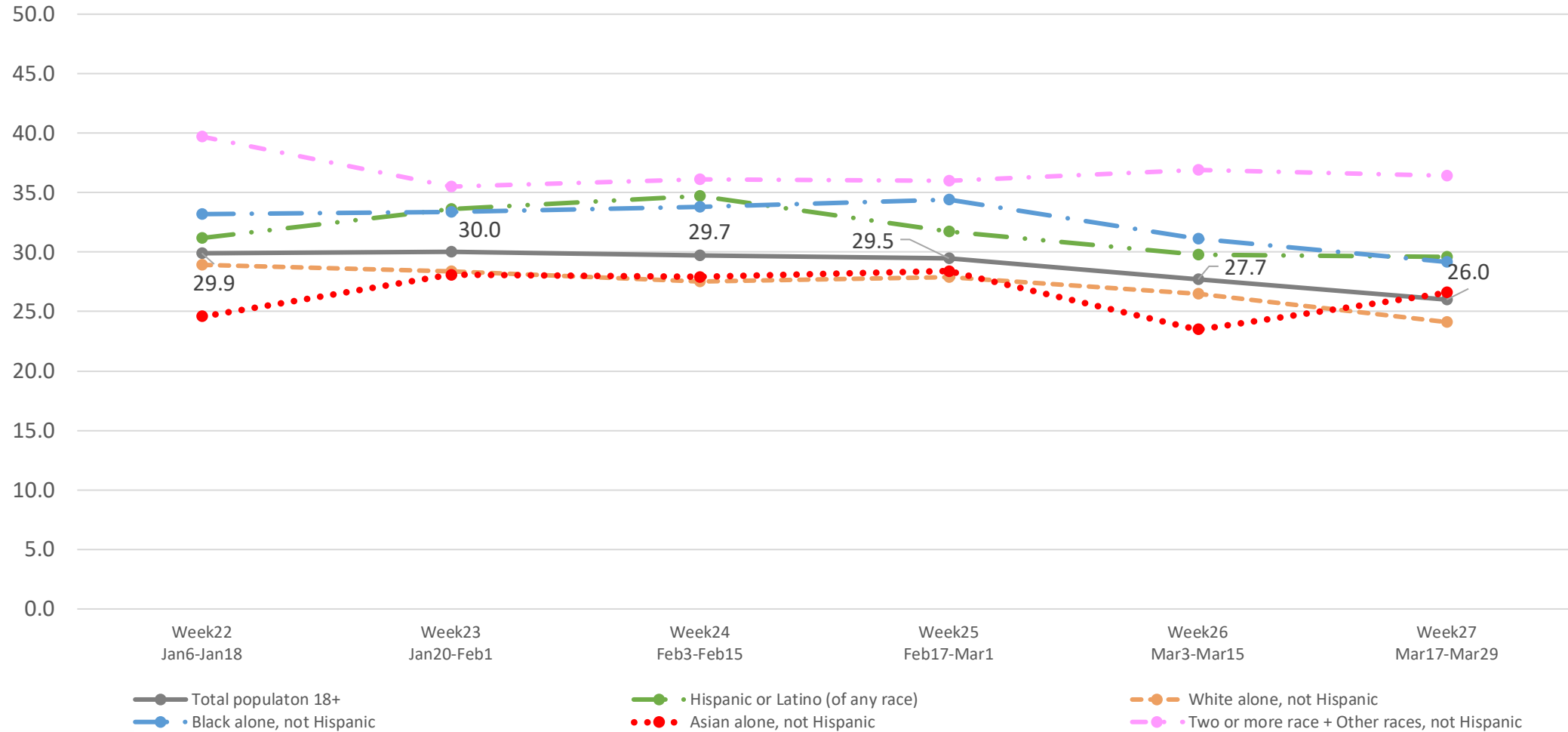


Symptoms of Anxiety by Race



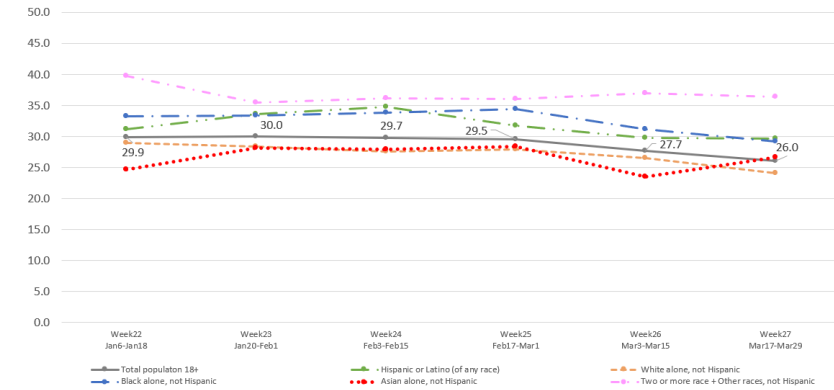
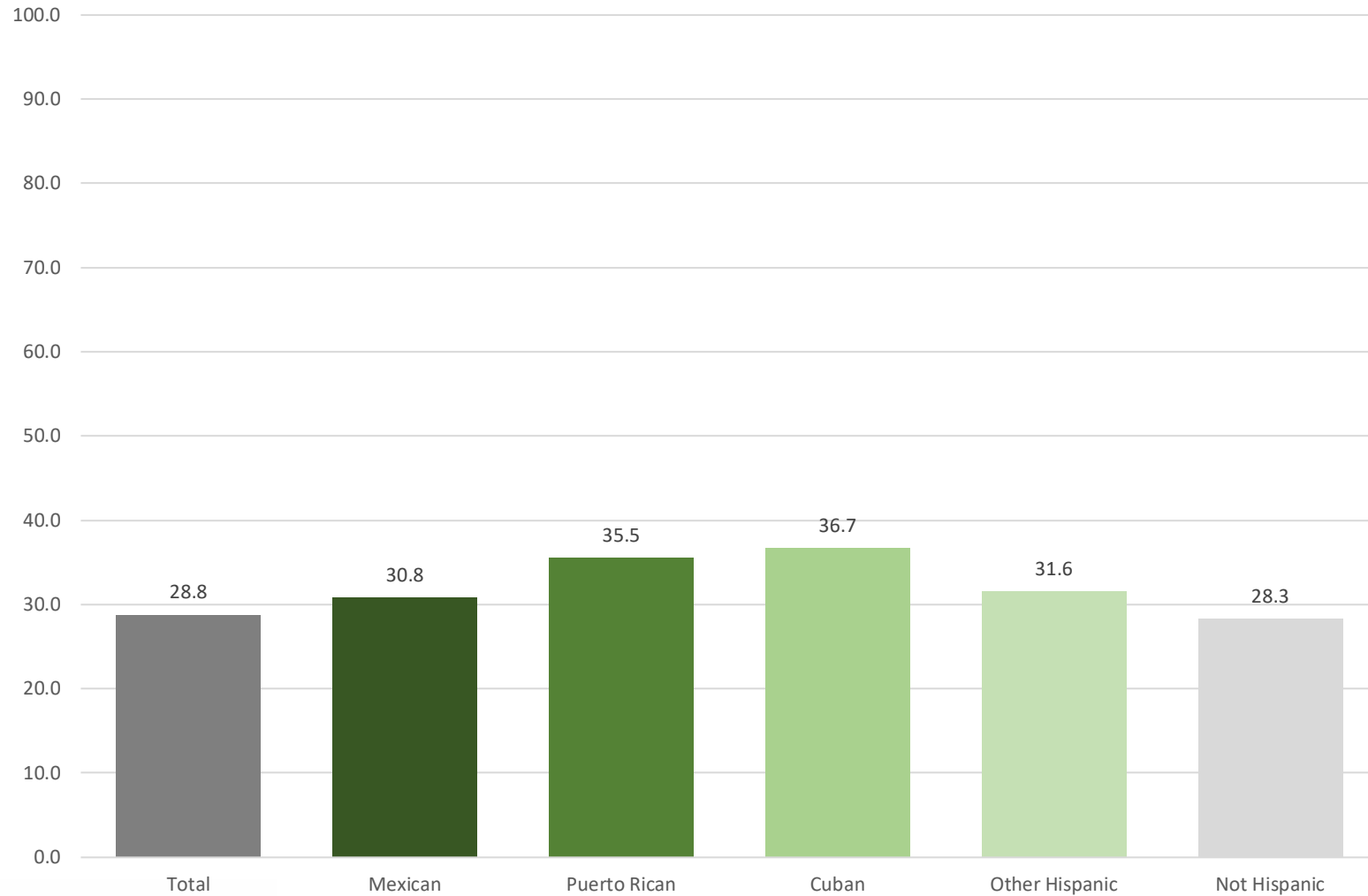
Note: Race groups are the not-Hispanic population, alone population.
 Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Symptoms of Depression by Weeks and Hispanic Origin and Race



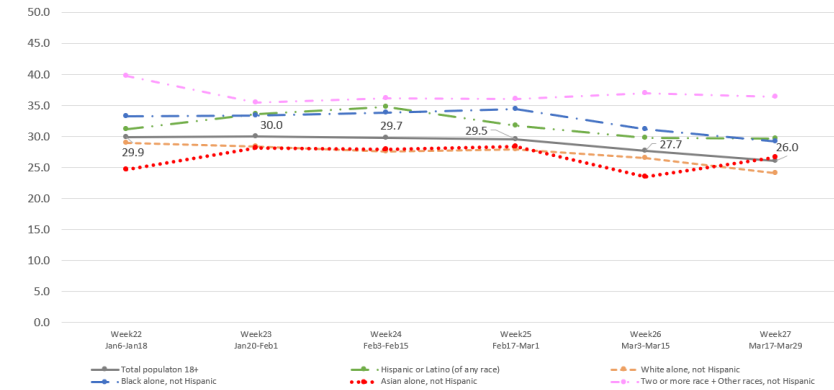
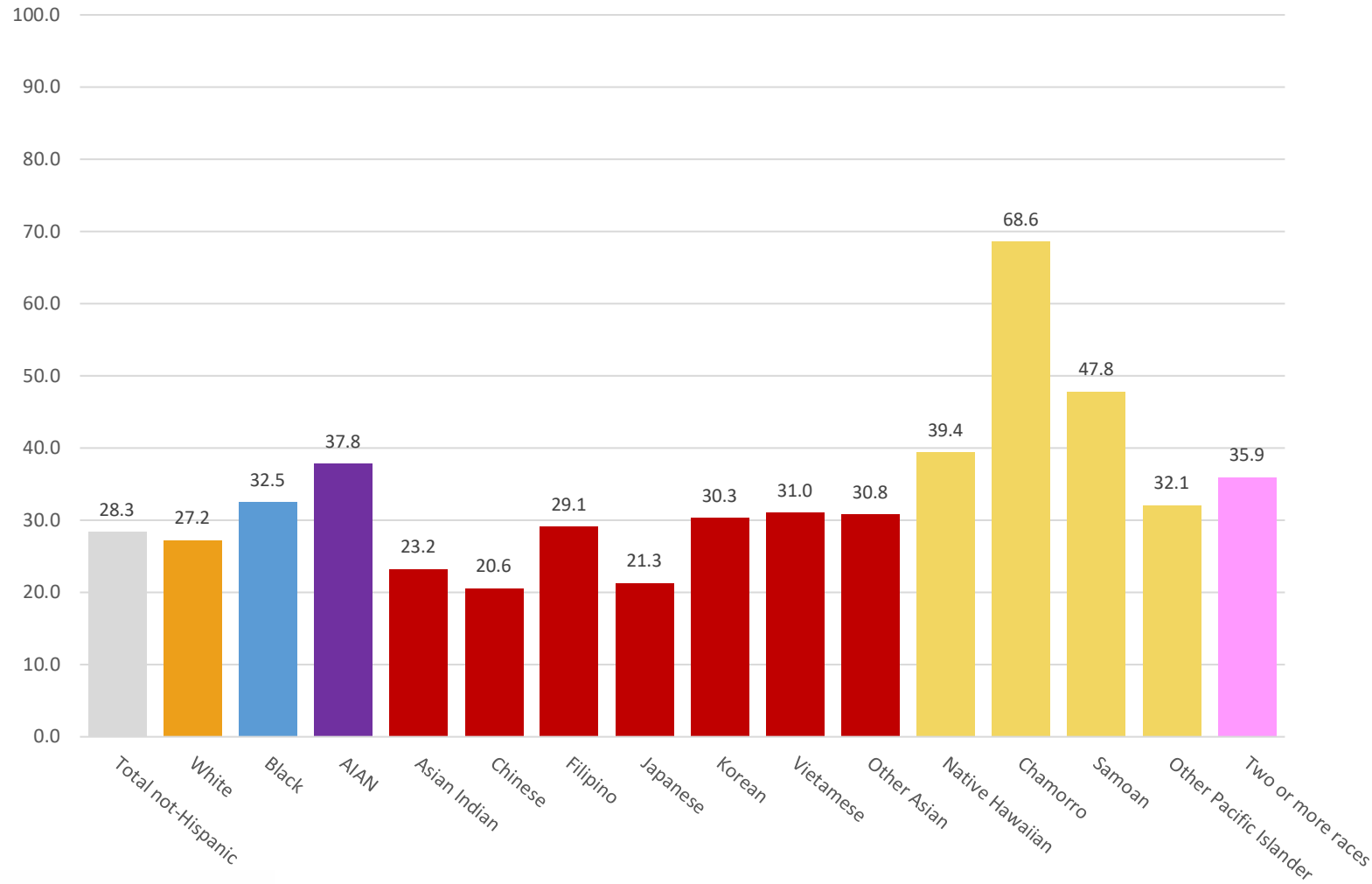
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Symptoms of Depression by Hispanic Origin



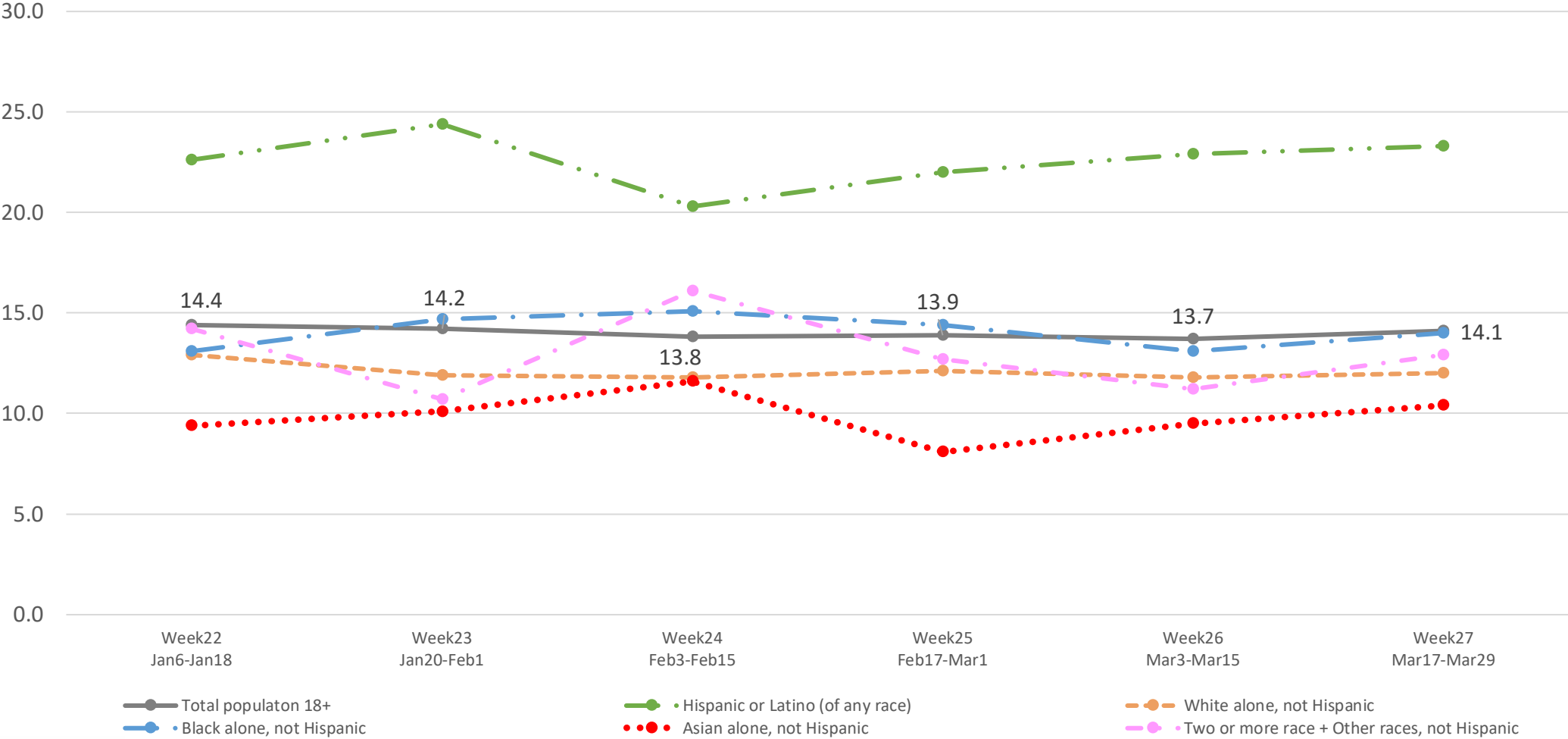
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Symptoms of Depression by Race



Note: Race groups are the not-Hispanic population, alone population.
 Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

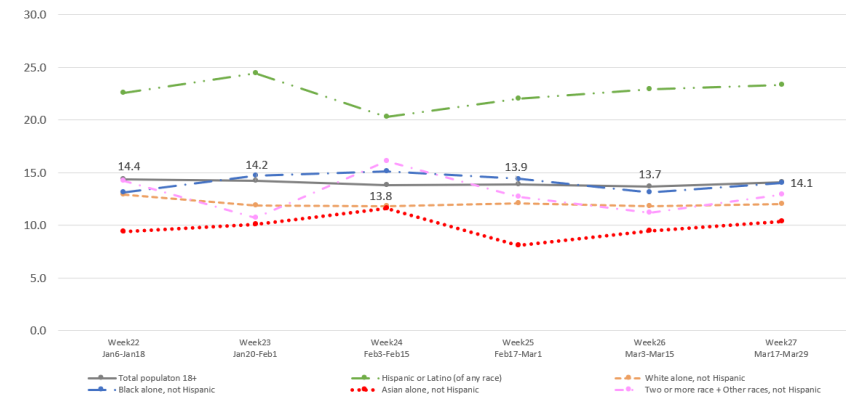
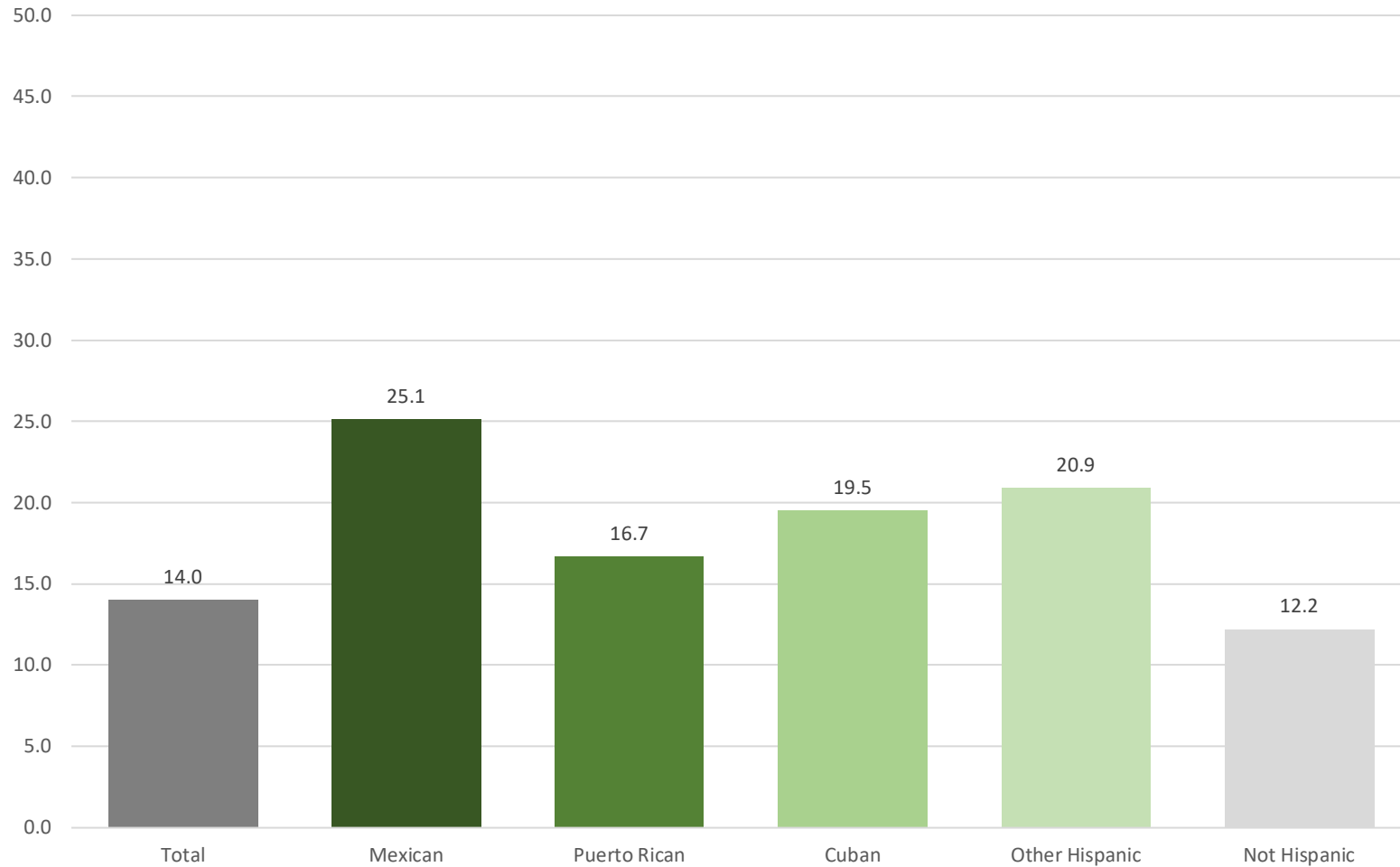
Had COVID by Weeks and Hispanic Origin and Race



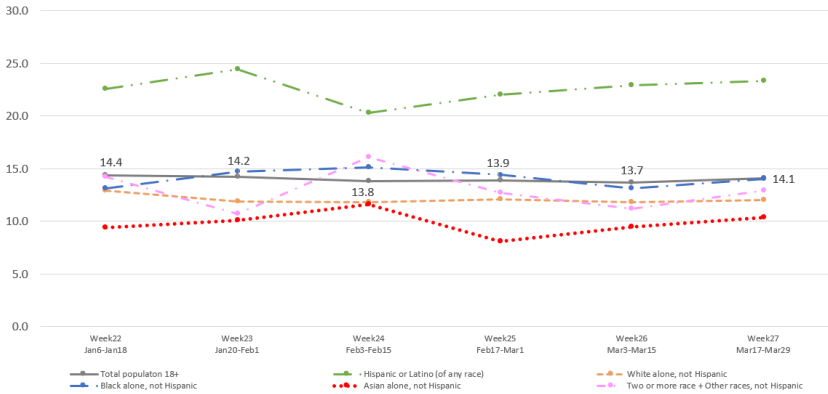
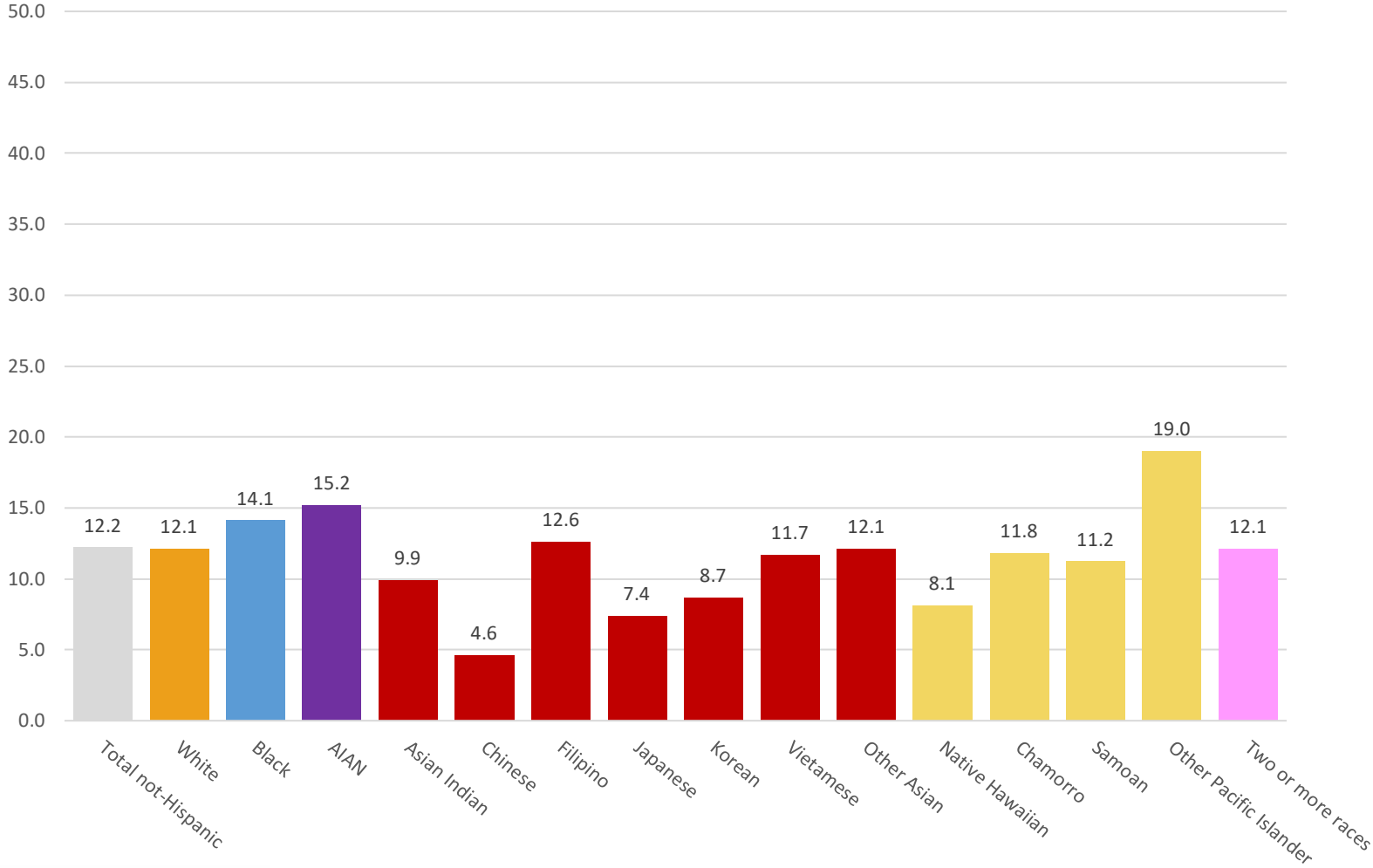
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).



Had COVID by Hispanic Origin

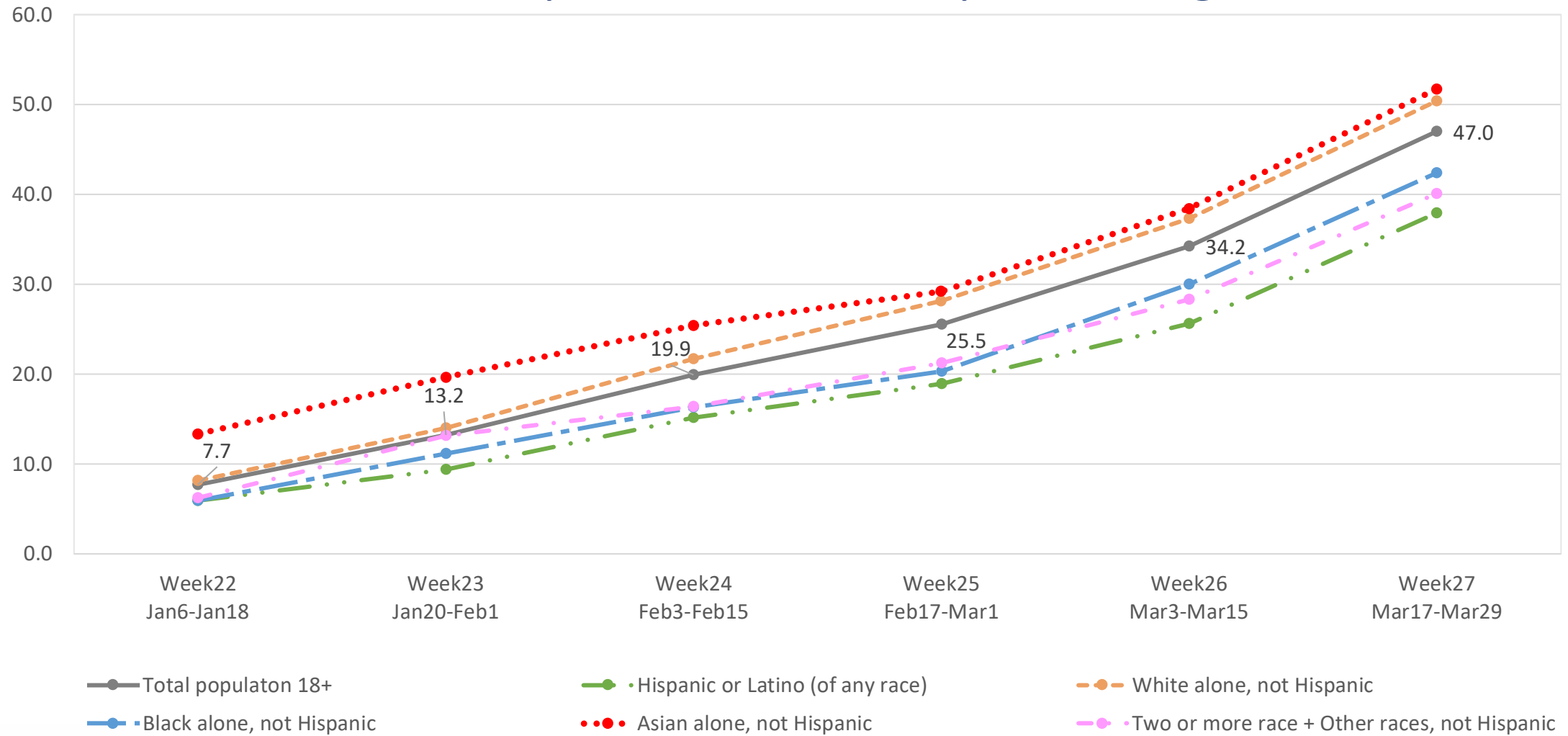


Had COVID by Race

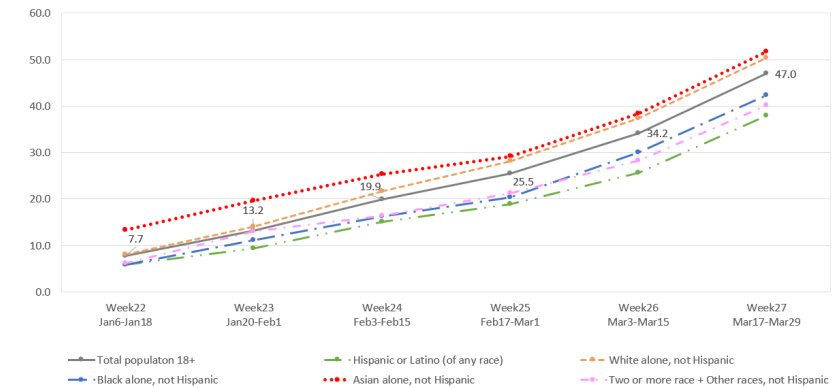
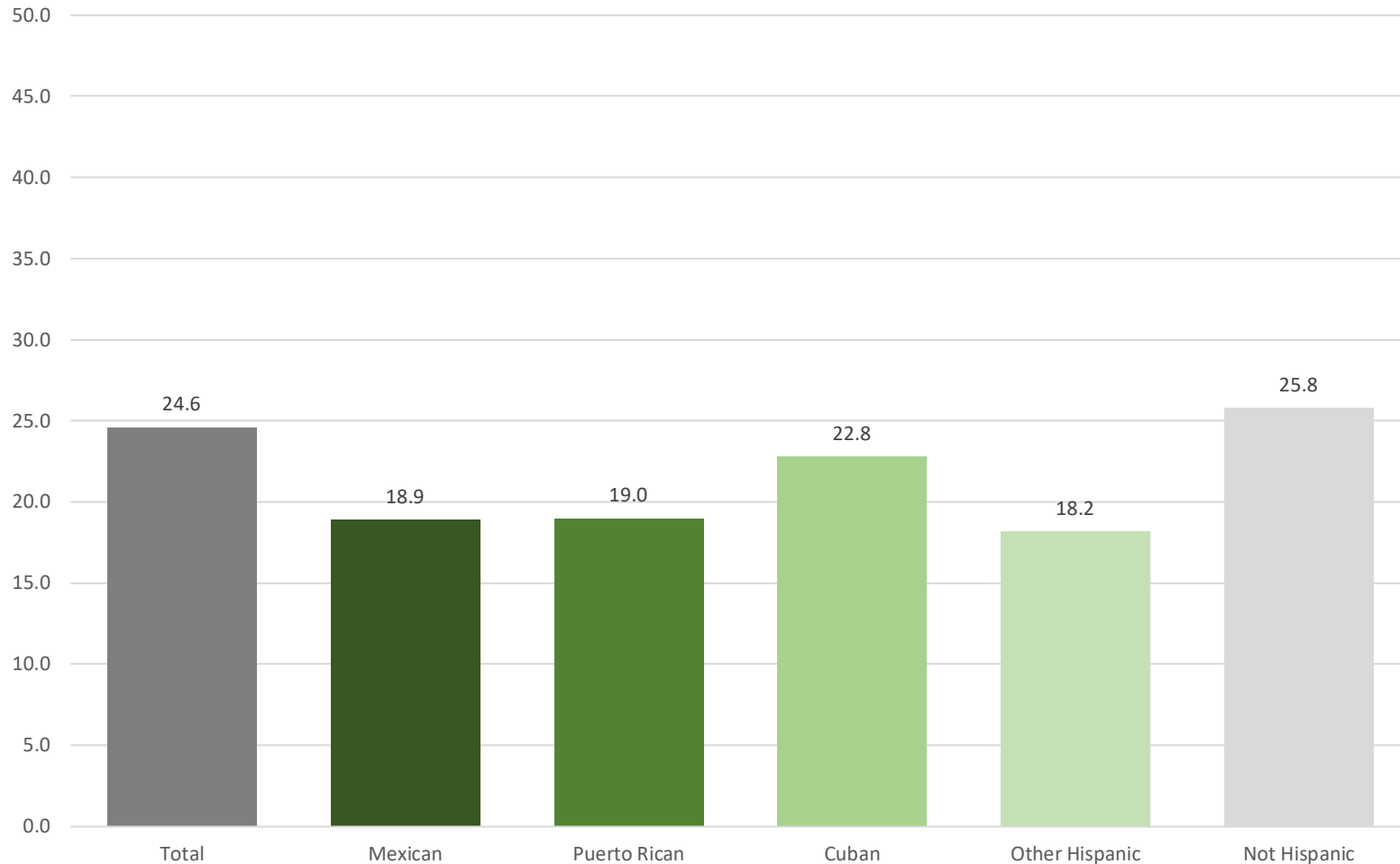


Note: Race groups are the not-Hispanic population, alone population.
 Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

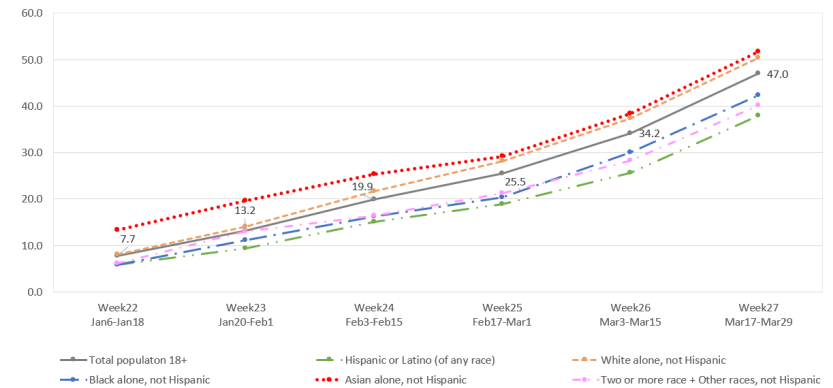
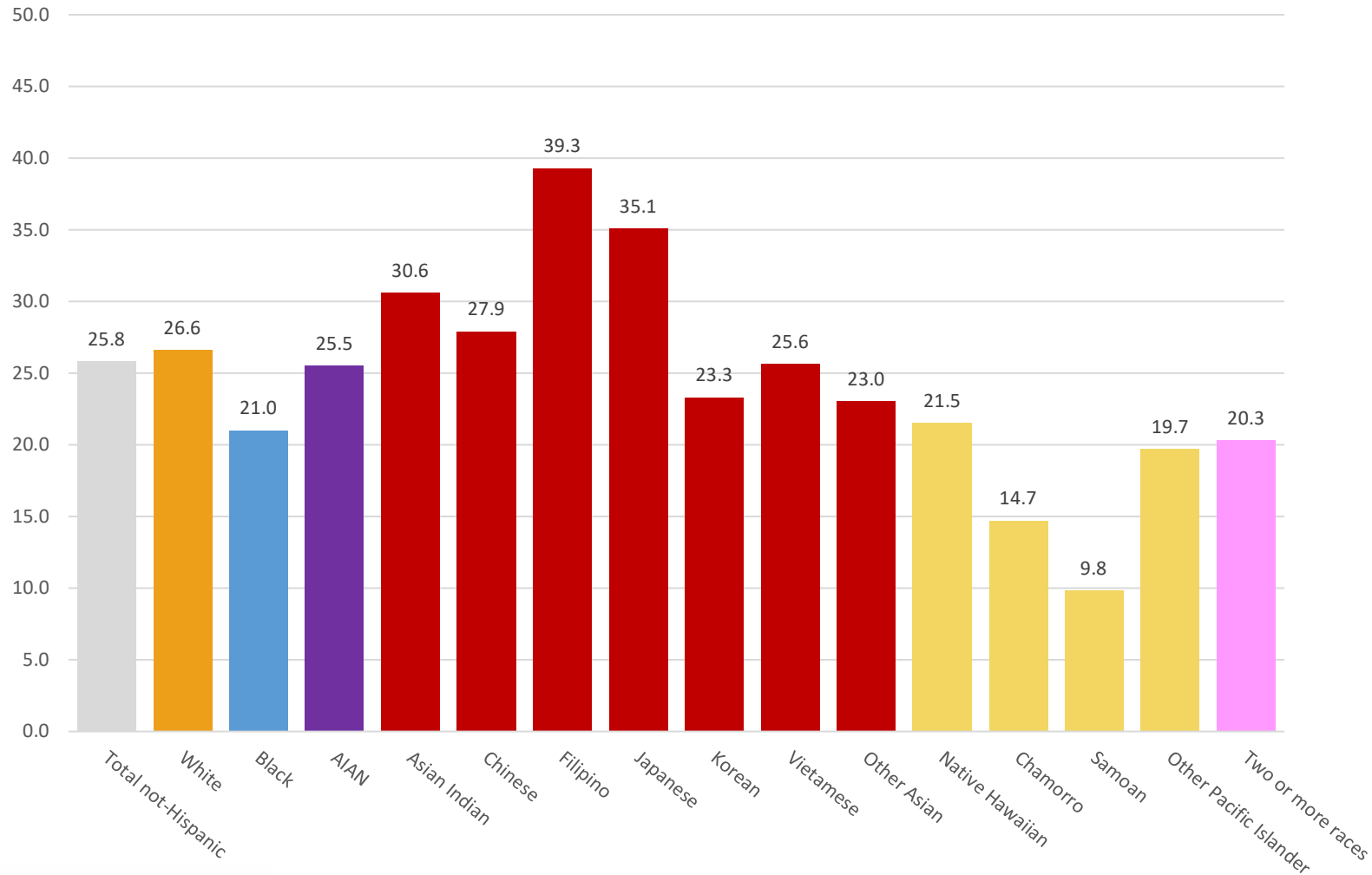
Received Vaccine by Weeks and Hispanic Origin and Race



Received Vaccine by Hispanic Origin

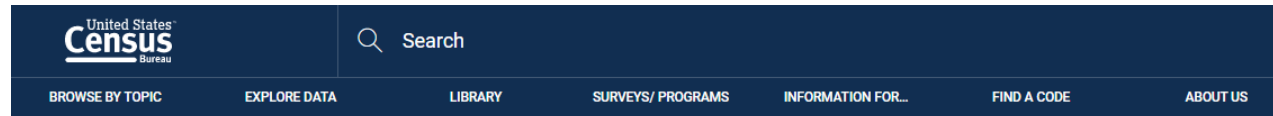


Received Vaccine by Race



Note: Race groups are the not-Hispanic population, alone population.
Source: Data from the Household Pulse Survey (January 6 – March 29, 2021).

Household Pulse Survey Website



// Census.gov > Data > Experimental Data Products > Household Pulse Survey

Measuring Household Experiences during the Coronavirus Pandemic



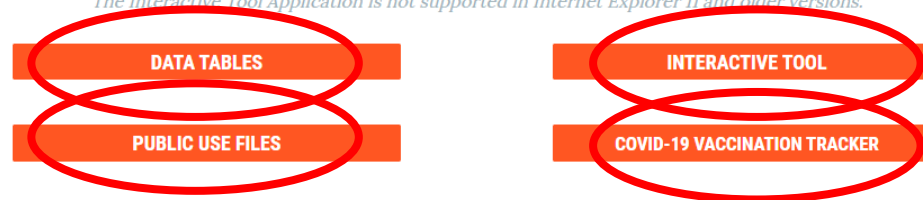
Data collection for Phase 3 of the Household Pulse Survey ran from October, 28, 2020 – March 29, 2021 and is now closed. Data collection for Phase 3.1 of the survey is scheduled to begin on April 14, 2021, with the next data release on May 5, 2021.



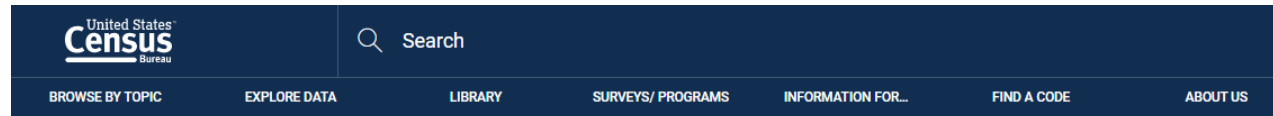
What is the Household Pulse Survey?

The U.S. Census Bureau, in collaboration with multiple federal agencies, is in a unique position to produce data on the social and economic effects of coronavirus on American households. The Household Pulse Survey is designed to deploy quickly and efficiently, collecting data to measure household experiences during the coronavirus pandemic. Data will be disseminated in near real-time to inform federal and state response and recovery planning.

The Interactive Tool Application is not supported in Internet Explorer 11 and older versions.



Household Pulse Survey Website



// Census.gov > Data > Experimental Data Products > Household Pulse Survey

Measuring Household Experiences during the Coronavirus Pandemic



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DATA TABLES

INTERACTIVE TOOL

PUBLIC USE FILES

COVID-19 VACCINATION TRACKER



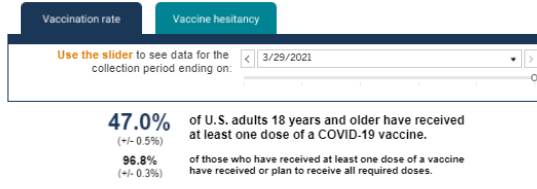
<https://www.census.gov/data/experimental-data-products/household-pulse-survey.html>

Household Pulse Survey COVID Vaccine Tracker

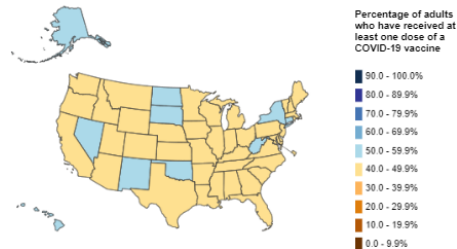
Household Pulse Survey COVID-19 Vaccination Tracker

APRIL 14, 2021

Household Pulse Survey COVID-19 Vaccination Tracker



Estimated Vaccination Rates by State: March 17–March 29, 2021



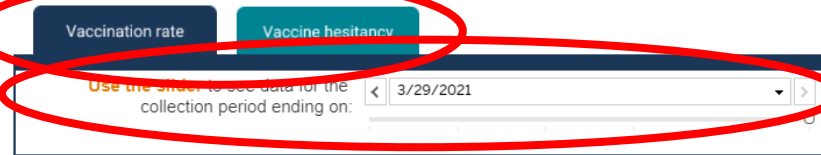
National Vaccination Rate by Characteristic

Age	Sex	Hispanic origin and race	Education	Insurance status	COVID-19 status
		White Alone, not Hispanic			50.4% (+/- 0.6%)
		Black Alone, not Hispanic			42.4% (+/- 1.8%)
		Asian Alone, not Hispanic			51.7% (+/- 2.0%)
		Two or More Races + other races, not Hispanic			40.1% (+/- 2.9%)
		Hispanic or Latino (may be of any race)			37.9% (+/- 1.5%)

Household Pulse Survey COVID-19 Vaccination Tracker

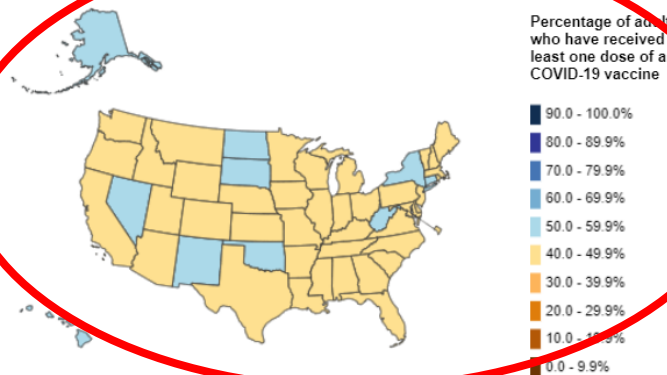
APRIL 14, 2021

Household Pulse Survey COVID-19 Vaccination Tracker



47.0% (+/- 0.5%) of U.S. adults 18 years and older have received at least one dose of a COVID-19 vaccine.
96.8% (+/- 0.3%) of those who have received at least one dose of a vaccine have received or plan to receive all required doses.

Estimated Vaccination Rates by State: March 17–March 29, 2021



National Vaccination Rate by Characteristic

Age	Sex	Hispanic origin and race	Education	Insurance status	COVID-19 status
		18–24			18.8% (+/- 2.1%)
		25–39			31.9% (+/- 1.0%)
		40–54			39.7% (+/- 0.9%)
		55–64			52.8% (+/- 1.2%)
		65 and above			80.7% (+/- 1.0%)

National Vaccination Rate by Characteristic

Age	Sex	Hispanic origin and race	Education	Insurance status	COVID-19 status
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		Black Alone, not Hispanic			42.4% (+/- 1.8%)
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Household Pulse Survey COVID Vaccine Tracker (cont.)

f Household Pulse Survey COVID-19 Vaccination Tracker

APRIL 14, 2021

Household Pulse Survey COVID-19 Vaccination Tracker

Vaccination rate | **Vaccine hesitancy**

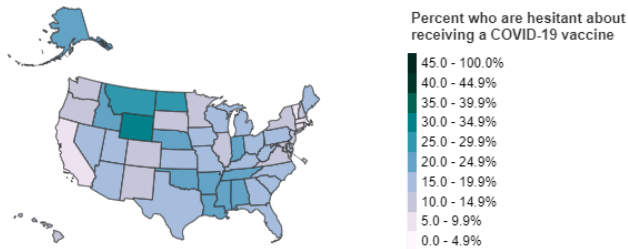
Use the slider to see data for the collection period ending on: 3/29/2021

Use buttons to include or exclude segments of the population based on how likely they are to get a COVID-19 vaccine once it is available.

DEFINITELY NOT | **PROBABLY NOT** | UNSURE | PROBABLY

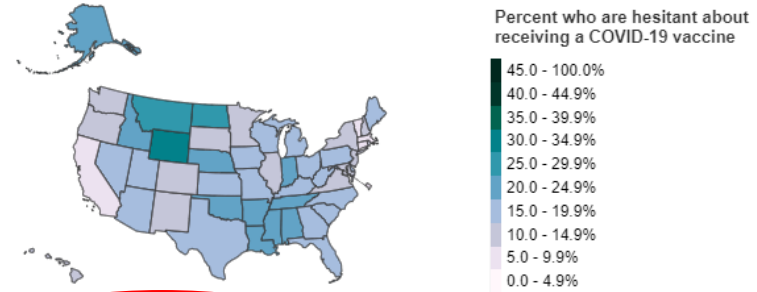
15.6% of U.S. adults 18 years and older are hesitant about receiving a COVID-19 vaccine. (+/- 0.4%)

Percentage of Those Aged 18 and Over Who Are Hesitant About Receiving a COVID-19 Vaccine



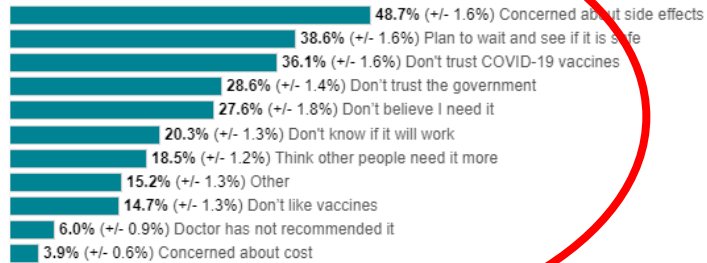
Percentage of Those Aged 18 and Over Who Are Hesitant About Receiving a COVID-19 Vaccine

Hover on a state to see top reasons for vaccine hesitancy in that state.

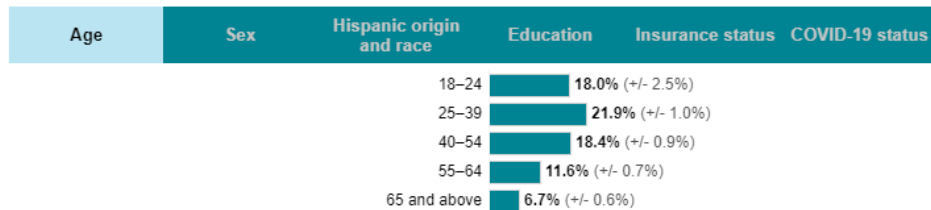


National Reasons for Vaccine Hesitancy


Among those who are hesitant about receiving a COVID-19 vaccine (respondents were able to select multiple reasons)



National Hesitancy Rate by Characteristic



// Census.gov > America Counts: Stories Behind the Numbers > How Are Americans Using Their Stimulus Payments?



Population


How Are Americans Using Their Stimulus Payments?

Majority Who Received Stimulus Payments Spending Most of It on Household Expenses

DANIEL PEREZ-LOPEZ AND CHARLES ADAM BEE | JUNE 24, 2020

About 85.5% of respondents to the U.S. Census Bureau's experimental Household Pulse Survey said they had received or expected someone in the household to receive an Economic Impact Payment or stimulus check.

The majority of adults in households that received a stimulus check from the federal government say they used it or planned to use most of it on household



POPULATION

United States Census Bureau

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// Census.gov > America Counts: Stories Behind the Numbers > Self-Employed Adults Hit Harder by Pandemic-Related Business Downturns in Hardest-Hit States



Business and Economy


Self-Employed Adults Hit Harder by Pandemic-Related Business Downturns in Hardest-Hit States

Combining Census Bureau Pulse Surveys Reveals Which Workers Are Hardest Hit by COVID-19

MARK KLEE, LYNDA LAUGHLIN, AND ROBERT MUNK | JUNE 30, 2020

Self-employed workers in states where businesses are hardest hit by the COVID-19 pandemic are more likely to face economic hardships, according to new findings from the U.S. Census Bureau's experimental Household and Small Business Pulse surveys.

Creating jobs and running small businesses are just a couple of examples of the vital roles self-employed workers play in the U.S. economy.



POPULATION

How Are Americans Using Their Stimulus Payments?

Is this page helpful? X

// Census.gov > America Counts: Stories Behind the Numbers > The Risks Children Face During Pandemic



Families

The Risks Children Face During Pandemic

Adults in Households With Children Report Higher Rate of Late Housing Payments and Food Shortages Amid COVID-19

LINDSAY M. MONTE AND SHARON O'DONNELL | JUNE 30, 2020

Households with children continue to be hit harder by the financial pressures caused by the COVID-19 pandemic, according to the latest results of the U.S. Census Bureau's experimental Household Pulse Survey released last week.

Nationally, 24.7 million adults in mortgaged or rented households reported a late



BUSINESS AND ECONOMY

Is this page helpful? X

Yes No

// Census.gov > America Counts: Stories Behind the Numbers > Adults in Households With Children More Likely to Report Loss in Employment Income During COVID-19



Population

Adults in Households With Children More Likely to Report Loss in Employment Income During COVID-19

New Census Household Pulse Survey Shows More Households with Children Lost Income, Experienced Food Shortages During Pandemic

LINDSAY M. MONTE | MAY 27, 2020

Adults in households with children were more likely to report permanent loss of employment and food shortages since the start of the COVID-19 pandemic, according to a new U.S. Census Bureau survey.

Early results of the experimental Household Pulse Survey released today provide a detailed and near real-time picture of how individuals and households are faring during the pandemic.



POPULATION

New Census Surveys Provide Near Real-Time Info on Households, Businesses During COVID-19

Is this page helpful? X

Where to find the data

Household Pulse Survey main page:

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

Data tool:

<https://www.census.gov/data-tools/demo/hhp>

Vaccine tracker:

<https://www.census.gov/library/visualizations/interactive/household-pulse-survey-covid-19-vaccination-tracker.html>

Data Tables main page:

<https://www.census.gov/programs-surveys/household-pulse-survey/data.html>

Technical documentation:

<https://www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html>

Survey Respondent overview:

<https://www.census.gov/programs-surveys/household-pulse-survey.html>

Questions for NAC

- Are there special considerations for your constituency that we should keep in mind that might inhibit contact and participation to the Household Pulse Survey via the email and text strategy?
- What are your concerns and recommendations regarding differential non-response by subgroups within the covered frame and for MAFID addresses that do not have either emails or cell phone numbers and therefore currently excluded from the survey?
- As we look forward to the future of the Household Pulse Survey, what questions or measures should we consider, especially as we think about recovery?

Thank You!