

The planning scenarios described below should be used by state and local jurisdictions to develop operation plans for early COVID-19 vaccination when vaccine supply may be constrained. The scenarios describe potential COVID-19 vaccine requirements, early supply estimates after vaccine product approvals, and populations that may be recommended for vaccination during this early period. These scenarios are designed to support jurisdictional, federal, and partner planning, but they are still considered hypothetical. The COVID-19 vaccine landscape is evolving and uncertain, and these scenarios may evolve as more information is available.

Planners should assume that by January 2021 significantly more COVID-19 vaccine will be available for distribution and plans will need to evolve to address additional vaccine availability. Please refer to COVID-19 vaccine planning assumptions and additional guidance from CDC.

Scenario 1: Vaccine A demonstrates sufficient efficacy/safety for EUA in 2020

#### **Availability Assumptions**

	Vaccine availability by			
Candidate	End of Oct 2020	End of Nov 2020	End of Dec 2020	Notes
Vaccine A	~2M doses	10–20M doses	20–30M doses	Ultra-cold (-70 °C), for large sites only

#### Distribution, Storage, Handling, and Administration Assumptions

Vaccine A			
SHIPMENT	ON-SITE VACCINE STORAGE		
3 separately acquired components (mixed on site)	Frozen (-70 °C ± 10 °C)		
1. Vaccine	<ul> <li>Must be used/recharged within 10 days</li> </ul>		
<ul> <li>Direct to site from manufacturer (on dry ice)</li> </ul>	Storage in shipping container OK (replenish dry ice as		
<ul> <li>Multidose vials (5 doses/vial)</li> </ul>	needed)		
2. Diluent	Thawed but NOT reconstituted (2–8 °C)		
<ul> <li>Direct to site from USG (at room temperature)</li> </ul>	Must use within 24-48 hours		
3. Ancillary supply kits	Reconstituted (room temperature)		
<ul> <li>Direct to site from USG (at room temperature)</li> </ul>	Must use within 6 hours		
ORDERS	ADMINISTRATION		
Large quantities, to large administration sites only	2-dose series (21 days between doses)		
Minimum order: ~1000 doses	On-site mixing required; reconstitute with diluent just prior		
<ul> <li>Maximum order: ~5,000 doses</li> </ul>	to administration		
	Administer by intramuscular (IM) injection		
PRIORITIZED POPULATIONS AND ANTICIPATED VACCINE ADMINISTRATION SITES			

Health care professionals (incl. LTCF staff) – public health closed temporary mass vaccination clinics + potential for mobile

Essential workers (specifics TBA) - public health closed temporary mass vaccination clinics + potential for mobile clinics National Security populations – public health closed temporary mass vaccination clinics + DoD sites LTCF residents & staff – potential for mobile clinics to facilities

Additional Considerations for Early Vaccination Planning



- Jurisdictions should plan for real-time shipment of doses.
- Administration sites (during Phase 1) will not be required to store vaccine products beyond the period of time Vaccine A can be stored in the ultra-cold shipment box.
- Vaccine will be free of cost, but administration fees may not be reimbursable while a vaccine product is administered under an EUA.
- Given the challenging storage, handling, and administration requirements, early vaccination should focus on administration sites that can reach prioritized populations with as much throughput as possible.
- Stability testing is ongoing for Vaccine A; the storage and handling requirements presented here may shift. The requirements in these scenarios are likely the strictest set of requirements for which planning is needed.
- Jurisdictions should consider partnering with the private sector and with local hospital systems to provide vaccine in closest proximity to the prioritized populations as possible, given the limitations with the product. For example:
   Vaccine A may be administered through mobile clinics if multiple mobile clinics are planned over a short period of time to ensure high enough throughput.



### Scenario 2: Vaccine B demonstrates sufficient efficacy/safety for EUA in 2020

### **Availability Assumptions**

	Vaccine availability by			
Candidate	End of Oct 2020	End of Nov 2020	End of Dec 2020	Notes
Vaccine B	~1M doses	~10M doses	~15M doses	Central distro capacity required (-20 °C)

### Distribution, Storage, Handling, and Administration Assumptions

Vaccine B		
SHIPMENT	ON-SITE VACCINE STORAGE	
2 separately shipped components	Frozen (-20 °C)	
1. Vaccine	Storage in shipping container OK (replenish dry ice as	
<ul> <li>To central distributor (at -20 °C)</li> </ul>	needed)	
<ul> <li>Multidose vials (10 doses/vial)</li> </ul>	Refrigerated (2–8 °C)	
2. Ancillary supply kits	Must use within 7-14 days	
<ul> <li>Direct to site from USG (at room temperature)</li> </ul>	Room temperature	
	Must use within 6 hours	
ORDERS	ADMINISTRATION	
Central distribution capacity required	2-dose series (28 days between doses)	
Required by Dec 2020	No on-site mixing required	
Maintained at -20 °C	Administer by intramuscular (IM) injection	

#### PRIORITIZED POPULATIONS AND ANTICIPATED VACCINE ADMINISTRATION SITES

**Health care professionals (incl. LTCF staff)** – health care clinics + health care occupational health clinics + public health closed temporary mass vaccination clinics + mobile clinics

**Essential workers (specifics TBA)** – hospital occupational health + hospital clinics + public health closed temporary mass vaccination clinics

National Security populations - DoD + closed temporary mass vaccination clinics + mobile clinics

LTCF residents & staff - commercial pharmacy partners + mobile clinics

### Additional Considerations for Early Vaccination Planning

- Jurisdictions should plan for real-time shipment of doses.
- Administration sites (during Phase 1) will not be required to store vaccine products beyond the period of Vaccine B can be stored at 2–8 °C.
- Vaccine will be free of cost, but administration fees may not be reimbursable while a vaccine product is administered under an EUA.
- Given the challenging storage, handling, and administration requirements, early vaccination should focus on administration sites that can reach prioritized populations with as much throughput as possible.
- Stability testing is ongoing for Vaccine B; the storage and handling requirements presented here may shift. The requirements in these scenarios are likely the strictest set of requirements for which planning is needed.
- Jurisdictions should consider partnering with the private sector and with local hospital systems to provide vaccine in closest proximity to the prioritized populations as possible, given the limitations with the product.



### Scenario 3: Vaccines A and B demonstrate sufficient efficacy/safety for EUA in 2020

### **Availability Assumptions**

	Vaccine availability by			
Candidate	End of Oct 2020	End of Nov 2020	End of Dec 2020	Notes
Vaccine A	~2M doses	10-20M doses	20–30M doses	Ultra-cold (-70 °C), for large sites only
Vaccine B	~1M doses	~10M doses	~15M doses	Central distro capacity required (-20 °C)
Total	~3M doses	20–30M doses	35–45M doses	

### Distribution, Storage, Handling, and Administration Assumptions

Vaccine A			
SHIPMENT	ON-SITE VACCINE STORAGE		
3 separately acquired components (mixed on site)	Frozen (-70 °C ± 10 °C)		
1. Vaccine	<ul> <li>Must be used/recharged within 10 days</li> </ul>		
<ul> <li>Direct to site from manufacturer (on dry ice)</li> </ul>	Storage in shipping container OK (replenish dry ice as		
<ul> <li>Multidose vials (5 doses/vial)</li> </ul>	needed)		
2. Diluent	Thawed but NOT reconstituted (2–8 °C)		
<ul> <li>Direct to site from USG (at room temperature)</li> </ul>	Must use within 24-48 hours		
3. Ancillary supply kits	Reconstituted (room temperature)		
<ul> <li>Direct to site from USG (at room temperature)</li> </ul>	Must use within 6 hours		
ORDERS	ADMINISTRATION		
Large quantities, to large administration sites only	2-dose series (21 days between doses)		
<ul> <li>Minimum order: ~1,000 doses</li> </ul>	On-site mixing required; reconstitute with diluent just prior		
<ul> <li>Maximum order: ~5,000 doses</li> </ul>	to administration		
	Administer by intramuscular (IM) injection		

#### PRIORITIZED POPULATIONS AND ANTICIPATED VACCINE ADMINISTRATION SITES

*Health care professionals (incl. LTCF staff)* – public health closed temporary mass vaccination clinics + potential for mobile clinics

**Essential workers (specifics TBA)** – public health closed temporary mass vaccination clinics + potential for mobile clinics **National Security populations** – public health closed temporary mass vaccination clinics + DoD sites **LTCF residents & staff** – potential for mobile clinics to facilities

Vaccine B			
SHIPMENT	ON-SITE VACCINE STORAGE		
2 separately shipped components	Frozen (-20 °C)		
1. Vaccine	Storage in shipping container OK (replenish dry ice as		
<ul> <li>To central distributor (at -20 °C)</li> </ul>	needed)		
<ul> <li>Multidose vials (10 doses/vial)</li> </ul>	Refrigerated (2–8 °C)		
2. Ancillary supply kits	Must use within 7-14 days		
<ul> <li>Direct to site from USG (at room temperature)</li> </ul>	Room temperature		
	Must use within 6 hours		
ORDERS	ADMINISTRATION		
Central distribution capacity required	2-dose series (28 days between doses)		
Required by Dec 2020	No on-site mixing required		
Maintained at -20 °C	Administer by intramuscular (IM) injection		

#### PRIORITIZED POPULATIONS AND ANTICIPATED VACCINE ADMINISTRATION SITES

**Health care professionals (incl. LTCF staff)** – health care clinics + health care occupational health clinics + public health closed temporary mass vaccination clinics + mobile clinics

Essential workers (specifics TBA) – hospital occupational health + hospital clinics + public health closed temporary mass vaccination clinics



**National Security populations** – DoD + closed temporary mass vaccination clinics + mobile clinics **LTCF residents & staff** – commercial pharmacy partners + mobile clinics

#### **Additional Considerations for Early Vaccination Planning**

- Jurisdictions should plan for real-time shipment of doses.
- Administration sites (during Phase 1) will not be required to store vaccine products beyond the period of time Vaccine A can be stored in the ultra-cold shipment box or Vaccine B can be stored at 2–8 °C.
- Vaccine will be free of cost, but administration fees may not be reimbursable while a vaccine product is administered under an EUA.
- Given the challenging storage, handling, and administration requirements, early vaccination should focus on administration sites that can reach prioritized populations with as much throughput as possible.
- Stability testing is ongoing for Vaccine A and Vaccine B; the storage and handling requirements presented here may shift. The requirements in these scenarios are likely the strictest set of requirements for which planning is needed.
- Jurisdictions should consider partnering with the private sector and with local hospital systems to provide vaccine in closest proximity to the prioritized populations as possible, given the limitations with the product. For example:
   Vaccine A may be administered through mobile clinics if multiple mobile clinics are planned over a short period of time to ensure high enough throughput.