



# Current Landscape of Rural Vaccination

**National Adult and Influenza Immunization Summit**

**January 18, 2024**

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# Agenda

- Rural Health in Brief
- Overview of Rural Adult Vaccination Coverage Disparities
- Understanding the Rural Immunization Landscape
  - Rural Adult Immunization Listening Session & Pilots
  - Rural State of Vaccine Confidence Report
- CDC Initiatives
  - Bridge Access Program
  - CDC Partnerships for Vaccine Confidence and Equity
- Discussion



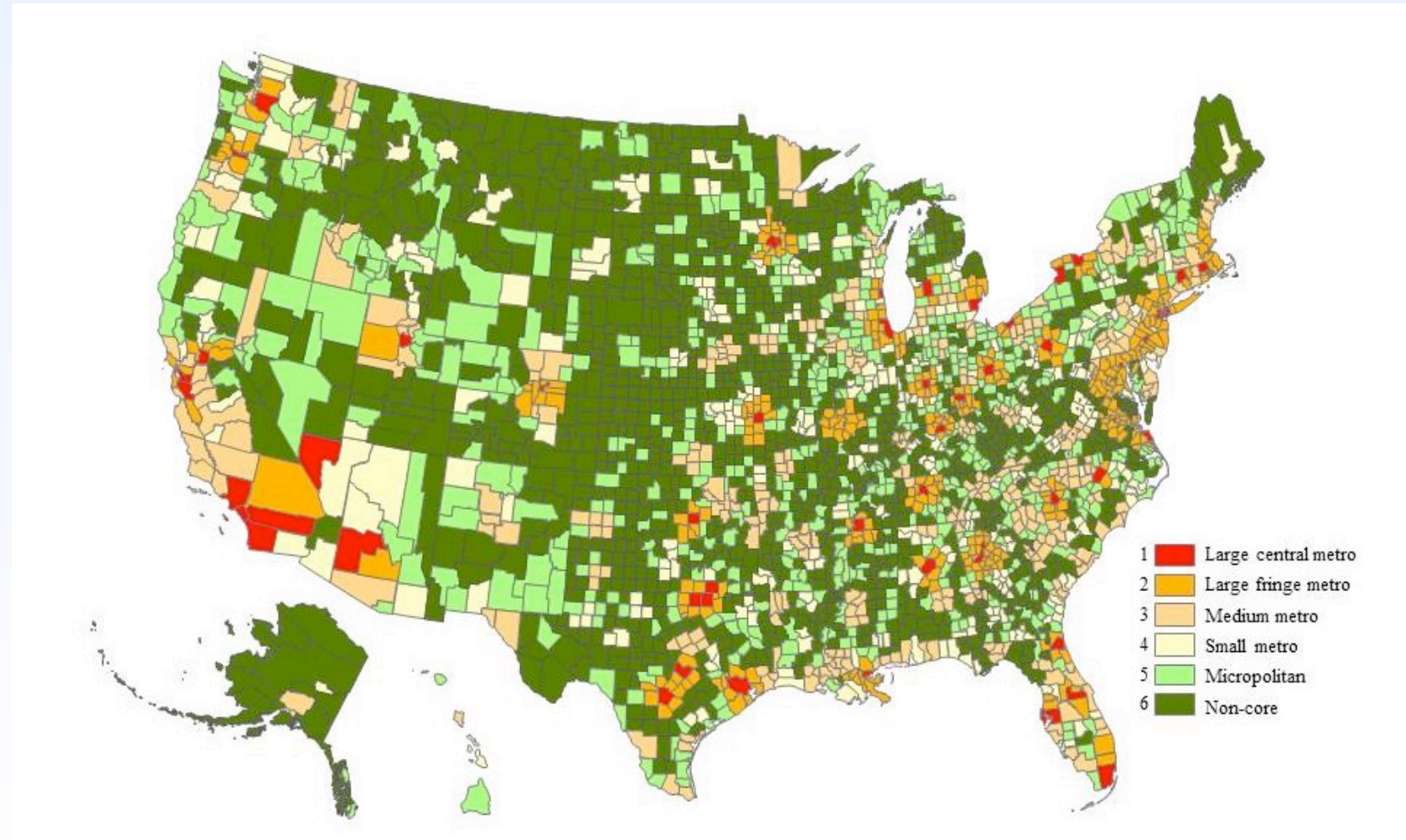
# Rural Health in Brief

# Rural Counties in the US

## 2013 Urban-Rural Classification Scheme for Counties

Most US counties are non-metro

15% of the population  
(15-20%, depending on rural definition)



# Barriers to Accessing Health Services in Rural Areas

- Distances
- Transportation
- Health Insurance Coverage
- Health Literacy
- Stigma
- Privacy
- Workforce shortages



# Rural Adult Vaccination Coverage Disparities

# Influenza Vaccination Trends – Rural vs. Urban

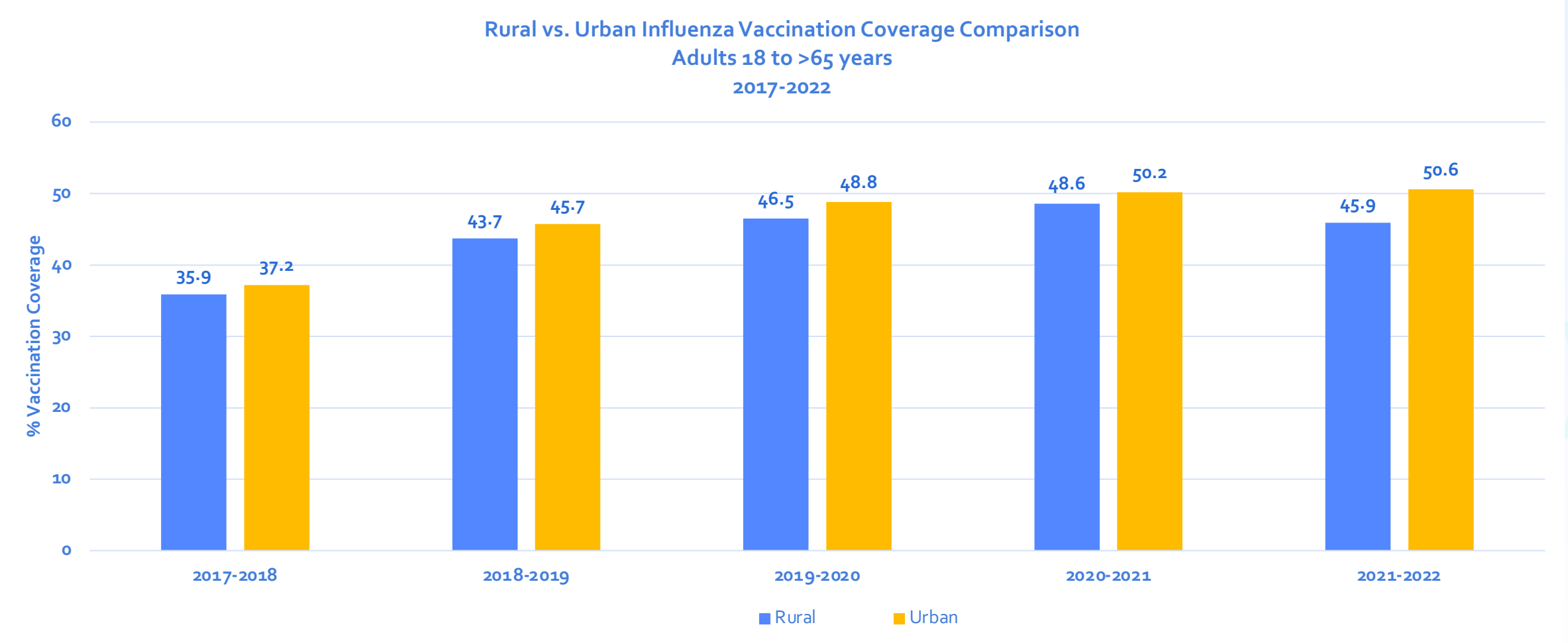
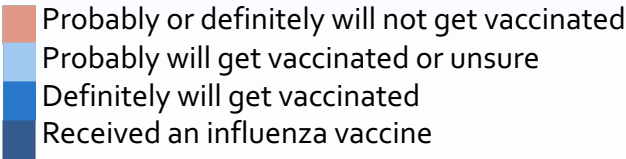
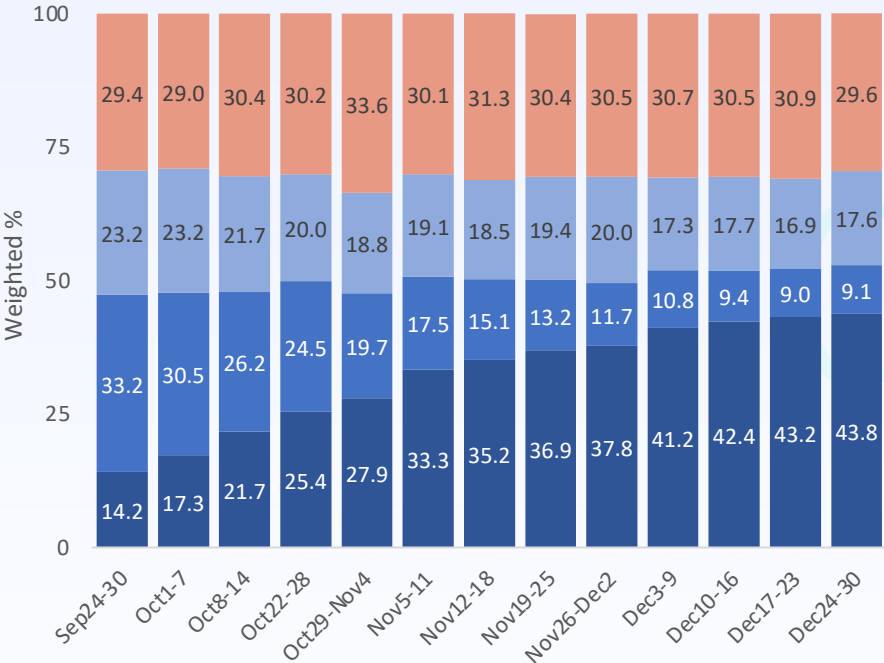


Figure 1. Estimated proportion of adults aged  $\geq 18$  years who received influenza vaccination\*, overall and by rurality—United States, Behavioral Risk Factor Surveillance System, 2017-18 through 2021-22 influenza seasons. Estimates are unadjusted coverage levels for the total sample.

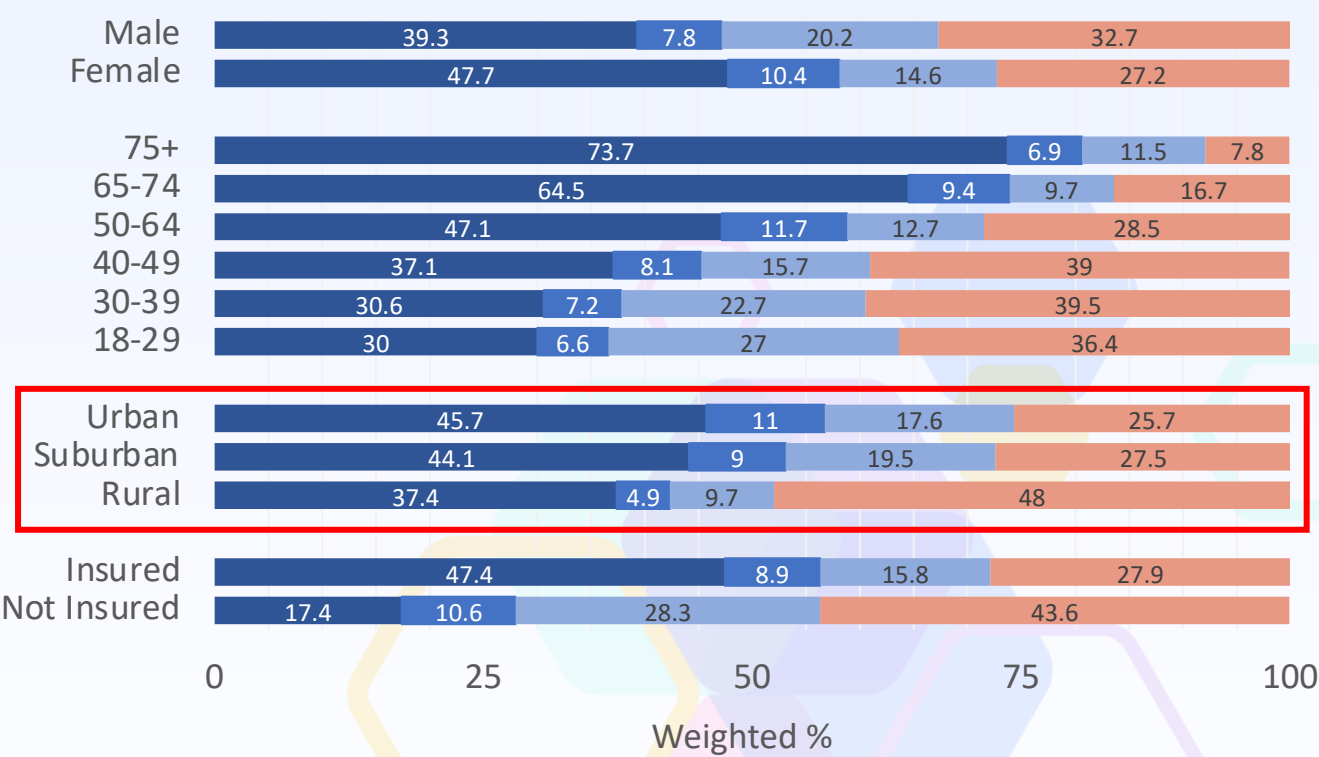


# Influenza Vaccination Status and Intent Among Adults ≥18 Years of Age, NIS-ACM, December 24-30, 2023

Weekly Influenza Vaccination Status and Intent Among Adults Age ≥18 Years, NIS-ACM



Influenza Vaccination Status and Intent Among Adults Age ≥18 Years by Demographics, NIS-ACM, December 24-30, 2023



Data Source: National Immunization Survey-Adult COVID Module.  
<https://www.cdc.gov/flu/fluview/dashboard/vaccination-adult-coverage.html>



# Influenza Vaccination Differences Across Age Groups

## 2017 - 2022

	18-25 years			26-49 years			50-64 years			65+ years		
	Rural	Urban	Diff	Rural	Urban	Diff	Rural	Urban	Diff	Rural	Urban	Diff
2017-2018	20.6	25.3	4.7	24.5	28.5	4.0	36.8	40.8	4.0	56.7	60.4	3.7
2018-2019	30.9	36.8	5.9	30.1	36.1	6.0	44.7	48.2	3.5	64.9	69.1	4.2
2019-2020	35.2	36.4	1.2	33.8	39.9	6.1	47	52.4	5.4	67.1	71.5	4.4
2020-2021	29.2	37	7.8	32.1	39.9	7.8	51.4	54.2	2.8	71.4	76.1	4.7
2021-2022	29.8	36.6	6.8	29.6	40.4	10.8	46.5	54.8	8.3	69.7	75.9	6.2

Table 1. Estimated proportion of adults aged ≥18 years who received influenza vaccination\*, overall and by rurality—United States, Behavioral Risk Factor Surveillance System, 2017-18 through 2021-22 influenza seasons. Estimates are unadjusted coverage levels.

# Tdap Vaccination Differences

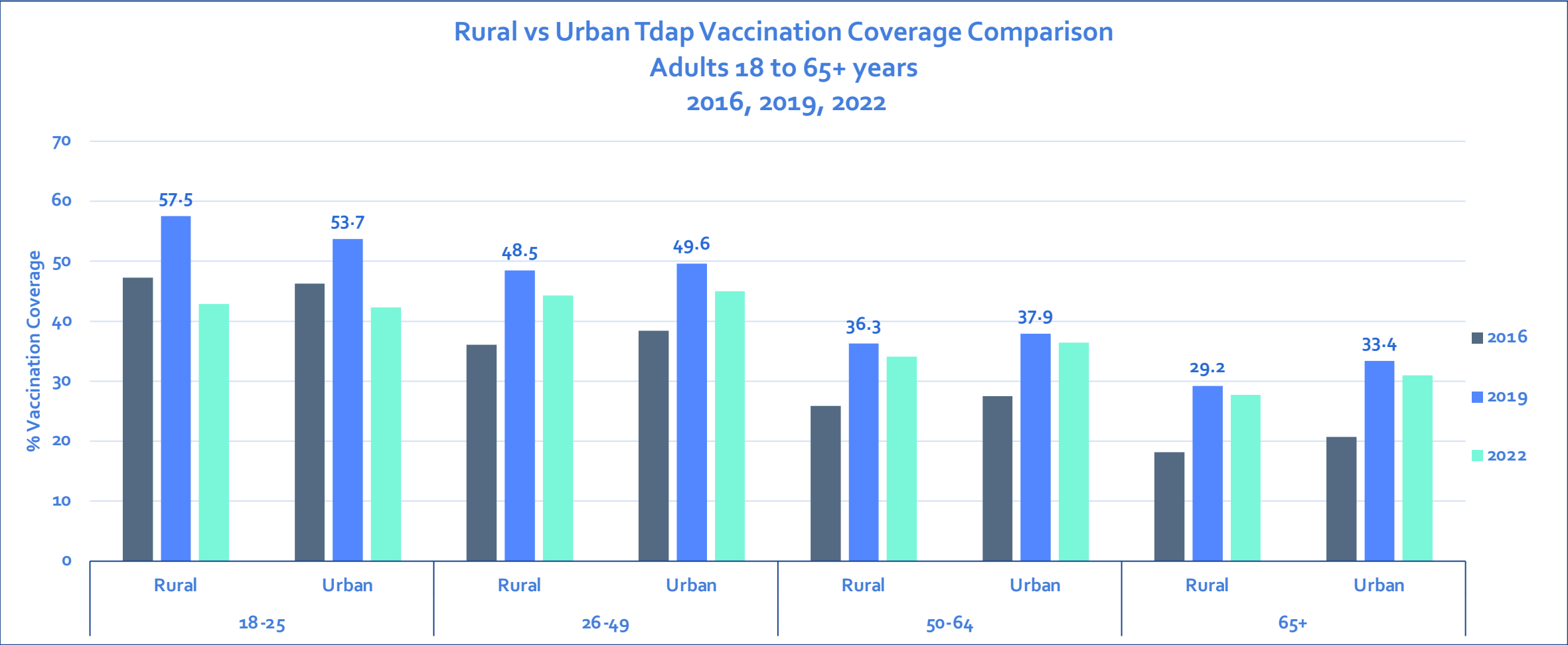


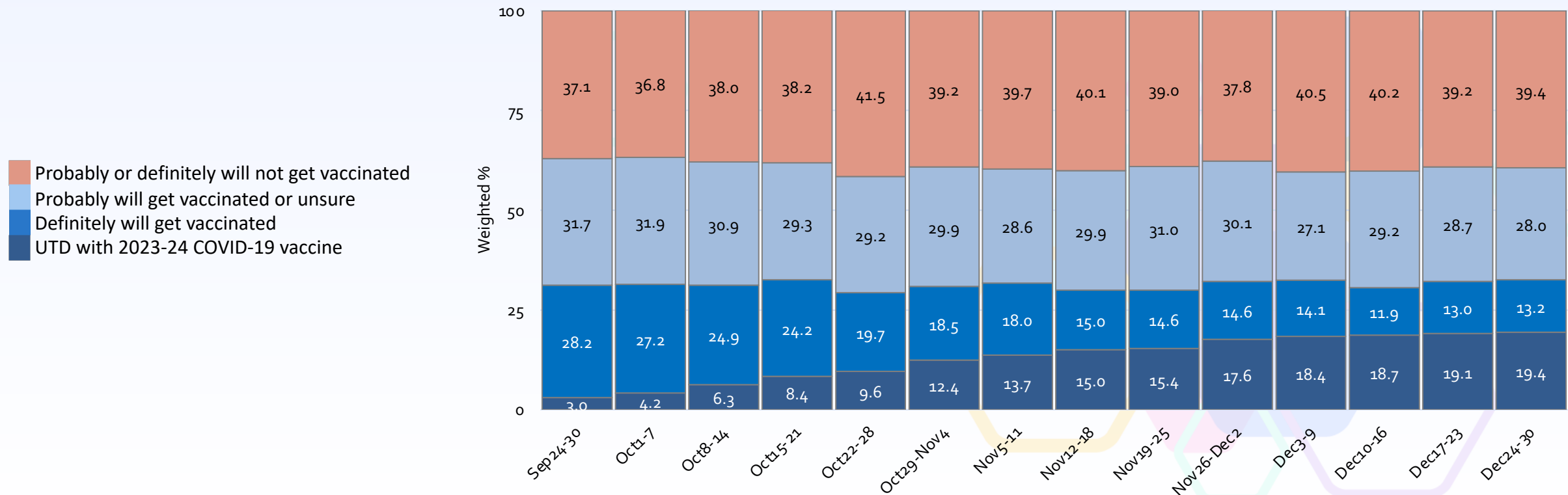
Figure 2. Estimated proportion of adults aged  $\geq 18$  years who received Tdap vaccination, overall and by rurality—United States, Behavioral Risk Factor Surveillance System, 2016, 2019, and 2022. Estimates are unadjusted coverage levels.

# COVID-19 Vaccination Status and Intent Among Adults ≥18 Years of Age, NIS-ACM, September 24 – December 30, 2023

## Key Takeaways/Changes/Summary of Data:

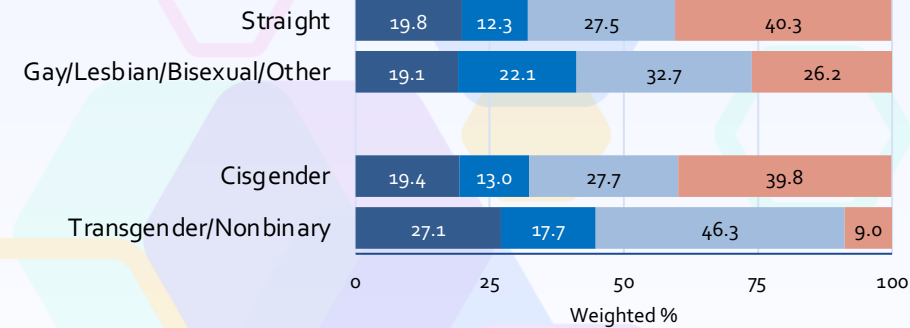
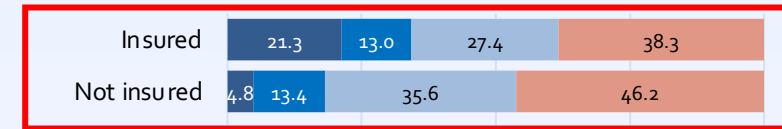
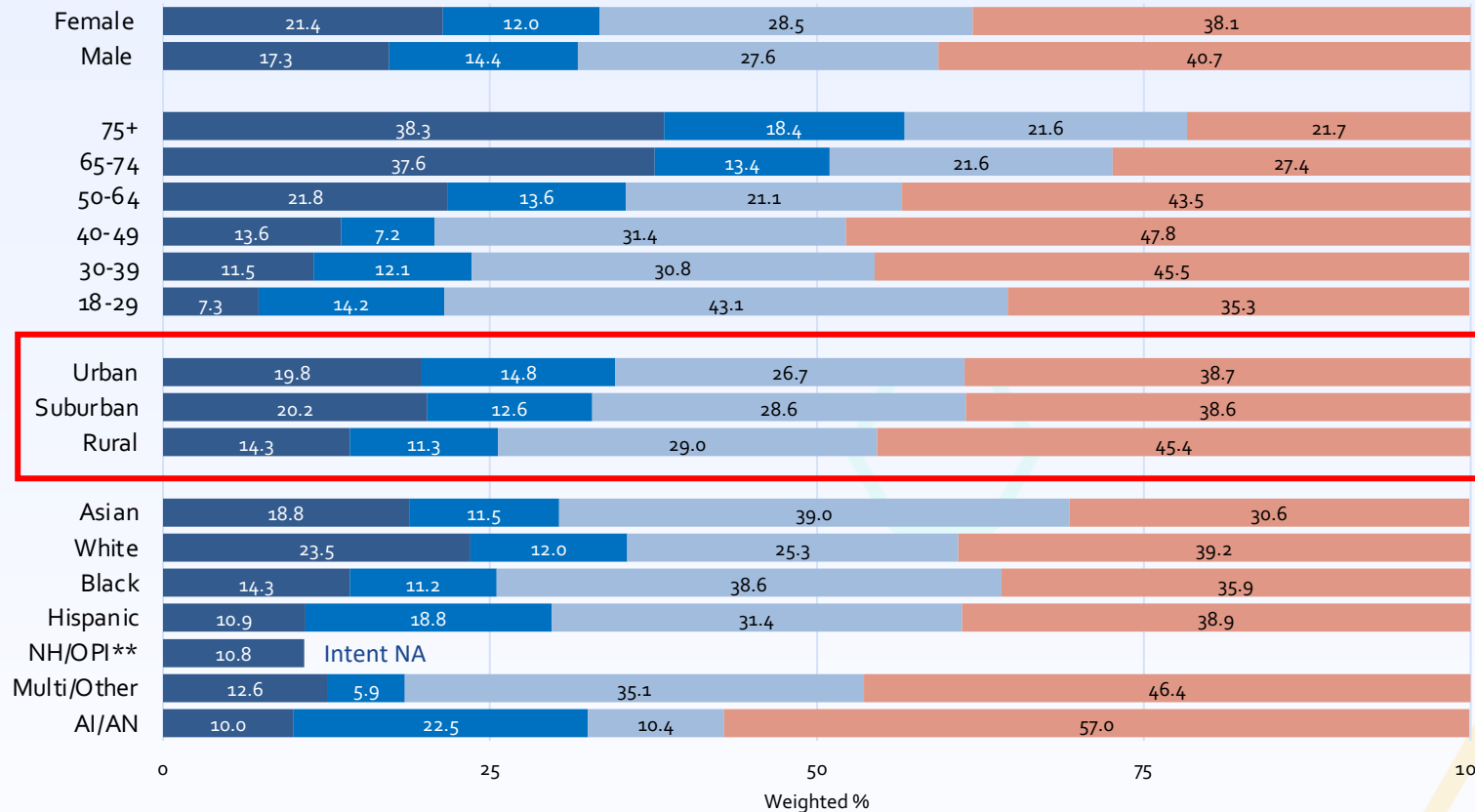
- Among adults aged ≥18 years responding to the National Immunization Survey (NIS) through December 30, **19.4%** (95% CI: 18.7-20.2) reported having received a COVID-19 vaccine since September 14, 2023.
- 13.2% (95% CI: 10.8-15.6) of adults said they definitely will get vaccinated, and 39.4% (95% CI: 35.8-43.0) said they probably or definitely will not get vaccinated.
- Among adults ≥65 years, **38.0%** (95% CI: 35.8-40.2) have received a COVID-19 vaccine since September 14, 2023.

Weekly COVID-19 Vaccination Status and Intent Among Adults Age ≥18 Years, NIS-ACM (n = 181,195)

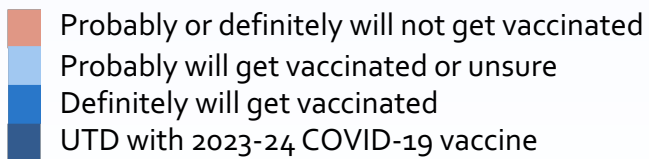


# COVID-19 Vaccination Status and Intent Among Adults Age ≥18 Years

## Demographic Breakdown: NIS-ACM, December 24–30, 2023 (n = 3,058)



\*\*Due to small sample size results should be interpreted with caution.  
NA: estimate not reported because denominator is <30; AI/AN: American Indian or Alaska Native; NH/OPI: Native Hawaiian or Other Pacific Islander.

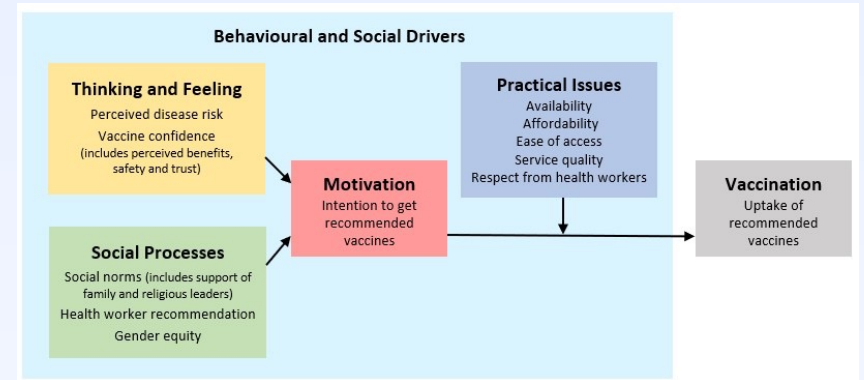


# Understanding the Rural Adult Immunization Landscape

# Rural Adult Immunization Listening Session

## ■ Session Preparation – Preliminary Research:

- Literature Review – findings aligned to BeSD Framework
- Key Informant Interviews
  - Rural health care providers (Federally Qualified Health Centers, Indian Health Service, Pharmacy, etc.)
  - Public health practitioners
  - Academics



**Behavioral and Social Driver Framework**

Source: The BeSD working group. Based on Brewer et al. *Psychol Sci Public Interest*. (2017).

## ■ **Topline findings:** Rural adults who have not been vaccinated can be considered initially in two broad groups requiring different approaches to increasing coverage.

### 1. Those who **reject** vaccination

- Trust of government and in the motives of pharmaceutical corporations has ruptured
- Messaging alone will not be successful
- Short-term solutions are doubtful
- **Long-term efforts are required that reach beyond vaccination alone**

### 2. Those who are **hesitant** about vaccination

- The barriers to an individual's hesitancy *might* be overcome
- The right messaging approaches could prove effective
- Access and availability will likely help to facilitate vaccination
- **Both short- and long-term strategies promise results**

# February 2023 Rural Adult Immunization Listening Session

- Purpose: Obtain insights of rural health subject matter experts (SMEs) from different sectors about promising practices or successes that will inform pilot demonstrations in rural settings.
- Participants: 36 SMEs representing rural health care, public health, academics, and community leaders.
- Effective Strategies Identified
  - Use of trusted messengers
  - Public speaking engagements/Open forums (local civic clubs, churches, senior citizen centers)
  - Meeting people where they are (churches, job sites, long-term care facilities, colleges, county health departments, bars/restaurants)
  - Incorporate whole-person health (i.e., don't offer vaccines alone)
  - Frequent touchpoints
  - Ensure privacy or anonymity
  - Provider education on vaccines and confidence messaging
  - Mobile health clinics
  - Partner with pharmacists





# Rural Adult Immunization Pilots

- Partnership between Extension Foundation and National Rural Health Association (NRHA)
- The pilot's purpose is to implement promising strategies identified through the listening session and evaluate implementation and outcomes.
- Timeline: February 2024 – April 2025
- 3 states participating: Minnesota, North Carolina, and Virginia
- Proposed populations include
  - People with Substance Use Disorders
  - Pregnant People
  - Hispanic Adults



# CDC State of Vaccine Confidence (SoVC) Report: Special Rural Edition

- Started during the COVID-19 Response, the SoVC Insights Report identifies major themes influencing general vaccine confidence and uptake.
  - Report methods include social media mining and categorization of themes
  - Includes actionable strategies to address issues
- CDC's special report focused on vaccination in rural America was released in September 2023.



# CDC's State of Vaccine Confidence Insights Report: Vaccination in Rural America Special Report Themes

Residents in rural areas of the U.S. are **more concerned about safety, long-term side effects, effectiveness, and necessity of vaccines** than residents in urban areas.

Rural communities reported **lower levels of vaccine access and vaccine confidence** than suburban and urban communities.

Lower vaccine uptake in rural areas may be due to the lack of government trust and politicization of science. However, **community outreach and utilizing trusted messengers can and has increased vaccine confidence** in rural America.

# CDC Initiatives to Improve Adult Vaccination Rates



# Bridge Access Program

Extending Access to COVID-19 Vaccines



# CDC's Bridge Access Program

- CDC's Bridge Access Program provides no-cost COVID-19 vaccines to adults without health insurance and adults whose insurance does not cover all COVID-19 vaccination costs.
  - Updated CDC-recommended COVID-19 vaccines are included in the Bridge Access Program.
  - The Bridge Access Program will end by December 31, 2024.
  - The Vaccines for Adults (VFA) program, proposed in the FY 2023 and 2024 Presidential Budget, would be a long-term solution to ensure all adults have access to recommended vaccinations, including COVID-19 vaccines, at no cost to them.

# Who Can Get a No-Cost COVID-19 Vaccine Through the Bridge Program

Adults 18 years and older without health insurance

-and-

Adults with health insurance that does not cover all COVID-19 vaccine costs (only at Bridge Access Program sites that are in-network for their health insurance)



# Where to Get a No-Cost COVID-19 Vaccine through the Bridge Access Program?

**Local Healthcare Providers**

**Health Resources and Services  
Administration (HRSA)-Supported Health  
Centers**

**Retail Pharmacies:**  
Walgreens, CVS, eTrueNorth (pharmacy aggregator)



**Community  
events or  
pop-up sites  
with these  
groups**



Visit [Vaccines.gov](https://www.vaccines.gov) to find a provider that offers no-cost COVID-19 vaccines through the Bridge Access Program!

# CDC Partnerships to Increase Vaccine Confidence and Equity



# Extension Collaborative on Immunization Teaching & Engagement (EXCITE)



In May 2021, CDC partnered with USDA's Cooperative Extension System (CES) to conduct the EXCITE Project to reach rural and other medically-underserved communities.

## The EXCITE Project leverages CES' academic expertise and reach as local, trusted messengers to:

- Develop tailored vaccination-related materials on COVID-19 and other recommended adult vaccines
- Equip other key messengers (i.e., trusted community members) with tailored vaccine information to educate populations of focus
- Reduce vaccine barriers through partnerships with vaccine providers
- Increase vaccinations among migrant farmworkers, communities of color, and rural communities

***EXCITE is addressing system-wide vaccine confidence issues within CES.***

*Washington State University conducted surveys of CES staff regarding their attitudes toward vaccines.*

*WSU developed motivational interviewing, science media literacy, and neuromarketing training now included in CDC TRAIN's repository of offerings.*

# The EXCITE Project

Through this project:

Over 18M

Individuals reached through various engagement activities

26,023

Vaccinations from over 1,100 clinics held by community and healthcare partners

Over 170K

Total engagement activities delivered/disseminated

## impact

University of Idaho Extension programs that are making a difference in Idaho.

### EXCITE team integrates farm safety and immunization education, access to vaccines

#### AT A GLANCE

UI Extension's EXCITE team provided immunization education, vaccines, health screenings and farm safety presentations at two large Idaho dairies, vaccinating 25% of employees in attendance.

#### The Situation

University of Idaho Extension team for the Extension Collaborative on Immunization Teaching and Engagement (EXCITE) coordinated and facilitated 18 educational mobile vaccine clinics between December 2021 and June 2022. The resulting observations and experiences aligned with those of many health providers and vaccine educators across the state: direct education and conversations with trusted messengers are necessary. However, the urgency of the pandemic was wan-



Mario de Haro-Marti shares a meal and visits with dairy employees following a presentation on farm safety and immunizations.

University of Idaho Extension



University of Illinois Extension director Jody Johnson (right) exchanges contact information with Lee Wright (left) and son Roman Wright. The extension's office in southern Illinois has launched a vaccination education program that aims to reach this storied city; Johnson knows listening to locals will be key.

Cara Anthony/Kaiser Health News

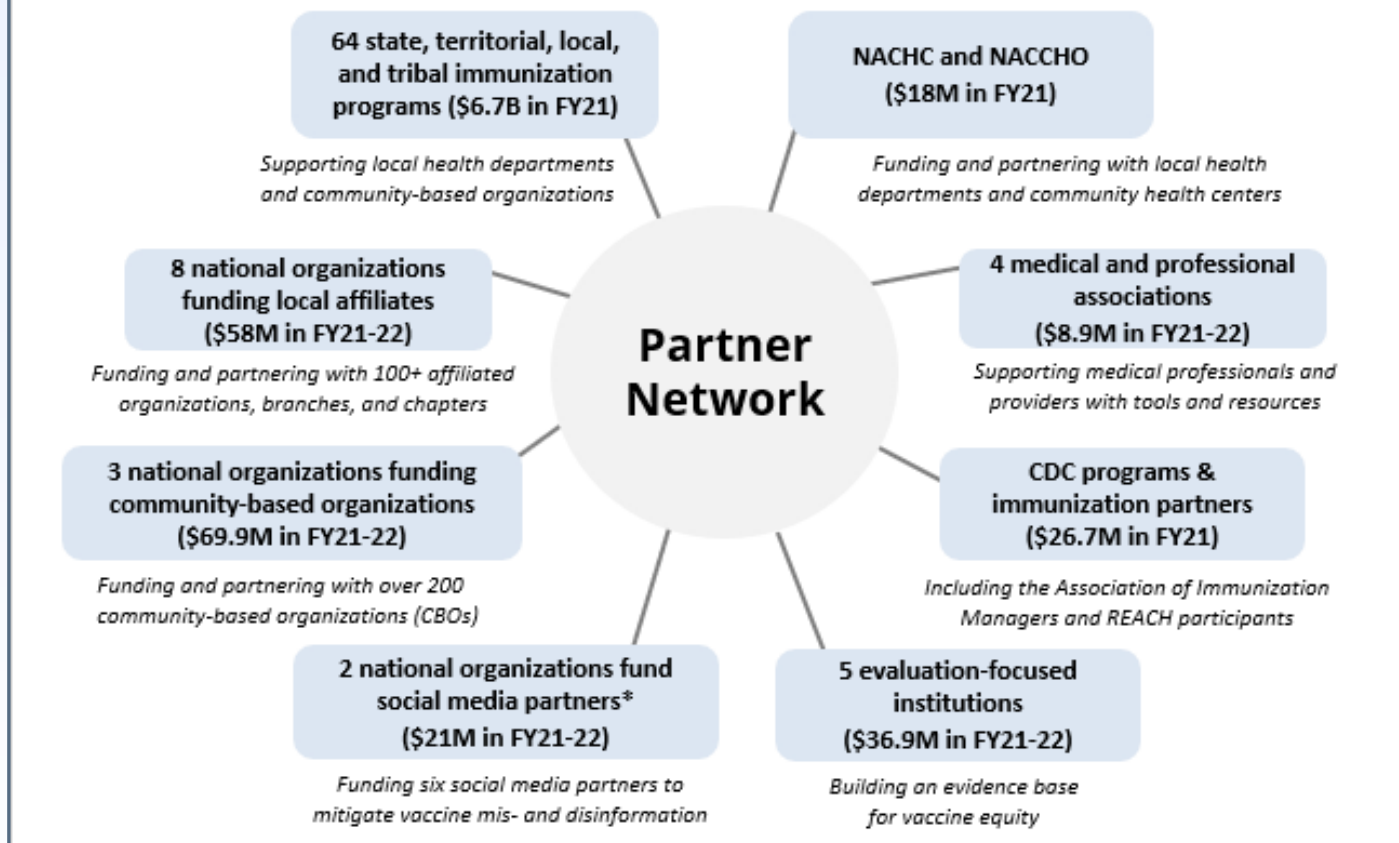
University of Illinois Extension



University of Arkansas  
Extension partnership with  
ARcare (FQHC)

# Partnerships for Vaccine Equity (P4VE) Program

Since 2020, the program has engaged over 500 national, state, and local partners, including:



The *P4VE* program aims to increase vaccine equity in racial and ethnic minority communities by providing:



Support for national, state, local and community-based organizations



A learning community, resource repository, and data technical assistance



National communications disseminating credible, evidence-based vaccine information



# Stories From the Field (P4VE)

- [Barn Quilts Keep South Dakota Healthy](#)
- [Snow White on the Job at Vaccination Event in Rural Appalachia](#)
- [COVID-19: The Leading Cause of Death for Idaho's Hispanic Population](#)



Photo Credit: Vermillion Cultural Association. Organizers handing out postcards in English, Lakota, and Spanish that provide the locations of nearby vaccine clinics.

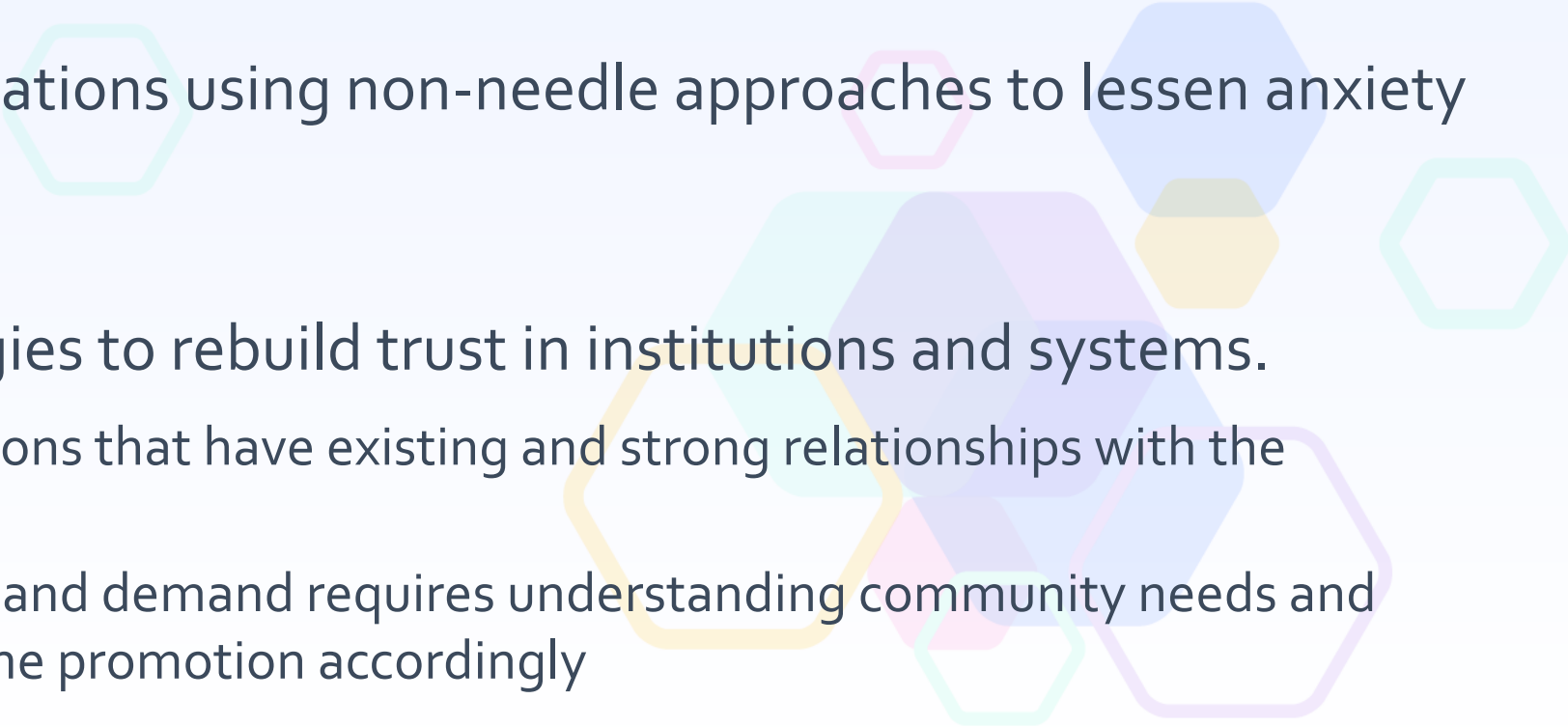


Photo Credit: The Health Wagon. Trunk-or-Treat event where families could receive treats, COVID-19, and flu vaccinations in the rural Appalachia region of Virginia.



Photo Credit: Idaho Immunization Coalition. Combined mobile health/vaccine clinic to provide COVID-19 vaccinations and health screenings to Hispanic communities in rural Idaho.

# What can be done?

- Rural health care providers are trusted messengers—delivery of strong and persistent recommendations on vaccination for patients and families is key.
    - Vaccines promoted as part of a broader “whole person” approach to health opposed to narrow focus on vaccination alone
  - Vaccine technology innovations using non-needle approaches to lessen anxiety and fear.
  - Employ long-term strategies to rebuild trust in institutions and systems.
    - Partnerships with organizations that have existing and strong relationships with the community
    - Building vaccine confidence and demand requires understanding community needs and concerns and tailoring vaccine promotion accordingly
- 



# Resources

- [CDC Office of Rural Health](#)
- [Vaccinate with Confidence](#)
- [State of Vaccine Confidence Rural Insights Report](#)
- [VCD 12 Strategies – Rural Focus](#)
- [NORC Rural Health Mapping Tool](#)
- [Bridge Access Program](#)
- [Extension Collaborative on Immunization Teaching & Engagement \(EXCITE\)](#)
- [Partnering For Vaccine Equity \(P4VE\)](#)



# Discussion

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

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