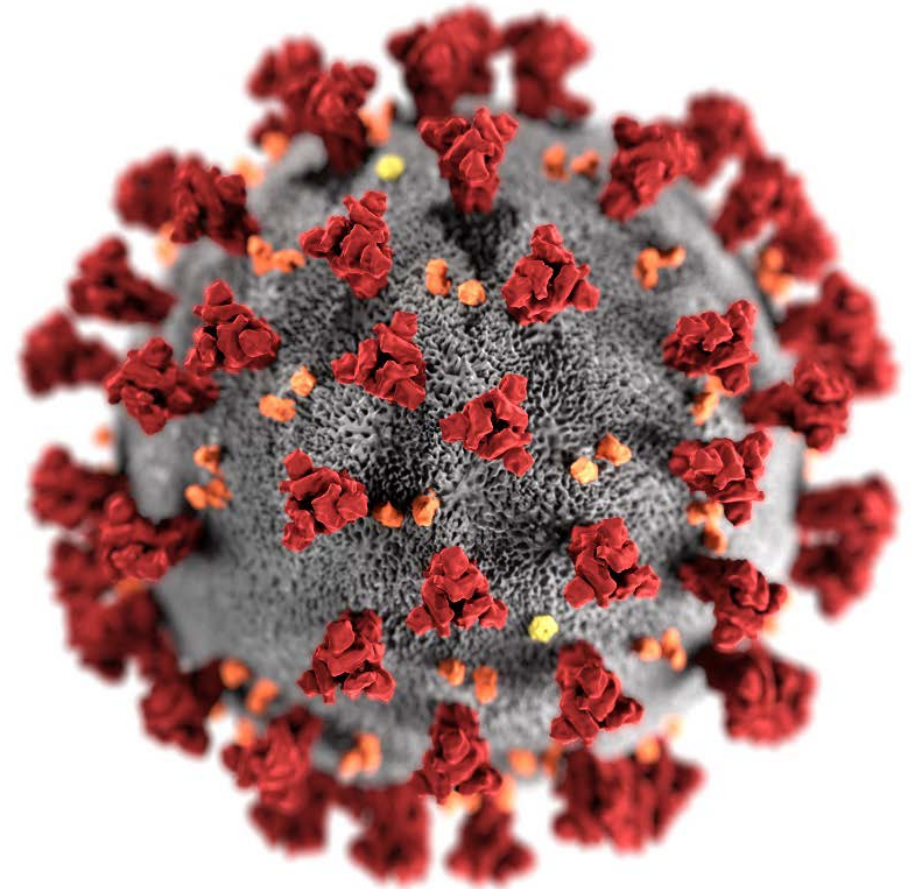


## Phased Allocation of COVID-19 Vaccines

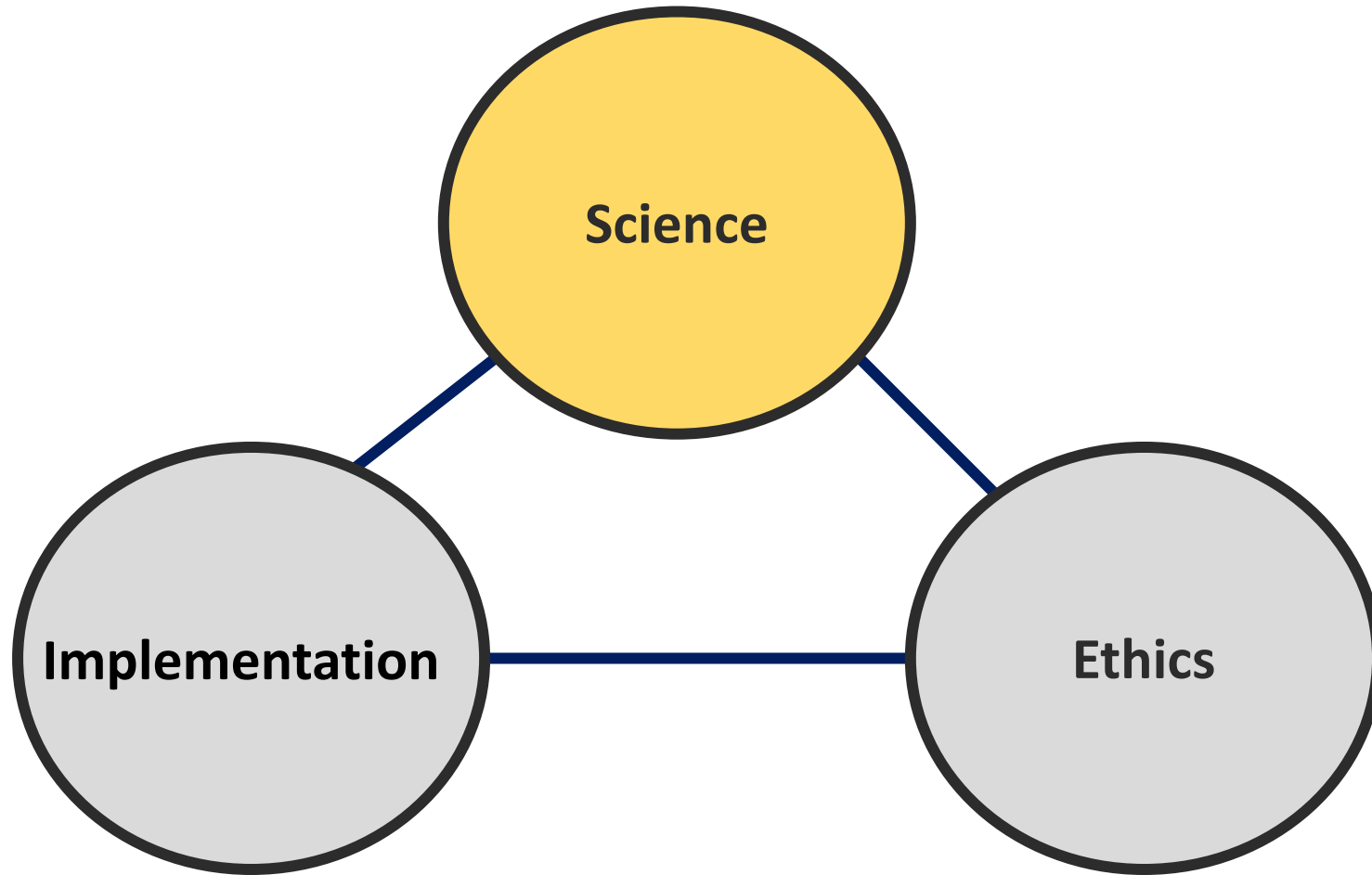
Kathleen Dooling, MD, MPH  
ACIP meeting  
December 1st, 2020



## Policy Question:

- **Should health care personnel and residents of long-term care facilities be offered COVID-19 vaccination in Phase 1a?**

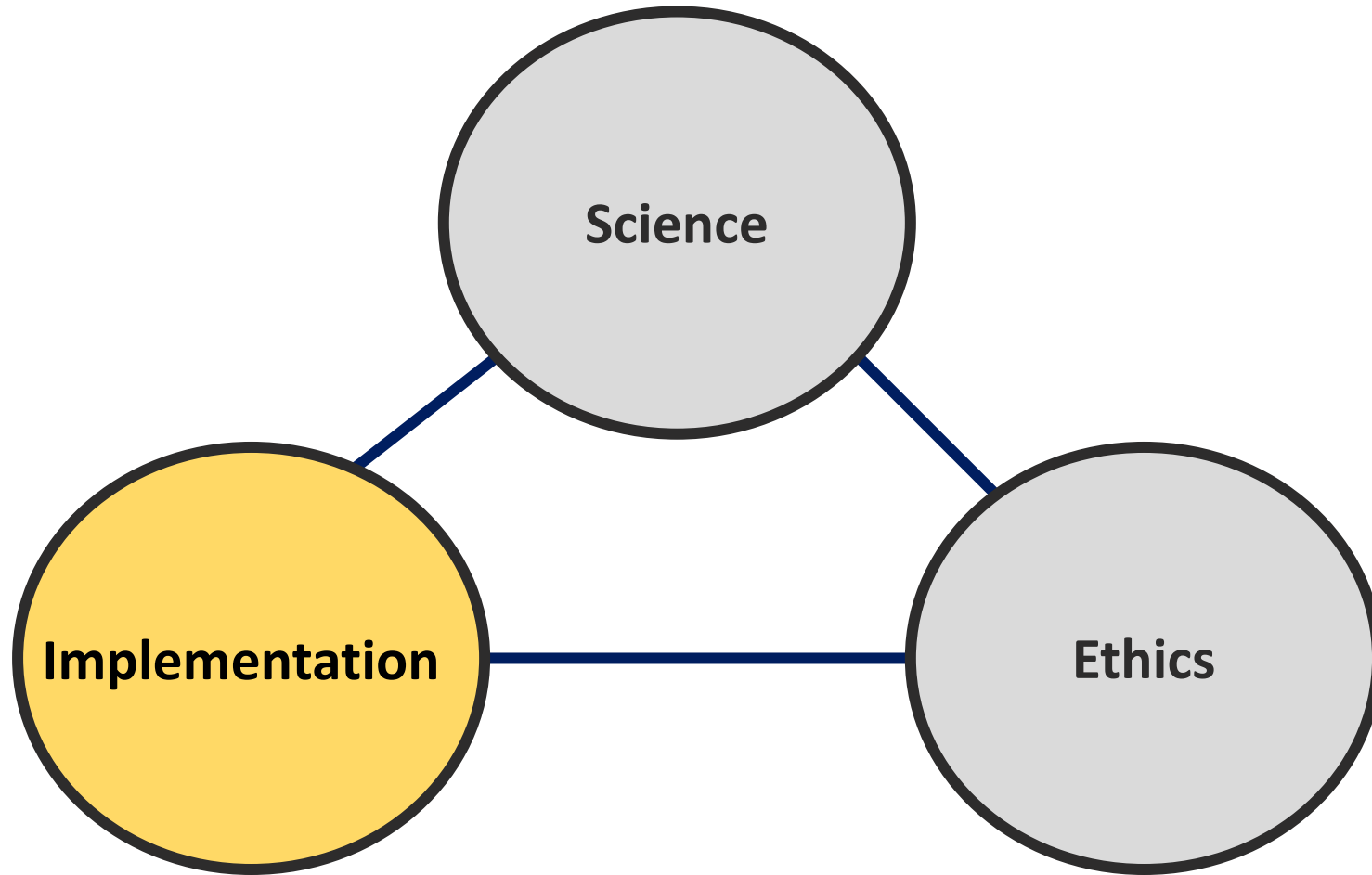
# Allocation of initial COVID-19 vaccine: Phase 1a



## Science:

- COVID-19 disease burden
- Balance of benefits & harms of vaccine

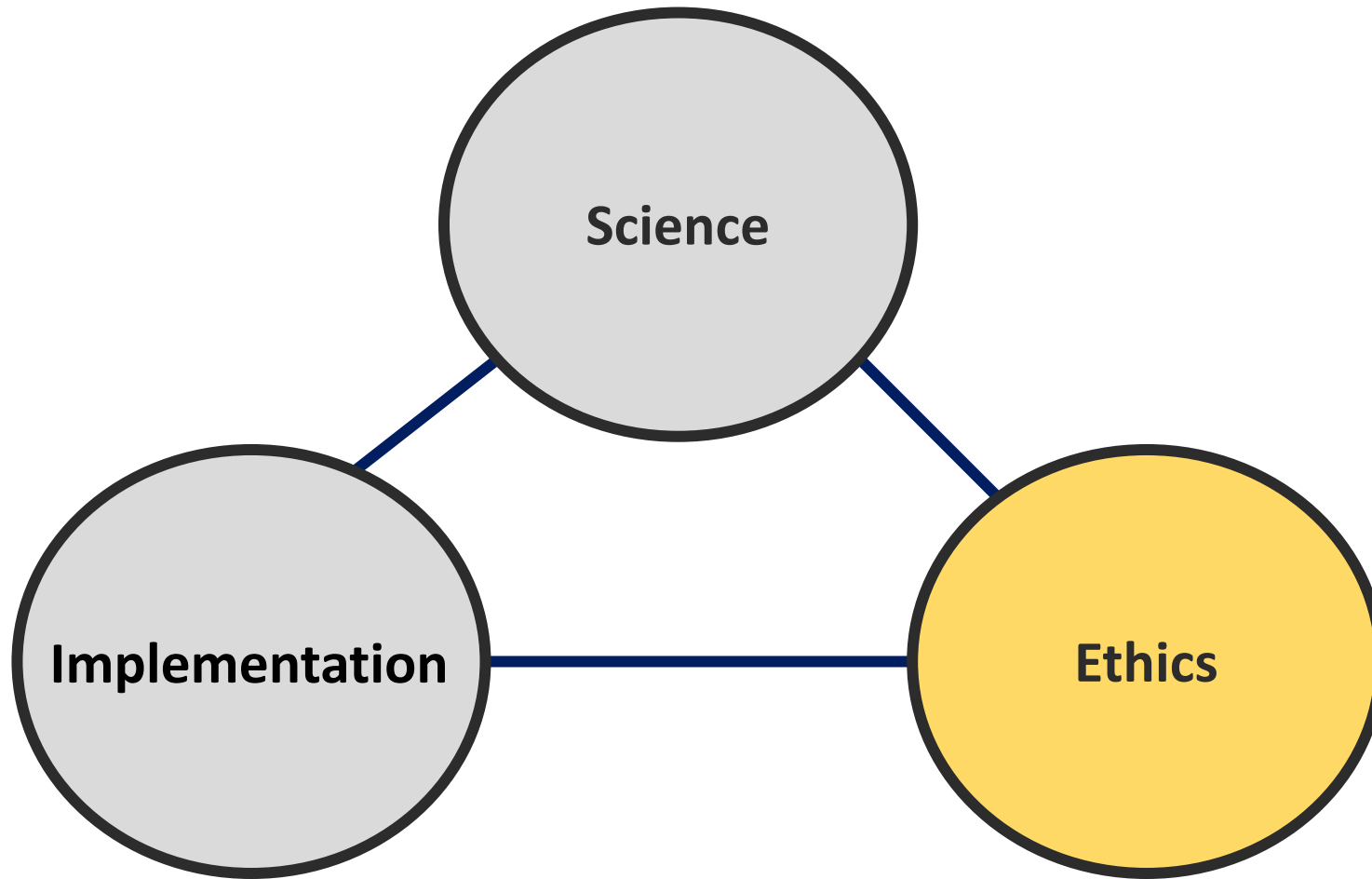
# Allocation of initial COVID-19 vaccine: Phase 1a



## Implementation:

- Values of target group
- Feasibility

# Allocation of initial COVID-19 vaccine: Phase 1a



## Ethical Principles:

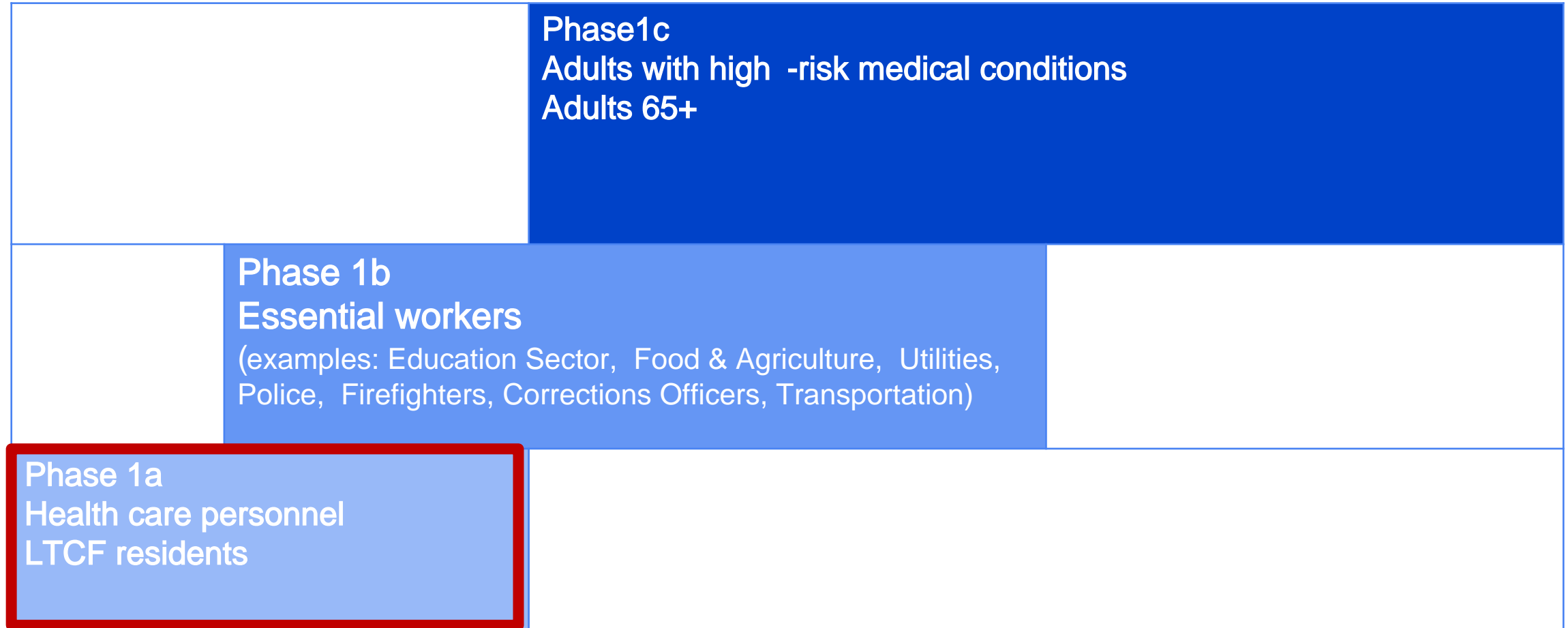
- Maximize benefits & minimize harms
- Promote justice
- Mitigate health inequities
- Promote transparency

# Work Group Proposed Interim Phase 1 Sequence

	<b>Phase1c</b> Adults with high -risk medical conditions Adults 65+	
	<b>Phase 1b</b> <b>Essential workers</b> (examples: Education Sector, Food & Agriculture, Utilities, Police, Firefighters, Corrections Officers, Transportation)	
<b>Phase 1a</b> Health care personnel LTCF residents		

**Time**

# Work Group Proposed Interim Phase 1 Sequence



**Time**

# Proposed groups for Phase 1a vaccination

Health care Personnel <sup>1,2</sup> (HCP) (~21million)	Long-Term Care Facility (LTCF) Residents <sup>3</sup> (~3M)
<b>Examples</b>	
<ul style="list-style-type: none"><li>• Hospitals</li><li>• Long-term care facilities</li><li>• Outpatient clinics</li><li>• Home health care</li><li>• Pharmacies</li><li>• Emergency medical services</li><li>• Public health</li></ul>	<ul style="list-style-type: none"><li>• Skilled nursing facilities (~1.3 M beds)</li><li>• Assisted living facilities (~0.8 M beds)</li><li>• Other residential care (~0.9 M beds)</li></ul>

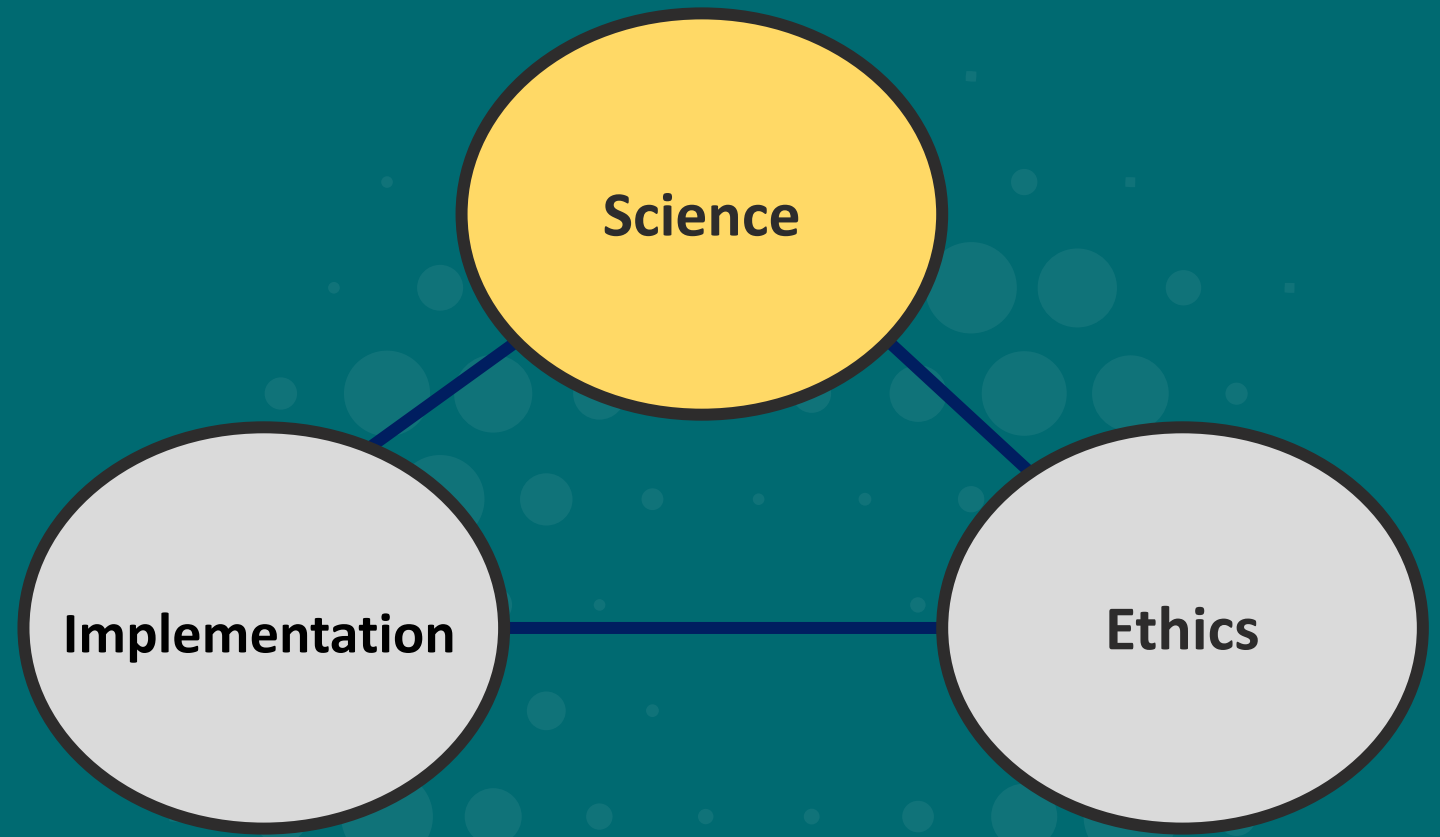
1. <https://www.cdc.gov/infectioncontrol/guidelines/healthcare>

2. <https://www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce>

3. <https://www.cdc.gov/longtermcare/index.html>



# Science



# Summary of Work Group considerations supporting vaccinating health care personnel in Phase 1a

- As of Nov 30, at least 243,000 confirmed COVID-19 cases among HCP, with 858 deaths<sup>1</sup>
- LTCF modeling demonstrates more cases and death averted at the facility by vaccinating staff compared to vaccinating residents<sup>2</sup>
- COVID-19 exposure (inside and outside the healthcare setting) results in absenteeism due to quarantine, infection and illness. Vaccination has the potential to reduce HCP absenteeism

<sup>1</sup> <https://covid.cdc.gov/covid-data-tracker/#health-care-personnel>

<sup>2</sup> Slayton, Modeling Allocation Strategies for the initial SARS-CoV-2 Vaccine Supply, ACIP Aug 21, 2020, <https://www.cdc.gov/vaccines/acip/meetings/slides-2020-08.html>

# Older adults in congregate settings are disproportionately affected by COVID-19

- Long-Term Care Facility (LTCF) residents and staff accounted for 6% of cases and 40% of deaths in the U.S.<sup>1</sup> (Nov 24, 2020)
  - Skilled Nursing Facilities (~1.3M)
    - ~496,000 confirmed + probable cases (as of Nov 15, 2020)<sup>2</sup>
    - >69,000 deaths
  - Assisted Living Facilities (~0.8M)
    - 27,965 confirmed + suspected cases (as of Oct 15/2020, based on 23 states<sup>3</sup>)
    - 5,469 deaths (as of Oct 15/2020, based on 20 states<sup>3</sup>)

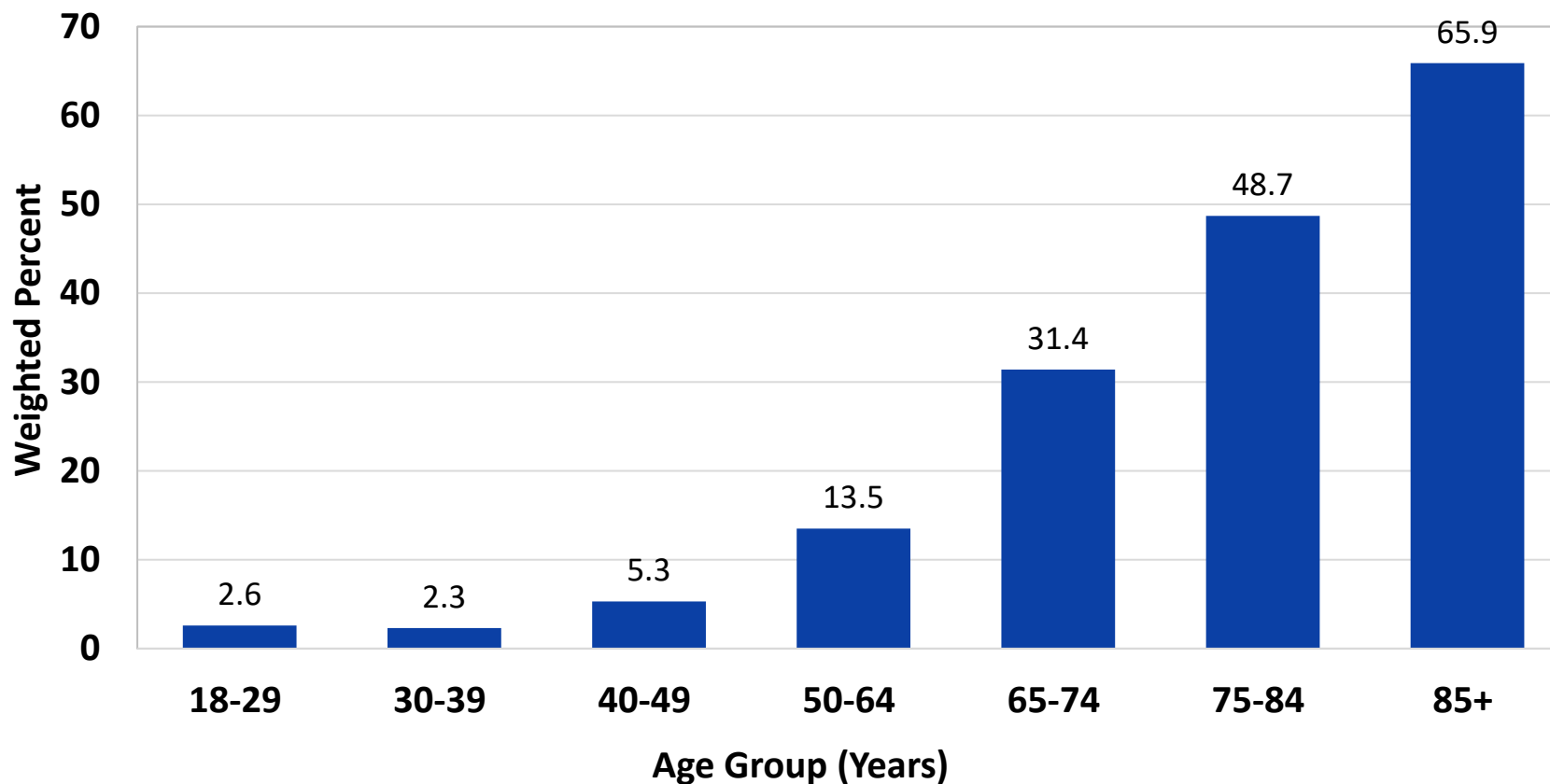
1. Kaiser Family Foundation. State data and policy actions to address coronavirus: COVID metrics by state. San Francisco, CA: Kaiser Family Foundation; 2020. <https://www.kff.org/health-costs/issuebrief/state-data-and-policy-actions-to-address-coronavirus/#long-term-care-casesdeaths>

2. CMS COVID-19 data: <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg/>

3. Yi SH, See I, Kent AG, et al. Characterization of COVID Assisted Living Facilities— 39 States, October 2020. MMWR Morb Mortal Wkly Rep 2020;69:1730-1735. DOI: <http://dx.doi.org/10.15585/mmwr.mm6946a3>

# The majority of COVID-associated hospitalized patients older than 75 years, were admitted from a LTCF\*

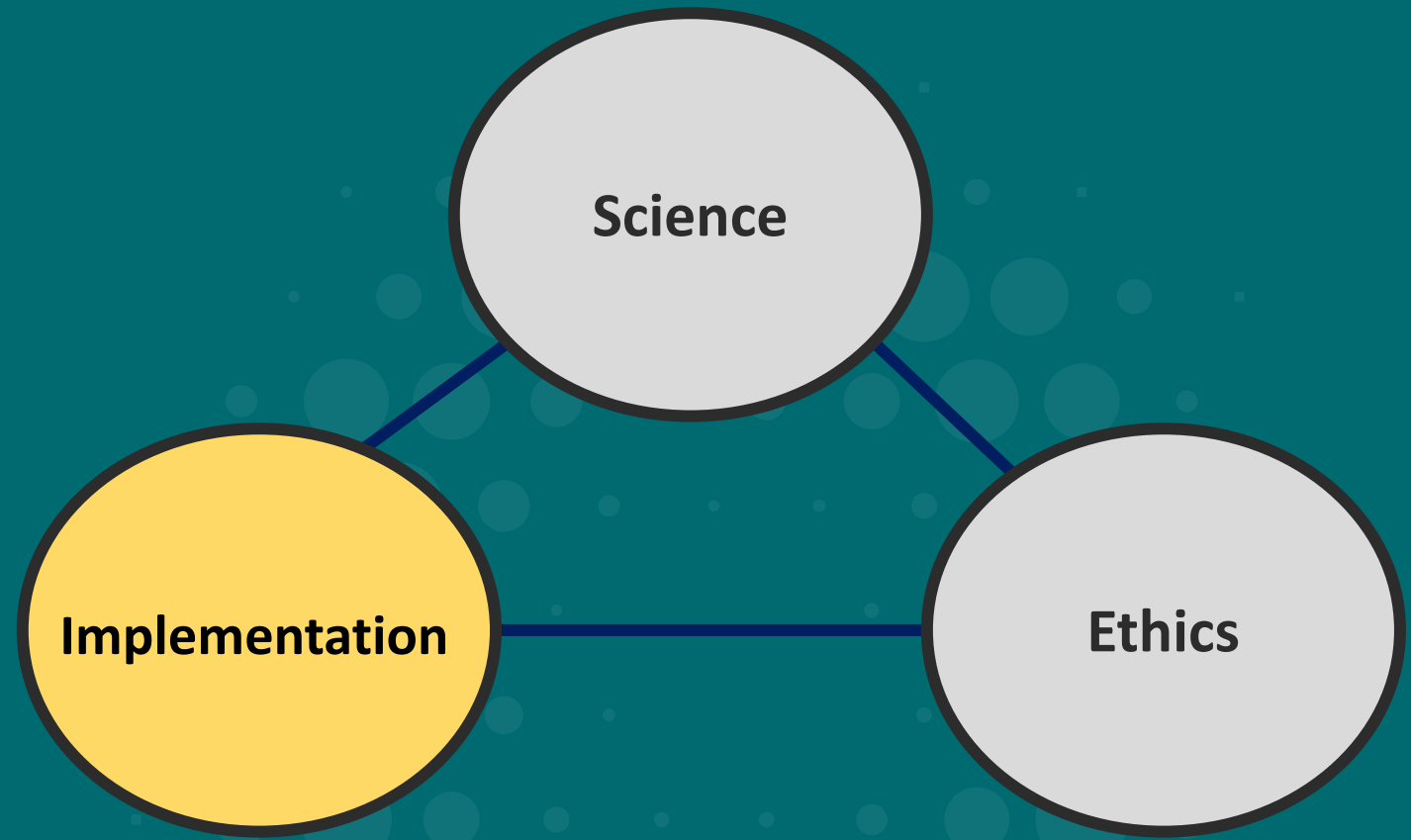
Proportion of COVID-associated hospitalized patients admitted from a LTCF\*



\*LTCF= Nursing home/skilled nursing facility, rehabilitation facility, assisted living/residential care, LTACH, group home/retirement, psychiatric facility, or other long-term care facility

Data Source: COVID-19 associated hospitalizations reported to Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) surveillance system. COVID-NET is a population-based surveillance system that collects data on laboratory-confirmed COVID-19-associated hospitalizations among children and adults through a network of over 250 acute-care hospitals in 14 states.

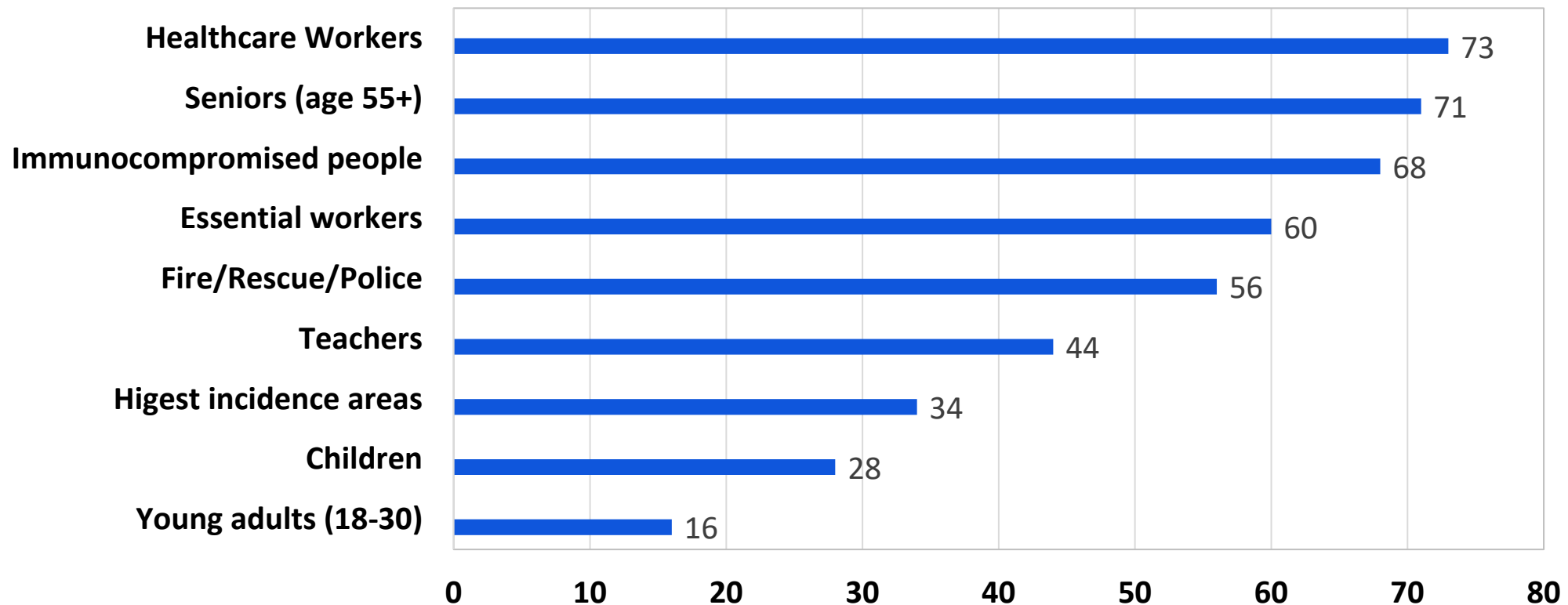
# Implementation



# Survey respondents supported early allocation of COVID-19 vaccine to health care personnel and seniors

Which of the following groups should receive priority when a COVID-19 vaccine is available?

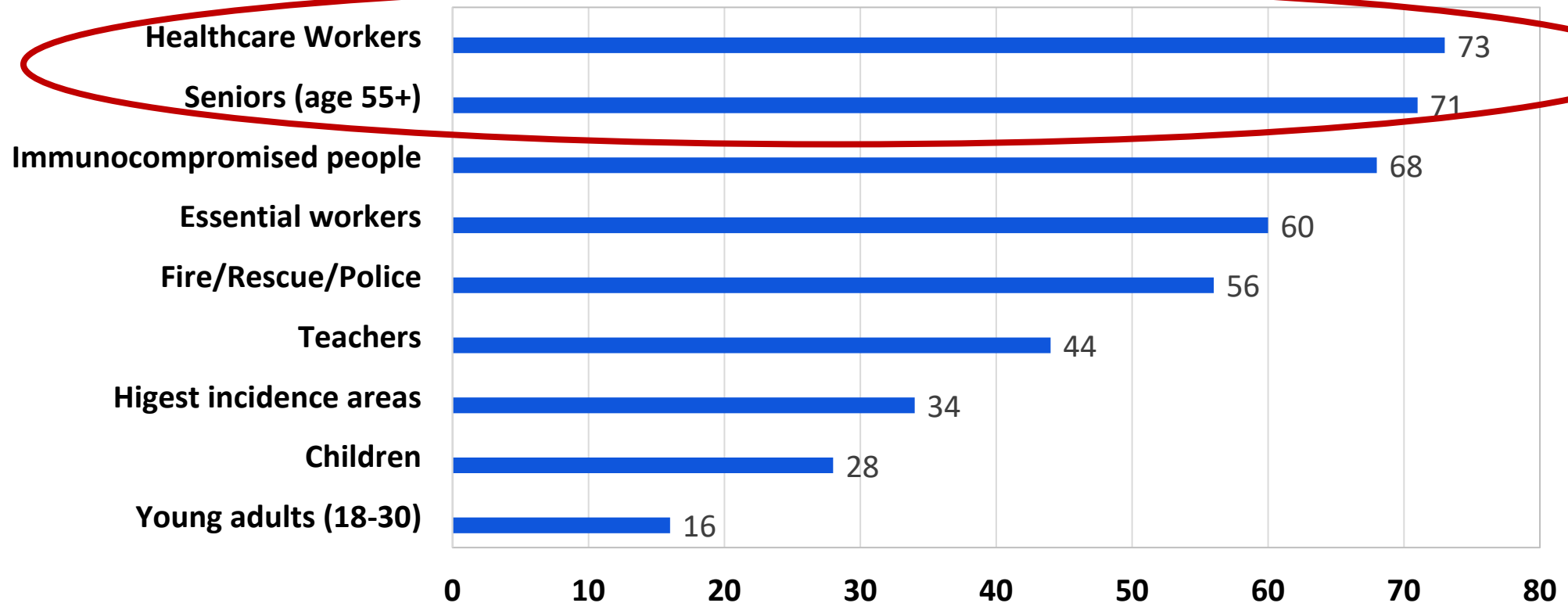
The Harris Poll, n=1399 U.S. Adults, August 14-16, 2020



# Survey respondents supported early allocation of COVID-19 vaccine to groups proposed for Phase 1

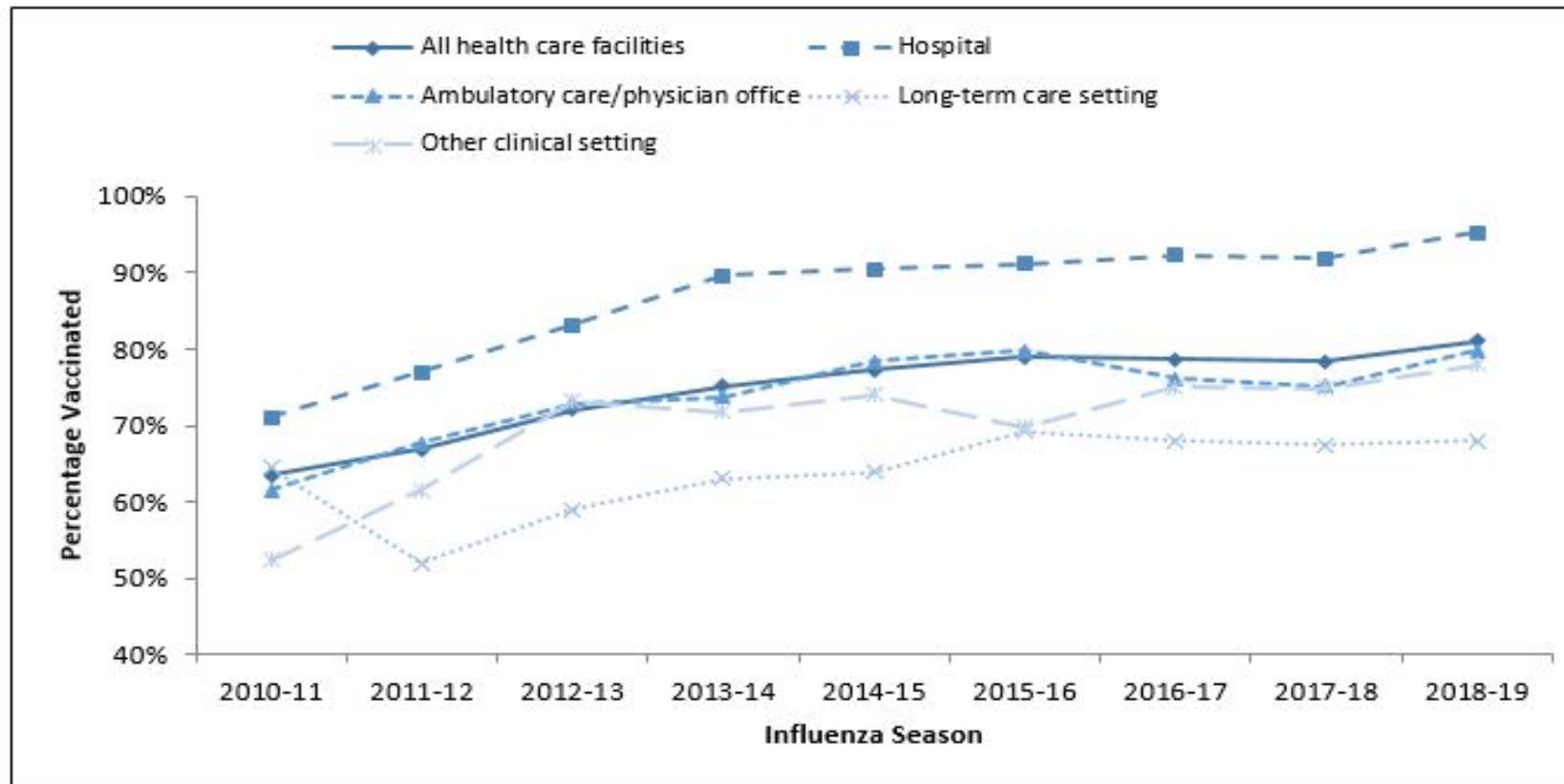
Which of the following groups should receive priority when a COVID-19 vaccine is available?

The Harris Poll, n=1399 U.S. Adults, August 14-16, 2020



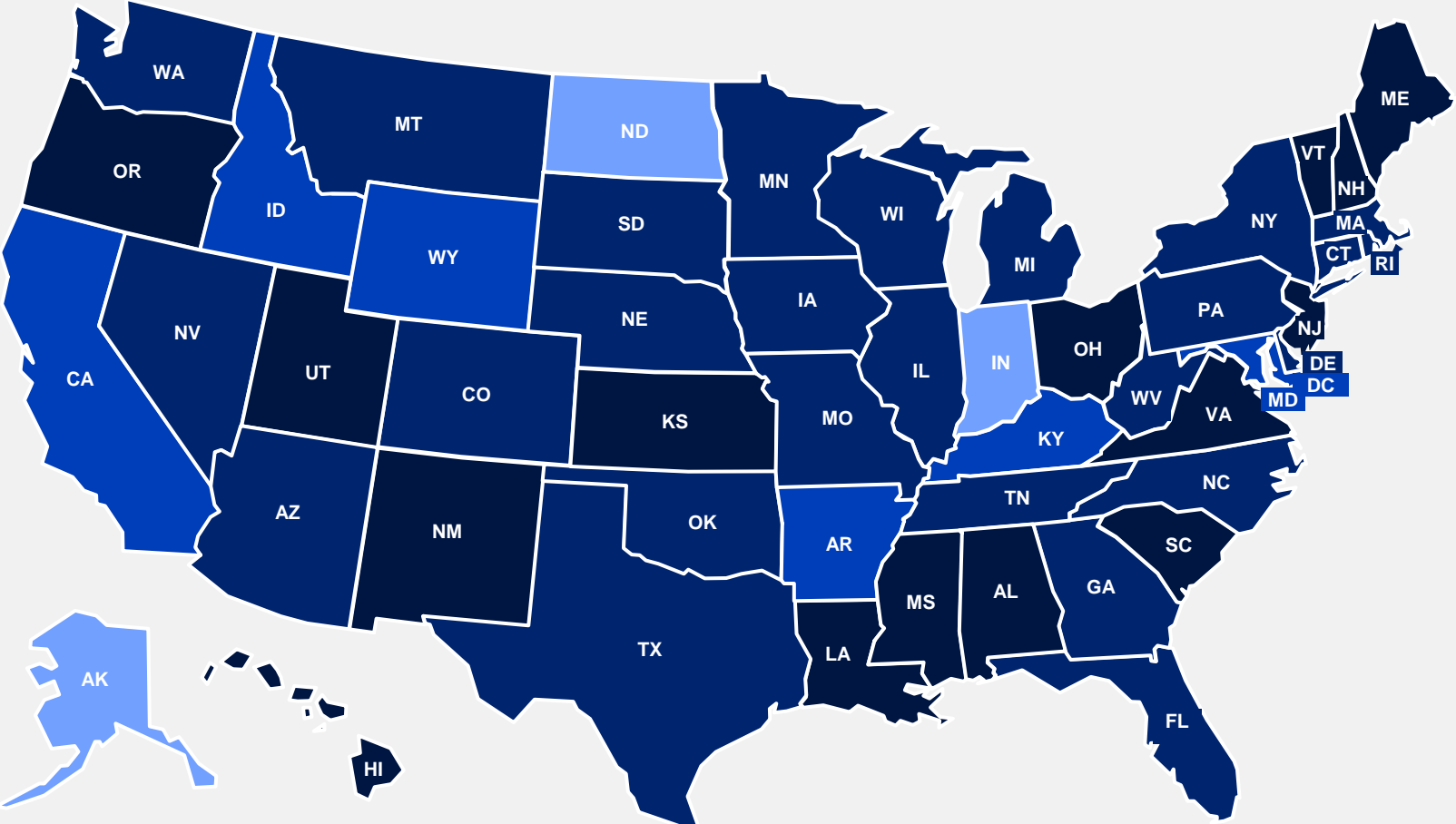
# Hospital staff influenza vaccine uptake highest among health care personnel

Percentage of health care personnel who received influenza vaccination, by work setting\* —  
Internet panel surveys, † United States, 2010–11 through 2018–19 influenza seasons





# Skilled Nursing Facilities (SNFs) Enrolled in Pharmacy Partnership for Long-Term Care Program

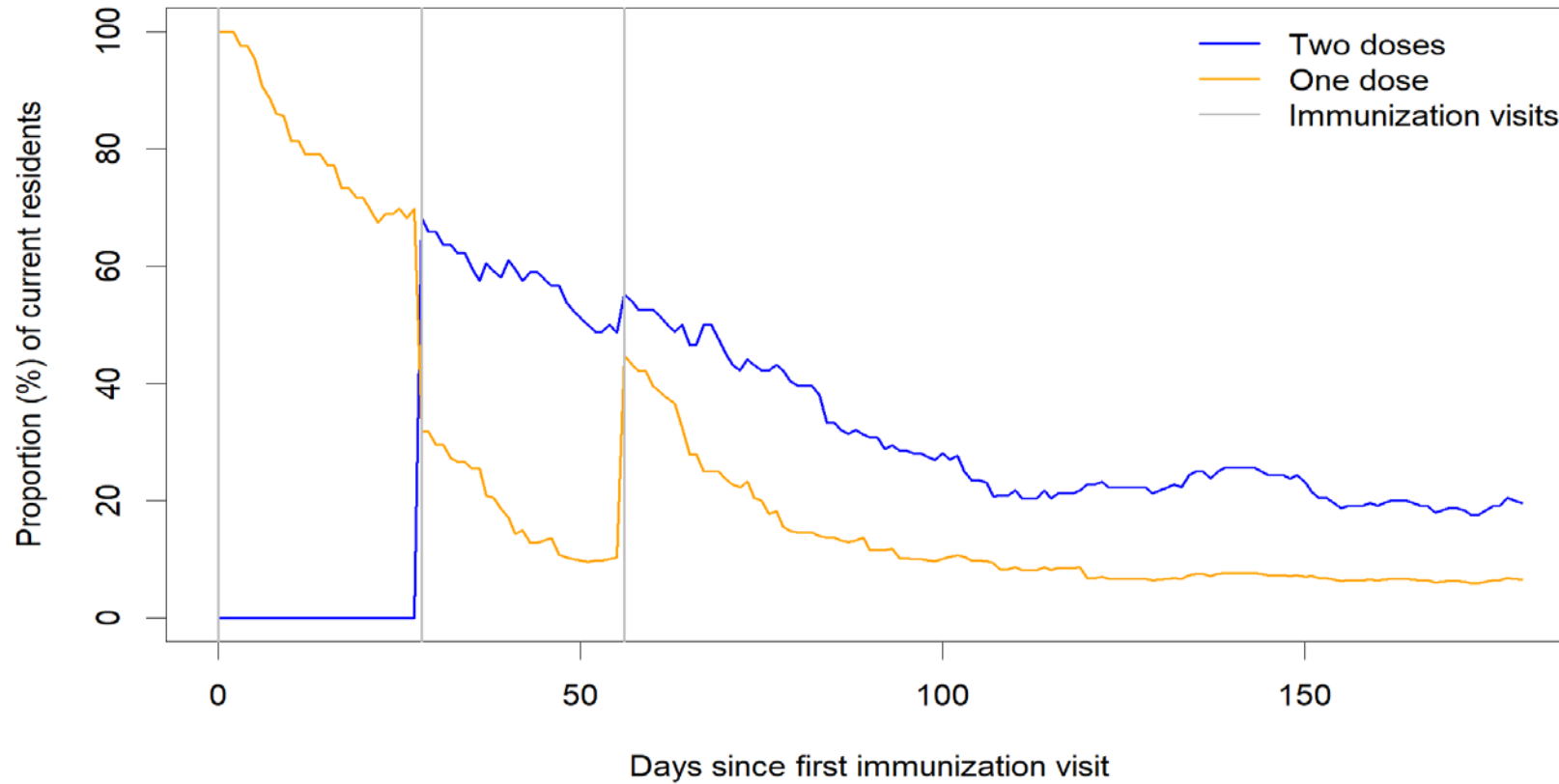


- 100% of SNFs enrolled
- 95-99% of SNFs enrolled
- 90-94% of SNFs enrolled
- 80-89% of SNFs enrolled
- <80% of SNFs enrolled

**99% of total SNFs nationwide have enrolled (N=15,353)**

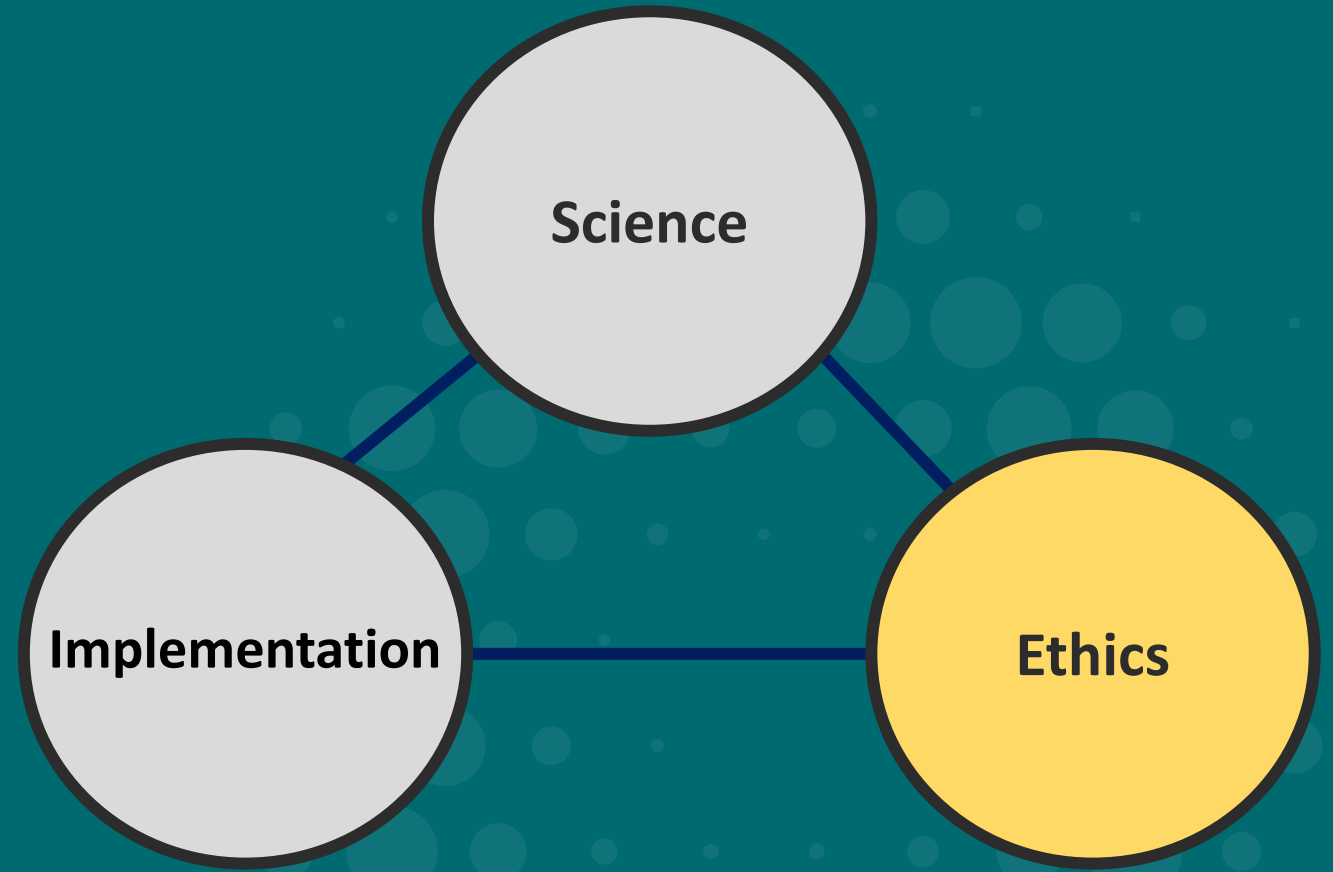
\* States >100% enrollment: Numerator may include non-CMS-certified SNFs. Denominator is only CMS-certified.<sup>17</sup>

# Example: One-dose and two-dose coverage among Skilled Nursing Facility residents



Note: Results from a simulation run based on SNF lengths of stay, excluding stays longer than a year. Discharge data from MCM Minimum Data Set, 2016

# Ethics



# Work Group assessment: Ethics

Ethical Principle	Health care personnel (~21 million)	Long-Term Care Facility Residents (~3 Million)
<b>Maximize benefits &amp; minimize harms</b>	Multiplier effect - protection of HCPs and preservation of healthcare capacity	LTCF residents are at high risk for infection severe disease and death from COVID-19. Prevention may reduce hospital utilization
<b>Promote justice</b>	HCP provide care in high risk settings and will be essential for vaccine distribution	Federal Pharmacy Partnership Program will facilitate equal access to vaccine across most LTCFs
<b>Mitigate health inequities</b>	HCP includes broad range of occupations, inclusive of low wage earners and racial and minority groups	Federal Pharmacy Partnership Program will reach LTCF across the socioeconomic spectrum

# Work Group assessment:

	Health care personnel (~21 million)	Long-Term Care Facility Residents (~3 Million)
Science	+++	+++
Implementation	+++	+++
Ethics	+++	+++

# Additional Work Group considerations for Phase 1a

- This represents interim guidance for Phase 1a– allocation policy will need to be dynamic and adapt as new information such as vaccine performance and supply and demand become clear
- Gating criteria will be necessary to move expeditiously from one Phase to the next, as demand saturates
- Following vaccination, measures to stop the possible spread of SARS-CoV-2, such as masks and social distancing, will still be needed
- The U.S. government is committed to making COVID-19 vaccines available to all residents who want them, as soon as possible

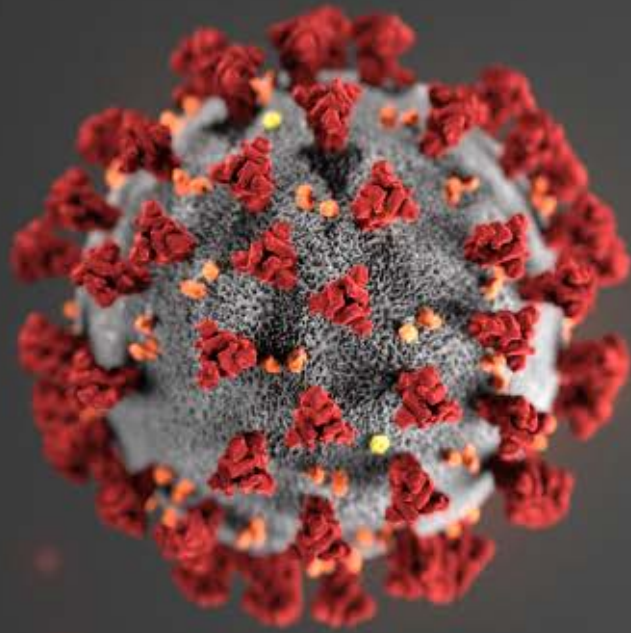
# Feedback from ACIP meeting, November 23, 2020:

## Health care personnel

- Guidance on sub-prioritization of HCP when vaccine supply is limited
- Address vaccination in pregnant/lactating HCP
- Reactogenicity following vaccination:
  - Guidance on scheduling to avoid potential clustering of worker absenteeism related to systemic reactions
  - Guidance on evaluation of systemic symptoms following vaccination

## LTCF Residents

- Understanding of LTCF resident consent/assent for vaccination
- Reactogenicity following vaccination & safety monitoring



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

# Thank you

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.

