Introduction

Nearly a year after the arrival of the COVID-19 pandemic in Philadelphia, there is light at the end of the tunnel. Three highly-effective COVID-19 vaccines have been approved for use and are being shipped in increasing quantities to the city. A growing number of providers are administering those doses to an increasing number of Philadelphians, through various mechanisms and channels. And increasingly-reliable information about vaccine availability suggests that most Philadelphians will have the opportunity to be vaccinated by mid- to late-Summer 2021.

On November 16, 2020, the Philadelphia Department of Public Health (PDPH) published a 130-page “Coronavirus Disease 2019 (COVID-19) Vaccination Plan.” Much of this plan was tentative, because much was unknown at the time about which vaccines would be approved for use, what populations they would be approved for, and how many doses would be received by the City of Philadelphia. Then on January 19, 2021, after more was known about vaccine availability, PDPH published a “Philadelphia COVID-19 Vaccine Distribution Plan” that offered more specificity on how the vaccine would be distributed in Phase 1a and Phase 1b. On March 3, PDPH issued an update on the earlier Vaccine Distribution Plan to articulate new strategies for increasing vaccination services throughout the city. This document provides a further update on the plan through the end of May, as well as a progress report on vaccinations to date. With federal promises for increased vaccine shipments and increased confidence in the reliability of information on vaccine availability, and many new providers engaged in vaccine distribution, Philadelphia is in a better position to continue expanding vaccination services for its residents.

In recent weeks, the number of vaccination sites has since increased, including the expansion of operations at retail and independent pharmacies, the first of the Philadelphia Fire Department (PFD) pop-up clinics, three additional community-based large vaccination clinics operated by the Philadelphia Department of Public Health (PDPH), and the Center City Vaccination Center (CCVC) operated with the support of the Federal Emergency Management Agency (FEMA). The PDPH community vaccination clinics are also now accepting walk-ups for residents eligible in Phases 1a and 1b, as is the CCVC from March 17-March 22. Following the recommendations from the Vaccine Advisory Committee, all residents age 65 and older, individuals with intellectual disabilities, staff who work in senior centers and adult day programs, and clergy are all now eligible for vaccination in Phase 1b. In concert with President Biden's direction to open vaccination eligibility to all adults by May 1, individuals who qualify in Phase 1c will soon be eligible in April, with an exact date to be announced in the coming weeks.

Progress to Date

PRIORITY GROUPS

Philadelphia's Vaccine Advisory Committee set priorities for populations eligible for vaccination in Phases 1a, 1b, and 1c, based on the recommendations of the federal Advisory Committee on Immunization Practices (ACIP). The membership of the Vaccine Advisory Committee can be found here: https://www.phila.gov/programs/coronavirus-disease-2019-covid-19/vaccines/covid-19-vaccine-documents/. In early February, the COVID-19 Racial Equity group was integrated into the Vaccine Advisory Committee to help address racial equity issues.
Persons included in Phase 1a are health care workers and residents of long-term care facilities; persons included in Phase 1b are frontline essential workers, persons living and working in congregate settings, persons over age 65, and persons with high-risk medical conditions. Additional populations—clergy, staff at senior centers and adult day programs, and persons with intellectual disabilities—have recently been added to the Phase 1b priority group, following the recommendation from the Vaccine Advisory Committee. Persons in Phase 1c are other essential workers. The full priority group list can be found here: https://www.phila.gov/media/20210319140135/Philadelphia-COVID-Vaccine-Priority-Eligibility-031921-1.pdf.

Vaccinations were offered to persons in Phase 1a from the arrival of the first vaccines in mid-December until the week of January 18, when persons in Phase 1b became eligible. There is some overlap between phases as the intent is not to vaccinate every individual in a phase before moving to the next, but rather to achieve a sufficient saturation level before moving on. Persons in early prioritization groups who choose not to accept vaccine during their corresponding phase will continue to have opportunities for vaccination as the phases progress.

Upon President Biden’s announcement that jurisdictions will be directed to make all adults eligible for COVID-19 vaccine no later than May 1, persons in Phase 1c will become eligible in April, with an exact date to be announced in the coming weeks. Philadelphia will enter Phase 2 on May 1.

VACINES AND DOSES AVAILABLE
The Food and Drug Administration (FDA) has approved three COVID-19 vaccines for use under Emergency Use Authorizations (EUA). They include Pfizer’s mRNA vaccine, Moderna’s mRNA vaccine, and an adenovirus vector vaccine made by Janssen (a subsidiary of Johnson & Johnson). Many other COVID-19 vaccine candidates are currently in development.

The federal government allocates first doses of the two-dose vaccines each week and then matches those with second-dose allocations three or four weeks later, according to the dosing interval of the vaccine. Philadelphia was allocated approximately 20,000 first doses combined of the Pfizer and Moderna vaccines per week through much of January, but first-dose allocations rose in February to closer to 30,000 per week, with total allocations as of March 22 almost 74,000 doses. Beginning the week of March 1, Philadelphia has started to receive allocations of the single dose Johnson & Johnson vaccine, which is expected to increase in quantity over the coming weeks. Note that doses allocated in a given week are shipped the following week, so they are first available for administration approximately 10 days after the dates shown on the graph below.
PROVIDERS AND MECHANISMS FOR VACCINE ADMINISTRATION

To achieve sustainable and equitable COVID-19 vaccine access across the city, PDPH is building a broad vaccine administration network, most of which is based on established health care providers. To enroll as COVID-19 vaccination providers, organizations must meet requirements established by the Centers for Disease Control and Prevention (CDC) for vaccine handling and complete a CDC provider enrollment agreement. As part of this process, providers must meet rigorous vaccine storage and handling requirements, as well as document the ability to electronically report immunization data within 24 hours using systems approved by PDPH.

As of March 22, 232 provider sites were enrolled to receive vaccines.

• **Hospitals/health systems**
  All acute care hospitals have vaccinated their own health care workers in their occupational health units. They are now inviting patients who meet Phase 1b eligibility criteria for vaccination. In addition, several hospitals are operating community-located mass vaccination clinics, often in partnership with religious organizations or other community-based organizations. In a unique arrangement, the Children's Hospital of Philadelphia (CHOP) began vaccinating teachers, school support staff, and childcare workers the week of February 22. As of March 22, CHOP administered 19,233 first doses and 3,150 second doses through these clinics.

• **Pharmacies**
  Rite Aid, the pharmacy chain with the best reach into lower-income Philadelphia neighborhoods, is providing vaccine at its 77 locations. CVS and Walgreens, under a federal contract, have been providing vaccinations to residents and staff of nursing homes, personal care homes and assisted living facilities. Centennial pharmacy has been offering vaccination on site to a variety of facilities with Phase 1b-eligible populations. As of March 22, 20 independent pharmacies had completed CDC provider agreements and had received vaccine to offer in their stores.

• **Federally Qualified Health Centers (FQHCs) and other outpatient clinics**
  PDPH is providing vaccine to approximately 56 FQHC sites and other outpatient clinics, initially to vaccinate their own staff and unaffiliated healthcare workers, and since early February to vaccinate persons eligible during Phase 1b.

• **PDPH mobile teams**
  PDPH is deploying mobile teams to vaccinate healthcare staff on-site at large facilities that are not affiliated with a health system, such as inpatient behavioral health facilities.

• **Public health vaccination clinic**
  PDPH is operating a clinic for unaffiliated health workers who are at high-risk of exposure or have a high-risk of exposing persons who are vulnerable, including staff who work at testing sites, dialysis providers, and non-municipal EMS providers, among other groups.

• **Organization-based clinics**
  PDPH has provided vaccine to other partners, including the Philadelphia Department of Prisons Health Services and the Philadelphia Fire Department—Emergency Medical Services, to vaccinate their own healthcare staff. Similarly, the Police Department and SEPTA have organized clinics to vaccinate their employees.
• **Mass vaccination events**

PDPH has operated a series of mass vaccination events for unaffiliated health care workers, such as home health aides and school nurses. Beginning the week of February 22, PDPH began a series of community-based large vaccination clinics for persons eligible in Phase 1b based on their age or medical vulnerability. On March 15, three additional clinics were added for a total of six community-based large vaccination clinics in operation Monday-Saturday. During the week of March 22, the Philadelphia Fire Department (PFD) will launch three additional community-based clinics. In addition, PFD has also operated two smaller pop-up vaccination clinics on March 12 (Frankford) and March 19 (West Philadelphia) and will continue to operate similar events in the coming weeks. Other organizations have similarly operated community-based large clinics, including hospitals (see above) and the Black Doctors COVID-19 Consortium.

As of the week ending March 14, approximately 526,803 doses had been administered, with the most doses being administered by hospitals (45%) and pharmacies (22%). The number of doses has been generally increasing over these weeks, with the most notable increase in the last few weeks from clinics and pharmacies, as well as the high volume of vaccinations at the Center City Vaccination Center.
**Philadelphia Covid-19 Vaccine Distribution Plan**

**Progress Reaching Priority Populations**

- **Health Care Workers**
  While current data systems do not track the occupation of persons vaccinated, hospitals and clinics report that most of their affiliated health care workers that are interested have been vaccinated by late February. There are a number of unaffiliated health care workers, particularly home health aides, who remain unvaccinated; those persons are being reached with mechanisms in Phase 1b.

- **Long-Term Care Facilities**
  Mobile teams managed by pharmacies have made good progress in vaccinating residents and staff at long-term care facilities. Of 102 nursing homes, personal care homes, and assisted living facilities that they were requested to reach, 99 have been visited by teams at least once, 94 at least twice, and 50 three times as of March 16. The teams administered 15,220 doses to residents and 12,065 doses to staff, from a total of 27,285 doses administered. PDPH is tracking progress across these facilities to ensure that anyone who was not vaccinated yet who wants to be vaccinated will be provided access, as well as completing dose series for persons when needed. Through the Regional Congregate Care Assistance Team (RCAT) program, the University of Pennsylvania and Temple University health systems have sent teams to 24 personal care homes to vaccinate residents and staff. A total of 478 persons were administered with at least one dose (345 residents and 133 staff).

- **Frontline Essential Workers**
  PDPH began working with both the Philadelphia Police Department and the Philadelphia Fire Department in January to coordinate vaccinations for first responders. As of March 15, 5,062 first and second doses have been administered to police officers, and 1,413 Fire Department personnel have been vaccinated. Vaccinations are being administered to staff from the Department of Prisons on site. There have been several clinics for SEPTA personnel operated by Albert Einstein Medical Center with a larger initiative planned at the Center City Vaccination Center. As of March 15, an estimated 3,500 SEPTA personnel have been vaccinated with at least one dose.

- **Elderly and Medically Vulnerable**
  Two of the largest groups in Phase 1b are those persons over age 75 (93,000) and persons with high-risk medical conditions (more than 400,000). Vaccination of these persons began in late January and will likely continue throughout the entire vaccination program. These vaccinations have been administered by the entire list of providers above. As of the week ending March 14, over 85,000 doses had been administered to persons over age 75, approximately 41% of residents in this age group. Over 67,000 doses have been administered to persons ages 65-74, approximately 30% of residents in this age group, since all became eligible on March 10. The vaccination data system cannot distinguish persons based on their medical conditions or employment.

**Racial Equity**

In early January it became clear that there were disparities in vaccination rates by race and ethnicity. For example, at the time, Black people represented 8% of those vaccinated, while representing 42% of the population of Philadelphia. At that time, most persons vaccinated were health care workers. While some of this racial disparity may have reflected the racial distribution of health care workers, it was clear that vaccination rates among minority health care workers were far lower than rates among white health care workers. Later, analyses of the zip code of residence showed lower vaccination rates in North Philadelphia, the Kensington area, and other areas where the populations are predominantly Black or Latinx.
Actions that have been taken to reduce these disparities include:

- Including persons with high-risk medical conditions (who are more likely to be in racial and ethnic minority groups) in Phase 1b.
- Working with pharmacy chains to improve the equity of their response by connecting them with community sites in low vaccination areas.
- Providing vaccine to and supporting Federally Qualified Health Centers and other clinics serving low-income, minority populations.
- Providing vaccine to and assisting the Black Doctors COVID-19 Consortium, an organization with a strong focus on reaching Black and Brown persons.
- Issuing invitations to vaccination opportunities preferentially to persons living in under-vaccinated zip codes, most of which have predominantly racial minority populations.
- Working with community leaders and trusted messengers (e.g., Black clergy) to endorse and support vaccinations in their respective communities.
- Partnering with community-based organizations and faith leaders to help reach their members with information about how to get vaccinated.

As of March 14, the percent of persons vaccinated who were Black had risen to 22%, a sign of progress but still reflecting a disparity that must be addressed further.

**Distribution Plans for Phases 1b and 1c**

**PROJECTED VACCINE AVAILABILITY**

President Biden announced in mid-February that 300 million doses of vaccine would be produced by vaccine manufacturers by the end of July. If vaccine manufacturers meet that production schedule and doses become available to Philadelphia in steadily-increasing amounts – which are far from guaranteed - weekly dose allocations could rise from approximately 75,000 per week in mid-March to 150,000 per week by the end of May. However, federal health officials have provided no information on the number of doses that Philadelphia can expect to receive each week. Weekly allocations through the week of March 22 are shown below. Because the federally-supported Type 1 mass vaccination site (Center City Vaccination Center) is provided vaccine directly from the federal government, it has added to the supply allocated to Philadelphia.
Vaccination Mechanisms and Plans

While only limited vaccine and vaccination options were available during Phase 1a, many current vaccination mechanisms will expand while new mechanisms become available during the coming months, including the following:

**HOSPITALS**

Health care systems will continue to administer vaccines to the health care workers who have not been vaccinated to date and will expand their vaccination of patients who are over age 65 or have high-risk medical conditions. In addition, many hospitals have been operating community-based large vaccination clinics for both patients and non-patients who meet Phase 1b eligibility criteria. In one special arrangement, the Children's Hospital of Philadelphia will continue to run high-volume clinics for teachers, schools support staff and early childhood educators. Through another collaborative arrangement, Temple University Hospital is partnering with the Philadelphia Housing Authority to vaccinate their frontline essential workers. Several hospital systems, including Temple, Einstein, and the Hospital of the University of Pennsylvania, are partnering with faith-based institutions to operate community-based clinics for 1b eligible residents. Temple and the University of Pennsylvania health systems also continue to vaccinate residents and staff in personal care homes.

**FEDERALLY QUALIFIED HEALTH CENTERS (FQHCS) AND OTHER CLINICS**

FQHCs offer an optimal mechanism for providing vaccine to high-risk residents as they are trusted healthcare providers, are typically located in underserved communities, and are staffed by and provide services to many persons of color. As of March 22, 25 FQHCs and 8 PDPH-operated District Health Centers are enrolled as COVID-19 vaccine providers and are currently offering vaccination services to 1b-eligible patients. Five FQHCs, including Delaware Valley Community Health, Family Practice and Counseling Network, Sayre Health Center, Public Health Management Corporation, and Spectrum, are vaccinating persons who are not currently enrolled patients. Other clinics also have plans to increase volume and expand access to non-patients.

**PHARMACIES**

Because pharmacies have such an extensive footprint in Philadelphia, they provide a convenient option for many residents. Eight large retail pharmacy chains, including Rite Aid, Walgreens, CVS, Acme, ShopRite, Giant, Sam’s Club, and Walmart have enrolled as COVID-19 vaccine providers and are currently offering vaccination services at numerous locations throughout the city to persons age 65 and older. In addition, 20 independent pharmacies, some with multiple locations, have enrolled as vaccine providers, and PDPH is currently working with more than 21 additional pharmacy sites to enroll them as vaccine providers, as of March 22.

As the vaccine supply continues to expand, pharmacies will be able to offer vaccine to a large swath of the community and will provide a sustainable option for ongoing COVID-19 vaccination services through Phase 2 and beyond. PDPH is working with pharmacy chains to improve the equity of their response by connecting them with community sites in low vaccination areas. In addition to offering vaccination services to eligible individuals at retail locations, several pharmacies, such as Centennial, Rite Aid, Acme, and SunRay Pharmacy, also have the capability to offer onsite vaccination services in congregate or other high-risk settings or for specific 1b or 1c occupational groups. ShopRite and Acme have been approved to vaccinate their store workers. PDPH will continue to connect these pharmacy providers with 1b eligible groups.
OTHER MEDICAL PROVIDERS
PDPH will continue to operate a clinic for persons working in high-risk settings that meet 1a or 1b criteria. This clinic operates Monday-Friday, by appointment only, and typically vaccinates approximately 600 persons per week. PDPH will also continue to work with a variety of other specialized medical providers, including dialysis centers, to vaccinate their high-risk patients. Currently enrolled providers, including Davita and Cancer Treatment Centers of America, will continue to vaccinate their high-risk patients, and PDPH will continue to enroll additional specialty care providers.

PDPH will also continue to conduct outreach to other primary care and private practices to enroll them as COVID-19 vaccine providers. The Johnson & Johnson vaccine may be a more appealing option for many currently unenrolled practices as it does not require special storage and handling.

COMMUNITY PROVIDERS
The Black Doctors COVID-19 Consortium (BDCC) is operating regular community-based large vaccination clinics. This trusted and high-volume provider will focus on low-income and minority populations that have been hardest hit by COVID-19.

To expand the number of community-based vaccination providers, the City has partnered with the Philadelphia Mental Health Care Corporation (PMHCC) to offer funding for vaccination services through a COVID-19 Community Vaccination Program Request for Proposals (RFP). As of March 22, 16 applications had been received from interested organizations. Responses to this RFP will be reviewed on a rolling basis, and PDPH plans to announce selection of the first group of providers in the coming days.

GOVERNMENT-RUN MASS VACCINATION CLINICS
PDPH community vaccination clinics
As the vaccine supply has increased, PDPH has expanded its mass vaccination program to persons eligible under Phase 1b. The central concept of the program is to make vaccine available to high-risk persons in under-vaccinated neighborhoods with few or no vaccine providers through community-based clinics.

The PDPH community vaccination program launched three additional sites during the week of March 15 with clinics operating at the following locations:

- Martin Luther King Older Adult Center in North Philadelphia (19121)
- Community Academy of Philadelphia Charter School in Juniata (19124)
- University of the Sciences and Drexel University in West Philadelphia (19104)
- Simon Gratz High School in Nicetown-Tioga (19140)
- Edward O’Malley Athletic Association (EOM) in South Philadelphia (19148)
- Grand Yesha Ballroom in South Philadelphia (19145)

These locations were selected based on proximity to high priority zip codes (see the map that follows) that are under-vaccinated and have high vulnerability due to population demographics, as well as features of the individual host facilities, such as sufficient square footage and accessibility. Depending on its size, each clinic has a maximum throughput 300-500 persons per day.
Beginning March 15, these clinics began accepting walk-ups, when not all vaccine appointment slots were filled, for persons who meet eligibility criteria. In collaboration with community-based organizations and faith leaders, hours of operation and site information are being shared with eligible residents in the neighborhoods where clinics are operating. More information about these clinics, including the schedule, is available here: https://www.phila.gov/2021-03-16-everything-you-need-to-know-about-the-citys-vaccine-clinics.

In addition to running regularly scheduled clinics for the community, PDPH may also offer larger mass vaccination clinics for persons in 1b or 1c occupational categories who have no other mechanism for receiving vaccine. This need is currently being assessed as information about specific 1b and 1c occupational groups is collected.

**Philadelphia Fire Department-managed clinics**

PFD and the Office of Emergency Management have developed a pop-up vaccination clinic model that can deploy to any open, outdoor space. Two teams will be available that can vaccinate up to 150 people per day. PFD held its first pop-up clinic at Northeast Baptist Church in the Frankford area on March 12 and vaccinated 190 persons with the Johnson & Johnson vaccine, and held another at a church in Powelton Village on March 19. In addition to these pop-up clinics, PFD will begin to operate community-based clinics at brick and mortar locations on a more regular basis beginning on March 24. Sites include the Salvation Army (West Philadelphia) and PFD site at 7800 Ogontz Ave. (West Oak Lane), as well as additional to be announced in the coming weeks. These will run several days per week on a rotating basis throughout the city.
Center City Vaccination Center
The City of Philadelphia is partnering with the Federal Emergency Management Agency (FEMA), the Pennsylvania Emergency Management Agency (PEMA), and the Department of Defense (DoD) to operate a Type 1 Community Vaccination Center at the Pennsylvania Convention Center (PCC) with the capacity to vaccinate 6,000 persons per day. This site, the Center City Vaccination Center (CCVC), is in operation seven days per week, 8am-8pm, for a minimum of eight weeks, beginning March 3. Of note, the vaccine provided at these clinics do not come from Philadelphia's allocation but are provided separately from the federal government. The Convention Center was selected for this operation due to its large size, centrality, access to many public transit lines, and ability to accommodate the amplification of a successful mass vaccination model previously operated by PDPH at this venue. As of March 20, 107,155 persons have been vaccinated at the site.

In order to address the inequitable distribution of vaccine, the City shifted to accommodate 50% walk-ups from eligible residents from 22 priority zip codes at the CCVC daily from March 17 to March 22. The City, in partnership with SEPTA, is coordinating several transportation options to help ensure that persons can travel to and from the site. Options include:

- Free roundtrip transit passes for both vaccination appointments
- Door-to-door transportation service through SEPTA Customized Community Transportation (CCT) for individuals 65 years of age or older, with access and functional needs, or anyone who needs an individual ride accommodation
- A limited shuttle service for areas without accessible transit, in coordination with community-based organizations.

More information about the walk-up vaccination services at the CCVC, priority zip codes, and transportation options can be found here: [https://www.phila.gov/2021-03-16-open-access-at-the-center-city-vaccination-center-for-six-days-only/](https://www.phila.gov/2021-03-16-open-access-at-the-center-city-vaccination-center-for-six-days-only/).

Other federally-supported sites
Ongoing discussions are occurring between the City of Philadelphia and state and federal partners to determine if there are opportunities to operate additional federally-supported sites.

Mobile teams
On December 24, 2020, PDPH launched its mobile team initiative, which has focused on vaccinating staff in high-risk healthcare settings, such as inpatient behavioral health hospitals. Since then, over 10,000 first and second doses have been administered by the mobile team. PDPH is now expanding its focus to include additional congregate facilities, including residents in those facilities. To better assess the need and implement a systematic vaccination outreach plan, PDPH has developed a comprehensive list of congregate sites that are tiered by size and risk. Given the large number of congregate facilities in Philadelphia, including personal care homes, assisted living facilities, behavioral health facilities, group homes, and shelters, PDPH plans to augment mobile team capacity by bringing on additional personnel, as well as partnering with the Philadelphia Fire Department to conduct additional onsite vaccination clinics.
Estimated Throughput

With anticipated growth in the number of vaccination providers (mainly by enrolling more pharmacies and the RFP-funded providers) and increased vaccinations per week by existing providers, PDPH estimates that by the end of April, the entire group of providers in Philadelphia will be able to deliver approximately a peak of 161,000 doses per week. This estimate includes the continued operation of the federally-supported Type 1 site (CCVC), as well as other potential sites to be added. Depending on vaccine availability and demand, additional capacity may be needed by pharmacies, large clinics, and other providers in May, however, estimated doses administered per week is expected to decrease when the Type 1 site concludes operations.

<table>
<thead>
<tr>
<th>Provider Type</th>
<th>Est. # Sites by End April</th>
<th>Doses Week Ending 21-Feb</th>
<th>Est. Potential Doses Per Week by End April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitals</td>
<td>19</td>
<td>26,500</td>
<td>27,000</td>
</tr>
<tr>
<td>Clinics</td>
<td>53</td>
<td>8,400</td>
<td>14,000</td>
</tr>
<tr>
<td>Other medical</td>
<td>10</td>
<td>350</td>
<td>500</td>
</tr>
<tr>
<td>Pharmacies</td>
<td>168</td>
<td>20,400</td>
<td>37,000</td>
</tr>
<tr>
<td>Community (incl. RFP)</td>
<td>6</td>
<td>4,000</td>
<td>15,500</td>
</tr>
<tr>
<td>PDPH-supported</td>
<td>7</td>
<td>3,600</td>
<td>3,000</td>
</tr>
<tr>
<td>Federally-supported</td>
<td>1-3</td>
<td>40,600</td>
<td>63,000</td>
</tr>
<tr>
<td>Mobile teams</td>
<td>NA</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total administered</strong></td>
<td><strong>NA</strong></td>
<td><strong>103,850</strong></td>
<td><strong>161,000</strong></td>
</tr>
</tbody>
</table>

Patient Access

**APPOINTMENT SCHEDULING AND THE VACCINE INTEREST DATABASE**

The systems for making vaccines available to residents and the scheduling of appointments are managed by the many different organizations providing vaccinations. While appointments will continue to be scheduled at all PDPH community vaccination clinics, as of March 15, if not all vaccination slots are filled, eligible residents may walk-up on a first come, first served basis. These walk-ups will be accommodated as long as there is sufficient vaccine for both registered persons and walk-ups. The Black Doctors COVID-19 Consortium will continue to operate vaccination clinics on a walk-up basis.

To meet the demand for a central system for residents to learn about vaccination opportunities, in January, PDPH launched the Vaccine Interest Form for Residents, an online form on which residents can sign up to indicate their interest in receiving vaccine; residents can register themselves or receive assistance through 311 or PDPH's COVID-19 Call Center. Shortly thereafter, PDPH also launched the Workforce COVID-19 Vaccine Planning Form (Phases 1b and 1c), an online form on which Philadelphia employers with Phase 1b or Phase 1c workers can register their organization.

As of March 15, nearly 345,000 persons have signed up on the form for residents. When planning vaccination clinics, PDPH will query the Vaccine Interest database to identify eligible persons and then issue invitations both electronically and by phone (for persons who do not have internet access) to schedule appointments. To ensure equitable access to vaccine and improve vaccination rates in high-risk communities, PDPH has been and will continue to over-sample under-vaccinated zip codes when issuing invitations to schedule appointments. As of March 15, PDPH plans to send invitations for the Center City Vaccination Center to all residents in the Vaccine Interest database, who are eligible in Phases 1a or 1b, but not yet vaccinated or scheduled.
PDPH is also working with other organizations that have call centers, such as health plans, to enlist their support so that individualized calls, rather than robocalls, can be made to help registered individuals schedule appointments.

The Workforce COVID-19 Vaccine Planning Form will be used to connect organizations that have employees who are frontline essential workers to vaccine providers.

**WALK-UP ACCESS**

Beginning the week of March 15, the PDPH community vaccination clinics has begun accepting walk-ups for persons who meet Phases 1a and 1b eligibility criteria. Likewise, from March 17 to March 22, eligible residents will be accepted for walk-up services at the Center City Vaccination Center. As the vaccine supply expands and that supply begins to approach demand, more providers are likely to offer vaccination to people without appointments. Walk-up options may also expand as outdoor venues are incorporated when weather conditions are better.

**Access for Vulnerable Populations**

Achieving equitable vaccine distribution requires intentional strategies to reach subpopulations in the city who face a higher risk of serious disease and death from COVID-19 and who are likely to face significant barriers to vaccination. This includes people living in congregate facilities, homebound seniors, people living with disabilities, immigrants/those with limited English proficiency, and Black and Brown people, who have experienced historic discrimination.

**CONGREGATE FACILITIES**

Congregate living facilities, such as prisons, shelters, and residential psychiatric and rehab facilities, pose a particularly high risk because they place a large number of people, often including many with risk factors for severe illness, together with staff members who come and go from the facility, potentially bringing asymptomatic COVID-19 infection. These sites are being prioritized based on the type of facility, size of the population, risk of exposure and/or severe disease for staff and/or residents, and its location (i.e., in a high, medium, or low-risk zip code). Eligible residents of settings that do not meet the Health Department’s definition of a congregate setting (e.g., independent senior living facilities and apartment buildings), are referred to various partner agencies using geographic prioritization criteria. Onsite vaccinations at these facilities are underway or planned, as summarized below.

<table>
<thead>
<tr>
<th>Site category</th>
<th>Vaccination Provider(s)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long-term care and assisted living facilities enrolled in the CDC Pharmacy Partnership for Long-term Care Program</td>
<td>CVS and Walgreens</td>
<td>Ongoing: all sites have been visited 1-3 times. Some ongoing need will continue due to turnover.</td>
</tr>
<tr>
<td>Inpatient behavioral health</td>
<td>PDPH mobile team; pharmacy providers</td>
<td>Staff vaccinated at most sites, vaccination of residents in progress.</td>
</tr>
<tr>
<td>Personal Care Homes and Assisted Living Facilities not enrolled in the CDC Pharmacy Partnership for Long-term Care Program</td>
<td>PDPH mobile team; EMS mobile team; Rite Aid, Centennial and other pharmacy providers; Regional Congregate Care Assistance Teams (RCAT)</td>
<td>PDPH mobile team and pharmacy partners have vaccinated at some sites. Additional planning will prioritize sites based on size and risk profile.</td>
</tr>
<tr>
<td>Group Homes</td>
<td>Rite Aid</td>
<td>Planning stages, building on state partnership.</td>
</tr>
<tr>
<td>Senior Housing</td>
<td>Multiple pharmacies</td>
<td>Sharing information on pharmacy partnerships with senior housing sites for those interested in setting up onsite vaccinations or options at pharmacies nearby.</td>
</tr>
<tr>
<td>Shelters</td>
<td>PDPH mobile team, other medical and pharmacy providers</td>
<td>Office of Homeless Services (OHS) provided a list of highest risk shelters, which are being prioritized based on size and medical risk of residents.</td>
</tr>
<tr>
<td>Prisons</td>
<td>Prison Health Services</td>
<td>Vaccinations of staff and incarcerated persons are ongoing. Some ongoing need will continue due to turnover.</td>
</tr>
<tr>
<td>Other congregate settings</td>
<td>Pharmacies, PDPH mobile team</td>
<td>Prioritization depends on size and medical risk of residents.</td>
</tr>
</tbody>
</table>
HOMEBOUND PERSONS
This group is at lower risk than those living in congregate facilities because they are exposed to fewer people. However, most people in this group have significant medical risk for severe COVID-19 infection and many have home healthcare workers and others who come and go in their homes, bringing risk of infection. Many homebound people could travel to a vaccination site if door to door transportation was provided and if the site had accommodations (wheelchairs, seating) to allow for their safety. Truly homebound people will require vaccination in the home.

The City is exploring accessible transportation options to allow as many people as possible in this category to be vaccinated at a vaccine site. For the Center City Vaccination Center, as described prior, the City and SEPTA are offering multiple transportation options to the site. However, planning is in process for in-home vaccination for the estimated 7,400 persons who are bedbound or otherwise unable to travel a vaccination site. For example, the Philadelphia Fire Department has also developed a model for conducting in-home vaccinations for homebound individuals using two-person EMS teams. The capability will be available in the coming weeks.

PEOPLE LIVING WITH DISABILITIES
People living with disabilities who live in congregate settings or are homebound will be vaccinated as described above. Those who live alone or with family members may need special accommodations to allow them to be vaccinated comfortably at a vaccination site. ADA standards will be met at mass vaccination sites. At all City and Federal sites, mobility assistance devices like wheelchairs are made available for individuals to borrow while on site. One companion is permitted to accompany the individual who is receiving the appointment. A working group on ADA accessibility has been convened for the Center City Vaccination Center and community-based clinics. The standards and policies developed by this group will be reviewed and any changes needed for PDPH mass vaccination sites will be adopted.

IMMIGRANTS AND PERSONS WITH LIMITED ENGLISH PROFICIENCY
Adjusted for age, Latinos have suffered the highest rates of hospitalization and death during the pandemic. Data for many other immigrant groups is limited. Language barriers and concerns about possible immigrant enforcement may keep many immigrants and those who do not speak or read English fluently from obtaining vaccines. To try to meet the needs of immigrant groups:

- PDPH will continue to supply COVID-19 vaccine to FQHCs. These sites are trusted healthcare institutions that provide care for many immigrants in Philadelphia.

- Community-based organizations serving these groups will share information about the PDPH Vaccine Interest Form and assist community members to register.

- 311 and the PDPH call center have access to bilingual staff (Spanish) and an interpreter telephone line to enroll people in the Vaccine Interest Form. They are recruiting staff who speak additional languages.

- PDPH vaccination sites will not require photo ID, to avoid creating a barrier for undocumented people, although they will require people to provide a valid Philadelphia address. Neither a social security number nor insurance is required for vaccination. PDPH is working with sites to ensure this information is disseminated and followed.

- Interpretation is provided at all PDPH vaccination sites. PDPH provides in-person interpreters for the most common languages, where possible, and offers telephone line interpretation for those languages for which we do not have an in-person interpreter. For those who use sign language, video relay interpretation services are available via tablet and mobile application. Furthermore, the Center City Vaccination Center has dedicated Spanish and Mandarin Chinese in-person interpreters.
• Plain language, multi-lingual educational materials about the vaccine are currently in development.

• PDPH will work with partner organizations to call people from the Vaccine Interest database who lack an email address and offer them vaccine appointments.

• The Request for Proposals for vaccination providers encourages applications from providers who can reach new immigrants and other marginalized populations for vaccinations.

Racial Equity

Black and Brown people in Philadelphia have suffered the highest rates of severe infection and death from COVID-19. PDPH will work with all vaccine providers in Philadelphia to improve access to communities of color. In addition to continuing current actions described above to reach minority populations, PDPH will:

• Support more vaccinations through FQHCs, many of which are located in low-income neighborhoods and are staffed and utilized by persons of color.

• Expand placement of large vaccination clinics in zip codes with low vaccination rates and high social vulnerability, with a key focus on closing the gap on vaccine access in Black, Brown, and immigrant communities.

• Support qualified vaccination providers that apply under the Request for Proposals for funding to reach Black and Brown communities.

• Deploy mobile units to low-income senior housing and similar facilities.

• Continue to review the data on vaccinations by race and geographic area, and direct efforts to under-vaccinated populations, particularly populations of color.

• Collect and publicize data to assess racial and ethnic disparities in vaccination rates. This includes requiring all provider sites and RFP-sites to collect and report race and ethnicity data, as well as working to reduce missing race/ethnicity data by matching data with other data sources.

• Emphasize vaccination of frontline essential workers, who are disproportionately people of color. This includes directed efforts to reach first responders, food service workers, teachers, childcare workers, other city workers, and SEPTA employees.

Communications and Education

The City is committed to consistently and transparently communicating with the public about vaccine distribution in a variety of formats. In addition to a weekly press conference on Tuesdays, the Health Department recently added a second weekly press conference on Friday afternoons. City leadership is providing weekly briefings for City Council leadership and weekly Intergovernmental Convenings where all City, State, and Federal elected officials are welcome to participate to receive updates and ask questions about vaccine distribution plans.

Since the spring of 2020, the City's website on the COVID-19 pandemic response at www.phila.gov/covid has included information on the coronavirus, how it is spreading in Philadelphia, the latest data on the pandemic, and the City’s response, including Health Department activities like testing and contact tracing but also other City efforts like Access Centers and food distribution programs. The COVID website is beginning to be populated with information
about the vaccine distribution effort and will ultimately transition into a vaccine-first information hub. Currently, the Health Department’s vaccine information includes a dashboard on vaccine distribution that is updated every weekday, frequently asked questions to be used to combat rumors and misinformation, and information about where to sign up for a COVID vaccine. In addition to the COVID-19 website, the City is publishing a blog post every week with the latest information on the breakdown of who is being vaccinated, where vaccines have been made available, and the latest updates on the distribution effort.

Recognizing that not everyone in Philadelphia has access to the internet or feels comfortable using the internet, the Health Department has integrated vaccine expertise into their already-existing COVID-19 Call Center (215-685-5488). Our dedicated call-takers can answer questions in English and Spanish about a variety of COVID-19 vaccine topics. Recently, the City has bolstered the capacity of the Call Center through a partnership with 311. Individuals can now call 311 to register their interest in receiving a vaccine. PDPH has provided training to other call centers, like PCA and the CARIE Line, so that callers to their centers can receive assistance in signing up on the Vaccine Interest Form. Finally, PDPH is also working with other diverse partners, such as Esperanza, the Philadelphia AIDS Consortium, and St. Thomas Aquinas, who have robust call centers to enlist their support so that individualized calls, rather than robocalls, can be made to individuals who have signed up for vaccines.

The City will run a paid media campaign promoting vaccination, beginning in mid- to late-March and continuing for six months. This campaign is intended to provide facts on COVID-19 vaccine, allow regular Philadelphians to ask questions and have experts and trusted messengers reply, and make emotional calls for folks to get their vaccine. The content and messages are currently being tested by diverse focus group participants.

Community Engagement

The most effective messengers are those that people already trust - people that have told them the truth in the past and people who look and sound like them. PDPH has engaged with Philly Counts and the Mayor’s Office of Public Engagement to identify trusted messengers and provide them with information on the vaccine so they can recommend it to their communities, and materials and talking points to share. Philly Counts will use the network of community-based trusted messengers that it developed to facilitate the census count in order to share information on the vaccine, address vaccine hesitancy, and encourage vaccine interest in under-served communities. They are currently seeking philanthropic support to compensate volunteers for their time in support of these efforts.

In addition to Philly Counts, the Health Department has been and will continue to participate in virtual town halls with trusted messengers and community leaders to provide them with opportunities to learn about the vaccine and distribution effort, ask questions, and hear directly from Health Department experts. These sessions end with a call-to-action to set up future town halls and one-on-one conversations to further the conversations in their communities. The Health Department is also actively holding and planning information sessions with community organizations and labor unions.
Program Monitoring

VACCINE UPTAKE AND ACCEPTABILITY
PDPH will monitor citywide vaccination rates through daily data reporting by providers into the City’s PhilaVax database. Vaccination rates are publicly available on the Philadelphia COVID-19 Vaccination Dashboard.

EQUITABLE ACCESS TO VACCINE
PDPH will continue to show data on disparities in vaccine uptake on its online dashboard and adjust distribution methods to ensure vaccine access among communities of color.

VACCINE SAFETY
Several mechanisms are in place to monitor vaccine safety. Adverse events following COVID-19 vaccination can be reported to CDC’s Vaccine Adverse Event Reporting System (VAERS). VAERS may be contacted directly, or adverse event reports can be called in to PDPH staff, who will assist with filing the VAERS report. In addition, all persons who receive COVID-19 vaccine are being encouraged to enroll in CDC’s V-safe program, a smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after vaccination. Early data compiled by the Centers for Disease Control and Prevention (CDC) through these reporting mechanisms demonstrate the safety of both the Pfizer and Moderna vaccines.

Conclusions
Although COVID-19 vaccines have been available in Philadelphia since mid-December, the vaccination initiative is still in its early stages. There remains much uncertainty about the vaccines that will be approved for use, the number of doses that will be made available to the city, and the timing of receipt of those doses. Nonetheless, current best estimates are that enough vaccines will be available to offer vaccination to every Philadelphia adult by late summer 2021. The City’s mechanisms to deliver those vaccines are still in development, but are growing to match the number of doses arriving. With this plan, there is reason to be optimistic that by late summer, enough Philadelphia residents will be vaccinated to prevent most of the transmission of COVID-19, and to do so in a way that protects the city’s most vulnerable residents and achieves racial equity in vaccination.