



COVID-19 Vaccine Challenges: Illustrating Hurdles to Population Immunity and Equity Using Flu Vaccination Data

February 4, 2021 – 1:00 PM CDT

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Robert Wood Johnson Foundation

Technical Items

Participant audio has been automatically muted and video has been turned off

Submit questions using the Q&A feature at any time during the webinar

Problems:

- Ask for help using the chat feature
- Send a support request to Zoom at: <https://support.zoom.us/hc/en-us/requests/new>

Download the slides at: <https://www.shadac.org/news/upcoming-shadac-webinar-anticipating-covid-19-vaccination-challenges-through-flu-vaccination>

Webinar recording will be posted on SHADAC's website

- E-mail notice will be sent to participants

Presenter

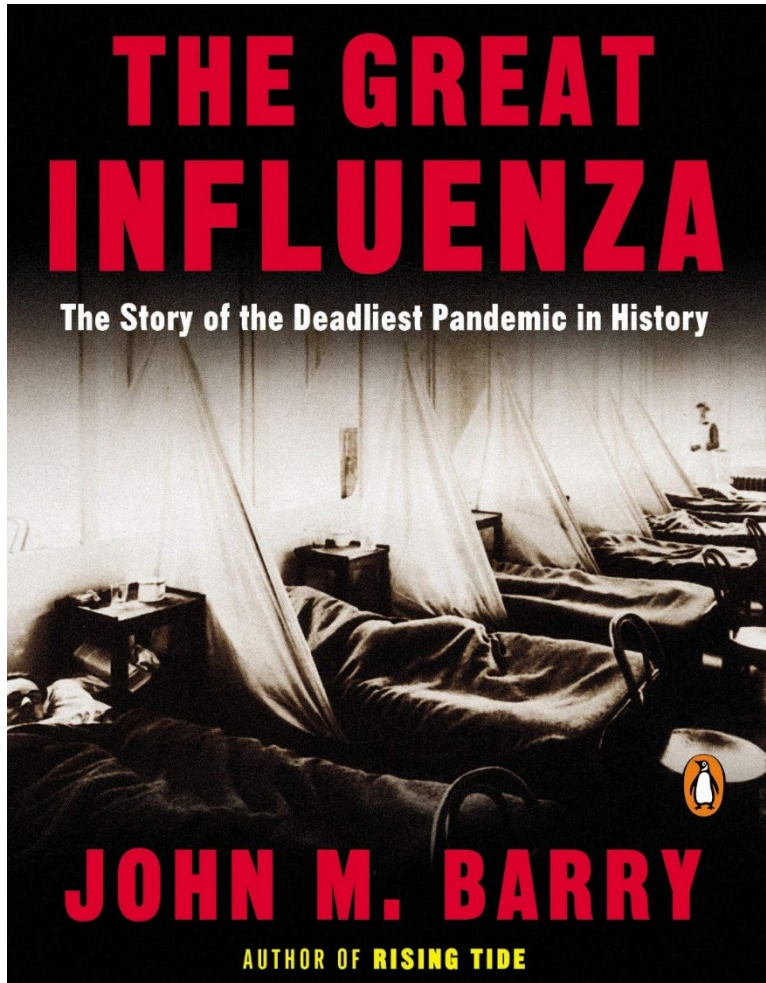


Colin Planalp, MPA
SHADAC Senior Research Fellow

COVID-19 Vaccination Context

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COVID-19 Vaccine: A Century of Progress

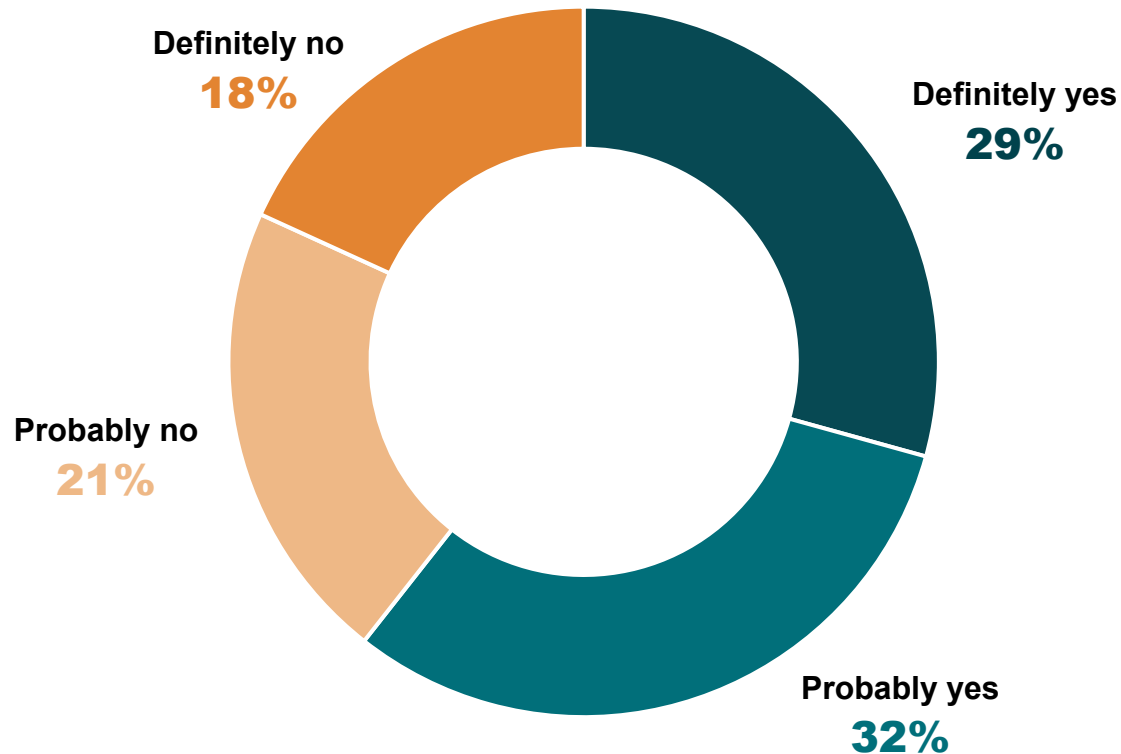


“Society cannot function if it is every man for himself.”

— John M. Barry

Pew Research Center COVID-19 Vaccine Intent Survey

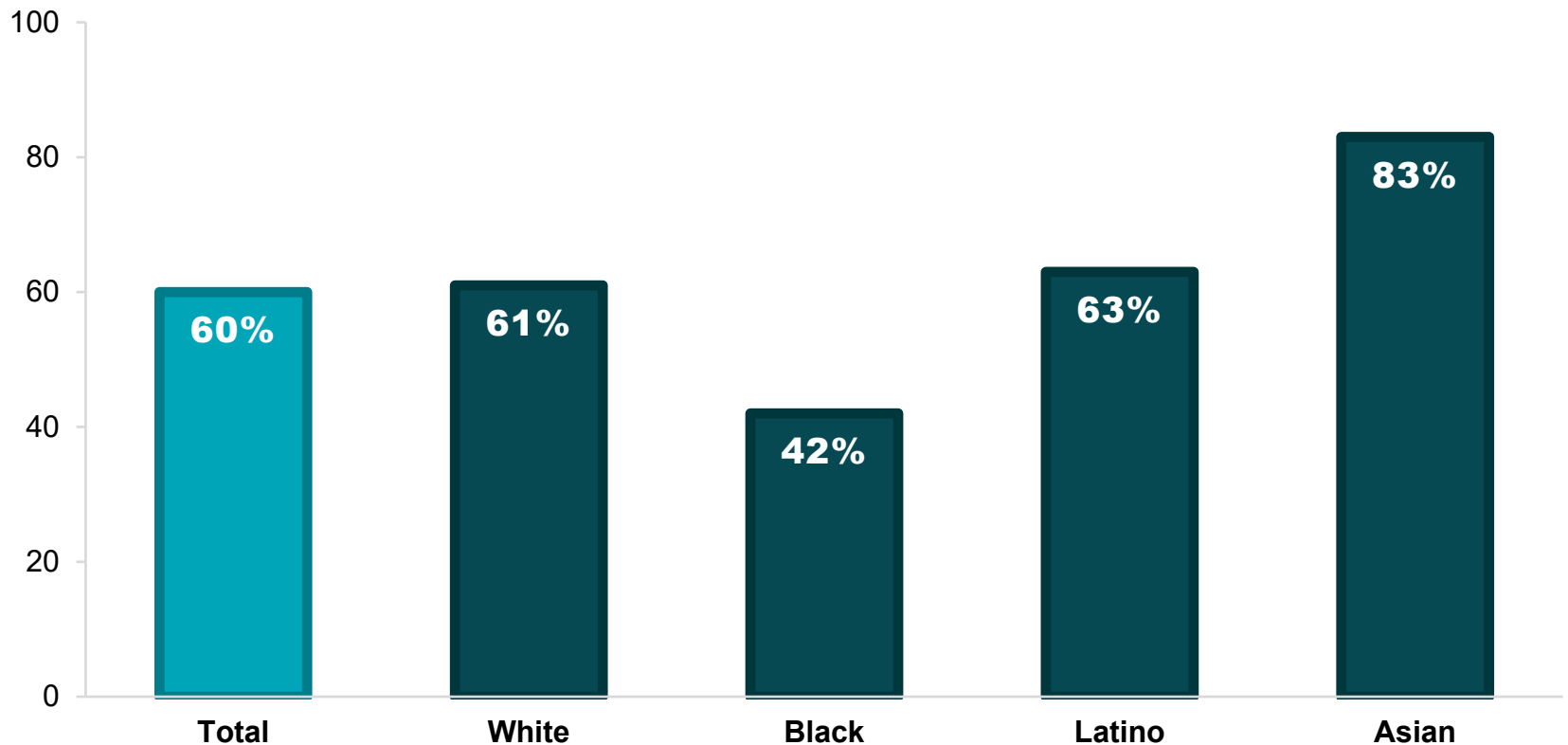
Percent of U.S. adults who would get a COVID-19 vaccine if available today (Nov. 2020)



Source: Pew Research Center, December 2020, "Intent to Get a COVID-19 Vaccine Rises to 60% as Confidence in Research and Development Process Increases"

Pew Research Center COVID-19 Vaccine Intent Survey

Percent of U.S. adults who would get a COVID-19 vaccine if available today, by race/ethnicity (Nov. 2020)



COVID-19 Herd Immunity

“We really don’t know what the (herd immunity) number is. I think the real range is somewhere between **70 to 90 percent.**”

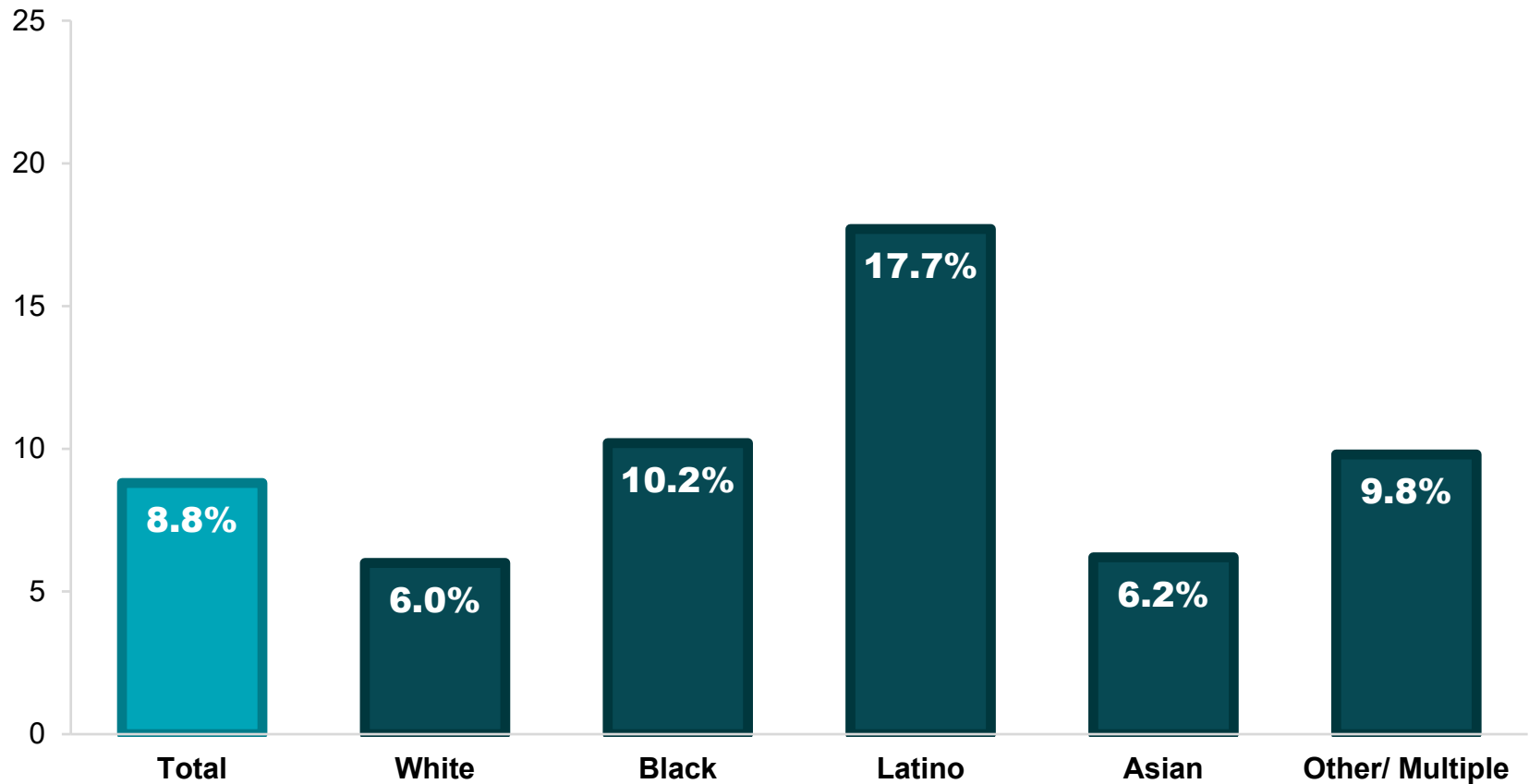
— Dr. Anthony Fauci



Credit: NIAID

Health Equity and Herd Immunity

Uninsurance Rates, U.S. 2018



Existing Vaccines as a Proxy

- Most vaccines are targeted primarily at children (e.g., measles, poliovirus)
- But CDC recommends **flu vaccines** each year for nearly everyone at least 6 months old—including adults
- So how does the U.S. perform in adult flu vaccination rates?



Flu Vaccination Rates

Across the States

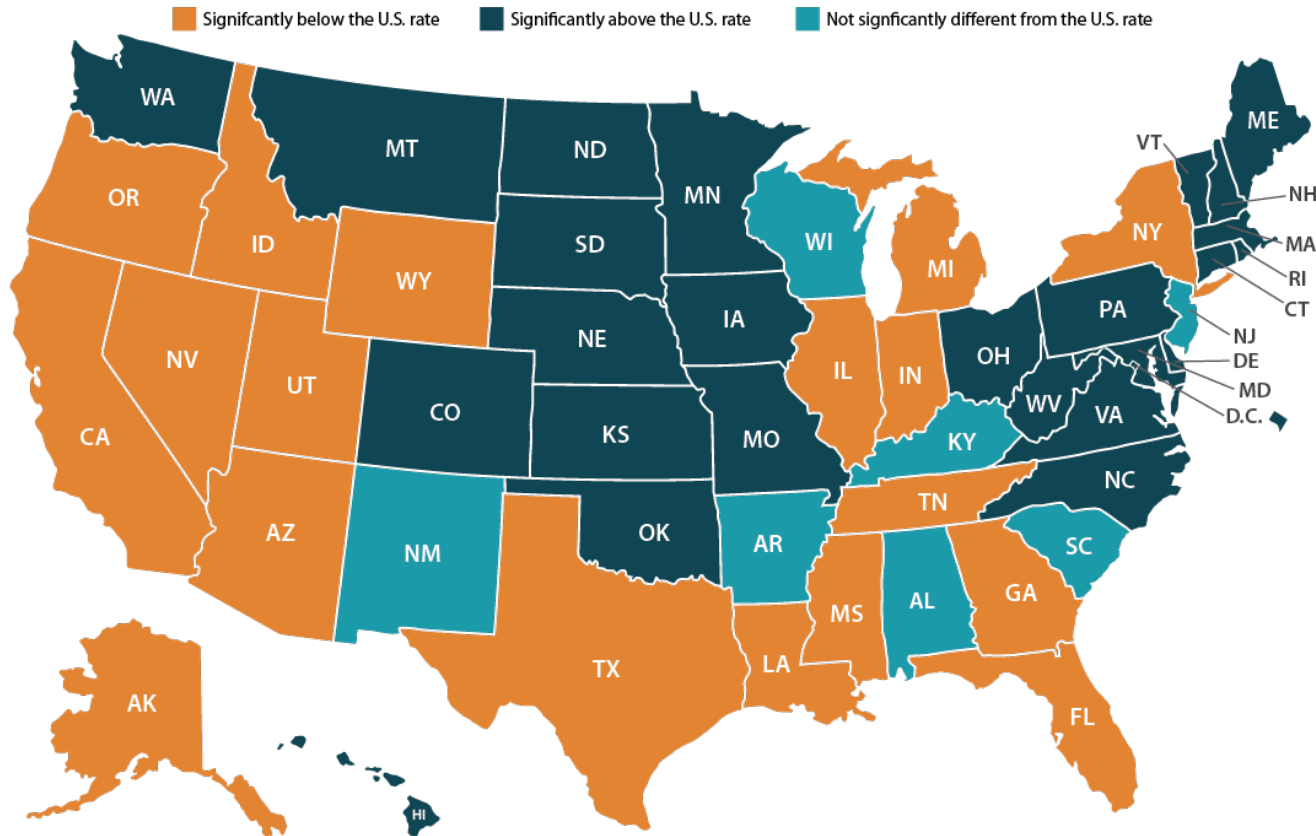
About the Data

Data source: Behavioral Risk Factor Surveillance System (BRFSS), a joint survey conducted by states with the U.S. Centers for Disease Control and Prevention of non-institutionalized adult (age 18+)

Years of data: Pooled surveys from years of 2017-2019, to increase sample to support sub-population analysis at state-level

Relevant variables: Age, gender, education, income (categorical), race/ethnicity, health insurance coverage (yes/no), chronic health conditions, health care access (“personal doctor”), urbanization (urban-rural spectrum)

State vs. U.S. Flu Vaccination Rates, Adults (2017-2019)



Source: SHADAC analysis of 2017-2019 Behavioral Risk Factor Surveillance System (BRFSS) Data.

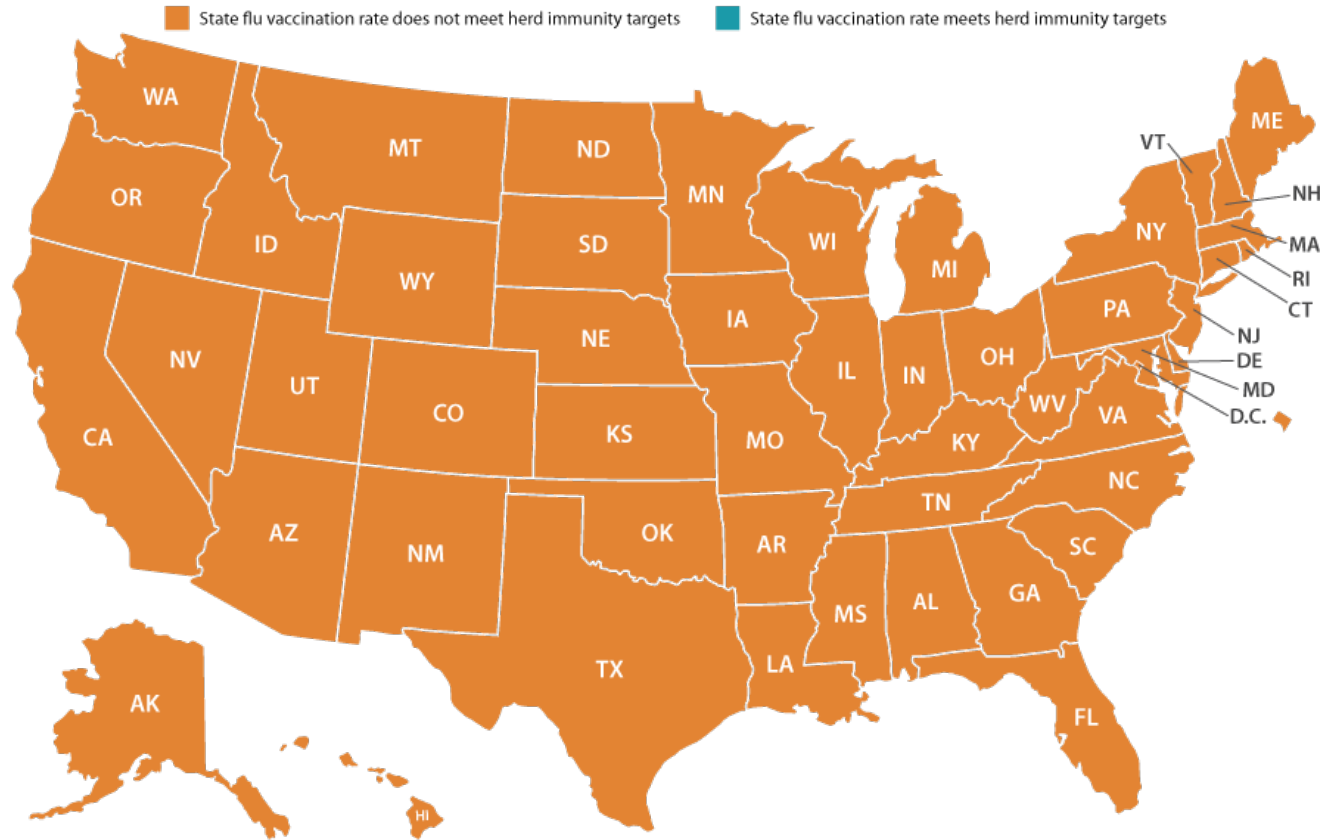
U.S. Rate
38.7%

Lower than U.S.
18 STATES

Equivalent to U.S.
7 STATES

Higher than U.S.
25 STATES & D.C.

State Flu Vaccination vs. COVID-19 Herd Immunity Target, Adults (2017-2019)



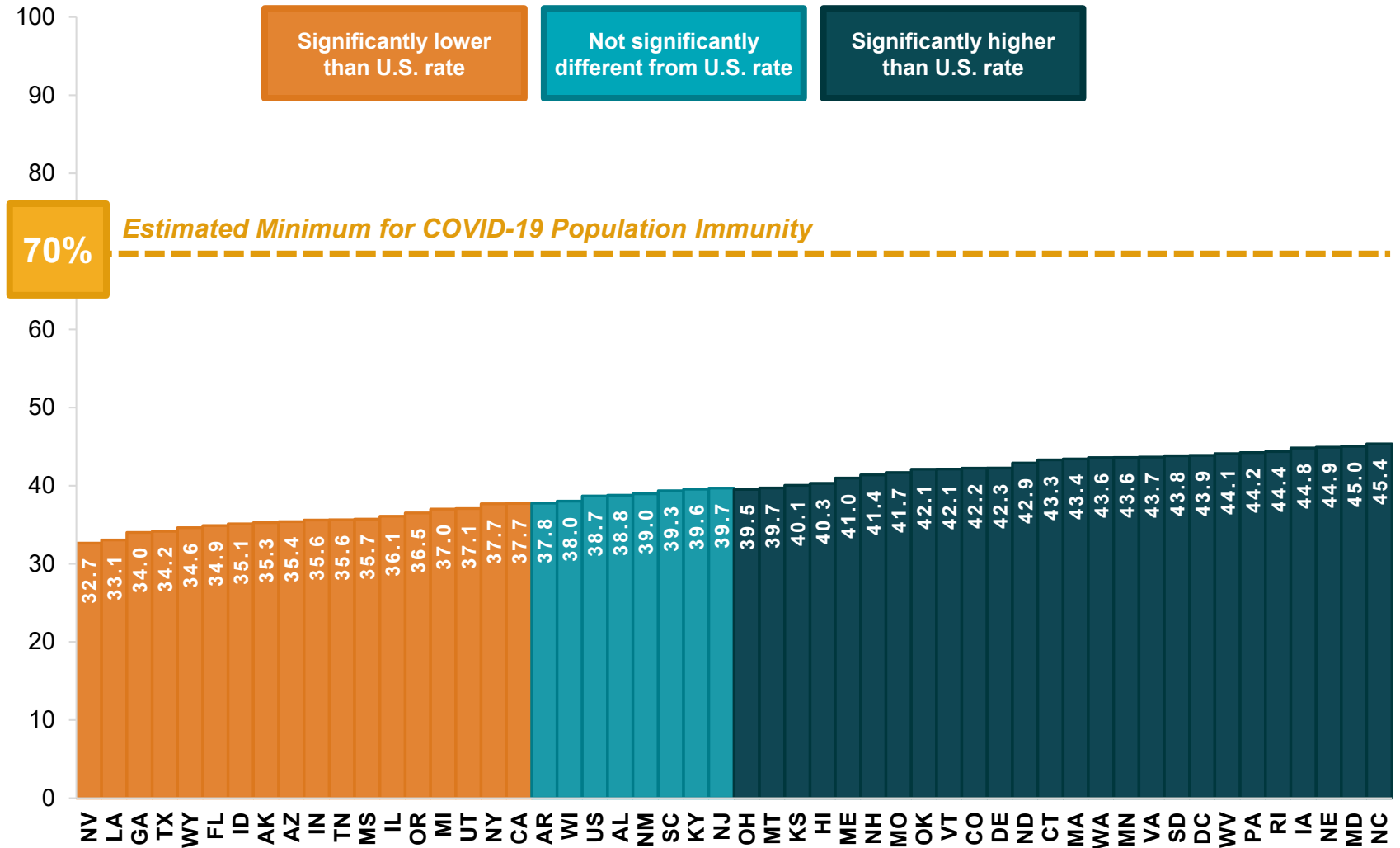
Target:
70%

Below target
50 STATES & D.C.

At target:
0 STATES

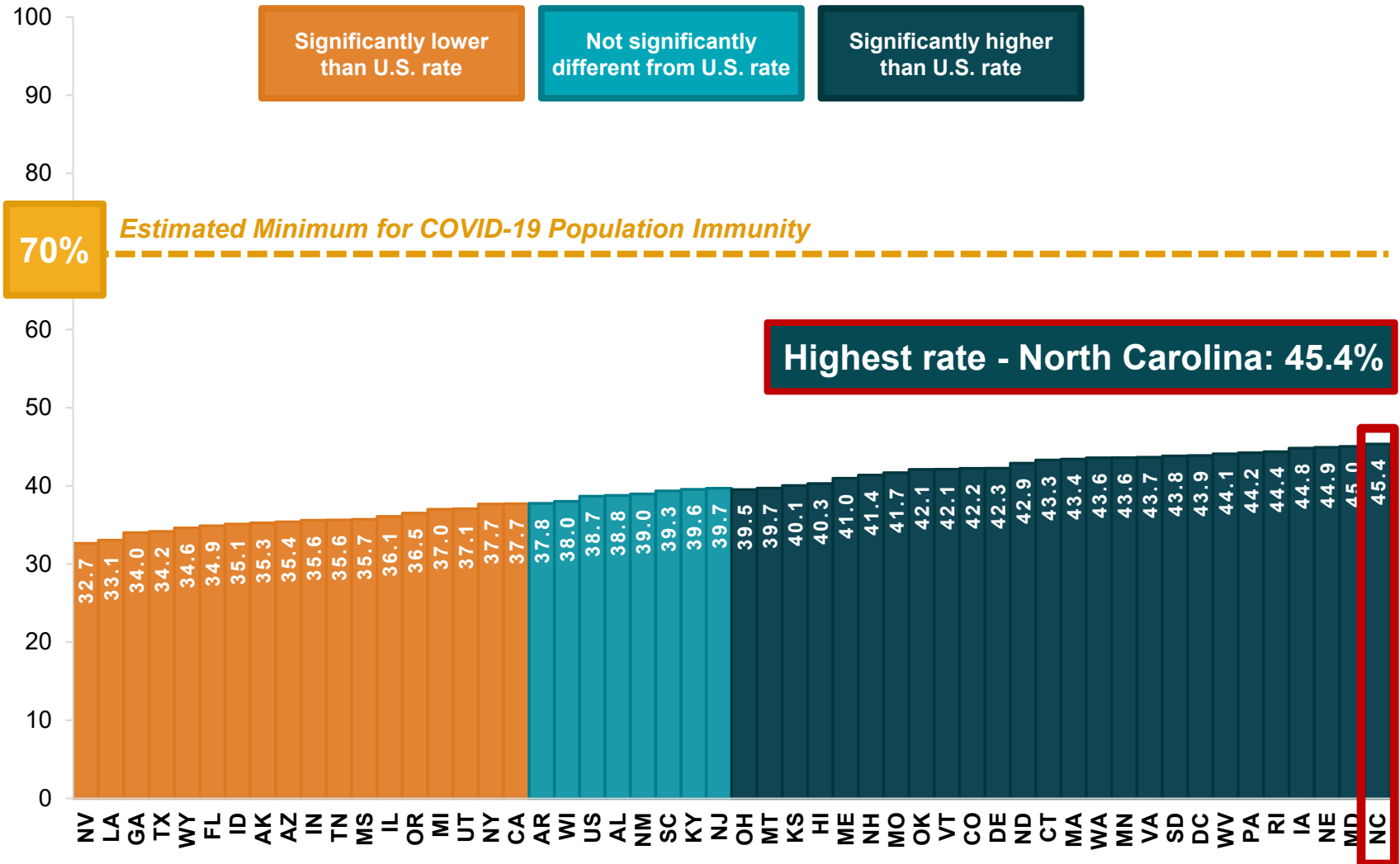
Above target:
0 STATES

State Flu Vaccination Rates, Adults



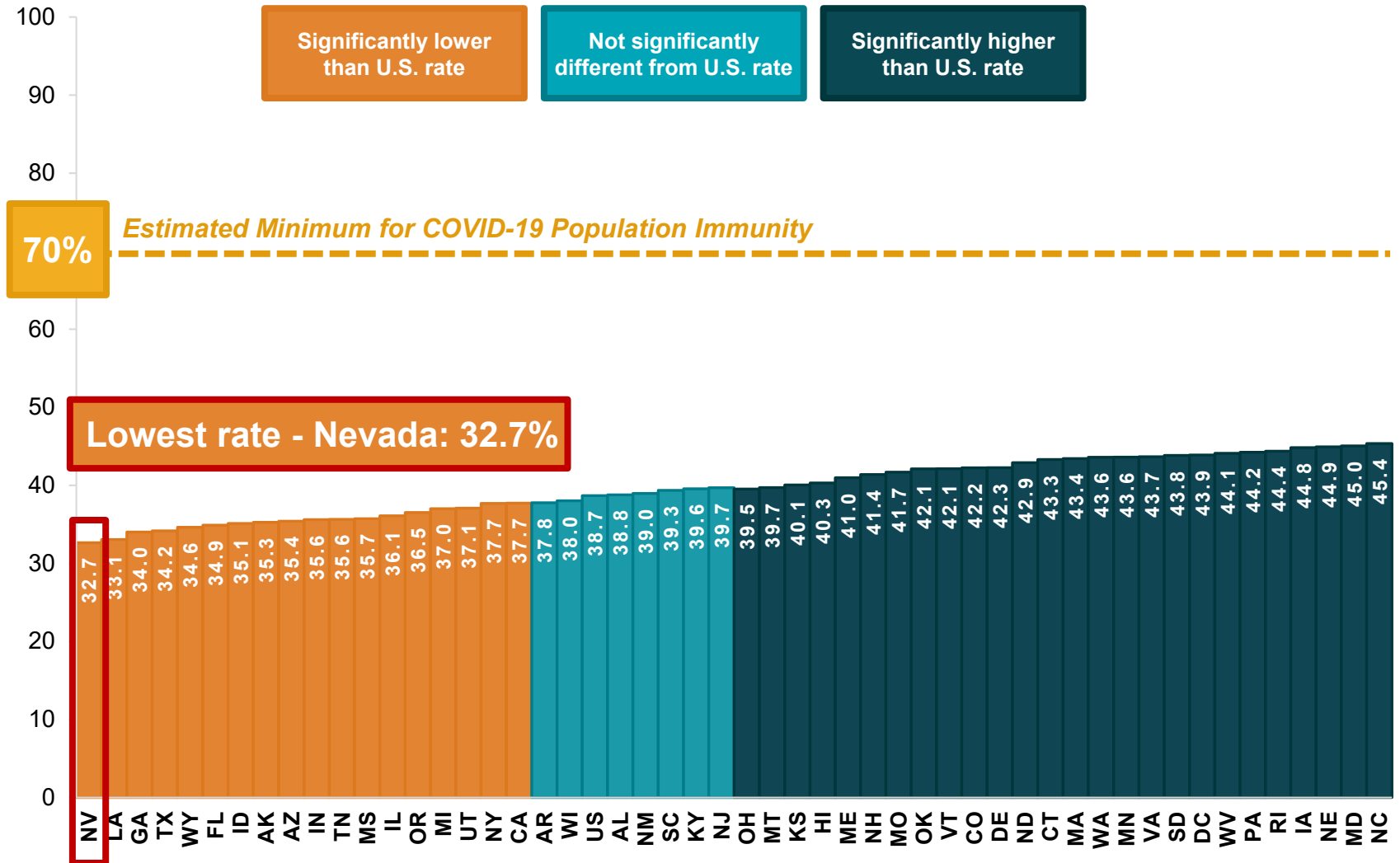
Source: SHADAC analysis of 2017-2019 BRFSS. Statistical testing conducted at the 95% level.

State Flu Vaccination Rates, Adults



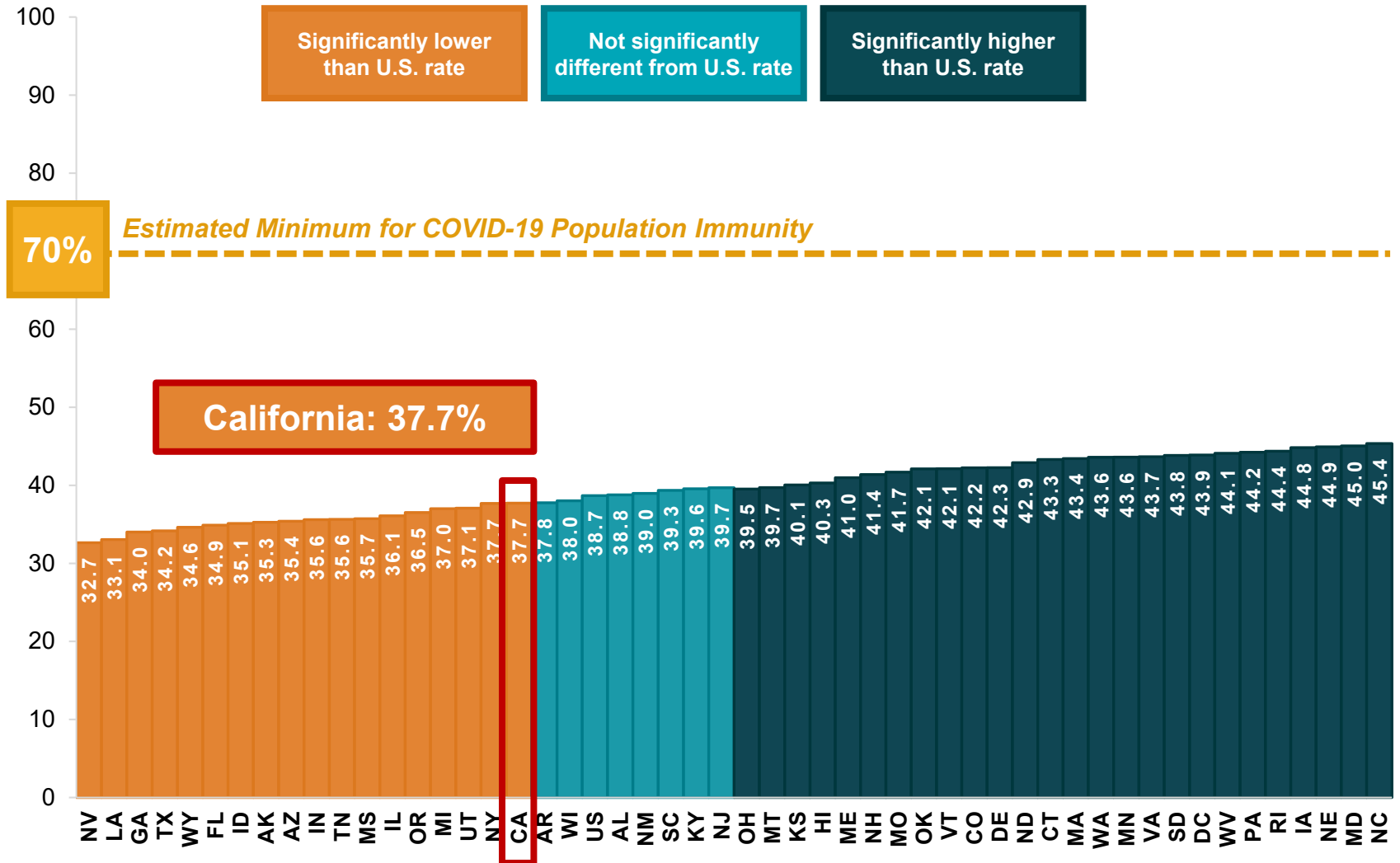
Source: SHADAC analysis of 2017-2019 BRFSS. Statistical testing conducted at the 95% level.

State Flu Vaccination Rates, Adults



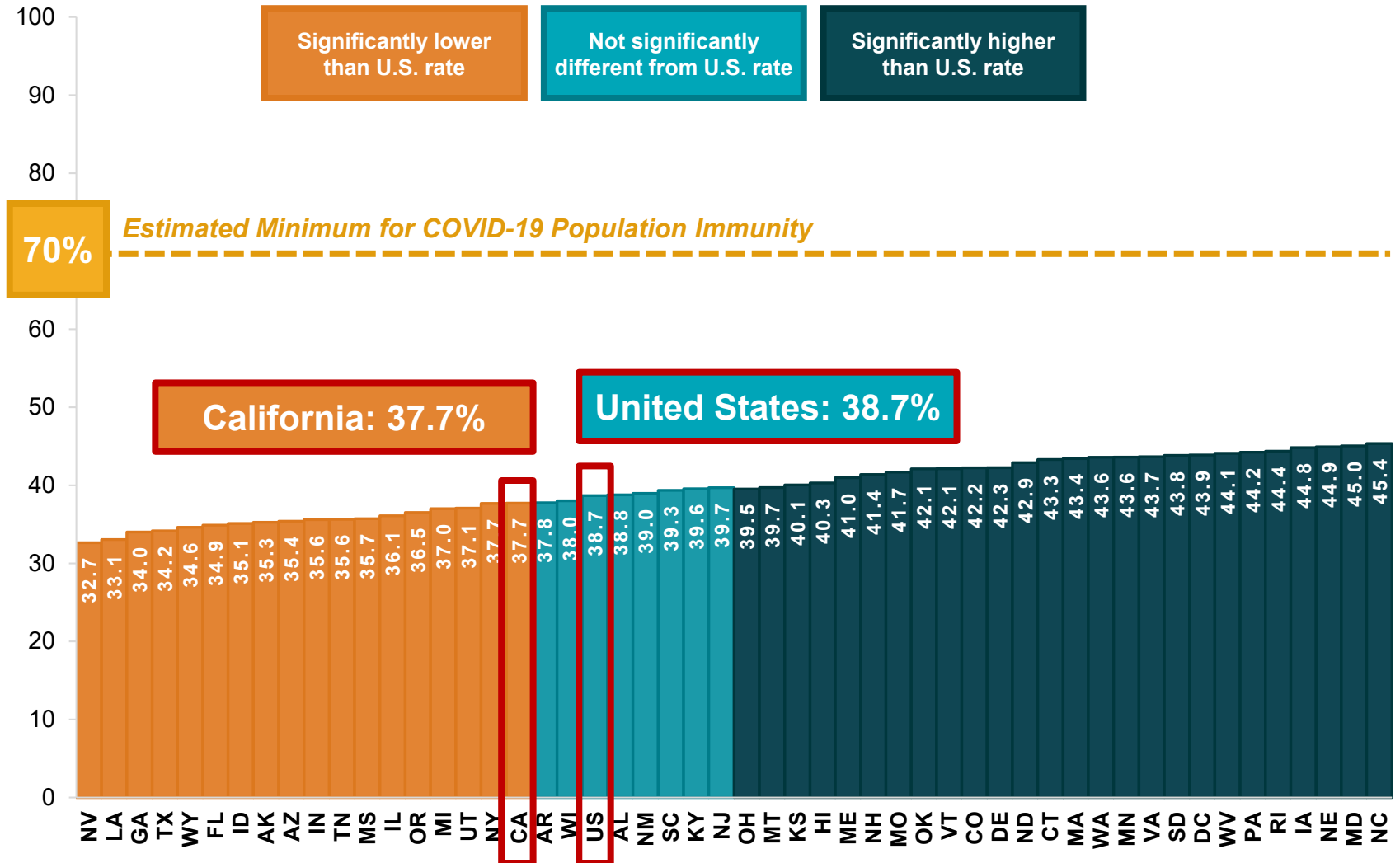
Source: SHADAC analysis of 2017-2019 BRFSS.
Statistical testing conducted at the 95% level.

State Flu Vaccination Rates, Adults



Source: SHADAC analysis of 2017-2019 BRFSS. Statistical testing conducted at the 95% level.

State Flu Vaccination Rates, Adults

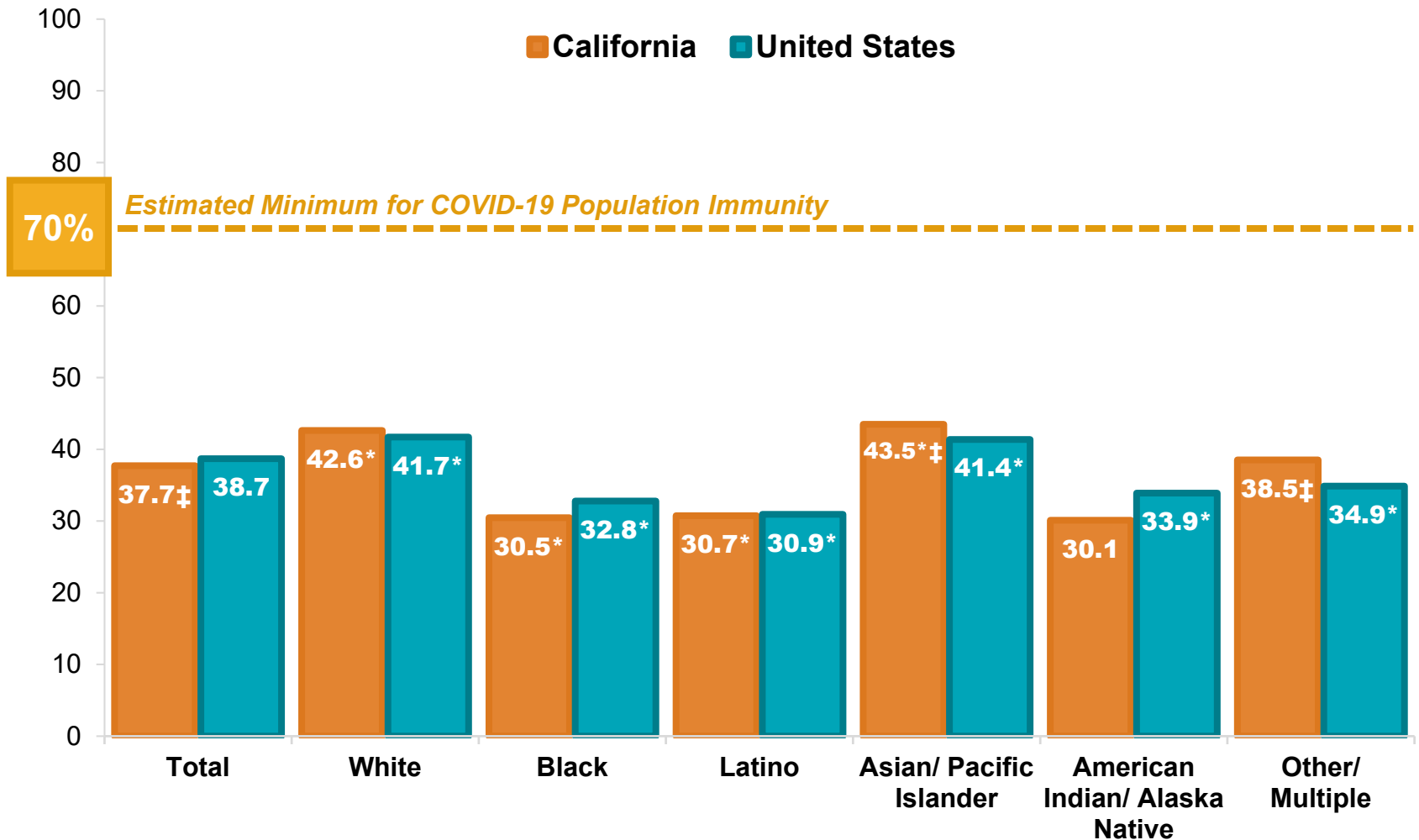


Source: SHADAC analysis of 2017-2019 BRFSS. Statistical testing conducted at the 95% level.

Flu Vaccination Rates

Demographic Groups and Access to Care

U.S. and California Flu Vaccination Rates, Adults by Race/Ethnicity

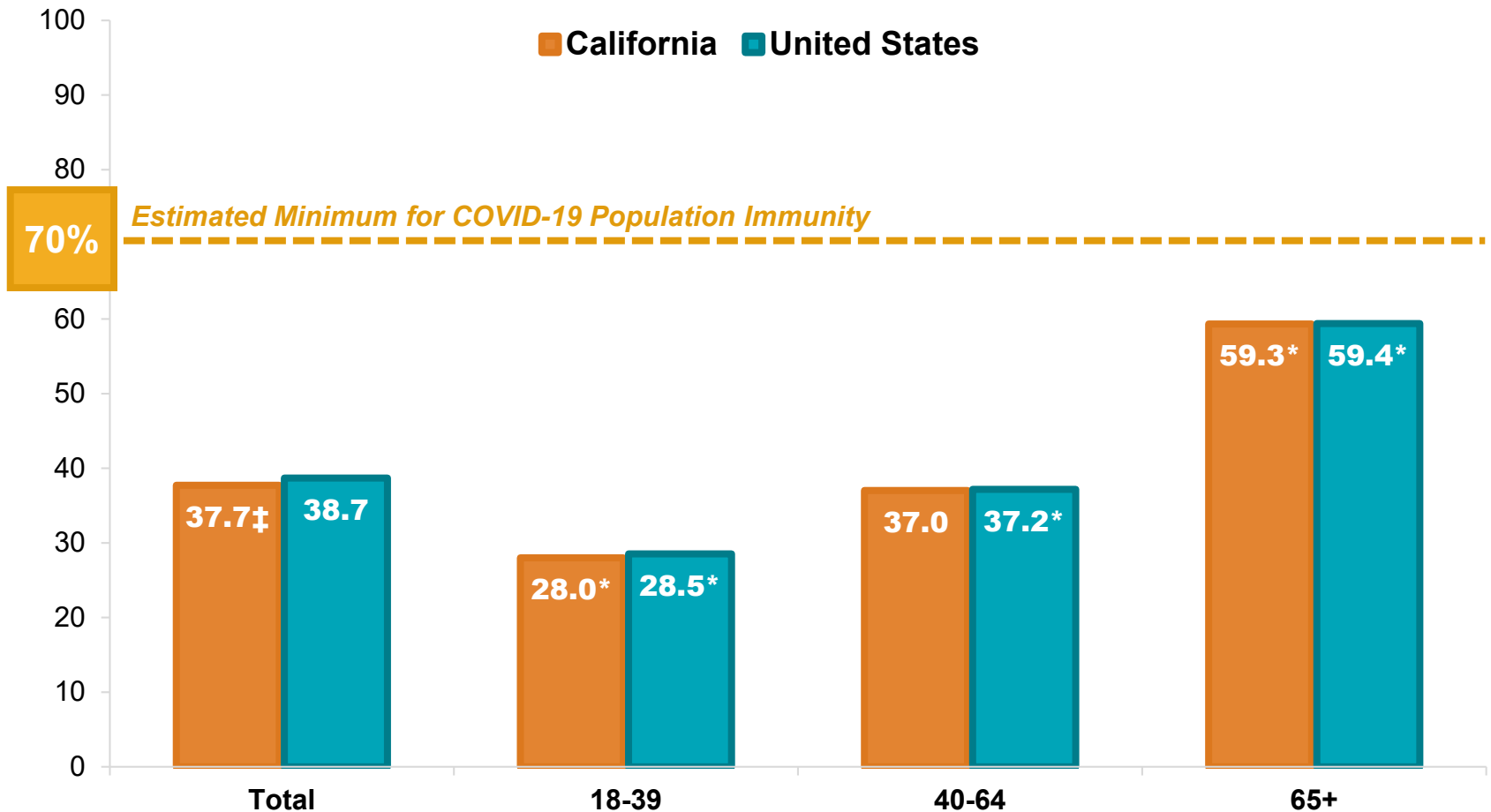


* Sub-group estimate significantly different from total population estimate at 95% level.

‡ California estimate significantly different from U.S. estimate at 95% level.

SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Age

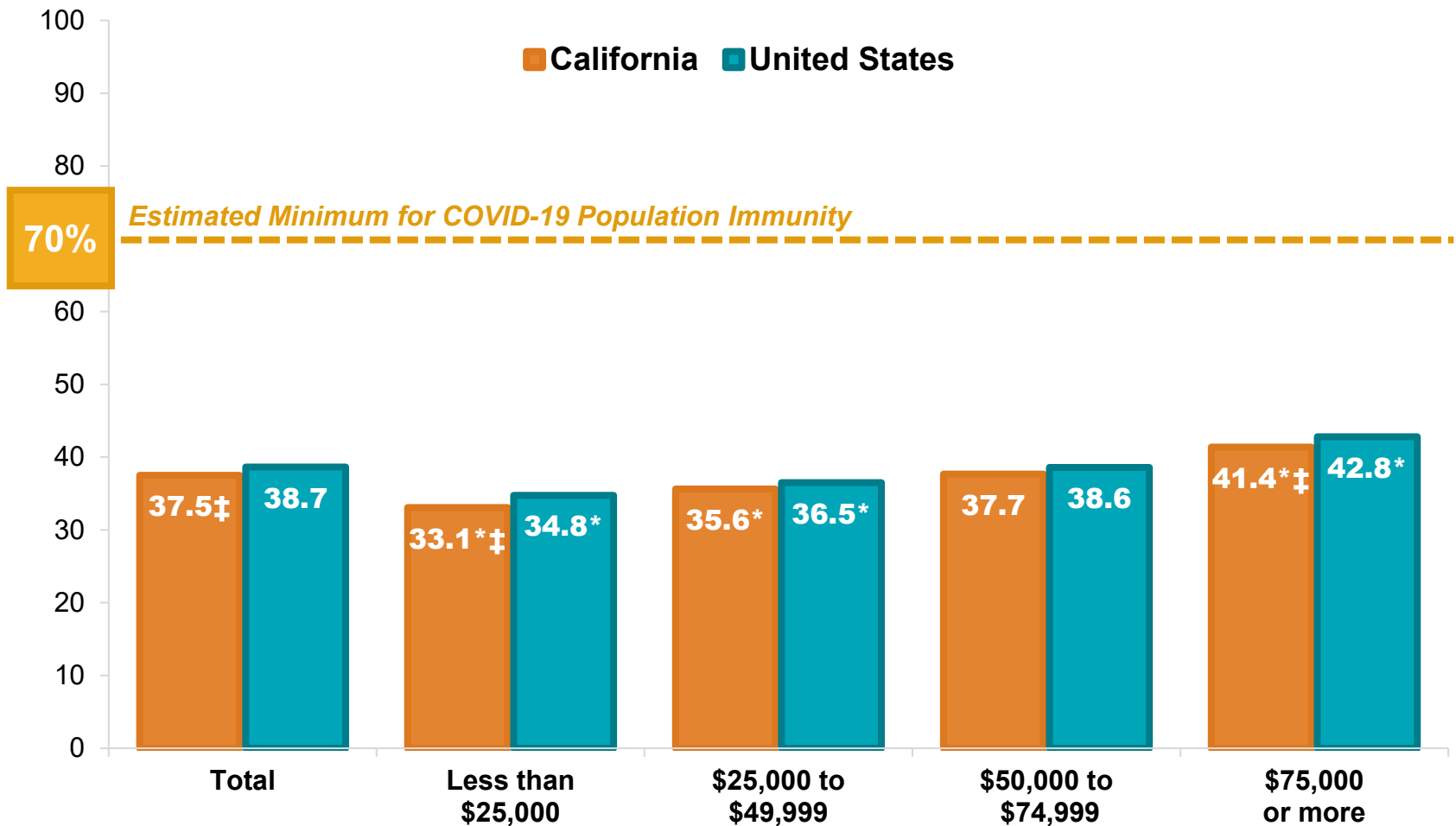


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SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Income

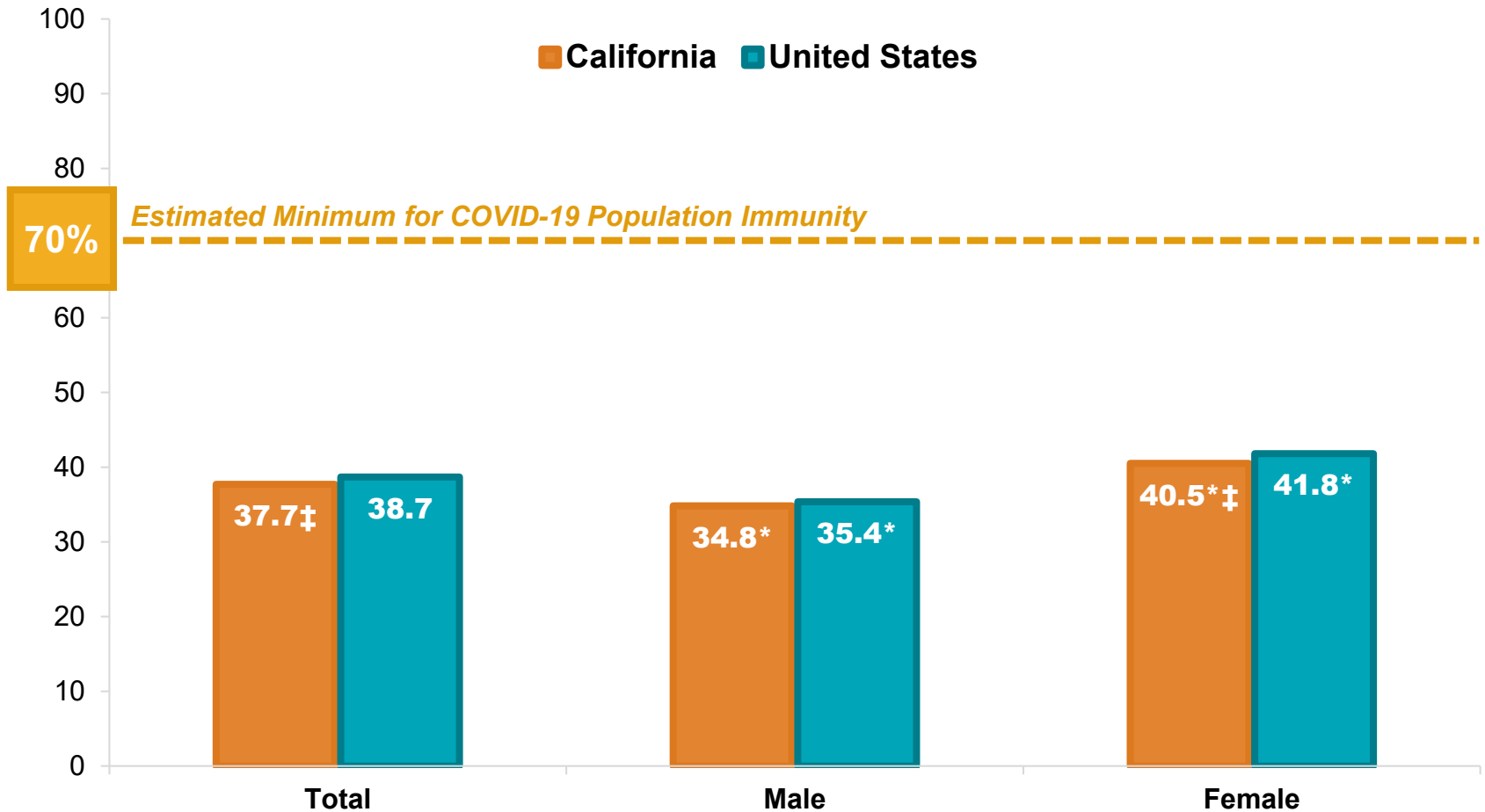


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SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Gender

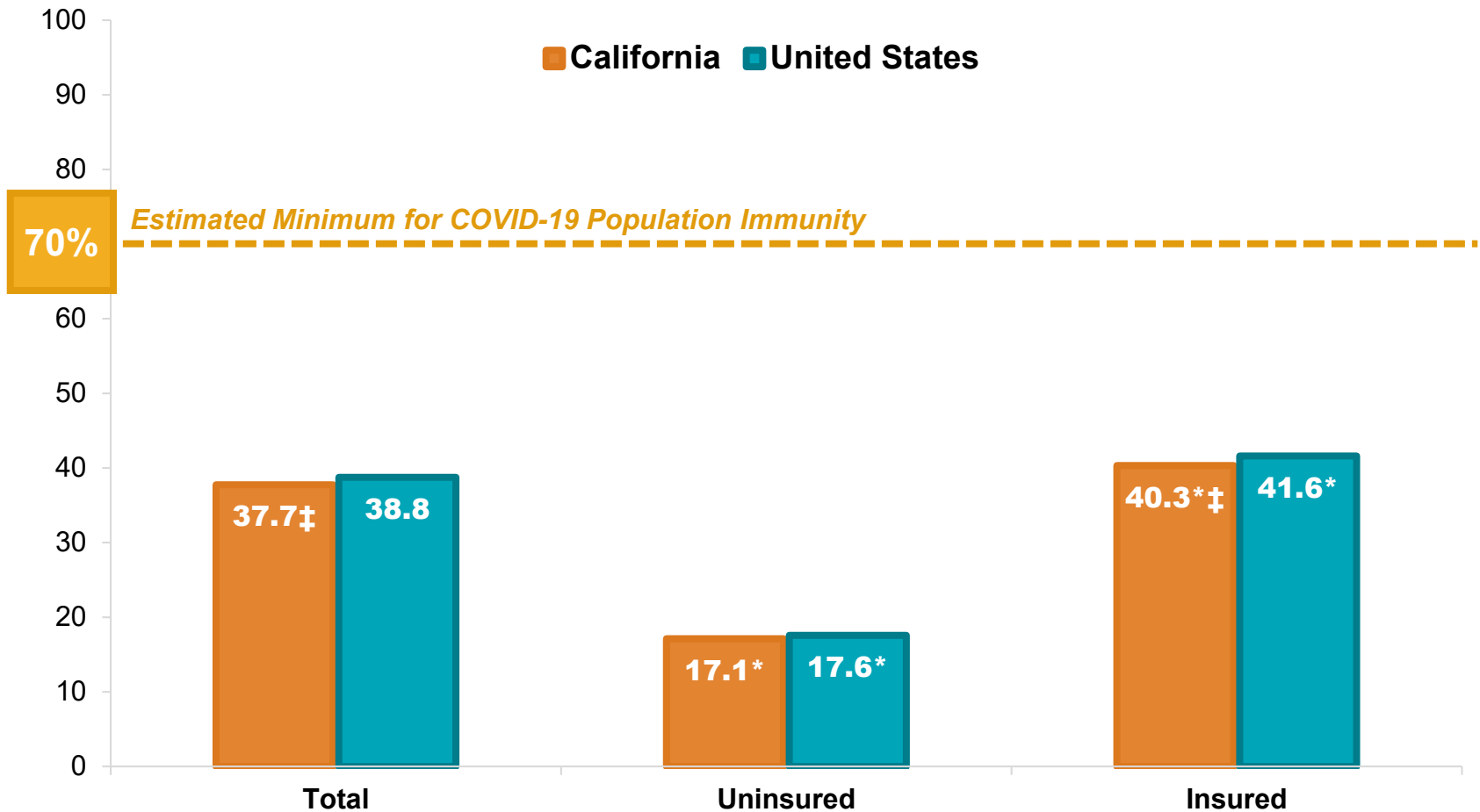


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SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Health Insurance Status

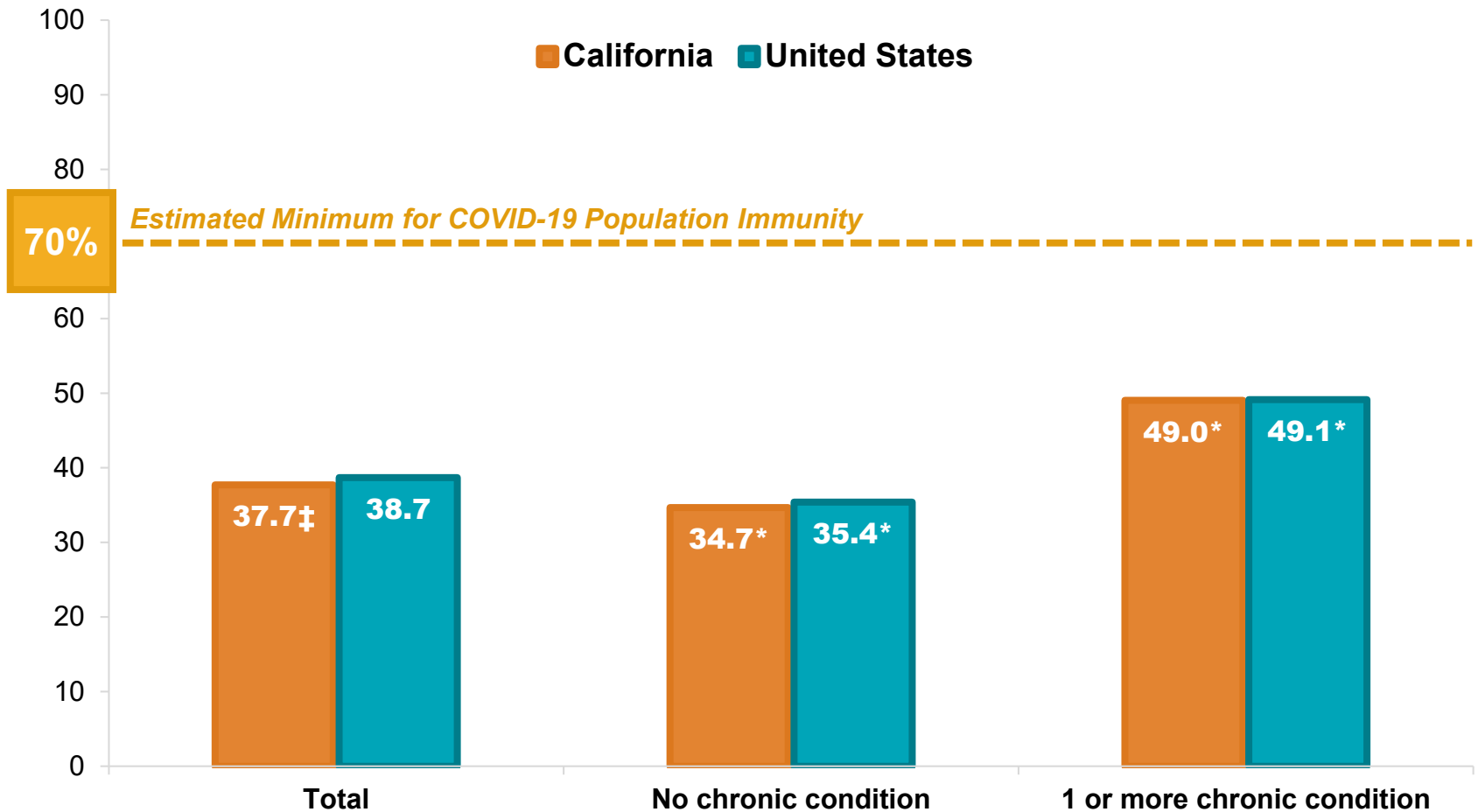


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SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Chronic Health Condition

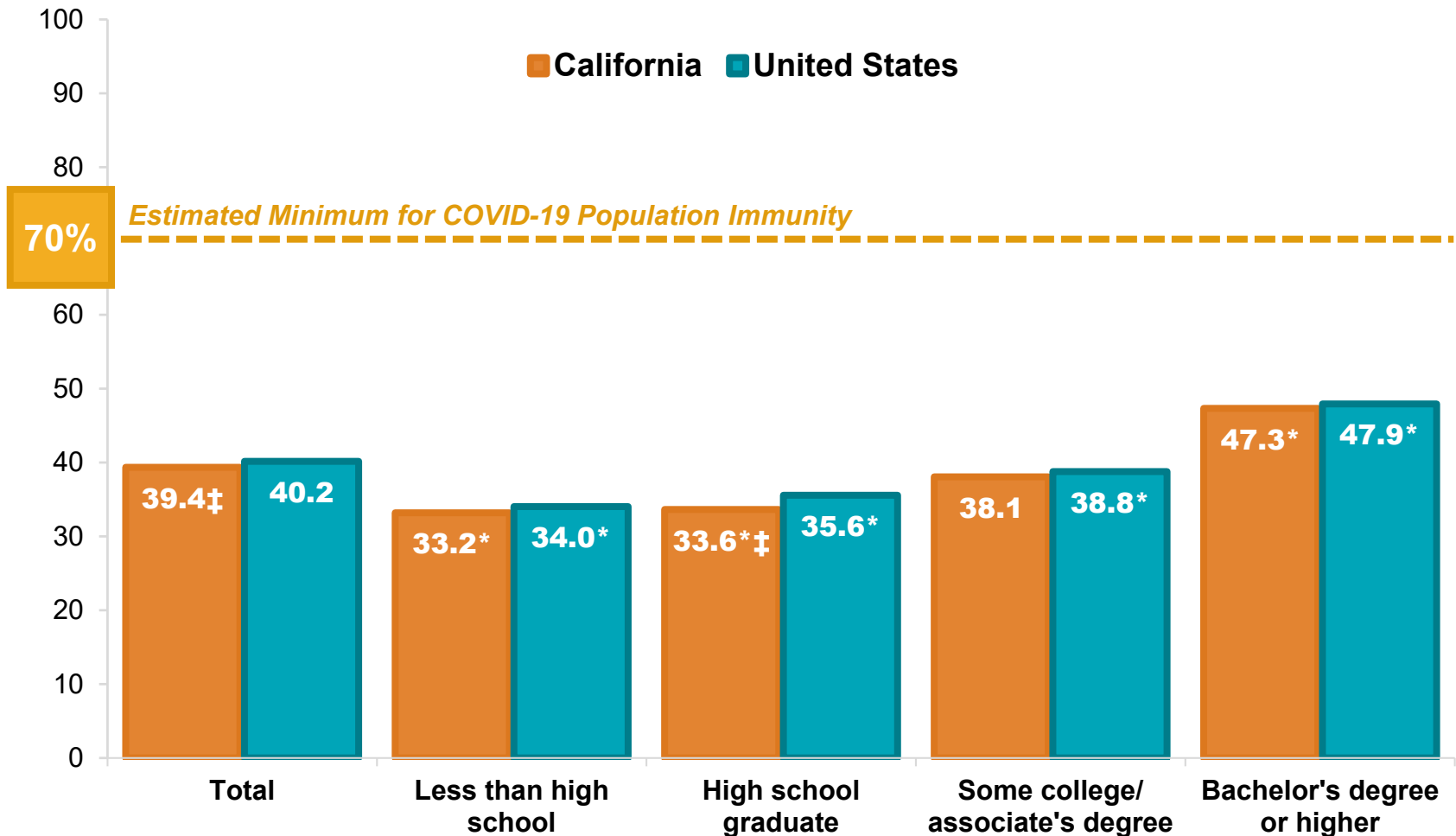


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SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Education (age 25+)

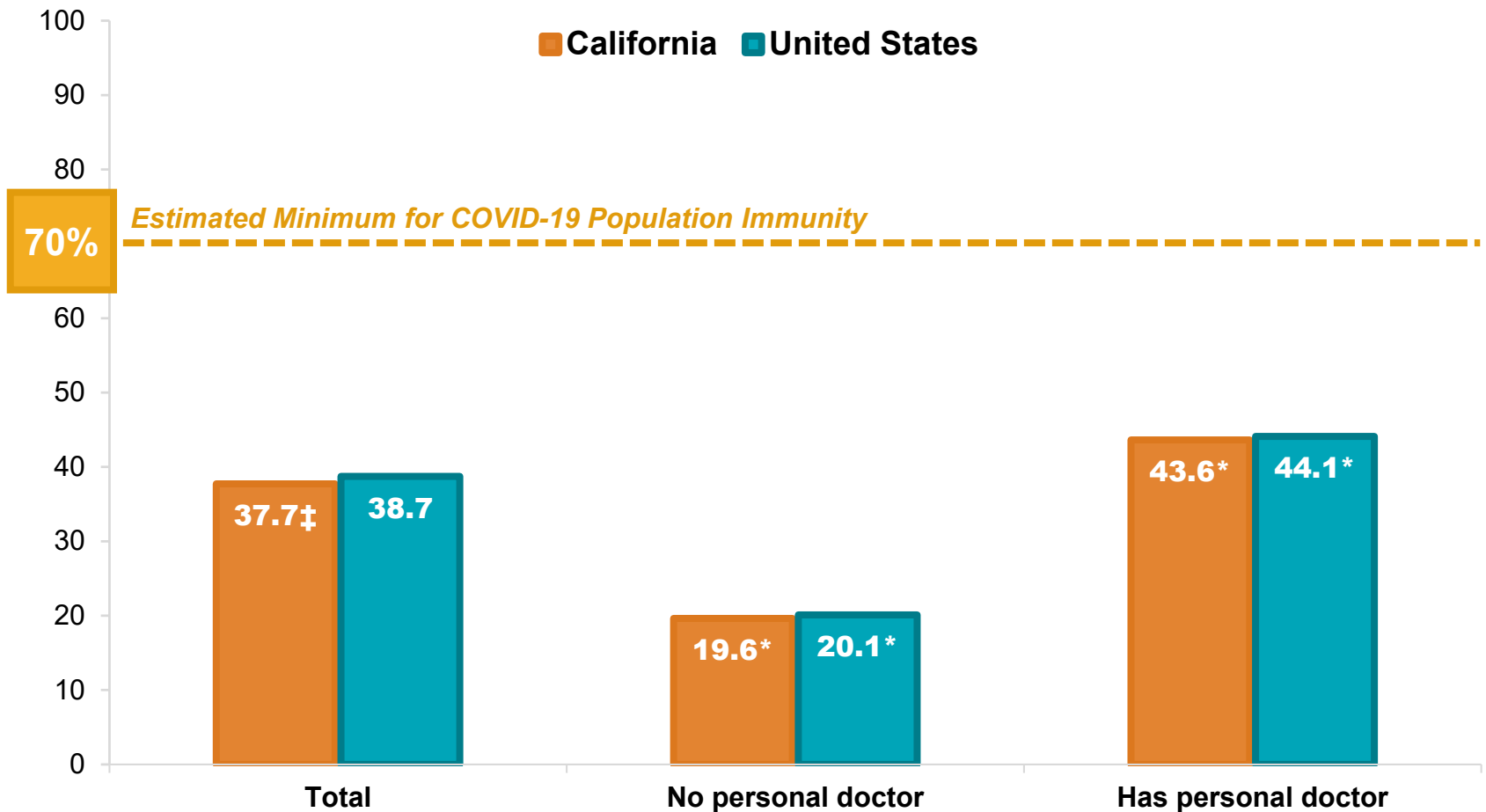


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SHADAC analysis of 2017-2019 BRFSS.

U.S. and California Flu Vaccination Rates, Adults by Personal Doctor



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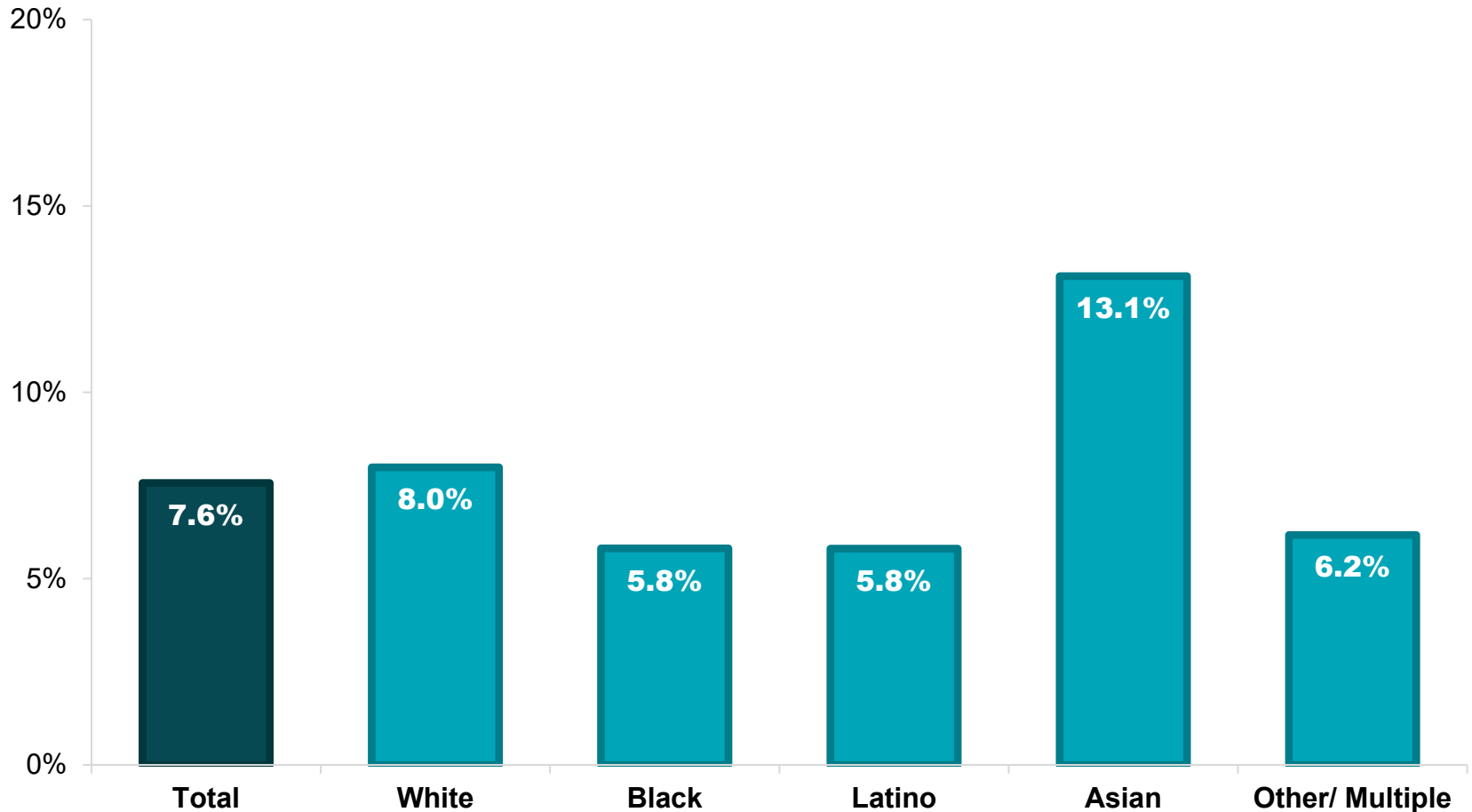
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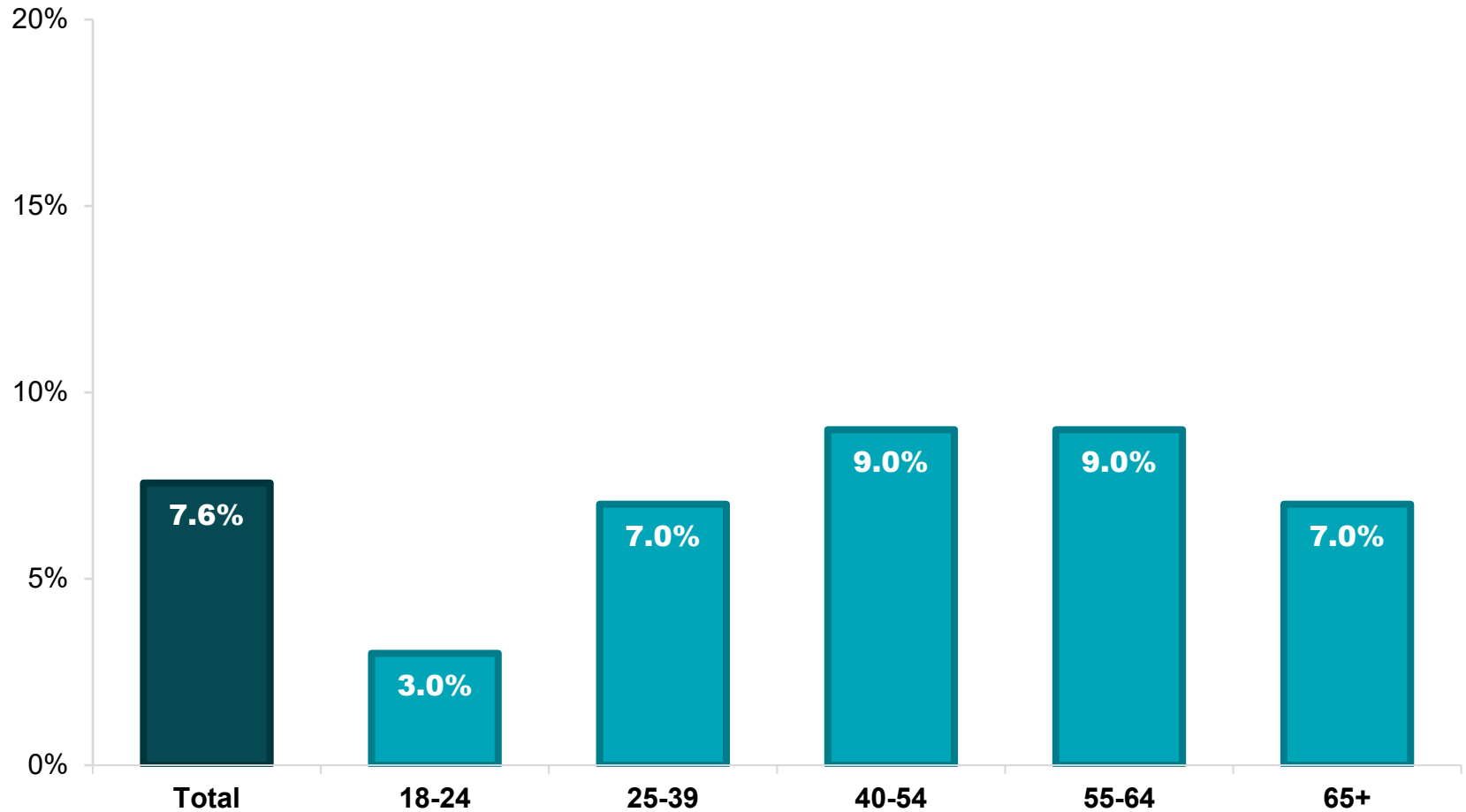
COVID-19 Vaccination Rates

Health Inequities in Early Data

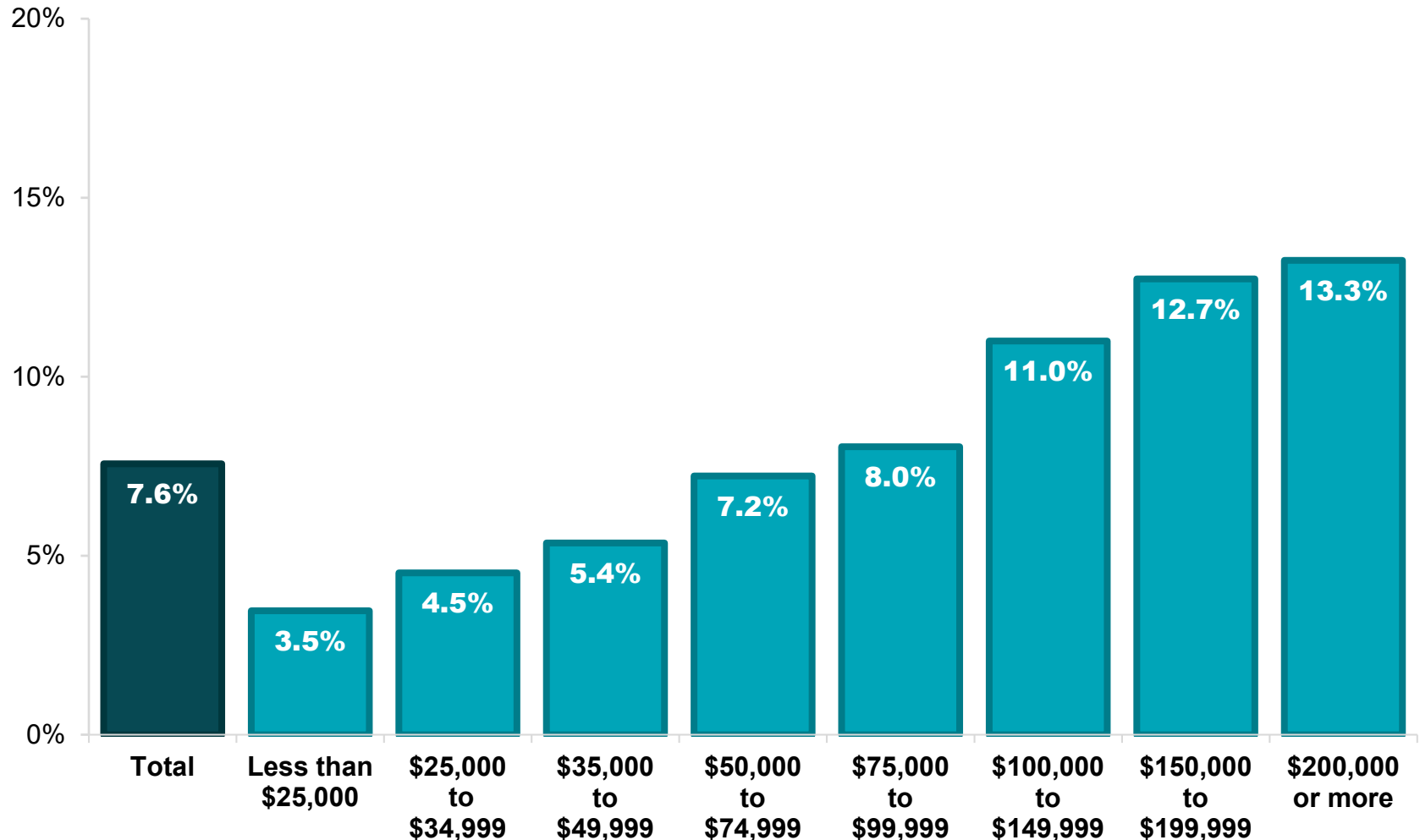
U.S. COVID-19 Vaccination Rates (1 or 2 doses) by Race/ Ethnicity, January 6-18, 2021



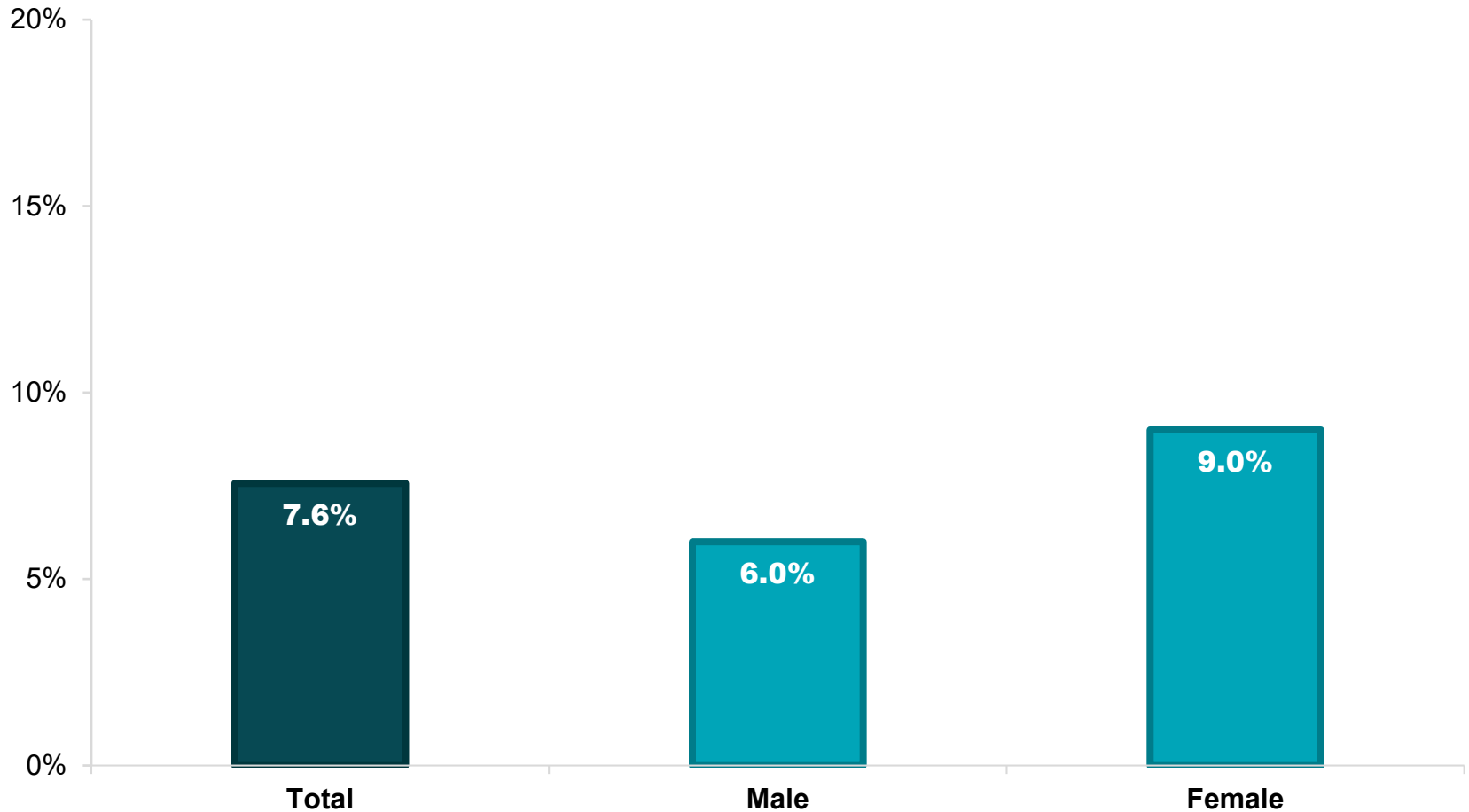
U.S. COVID-19 Vaccination Rates (1 or 2 doses) by Age, January 6-18, 2021



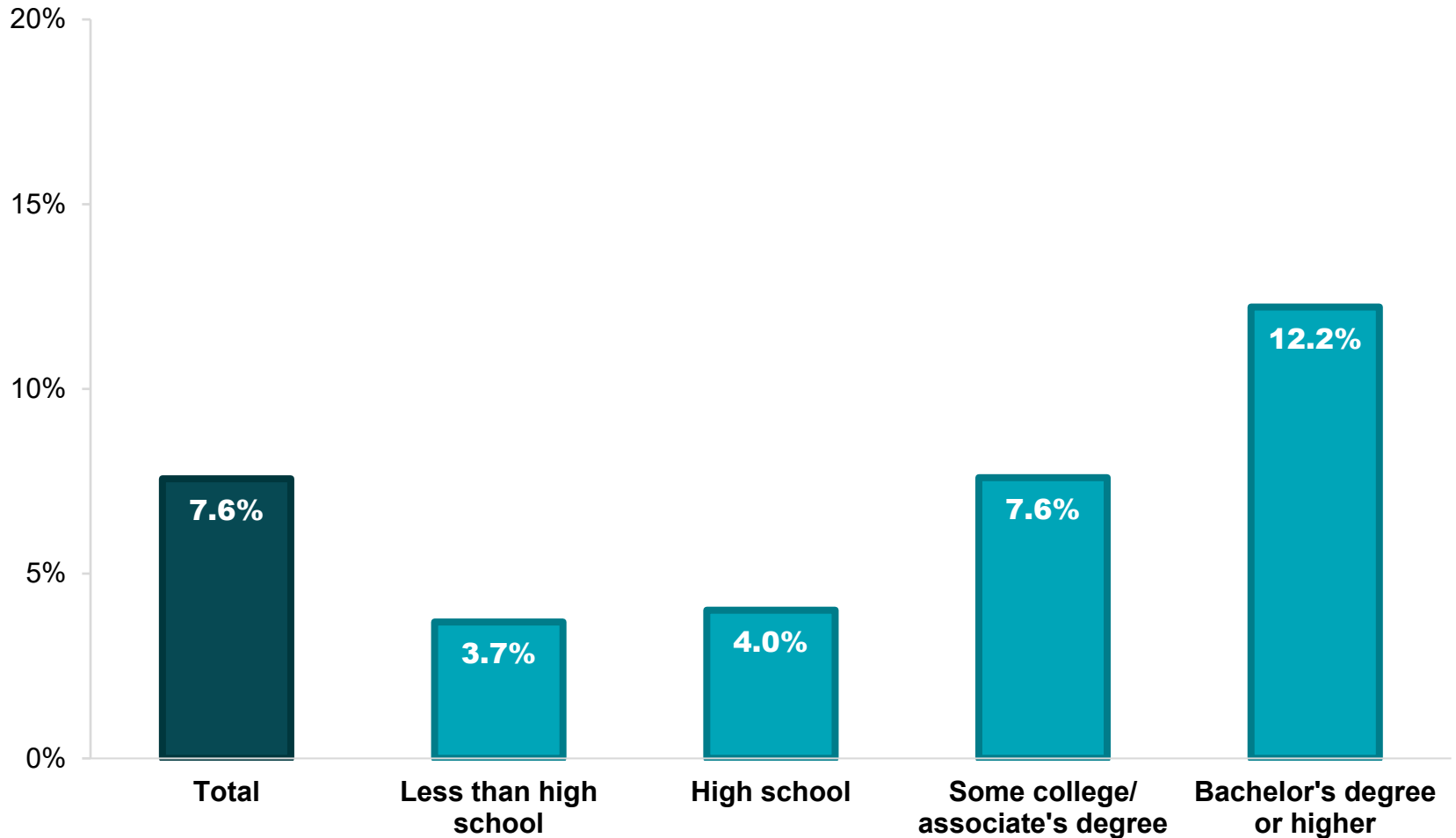
U.S. COVID-19 Vaccination Rates (1 or 2 doses) by Income, January 6-18, 2021



U.S. COVID-19 Vaccination Rates (1 or 2 doses) by Gender, January 6-18, 2021



U.S. COVID-19 Vaccination Rates (1 or 2 doses) by Education, January 6-18, 2021



Addressing Vaccination Inequities

Enhancing Health Equity

Race/ Ethnicity: Rebuild trust among maltreated and marginalized communities

Age: Special focus on persuading younger adults

Income: Develop ways to reach out and allay cost concerns of people with lower incomes

Gender: Craft messages with appeal to men

Memorandum Terminating the 40-year Tuskegee Syphilis Study

MEMORANDUM DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY

TO : Director
Center for Disease Control
THROUGH: Administrator, HS *MDH* 11/22 DATE: NOV 16 1972

FROM : Assistant Secretary for Health

SUBJECT: Termination of USPHS Study of Untreated Syphilis (the Tuskegee Study)

As recommended by the Tuskegee Syphilis Study Ad Hoc Advisory Panel, I have decided that the "Tuskegee Study" as a study of untreated syphilis must be terminated. I will advise you of the necessary steps to be taken to assure that appropriate medical care be given to all remaining participants in the "Tuskegee Study" as a part of the close-out phase of the project.

Merlin K. DuVal, M.D.
Merlin K. DuVal, M.D.

DHEW USPHS, HSMHA
72 NOV 29 PM 12:09
CDC, OFFICE OF THE
CENTER DIRECTOR

Credit: National Archives and Records Administration

Enhancing Health Equity

Health Insurance Status: Make vaccine easily available to people without health coverage

Chronic Health Conditions: Encourage healthy adults to obtain a vaccine

Education: Employ health literacy best-practices to ensure message is accessible regardless of education level

Health Care Access: Develop innovative ways to reach people limited or no ties to formal public health and health care systems



Thank you

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University of Minnesota, Minneapolis
www.SHADAC.org



Questions for Presenters?



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Lynn Blewett, PhD
SHADAC Director

Any other questions or requests:

Email shadac@umn.edu

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