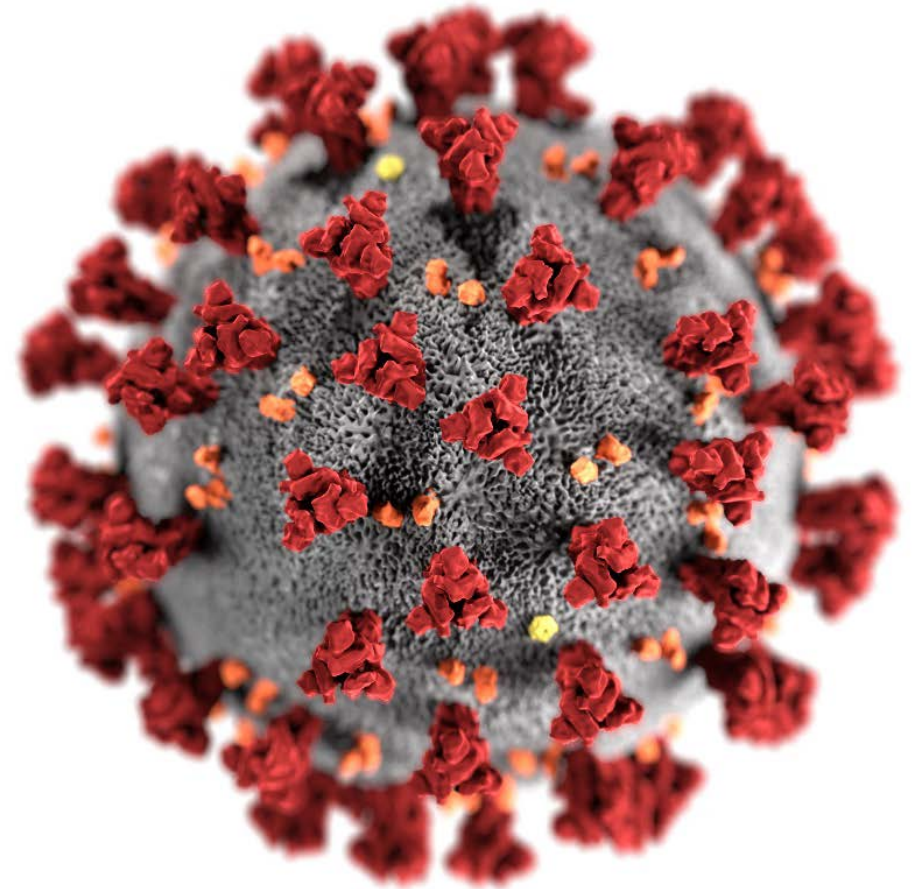


## Phased Allocation of COVID-19 Vaccines

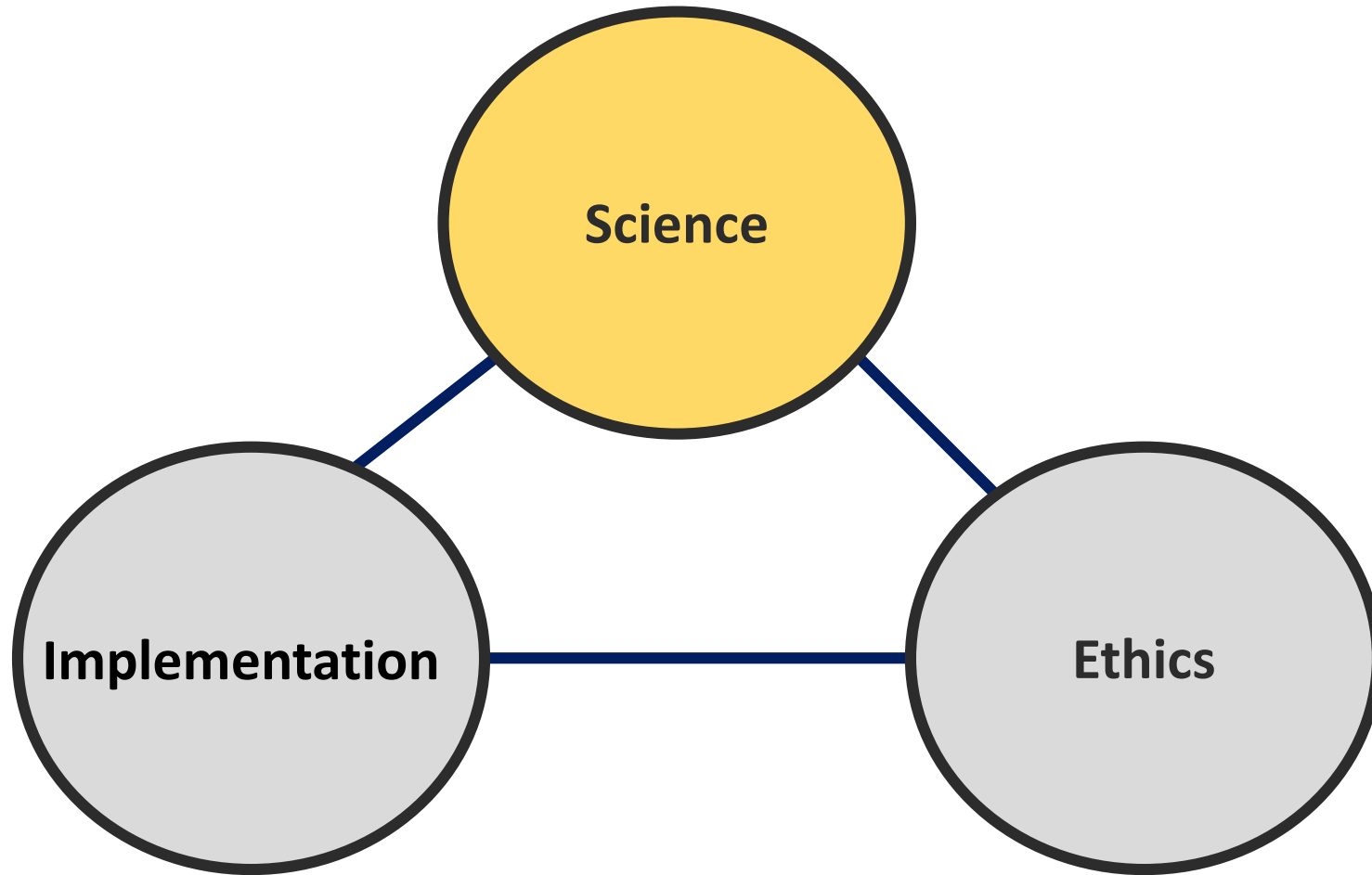
Kathleen Dooling, MD, MPH  
ACIP meeting  
December 1st, 2020



## **Policy Question:**

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

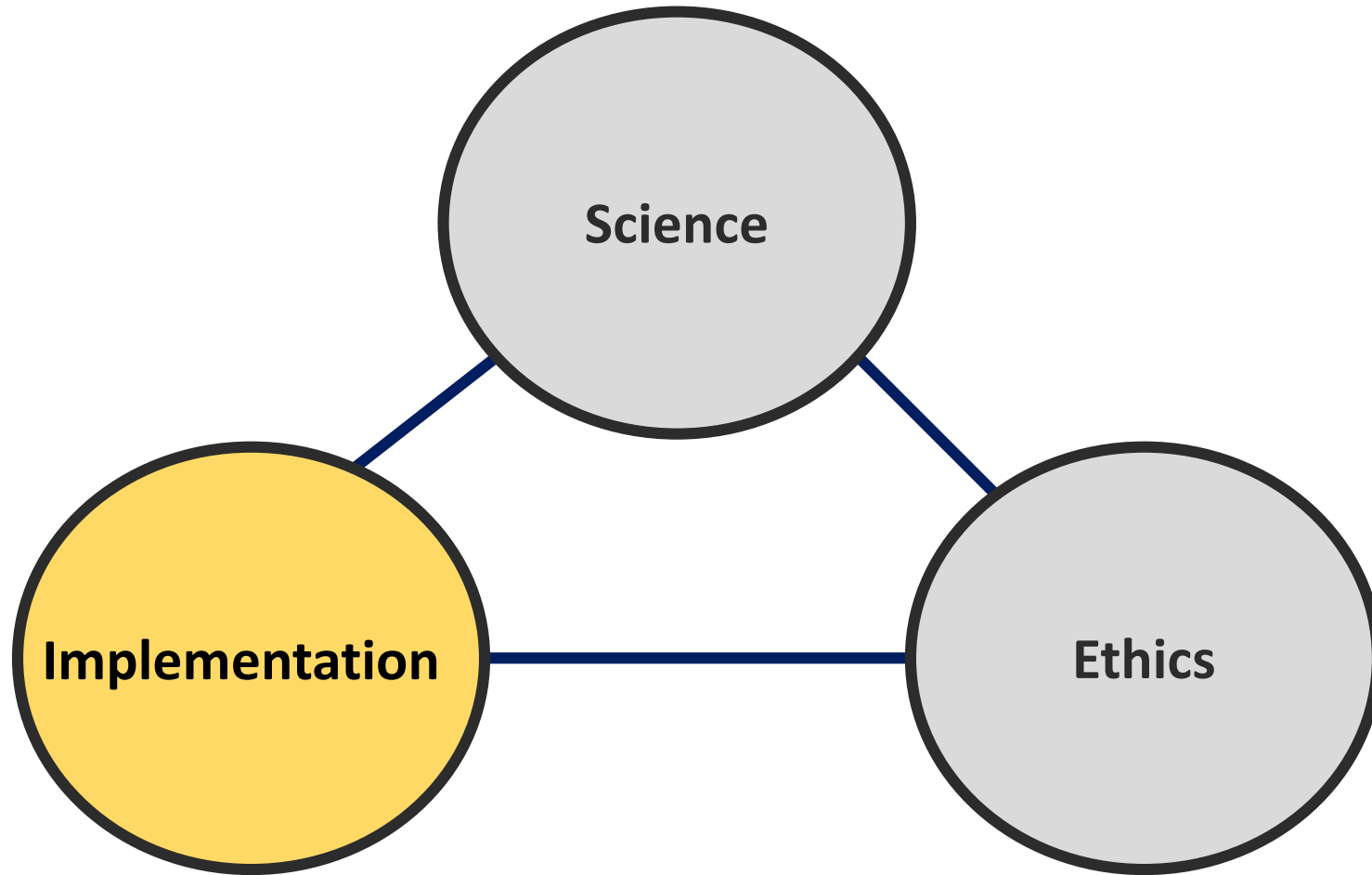
# Allocation of initial COVID-19 vaccine: Phase 1a



## Science:

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

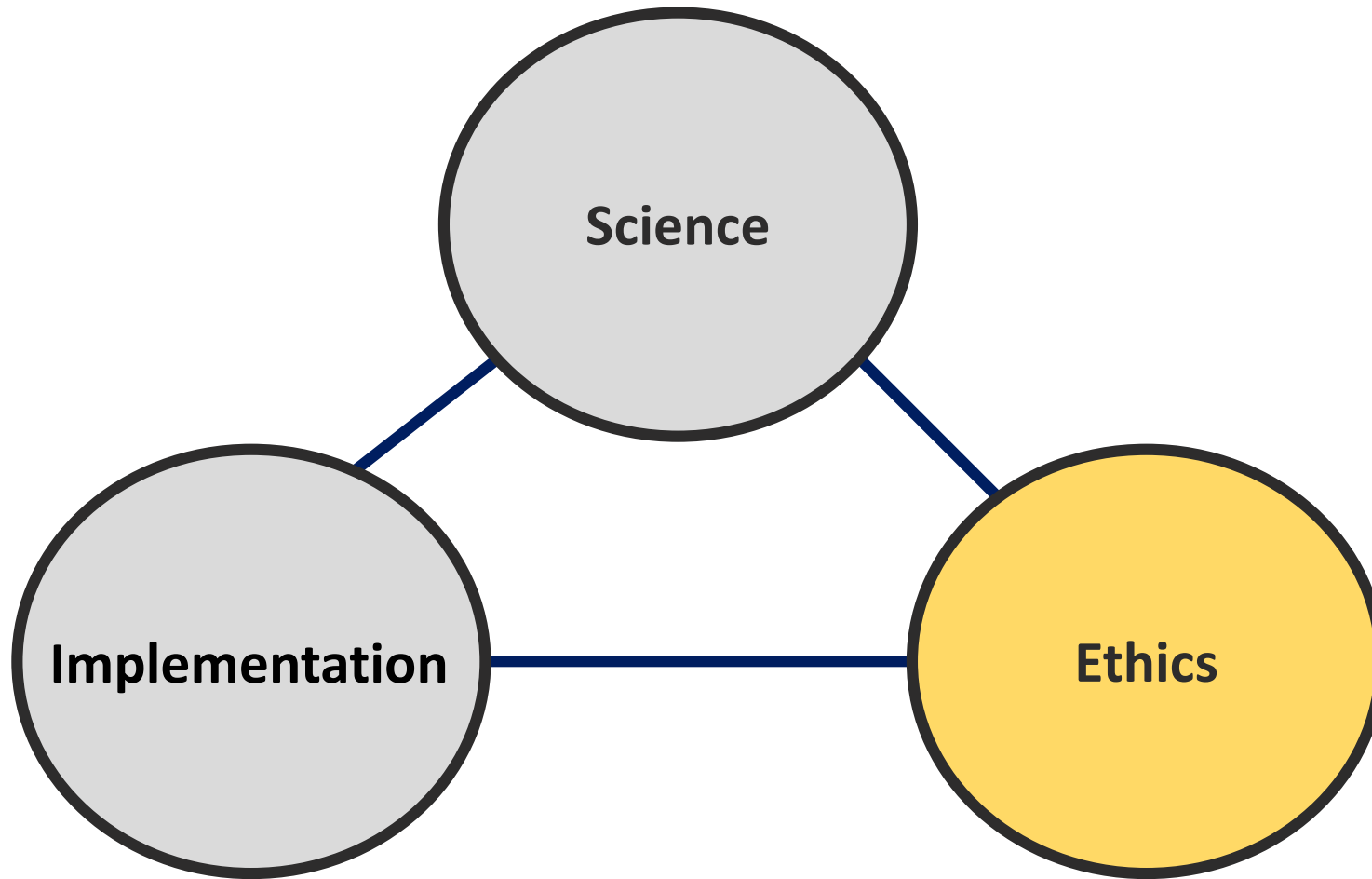
# Allocation of initial COVID-19 vaccine: Phase 1a



## Implementation:

- Values of target group
- Feasibility

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



## Ethical Principles:

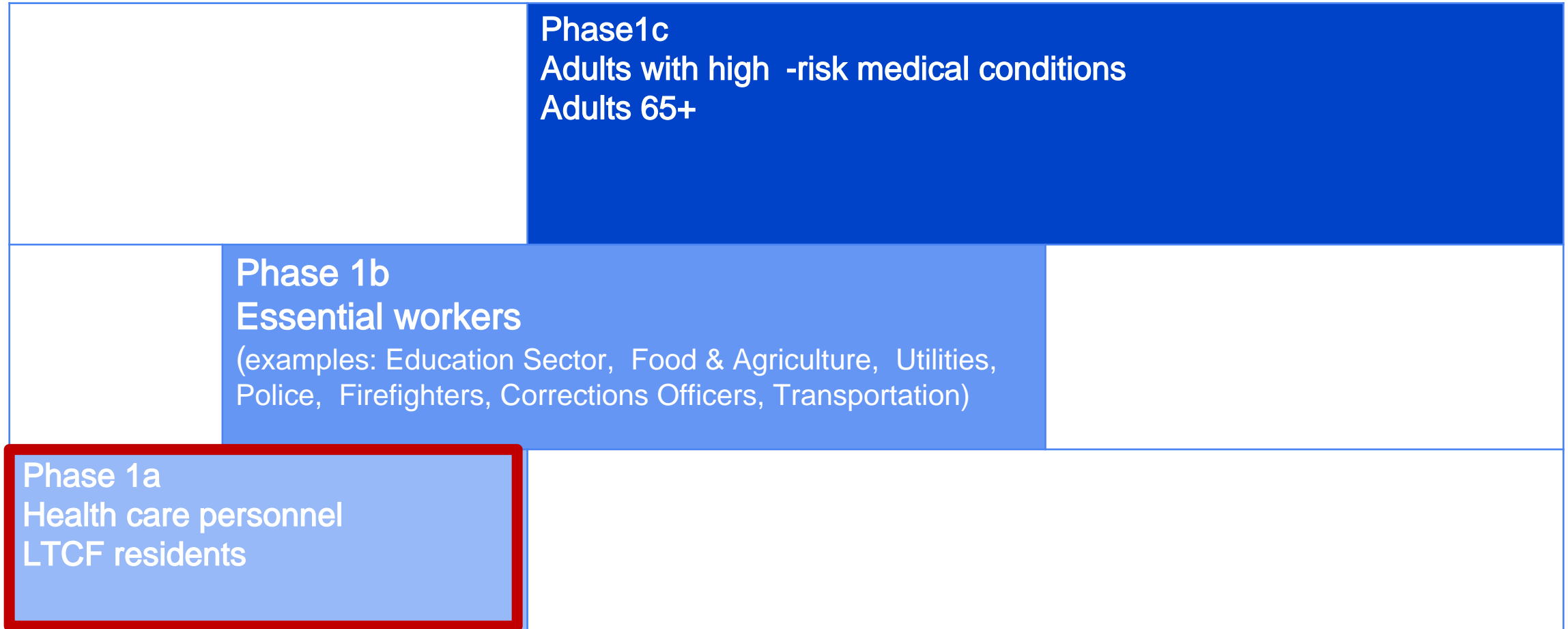
- Maximize benefits & minimize harms
- Promote justice
- Mitigate health inequities

# 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>

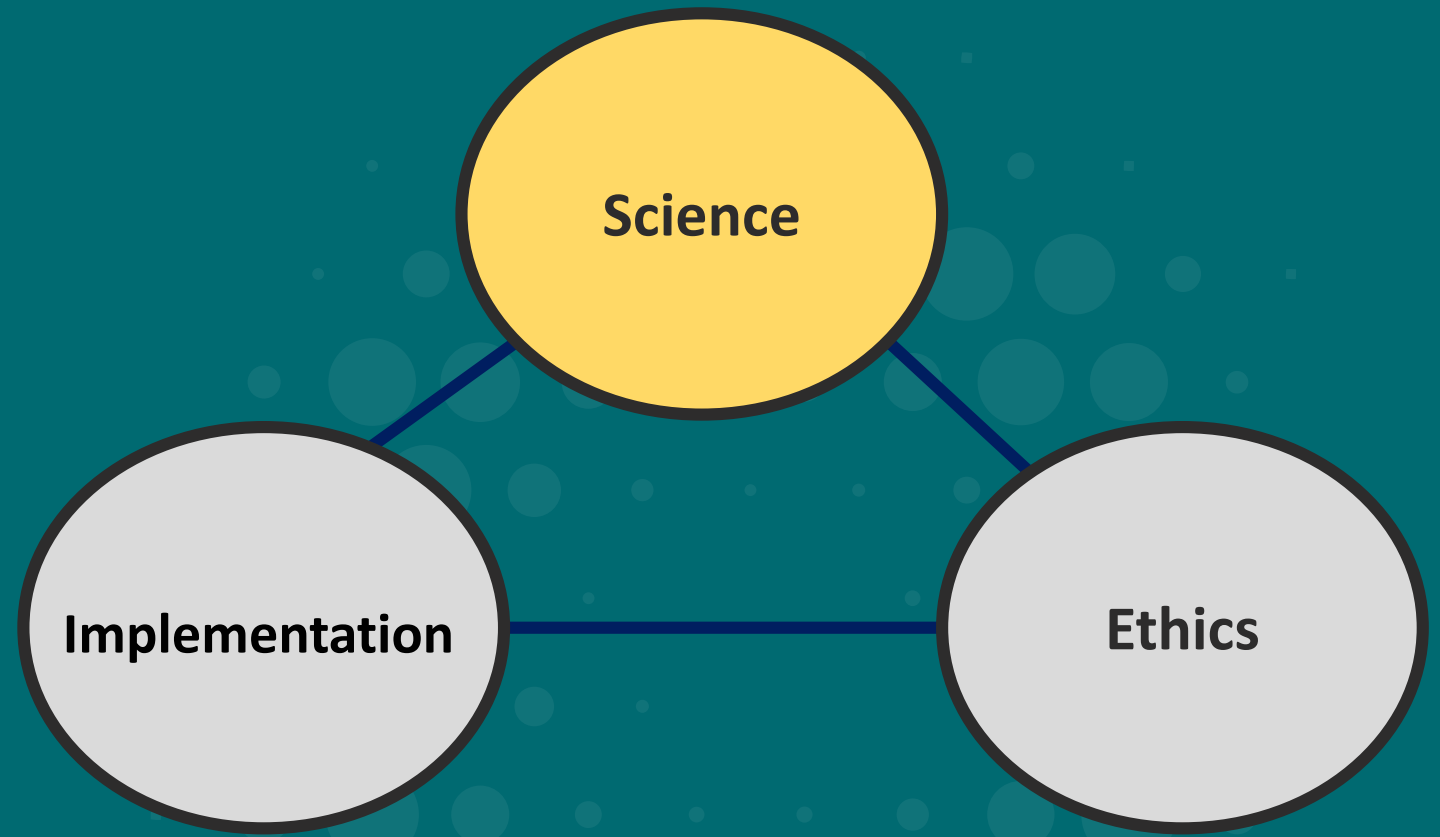
1. <https://www.cdc.gov/infectioncontrol/guidelines/healthcare>

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>)

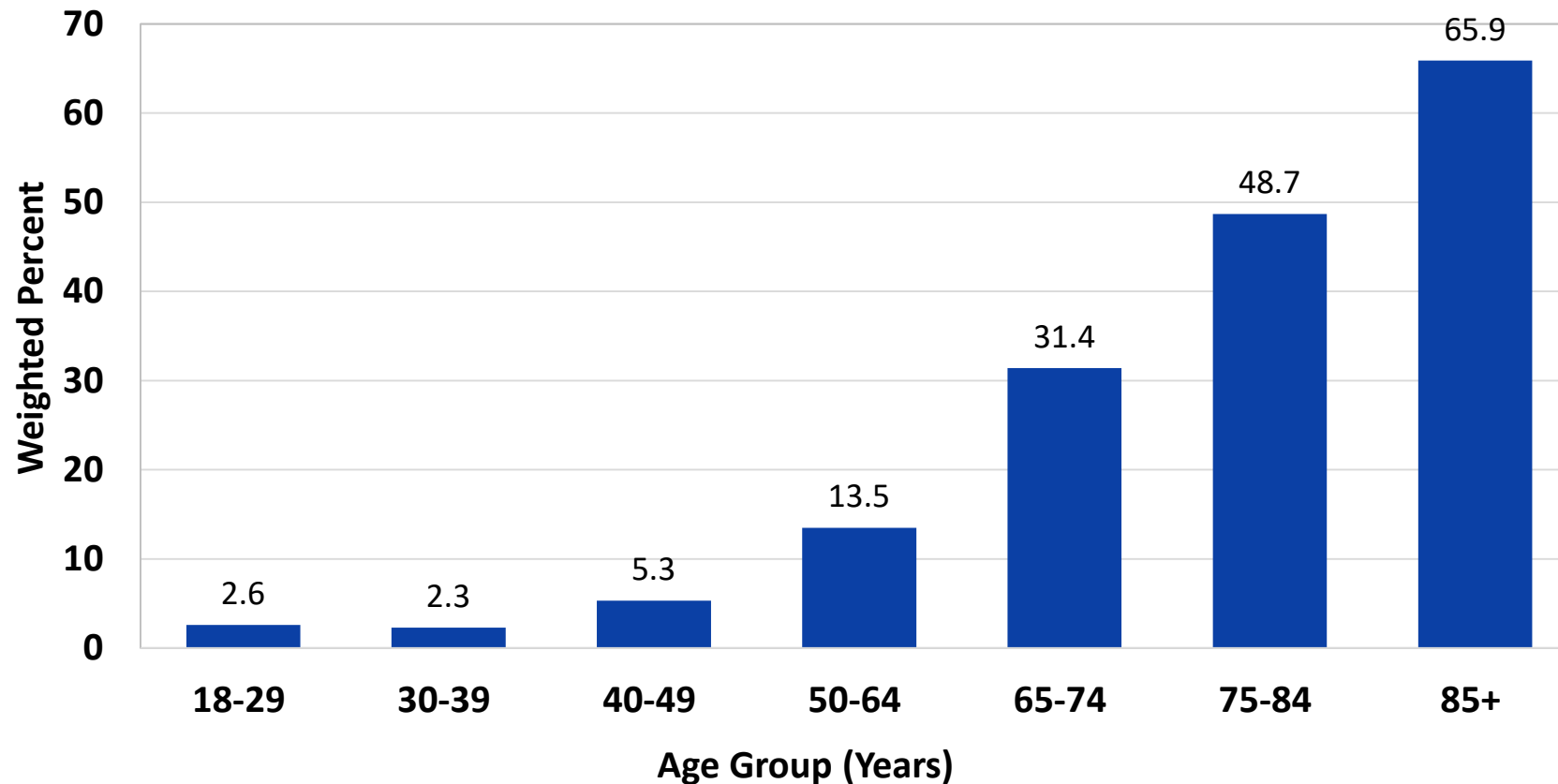
1. Kaiser Family Foundation. State data and policy actions to address coronavirus: COVID metrics by state. San Francisco, CA: Kaiser Family Foundation; 2020. <https://www.kff.org/health-costs/issuebrief/state-data-and-policy-actions-to-address-coronavirus/#long-term-care-casesdeaths>

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\*

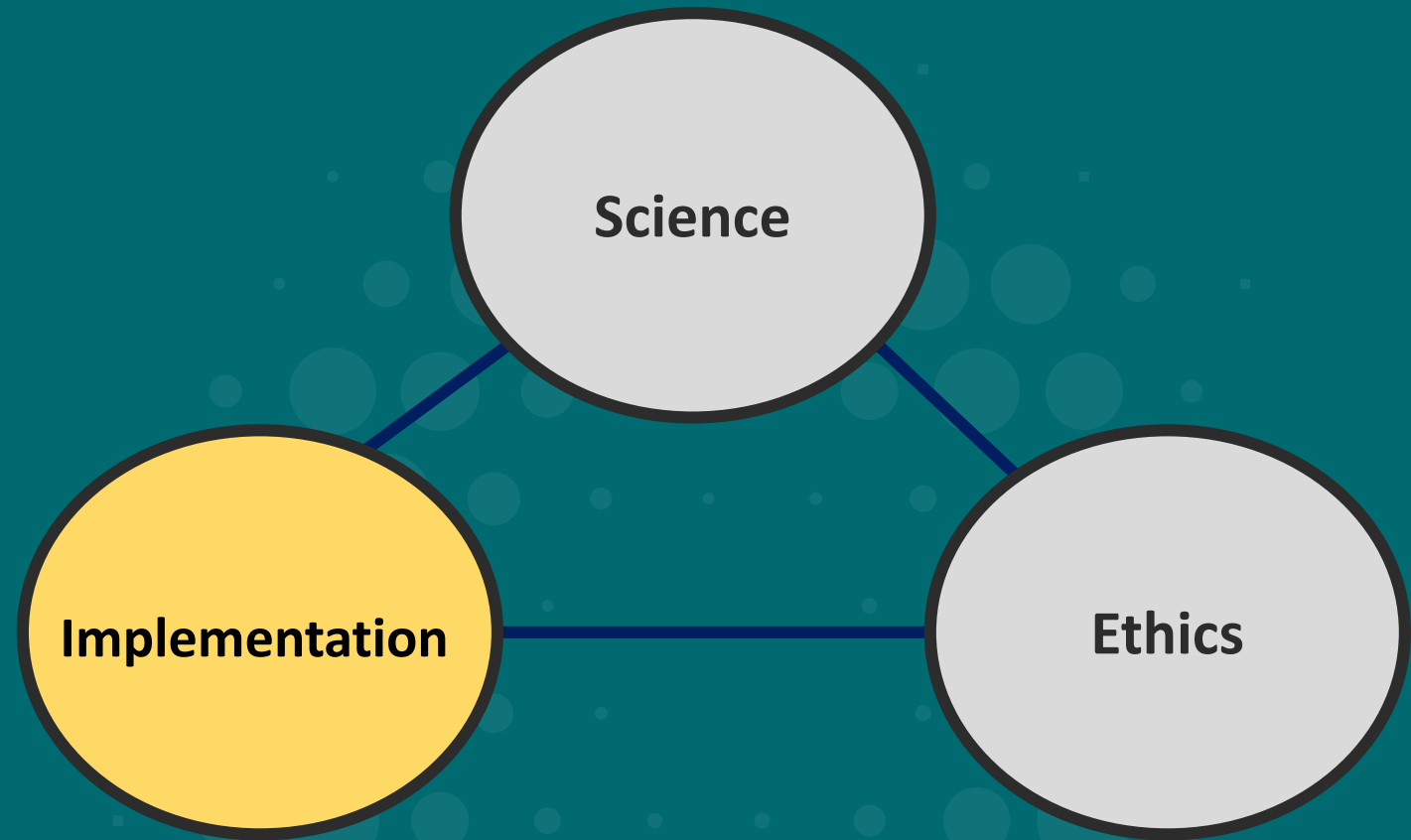
Proportion of COVID-associated hospitalized patients admitted from a LTCF\*



\*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.

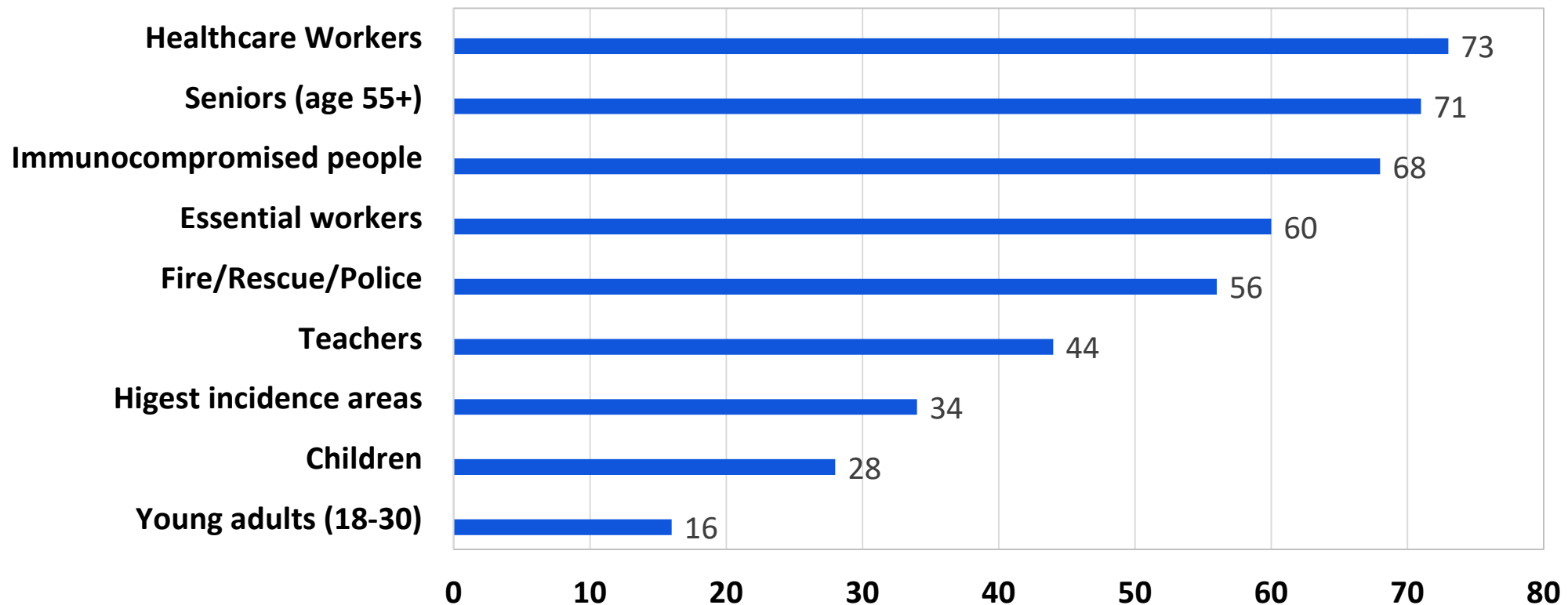
# Implementation



# 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?

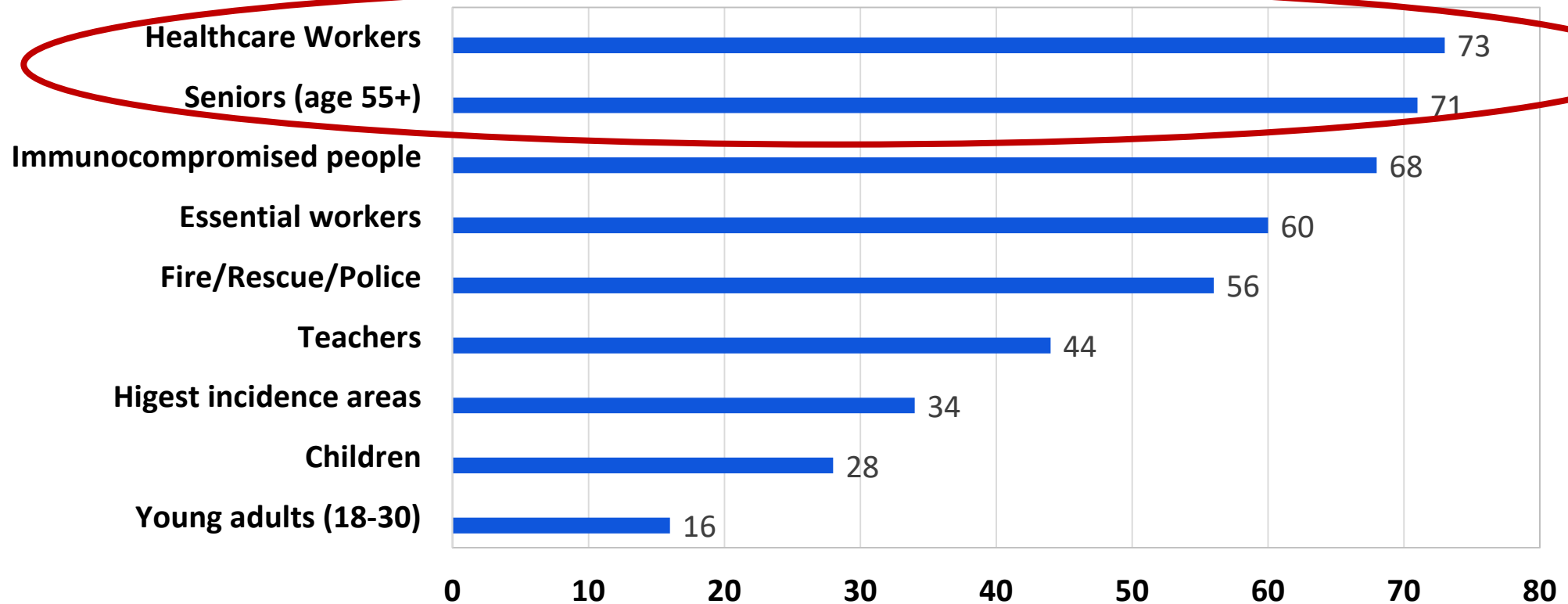
The Harris Poll, n=1399 U.S. Adults, August 14-16, 2020



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

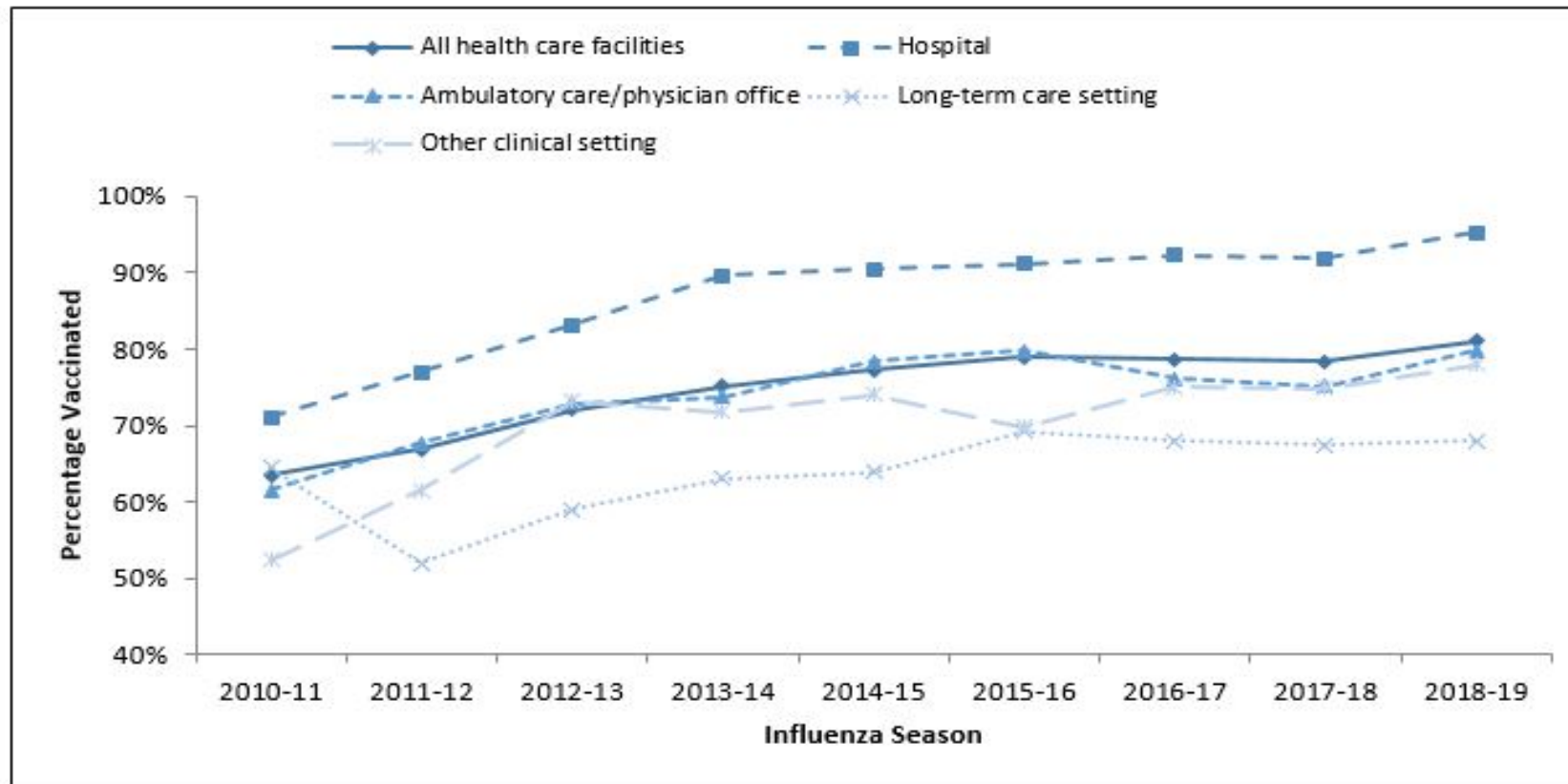
Which of the following groups should receive priority when a COVID-19 vaccine is available?

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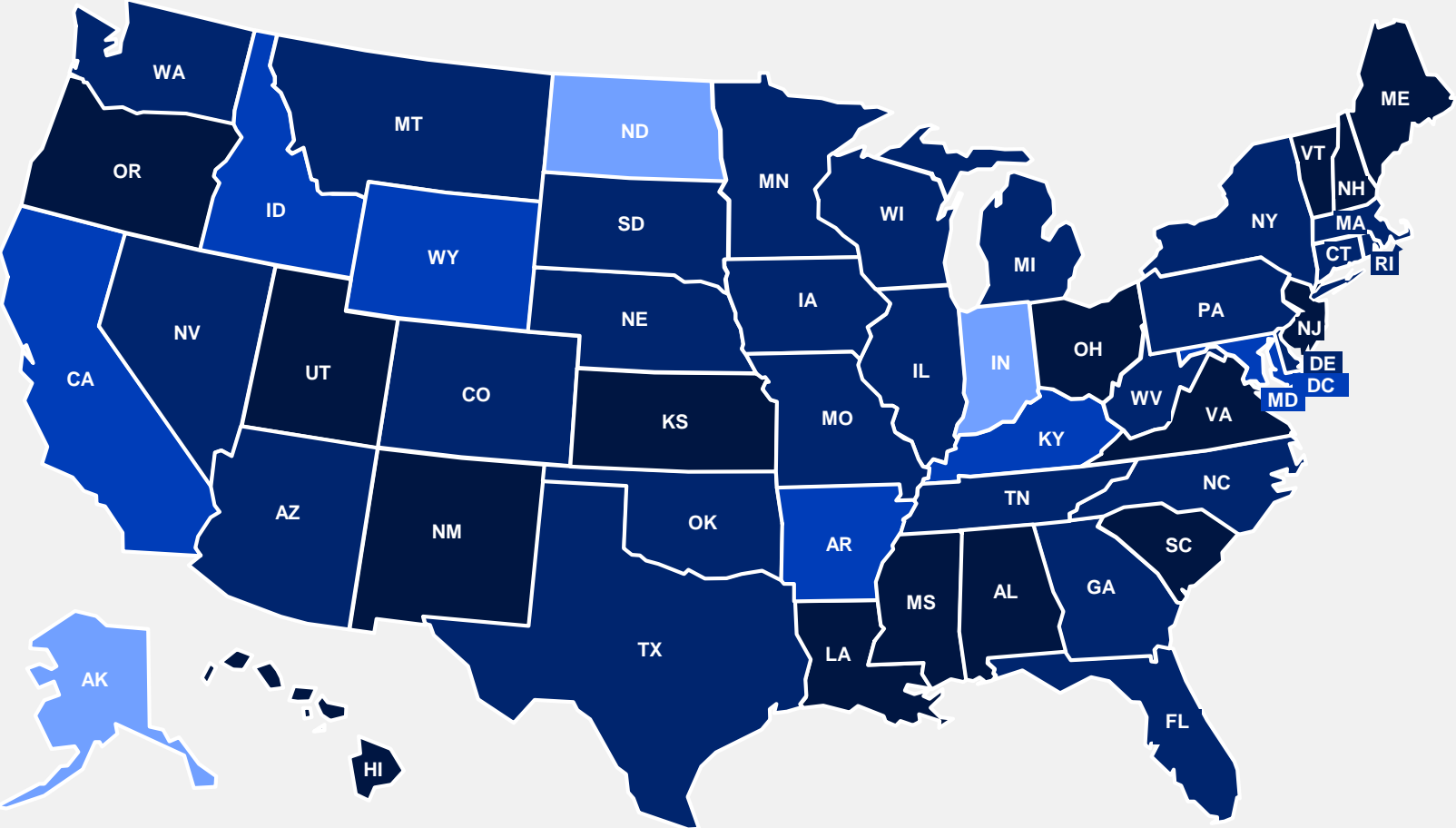
# Hospital staff influenza vaccine uptake highest among health care personnel

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

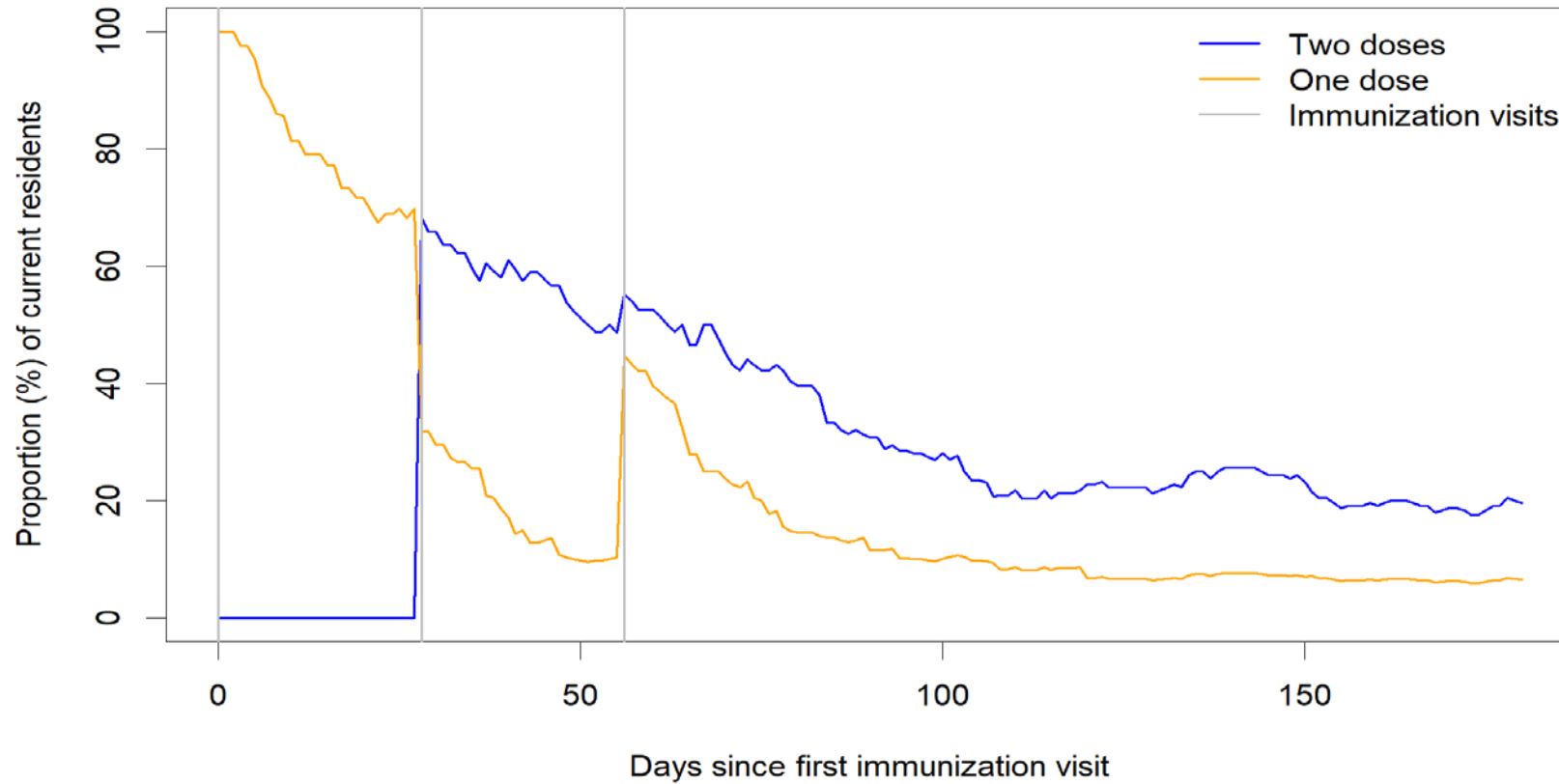


- 100% of SNFs enrolled
- 95-99% of SNFs enrolled
- 90-94% of SNFs enrolled
- 80-89% of SNFs enrolled
- <80% of SNFs enrolled

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

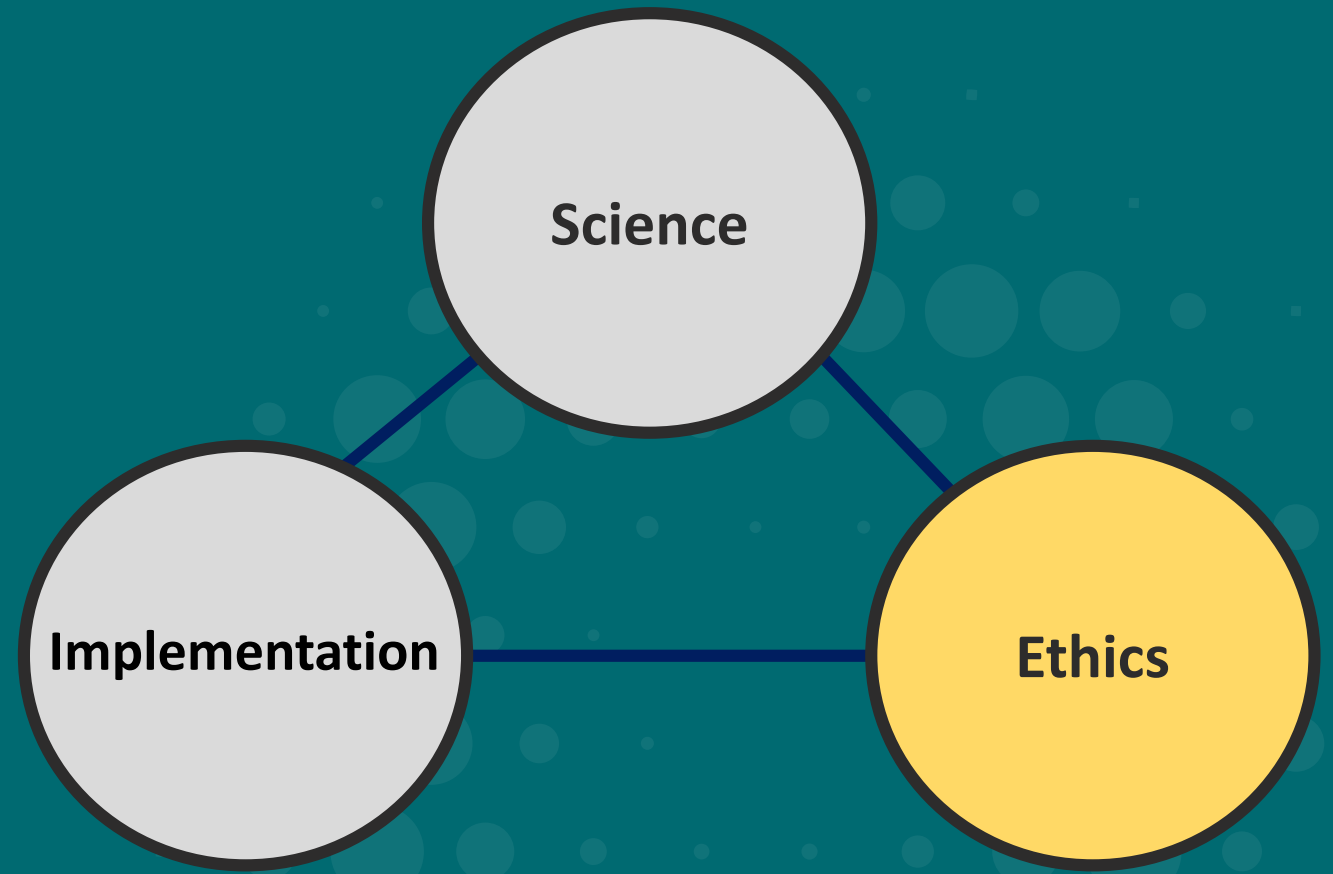
\* States >100% enrollment: Numerator may include non-CMS-certified SNFs. Denominator is only CMS-certified.<sup>17</sup>

# 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

# Proposed Interim Phase 1 Sequence

	<b>Phase 1c</b> Adults with high -risk medical conditions Adults 65+	
	<b>Phase 1b</b> Essential workers	
<b>Phase 1a</b> HCP LTCF residents		

**Policy Question:**

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

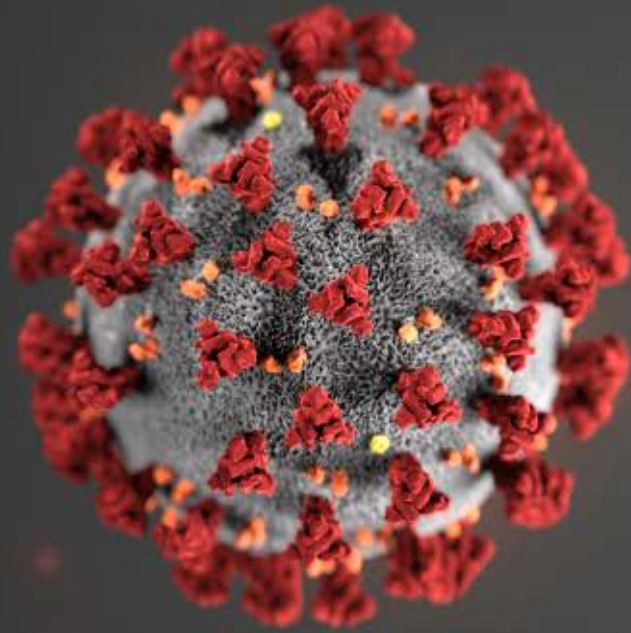


# ACIP Vote – Interim Recommendation

When a COVID-19 vaccine is authorized by FDA and recommended by ACIP, health care personnel<sup>§</sup> and residents of long-term care facilities<sup>¶</sup> should be offered vaccination in the initial phase of the COVID-19 vaccination program (Phase 1a)

§Health care personnel are defined as paid and unpaid persons serving in health care settings who have the potential for direct or indirect exposure to patients or infectious materials

¶ Long-term care facility residents are defined as adults who reside in facilities that provide a variety of services, including medical and personal care, to persons who are unable to live independently



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.

