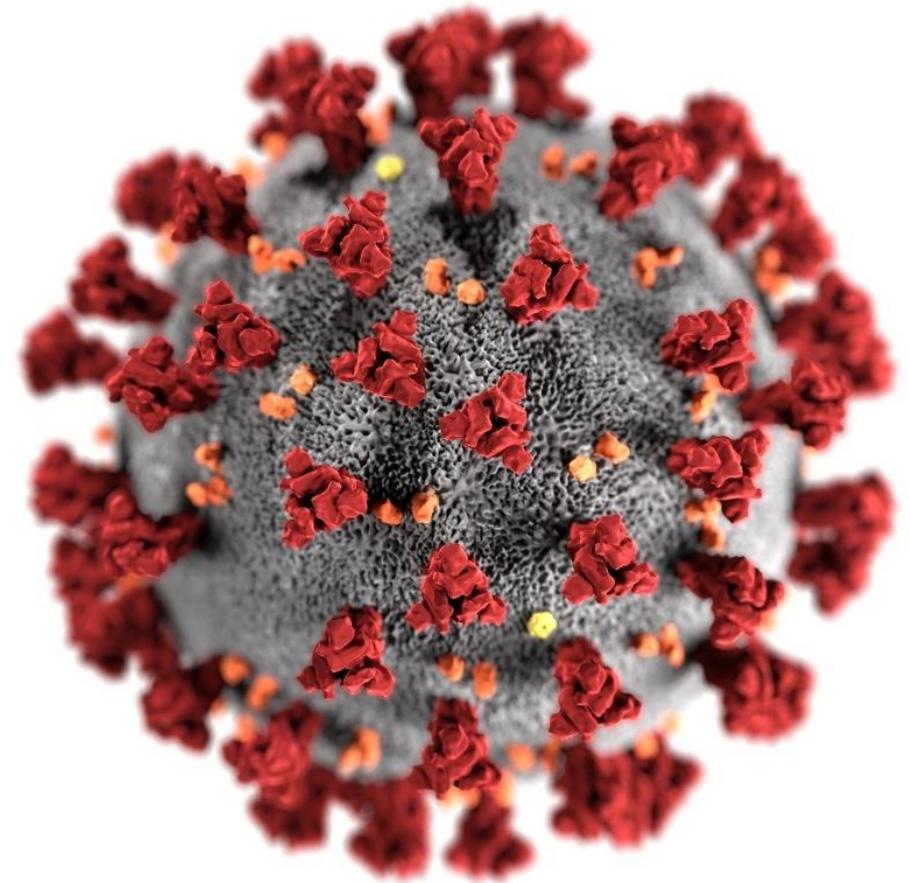


# COVID-19 vaccine implementation

Nancy Messonnier, MD

8/12/2020



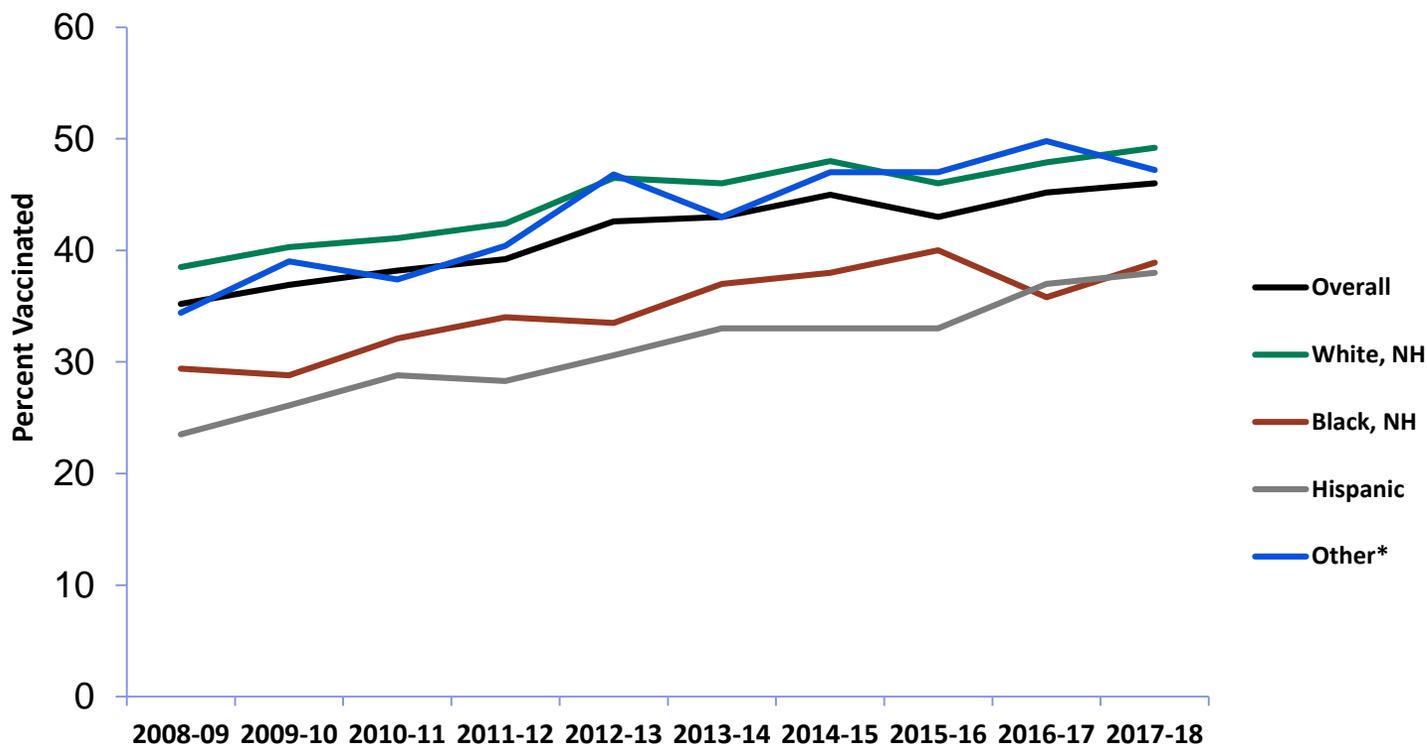
# Complex and evolving landscape for COVID-19 vaccine

- One vs. two dose series
- Products not interchangeable
- Varying presentations
- Vaccine efficacy and adverse event profile in different populations
- Varying cold-chain requirements
- Use in children and pregnant women
- Need for socially distanced vaccination practices
- Communication and education
- Some high-risk groups for COVID-19 may distrust public health



# Rising to the challenge to achieve high coverage with COVID-19 vaccines

Influenza Vaccination Coverage, ≥18 years, by Race/Ethnicity:  
2008-09 – 2017-18



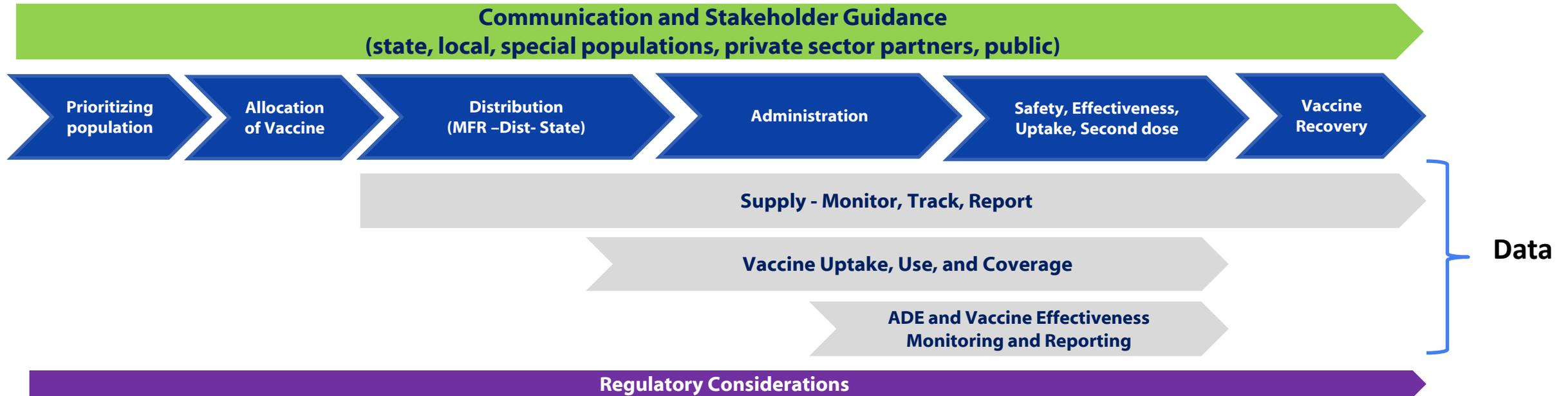
- Vaccination coverage of racial and ethnic minorities is consistently lower than that of white populations
- **We need novel and more robust strategies to increase uptake of COVID-19 vaccine, once available**

\*Other includes Asian, American Indian/Alaska Native, and multiple race.



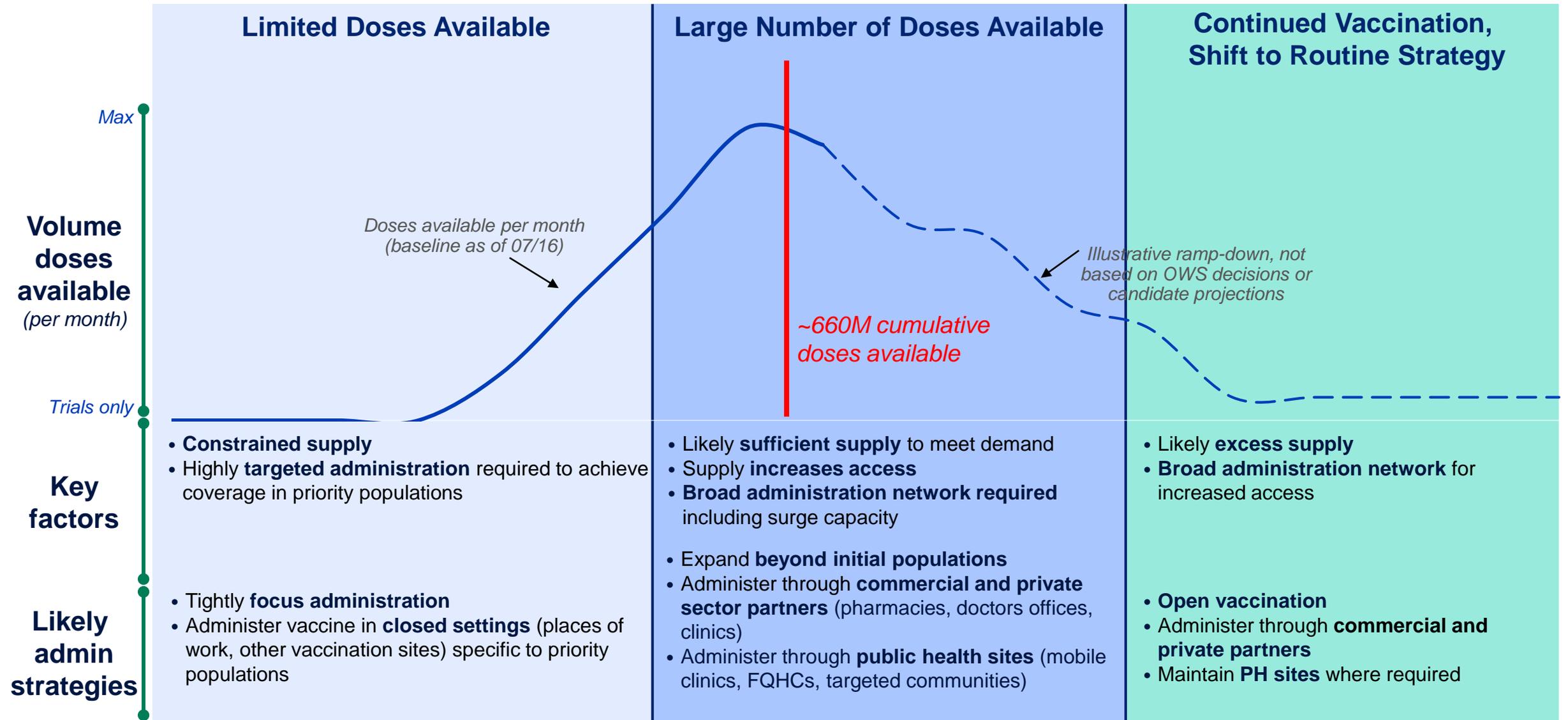
Source: Vaccination Coverage among Adults in the United States, National Health Interview Survey, CDC, 2017. NH = Non-Hispanic. Vaccinations included in this assessment include influenza, pneumococcal, Td, Tdap, Zoster, HepA, HepB, and HPV.

# Multiple Critical Components to Vaccine Implementation

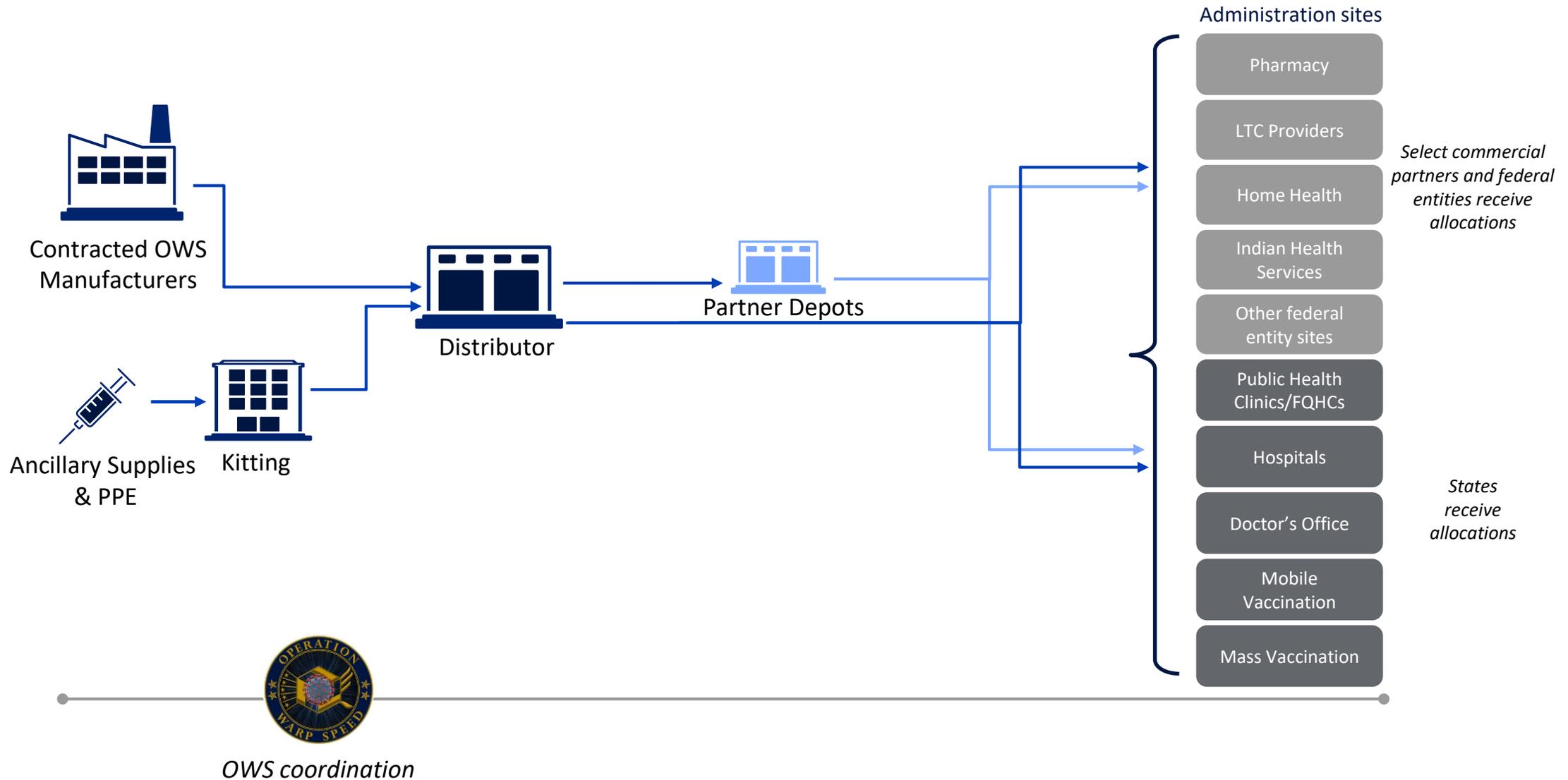


Public health impact relies on rapid, efficient, and high uptake of complete vaccine series, with focus on high-risk groups

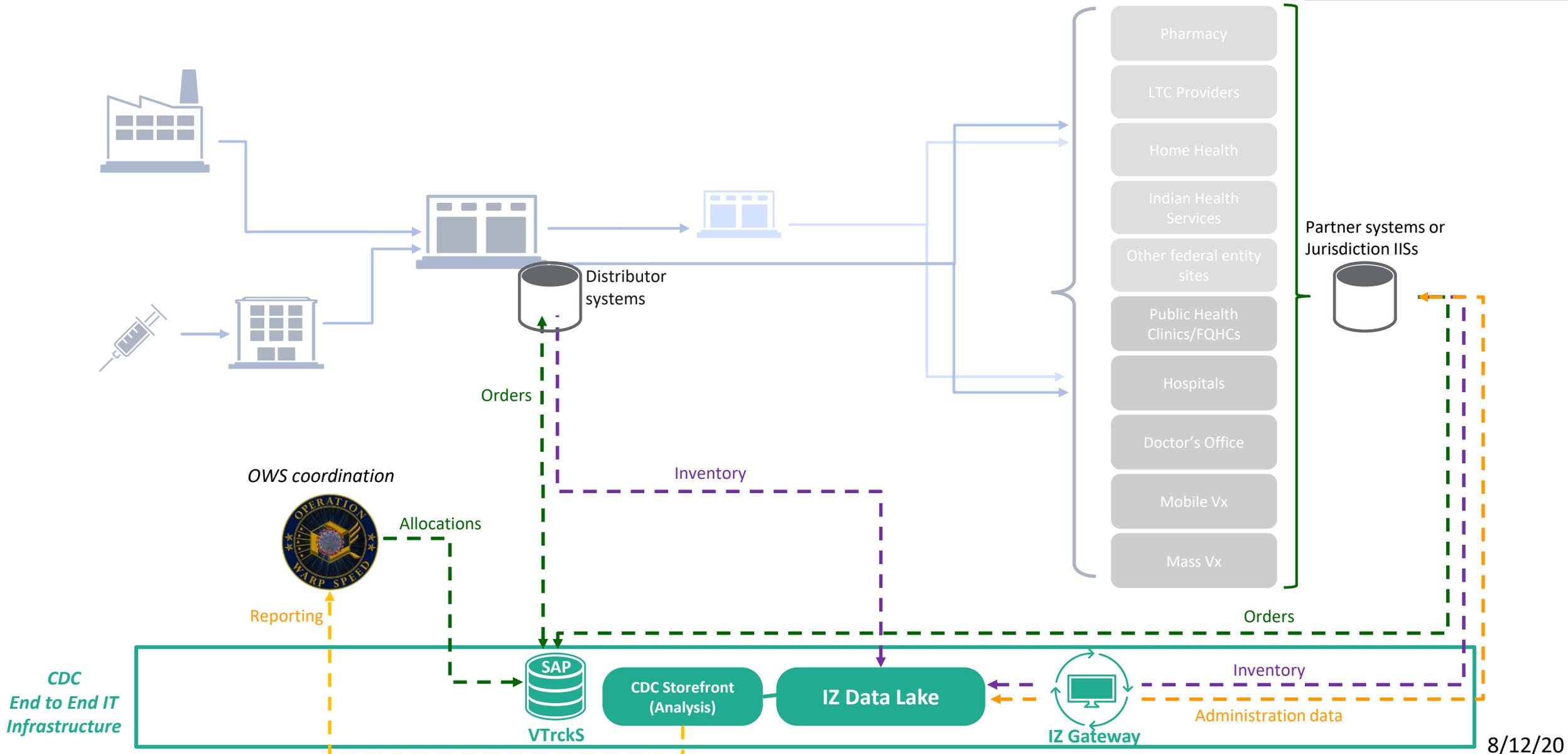
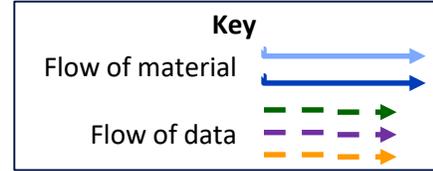
## Distribution will Adjust as volume of vaccine doses increases, moving from targeted to broader populations reached (phased approach)



# Overview of Distribution and Administration



# End to end data infrastructure



# To distribute and administer COVID-19 vaccine, we will leverage many partners to ensure success

Leveraging public health expertise and assets from all-of-USG...

...and contributions from our private partners



Federal



State



Local



Distribution



Administration



Guidance & best practices

# Planning is everything...

COVID-19 vaccine implementation will look different than prior pandemic vaccine planning

- Variation and complexity of vaccines in clinical development
- Federal engagement and review of state plans
- Federal and state end-to-end visibility on vaccine supply and uptake
- Augment public health implementation with federal commercial partnerships



# Draft Concept of Operations for select target populations

Populations are not comprehensive; additional populations to be added

Target population	Est. population size	Vaccination site	CONOPS
<b>Nursing Home / Assisted Living Facility residents</b>	~3M	<ul style="list-style-type: none"> <li>• Within NHs/ALFs</li> </ul>	<ul style="list-style-type: none"> <li>• States allocate vaccine to NHs/ALFs; direct allocation to pharmacy providers for CMS certified NHs</li> <li>• USG offers federal assistance with facility-level vaccination service</li> <li>• Vaccination occurs in facilities</li> </ul>
<b>Populations with Disabilities</b>	TBD		
<b>Healthcare workers</b>	~17M		
<b>Frontline essential workers</b>	~14M		
<b>Elderly (65 years &amp; older)</b>	~37M		
<b>National Security populations</b>	~2M		
<b>Communities of color (Black, Hispanic, Native)</b>	~100M		



# In the face of health crises or emergencies, communication, community engagement, and cultural competency are critical



This research suggests that efforts should prioritize **targeted messaging, community engagement and support, and culturally competent interventions** to promote equitable acceptance and uptake of adult immunizations.



## Targeted Messaging

Epidemics do not increase vaccine acceptance in racial or ethnic minorities, meaning targeted communication from trusted messengers remains necessary—especially when a vaccine is new, data on safety or risks is limited, and negative informal messaging occurs (CDC, 2015).



## Community Engagement

Sustained community engagement is key in identifying the education and support required to implement health efforts—especially in communities that face instability with basic needs, such as employment, food, shelter, and clean water (Hutchins, 2009).



## Cultural Competency

Health care staff and first responders should provide culturally competent messaging and care—and include minority groups in planning—to encourage equitable engagement and outcomes in a pandemic response (Hutchins, 2009).

# The Vaccine Life Cycle

safety at every phase

**GUIDE**

**ACIP**

ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

**BLA**

BIOLOGICS LICENSE APPLICATION

**CDC**

CENTERS FOR DISEASE CONTROL AND PREVENTION

**FDA**

FOOD AND DRUG ADMINISTRATION

**IND**

INVESTIGATIONAL NEW DRUG APPLICATION

**VACCINE DEVELOPMENT**

**safety is a priority during vaccine development + approval**

**safety continues with CDC + FDA safety monitoring**

PHASE 1 safety  
 PHASE 2 effectiveness  
 PHASE 3 safety + effectiveness

PHASE 4 safety monitoring for serious, unexpected adverse events

BASIC RESEARCH DISCOVERY PRE-CLINICAL STUDIES

CLINICAL STUDIES / TRIALS

FDA REVIEW

ACIP REVIEW

POST-APPROVAL MONITORING + RESEARCH

IND SUBMITTED

BLA SUBMITTED

FDA APPROVAL OF 1 NEW VACCINE

ACIP RECOMMENDATION



**LEARN MORE**

[FDA VACCINE DEVELOPMENT + APPROVAL PROCESS](http://go.usa.gov/xvvNd) <http://go.usa.gov/xvvNd>  
[CDC VACCINE SAFETY MONITORING + RESEARCH](http://go.usa.gov/xvvNe) <http://go.usa.gov/xvvNe>



# Vaccinate with **Confidence**

CDC's strategic framework for strengthening vaccine confidence and preventing outbreaks of vaccine preventable diseases.

Protect  
communities

## Strategy: Protect communities at risk from under-vaccination

- ✓ Leverage immunization data to find and respond to communities at risk
- ✓ Work with trusted local partners to reach at-risk communities before outbreaks
- ✓ Ensure vaccines are available, affordable, and easy-to-get in every community

Empower  
families

## Strategy: Get providers and parents effective information resources

- ✓ Expand resources for health care professionals to help them have effective vaccine conversations with parents
- ✓ Work with partners to start conversations before the first vaccine appointment
- ✓ Help providers foster a culture of immunization in their practices

Stop myths

## Strategy: Stop misinformation from eroding public trust in vaccines

- ✓ Work with local partners and trusted messengers to improve confidence in vaccines among key, at-risk groups
- ✓ Establish partnerships to contain the spread of misinformation
- ✓ Educate key new stakeholders (e.g., state policy makers) about vaccines

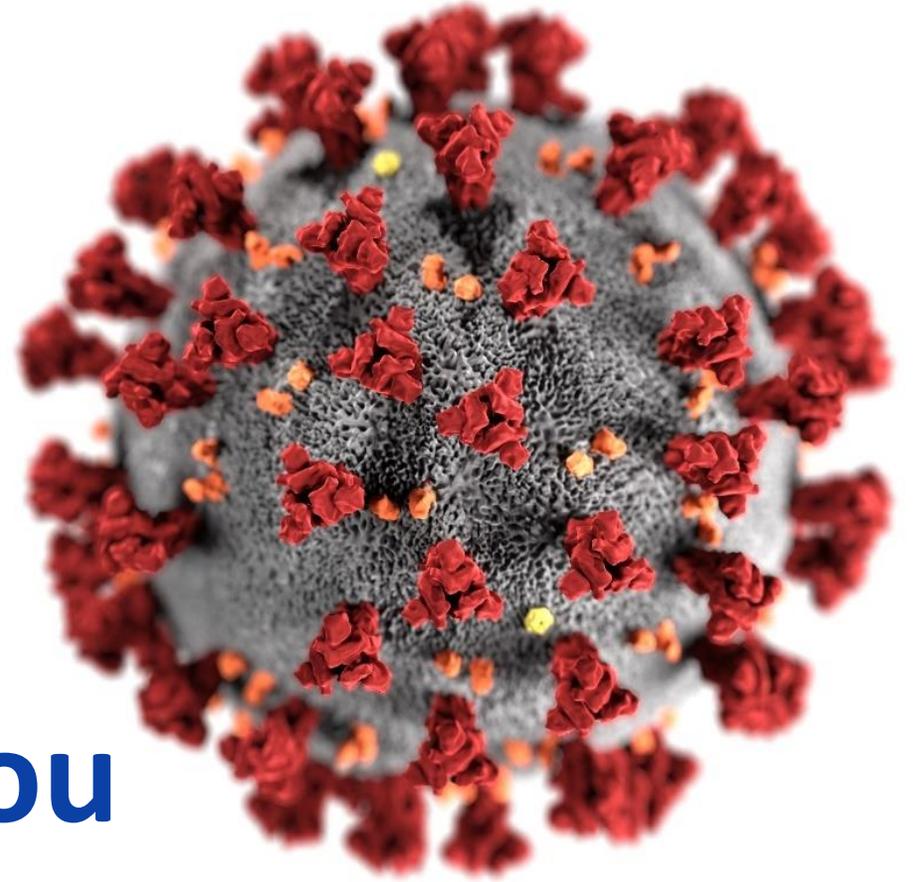
# Microplanning with jurisdictions for COVID-19 vaccination response will begin next week

## Objectives of program

- 1 Accelerate state, local, tribal readiness for a large-scale vaccination campaign
- 2 Better inform OWS's understanding of jurisdiction plans & technical assistance needs
- 3 Provide technical assistance to jurisdictions on their COVID-19 vaccine planning process
- 4 Develop model plans to be shared with all jurisdictions prior to COVID-19 vaccine release
- 5 Build on expanded influenza vaccination campaign planning work

## Key facts

- 5 jurisdictions: ND (on site), FL (on site), CA, MN, PHI (virtual)
- Multi-agency microplanning teams, including
  - CDC
  - DOD
  - IHS



# Thank you

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

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

