

Aligning Systems for Equitable Vaccination Access

Study of the Aging and Disability Vaccination Collaborative (ADVC)

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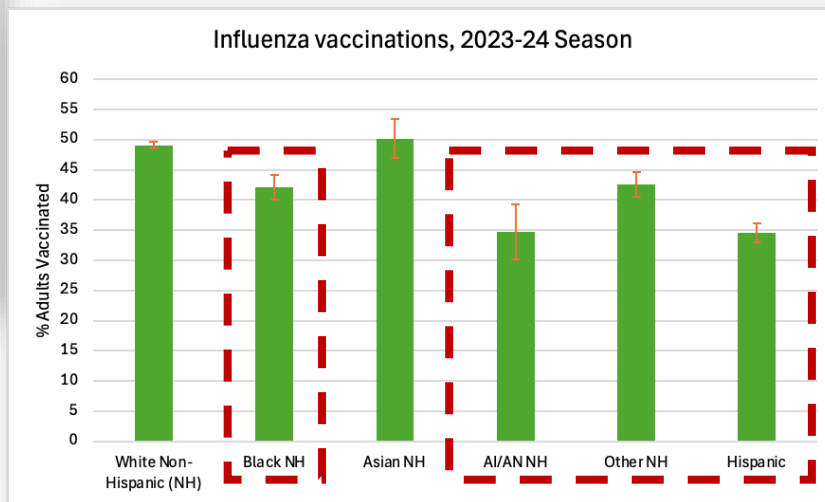
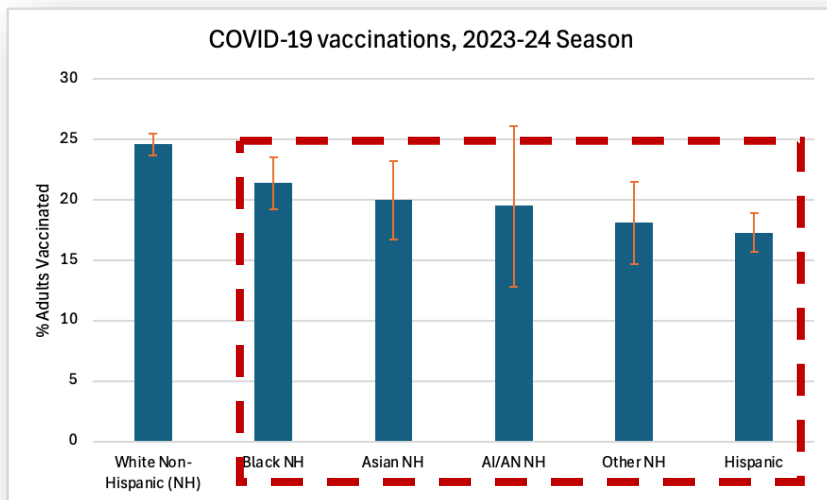
January 8, 2024

Seasonal vaccination: health impacts

- Deaths:
 - Influenza: 28,000
 - ~70% older adults
 - COVID-19: 76,446
 - ~90% older adults
- Substantial racial/ethnic inequities exist
- Influenza vaccination reduces the risk of:
 - Hospitalization: ↓ ~40%
 - Severe illness: ↓ ≥80%
- COVID-19 vaccination reduces the risk of:
 - Severe illness: ↓ ~50%
 - Long COVID
- Vaccination rates among older adults (2023-2024):
 - Influenza: ~70%
 - COVID: ~40-50%



Continued disparities in vaccination



Source: CDC RespVaxView (NIS-COVID & BRFSS)

Potential mechanisms of systemic racism

Intent to pursue
vaccination

Access to
vaccination

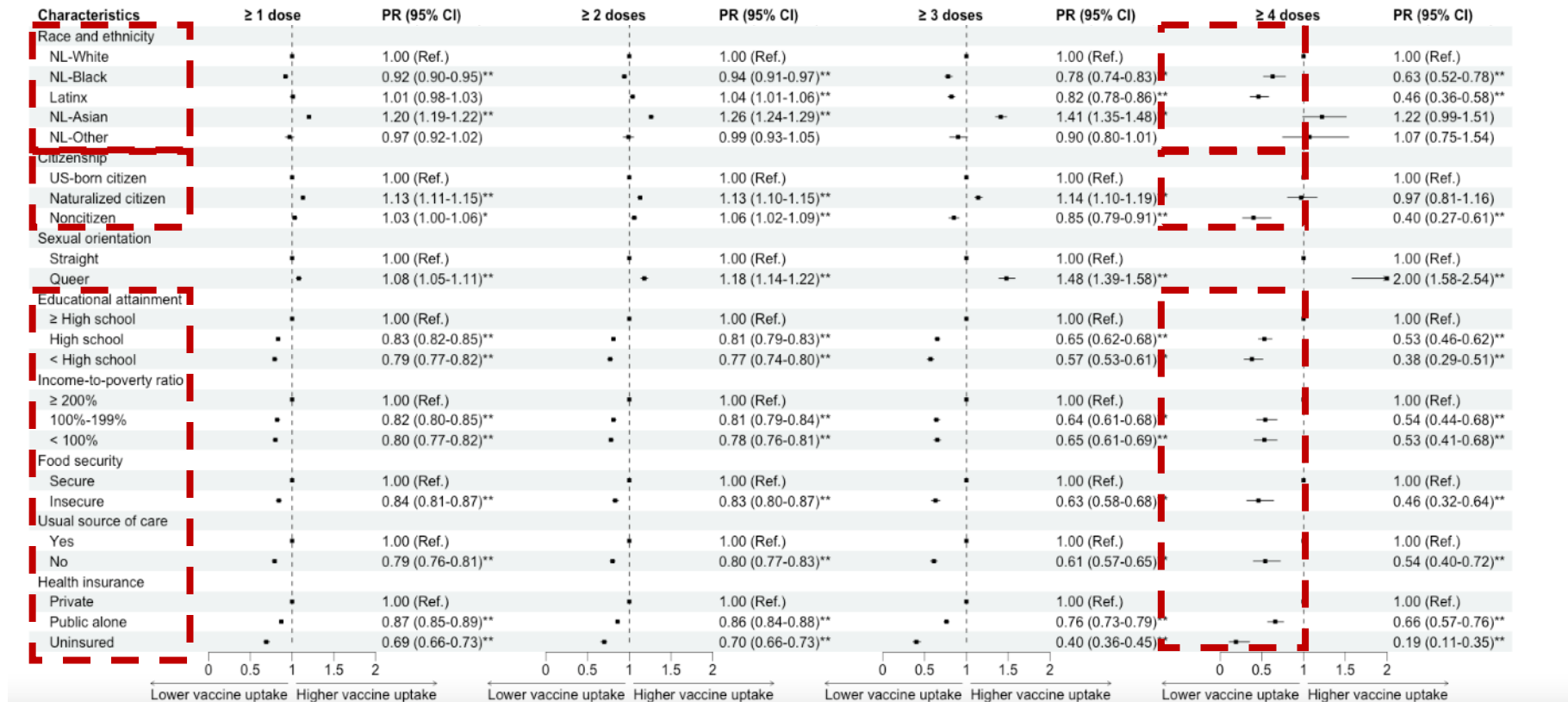
Getting
vaccinated

Targeted misinformation,
insufficient health information in
patients' preferred languages,
discrimination, mistrust based on
past racism

Racialized distribution of
economic and practical barriers
to accessing vaccination (e.g.,
time scarcity, financial barriers,
etc.)



Vaccination inequities across SDOH




Source: [Guadamuz, 2023.](#)

System alignment to support access


- Emerging evidence that vaccination strategies involving community-based organizations and assistance that spans multiple needs can support access and equity.

Vaccine 41 (2023) 1994–2002

Contents lists available at [ScienceDirect](#)

 **Vaccine**

journal homepage: www.elsevier.com/locate/vaccine




Trusted messengers and trusted messages: The role for community-based organizations in promoting COVID-19 and routine immunizations






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RESEARCH ARTICLE



Greater Covid-19 vaccine uptake among enrollees offered health and social needs case management: Results from a randomized trial

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HSR Health Services Research

Rationale and priorities for ADVC

- Older adults and people with disabilities face disproportionate risks from respiratory illness but relatively low uptake of updated vaccines.
- ADVC intended to **prioritize reaching people who have faced additional barriers**, including aspects of identity such as:
 - Race/ ethnicity
 - LGBTQ+
 - At risk of institutionalization
 - Have low income
 - Limited English proficiency
 - Live in rural areas



System Alignment Approach: ADVC



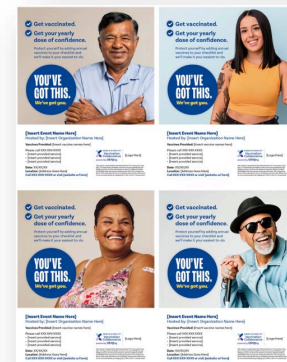
\$75 M federal
grant



Hosts ADVC
(begins 2023)

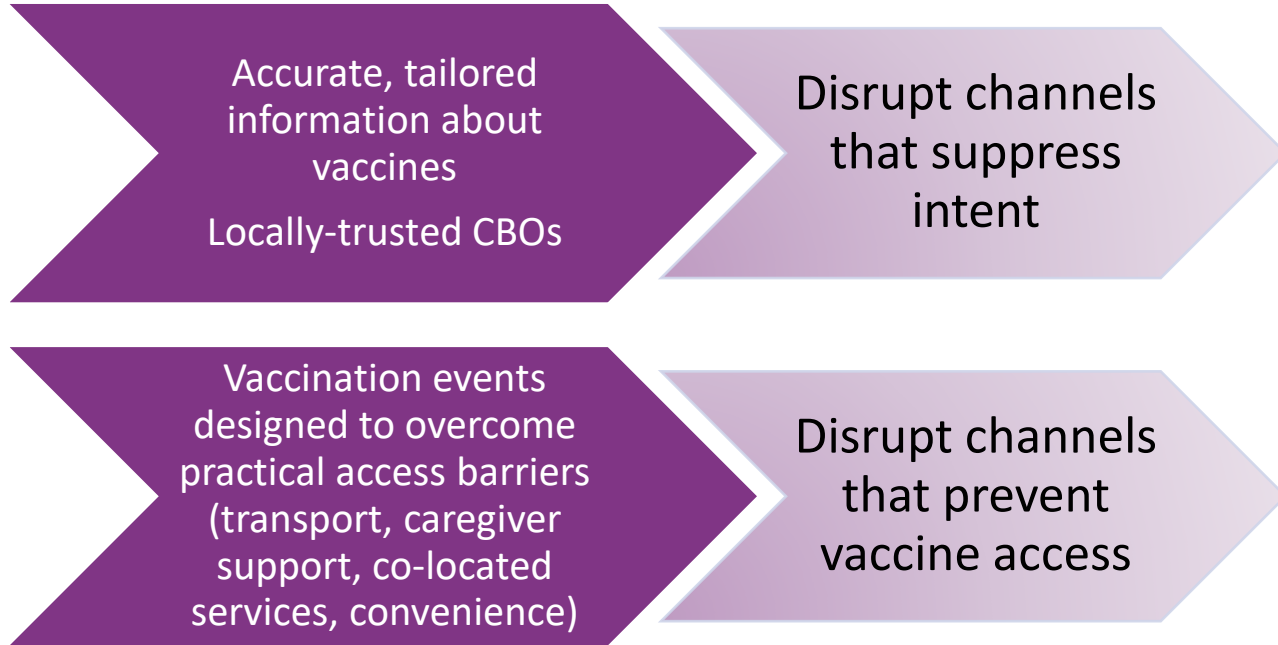


Funding to
AAAs, CILs, &
other nonprofits



Vaccination
events, support
& education
(2023-25)

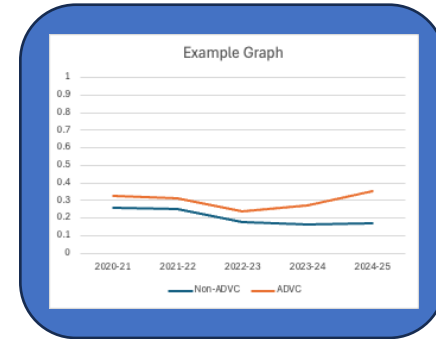
Potential to disrupt racial inequities



Determining Impact



Aim 1. Descriptive analysis
examine activities and
partnerships associated with
increased vaccination of
minoritized populations



Aim 2. Quasi-experimental
study testing whether
vaccination rates for
minoritized racial/ ethnic
populations increased in
ADVC-recipient counties,
after ADVC began.

Today: Some preliminary data

- Understanding where ADVc was implemented.
- Description of vaccinations given in 2023-24, using data on:
 - Characteristics of vaccine recipients
 - Strategies used at the event where a vaccination occurred:
 - Activities to encourage engagement
 - Other services offered alongside vaccination
 - Types of partner organizations involved in the event



Purpose: Illustrate what ADVc has done and process data available for further analysis (not yet trying to draw conclusions or infer causality)

Comparison of counties exposed to ADVC

- ADVC counties generally more urbanized, more diverse in comparison to non-ADVC counties
- Also somewhat higher rates of COVID-19 vaccination

	ADVC Counties (n=165, 5%)		Non-ADVC Counties (n=2969, 95%)		T-test
	%	SD	%	SD	p-value
Demographic Characteristics					
Population 65+	21.0	3.7	23.0	4.7	0.00
Population Below Poverty Line	12.5	4.4	12.8	6.2	0.00
Race / Ethnicity					
White	60.1	15.9	69.8	17.0	0.00
Black or African American	14.0	13.2	11.3	14.5	0.00
American Indian / Alaska Native	0.7	3.9	0.8	8.0	0.15
Asian	8.0	5.2	4.4	2.4	0.00
Native Hawaiian / Other Pacific Islander	0.2	0.3	0.1	0.2	0.00
Some other race	7.5	4.0	4.6	3.9	0.00
Two or more races	7.5	2.8	6.4	3.5	0.00
Hispanic or Latino origin	21.5	12.8	16.7	14.2	0.02
White alone, not Hispanic or Latino	50.7	18.7	61.5	20.3	0.00
COVID-19 Vaccinations					
Administered Dose 1 - 65+	87.4	24.5	85.5	27.2	0.00
Booster Received - 65+	62.9	13.7	58.4	13.8	0.24
Bivalent Booster - 65+	44.2	15.2	32.1	14.0	0.10
County Status					Chi-square
Metro/Non-metro					
Metro	82.4	-	35.4	-	0.00
Non-metro	17.7	-	64.6	-	

Vaccine recipients, 2023-24

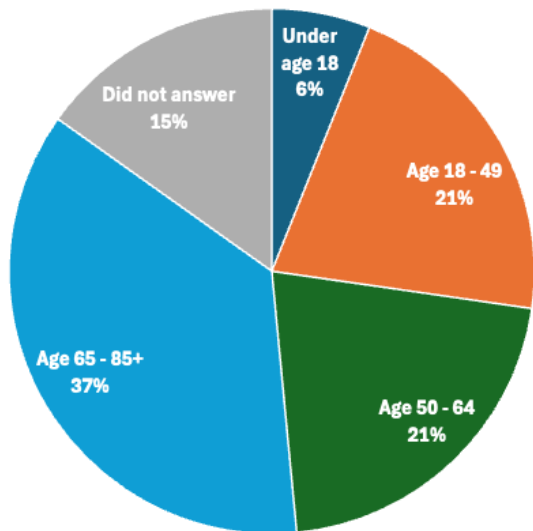
- ADVC grantees documented **276,265** vaccines administered in the 2023-24 vaccination year
- **238,718** individuals vaccinated (some people received multiple vaccinations)

Vaccine type	Number administered	% of recipients who received
Flu vaccine	146,335	61%
Covid 1st dose	10,502	4%
Covid 2 nd + dose	90,749	38%
Other	28,679	12%
Total	276,265	100%

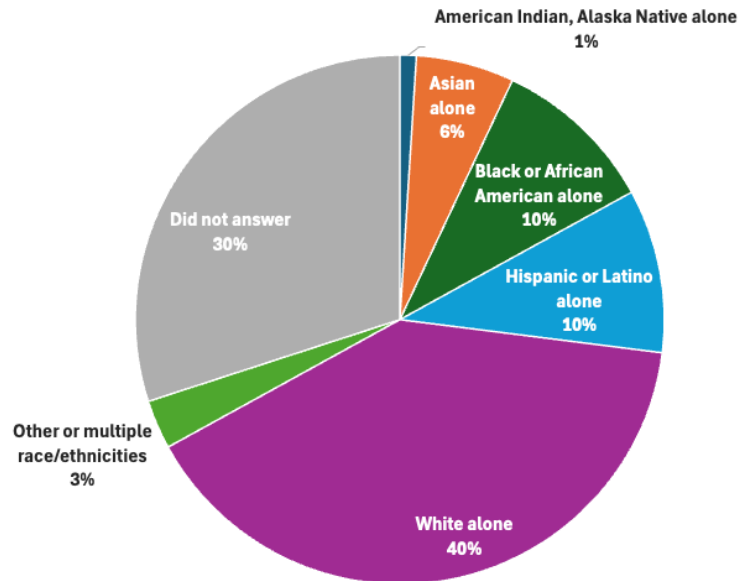
Vaccine recipients, self-reported characteristics

N = 238,718 individuals

Vaccination Recipients by Age

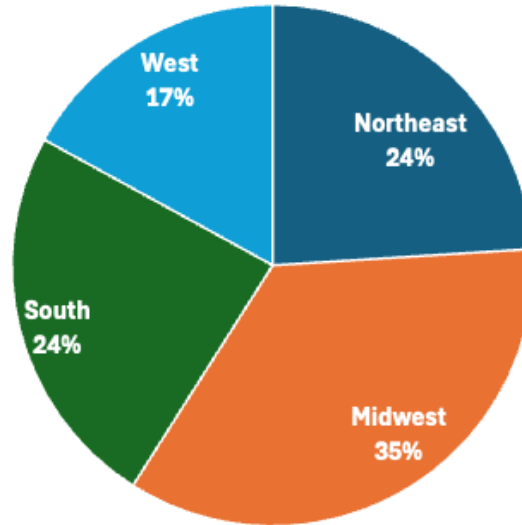


Vaccination Recipients by Race/ Ethnicity



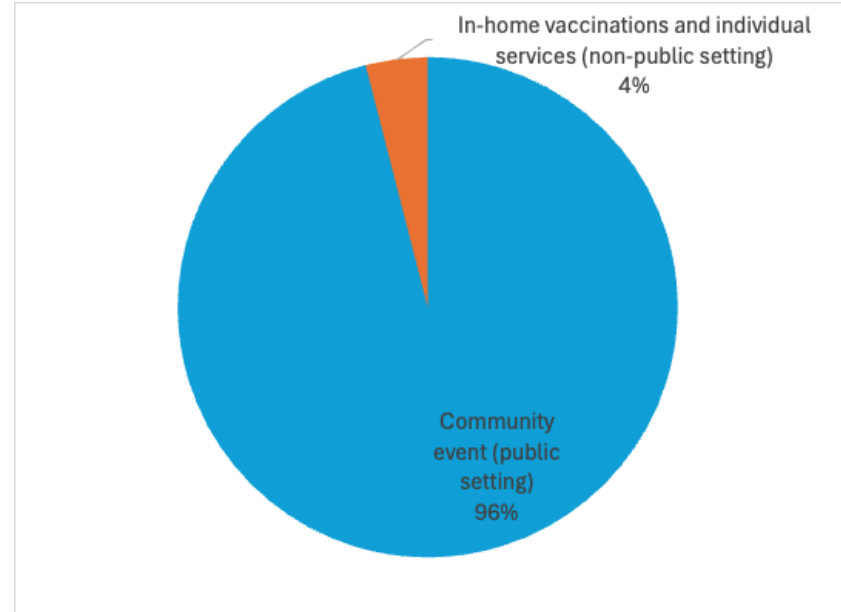
Distribution of vaccine recipients across U.S.

Percent of Vaccine Recipients by Census Region

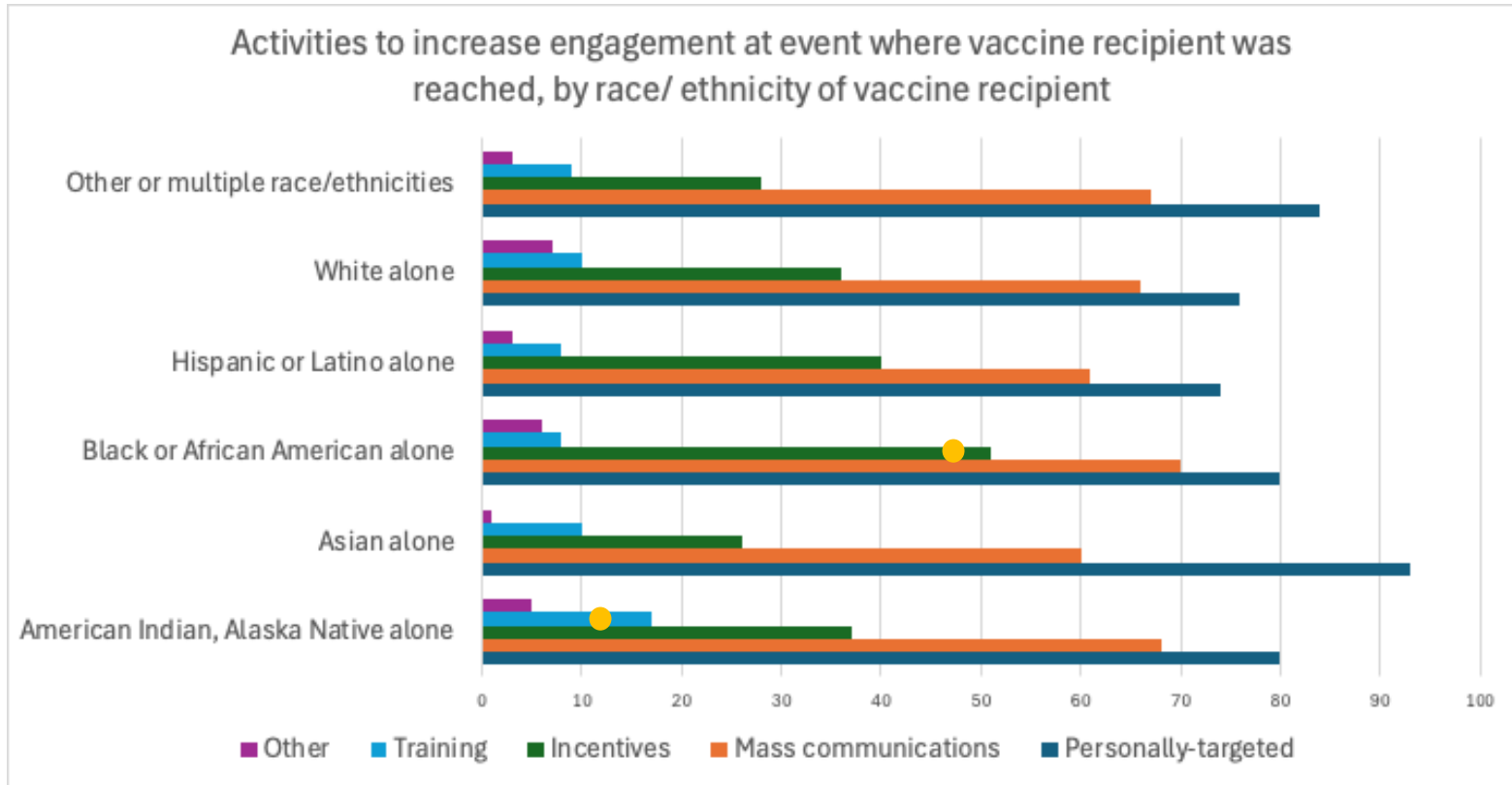


Vaccination events where people were reached

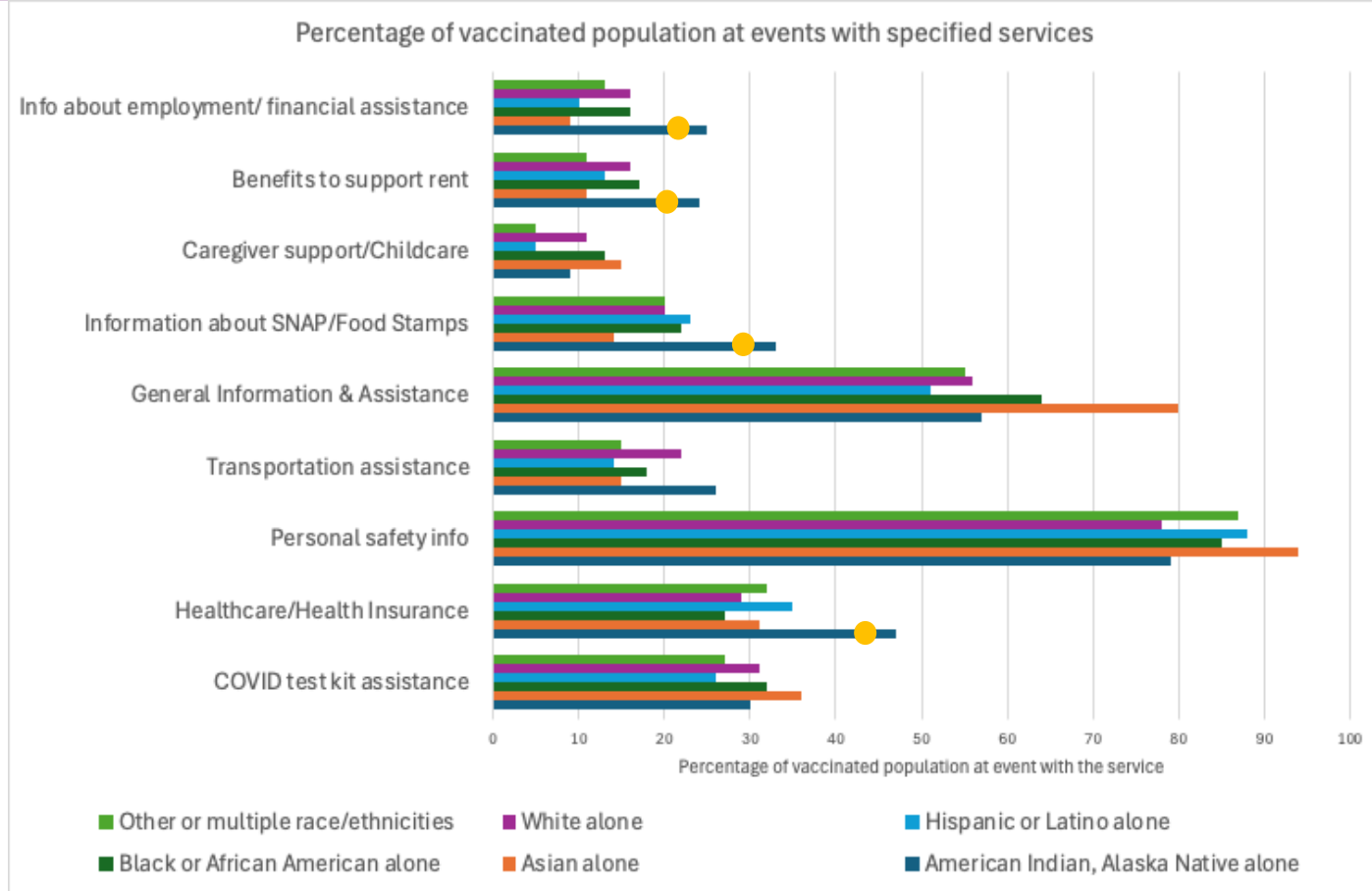
- Majority of vaccinations occurred at community events, in public settings
- 9,500 vaccinations occurred in-home
- 12% of vaccine recipients reported having a disability



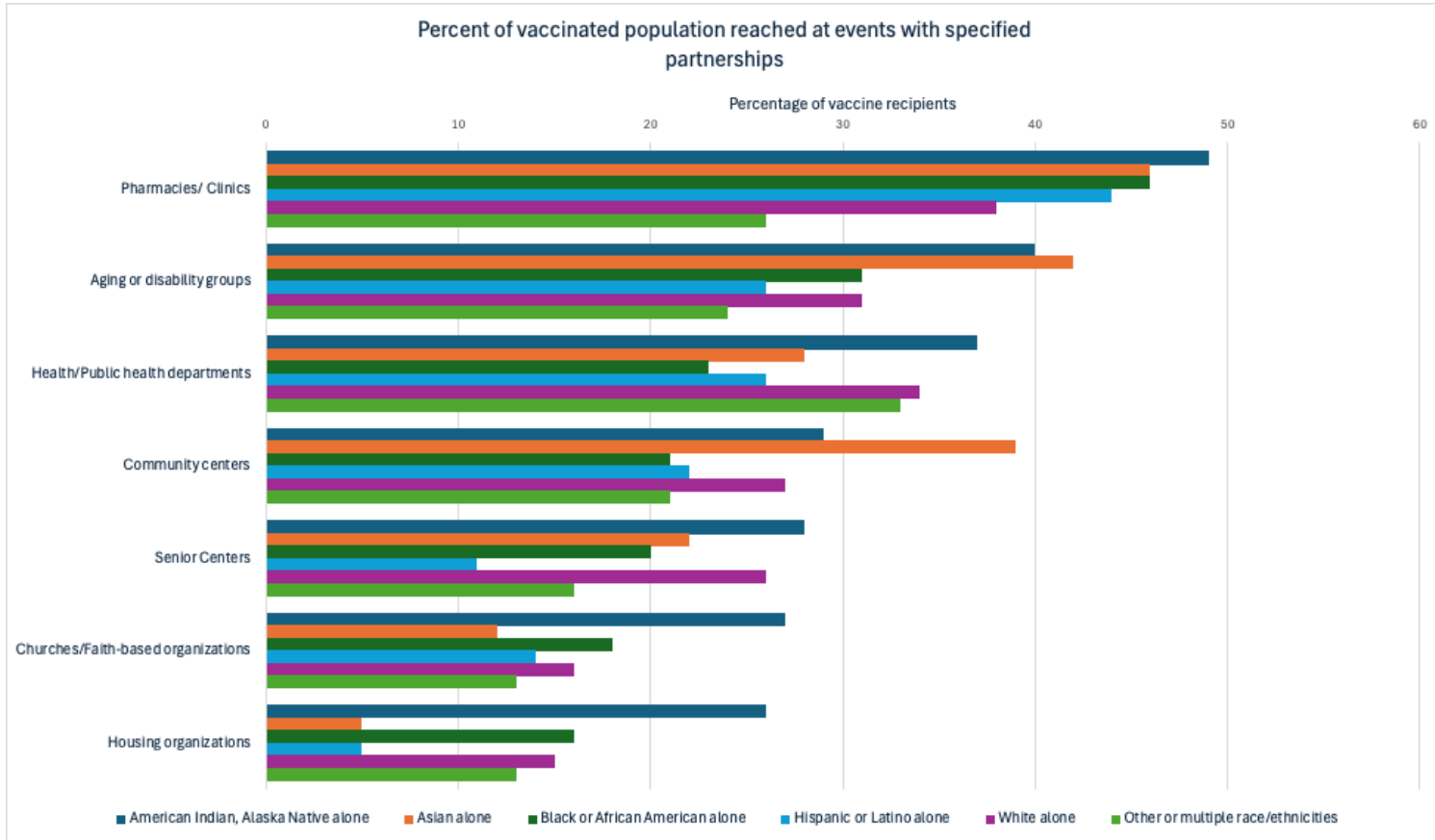
Strategies used when populations were reached



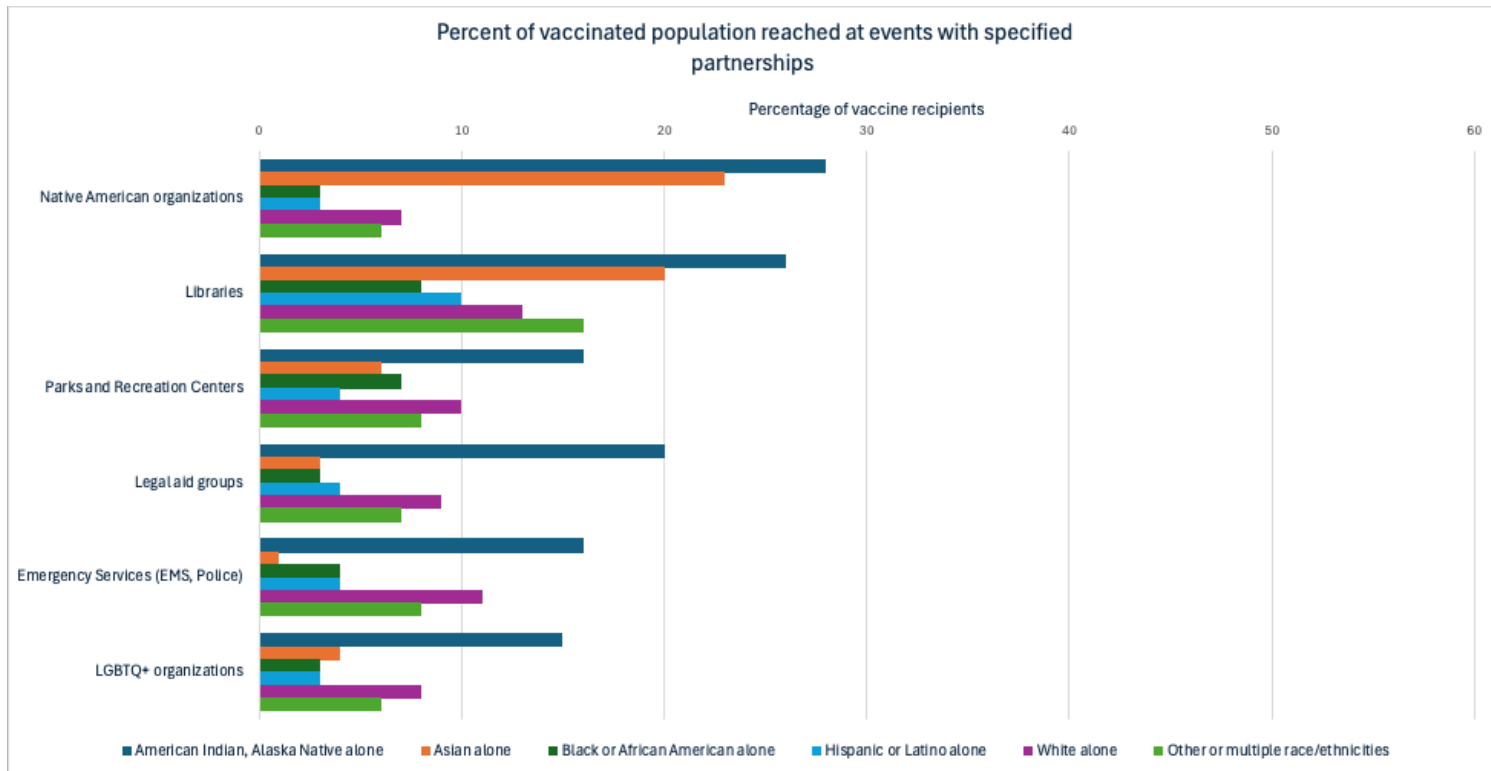
Other services offered alongside vaccination when populations were reached



Types of organizational partners involved in event when populations were reached (1)



Types of organizational partners involved in event when populations were reached (2)



Next Steps

- **(Aim 2) Quasi-experimental study:** To assess whether vaccination rates for minoritized populations increased in ADVC-recipient counties, after ADVC began.

- **Data:**

- IQVIA LRx Claims (2020-2025)
- American Community Survey (2019-2023)

- **Analytic strategy:**

Vaccination rates (ZIP code level)

<i>Counties</i>	Pre- (2020-22)	Post- (2023-25)	Difference
ADVC (163)			
non-ADVC (2963)			
<i>Difference-in-Difference</i>			

- *Effect overall and by race/ethnicity*

- ZIP code racial/ethnic composition = proxy for race/ethnicity
 - “High” if in the 95th percentile in terms of % of residents that identify as AI/AN, Asian, Black, Latinx, and NHOPI, respectively
- Evaluate approaches that are most effective at reaching minoritized populations

Use of evidence beyond study



Large-scale
investments
to promote
vaccination
equity



Illustrate
impacts of
ADVC
grantees'
work locally



Approaches
that CBOs
can use to
close
vaccination
equity gaps

Thank you!

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Engaging Refugee-led Organizations & Empowering Refugee Voices to Advance Equity in Refugee Resettlement

Wednesday, Jan 22nd | 12pm ET

Register [here](#).