Executive Summary

"The emergence of the COVID-19 pandemic has created unprecedented public health challenges and spurred a global race to develop and distribute one or more viable vaccines. The challenge of vaccine development is matched by the challenge of vaccine distribution; once discovered and produced, it must be delivered and dispensed to the population writ large. Although a vaccine is not yet available, lessons learned from the acquisition and distribution of COVID-19 diagnostics and therapeutics suggest that States begin addressing the challenges of mass distribution before its arrival. Immunizing the U.S. population against COVID-19 will likely require the single largest vaccination campaign ever undertaken and require leaders from state public health, immunization, and emergency management systems to design and execute the vaccination operation. As with many COVID-19 activities, a "whole of government" response, with broad participation by health and human services, economic development, education, and public safety agencies, as well as private sector partners and the public, is crucial to success."

On September 16, 2020 the Centers for Disease Control and Prevention (CDC) released the *COVID-19 Vaccination Program Interim Playbook for Jurisdiction Operations*² and directed jurisdictions to prepare and submit their COVID-19 vaccination response plans for CDC review no later than October 16, 2020, in support of Operation Warp Speed (see Figure ES-1).³ Less than two months later on December 13, 2020, the FDA issued an emergency use



Figure ES-1: COVID-19 Interim Playbook and Guidance and the Operation Warp Speed Strategy for Distributing a COVID-19 Vaccine

authorization for the Pfizer-BioNTech vacccine for the immunization of people 16 years of age and older⁴. On December 18, 2020, the FDA authorized the emergency use of mRNA-1273, Moderna's vaccine against COVID-19 in individuals 18 years of age or older.⁵

A core Planning Team was formed with representatives from local, state, and federal levels as well as private sector partners under the leadership of the Disease Outbreak Control Division (DOCD) Immunization Branch (IMB) to develop the state's COVID-19 Vaccination Plan.

The purpose of the Hawaii COVID-19 Vaccination Plan is to provide an operational plan that will support the state's efforts to implement a comprehensive vaccination program to reduce COVID-19-related illnesses, hospitalizations, and deaths, and to help restore societal functioning. This plan provides operational and logistical guidance for a statewide COVID-19 vaccination effort to effectively request, secure, receive, store, stage, distribute, dispense, and recover vaccine assets. It describes the concept of operations and identifies anticipated roles and responsibilities of organizations supporting this effort.

Three overarching Priorities supported by nine Operational Objectives were employed to maximize societal benefit by reducing morbidity and mortality caused by transmission of the novel coronavirus (see Figure ES-2).

¹ Preparing For The COVID-19 Vaccine And Considerations For Mass Distribution, https://www.nga.org/memos/covid-19-vaccine-considerations-mass-distribution/ accessed September 28, 2020.

² COVID-19 Vaccination Program Interim Playbook for Jurisdiction Operations – September 16, 2020; available at: https://www.cdc.gov/vaccines/imz-managers/downloads/COVID-19-Vaccination-Program-Interim Playbook.pdf, accessed on October 8, 2020.

³ https://www.defense.gov/Explore/Spotlight/Coronavirus/Operation-Warp-Speed/Operation-Warp-Speed-Timeline/, accessed on December 31, 2020.

⁴ https://www.cvdvaccine.com/, accessed on December 31, 2020.

⁵ https://www.modernatx.com/covid19vaccine-eua/, accessed on December 31, 2020.

Priority 1: Establish a robust and effective operational structure to support vaccination program efforts.

Obj. 1. Minimize the amount of time from receipt of vaccine in the state to administration

Obj. 2. Maintain the cold chain and storage of the vaccine throughout all stages of its movement and administration

Obj. 3. Ensure that critical populations receive the correct FDA-Authorized vaccine

Priority 2: Engage a broad group of stakeholders to support planning and readiness efforts to include vaccination providers and representatives from critical population categories.

Obj. 4. Implement a vaccine allocation process that is ethical and transparent

Obj. 5. Ensure those at highest priority for vaccination have the opportunity to be vaccinated first

Obj. 6. Minimize disease transmission through the use of COVID-19 specific procedures during vaccination efforts

Priority 3: Establish and implement a pro-active vaccination communications program.

Obj. 7. Maximize the uptake of a safe and effective vaccine

Obj. 8. Maximize second dose administration

Obj. 9. Engage with the community to rapidly identify, investigate, and transparently report on any adverse events associated with vaccine administration

Figure ES-2: COVID-19 Priorities and Objectives

A Vaccination Core Planning Team and a Vaccination Program Implementation Committee, as well as standing and ad hoc working groups will be used to support the COVID-19 vaccination program (See Appendix A: Task Organization).

Stakeholders from organizations throughout Hawaii helped to support each of these two coordinating bodies

based on four recommended categories for critical population groups identified in CDC's Interim Updated Planning Guidance on Allocating and Targeting Pandemic Influenza Vaccine during an Influenza Pandemic⁶ (see Figure ES-3).

The CDC's COVID-19 Vaccination Program Interim Playbook for Jurisdiction Operations identifies three "Guidance for allocating and targeting initial vaccination of certain groups includes a structure... that defines population groups in four broad categories that correspond with the objectives of a pandemic vaccination program – to protect people who

- 1) maintain homeland and national security,
- 2) provide health care and community support services,
- 3) maintain critical infrastructure, and
- 4) are in the general population."

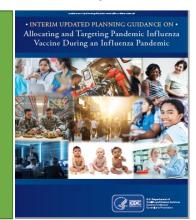


Figure ES-3: Four Categories for Critical Population Groups

phases of operation for the availability of COVID-19 vaccine as described below in Figure ES-4

⁶ https://www.cdc.gov/flu/pandemic-resources/pdf/2018-Influenza-Guidance.pdf

Phase 1 Phase 2 Phase 3

- •Limited Doses Available
- Large Number of Doses Available,
 Supply Likely to Meet Demand
- Likely Sufficient Supply, Slowing Demand

Figure ES-4: Operational Phases

A key point to consider is that vaccine supply will be limited in Phase 1, so the allocation of doses will focus on vaccination providers⁷ and settings for vaccination to target limited critical populations throughout the state. COVID-19 vaccination providers will need to enroll in each county into the Hawaii Immunization Registry (HIR) system⁸ so that enough vaccine can be ordered and allocated in order to reach critical populations. As the vaccine supply increases, efforts will expand in Phases 2 and 3, allowing vaccinations for additional critical populations including the general public.

It is important to note that prioritization of the various population groups to receive initial doses of vaccine could change as more vaccines become available, depending on each vaccine's characteristics, the overall supply, disease epidemiology, and local community factors. The Vaccine Allocation and Prioritization Working Group will be reconvened to recommend modifications and adjustments to prioritization decisions as future COVID-19 vaccinations are approved for use (See Figure ES-5: Vaccine Prioritization Process).

CDC'S Advisory Committee on Immunization Practices (ACIP) Provides Allocation Recommendations COVID-19 Vaccine Allocation and Prioritization Working Group reviews guidance and makes initial prioritization recommendations

HDOH reviews recommendations and updates prioritization guidance (if needed)

HDOH publishes and disseminates updated prioritization guidance

Figure ES-5: Vaccine Prioritization Process

On December 20, 2020, the CDC'S Advisory Committee on Immunization Practices (ACIP)¹⁰ published updated recommendations that describe the use of four allocation phases¹¹ to target population groups starting with Allocation Phase 1a and progressing until the entire population is able to receive the COVID-19 vaccine. Recommendations from the Hawaii COVID-19 Vaccine Allocation and Prioritization Working Group in conjunction with Department of Health subject matter experts were used to identify the population groups below. Strong consideration was given to CDC Guidance and adherence to ACIP recommendations (See Figure ES-6: Vaccine Prioritization Phases).

⁷ For the purposes of this document, "vaccination provider" refers to any facility, organization, or healthcare provider licensed to possess/administer vaccine or provide vaccination service (to include HDOH), while a "COVID-19 vaccination provider" is any vaccine provider that HDOH enrolled in the COVID-19 Vaccination Program.

⁸ https://health.hawaii.gov/docd/about-us/programs/hawaii-immunization-registry-hir/

⁹ COVID-19 Vaccination Program Interim Playbook for Jurisdiction Operations – September 16, 2020; available at: https://www.cdc.gov/vaccines/imz-managers/downloads/COVID-19-Vaccination-Program-Interim_Playbook.pdf, accessed on October 8, 2020.

¹⁰ https://www.cdc.gov/mmwr/volumes/69/wr/mm695152e2.htm?s cid=mm695152e2 w

¹¹ **NOTE**: The *Framework for Equitable Allocation of COVID-19 Vaccine* uses the term "phases" suggesting successive deployments of vaccine to critical populations groups instead of another term "tiers" which had been used previously by the CDC (i.e. – Phases 1a, 1b, 1c, and 2 instead of Tier 1, Tier 2, etc.). The authors stated that they wanted to eliminate the suggestion of any population group having greater importance than another, and that within each phase, all groups should have equal priority for vaccine. Also, that when individuals within a group fall into multiple phases , the higher phase should take precedent.

Phase 1a

- Health care personnel
- Long-term care facility residents

Phase 1b

- Frontline essential workers
- Adults 75 years of age and older

Phase 1c

- Adults aged 65–74 years
- Persons aged 16– 64 years with high-risk medical conditions
- Essential workers not recommended for vaccination in Phase 1b

Phase 2

 All persons aged ≥16 years not previously recommended for vaccination

Figure ES-6: Vaccination Prioritization Phases

Although these phases are listed sequentially, distribution may occur concurrently between phases based on logistical and operational needs and resources.¹²

- Where possible, within each phase, COVID-19 vaccination should be distributed to populations prioritized to the eldest first, then by descending age order as more vaccine supply becomes available.
- The Hawaii COVID-19 Vaccine Allocation and Prioritization Working Group recommended that the initial Phase 1b efforts prioritize targeting the 75 and older population to rapidly reduce hospitalizations and mortality.
- Where possible, COVID-19 vaccination should be distributed to populations prioritized geographically in consideration of ¹³:
 - o Current disease activity and history of disease outbreaks or clusters
 - Disproportionately affected communities.
 - o Health and socio-economic vulnerabilities.

Consideration will also be given to logistical capacity to optimize delivery of the vaccine during each implementation phase. Given the size of the population captured in Phase 1b, estimated at 230,000 individuals, it is clear that sub-prioritization will be necessary for the next several months. The Hawaii COVID-19 Vaccine Allocation and Prioritization Working Group recommended that sub-prioritization of the Phase 1b essential workers include considerations, such as:

- Epidemiologic evidence of disproportionately high rates of COVID-19 infection.
- Workers who conduct operations and services that are essential to continued critical infrastructure viability, particularly where they serve unique functions.
- The fluid nature of circumstances around vaccine distribution.

In light of these considerations, the Hawaii COVID-19 Vaccine Allocation and Prioritization Working Group suggested that the following 1b essential workers be given initial priority at this time:

¹² ACIP recommendations note that "During a pandemic, efficient, expeditious and equitable distribution and administration of authorized vaccine is critical". This includes ensuring that there is no wasted vaccine. For example, each vaccination clinic should work to make sure that appointments match the amount of vaccine available. At the end of a vaccination clinic, clinic managers will need to use their best judgement to ensure that no doses are wasted in the event that all targeted prioritization groups have been reached.

¹³ ACIP recommendations note that "Within national guidelines, state and local jurisdictions should have flexibility to administer vaccine based on local epidemiology and demand"

- First responders
- Corrections officers
- Emergency services dispatchers
- Critical transportation infrastructure workers (harbor and dock workers, public transportation, etc.)
- Critical utilities (energy, water, etc.)
- Teachers and childcare and educational support staff (childcare, early education, K-12, post-secondary)
- Those essential for federal, state, and local government operations
- U.S. Postal Service employees

Table ES-1 below provides a description of each population group as well as an estimate of the percentage of the population in each group.

Table ES-1: Population Groups based on CDC Advisory Committee on Immunization Practices (ACIP) guidance

Allocation Phase	Population Group	Description	Estimated % of Population ¹⁴
Phase 1a	Health care personnel	Includes paid and unpaid personnel serving in health care settings who have the potential for direct or indirect exposure to patients or infectious materials	5%
	Long-term care facility residents	Adults who reside in facilities that provide a range of services, including medical and personal care, to persons who are unable to live independently	1%
Phase 1b	Adults 75 years of age and older	9%	
	Frontline essential workers	Includes first responders, and frontline essential workers, defined as workers whose duties must be performed onsite and require being in close proximity (<6 feet) to the public or coworkers, and are essential to the functioning of society. ¹⁵	11%
Phase 1c	Adults aged 65–74 years	Adults 65-74	10%
	Persons aged 16–64 years with high-risk medical conditions	Individuals of all authorized vaccine eligible ages with underlying conditions that increase the risk for severe COVID 19	30%
	Essential workers not recommended for vaccination in Phase 1b	Essential workers not included in Phase 1b	7%
Phase 2	All persons aged ≥16 years not previously recommended for vaccination 16	All other persons residing ¹⁷ in Hawaii aged ≥16 years not already recommended for vaccination in Phases 1a, 1b, or 1c.	27%

Table ES-2 below provides a description of each population group as well as an estimate of the percentage of the population in each group by county/island.

¹⁴ See TABLE. Advisory Committee on Immunization Practices recommendations for allocation of COVID-19 vaccines to persons aged ≥16 years — United States, December 2020, https://www.cdc.gov/mmwr/volumes/69/wr/mm695152e2.htm, accessed on December 31, 2020.

¹⁵ https://www.cisa.gov/sites/default/files/publications/Version 4.0 CISA Guidance on Essential Critical Infrastructure Workers FINAL%20AUG%2018v3.pdf, accessed on December 31, 2020.

¹⁶ "As of December 18, 2020, only the Pfizer-BioNTech COVID-19 vaccine is authorized for use in persons aged 16–17 years",

https://www.cdc.gov/mmwr/volumes/69/wr/mm695152e2.htm, accessed on December 31, 2020.

¹⁷ Non-residents are accounted for in their resident jurisdiction's allocation of vaccine.

Table ES-2: Population Estimates by County/Island

Allocation Phase	Population Group	ates by County/Island Description	Estimated % of Population	Hawaii County	Maui	Molokai	Lanai	City and County of Honolulu	Kauai County	Total
Phase 1a	Health care personnel	Includes paid and unpaid personnel serving in health care settings who have the potential for direct or indirect exposure to patients or infectious materials	5%	8,148	6,397	253	116	39,522	2,915	57,351
	Long-term care facility residents	Adults who reside in facilities that provide a range of services, including medical and personal care, to persons who are unable to live independently	1%	1,630	1,279	51	23	7,904	583	11,470
Phase 1b	Adults 75 years of age and older	Adults 75 years of age and older	9%	14,666	11,514	455	209	71,140	5,248	103,231
	Frontline essential workers	Includes first responders, and frontline essential workers, defined as workers whose duties must be performed onsite and require being in close proximity (<6 feet) to the public or coworkers, and are essential to the functioning of society.[1]	11%	17,925	14,072	556	255	86,949	6,414	126,172
Phase 1c	Adults aged 65–74 years	Adults 65-74	10%	16,295	12,793	506	232	79,045	5,831	114,701
	Persons aged 16– 64 years with high-risk medical conditions	Individuals of all authorized vaccine eligible ages with underlying conditions that increase the risk for severe COVID 19	30%	48,886	38,379	1,517	695	237,134	17,492	344,104
	Essential workers not recommended for vaccination in Phase 1b	Essential workers not included in Phase 1b	7%	11,407	8,955	354	162	55,331	4,082	80,291
Phase 2	previously	All other persons residing in Hawaii aged ≥16 years not already recommended for vaccination in Phases 1a, 1b, or 1c.	27%	43,997	34,541	1,365	626	213,421	15,743	309,694
	Total (Population Aged 16 and older)			162,953	127,931	5,057	2,318	790,447	58,308	1,147,014

This plan provides stakeholders from the whole community with the operational information needed to prepare their organizations to support the Hawaii COVID-19 Vaccination Program. The Hawaii COVID-19 Vaccination Core Planning Team recommends that stakeholders develop/update standard operating procedures (SOPs), as well as supporting plans and procedures, and continue outreach efforts throughout Hawaii to prepare the public for the COVID-19 Vaccination Program as vaccines become more widely available.