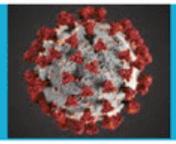
COVID-19 VACCINATION SCENARIOS FOR JURISDICTIONAL PLANNING—PHASE 1, Q4 2020



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

3 separately acquired components (mixed on site)

1. Vaccine
   - Direct to site from manufacturer (on dry ice)
   - Multidose vials (5 doses/vial)
2. Diluent
   - Direct to site from USG (at room temperature)
3. Ancillary supply kits
   - Direct to site from USG (at room temperature)

ON-SITE VACCINE STORAGE

Frozen (-70 °C ± 10 °C)

- Must be used/recharged within 10 days
- Storage in shipping container OK (replenish dry ice as needed)

Thawed but NOT reconstituted (2–8 °C)

- Must use within 24-48 hours

Reconstituted (room temperature)

- Must use within 6 hours

ORDERS

Large quantities, to large administration sites only

- Minimum order: ~1000 doses
- Maximum order: ~5,000 doses

ADMINISTRATION

2-dose series (21 days between doses)

- On-site mixing required; reconstitute with diluent just prior 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

Additional Considerations for Early Vaccination Planning

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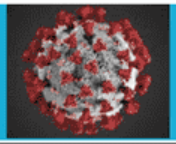

- Jurisdictions should plan for real-time shipment of doses.
- Administration sites (during Phase 1) will not be required to store vaccine products beyond the period of time Vaccine A can be stored in the ultra-cold shipment box.
- Vaccine will be free of cost, but administration fees may not be reimbursable 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.

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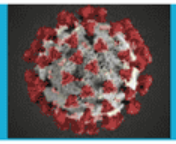

Scenario 2: Vaccine B demonstrates sufficient efficacy/safety for EUA in 2020

Availability Assumptions

Candidate	Vaccine availability by End of Oct 2020	Vaccine availability by End of Nov 2020	Vaccine availability by 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

2 separately shipped components

1. Vaccine
   - To central distributor (at -20 °C)
   - Multidose vials (10 doses/vial)
2. Ancillary supply kits
   - Direct to site from USG (at room temperature)

ON-SITE VACCINE STORAGE

Frozen (-20 °C)

- Storage in shipping container OK (replenish dry ice as needed)

Refrigerated (2–8 °C)

- Must use within 7-14 days

Room temperature

- Must use within 6 hours

ORDERS

Central distribution capacity required

- Required by Dec 2020
- Maintained at -20 °C

ADMINISTRATION

2-dose series (28 days between doses)

- No on-site mixing required
- 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.

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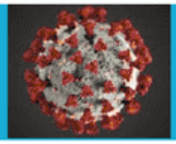

Scenario 3: Vaccines A and B demonstrate sufficient efficacy/safety for EUA in 2020

Availability Assumptions

Candidate	Vaccine availability by 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

3 separately acquired components (mixed on site)

1. Vaccine
   - Direct to site from manufacturer (on dry ice)
   - Multidose vials (5 doses/vial)
2. Diluent
   - Direct to site from USG (at room temperature)
3. Ancillary supply kits
   - Direct to site from USG (at room temperature)

ON-SITE VACCINE STORAGE

Frozen (-70 °C ± 10 °C)

- Must be used/recharged within 10 days
- Storage in shipping container OK (replenish dry ice as needed)

Thawed but NOT reconstituted (2–8 °C)

- Must use within 24-48 hours

Reconstituted (room temperature)

- Must use within 6 hours

ORDERS

Large quantities, to large administration sites only

- Minimum order: ~1,000 doses
- Maximum order: ~5,000 doses

ADMINISTRATION

2-dose series (21 days between doses)

- On-site mixing required; reconstitute with diluent just prior 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

2 separately shipped components

1. Vaccine
   - To central distributor (at -20 °C)
   - Multidose vials (10 doses/vial)
2. Ancillary supply kits
   - Direct to site from USG (at room temperature)

ON-SITE VACCINE STORAGE

Frozen (-20 °C)

- Storage in shipping container OK (replenish dry ice as needed)

Refrigerated (2–8 °C)

- Must use within 7-14 days

Room temperature

- Must use within 6 hours

ORDERS

Central distribution capacity required

- Required by Dec 2020
- Maintained at -20 °C

ADMINISTRATION

2-dose series (28 days between doses)

- No on-site mixing required
- 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

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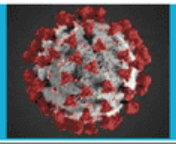

National Security populations – DoD + closed temporary mass vaccination clinics + mobile clinics
LTCF residents & staff – commercial pharmacy partners + mobile clinics

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.