

Recommendations for the State of Wisconsin on Distributing COVID-19 Vaccine Allotments in Phase 1A

The Vaccine Distribution Subcommittee (“Subcommittee”) of the State Disaster Medical Advisory Committee (SDMAC) was established to develop guidance for the Department of Health Services (DHS) regarding allocation of limited numbers of vaccine doses during the COVID-19 pandemic. It is anticipated that one or more SARS-CoV-2 vaccine products will be authorized or approved for use in the United States as early as mid-December of 2020. The initial 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 until production and distribution increases in amounts sufficient to meet all needs.

The Subcommittee was tasked with answering the following question:

When distributing limited supplies to vaccinators, what population level characteristics should DHS consider?

The Advisory Committee on Immunization Practices (ACIP) has subdivided early vaccination into three distinct phases: Phase 1a, Phase 1b, and Phase 1c. This document is intended to provide a response to the charge question for Phase 1a which has been proposed by ACIP¹ and the Subcommittee to include the following populations:

Health care personnel (HCP) *“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.”*

Residents of Long Term Care Facilities (RLTCF): *Individuals residing in LTCF which include skilled nursing facilities (nursing homes) and assisted living facilities (community-based residential facilities and residential care apartment complexes).*

The State of Wisconsin Department of Health Services (DHS) will be coordinating the logistics of vaccine deployment. Entities who wish to become *vaccinating entities* will need to [enroll](#) and be vetted by DHS. For the purpose of this document, **vaccinating entities** are defined as:

“Vaccinators who have been evaluated by DHS and are approved to vaccinate HCP and residents of LTCF.”

DHS will be allocating distributions of vaccine released through the Centers for Disease Control and Prevention (CDC). An **allotment** is defined as:

“An amount of vaccine released from CDC to DHS for the purposes of vaccinating the Phase 1a priority population with a first dose.”

Subsequent doses of a two-dose vaccine schedule will be allocated in accordance with *Recommendations for State of Wisconsin to Distribute of a Multiple Dose COVID-19 Vaccine*. DHS plans to use a “hub and spoke” model for vaccine distribution where vaccine is received in a centralized location able to support appropriate cold-chain measures (hubs) and distributed to vaccinating entities (spokes).

The Subcommittee convened to develop recommendations for DHS on how to choose between different *vaccinating entities* (e.g. spokes) and different subpopulations (HCP vs RLTCF). The Subcommittee deliberated and recommends that DHS implement an allocation framework based on the following principles:

¹ Oliver, ACIP meeting, 11/23/2020

1. Fill partial vaccine orders. The Subcommittee believes providing a partial allocation to as many vaccinating entities as possible is preferable to fulfilling full orders for a smaller number of vaccinating entities. Ensuring that at least some vaccine is delivered to as many vaccinating entities as possible was considered important for minimizing the risk of geographic disparities in vaccine access. It may also minimize the risk of wasted doses.

2. Give equal priority to health care providers and long-term care facility residents. The Subcommittee recommends that the DHS partition the initial allotment of vaccine for distribution to HCPs and LTCF, in proportion to the size of these subpopulations in Wisconsin. Vaccinating entities that propose to administer vaccine to both HCPs and LTCFs should request their total vaccine population.

3. Give greater priority to vaccinating entities who will administer vaccine in communities characterized by higher levels of social vulnerability. The subcommittee recommends using the CDC's Social Vulnerability Index as a consideration in rationing among vaccinating entities. As highlighted in the CDC publication *Ethical Framework to Guide the Allocation of COVID-19 Therapeutics and Vaccines*,² the subcommittee believes it can be used as a proxy for lower income workforce that might be of communities who have experienced disproportionate impacts from the pandemic³. Its use was recommended in *A Framework for Equitable Allocation of Vaccine for the Novel Coronavirus*⁴ as a way to ensure health equity was built into distribution plans.

4. Incentivize vaccinating entities to vaccinate unaffiliated HCPs such as first responders. It is likely that in early distributions vaccinating entities will be serving their employees. The Subcommittee recognizes that many HCP may not have immediate access to an employer based clinic examples might include: small clinics, non-traditional health settings (e.g. home health), or volunteer services (e.g. EMS). The Subcommittee recognizes that vaccinating entities are likely adding extra administrative burden to provide a service for the broader community.

5. Current COVID-19 disease activity level in a geographic region should not be considered as a factor for prioritizing vaccinating entities for receiving a greater proportion of their vaccine request. The Subcommittee determined that because COVID-19 disease activity is very high in 100% of Wisconsin Counties, it will not be beneficial to prioritize specific regions of the state during Phase 1a. HCPs and LCTFRs are at elevated risk of exposure to SARS-CoV-2 in all regions of the state.

6. Current health care provider staffing shortages should not be considered as a factor for prioritizing vaccinating entities for receiving a greater proportion of their vaccine request. While COVID-19 vaccination is a key strategy for protecting the healthcare workforce, the protective benefit will not be immediate. Both doses of a vaccine series are likely necessary to offer protection. Health care staffing shortages are subject to change week-to-week, and therefore may not be a reliable indicator of where vaccination of HCPS will have maximum benefit.

² Wisconsin State Disaster Medical Advisory Committee Ethics Subcommittee. *Ethical Framework to Guide the Allocation of COVID-19 Therapeutics and Vaccines*. <https://publicmeetings.wi.gov/download-attachment/2c4916b2-6036-43ec-a654-b65e8d3fcd75>

³ Dasgupta S, Bowen VB, Leidner A, et al. Association Between Social Vulnerability and a County's Risk for Becoming a COVID-19 Hotspot — United States, June 1–July 25, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:1535–1541. DOI: <http://dx.doi.org/10.15585/mmwr.mm6942a3>

⁴National 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>

Appendix: Sample Request form Used by Vaccinating Entities and Proposed use Prioritization Criteria

Vaccinating entities should request the exact number of vaccine doses it will administer within 5 days of the shipment date. DHS should aim to fill a proportion of the vaccine order of every requesting entity, with the limitation that there will be a minimum quantity of vaccine that can be shipped during the initial phase. Entities that cannot commit to administering at least this minimum quantity (i.e. 50 vaccine doses) within 5 days of shipment will not be eligible to receive vaccine during the initial round of distribution. The minimum quantity will be subject to change during subsequent rounds of distribution, and as additional vaccine products become available.

Entities requesting more than the minimum quantity will receive some proportion of their request. The proportion will be determined by the total number of vaccine doses requested by vaccinating entities in relationship to the total vaccine allotment received by DHS, with adjustments made for county-level social vulnerability index and commitment to administer vaccine to HCPs such as first responders, who may not be affiliated with an organization with capacity to request and administer vaccine during the initial phase.

County #1, 2, 3 . . . n:

Doses administered to HCP employed by vaccinating entity: _____
Doses administered to unaffiliated HCPs (e.g. first responders): _____
Doses administered to residents of long-term care facilities: _____
Total doses requested for county: _____

Total Vaccine Dose Request (sum of doses for all counties): _____

As a hypothetical example, a health care organization might request 1000 vaccine doses, to be administered in three Wisconsin Counties where they operate hospitals and clinics. They have also partnered with the county EMS system in one county to vaccinate first responders. They submit an itemized vaccine request to DHS with the following

County A: 600 total doses requested
600 HCP employees
0 unaffiliated HCPs
0 long-term care residents
(County A is in the 1st (highest) quintile of social vulnerability index)

County B: 200 doses requested
200 HCP employees
0 unaffiliated HCPs
0 long-term care residents
(County B is in the 2nd quintile of social vulnerability index)

County C: 200 doses requested
0 HCP employees
100 unaffiliated HCPs
100 long-term care residents
(County C is in the 5th (lowest) quintile of social vulnerability index)

The vaccine doses distributed to the organization will be calculated based on the amount of vaccine available as a proportion of the total doses requested by all vaccinators. 250,000 doses were requested by all vaccinating entities, but Wisconsin's first allotment was only 50,000 doses, then every entity would receive $(50,000 / 250,000 = 0.2)$ or 20% of their request if no adjustments were made. If adjustments

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were made based on prioritization criteria recommended by SDMAC, then an entity may receive a slightly higher or lower proportion of their request.

Example: Distribution to vaccinating entity during phase 1a, assuming supplies are sufficient for 20% of HCP doses requested and 10% of LTFR doses requested in the first round.

Without adjustments	With Adjustments
County A: $600 \times 0.2 = 120$ doses County B: $200 \times 0.2 = 40$ doses County C: $(100 \times 0.2) + (100 \times .1) = 30$ doses Total = 190 doses	County A: $600 \times 0.3 = 180$ doses <i>(proportion increased because highest SVI)</i> County B: $200 \times 0.25 = 50$ <i>(proportion increased because of higher SVI)</i> County C: $(100 \times .2) + (100 \times 0.05) = 25$ <i>(both proportions decreased because of lowest SVI, but proportion of HCP request increased because of commitment to vaccinate unaffiliated first responders)</i> Total = 255 doses