COVID-19 Vaccine Distribution: Overview of State Perspectives

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**Vaccine Distribution—Phased Approach**
(National Academy of Medicine recommendations)

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
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</thead>
<tbody>
<tr>
<td><strong>Phase 1a &quot;Jumpstart&quot;</strong></td>
<td>• High-risk HCP</td>
<td>• Young adults</td>
<td>Everyone else</td>
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<tr>
<td>• First responders</td>
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<tr>
<td><strong>Phase 1b</strong></td>
<td>• People with high clinical risk</td>
<td>• People, staff in other important societal industries and increased exposure risk</td>
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<tr>
<td>• Older adults in congregate settings</td>
<td>• K-12 teachers, staff, childcare workers</td>
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<td>• Workers in critical societal industries <em>and</em> with exposure risk</td>
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<td>• People with moderate clinical risk</td>
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<td></td>
<td>• People, staff in homeless shelters or group homes for mental, developmental, intellectual, or physical disabilities</td>
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<td></td>
<td>• People, staff in prisons, jails, detention centers</td>
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<td></td>
<td>• All other older adults</td>
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**Cross-cutting:** in each group above, prioritize geographies with high CDC Social Vulnerability Index score.

**If multiple vaccines are available,** allocate to different groups above according to ACIP's recommendations for each vaccine's performance for any given group.

Administration of COVID-19 Vaccine Will Likely Follow a Phased Approach

Limited Doses Available
- Projected short period of time for when doses are limited
- Constrained supply, central distribution
- Cold chain & handling may require specialized equipment and high throughput

Large Number of Doses Available
- Likely sufficient supply to meet demand
- Additional vaccine products allow a wider range of administration locations
- Broad administration network required (pharmacies, doctors offices, public health clinics, mobile clinics, FQHCs)
- Focus on increasing access for critical populations

Continued Vaccination
- Sufficient supply to meet demand
- Harness vaccine provider networks with proven ability to reach critical populations
- Enhance series completion

Phase 1a: Healthcare personnel
Phase 1b may include: Essential Workers, High risk Medical Conditions, Adults 65+

Source: CDC, Sept 2020
Phase 1a: CDC/NAM Estimates

• Healthcare personnel
  o All paid and unpaid persons serving in healthcare settings how have the potential for direct or indirect exposure to patients or infectious materials - includes persons not directly involved in patient care but potential exposed while working in a healthcare setting

• First responders
  o All paid and unpaid EMS personnel, police, and firefighters

Estimated Population
~ 17 – 20 M

Examples:
• Hospitals
• LTCF/SNF
• Outpatient
• Home Health care
• Pharmacies
• Public Health

Phase 1b: CDC/NAM Estimates

- **High clinical risk**
  - Cancer, chronic kidney disease, COPD, immunocompromised from solid organ transplant, obesity (BMI > 30), serious heart condition, sickle cell disease, type 2 DM

- **Older adults in congregate or overcrowded settings**
  - Nursing home/residential living: CVS/Walgreens “whole facility” vaccination
  - Age > 65 living below poverty line
  - Age > 65 in multigenerational household

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**Estimated Population**

- **High Clinical Risk:**
  - > 100 M – of which ~19-20 M may be at highest risk (multiple comorbidities)

- **Qualifying Older Adults:**
  - ~ 17 M (~ 53 M if include all > 65 years)

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Phase 2: CDC/NAM Estimates

- Teachers, staff, and child care workers
  ~ 9.1 M
- Essential workers (non-health care) with high risk of exposure
  ~ 2.6 M
- Moderate clinical risk
  Unknown – anticipated to be tens of millions
- Homeless shelter/group home residents and staff
  ~ 1M
- Prisoners, detainees, and staff
  ~ 2.7 M
- All other older adults
  ~ 13 - 33 M without comorbid conditions

Estimated Population
>>> 38 M (likely ~ 100 M)

Phase 3: CDC/NAM Estimates

• Young Adults
  ~ 46.5 M non previously included

• Children
  ~ 80 M

• Essential workers with moderate risk of exposure
  ~ 26 M

Estimated Population
~ 152 M

State Vaccine Implementation Planning

States were required to submit a COVID-19 Vaccination Plan to CDC outlining plans for:

• Identifying and allocating vaccines to critical populations
• Logistical planning to meet vaccine storage, handling, and administration requirements
• Supporting vaccine provider enrollment, vaccine ordering, distribution, storage, and handling
• Engaging providers, partners, and communities
• Vaccine program communications
Key Challenge: Identifying and Allocating Early Vaccine to Critical Populations

Possible Groups for Phase 1 Vaccination

- Vaccine supply will initially be limited - uncertain methodology for distributing to states.
- Need to adapt NASEM Framework/ACIP recommendations to state conditions, population, infrastructure.
- Develop clear, transparent process for allocation based on Federal recommendations and community input.
- Equity at the forefront.
- Healthcare workers first in line – work with providers/health systems to identify early populations, enroll providers, set up closed PODs.

Source: ACIP COVID Vaccine Workgroup, September 22 Meeting.
Key Challenge: Operational Planning for Distribution

• Multiple vaccines with the potential for different efficacy across groups and differing handling and storage requirements
  • Cold chain storage (frozen, ultra-cold)
  • Non-interchangeable second dose at 3-4 weeks
  • Required bedside mixing or reconstitution
  • Packaged in 100-1000 dose increments

• How to support high volume mass vaccinations in socially distanced environment?
• Leveraging existing infrastructure and outreach efforts (testing/flu)
• Responding to local conditions – rural challenges, healthcare infrastructure, weather
• Early distribution will occur in healthcare and congregate settings (LTCs, corrections). As supply increases, need to focus on “push” into community settings
Key Challenge: Building a Data Infrastructure

Overview of OWS/CDC Vaccine Infrastructure

State responsibilities:

- IIS or complimentary data systems must be capable of supporting provider enrollment, vaccine ordering and inventory management, tracking dose-level administration, and reporting to Federal systems.

- Legal or regulatory changes may be needed to share vaccine info with the federal system BUT more information is needed on required data elements.

Key Challenge: Vaccine Communications

Challenges:
• Diminished public confidence in integrity of FDA approval process
• Rising levels of vaccine hesitancy, organized misinformation on social media
• Healthcare disparities, distrust and historical trauma for racial and ethnic communities
• Unknowns for safety and effectiveness, supply

Strategies:
• Engaging trusted messengers
• Culturally and linguistically-appropriate materials
• Communicate with the public in clear, transparent terms
• Lessons learned from flu season
Thank You!

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