



**STOP
COVID**



**Partners
In Health**

UNITED STATES

COVID-19 Vaccine Rollout: Effective and Equity-driven Operations

USPHAU | Learning Team | 24 Feb 2021

Participants in Attendance

- ❖ Catholic Charities Maine refugee and Immigration services
- ❖ CDC Foundation
- ❖ City of Haverhill
- ❖ City of St. Louis Department of Health
- ❖ Cook County Health
- ❖ CORE
- ❖ Curamericas Global
- ❖ DHHS NCORH
- ❖ El Sol Neighborhood Educational Center
- ❖ Franklin County Public Health
- ❖ Health Choice Arizona
- ❖ Health commons solutions lab
- ❖ Healthcare Collaborative of Greater Columbus
- ❖ Indiana University/ Fairbanks School of Public Health
- ❖ Indiana University/ Marion County Public Health
- ❖ Industrial Areas Foundation
- ❖ Inner City
- ❖ Kepro
- ❖ KKV
- ❖ Kokua Kalihi Valley
- ❖ Louisiana Department of Health
- ❖ LWDA
- ❖ Maine Immigrant Rights Coalition
- ❖ Mt Calvary Center for Leadership Development
- ❖ Muslim Action Network
- ❖ Nazareth Hospital
- ❖ NCDHHS
- ❖ Ohio Department of Health
- ❖ PHI Tracing Health Pacific NW
- ❖ Pima County Health Department
- ❖ Public Health Institute (PHI)
- ❖ Restart
- ❖ Service Year Alliance
- ❖ Sierra Health Foundation
- ❖ Teton County Health Department
- ❖ The NARBHA Institute
- ❖ University of Cincinnati

Agenda

- 1 Welcome & Introductions
- 2 Framing Information
- 3 Case Studies
 1. Newark DOH
 2. El Sol NEC
 3. CORE (GA & Los Angeles)
 4. Ariadne Labs
- 4 Q&A with Case Presenters, Discussion
- 5 Feedback Poll

US Vaccine Rollout by the Numbers

Doses administered per 100,000 population, 2/23/2021, 6am ET

1.4M per day, rolling average

Total doses distributed	Number received first dose	Number received second dose	Newly distributed per 100,000 on 02/23
82,114,370	44,544,969	19,882,544	2,079

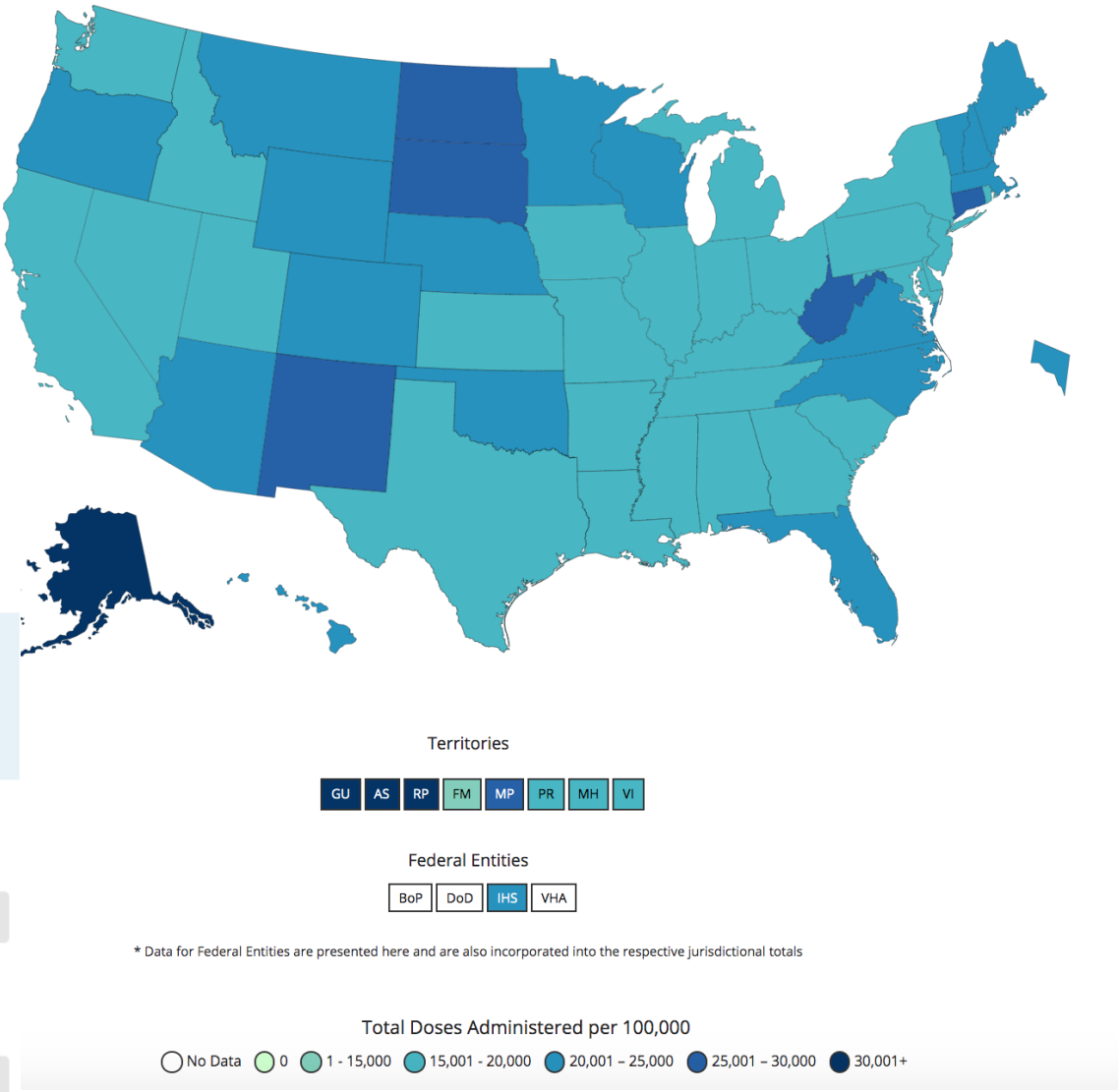
Percent of population partially vaccinated (one dose received)



Percent of population fully vaccinated (two doses received)



Total Doses Administered Reported to the CDC by State/Territory and for Select Federal Entities per 100,000 of the Total Population



The Wealthy Are Getting More Vaccinations, Even in Poorer Neighborhoods

Officials acknowledge that the coveted shots are disproportionately going to white people and that planners' efforts to course-correct are having limited effect.

By Abby Goodnough and Jan Hoffman

Published Feb. 2, 2021 Updated Feb. 4, 2021

BUSINESS / MONEY

Hospitals Help Wealthy Donors 'Skip the Line' for Vaccines



HEALTH

Random People Are Lining Up to Get Vaccinated in D.C. Grocery Stores

Pharmacies have started quietly offering leftover COVID-19 shots to anyone around. You can guess where this goes.

JACOB STERN JANUARY 13, 2021

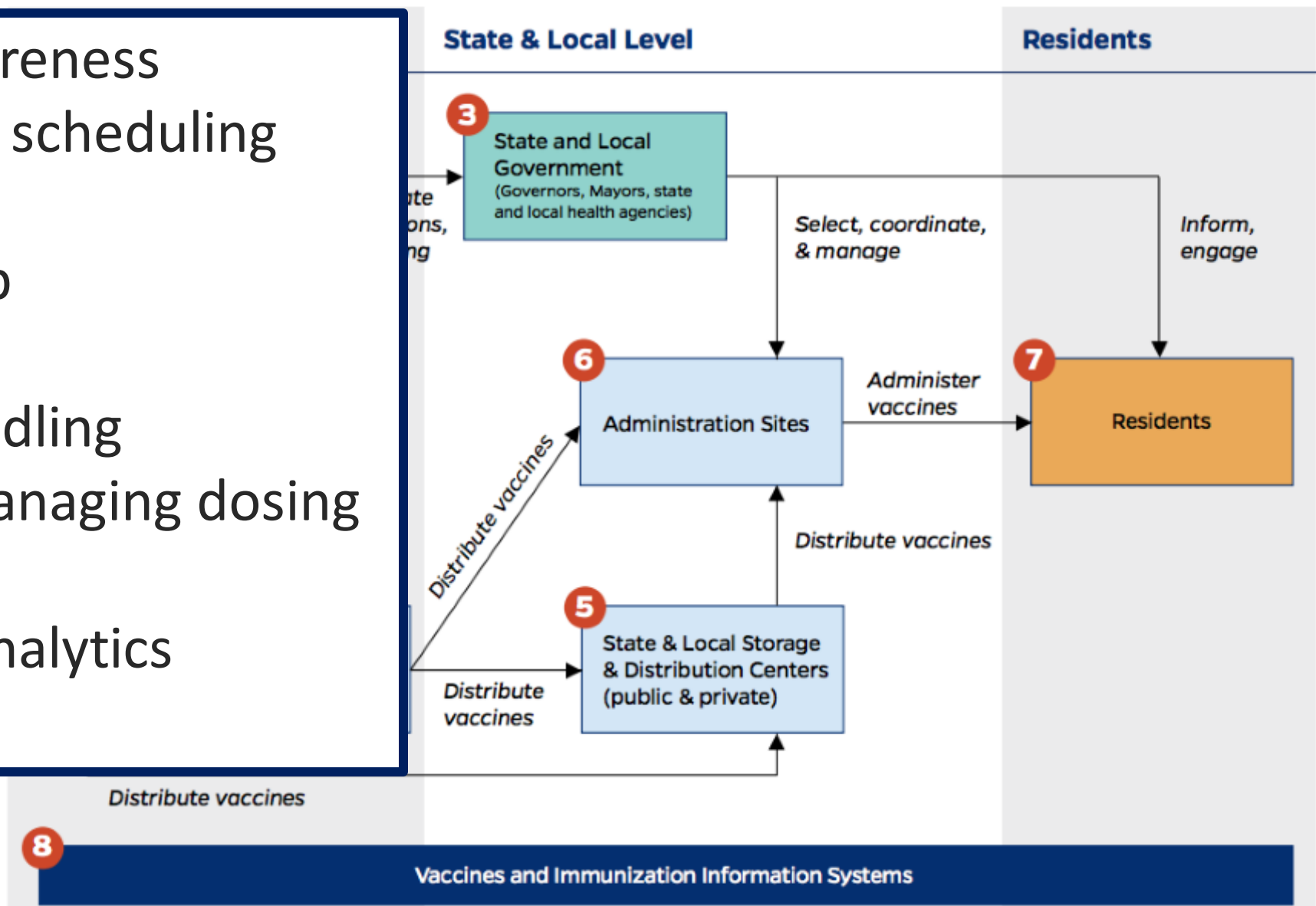


By Dawn Allcot

February 23, 2021

Exhibit 1 US COVID-19 vaccination delivery chain

- Community awareness
- Registration and scheduling
- IT systems
- Site ID and setup
- Staffing
- Storage and Handling
- Workflows to managing dosing requirements
- Reporting and analytics
- And more...





Dr. Mark Wade
Director, City of Newark
Department of Health
and Community Wellness



Alex Fajardo, MCP, CFC
Executive Director
El Sol Neighborhood
Educational Center



Marlina Crespo
COVID-19 Program
Manager
Community Organized
Relief Effort (CORE)



Virginia Chu
Planning Unit
Manager
CORE-GA



Julie Rosenberg, MPH
Better Evidence
Assistant Director
Ariadne Labs

Case Study Presenters

CITY OF **NEWARK**
Mayor Ras J. Baraka





COVID-19 Vaccine Rollout: Newark, New Jersey

PIH Learning Collaborative Webinar
February 24, 2021

Newark At A Glance

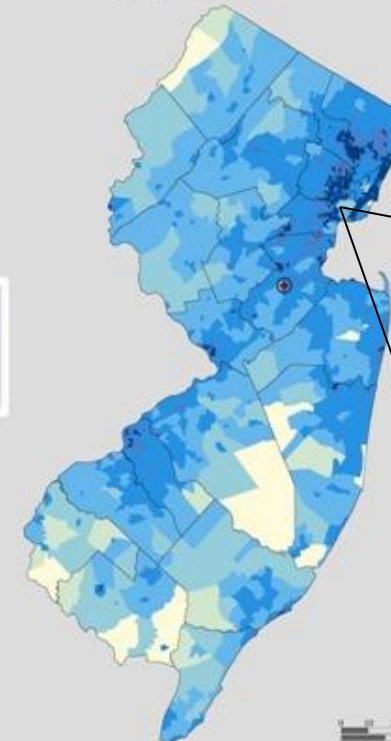
The city has been hard-hit by COVID, both in health outcomes and economic livelihood

- Newark has a population of ~**282,000**; and is predominantly Black or African American (47%) and Hispanic or Latino (39%)
- **Large language diversity:** about half of Newark residents speak only English at home
- **Median household income is significantly lower in Newark** (\$37,642) as compared with the US (\$63,179)
- **The percentage of citizens living below the poverty line is significantly higher in Newark at 24.6%** in comparison with the US (11.8%)
- Residents report **overall poorer health indicators**, are **underinsured**, and have **lower access** to preventive care measures
- The City has a robust network of trusted and respected community-based organizations and houses of worship, and a strong **culture of care**

2010 Census: New Jersey Profile

Population Density by Census Tract

New Jersey Population 1970 to 2010	
2010	8,791,894
2000	8,414,350
1990	7,730,188
1980	7,364,823
1970	7,168,164



City of Newark Vaccination Planning

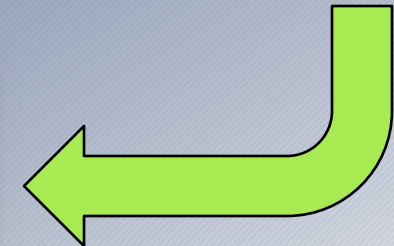
How?

- Conduct healthcare partner outreach and coordination in November
- Calculate estimated throughput of small, medium, large sites
- Estimate additional number of sites needed to reach 70% of population within 6 months
- Identify staffing resources and gaps
- Design, plan and mobilize resources to avail population with as many vaccines as possible within 6 months
- Consider high priority and special needs populations

	Seat 1	Seat 2	Seat 3	Seat 4	Seat 5	Seat 6	Seat 7	Seat 8
Pre-Seat	Registration	Registration	Registration	Registration	Registration	Registration	Registration	Registration
5 min	Vaccinate				Vaccinate			
10 min	Observe	Vaccinate			Observe	Vaccinate		
15 min	Discharge	Observe	Vaccinate		Discharge	Observe	Vaccinate	
20 min	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate
25 min	Vaccinate	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe
30 min	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge
35 min	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate	Sanitize
40 min	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate
45 min	Vaccinate	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe
50 min	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge
55 min	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate	Sanitize
60 min	Sanitize	Discharge	Observe	Vaccinate	Sanitize	Discharge	Observe	Vaccinate
65 min		Sanitize	Discharge	Observe		Sanitize	Discharge	Observe
70 min			Sanitize	Discharge			Sanitize	Discharge
75 min				Sanitize				Sanitize

Type	Number of sites	Weekly capacity for Newarkers
Site type 1 (UH)	1	3780
Site type 2 (small, DOH/FQHC)	2	1536
Site type 3 (medium size, 16 chair)	4	9216
Site type 4 (Essex CC)	1	2700
Total weekly vaccinations for Newarkers		17,232

	weeks	months
Time to vaccinate 100%	24.4	6.11
Time to vaccinate 70%	17.1	4.28
	<i>Target < 6 months</i>	



Citywide Vaccination Efforts

City-Run Vaccination Clinics	
DOH: FQHC clinics	2
DOH/DPS: High-school ward sites	2 (+2 more mid-March)
Mobile / pop-up clinics for priority and hard-to-reach populations	Various
County & Partner Clinics	
County Sites	2 in Newark (5 total)
Hospitals (University Hospital, Newark Beth Israel)	2
FQHCs (St. James, Newark CHC, Jewish Renaissance Center)	3 (5 total locations)
Private Pharmacies (Shoprite, Liss)	2
TOTAL Vaccine Sites in Newark	15, with various pop-ups

Outreach to Priority Populations: Seniors & Unhoused

How to best reach:

- 1800 unhoused residents (18 shelters)
- 6600 senior housing residents (35 senior housing buildings)
- Less likely to choose to or be able to travel to static clinic locations

Mobile Team Approach:

- Unhoused and shelter pops (pending):
 - Large shelters (on site)
 - Drop-in centers
 - Street outreach
- Senior Housing (2-3 teams per day)
 - 35+ senior housing buildings

Schedule for Senior Housing Buildings and Residents Without Addresses

-Team A will focus on vaccination of the homeless population
 -Teams B and C will focus on vaccination of the senior buildings
 -Each team will be expected to work 6 days a week for an 8 hour shift (this may not fall in 9-5 hours to best accommodate people's schedules and shift work, esp at shelters); Thus each team is scheduled for 24 days to allow for 24 days of outreach
 -Larger buildings and shelters (>100) will be scheduled for at least 2 days, in order to cover the full buildings and allow for those who work specific days and shifts to have more opportunities for access
 -Assume vaccination rate of 70%, though current interest in uptake may be lower for now
 -Team A will be mobile and provide vaccines at larger shelters. During days when not at shelters, the team will be based at either Shani Baraka or NJCRI drop in centers, and will provide vaccines for smaller shelters and unhoused populations.
 -Bus transportation will be provided for all staff and residents for each shelter on specified days.

Team (A, B, C)	Days needed to vaccinate 70% (8-seat model)	Location	Day (Round 1)	Name	Address	Ward	Total 70% vaccination	Total 100% vaccination	Max Capacity
A	3	On site	Day 1-4	224 Help Center	224 Sussex Ave	North	319	456	431
A	0	224		Urban Renewal Corporation	689 South 16Th Street	South	27	38	38
A	0	On site	Day 5-6	Apostle'S House	16-18 Grant Street (24 Grant Street)	Central	24	34	12
A	0	Apostle's		Apostle'S House	513-515 Avon Ave	Central	19	27	17
A	1	On site	Day 7 - 8	Holiday Inn	160 Frontage Road		140	200	200
A	2	On site	Day 9-10	New Community Harmony House	278-282 South Orange Ave.	West	181	259	250
A	0	St. Rocco's		St. Bridget'S	47-71 Miller Street 3Rd Floor	South	25	36	30
A	1	On site	Day 11-12	St. Rocco'S	368 S 7Th Street	West	55	79	59
A	1	On site		The Restoration Center	278-306 South 12Th Street	West	98	140	140
A	0	Restoration Cent	Day 13-14	Newark Transitional Corp.	198 Clinton Avenue	Central	34	48	40
A	0	Restoration Cent		Newark Transitional Corp.	212 Peshine Avenue	North	21	30	22
A	2	On site	Day 15-16	YMCA	600 Broad Street	East	221	315	292
A	0	SB		Newly Destined	1114 Broad Street	Central	32	45	39
A	0	SB		Circle Of Life	55 Tillinghast Street	South	45	64	53
A	0	SB	Day 17-20	Fairmont Health Services	202 Fairmont Avenue	West	29	41	35
A	0	SB		Missionaires Of Charity	60 Jay Street	North	15	22	20
A	0	NJCRI		United Community Corporation	31 Fulton Street	East	35	50	20
A	0	NJCRI	Day 21-24	Covenant House	330 Washington Steet	East	48	69	45
B	1	On site	Week 1, Day 1-2	Stephen Crane Elderly 22-C	801 North 6th Street	North	149	213	213
C	1	On site	Week 1, Day 1-2	Stephen Crane Elderly 22-D	900 Franklin Ave	North	130	186	186
C	1	900 Franklin Ave		Stephen Crane Elderly 2-16	60 Cedar Lane	North	55	79	79
B	1	On site	Week 1, Day 3-4	Kretchmer Elderly 21A	991 Frelinghuysen Ave	South	109	156	156
B	0	991 Freling		Kretchmer Elderly 2-17	35 Van Vechten Street	South	43	62	62
B	1	On site	Week 1, Day 3-4	Branch Brook Manor	1 Branch Brook Plaza	North	161	230	230
B	1	On site	Week 1, Day 5	Seth Boyden Elderly 21-E	130 Dayton Street	South	72	103	103
C	1	On site	Week 1, Day 5	Seth Boyden Elderly 21-F	46 Evergreen Ave	South	71	102	102
B	1	On site	Week 1, Day 6	James C. White 2-25	516 Bergen Street	Central	129	184	184
C	1	On site	Week 1, Day 6	Lincoln Towers	9 Lincoln Street	Central?	137	196	196
B	2	CVS: HUD 202	CVS?		444 MT Prospect Ave	North	19	280	280

Priority Populations: Seniors

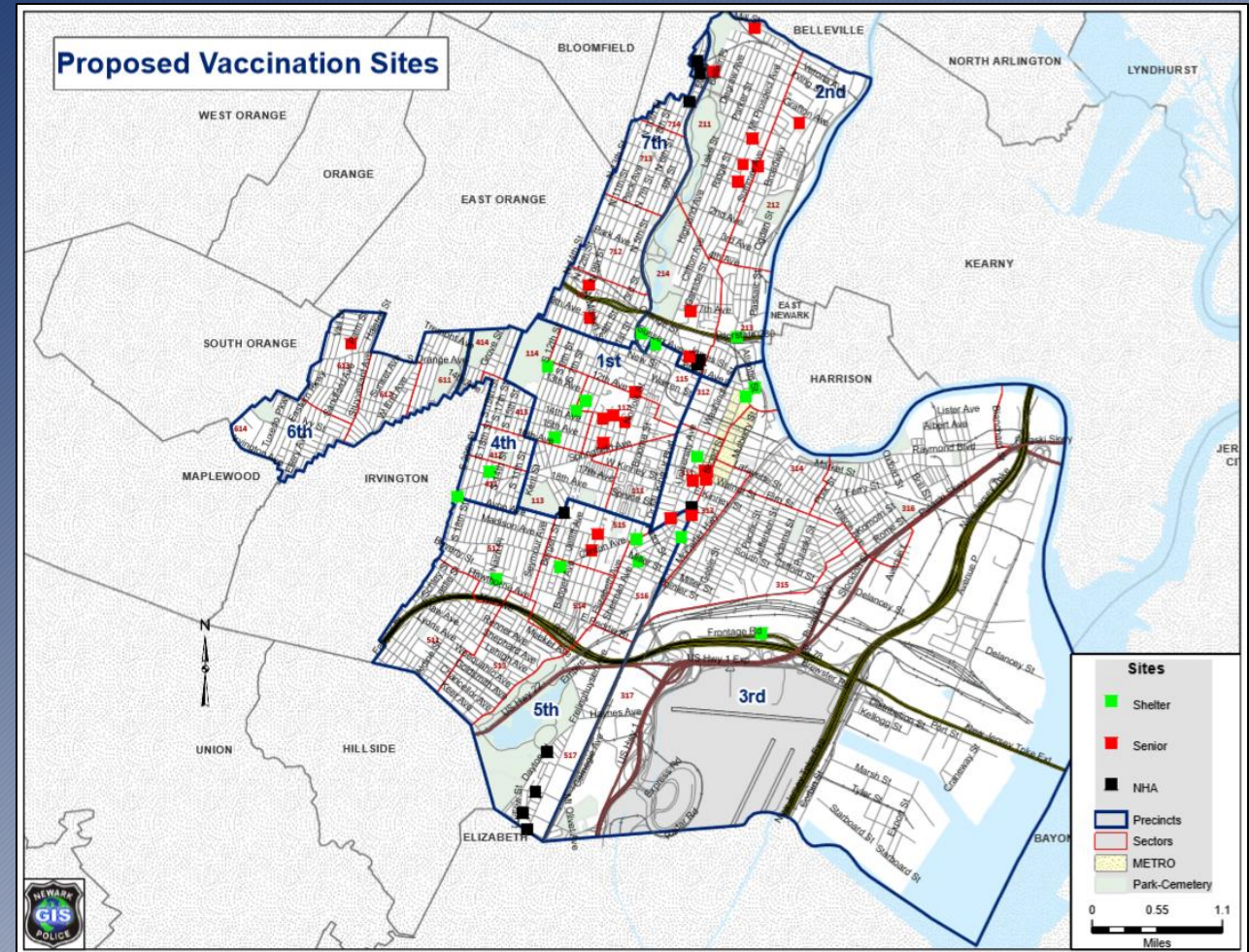
Provider	Sites Covered
City of Newark / DOH	32 Sites
CVS	444 Mt. Prospect Ave Grace West Manor
St. James	Branch Brook Manor 505 Mt. Prospect Ave 595 Mt. Prospect Ave Donald Bradley Complex



- Stephen Crane Elderly 22-C
- Stephen Crane Elderly 22-D
- Stephen Crane Elderly 2-16
- Kretchmer Elderly 21A
- Kretchmer Elderly 2-17
- Seth Boyden Elderly 21-E
- Seth Boyden Elderly 21-F
- James C. White 2-25
- Lincoln Towers
- 711 Broadway A
- Parkside Manor
- New Community
- New Community
- 502 Summer Ave
- New Community
- New Hope Senior Building
- New Community
- One Court Street
- Baxter Park
- 2 Nevada Street
- Villa Victoria
- Baxter Elderly 22-B
- St Mary's Villa
- 1060 Broad Street
- 10 Hill Street
- RPM Community/Springfield Senior Residence
- New Community
- New Community
- 75-97 Shalom Towers
- City View Senior
- Harrison Park Sq
- Boulevard

Priority Populations: Unhoused & Unsheltered (Planned)

Provider	Sites Covered
DOH / NJCRI	<ul style="list-style-type: none"> • 224 Help Center • Urban Renewal Corporation • Apostle's House (x2) • Holiday Inn • New Community Harmony House • St. Bridget's • St. Rocco's • The Restoration Center • Newark Transitional Corp. (x2) • YMCA • Newly Destined • Circle Of Life • Fairmont Health Services • Missionaries Of Charity • United Community Corporation • Covenant House • Outreach to encampments / unhoused



Vaccine Rollout: Monitoring and Evaluation

Information Sharing

- Coordination with healthcare vaccination partners in February
- Agreed upon need for increased situational awareness and reporting
- City of Newark in process of implementing data reporting and evaluation system
- Weekly vaccination progress to be monitored

	02/22/2021 1st doses	1st doses (Newarkers)	02/22/2021 - 2nd doses	Total	% 1st doses Newarkers
St James					
Newark CHC					
Dept. of Health					
JRMC					
Univeristy Hospital					
Newark Beth Israel					
Essex County: t					
Total					
Essex County: t					
	Population			Total % Vaccinated	
	282,090			%	

DRAFT IN PROGRESS



Municipal Council
MILDRED C. CRUMP

Council President/Council Member-at-Large

LUIS A. QUINTANA

Vice President/Council Member-at-Large

AUGUSTO AMADOR

Council Member, East Ward

CARLOS M. GONZALEZ

Council Member-at-Large

JOHN SHARPE JAMES

Council Member, South Ward

LaMONICA McIVER

Council Member, Central Ward

JOSEPH A. McCALLUM

Council Member, West Ward

EDDIE OSBORNE

Council Member-at-Large

ANIBAL RAMOS, JR.

Council Member, North Ward

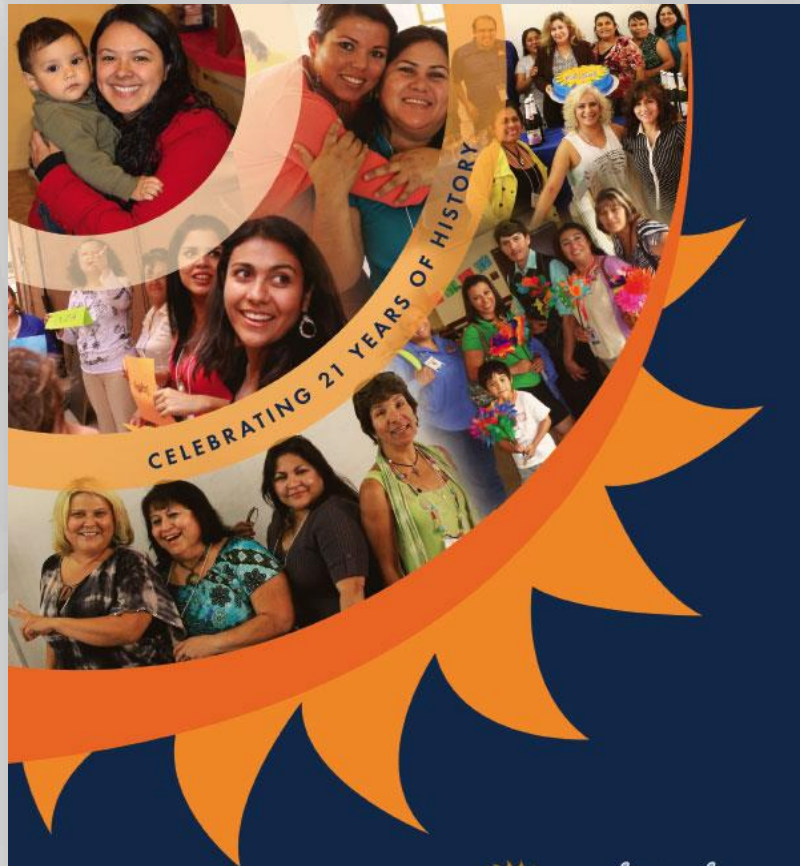


COVID-19 Vaccine Rollout: Effective and Equity-Driven Operation

Alexander Fajardo

February, 2021

El Sol Neighborhood Educational Center



- **Year founded:** 1991
- **Mission:** To empower our communities to lead healthy lives & access to healthcare, safe, affordable housing; opportunities for education; and the leadership to eliminate disparities.
- **Vision:** Our Community members will reach personal empowerment to move towards self-sufficiency and contribute to their community's well being.
- **Region:** Inland Empire, CA



What Do We Do?

With a focus on prevention and public health we work on **education, health promotion, and community engagement.**



How Do We Do It?

We provide culturally-competent health education, outreach and community development through our

Community Health Workers/Promotores de Salud.





Vaccination Case # 1
San Bernardino County
City of Adelanto
Rural Area

Process

- Planning
- Securing Supplies and Materials
- Recruitment
- Vaccination
- Follow Up





Vaccination Case # 2
Riverside County
Coachella Valley
Farmworkers

Process

- Planning
- Registration
- Securing Supplies and Materials
- Vaccination
- Follow Up





Lessons Learned

Lessons Learned

- Each community needs different strategies.
- Must involve community members on the solution.
- Be honest with County Departments.
- Create an action plan for the vision of the implementation.
- Be patient.

Contact Information



Alexander Fajardo
Executive Director

Phone: (909) 884-3735

Email: alex fajardo@elsolnec.org

Website: www.elsolnec.org





Community Organized
Relief Effort

Georgia & Los Angeles

Virginia Chu & Marlina Crespo

Mobile Flu Vaccination- GA



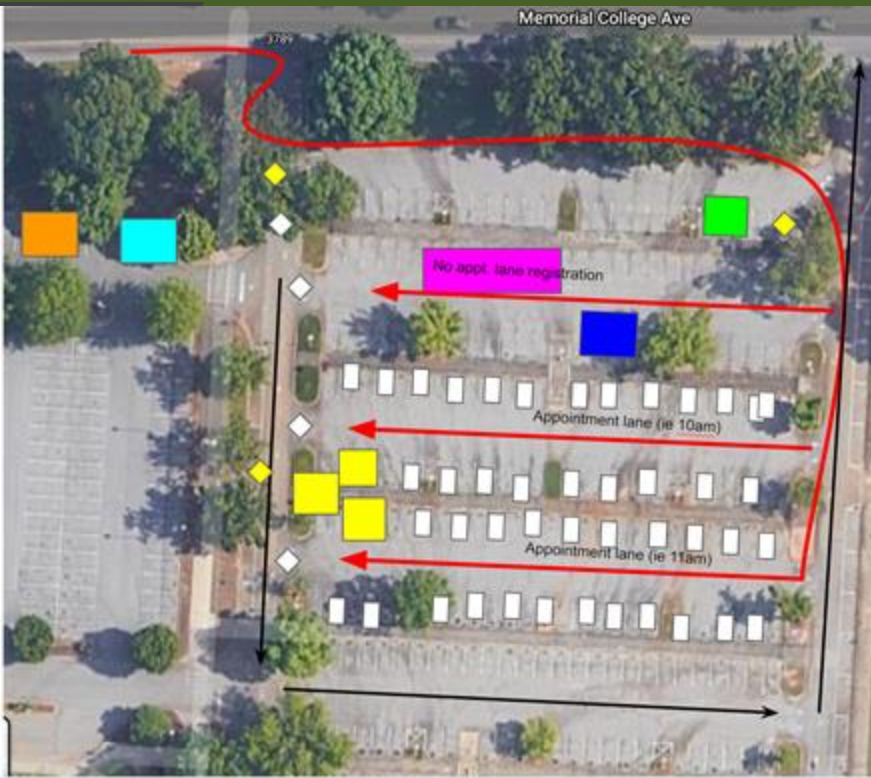
- Georgia ranked 45th for influenza vaccinations
- 15 different mobile Covid-19 testing sites (4 counties)
- Nearly 800 vaccinations
- 5% of vaccinated in DeKalb county first time flu shot
- Utilized language skills of testing staff

Lessons

Clinical staff scheduling and needs, vaccine transport, engaging in vaccine discussion

Mobile Covid-19 Vax- GA

- Local health clinic: Phase 1A+ and zip code eligibility
- Alternative flow maps depending on weather
- 522 vaccinations in 3 days



Vaccinators go to patients

Patients go to

Mobile Vax Units - LA



Sun, 02/14/21	M1	M2	M3	M4	M5
Site Location & Address	Slauson Super Mall Address:	Metro Station Address:	Sears Address:	Baldwin Hills Address:	South Park Address:
Vaccine	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Testing Times	0900-1500	0900-1500	0900-1500	0900-1500	0900-1500
Flu Vaccine Collaboration	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LAFD TEAM LEAD					
CORE TEAM LEAD					
Passenger Van	NO VAN	NO VAN	VAN	VAN	VAN

Mobile Vax Units - LA





Mass Testing & Vax - Dodgers





Considerations

- Appointment scheduling
- Targeting specific populations
- Adapting staff for vaccines
- Language skills
- Internal communication between partners



Monitoring Capacity and How to Plan Accordingly



- Key performance indicators
 - Doses/clinician, doses/day, patient throughput
- Expand reach with additional sites



ARIADNE LABS

BRIGHAM HEALTH
BWH BRIGHAM AND
WOMEN'S HOSPITAL

HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH

Maximizing the Impact of COVID-19 Vaccinations: With Speed, Scale, and Equity

Julie Rosenberg, MPH

Vaccination requires robust vaccine delivery strategies

Framework for Equitable and Effective Vaccine Delivery

ALLOCATION

Identify the right populations for equitable distribution

DISTRIBUTION

Get the right vaccine to the right people at the right time in the right place

VERIFICATION

Ensure proper distribution and track progress towards herd immunity

DEMAND

Generate demand and address hesitancy, tailor engagement, communicate

Vaccine Allocation Planner



Vaccine Allocation Planner for COVID-19

States are currently allocating the first shipments of COVID-19 vaccines to their highest priority populations. The Vaccine Allocation Planner for COVID-19 helps state and county decision makers by estimating the size of these populations in every county of the US and the percent vaccine coverage achievable under various scenarios. This tool uses the 13 priority populations identified by [The National Academies of Sciences, Engineering, and Medicine \(NASEM\) Framework for Equitable Allocation of COVID-19 Vaccine](#). Users can order these priority groups according to recommendations from either NASEM or the CDC's Advisory Committee on Immunization Practices (ACIP).

SELECT A STATE: Massachusetts

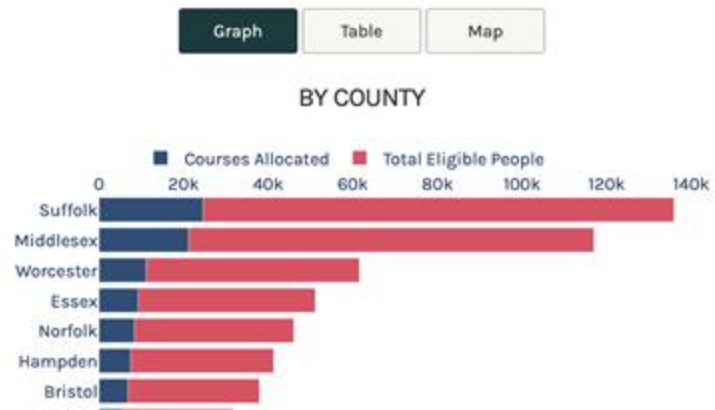
SELECT THE DOSE REGIMEN: 1 dose 2 dose

1. SELECT GROUPS TO VACCINATE

DISPLAY GROUPS AS RECOMMENDED BY: NASEM ACIP

Phase	Group	People
1a	<input checked="" type="checkbox"/> High risk workers in health care facilities	512,995
	<input checked="" type="checkbox"/> First responders	47,206
1b	<input type="checkbox"/> People with significant comorbid conditions	0
	<input type="checkbox"/> Older adults in congregate or overcrowded settings	0
	<input type="checkbox"/> Critical risk workers (part 1)	0
	<input type="checkbox"/> Teachers and school staff	0
	<input type="checkbox"/> ...	0

If **Massachusetts** has **101,387** courses of vaccine available and **560,201** people to vaccinate, then the allocation across counties and groups will be:



Find Your Place in the Vaccine Line



Impact

- People posting screenshots of their place in line
- Empathy, understanding

Upcoming

- Working on follow-up piece that will address timing as well as with Washington Post, Univision, the Guardian and USA Today

Vaccination needs to succeed through the “last mile”

Vaccine demand

Vaccine supply

Where?

Onsite
Health systems
LTC facilities

Retail pharmacies
Mass vaccination sites

Primary care practices
Onsite/mobile sites
Employers
FQHCs
Community-based organizations

Who?

Highest priority groups
Health care workers
LTC residents

Large priority groups
All 65 or older
Motivated general public

Hard to reach
Late adopters
Skeptics/hesitant
Not trusting of Federal government
Isolated/homebound
Rural
Cultural/linguistic minorities

How much will it cost for Primary Care sites to open up?

We are modeling the workflow, time requirements, and costs for primary care clinics to offer COVID vaccines.

→ Advocate for higher reimbursement rates

→ Inform operations and investments

See: <https://vaccinebudgetcalculator.shinyapps.io/OutpatientVaccineCostCalculator/>





ARIADNE LABS



HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH

**We work to deliver the best possible care for
every patient, everywhere, every time**



Moderated Q&A



Closing Announcements

Thank you to our presenters, attendees, moderator, and Learning Team!

Announcements

- We will share slides and recording, along with a set of vx resources
- Today is part 2 of USPHAU Learning Team Vaccine Webinar Series
- Registration Link for our email list + full Resource Library will be emailed: <https://learning.pih.org/contact>

For more information on Partners In Health's US Public Health Accompaniment Unit, and to access small set of resources: <https://www.pih.org/us-public-health-accompaniment-unit>

Session 1:
Centering Community
Engagement/Shifting
Centers of Power
Wed. February 3

Speakers: WV Public Health, Chicago VCP, Urban Indian Health Institute, Montgomery
Key themes: Community leadership + engagement in communications, distribution, workforce

Session 2: Logistics,
Allocation, and
Distribution
Wed. February 24

Speakers: El Sol NEC; CORE (Los Angeles and Atlanta); Newark, NJ; Ariadne Labs
Key themes: Tools and strategies for flexible + adaptive planning, allocation, distribution, and tracking

Session 3: Vx in the
Cascade of COVID
Response
Wed. March 17

Key themes: Vx as part of bundle, role of other aspects of response, challenges in other pillars through rollout

US Public Health Accompaniment Unit



For more information please contact LearningCollab@pih.org

