

Wisconsin State Disaster Medical Advisory Committee Vaccine Distribution Subcommittee: Phase 1a Guidance for Vaccinating Entities to Prioritize COVID-19 Vaccine in Priority Populations

The Vaccine Distribution Subcommittee (“Subcommittee”) of the State Disaster Medical Advisory Committee (SDMAC) was established to develop guidance for Department of Health Services (DHS) plan for allocation of limited numbers of vaccine doses during the COVID-19 pandemic, especially in the first months following vaccine release. At the present time, no SARS-CoV-2 vaccine is available in the United States, but several candidate vaccines are in development and two vaccine are currently in FDA review for Emergency Use Authorization. It is realistic to assume that one or more vaccine products will be approved for use in the United States during the next six months. Once approved, the quantity of vaccine doses available will be small in relationship to the number of people eligible to receive it, and therefore rationing of available vaccine will be necessary as production and distribution increases.

The Wisconsin vaccination program will unfold in a series of phases, and it will begin with Phase 1a corresponding to the period when the vaccine supply is most restricted. In accordance with the SDMAC charge, the co-chairs and Subcommittee conducted a review of high profile guidance documents including the National Academies of Sciences, Engineering, and Medicine¹, the World Health Organization², and Johns Hopkins Bloomberg School of Public Health³ and the Advisory Committee on Immunization Practice (ACIP). The Subcommittee identified health care workers as the most common priority group for Phase 1a (Table 1).

The CDC COVID-19 Vaccination Program Provider Agreement requires all immunizers to follow all CDC and ACIP *recommendations* and *requirements*. At the current time, the ACIP has issued recommendation for use of COVID-19 vaccines in Tier 1a for residents of long-term care facilities and health care personnel.⁴ Should a vaccinator anticipate vaccine waste (vaccine approaching the end of a shelf life or stability guidelines) they must alert DHS immediately to ensure the vaccine is used.

The Subcommittee agreed to define Residents of Long-Term Care Facilities (RLTCF) 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.”

The CDC/ACIP guidance for prioritization within this group is:

¹ National Academies of Sciences, Engineering and Medicine. A Framework for Equitable Allocation of Vaccine for the Novel Coronavirus. <https://www.nap.edu/catalog/25914/discussion-draft-of-the-preliminary-framework-for-equitable-allocation-of-covid-19-vaccine>

² World Health Organization. WHO SAGE values framework for the allocation and prioritization of COVID-19 vaccination. https://apps.who.int/iris/bitstream/handle/10665/334299/WHO-2019-nCoV-SAGE_Framework-Allocation_and_prioritization-2020.1-eng.pdf

³ Johns Hopkins University. Interim Framework for COVID-19 Vaccine Allocation and Distribution in the United States. <https://www.centerforhealthsecurity.org/our-work/publications/interim-framework-for-covid-19-vaccine-allocation-and-distribution-in-the-us>

⁴ Dooling K, McClung N, Chamberland M, et al. The Advisory Committee on Immunization Practices’ Interim Recommendation for Allocating Initial Supplies of COVID-19 Vaccine — United States, 2020. MMWR Morb Mortal Wkly Rep. ePub: 3 December 2020. DOI: https://www.cdc.gov/mmwr/volumes/69/wr/mm6949e1.htm?s_cid=mm6949e1_w

“skilled nursing facilities will be prioritized, as they care for the most medically vulnerable residents. When broadening is possible, other facilities such as assisted living facilities, residential care communities, intermediate care facilities for individuals with developmental disabilities, and state veterans homes should be considered.”

The Subcommittee agreed to define **health care personnel (HCP)** eligible for vaccination in Phase 1a as:

“individuals who provide direct patient service (compensated and uncompensated) or engage in healthcare services that place them into contact with patients who are able to transmit SARS-CoV-2, and/or infectious material containing SARS-CoV-2 virus.”

The CDC/ACIP guidance for prioritization within this group is:

“frontline HCPs in hospitals, nursing homes, home care who i) work where transmission is high or ii) at increased risk of transmitting to patients at high risk of severe morbidity and mortality. The HCP category includes clinicians; environmental services; nursing assistants; staff in assisted living, long term care and group care; and home caregivers if meet 1a risk criteria⁵.”

Given the high level of SARS-CoV-2 circulating throughout the state of Wisconsin, the Subcommittee agreed that all patient facing health care personnel likely met the definition of “being placed into contact with patients who are able to transmit SARS-CoV-2.” The Subcommittee provided evidence-based review of literature and provided guidance to vaccinating entities, which is broken into organizational and individual patient level decision-making.

Vaccinating entities may include one or more of the following prioritization criteria when allocating vaccine among health care personnel:^{6,7,8}

HCPs on designated COVID-19 units may be prioritized over HCPs who are working on non-COVID-19 units: COVID-19 units are serving individuals who are the most severely ill as a direct result of the pandemic. Illness and/or absence on the part of the HCP serving these patients would represent a significant negative impact for both individual vaccinating entities and the overall ability of the health system to respond to this crisis.

Known patient COVID-19 status: While asymptotic spread is a significant challenge for all health care personnel, prioritization may be considered for individuals who are caring for known COVID-19 patients and those testing patients to determine COVID-19 status (for example, testing staff).

⁵ Centers for Disease Control and Prevention. *COVID-19 Vaccine Program Interim Playbook for Jurisdictional Operations (2)*. https://www.cdc.gov/vaccines/imz-managers/downloads/COVID-19-Vaccination-Program-Interim_Playbook.pdf

⁶ Nguyen, L, Drew D, Graham M, et al. *Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study*. The Lancet. July 31, 2020. [https://doi.org/10.1016/S2468-2667\(20\)30164-X](https://doi.org/10.1016/S2468-2667(20)30164-X)

⁷ Centers for Disease Control and Prevention. *Strategies for Optimizing the Supply of N95 Respirators*. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy/index.html>

⁸ Centers for Disease Control and Prevention. *Interim Infection Prevention and Control Recommendations for Healthcare Personnel during the Coronavirus Disease 2019 (COVID-19) Pandemic*. https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Finfection-control%2Fcontrol-recommendations.html

Essential nature of a position and ability to restaff: Vaccinating entities may wish to prioritize staff with essential skills and knowledge and/or staff who would be difficult to replace in the event of need to isolate and/or for time to recover from moderate to severe illness, thus resulting in an inability to work.

High risk procedures: Individuals who perform high risk procedures, such as intubation, respiratory treatments, and other aerosol-generating procedures, may be prioritized.

Work in ICU prioritized over non-ICU: As ICU beds in Wisconsin reach capacity, maintaining staffing for beds that are occupied by acutely ill patients from both pandemic and non-pandemic causes ensures that hospitals can continue to serve patients.

Other non-pharmaceutical interventions (NPI): Some HCP may be patient facing but may have access to additional non-pharmaceutical interventions such as adequate physical distancing, Plexiglas for protection, and very brief interactions with each patient.

Access to PPE: Any HCP who meet the definition of Phase 1a eligibility should have access to adequate PPE. Those who do not have access to appropriate PPE may receive higher priority.

Environmental containment measures: HCP in makeshift wards with inadequate ventilation might be prioritized over those working in wards with environmental mitigations in place.

Density of workplace/patient care environment: HCP exposure to high volumes of individuals or groups might be prioritized over individuals who have fewer contacts.

Duration of exposure: HCP who are exposed to COVID-19 positive patients for longer durations might be prioritized over those who have shorter durations of exposure.

Recent history in HCP of confirmed COVID-19 case⁹: HCP with documented **acute** SARS-CoV-2 infection in the preceding 90 days may choose to delay vaccination until near the end of the 90-day period in order to facilitate vaccination of those HCP who remain susceptible to infection, as current evidence suggests reinfection is uncommon during this period after initial infection. **Of note, previous SARS-CoV-2 infection, whether symptomatic or asymptomatic, is not considered a contraindication to vaccination and serologic testing for SARS-CoV-2 antibodies is not recommended prior to vaccination."**

⁹ Centers for Disease Control and Prevention. *Duration of Isolation and Precautions for Adults with COVID-19.* <https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html>

Individual demographic and health status characteristics of HCP have been identified in the available evidence that may place a HCP at higher risk of severe illness from the virus that causes COVID-19^{10,11}; therefore, vaccinating entities *might* consider using them as an additional prioritization criteria when feasible:

Demographic

Age 65+¹²
Black
Latinx
Native American
Socioeconomic class

Health Status

Asthma
Cancer
Cardiovascular disease
Chronic kidney disease
Chronic lung disease
Chronic metabolic disease
COPD (chronic obstructive pulmonary disease)
Diabetes
Heart conditions, such as heart failure, coronary artery disease, or cardiomyopathies
Hypertension
Intellectual or developmental disability¹³
Immunocompromised condition
Immunocompromised state (weakened immune system) from solid organ transplant
Obesity (body mass index [BMI] of 30 kg/m² or higher but < 40 kg/m²)
Pregnancy
Severe Obesity (BMI ≥ 40 kg/m²)
Sickle cell disease
Smoking

In addition, vaccinators may choose to implement lottery systems and/or first come/first served options. The subcommittee encourages that however vaccine is prioritized that it be clear and transparent for staff with efforts to reduce rather than reinforce inequalities whenever possible.

¹⁰<https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>

¹¹ Kambhampati AK, O'Halloran AC, Whitaker M, et al. COVID-19–Associated Hospitalizations Among Health Care Personnel — COVID-NET, 13 States, March 1–May 31, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:1576–1583. DOI: <http://dx.doi.org/10.15585/mmwr.mm6943e3>

¹² Self WH, Tenforde MW, Stubblefield WB, et al. Seroprevalence of SARS-CoV-2 Among Frontline Health Care Personnel in a Multistate Hospital Network — 13 Academic Medical Centers, April–June 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:1221–1226.

¹³ A FAIR Health, West Health Institute and Marty Makary, MD, MPH. (2020). *Risk Factors for COVID-19 Mortality among Privately Insured Patients*. New York, New York: FAIR Health 2020.

Table 1

Categories of HCP job titles and settings¹⁴

- Anesthesia related team members
- Behavior health providers, including psychologists, therapists, counselors
- Certified nursing assistant, nursing assistant, nurse aide, medical assistant
- Chiropractors
- Clinical ethicist
- Dental services, including dentist, dental hygienist, dental assistants
- Direct care personnel, for example, people who provide direct care to patients, including in their homes (for example, personal care assistant, home health worker)
- Emergency medical responders (EMR), including emergency medical technician/paramedic including all levels of EMRs
- Environmental services, food & nutrition, buildings & grounds in patient care setting
- Health care trainees
- Hospice workers
- Nurse, including community settings
- Long-term care facilities staff
- Pharmacist/pharmacist assistant
- Phlebotomist and laboratory personnel
- Physician assistant/nurse practitioners
- Physicians (MD/DO – all settings)
- Public health workers providing vaccines and testing for COVID-19
- Radiation therapy technologists (RTTs)/radiologic technologists (RTs)
- Respiratory therapists
- Security personnel
- Spiritual care provider
- Social work, case management, Child Life staff
- Therapy services, for example, physical therapy, occupational therapy, speech therapy
- Transportation services to and from health care settings, for example, testing sites, dialysis centers, ambulatory care

Other health care personnel who have CDC defined exposure

Other professionals and lay people who provide services as defined above

¹⁴ This list does not imply or represent prioritization within this group, it is simply a guide to help vaccinating entities identify credentials and/or job titles that would be appropriate to include in discussions of prioritization. As noted, this list is not all inclusive. These job descriptions *must* meet the eligibility criteria for Phase 1a in addition to the job titles described here. The Subcommittee declined to specify a specific setting as describing the location of services creates further confusion and risk that HCP might be excluded when their position qualifies them for vaccination.