Health Committee Staff

Sara Liss, *Senior* *Legislative Counsel*

Harbani Ahuja, *Legislative Counsel*

Emily Balkan, *Senior Legislative Policy Analyst*

Lauren Hunt, *Finance Analyst*

Brook Frye, *Data Analyst*

A close up of a logo

Description automatically generated

## THE COUNCIL OF THE CITY OF NEW YORK

# COMMITTEE REPORT OF THE HUMAN SERVICES Division

*Jeffrey Baker, Legislative Director*

*Andrea Vazquez, Deputy Director, Human Services*

**COMMITTEE ON HEALTH**

*Hon. Mark Levine, Chair*

#### March 18, 2021

**Proposed Int. No. 2236-A:** By Council Members Levine, Powers, Miller, Lander, Rivera, Kallos and Holden

**Title:** A Local Law in relation to the creation of a unified scheduling system for COVID-19 vaccinations, and to provide for the repeal thereof

**Proposed Res. No. 1529-A:**  By Council Members Levine, Louis, Chin, Lander, Rivera and Levin

**Title:**  Resolution calling on the New York State Legislature to pass, and the Governor to sign, legislation to protect New York State’s safety net providers and Special Needs Plans by eliminating the Medicaid pharmacy carve-out

**Res. No. 1535:** By Council Members Miller, Cabrera, Moya, Ampry-Samuel, Adams, Koo, Louis, Kallos, Chin, Grodenchik, Ayala, Lander, Levine, Rosenthal, Powers, Riley, Gibson, Brannan, Rose, Rodriguez, Cumbo, Reynoso, Eugene, Perkins, Salamanca, D. Diaz, Cornegy, Rivera, Barron, Dromm, Koslowitz, Van Bramer and Holden (at the request of the Brooklyn Borough President)

**Title:** Resolution calling on the New York State Legislature to pass, and the Governor to sign, legislation allowing local health departments to implement changes to improve the COVID-19 vaccine roll out

1. **INTRODUCTION**

On March 18, 2021, the Committee on Health, chaired by Council Member Mark Levine, will hold a hearing on three pieces of legislation relating to COVID-19 vaccinations and health: Proposed Int. No. 2236-A, sponsored by Council Member Mark Levine, would create a unified scheduling system for COVID-19 vaccinations; Proposed Res. No. 1529-A, sponsored by Council Member Mark Levine, would call on the New York State Legislature to pass legislation protecting the State’s safety net providers and Special Needs Plans by eliminating the Medicaid pharmacy carve-out; and Res. No. 1535, sponsored by Council Member I. Daneek Miller, would call on the New York State Legislature to pass legislation allowing local health departments to implement changes to improve the COVID-19 vaccination roll out. This legislation was originally heard at a hearing of this Committee as well as the Committees on Aging and Technology on February 17, 2021, at which the Committees heard testimony from the New York City Department of Health and Mental Hygiene (DOHMH), the Department for the Aging (DFTA), advocates, and other interested parties.

1. **BACKGROUND**
   1. *COVID-19 Background*

In late 2019, a novel coronavirus, called SARS-CoV-2, first emerged and spread rapidly around the world, resulting in a global pandemic.[[1]](#footnote-2) As of February 16, 2021, there have been over 109 million confirmed cases of COVID-19, the disease caused by SARS-CoV-2, and over 2.4 million deaths worldwide, including more than 28.3 million cases and close to 500,000 deaths in the United States alone.[[2]](#footnote-3) New York State (NYS) and New York City (NYC) have been hit particularly hard by this pandemic. As of February 16, 2021, there have been more than 1.5 million confirmed cases[[3]](#footnote-4) and more than 37,300 deaths in the State,[[4]](#footnote-5) including more than 675,000 cases, 23,372 confirmed deaths, and 5,056 probable deaths in New York City.[[5]](#footnote-6)

COVID-19 presents a wide range of symptoms, ranging from mild symptoms to severe illness.[[6]](#footnote-7) Symptoms include fever or chills, cough, shortness of breath, difficulty breathing, fatigue, muscle or body aches, headache, loss of taste or smell, sore throat, congestion, runny nose, nausea, vomiting, and diarrhea.[[7]](#footnote-8) Some people are at increased risk of developing severe COVID-19 symptoms and dying from the virus, including older adults and those with certain underlying medical conditions,[[8]](#footnote-9) such as cancer, chronic kidney disease, heart conditions, obesity, and type 2 diabetes.[[9]](#footnote-10) Other groups that should take extra precautions include people who are racial and/or ethnic minorities, individuals with disabilities, those with developmental and behavioral disorders, individuals with drug use or substance use disorder, those who are pregnant or breastfeeding, individuals living in rural communities, and those experiencing homelessness.[[10]](#footnote-11) Studies have found that individuals with intellectual disabilities and developmental disorders are at particular risk, with a COVID-19 fatality rate three times as high as the rate amongst those without intellectual and developmental disabilities.[[11]](#footnote-12)

1. **IMPACT ON SENIORS’ HEALTH**
   1. *NYC Seniors and COVID-19 Data*

COVID-19 has disproportionately impacted New York City’s senior population. The rate of COVID-19 hospitalizations and deaths are drastically higher for those over the age of 75 compared to all other age groups, and those aged 65-74 are also at increased risk.[[12]](#footnote-13) As of February 16, 2021, the rate of hospitalizations for COVID-19 was 4,322.93 per 100,000 people for those 75 years and older.[[13]](#footnote-14) For those aged 65-74, the rate is 2,589.33 per 100,000.[[14]](#footnote-15) The Citywide average rate is 1,026.25 per 100,000.[[15]](#footnote-16) Therefore, those 75 years and older are over four times more likely to be hospitalized with COVID than the City average, and those aged 65-74 are more than two and a half times more likely.[[16]](#footnote-17)

The rate of COVID-19 related death among this population is even more stark. As of February 16, 2021, for those aged 75 and older, the rate of death from COVID-19 is 2,102.53 per 100,000.[[17]](#footnote-18) This is approximately seven and a half times higher than the Citywide average, which is 280.35 per 100,000.[[18]](#footnote-19) The rate of death for those aged 65-74 is 795.78, about three times the Citywide average.[[19]](#footnote-20) Of the 28,277 confirmed and probable COVID-19 deaths in NYC with known data, 14,472 were individuals 75 years and older.[[20]](#footnote-21) This is roughly half of all deaths in the City.[[21]](#footnote-22) Those 65-74 years old accounted for 6,758 deaths.[[22]](#footnote-23)

Additionally, hospitalizations and deaths resulting from COVID-19 infection also disproportionately impact those who are lower income, Black, and Latinx.[[23]](#footnote-24) Residents of neighborhoods with 30 percent or more households living below the poverty line were more than twice as likely to become hospitalized or die from COVID-19 as those living in neighborhoods with under 10 percent of households living in poverty.[[24]](#footnote-25) According to data from DOHMH, New York City residents who are Black are 1.84 times more likely to be hospitalized for COVID-19 compared to white residents, and are 1.74 times more likely to die.[[25]](#footnote-26) New York City residents who are Latinx die from COVID-19 at 1.91 times the rate of white residents, and about two times as likely to be hospitalized.[[26]](#footnote-27)

New Yorkers with intersecting identities, such as those who are older, Black, Latinx, and living with underlying health conditions, are at increased risk for severe COVID-19 complications and death.[[27]](#footnote-28) For all age groups, including those 75 and older, the rate of death was highest for those who are Black and Latinx.[[28]](#footnote-29) The rate of death per 100,000 people for those 75 years and older is 1,427.42 for those who are Asian/Pacific-Islanders, 1,733.54 for those who are white, 2,284.84 for those who are Black, and 2,478.34 for those who are Latinx.[[29]](#footnote-30) The highest rate of death for those 65 years and older is in the Bronx.[[30]](#footnote-31) Of the 11,808 individuals 75 years and older who have died, 9,669 (about 82 percent) had known underlying illnesses, including lung disease, asthma, heart disease, a weakened immune system, obesity, diabetes, kidney disease, liver disease, and cancer.[[31]](#footnote-32) Of those aged 65-74, 4,885 out of 5,720 (or about 85 percent of) individuals had known underlying conditions.[[32]](#footnote-33) It is very likely that more had underlying conditions, given the number of cases pending.[[33]](#footnote-34)

* 1. *Impact on Seniors’ Health*

In March 2020, the rapid spread of the SARS-CoV-2 virus required New York City to restrict in-person gatherings. To help control the spread of the virus, the City shut down physical operation of Department for the Aging senior centers in March 2020 and switched congregate meal operations to home delivered meals.[[34]](#footnote-35) The consequences of the pandemic and the switch in service has impacted the older adult population even as the city has entered phased re-opening: older adults have been disproportionately affected by food insecurity and social isolation and the disruption of their daily lives has been exacerbated by the extended closures to in-person resources such as senior centers, libraries, and settlement houses, as well as the restricted re-opening of restaurants and houses of worship.[[35]](#footnote-36)

At the height of the pandemic, communicating basic information about the virus in New York City was difficult, especially for those who have limited English proficiency and were cut off from their families due to social distancing guidance.[[36]](#footnote-37) Furthermore, the digital divide made accessing information more difficult and has increased social isolation, as 50 percent of older New Yorkers live alone and 42 percent do not have broadband Internet access.[[37]](#footnote-38) Food insecurity was also exacerbated during the pandemic, as senior centers and food pantries physically closed and meal delivery to older adults became a key concern.[[38]](#footnote-39) According to a study done by FoodBank NYC, prior to the pandemic one in 10 older New Yorkers was food insecure, but that number has now soared to one in five.[[39]](#footnote-40) In fact, since March, Citymeals, which many older adults rely on for food, has delivered 2.5 million meals to homebound New York older adults—an increase of 64 percent over the prior year.[[40]](#footnote-41)

Older adults have additionally experienced declines in their mental, physical, and cognitive health as a result of isolation, becoming homebound, and disruption to their daily life.[[41]](#footnote-42) According to the Centers for Disease Control (CDC), loneliness and isolation are serious health risks in older adults in the following ways:[[42]](#footnote-43)

* Social isolation significantly increases a person’s risk of premature death from all causes, a risk that may rival those of smoking, obesity, and physical inactivity;
* Social isolation was associated with about a 50% percent increased risk of dementia;
* Poor social relationships (characterized by social isolation or loneliness) was associated with a 29% increased risk of heart disease and a 32% increased risk of stroke;
* Loneliness was associated with higher rates of depression, anxiety, and suicide, as well as high blood pressure, heart disease, obesity, and a weakened immune system;
* Loneliness among heart failure patients was associated with a nearly 4 times increased risk of death, 68% increased risk of hospitalization, and 57% increased risk of emergency department visits.[[43]](#footnote-44)

The above is particularly concerning as older adults seem to suffer severe health outcomes from both contracting COVID-19, and from being isolated to avoid contracting COVID-19.[[44]](#footnote-45) In fact, a recent study showed that as a result of both the COVID-19 infection and COVID-induced isolation, different neuropsychiatric symptoms emerged and/or worsened in older adults with and without dementia.[[45]](#footnote-46)

Finally, COVID-induced isolation has caused many older adults to effectively become homebound by disrupting the daily activities in which they had previously been engaged. In some older adults, this has caused an acceleration into physical frailty, a decline in mobility, poor sleep quality, and physical inactivity.[[46]](#footnote-47) Many of these conditions can be addressed by increased access to health care,[[47]](#footnote-48) but as explained below, this access has also been disrupted.

* 1. *Impact on Seniors’ Access to Health Care*

In response to the spread of COVID-19 in early 2020, health systems made rapid and sweeping changes to how health care was delivered—mainly in an effort to keep as many people home as possible.[[48]](#footnote-49) This shift led many patients, including many older adults, to schedule appointments with their health care providers through telehealth visits—appointments typically conducted by video or phone, rather than in-person.[[49]](#footnote-50) Telehealth expanded tremendously during the COVID-19 pandemic, with virtual visits going from constituting almost 0.1 percent of medical visits nationwide in January 2020 to about 14 percent of all visits in April 2020, before leveling off at about 8 percent of visits by the end of the year.[[50]](#footnote-51) In New York City, Health + Hospitals reported that the number of billable virtual visits increased from 500 in January 2020 to almost 57,000 in the first three weeks of the pandemic, and 235,000 by June 2020.[[51]](#footnote-52) This expansion was made possible by a set of provisions through the two federal coronavirus relief bills in March 2020 and series of waivers that loosened regulations on who can get telehealth and how, as well as requiring insurance providers to cover telehealth visits.[[52]](#footnote-53)

In June 2020, the University of Michigan National Poll on Healthy Aging surveyed a national sample of U.S. adults aged 50-80 about their experiences related to telehealth visits.[[53]](#footnote-54) The poll found that from 2019 to 2020 there was a substantial increase in the proportion of older adults who reported that their health care providers offered telehealth visits; 62 percent stated that their health care providers offered telehealth visits in June 2020, compared to only 14 percent in May 2019.[[54]](#footnote-55) Similarly, the percentage of older adults who had ever participated in a telehealth visit rose sharply from 4 percent in May 2019 to 30 percent in June 2020.[[55]](#footnote-56) Among those who had a telehealth visit between March and June 2020, 76 percent reported it was with a primary care provider, 32 percent with a specialty care provider, and 18 percent with a mental health provider.[[56]](#footnote-57) In June 2020, 30 percent of older adults with a telehealth visit said that video or phone were the only options available when scheduling an appointment and 46 percent stated that their in-person visits were canceled or rescheduled to telehealth visits by their health care providers.[[57]](#footnote-58)

While older adults surveyed stated that their telehealth visits were more convenient than office visits, the majority also perceived office visits as providing a higher overall quality of care and better communication with health care providers.[[58]](#footnote-59) The most common concerns with telehealth visits were the lack of a physical exam and the feeling that the quality of care was not as good as in-person appointments.[[59]](#footnote-60) Other concerns included not feeling personally connected to the provider, having difficulty hearing or seeing the provider, and privacy concerns.[[60]](#footnote-61) While a majority of older adults who had a telehealth visit reported that the technology was easy to use, some older adults have limited experience and comfort with technology and need additional support.[[61]](#footnote-62) Many older adults do not have access to technology or the Internet at all, making telehealth visitations even more challenging and inaccessible. For example, while individuals aged 60 and above make up just 20 percent of the city’s population, they also represent 36 percent of New Yorkers with no internet connection at home—translating to 474,000 older New Yorkers living in households without Internet access.[[62]](#footnote-63) Furthermore, half of New Yorkers aged 80 and above lack access to the internet at home.[[63]](#footnote-64)

Aside from increasing the reliance on telehealth visits, COVID-19 fears have also drastically decreased visits to the emergency department (ED).[[64]](#footnote-65) In July 2020, it was reported that four in five adults were concerned about contracting COVID-19 from another patient or visitor if they needed to go to the ED, while nearly a third reported actively delaying or avoiding medical care.[[65]](#footnote-66) This manifested in reduced ED visits overall, with the CDC reporting a 42 percent drop in ED visits.[[66]](#footnote-67)

Older adults are in a particularly precarious situation, as they are among the highest at risk for complications and mortality from COVID-19, but can least afford to postpone or avoid receiving acute health care for other serious illnesses, injuries, or exacerbations of chronic conditions.[[67]](#footnote-68) As older adults are engaging at a lesser frequency with health care providers, a larger number of people are falling through the cracks with untreated or poorly managed health concerns.[[68]](#footnote-69) For example, reports show that the number of patients being treated for major artery blockages dropped by 38 percent—and this is not because one-third of the population with artery blockages have gotten better while isolating at home.[[69]](#footnote-70) Physicians have stated that once they returned to seeing their patients in person, the proportion of care shifted from majority routine care, to more urgent and post-acute care.[[70]](#footnote-71) This shift has been the result of people waiting longer to address exacerbations out of fear, the worsening of chronic conditions, and lifestyle disruptions, such as having irregular food access, worse nutrition, and exercise/mobility issues.[[71]](#footnote-72)

1. **COVID-19 Vaccine: An Overview**
   1. *Vaccine Development*

Although vaccines typically take years of research and testing before they are administered to the public, researchers have worked to develop a SARS-CoV-2 vaccine in record time.[[72]](#footnote-73) The work on a COVID-19 vaccine has been expedited for a few reasons. Health experts say the world cannot fully return to a more normal level of activity until a coronavirus vaccine is widely distributed,[[73]](#footnote-74) and multiple vaccines will be needed in order to supply enough doses for universal vaccination.[[74]](#footnote-75) Before the virus even had a name, and when there was only one reported death, a team of Chinese scientists uploaded its genetic sequence to a public site, inviting people from all over the world to begin working on a vaccine.[[75]](#footnote-76) Additionally, according to *STAT Health,* the virus itself is an easier target for potential vaccines than other pathogens, because it is similar to previously encountered viruses and because it causes an acute, and not a chronic, infection.[[76]](#footnote-77)

While any effective vaccine triggers a person’s immune system to make antibodies against the virus without causing disease, there are different techniques scientists are using to develop vaccines, some of which have not been approved previously for medical use.[[77]](#footnote-78) Older and more traditional strategies for developing vaccines, such as using a weakened or inactivated form of the virus, take a long time to develop.[[78]](#footnote-79) Inactive or live attenuated vaccines require growing viruses, and these procedures can take months to produce a batch of new vaccines.[[79]](#footnote-80) Common examples of such vaccines include conventional vaccines for influenza, chickenpox, and measles, mumps, and rubella.[[80]](#footnote-81)

Newer approaches, however, only require scientists to know the virus’ genetic sequence, and are quicker to implement.[[81]](#footnote-82) In fact, a team from the National Institute of Allergy and Infectious Diseases (NIAID) and the biotech company Moderna had a COVID-19 vaccine candidate ready for a Phase 1 trial less than ten weeks after scientists in China published the SARS-CoV-2 genetic sequence.[[82]](#footnote-83) The Moderna/NIAID vaccine, and others, were built with messenger ribonucleic acid (mRNA).[[83]](#footnote-84) mRNA is a naturally occurring hereditary substance—specifically, a single-stranded RNA molecule that is complementary to one of the deoxyribonucleic acid (DNA) strands of a gene.[[84]](#footnote-85)

COVID-19 mRNA vaccines function by giving the human body “instructions” via mRNA for how to make the coronavirus’ spike protein, a harmless piece of the virus found on its surface.[[85]](#footnote-86) The vaccine shuttles the mRNA into cells, which utilize those instructions to create the protein that triggers the immune response to COVID-19.[[86]](#footnote-87) Prior to this, no mRNA vaccine has ever been approved before.[[87]](#footnote-88) Other approaches have also been developed, such as viral vector vaccines and protein-based vaccines.[[88]](#footnote-89)

Vaccine development has also been speedy because of funding and regulatory nimbleness.[[89]](#footnote-90) The Ebola crisis taught regulators and other stakeholders the importance of having regulatory flexibility and transparency, which allows faster and streamlined processes to develop life-saving vaccines and treatments.[[90]](#footnote-91) For example, the FDA outlined that vaccines need to prevent infections or reduce the severity of COVID-19 in 50 percent of recipients to be approved, and some phases of clinical trials were collapsed, which saved time.[[91]](#footnote-92)

According to *The New York Times’* COVID-19 vaccine tracker, there are various phases of vaccine testing, and researchers are currently testing 67 vaccines in clinical trials on humans and at least 89 preclinical vaccines are under active investigation in animals.[[92]](#footnote-93) Six vaccines are currently approved for early or limited use, and four have been approved for full use.[[93]](#footnote-94) Two vaccines are currently in use in the United States: the Pfizer-BioNTech Vaccine and the Moderna vaccine.[[94]](#footnote-95) The Pfizer-BioNTech vaccine, which is an mRNA vaccine, reports having a 95 percent efficacy rate.[[95]](#footnote-96) It can be stored safely for up to five days in a standard refrigerator before being administered, and must be kept at minus 70 degrees Celsius for long-term storage.[[96]](#footnote-97) The second vaccine, developed by Moderna, has an efficacy rate of 94.1 percent.[[97]](#footnote-98) This vaccine can be stored for 30 days in a standard refrigerator or six months at minus 20 degrees Celsius.[[98]](#footnote-99)

In addition to the two vaccines already in use, Johnson & Johnson (J&J) applied for an emergency use authorization (EUA) for their vaccine on February 4, 2021, and the Food and Drug Administration’s (FDA’s) advisory board will meet on February 26 to consider the application.[[99]](#footnote-100) EUA allows unapproved medical products or unapproved uses of approved medical products to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by Chemical, Biological, Radiological, and Nuclear (CBRN) threat agents when there are no adequate, approved, and available alternatives.[[100]](#footnote-101) The FDA granted EUA to the Pfizer vaccine on December 11, 2020, and to the Moderna vaccine on December 18, 2020.[[101]](#footnote-102)

The clinical trials for J&J’s vaccine have had varied results.[[102]](#footnote-103) The vaccine had an efficacy of 72 percent in the United States, 66 percent in Latin America, and 57 percent in South Africa, with the lower result in South Africa likely to do with the rise of the B.1.351 variant in that country.[[103]](#footnote-104) Variants have become a concern within widescale vaccination efforts, and studies are underway to confirm vaccine efficacy against various strains of the virus.[[104]](#footnote-105) However, when J&J looked at just severe cases of COVID-19, the vaccine had an efficacy against severe disease of 85 percent in all regions, and therefore reduced the risk of hospitalization and death.[[105]](#footnote-106) The J&J vaccine only requires one dose and can be stored in a refrigerator[[106]](#footnote-107), which can help streamline vaccine efforts.

* 1. *The COVID-19 Vaccine Roll Out Overview*
     1. *New York State and City’s Vaccine Distribution Models*

Both New York State and New York City proposed preliminary plans to ensure the safe and efficient distribution and administration of COVID-19 vaccines to New York residents.[[107]](#footnote-108) To ensure coordinated and efficient statewide distribution and administration, all localities and entities in New York State will be required to follow the state’s guidance and protocols for COVID-19 vaccinations.[[108]](#footnote-109) The New York State Plan was created by analyzing New York’s health emergency response to the first influenza pandemic, lessons learned from the H1N1 vaccination effort, and emergency preparedness exercises with state and local health departments.[[109]](#footnote-110)

To establish and build public trust around vaccine safety and effectiveness, Governor Andrew Cuomo appointed members to New York’s Independent Clinical Advisory Task Force; the Task Force is comprised of leading scientists, doctors, and health experts, whose role it is to expeditiously review every COVID-19 vaccine authorized by the federal government, and to advise New York State on the vaccine’s safety and effectiveness in fighting the virus.[[110]](#footnote-111) To help guide the distribution and administration process, the Governor has also established a Vaccine Distribution and Implementation Task Force—comprised of experts in public health, immunizations, government operations, data, and other relevant fields—to advise the set up and operation of the State’s COVID-19 vaccination program.[[111]](#footnote-112) New York State prioritized vaccination recipients based on science, clinical expertise, and federal guidelines, with critical populations identified and recommended by the Advisory Committee on Immunization Practices. Prioritization decisions also took into account the disparate impact of COVID-19 on communities of color, health disparities present in underrepresented and marginalized communities, and communities with historically poor health outcomes.[[112]](#footnote-113) New York State is also working directly with Tribal Nations to ensure these communities’ vaccination needs are met.[[113]](#footnote-114)

New York City’s vaccination plan builds upon a well-established immunization infrastructure, and draws on DOHMH’s pandemic influenza plan, as well as lessons learned from the H1N1 and annual flu vaccination plans.[[114]](#footnote-115) DOHMH has established a Vaccine Task Force (VTF) for New York City’s COVID-19 response, with the objective of developing a plan for equitable distribution of COVID-19 vaccines when they become available.[[115]](#footnote-116) The VTF includes staff from across DOHMH specializing in equity, provider communications, community partner engagement, people living congregate settings, development and dissemination of information to the public, health care system support and field operations, as well as vaccine distribution, allocation, and accountability.[[116]](#footnote-117) DOHMH is utilizing existing relationship with immunization providers as well as reaching out to potential providers for enrollment in the COVID-19 vaccination program, and the VTF will coordinate vaccine planning with these organizations and collaborate closely with New York State and government agencies.[[117]](#footnote-118)

Similar to the State plan, the NYC COVID-19 Vaccination Plan looks to the National Academy of Science, Engineering, and Medicine framework and guidance from the Advisory Committee on Immunization Practices for planning of a phased rollout that adheres to national guidance and ensures local equity in allocation and access to New York City residents.[[118]](#footnote-119) The City plan states that the VTF is actively engaging community members to understand vaccine hesitancy, especially as it relates to historic and persistent racial oppression, and the VTF is prepared to deliver on-the-ground messaging both from public health leaders and trusted community members, in multiple languages to increase uptake of the vaccine and combat misinformation.[[119]](#footnote-120)

*ii. New York City’s Vaccine Roll Out*

On December 14, 2020, Nurse Sandra Lindsey became the first person in the United States to receive the COVID-19 vaccine in a non-clinical trial, when she received the vaccine at New York’s Long Island Jewish Medical Center.[[120]](#footnote-121) New York City began the first portion of Phase 1a of vaccine distribution that same day, which included high-risk hospital staff, affiliates, volunteers and contract staff, following the clinical risk assessment guidance, who received the vaccine through hospital employers.[[121]](#footnote-122) The following week, beginning December 21, 2020, this first group was expanded to include emergency medical services (EMS) personnel, medical examiners and coroners, funeral workers who have direct contact with infectious material and bodily fluids, health care or other high-risk direct care essential staff working in long-term care facilities (LTCF) and long-term, congregate settings, and persons living in LTCFs and in long-term congregate settings.[[122]](#footnote-123)

In the following two weeks, the group was again expanded to the remaining categories of phase 1a, which include agency staff and residents in congregate living situations run by the Office of People with Developmental Disabilities (OPWDD), the Office of Mental Health (OMH), and the Office of Addiction Services and Supports (OASAS), urgent care providers, any staff administering COVID-19 vaccinations, and other frontline health care workers.[[123]](#footnote-124)

On Friday, January 8, 2021, Governor Cuomo announced that phase 1b would commence in New York State on January 11, 2021, beginning with essential workers and New Yorkers over the age of 75.[[124]](#footnote-125) The Governor also announced that a new network of vaccine sites would be operationalized to supplement vaccine administration for individuals falling under group 1a and eligible under the first phase of group 1b.[[125]](#footnote-126) The Governor called upon large unions to organize vaccine administration to essential workers in their networks, to allow other providers to administer vaccines to those in the 75+ age group.[[126]](#footnote-127) DOHMH provided further guidance after the Governor’s announcement, declaring that the next phase would include people aged 75 and older, teachers and education workers, first responders, public safety workers, and public transit workers.[[127]](#footnote-128)

On January 12, 2021, after updated guidance from the CDC, Governor Cuomo announced that those aged 65 and older would be eligible to receive the vaccine, and that the State was working to ensure that those under age 65 who are immunocompromised would also be eligible.[[128]](#footnote-129) The Governor noted that although roughly seven million New Yorkers were now eligible for the vaccine, the federal government was still only allotting the state 300,000 vaccines per week.[[129]](#footnote-130) Starting February 15, 2021, individuals with underlying conditions will also be eligible for the COVID-19 vaccine.[[130]](#footnote-131) On February 5, 2021, Governor Cuomo announced which comorbidities and underlying conditions would allow a person to qualify for a vaccine.[[131]](#footnote-132) Conditions include cancer, chronic kidney disease, pulmonary disease, intellectual and developmental disabilities, heart conditions, immunocompromised state, severe obesity, pregnancy, sickle cell disease or thalassemia, type 1 or 2 diabetes mellitus, cerebrovascular disease, neurologic conditions and liver disease.[[132]](#footnote-133)

Due to lack of supply, technological barriers, and other issues, the State and City’s vaccine roll out has led to disparate outcomes and inaccessible vaccine appointments.[[133]](#footnote-134) As of February 16, 2021, among the adults who have received at least one dose of the vaccine who have known race and ethnicity data, 43 percent are white, 15 percent are Asian, 16 percent are Latino, 11 percent are Black, and 14 percent are listed as “other.”[[134]](#footnote-135) Among the adults 65 years old and older who have received at least one dose of the vaccine who have known race and ethnicity data, 47 percent are white, 13 percent are Asian, 15 percent are Latino, 12 percent are Black, and 14 percent are listed as “other.”[[135]](#footnote-136) The City is 29 percent Latino and 24 percent Black, and both communities are underrepresented in vaccine distribution.[[136]](#footnote-137) See below a graph comparing vaccination rate by race for those aged 65 and older compared to percent of population.

Chart, bar chart

Description automatically generated

One of the main barriers to equitable vaccine distribution is supply. According to Mayor de Blasio, since the beginning of February 2021, the City has had the capacity to vaccinate 500,000 people per week.[[137]](#footnote-138) Although both the State and the City continue to open mass vaccination sites with the capability of vaccinating thousands of people per day each,[[138]](#footnote-139) the City is still vaccinating, at most, less than 60,000 people per day, and much less than that on weekends.[[139]](#footnote-140) On February 10, it was announced at a Governor’s press conference that the state and federal governments are continuing to take steps to increase the vaccine supply, and the federal government has achieved a 28 percent increase in vaccine allocation since the start of the Biden Administration.[[140]](#footnote-141) Additionally, the federal government is helping states administer their vaccine supply more efficiently and equitably by providing visibility into the supply states will receive weeks in advance.[[141]](#footnote-142) While federal, state, and city governments are working to increase supply and address other barriers, such as creating more mass vaccination sites in the hardest hit areas,[[142]](#footnote-143) technological issues and other barriers persist.

1. **SCHEDULING VACCINE APPOINTMENTS IN NEW YORK CITY**

New York State launched and maintains an external public-facing dashboard to keep New Yorkers informed of vaccination progress and relevant updates, including doses administered by region.[[143]](#footnote-144) There is also a state website for those seeking information regarding vaccine eligibility and appointment scheduling that offers a vaccine eligibility screening tool and a vaccine administration site locator.[[144]](#footnote-145) In addition to online services, a call center and hotline[[145]](#footnote-146) have been made available for patients and providers to access live support.[[146]](#footnote-147) Like New York State, New York City also offers online and over-the-phone services.[[147]](#footnote-148)

There are several vaccination sign-up websites available to qualified New Yorkers. Among them are city and state-managed websites: *COVID-19 Vaccine Finder*[[148]](#footnote-149)*, COVID-19 Vaccine Hubs*[[149]](#footnote-150)*, New York City Health + Hospitals COVID-19 Vaccination Scheduler*[[150]](#footnote-151), *COVID-19 Vaccine*[[151]](#footnote-152) as well as websites managed by third-party software engineers: *TurboVax*[[152]](#footnote-153) and *NYC Vaccine List*.[[153]](#footnote-154)

The *COVID-19 Vaccine Finder* is created and managed by DOHMH.[[154]](#footnote-155) The *COVID-19* *Vaccine Finder* is an aggregator of both public and private vaccination providers.[[155]](#footnote-156) The website lists vaccination providers and upon entering a zip code or address in a search bar, directs a user to a map and directory of the closest vaccination providers.[[156]](#footnote-157) It then further directs the user to the provider’s website to schedule a COVID-19 vaccination appointment.[[157]](#footnote-158) According to the information listed on the main page, “[e]ach [provider] manages its own schedules and appointments on its website.”[[158]](#footnote-159)

As required by Local Law 30 of 2017, information on the *COVID-19* *Vaccine Finder* website is available in the top ten languages spoken by New Yorkers including: Spanish, Chinese, Russian, Bengali, Haitian Creole, Korean, Arabic, Urdu, French, and Polish.[[159]](#footnote-160) The website’s translation is provided by Google Translate.[[160]](#footnote-161) However, as the website serves as a directory, there is no guarantee that this language support is consistent across all the private and public providers which the *COVID-19 Vaccine Finder* redirects towards.[[161]](#footnote-162)

Other municipal websites set up to help New Yorkers schedule vaccinations are *DOHMH COVID-19 Vaccine Hubs*[[162]](#footnote-163) and the *NYC Health + Hospitals COVID-19 Vaccination Scheduler.*[[163]](#footnote-164)Both websites, rather than directing a user to external webpages, require a step-by-step registration and verification process before allowing users to arrive at an appointment scheduler.[[164]](#footnote-165) Unlike the *Vaccine Finder,* which provides information about both private and public vaccination sites, the *NYC Health + Hospitals COVID-19 Vaccination Scheduler* only coordinates appointments for vaccination sites run by NYC Health + Hospitals , and the *DOHMH COVID-19 Vaccine Hubs* only coordinates appointments for vaccination sites run by DOHMH.[[165]](#footnote-166) The *DOHMH Vaccine Hubs* provides information in ten languages, while the *NYC Health + Hospitals COVID-19 Vaccination Scheduler* only offers information in English.[[166]](#footnote-167)

Although these websites provide valuable information about the immunization process to New Yorkers, they have several issues that cause users frustration in navigating the process of finding and scheduling vaccination appointments.[[167]](#footnote-168) The most common issues are related to a non-user-friendly interface, a lengthy registration process, and heavy web traffic.[[168]](#footnote-169)

For example, in order to schedule vaccine appointments through the *COVID-19* *Vaccine Finder* website, rather than browse appointment availability citywide, users are directed to other providers’ websites with their own different interfaces.[[169]](#footnote-170) Users are then asked to submit their personal information with a vaccination provider they select.[[170]](#footnote-171) Required information often includes an email address, health insurance information, and employment information, which users may not have readily available.[[171]](#footnote-172) This process can take from several minutes to several hours, and can ultimately leave residents without desired immunization appointments, as after the lengthy registration process, users often learn that no appointments are available due to a lack of availability of appointments or low vaccine supply.[[172]](#footnote-173) If the user is unsuccessful with scheduling an appointment, the user has to repeat the same registration and screening processes with other providers.[[173]](#footnote-174) In addition, heavy web traffic may slow that process, causing webpages to freeze or crash, and forcing users to restart the process all over again.[[174]](#footnote-175)

Another issue is that the *COVID-19* *Vaccine Finder* is not compatible with Internet Explorer, which is often used as a default browser on computers.[[175]](#footnote-176) Downloading another browser in order to access the website might not only be challenging for some non-tech-savvy New Yorkers, but could also become an unbearable obstacle.

The above issues related to access to vaccination appointments represent significant barriers to the equitable distribution of the vaccine in New York City.[[176]](#footnote-177) In order to improve access to vaccination appointments online, several software engineers have created their own websites with an easier to use interface.[[177]](#footnote-178) Independent websites that have come to the forefront are *NYC Vaccine List* and *TurboVax*.[[178]](#footnote-179)

*NYC Vaccine List* was launched by a team of volunteers led by site developers Dan Benamy and Cameron Yick.[[179]](#footnote-180) *NYC Vaccine List* collects data about vaccine availability with programs called "crawlers." These crawlers navigate several websites, including the *COVID-19* *Vaccine Finder*, the NY State Department of Health, the *COVID-19 Vaccine Hubs*, and the *COVID-19 Vaccination Scheduler* run by NYC Health + Hospitals.[[180]](#footnote-181) The development team recently incorporated Google Translate into their website to support most languages, including the top ten New York City languages.[[181]](#footnote-182)

*TurboVax*, created by software developer Huge Ma, also automatically searches through three major government vaccination websites (*COVID-19 Vaccine Hubs*, *NYC Health + Hospitals COVID-19 Vaccine Scheduler*, and *New York State Vaccination Centers*) to find available appointment slots.[[182]](#footnote-183) *TurboVax* does not have extra language support.[[183]](#footnote-184)

Both websites direct users to external webpages to register and book appointments. However, instead of having users individually go through each vaccination provider’s online registration process for potentially unavailable appointments, *NYC Vaccine List* and *TurboVax* streamline the process by compiling available appointments in one location so that it is easier to find appointment availability.[[184]](#footnote-185) Both websites also have disclaimers that the data on their websites is not perfect given the limited supply of the vaccine and the limited availability of vaccine appointments.[[185]](#footnote-186)

Unfortunately, some New Yorkers – especially seniors – might not be able to access either of these websites due to the lack of an Internet connection, low digital literacy, and/or lack of access to technology. For example, the New York City Comptroller reported that 42% of New Yorkers aged 65 and above lacked broadband Internet access.[[186]](#footnote-187) Additionally, United States Census data from 2019 showed that in New York City, 9.6% of households aged 65 years and over do not have broadband access, but do have computers.[[187]](#footnote-188) However, approximately 18.8% of these households do not have a computer at all; this compared to just 5.7% of the 18-64 year old age group that do have a computer, but no broadband and 3.1% with no computer.[[188]](#footnote-189) Further, some of these New Yorkers, may not have electronic contact information like an email address, which is often required to schedule a vaccine appointment online.[[189]](#footnote-190)

In order to assist those vulnerable individuals who may not be able to easily schedule vaccination appointments online, both New York State and New York City launched vaccination hotlines to allow residents to schedule immunization appointments by phone.[[190]](#footnote-191) The New York State (1-833-NYS-4VAX) hotline is open from 7 a.m. - 10 p.m., while New York City (1-877-VAX-4NYC) hotline is open from 8 a.m. - 9 p.m.[[191]](#footnote-192) The City’s hotline has at least 750 customer service representatives answering calls seven days a week.[[192]](#footnote-193) Nevertheless, hold times remains significantly long.[[193]](#footnote-194)

As New York City continues its vaccination efforts and consolidates available appointments, more New York City residents will use either the online portals or the City’s vaccination hotline to sign up for receiving vaccines.[[194]](#footnote-195) Improving the user experience of these technologies is necessary in order to make it easier for New Yorkers to schedule appointments for the COVID-19 vaccine.[[195]](#footnote-196)

1. **SENIORS’ ACCESS TO THE COVID-19 VACCINE**

Citywide, 1.3 million people aged 65 or older are eligible for the COVID-19 vaccine,[[196]](#footnote-197) and according to the Department of Health, 282,407 older New Yorkers have received at least 1 dose of the vaccine.[[197]](#footnote-198) New York City’s Vaccine Planning Group for Older New Yorkers works with local organizations to increase older adults’ understanding of COVID-19 vaccinations and city resources available to them.[[198]](#footnote-199) This group has conducted outreach to seniors through knocking on doors, making phone calls and robocalls, hosting virtual townhalls and partnering with local health providers.[[199]](#footnote-200)

To help ensure older adults receive vaccinations, the City operates a vaccine registration website,[[200]](#footnote-201) offers seniors transportation to vaccination sites, and provides vaccinations at targeted locations, including within the New York City Housing Authority. [[201]](#footnote-202) However, despite the City’s efforts, older adults face a plethora of hurdles when seeking vaccinations, including issues within the city’s own services.[[202]](#footnote-203)

1. *Older Adult Vaccine Skepticism*

Many older adults are hesitant to receive the COVID-19 vaccine. According to a study by the City University of New York Graduate School of Public Health and Health Policy, vaccine acceptance for individuals aged 60 and older was just 52% in September 2020 and increased only by 11%, to 63%, in January 2021.[[203]](#footnote-204) While data on vaccine acceptance rates for older adults of color is limited, research shows that people of color, especially Black people, are disproportionately hesitant about receiving the COVID-19 vaccine.[[204]](#footnote-205) Notably, such hesitancy is rooted in historical injustices, such as the Tuskegee syphilis experiment, as well as present day systemic injustices.[[205]](#footnote-206) Recently, there have been reports of NYC nursing homes giving veterans experimental COVID-19 treatments without family members awareness.[[206]](#footnote-207)

To address the overall skepticism of the vaccine, as previously noted, the City has conducted various outreach and informational campaigns, including launching a Vaccine for All effort, that include broad outreach and education to address vaccine hesitancy.[[207]](#footnote-208)

1. *Registration Challenges*

Like other eligible groups, older adults are required to register for vaccines online or call a city hotline to make an appointment.[[208]](#footnote-209) However, as mentioned above, many older adults do not have access to technology and/or Wi-Fi to access the registration page, while those who are able to access the Internet often have troubles navigating vaccine registration websites.[[209]](#footnote-210) For example, older adults have reported being confused by the multiple vaccine websites, many of which act in parallel to one other.[[210]](#footnote-211) Further, there have been reports of malfunctioning registration websites, which have caused people to spend hours trying to schedule an appointment. [[211]](#footnote-212) Overall, older adults have reported spending hours online trying to reserve a vaccination appointment, and in many cases, after all of that time invested, they learned that there were no appointments available.[[212]](#footnote-213)

Although the City also offers a vaccination hotline for individuals who are unable to access the internet, this hotline has also produced frustration for older adults. For example, callers are required to have an email address, leaving seniors without one at a disadvantage. [[213]](#footnote-214) There have also been reports of callers spending 30 minutes on hold after calling the hotline.[[214]](#footnote-215)

1. *Proximity to Vaccination Sites*

Following reports that vaccination sites were located far from many seniors’ homes, the City announced several actions it would take to support older adults accessibility to vaccination sites. [[215]](#footnote-216)

On January 14, 2021, Mayor Bill de Blasio announced that the City would open vaccination clinics in New York City Housing Authority (NYCHA) developments to provide on-site vaccinations for residents aged 65 and older.[[216]](#footnote-217) Vaccination clinics have begun operating at Van Dyke I & II Houses in Brooklyn, Polo Grounds Towers in Manhattan and Cassidy Lafayette Houses in Staten Island.[[217]](#footnote-218)

On January 17, 2021, Mayor de Blasio announced that the City would offer transportation services to individuals aged 65 and older who need transportation to and from COVID-19 vaccination appointments.[[218]](#footnote-219) To ensure that older adults are aware of this resource, City-operated sites that schedule appointments ask older adults if they need transportation and if they do, they are directed to transportation options such as ambulette services, Access-a-Ride, and cab services.[[219]](#footnote-220) The Mayor’s office also announced that in a few weeks selected senior center programs will provide transportation to vaccine appointments for seniors, and that the Administration will offer about 10,000 rides weekly.[[220]](#footnote-221)

Recently, on February 12, 2021, the Mayor also announced a plan to administer the vaccine to homebound older adults and home care workers.[[221]](#footnote-222) The City will set up vaccination clinics at DFTA retirement communities and NYC’s Housing Preservation and Development (HPD) senior buildings.[[222]](#footnote-223) Two of these sites, Warbasse Cares Program and Morningside Retirement & Health Services, will launch the week of February 15, with additional sites launching over the proceeding weeks.[[223]](#footnote-224)

The City will also increase vaccinations for homecare aides, home health aides, and personal care aides by ensuring that they receive priority appointments at City vaccine sites and increased access to five workforce hubs.[[224]](#footnote-225) According to the announcement, the City aims to vaccinate 25,000 home health aides throughout the next month.[[225]](#footnote-226)

1. *New York City Aging Efforts*

The New York City Department for the Aging, also known as NYC Aging, administers federal, state, and city funding to address service needs for older residents. Since the development of the COVID-19 vaccination, NYC Aging has supported the city with outreach to older adults.[[226]](#footnote-227) Currently, NYC Aging’s website offers a resource hub that provides information about the vaccine, and NYC Aging Commissioner Lorraine Cortés-Vázquez is a member of the New York City’s Vaccine Planning Group.[[227]](#footnote-228) Additionally, NYC Aging senior provider organizations have helped older adults register for vaccines, and the City also recently announced that NYC Aging providers will be able to connect seniors to transportation services.[[228]](#footnote-229)

Despite the aforementioned efforts and services, NYC Aging has been criticized for its ability to effectively support seniors with getting vaccinated. [[229]](#footnote-230) Many senior service providers and older adults have called for senior centers to become vaccination distribution sites, contending that seniors trust their senior centers and would feel more comfortable with obtaining a vaccination there in lieu of an unfamiliar organization and location.[[230]](#footnote-231) During a February 10, 2021 NYC Council hearing, Commissioner Cortez-Vasquez testified that while senior centers are not currently vaccination sites, the option is “never off the table.”[[231]](#footnote-232)

1. **LEGISLATON ANALYSIS**

**Proposed Int. No. 2236-A**: *A Local Law in relation to the creation of a unified scheduling system for COVID-19 vaccinations, and to provide for the repeal thereof*

This bill would require DOHMH to develop and maintain a website which operates as a unified scheduling system for COVID-19 vaccinations for all vaccination locations and providers located in New York City. Since introduction, the bill was updated to include the ability to display all available appointments across all vaccination locations of cooperating providers filterable by zip code and eligibility category. The was also amended to allow users to request to be notified when new COVID-19 vaccination appointments are available, and allows an eligible user to pre-register for such an appointment.

This law would take effect immediately and be deemed repealed 2 years after it becomes law.

THIS PAGE LEFT INTENTIONALLY BLANK

Proposed Int. No. 2236-A

By Council Members Levine, Powers, Miller, Lander, Rivera, Kallos and Holden

..Title

A Local Law in relation to the creation of a unified scheduling system for COVID-19 vaccinations, and to provide for the repeal thereof

..Body

Be it enacted by the Council as follows:

Section 1. a. Definitions. For the purposes of this section, the following terms have the following meanings:

COVID-19. The term “COVID-19” means the disease caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Department. The term “department” means the department of health and mental hygiene, or another agency designated by the mayor.

b. COVID-19 vaccination scheduling system. The department shall develop and maintain an online platform which can operate as a unified scheduling system for COVID-19 vaccinations for cooperating providers that may include, but need not be limited to, vaccination locations operated by the department, by the health and hospitals corporation, and by New York state. Such platform shall be made available to the general public in all designated citywide languages, as defined by section 23-1101 of the administrative code of the city of New York, and shall be accessible to people with disabilities in accordance with section 23-802 of such code. Such platform shall display all available appointments across all vaccination locations of cooperating providers, organized by date and time and filterable by zip code and eligibility category, and allow for the scheduling of COVID-19 vaccination appointments, either on such platform or through a link to the website of a provider, across all vaccination locations of cooperating providers located in the city of New York.

c. Such platform shall allow an eligible user, as prioritized by the department, to request to be notified when new COVID-19 vaccination appointments are available for such user, and allow an eligible user to pre-register for such an appointment.

§ 2. This local law takes effect 30 days after it becomes law, and is deemed repealed 2 years after it becomes law.

HKA/SIL

LS #17045

3/10/21 9:34 pm

Proposed Res. No. 1529-A

..Title

Resolution calling on the New York State Legislature to pass, and the Governor to sign, legislation to protect New York State’s safety net providers and Special Needs Plans by eliminating the Medicaid pharmacy carve-out.

..Body

By Council Members Levine, Louis, Chin, Lander, Rivera and Levin

Whereas, Congress created the Medicaid rebate program in 1990; and

Whereas, Under the program, a manufacturer must pay rebates to state Medicaid programs for “covered outpatient drugs,” which lowers the cost of drugs for Medicaid programs; and

Whereas, In 1992, Congress extended the same kind of relief to safety net providers by enacting Section 340B of the Public Health Service Act (the 340B program); and

Whereas, The 340B program requires pharmaceutical manufacturers to provide front-end discounts on covered outpatient drugs purchased by specified providers, called “covered entities,” that serve the nation's most vulnerable populations; and

Whereas, According to congressional reports, the purpose of the 340B program is to enable covered entities “to stretch scarce federal resources as far as possible, reaching more eligible patients and providing more comprehensive services”; and

Whereas, The 340B program protects safety net providers, including HIV/AIDS clinics that receive support under the federal Ryan White CARE Act, and community health centers and safety net hospitals that have been on the frontlines of fighting COVID-19; and

Whereas, COVID-19 has disproportionately impacted Black, Latinx, and other communities of color, as well as those who have lower incomes; and

Whereas, Ethnic and racial minorities and those who are lower income are also served by safety net providers; and

Whereas, According to New York State Department of Health (NYSDOH), there are 209 covered entities under the 340B program, totaling 2,191 sites across the state; and

Whereas, These providers rely on the savings from the 340B program to provide numerous services addressing social determinants of health and health inequities, including transportation assistance, sexually transmitted infection (STI) screenings, nurse triage and education services, care coordination and patient navigation for those who are chronically ill, free oncology services, and insurance assistance and enrollment services; and

Whereas, Providers also use these funds to operate food pantries and run mental health and wellness programs, including nutrition and diabetes education and harm reduction programs; and

Whereas, According to the Medicaid and CHIP Payment and Access Commission (MACPAC), states may offer Medicaid benefits on either a fee-for-service (FFS) basis, or through managed care plans, or both; and

Whereas, For those with managed care, which includes nearly everyone with Medicaid in New York State, the state pays a fee to a managed care plan for each person enrolled in such plan; and

Whereas, Managed care plans include Special Needs Plans (SNPs), such as HIV SNPs, which are managed care plans that cover the same services as other Medicaid managed care plans, as well as additional special services for people living with HIV/AIDS; and

Whereas, In April 2020, Governor Cuomo and the New York State Legislature passed a budget that included a plan to transition, or carve-out, the Medicaid managed care pharmacy benefit to FFS; and

Whereas, According to the NYSDOH, this proposal will carve-out the pharmacy benefit for 4.3 million managed care Medicaid members, moving the benefit back to FFS, by April 1, 2021, which will give the State “complete visibility into the underlying cost of prescription drugs and greater control to manage overall prescription drug spending”; and

Whereas, The Medicaid pharmacy carve-out would harm 340B providers, including community health centers, HIV providers, sexual health clinics, many rural hospitals, and other safety net providers, because they would no longer be able to purchase prescription drugs at a significantly reduced price; and

Whereas, If New York State shifts Medicaid drug coverage as outlined in the budget, safety net providers will lose hundreds of millions of dollars they now use for patient care, and the State and the federal government will instead receive more rebates; and

Whereas, According to the Community Healthcare Association of New York State (CHCANYS), extensive harm will occur to community health centers as a result of the pharmacy carve-out, including health center closures, lay-offs of hundreds of staff, and loss of over $100 million in client services; and

Whereas, The End AIDS NY Coalition surveyed 15 of its member organizations that operate HIV clinics, and these 15 organizations alone reported that they will lose $56.1 million in annual revenue if the planned pharmacy carve-out is implemented; and

Whereas, According to a letter that hospital leaders sent to Governor Cuomo and NYSDOH Commissioner Zucker, about 100 hospitals serving low-income and indigent populations across the state will lose more than $87 million next year as a result of this change, on top of the $20 billion to $25 billion in losses and new expenses incurred due to COVID-19; and

Whereas, A.1671/ S.2520, sponsored by Assembly Member Richard Gottfried and Senator Gustavo Rivera, would delay the carve-out for eligible 340B providers and HIV SNPs to April 1, 2024; and

Whereas, Delaying implementation of the carve-out would give providers and policymakers more time to consider ways to avoid or minimize the negative impact of such a change; and

Whereas, While a delay would be beneficial, advocates, including safety net providers and HIV SNPs, are calling for the carve-out to be eliminated altogether; and

Whereas, Although the state's Fiscal 2022 Executive Budget proposes the creation of the 340B Reimbursement Fund, which is intended to offset the 340B revenue losses providers would face from the pharmacy benefit carve-out, this is not enough of a guarantee to protect our safety net providers and could cause undue hardship; and

Whereas, Given the disproportionate impact of COVID-19 on the most vulnerable communities and the providers that serve them, eliminating the carve-out would greatly benefit the New Yorkers who need it most; now, therefore, be it

Resolved, That the Council of the City of New York calls on the New York State Legislature to pass, and the Governor to sign, legislation to protect New York State’s safety net providers and Special Needs Plans by eliminating the Medicaid pharmacy carve-out

EB

LS 16674/16784

12/21/2020

Res. No. 1535

..Title

Resolution calling on the New York State Legislature to pass, and the Governor to sign, legislation allowing local health departments to implement changes to improve the COVID-19 vaccine roll out.

..Body

By Council Members Miller, Cabrera, Moya, Ampry-Samuel, Adams, Koo, Louis, Kallos, Chin, Grodenchik, Ayala, Lander, Levine, Rosenthal, Powers, Riley, Gibson, Brannan, Rose, Rodriguez, Cumbo, Reynoso, Eugene, Perkins, Salamanca, D. Diaz, Cornegy, Rivera, Barron, Dromm, Koslowitz, Van Bramer and Holden (at the request of the Brooklyn Borough President)

Whereas, A novel coronavirus, called SARS-CoV-2, first emerged in late 2019 and spread rapidly around the world; and

Whereas, New York City, which was the epicenter of the pandemic for months, has been devastated both economically and emotionally; and

Whereas, As of January 15, 2021, 517,729 residents of New York City had tested positive for the disease caused by SARS-CoV-2, called COVID-19, with 73,272 hospitalized for treatment and 25,909 dying from the virus; and

Whereas, According to data from the New York City Department of Health and Mental Hygiene (DOHMH), COVID-19 has disproportionately impacted New York City residents who are Black, Latino, and lower income; and

Whereas, Residents of neighborhoods with 30 percent or more households living below the poverty line were more than twice as likely to die from COVID-19 as those living in neighborhoods with under 10 percent of households living in poverty; and

Whereas, New York City residents who are Black or Latino die from COVID-19 at nearly twice the rate of those who are white; and

Whereas, According to a preliminary report about disparities among Asian Americans at New York City’s Public Hospital System, certain Asian American communities, including South Asians and those who are Chinese, were also disproportionately impacted by COVID-19; and

Whereas, DOHMH data, and other health data in general, is limited because they aggregate all Asian ethnic groups into a single race category, which can obscure differences in characteristics and outcomes between these diverse groups; and

Whereas, Starting in December 2020, the City began administering COVID-19 vaccines to the first group of individuals eligible, including staff and residents of long-term care facilities and frontline health care workers; and

Whereas, In January 2020, eligibility was expanded to all New Yorkers over the age of 65, as well as many essential workers; and

Whereas, Despite increased eligibility, the pace of vaccine deployment is insufficient to combat the crisis as infections and deaths continue to rise; and

Whereas, The COVID positivity rate in New York City, as of January 15, 2021, is nearly 8.5 percent, with some neighborhoods experiencing rates of over 15 percent; and

Whereas, As of January 14, 2021, only 337,518 vaccine doses have been administered in New York City, out of 800,500 available doses; and

Whereas, On January 5, 2021, Brooklyn Borough President Eric Adams and the New York City Council’s Black, Latino, and Asian Caucus shared a letter with New York State Department of Health (NYSDOH) Commissioner Howard Zucker and DOHMH Commissioner Dave Chokshi outlining steps to improve the vaccination process; and

Whereas, According to the letter, vaccine distribution must be executed with maximum urgency, and no less frequently than 24 hours per day, 7 days per week; and

Whereas, NYSDOH must expand eligibility to include those with underlying health conditions as well as those who live in the zip codes most impacted by COVID-19; and

Whereas, NYSDOH should create a more transparent, color-coded, tiered system to define each level of eligibility for the vaccine; and

Whereas, Regardless of eligibility, the City and State should ensure that all vaccine doses are used each day by creating a vaccine standby list for residents, so individuals can receive a vaccine if it would otherwise go to waste; and

Whereas, The City and State should create a hotline for New Yorkers to use to book vaccine appointments as well as educate them about the proof they will need to provide at the vaccine site; and

Whereas, All vaccination sites should require proof of eligibility from everyone with an appointment; and

Whereas, To ensure immigrants and other at-risk communities are connected with the vaccination program, the City and State must work with advocacy organizations and those groups on the ground that can help them prove eligibility and to build the queue for the next round vaccines, once more individuals become eligible; and

Whereas, The City must immediately provide a map of vaccine locations; and

Whereas, To ensure equitable distribution, locations should be open 24 hours a day and should include schools without student populations currently doing in-person learning, schoolyards, houses of worship, and senior centers; and

Whereas, To provide adequate staffing, the City and State should incentivize people to help supervise sites and administer the vaccine, including individuals who are retired health professionals, medical students, the American Red Cross, and the NYC Blood Bank; and

Whereas, The City needs a vaccine distribution plan that recognizes the urgency of vaccinating every resident, while prioritizing those most in need, and one that ensures that the City and State are working in concert with one another; and

Whereas, In addition to the vaccine distribution planning steps in the letter, the State must also develop a publicly accessible, real-time vaccination dashboard which discloses vaccination data disaggregated by race, ethnicity, gender, age, sexual orientation, employment, and zip code; and

Whereas, Along with urgency, we must ensure that our vaccination plan is equitable and reaching communities most impacted by COVID-19; now, therefore, be it

Resolved, That the Council of the City of New York calls on the New York State Legislature to pass, and the Governor to sign, legislation allowing local health departments to implement changes to improve the COVID-19 vaccine roll out.

EB

LS 17044

01/15/2021

1. Axios, “The COVID-19 Tracker.” Accessed at: <https://www.statnews.com/feature/coronavirus/covid-19-tracker/>. [↑](#footnote-ref-2)
2. Worldometer, “COVID-19 Coronavirus Pandemic.” Accessed at: <https://www.worldometers.info/coronavirus/>. [↑](#footnote-ref-3)
3. NYS DOH COVID-19 Tracker, “Persons Tested Positive by County.” Accessed at: <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-Map?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n>. [↑](#footnote-ref-4)
4. New York State Department of Health COVID-19 Tracker, “Fatalities.” Accessed at: <https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-Fatalities?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n>. [↑](#footnote-ref-5)
5. New York City Department of Health and Mental Hygiene, “COVID-19: Data.” Accessed at: <https://www1.nyc.gov/site/doh/covid/covid-19-data.page>. [↑](#footnote-ref-6)
6. Centers for Disease Control and Prevention, “Symptoms of Coronavirus,” May 13, 2020. Accessed at: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>. [↑](#footnote-ref-7)
7. *Id.*  [↑](#footnote-ref-8)
8. Centers for Disease Control and Prevention, “People at Increased Risk and Other People Who Need to Take Extra Precautions,” September 11, 2020. Accessed at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/index.html>. [↑](#footnote-ref-9)
9. Centers for Disease Control and Prevention, “People with Certain Medical Conditions,” October 6, 2020. Accessed at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fneed-extra-precautions%2Fgroups-at-higher-risk.html>. [↑](#footnote-ref-10)
10. Centers for Disease Control and Prevention, “People at Increased Risk and Other People Who Need to Take Extra Precautions,” September 11, 2020. Accessed at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/index.html>. [↑](#footnote-ref-11)
11. “Developmental Disabilities Heighten Risk of Covid Death,” NY Times, Nov. 10, 2020, available at <https://www.nytimes.com/2020/11/10/health/covid-developmental-disabilities.html>. [↑](#footnote-ref-12)
12. NYC DOHMH, *COVID-19: Data Tools*, available at <https://www1.nyc.gov/site/doh/covid/covid-19-data-totals.page> [↑](#footnote-ref-13)
13. *Id.*  [↑](#footnote-ref-14)
14. *Id.* [↑](#footnote-ref-15)
15. *Id.* [↑](#footnote-ref-16)
16. *Id.* [↑](#footnote-ref-17)
17. *Id.* [↑](#footnote-ref-18)
18. *Id.* [↑](#footnote-ref-19)
19. *Id.* [↑](#footnote-ref-20)
20. *Id.* [↑](#footnote-ref-21)
21. *Id.*  [↑](#footnote-ref-22)
22. *Id.* [↑](#footnote-ref-23)
23. *Id.* [↑](#footnote-ref-24)
24. *Id.* [↑](#footnote-ref-25)
25. *Id.* [↑](#footnote-ref-26)
26. *Id.*  [↑](#footnote-ref-27)
27. *Id.* [↑](#footnote-ref-28)
28. *Id.* [↑](#footnote-ref-29)
29. *Id.* [↑](#footnote-ref-30)
30. *Id.* [↑](#footnote-ref-31)
31. *Id.* [↑](#footnote-ref-32)
32. *Id.* [↑](#footnote-ref-33)
33. *Id.* [↑](#footnote-ref-34)
34. *See* Yoav Gonen and Christine Chung, *Food Czar To Oversee Meal Delivery for Elderly After Early Stumbles*, The City, Apr. 15, 2020, <https://www.thecity.nyc/life/2020/4/15/21247114/food-czar-to-oversee-meal-delivery-for-elderly-after-early-stumbles>. [↑](#footnote-ref-35)
35. Erin Garnett, et al., *Supporting Older Adults Through Coronavirus: Ideas from Experts and Leaders Across NYC*, Center for Urban Future (Apr. 2020), <https://nycfuture.org/research/supporting-older-adults-through-coronavirus>. [↑](#footnote-ref-36)
36. *Coronavirus intensifies existing issues for older immigrants*, American Heart Association News, Apr. 28, 2020, <https://www.heart.org/en/news/2020/04/28/coronavirus-intensifies-existing-issues-for-older-immigrants>. [↑](#footnote-ref-37)
37. Elana Kieffer, *Beyond Age, Race & Income: Sociodemographic Factors to Track During COVID-19*, National Council on Aging, May 22, 2020, <https://www.ncoa.org/blog/beyond-age-race-income-sociodemographic-factors-to-track-during-covid-19/>. [↑](#footnote-ref-38)
38. Kate Kirker, *40 Suggestions to Help Especially Vulnerable Seniors During Coronavirus Crisis: Report*, Gotham Gazette, Apr. 17, 2020, <https://www.gothamgazette.com/city/9320-suggestions-to-help-especially-vulnerable-seniors-during-coronavirus-crisis-new-york>; Chelsia Rose Marcius, *'A panic for food’: How the COVID-19 pandemic has impacted NYC’s hungry*, New York Daily News, Oct. 4, 2020, <https://www.nydailynews.com/new-york/ny-covid-nyc-hungry-need-food-20201005-74ukp32w4fcihckkusciu7t6fq-story.html>. [↑](#footnote-ref-39)
39. *Id.* [↑](#footnote-ref-40)
40. *Id.* [↑](#footnote-ref-41)
41. *See, e.g.*, *Loneliness and Social Isolation Linked to Serious Health Conditions*, Centers for Disease Control and Prevention, *available at* <https://www.cdc.gov/aging/publications/features/lonely-older-adults.html#:~:text=Older%20adults%20are%20at%20increased,the%20amount%20of%20social%20contact>. [↑](#footnote-ref-42)
42. *Id*. [↑](#footnote-ref-43)
43. *Id*. [↑](#footnote-ref-44)
44. # *See, e.g.*, “The Impact of COVID-19 Infection and Enforced Prolonged Social Isolation on Neuropsychiatric Symptoms in Older Adults With and Without Dementia: A Review,” Psychiatry, 22 October 2020, available at <https://doi.org/10.3389/fpsyt.2020.585540>.

    [↑](#footnote-ref-45)
45. *Id*. [↑](#footnote-ref-46)
46. *See, e.g.* “Maximising mobility in older people when isolated with COVID-19,”The Centre for Evidence-Based Medicine, March 20, 2020, available at <https://www.cebm.net/covid-19/maximising-mobility-in-the-older-people-when-isolated-with-covid-19/>. [↑](#footnote-ref-47)
47. *See, e.g.*, *Loneliness and Social Isolation Linked to Serious Health Conditions*, Centers for Disease Control and Prevention, *available at* <https://www.cdc.gov/aging/publications/features/lonely-older-adults.html#:~:text=Older%20adults%20are%20at%20increased,the%20amount%20of%20social%20contact>. [↑](#footnote-ref-48)
48. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-49)
49. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-50)
50. Christian González-Rivera & Ruth Finkelstein, *Meaningful access: Investing in technology for aging well in New York City*, Brookdale Center for Healthy Aging, Jan. 22, 2021, <https://brookdale.org/meaningful-access-investing-in-technology-for-aging-well-in-new-york-city/>. [↑](#footnote-ref-51)
51. Christian González-Rivera & Ruth Finkelstein, *Meaningful access: Investing in technology for aging well in New York City*, Brookdale Center for Healthy Aging, Jan. 22, 2021, <https://brookdale.org/meaningful-access-investing-in-technology-for-aging-well-in-new-york-city/>. [↑](#footnote-ref-52)
52. Christian González-Rivera & Ruth Finkelstein, *Meaningful access: Investing in technology for aging well in New York City*, Brookdale Center for Healthy Aging, Jan. 22, 2021, <https://brookdale.org/meaningful-access-investing-in-technology-for-aging-well-in-new-york-city/>. [↑](#footnote-ref-53)
53. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-54)
54. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-55)
55. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-56)
56. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-57)
57. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-58)
58. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-59)
59. *Id.* [↑](#footnote-ref-60)
60. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-61)
61. Lorraine Buis, *Telehealth Use Among Older Adults Before and During COVID-19*, National Poll on Healthy Aging, University of Michigan, Aug. 17, 2020, <https://www.healthyagingpoll.org/report/telehealth-use-among-older-adults-and-during-covid-19>. [↑](#footnote-ref-62)
62. Christian González-Rivera & Ruth Finkelstein, *Meaningful access: Investing in technology for aging well in New York City*, Brookdale Center for Healthy Aging, Jan. 22, 2021, <https://brookdale.org/meaningful-access-investing-in-technology-for-aging-well-in-new-york-city/>. [↑](#footnote-ref-63)
63. Christian González-Rivera & Ruth Finkelstein, *Meaningful access: Investing in technology for aging well in New York City*, Brookdale Center for Healthy Aging, Jan. 22, 2021, <https://brookdale.org/meaningful-access-investing-in-technology-for-aging-well-in-new-york-city/>. [↑](#footnote-ref-64)
64. Kevin Biese, *Emergency care for older adults in the COVID-19 era and beyond: Proactive, Safe and Close to Home*, George Washington University School of Medicine & Health Sciences, Jul. 14, 2020, <https://smhs.gwu.edu/urgentmatters/news/emergency-care-older-adults-covid-19-era-and-beyond-proactive-safe-and-close-home>. [↑](#footnote-ref-65)
65. Kevin Biese, *Emergency care for older adults in the COVID-19 era and beyond: Proactive, Safe and Close to Home*, George Washington University School of Medicine & Health Sciences, Jul. 14, 2020, <https://smhs.gwu.edu/urgentmatters/news/emergency-care-older-adults-covid-19-era-and-beyond-proactive-safe-and-close-home>. [↑](#footnote-ref-66)
66. Kevin Biese, *Emergency care for older adults in the COVID-19 era and beyond: Proactive, Safe and Close to Home*, George Washington University School of Medicine & Health Sciences, Jul. 14, 2020, <https://smhs.gwu.edu/urgentmatters/news/emergency-care-older-adults-covid-19-era-and-beyond-proactive-safe-and-close-home>. [↑](#footnote-ref-67)
67. Kevin Biese, *Emergency care for older adults in the COVID-19 era and beyond: Proactive, Safe and Close to Home*, George Washington University School of Medicine & Health Sciences, Jul. 14, 2020, <https://smhs.gwu.edu/urgentmatters/news/emergency-care-older-adults-covid-19-era-and-beyond-proactive-safe-and-close-home>. [↑](#footnote-ref-68)
68. *Reaching Our “Silent Seniors” During COVID-19,* Healthwise, Oct. 6. 2020, <https://www.healthwise.org/blog/reaching-silent-seniors-during-covid.aspx>. [↑](#footnote-ref-69)
69. *Reaching Our “Silent Seniors” During COVID-19,* Healthwise, Oct. 6. 2020, <https://www.healthwise.org/blog/reaching-silent-seniors-during-covid.aspx>. [↑](#footnote-ref-70)
70. *Reaching Our “Silent Seniors” During COVID-19,* Healthwise, Oct. 6. 2020, <https://www.healthwise.org/blog/reaching-silent-seniors-during-covid.aspx>. [↑](#footnote-ref-71)
71. *Reaching Our “Silent Seniors” During COVID-19,* Healthwise, Oct. 6. 2020, <https://www.healthwise.org/blog/reaching-silent-seniors-during-covid.aspx>. [↑](#footnote-ref-72)
72. Jonathan Corum et. al., *Coronavirus Vaccine Tracker*, The New York Times, last updated November 23, 2020, available at <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html> [↑](#footnote-ref-73)
73. Ursula Perano, *Key information about the effective COVID-19 vaccines*, Axios, November 23, 2020, available at <https://www.axios.com/covid-vaccines-coronavirus-moderna-pfizer-oxford-d9522a80-c1c5-4da2-b7d8-c6c90c28b4b3.html> [↑](#footnote-ref-74)
74. Jonathan Corum et. al., *Coronavirus Vaccine Tracker*, The New York Times, last updated November 23, 2020, available at <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html> [↑](#footnote-ref-75)
75. Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-76)
76. Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-77)
77. Jonathan Corum, et. al., *Different Approaches to a Coronavirus Vaccine*, The New York Times, May 20, 2020, available at <https://www.nytimes.com/interactive/2020/05/20/science/coronavirus-vaccine-development.html> [↑](#footnote-ref-78)
78. Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-79)
79. Jonathan Corum, et. al., *Different Approaches to a Coronavirus Vaccine*, The New York Times, May 20, 2020, available at <https://www.nytimes.com/interactive/2020/05/20/science/coronavirus-vaccine-development.html> [↑](#footnote-ref-80)
80. *Id.* [↑](#footnote-ref-81)
81. Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-82)
82. *Id.* [↑](#footnote-ref-83)
83. *Id.* [↑](#footnote-ref-84)
84. “Messenger RNA,” NIH, available at <https://www.genome.gov/genetics-glossary/messenger-rna>. [↑](#footnote-ref-85)
85. *See Id*.; *see also*, Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-86)
86. Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-87)
87. *Id.* [↑](#footnote-ref-88)
88. Jonathan Corum, et. al., *Different Approaches to a Coronavirus Vaccine*, The New York Times, May 20, 2020, available at <https://www.nytimes.com/interactive/2020/05/20/science/coronavirus-vaccine-development.html> [↑](#footnote-ref-89)
89. Andrew Joseph, *‘A huge experiment’: How the world made so much progress on a Covid-19 vaccine so fast*, STAT News, July 30, 2020, available at <https://www.statnews.com/2020/07/30/a-huge-experiment-how-the-world-made-so-much-progress-on-a-covid-19-vaccine-so-fast/> [↑](#footnote-ref-90)
90. *Id.* [↑](#footnote-ref-91)
91. *Id.* [↑](#footnote-ref-92)
92. Jonathan Corum et. al., *Coronavirus Vaccine Tracker*, The New York Times, last updated February 6, 2021, available at <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html> [↑](#footnote-ref-93)
93. Jonathan Corum et. al., *Coronavirus Vaccine Tracker*, The New York Times, last updated February 6, 2021, available at <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html> [↑](#footnote-ref-94)
94. *Id.* [↑](#footnote-ref-95)
95. Ursula Perano, *Key information about the effective COVID-19 vaccines*, Axios, November 30, 2020, available at <https://www.axios.com/covid-vaccines-coronavirus-moderna-pfizer-oxford-d9522a80-c1c5-4da2-b7d8-c6c90c28b4b3.html> [↑](#footnote-ref-96)
96. *Id.* [↑](#footnote-ref-97)
97. *Id.* [↑](#footnote-ref-98)
98. *Id.* [↑](#footnote-ref-99)
99. Jonathan Corum et. al., *Coronavirus Vaccine Tracker*, The New York Times, last updated February 6, 2021, available at <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html> [↑](#footnote-ref-100)
100. “Emergency Use Authorization,” FDA, available at <https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization#abouteuas>. [↑](#footnote-ref-101)
101. Jonathan Corum et. al., *Coronavirus Vaccine Tracker*, The New York Times, last updated November 23, 2020, available at <https://www.nytimes.com/interactive/2020/science/coronavirus-vaccine-tracker.html> [↑](#footnote-ref-102)
102. *Id.* [↑](#footnote-ref-103)
103. *Id.* [↑](#footnote-ref-104)
104. *Id.* & Jonathan Corum & Carl Zimmer, *Coronavirus Variants and Mutations,* The New York Times, last updated February 11, 2021, last accessed February 12, 2021, available at <https://www.nytimes.com/interactive/2021/health/coronavirus-variant-tracker.html> [↑](#footnote-ref-105)
105. *Id.* [↑](#footnote-ref-106)
106. *Id.* [↑](#footnote-ref-107)
107. New York State Department of Health, *New York State’s COVID-19 Vaccination Program*, Oct. 2020, <https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/NYS_COVID_Vaccination_Program_Book_10.16.20_FINAL.pdf>; New York City Department of Health & Mental Hygiene, *Interim COVID-19 Vaccination Plan – Executive Summary*, <https://www.cdc.gov/vaccines/covid-19/downloads/new-york-city-jurisdiction-executive-summary.pdf>. [↑](#footnote-ref-108)
108. *Id.* [↑](#footnote-ref-109)
109. *Id.* [↑](#footnote-ref-110)
110. *Id.* [↑](#footnote-ref-111)
111. *Id.* [↑](#footnote-ref-112)
112. *Id.* [↑](#footnote-ref-113)
113. *Id.* [↑](#footnote-ref-114)
114. New York City Department of Health & Mental Hygiene, *Interim COVID-19 Vaccination Plan – Executive Summary*, <https://www.cdc.gov/vaccines/covid-19/downloads/new-york-city-jurisdiction-executive-summary.pdf>. [↑](#footnote-ref-115)
115. *Id.* [↑](#footnote-ref-116)
116. *Id.* [↑](#footnote-ref-117)
117. *Id.* [↑](#footnote-ref-118)
118. *Id.* [↑](#footnote-ref-119)
119. *Id.* [↑](#footnote-ref-120)
120. See, e.g., “NYC Nurse Is Among The 1st To Get COVID-19 Vaccine In The U.S.,” NPR, Dec. 14, 2020, available at <https://www.npr.org/2020/12/14/946253331/new-york-city-nurse-among-the-first-to-get-coronavirus-vaccine-in-the-u-s>. [↑](#footnote-ref-121)
121. “Guidance for Facilities, Providers, and Local Health Departments Receiving COVID-19 Vaccine Weeks 1-5 New York State Vaccination Program Phase 1A Only,” NYS DOH, available at <https://coronavirus.health.ny.gov/system/files/documents/2021/01/guidance_facilitiesreceivingcovid19vaccineweeks1-5.pdf>. [↑](#footnote-ref-122)
122. *Id*. [↑](#footnote-ref-123)
123. “Guidance for Facilities, Providers, and Local Health Departments Receiving COVID-19 Vaccine Weeks 1-5 New York State Vaccination Program Phase 1A Only,” NYS DOH, available at <https://coronavirus.health.ny.gov/system/files/documents/2021/01/guidance_facilitiesreceivingcovid19vaccineweeks1-5.pdf>. [↑](#footnote-ref-124)
124. “Governor Cuomo Announces Expanded Vaccination Network To Accelerate Distribution of COVID-19 Vaccine,” Governor Press Release, Jan. 8, 2021, available at <https://www.governor.ny.gov/news/governor-cuomo-announces-expanded-vaccination-network-accelerate-distribution-covid-19-vaccine>. [↑](#footnote-ref-125)
125. *Id*. [↑](#footnote-ref-126)
126. *Id*. [↑](#footnote-ref-127)
127. “COVID-19: Vaccine Distribution in NYC,” DOHMH Website, available at <https://www1.nyc.gov/site/doh/covid/covid-19-vaccine-eligibility.page>. [↑](#footnote-ref-128)
128. *Audio & Rush Transcript: Governor Cuomo Updates New Yorkers on State's COVID-19 Response*, Makes an Announcement, Governor Press Release, Jan. 12, 2021, available at <https://www.governor.ny.gov/news/audio-rush-transcript-governor-cuomo-updates-new-yorkers-states-covid-19-response-makes-0> [↑](#footnote-ref-129)
129. *Id.* [↑](#footnote-ref-130)
130. *Governor Cuomo Announces List of Comorbidities and Underlying Conditions Eligible for COVID-19 Vaccine Starting February 15*, New York State Press Release, February 5, 2021, available at <https://www.governor.ny.gov/news/governor-cuomo-announces-list-comorbidities-and-underlying-conditions-eligible-covid-19-vaccine> [↑](#footnote-ref-131)
131. *Id.* [↑](#footnote-ref-132)
132. *Id.* [↑](#footnote-ref-133)
133. Annie McDonough, *How New York can distribute the vaccine more equitably*, City & State, February 3, 2021, available at <https://www.cityandstateny.com/articles/policy/health-care/how-new-york-can-distribute-vaccine-more-equitably.html> [↑](#footnote-ref-134)
134. New York City Department of Health and Mental Hygiene, *COVID-19 Vaccines*, last accessed on February 11, 2021, available at <https://www1.nyc.gov/site/doh/covid/covid-19-data-vaccines.page> [↑](#footnote-ref-135)
135. *Id.* [↑](#footnote-ref-136)
136. Annie McDonough, *How New York can distribute the vaccine more equitably*, City & State, February 3, 2021, available at <https://www.cityandstateny.com/articles/policy/health-care/how-new-york-can-distribute-vaccine-more-equitably.html> [↑](#footnote-ref-137)
137. *Transcript: Mayor de Blasio Holds Media Availability*, New York City Mayor Press Release, January 25, 2021, available at <https://www1.nyc.gov/office-of-the-mayor/news/055-21/transcript-mayor-de-blasio-holds-media-availability> [↑](#footnote-ref-138)
138. *Video, Audio, Photos & Rush Transcript: Governor Cuomo & Biden Administration Announce Mass Vaccination Sites to Open in New York State, Targeted at Increasing Equitable Vaccination Access*, New York State Press Release, February 10, 2021, available at <https://www.governor.ny.gov/news/video-audio-photos-rush-transcript-governor-cuomo-biden-administration-announce-mass> *and Vaccine For All: Citi Field Site Opens Today, New York City Press Release*, February 10, 2021, available at <https://www1.nyc.gov/office-of-the-mayor/news/098-21/vaccine-all-citi-field-site-opens-today> [↑](#footnote-ref-139)
139. *COVID-19 Data,* New York City Department of Health and Mental Hygiene, last accessed February 11, 2021, available at <https://www1.nyc.gov/site/doh/covid/covid-19-data.page> [↑](#footnote-ref-140)
140. *Video, Audio, Photos & Rush Transcript: Governor Cuomo & Biden Administration Announce Mass Vaccination Sites to Open in New York State, Targeted at Increasing Equitable Vaccination Access*, New York State Press Release, February 10, 2021, available at <https://www.governor.ny.gov/news/video-audio-photos-rush-transcript-governor-cuomo-biden-administration-announce-mass> [↑](#footnote-ref-141)
141. *Id.* [↑](#footnote-ref-142)
142. *Id.* & *Vaccine For All: Citi Field Site Opens Today, New York City Press Release*, February 10, 2021, available at <https://www1.nyc.gov/office-of-the-mayor/news/098-21/vaccine-all-citi-field-site-opens-today> [↑](#footnote-ref-143)
143. New York State Department Of Health COVID-19 Vaccine Tracker, last accessed February 11, 2021, available at <https://covid19vaccine.health.ny.gov/covid-19-vaccine-tracker> [↑](#footnote-ref-144)
144. New York State Department of Health, *See if you may be Eligible to Receive the COVID-19 Vaccine*, last accessed February 11, 2021, available at <https://am-i-eligible.covid19vaccine.health.ny.gov/> [↑](#footnote-ref-145)
145. “COVID-19 Vaccine: Get the Facts,” NY DOH, available at <https://covid19vaccine.health.ny.gov/>; Hotline is 1-833-NYS-4-VAX ([1-833-697-4829](tel:18336974829)). [↑](#footnote-ref-146)
146. *Id.* [↑](#footnote-ref-147)
147. Sydney Pereira, “New Yorkers Eligible For COVID Vaccine Report Frustrations With City Registration Websites”, Gothamist, January 11, 2021, available at <https://gothamist.com/news/new-yorkers-eligible-vaccine-report-frustrations-city-registration-websites>. [↑](#footnote-ref-148)
148. “NYC COVID-19 Vaccine Finder”, NYC DOHMH, last accessed on February 12, 2021, available at <https://vaccinefinder.nyc.gov/>. [↑](#footnote-ref-149)
149. “COVID-19 Vaccine Hubs Appointment Scheduler”, NYC DOHMH, last accessed on February 12, 2021, available at <https://vax4nyc.nyc.gov/patient/s/>. [↑](#footnote-ref-150)
150. “COVID-19 Vaccination Scheduler”, NYC Health + Hospitals, last accessed on February 12, 2021, available at <https://covid19.nychealthandhospitals.org/UnaffiliatedHealthCareWorkers>. [↑](#footnote-ref-151)
151. “COVID-19 Vaccine”, New York State, last accessed on February 12, 2021, available at <https://covid19vaccine.health.ny.gov/>. [↑](#footnote-ref-152)
152. “TurboVax”, available at <https://www.turbovax.info/>. [↑](#footnote-ref-153)
153. “NYC Vaccine List”, available at <https://nycvaccinelist.com/>. [↑](#footnote-ref-154)
154. “COVID-19: Vaccines”, NYC DOHMH, last accessed on February 12, 2021, available at <https://www1.nyc.gov/site/doh/covid/covid-19-vaccines.page>. [↑](#footnote-ref-155)
155. *Id.* [↑](#footnote-ref-156)
156. *Id.* [↑](#footnote-ref-157)
157. *Id.* [↑](#footnote-ref-158)
158. *Id.* [↑](#footnote-ref-159)
159. *“*COVID-19 Vaccine Finder Locations,” NYC DOHMH, last accessed on February 12, 2021, available at <https://vaccinefinder.nyc.gov/locations>; Local Law 30, The New York City Council, available at <https://go.usa.gov/xsrAe>. [↑](#footnote-ref-160)
160. *Id*; “Language and Disability Access,” NYC Mayor’s Office of Immigrant Affairs, last accessed on February 12, 2021, available at <https://www1.nyc.gov/site/immigrants/about/language-and-disability-access.page>. [↑](#footnote-ref-161)
161. “COVID-19 Vaccine Finder Locations,” NYC DOHMH, last accessed on February 12, 2021, available at <https://vaccinefinder.nyc.gov/locations>. [↑](#footnote-ref-162)
162. “COVID-19 Vaccine Hubs Appointment Scheduler,” NYC DOHMH, last accessed on February 12, 2021, available at <https://vax4nyc.nyc.gov/patient/s/>. [↑](#footnote-ref-163)
163. “COVID-19 Vaccination Scheduler”, NYC Health + Hospitals, last accessed on February 12, 2021, available at <https://covid19.nychealthandhospitals.org/UnaffiliatedHealthCareWorkers>. [↑](#footnote-ref-164)
164. “COVID-19 Vaccine Hubs Appointment Scheduler,” NYC DOHMH, last accessed on February 12, 2021, available at <https://vax4nyc.nyc.gov/patient/s/>; “COVID-19 Vaccination Scheduler”, NYC Health + Hospitals, last accessed on February 12, 2021, available at <https://covid19.nychealthandhospitals.org/UnaffiliatedHealthCareWorkers>. [↑](#footnote-ref-165)
165. “COVID-19 Vaccines at NYC Health + Hospitals,” NYC Health + Hospitals, last accessed on February 12, 2021, available at <https://www.nychealthandhospitals.org/covid-19-vaccines/>; Sydney Pereira, “New Yorkers Eligible For COVID Vaccine Report Frustrations With City Registration Websites”, Gothamist, January 11, 2021, available at <https://gothamist.com/news/new-yorkers-eligible-vaccine-report-frustrations-city-registration-websites>. [↑](#footnote-ref-166)
166. *Id.* [↑](#footnote-ref-167)
167. *Id.*  [↑](#footnote-ref-168)
168. *Id;* Annie McDonough, “Vaccine website frustrations point to larger government tech problems”, City and State, January 12, 2021, available at <https://www.cityandstateny.com/articles/policy/technology/vaccine-website-frustrations-point-larger-government-tech-problems.html>; Sharon Otterman, “The Maddening Red Tape Facing Older People Who Want the Vaccine”, The New York Times, January 14, 2021, available at <https://www.nytimes.com/2021/01/14/nyregion/covid-vaccine-older-people-senior-citizens.html>. [↑](#footnote-ref-169)
169. “COVID-19 Vaccine Finder Locations”, NYC DOHMH, last accessed on February 12, 2021, available at <https://vaccinefinder.nyc.gov/locations>. [↑](#footnote-ref-170)
170. *Id.* [↑](#footnote-ref-171)
171. *Id.* [↑](#footnote-ref-172)
172. Sydney Pereira, “New Yorkers Eligible For COVID Vaccine Report Frustrations With City Registration Websites”, Gothamist, January 11, 2021, available at <https://gothamist.com/news/new-yorkers-eligible-vaccine-report-frustrations-city-registration-websites>; Annie McDonough, “Vaccine website frustrations point to larger government tech problems”, City and State, January 12, 2021, available at <https://www.cityandstateny.com/articles/policy/technology/vaccine-website-frustrations-point-larger-government-tech-problems.html>; Sharon Otterman, “The Maddening Red Tape Facing Older People Who Want the Vaccine”, The New York Times, January 14, 2021, available at <https://www.nytimes.com/2021/01/14/nyregion/covid-vaccine-older-people-senior-citizens.html>. [↑](#footnote-ref-173)
173. *Id.* [↑](#footnote-ref-174)
174. *Id.* [↑](#footnote-ref-175)
175. *See* COVID-19 Vaccine Finder, https://vaccinefinder.nyc.gov/ (this application does not support use with Internet Explorer. When utilizing this application we suggest using a different browser). [↑](#footnote-ref-176)
176. # Sharon Otterman, “N.Y.’s Vaccine Websites Weren’t Working. He Built a New One for $50,” New York Times, February 9, 2021, <https://www.nytimes.com/2021/02/09/nyregion/vaccine-website-appointment-nyc.html>*.*

     [↑](#footnote-ref-177)
177. Sharon Otterman, “N.Y.’S Vaccine Websites Weren’t Working. He Built a New One for $50”, The New York Times, February 9, 2021, available at <https://www.nytimes.com/2021/02/09/nyregion/vaccine-website-appointment-nyc.html>. [↑](#footnote-ref-178)
178. *Id.* [↑](#footnote-ref-179)
179. “About”, NYC Vaccine List, last accessed on February 12, 2021, available at <https://nycvaccinelist.com/about>. [↑](#footnote-ref-180)
180. *Id.* [↑](#footnote-ref-181)
181. *Id.* [↑](#footnote-ref-182)
182. “About,” TurboVax, last accessed on February 12, 2021, available at <https://www.turbovax.info/about>. [↑](#footnote-ref-183)
183. *Id.* [↑](#footnote-ref-184)
184. Sharon Otterman, “N.Y.’S Vaccine Websites Weren’t Working. He Built a New One for $50,” The New York Times, February 9, 2021, available at <https://www.nytimes.com/2021/02/09/nyregion/vaccine-website-appointment-nyc.html>. [↑](#footnote-ref-185)
185. “About,” TurboVax, last accessed on February 12, 2021, available at <https://www.turbovax.info/about>; “About”, NYC Vaccine List, last accessed on February 12, 2021, available at <https://nycvaccinelist.com/about>. [↑](#footnote-ref-186)
186. *Census and The City: Overcoming NYC’s Digital Divide in the 2020 Census*, Office of the NYC Comptroller, July 2019, available at <https://comptroller.nyc.gov/wp-content/uploads/documents/Census_and_The_City_Overcoming_NYC_Digital_Divide_Census.pdf> (based on 2017 United States Census data). [↑](#footnote-ref-187)
187. American Community Survey, *Types of Internet Subscriptions by Selected Characteristics*, United States Census Bureau, available at <https://data.census.gov/cedsci/table?q=broadband,%20new%20york%20city&tid=ACSST1Y2019.S2802&hidePreview=false>. [↑](#footnote-ref-188)
188. *Id.* [↑](#footnote-ref-189)
189. *See* Sharon Otterman, “N.Y.’S Vaccine Websites Weren’t Working. He Built a New One for $50”, The New York Times, February 9, 2021, available at <https://www.nytimes.com/2021/02/09/nyregion/vaccine-website-appointment-nyc.html>. [↑](#footnote-ref-190)
190. Sydney Pereira, “New Yorkers Eligible for COVID Vaccine Report Frustrations with City Registration Websites”, Gothamist, January 11, 2021, available at <https://gothamist.com/news/new-yorkers-eligible-vaccine-report-frustrations-city-registration-websites>. [↑](#footnote-ref-191)
191. # *See****id.***

     [↑](#footnote-ref-192)
192. Elizabeth Kim, “Coronavirus Updates: NYC Vaccination Appointment Hotline Will Soon Run 24/7”, Gothamist, January 13, 2021, available at <https://gothamist.com/news/coronavirus-updates-nyc-vaccination-appointment-hotline-will-now-run-247>; Sydney Pereira, “New Yorkers Eligible For COVID Vaccine Report Frustrations With City Registration Websites”, Gothamist, January 11, 2021, available at <https://gothamist.com/news/new-yorkers-eligible-vaccine-report-frustrations-city-registration-websites>. [↑](#footnote-ref-193)
193. Sharon Otterman, “The Maddening Red Tape Facing Older People Who Want the Vaccine”, The New York Times, January 14, 2021, available at <https://www.nytimes.com/2021/01/14/nyregion/covid-vaccine-older-people-senior-citizens.html>. [↑](#footnote-ref-194)
194. Sydney Pereira, “NY State Website Overwhelmed By Newly-Eligible People Seeking Vaccine”, Gothamist, February 14, 2021, available at <https://gothamist.com/news/ny-state-website-overwhelmed-newly-eligible-people-seeking-vaccine>. [↑](#footnote-ref-195)
195. Annie McDonough, “Vaccine website frustrations point to larger government tech problems”, City and State, January 12, 2021, available at <https://www.cityandstateny.com/articles/policy/technology/vaccine-website-frustrations-point-larger-government-tech-problems.html>. [↑](#footnote-ref-196)
196. Testimony of NYC Aging, NYC Council Committees on Aging and Technology hearing. January 22, 2021. [↑](#footnote-ref-197)
197. Department of Health, “Covid-19 Vaccines.” Accessed at: <https://www1.nyc.gov/site/doh/covid/covid-19-data-vaccines.page>. [↑](#footnote-ref-198)
198. # Office of the Mayor, “Vaccine for All: City to Offer Transportation for NYC Seniors,” January 17, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/035-21/vaccine-all-city-offer-transportation-nyc-seniors>

     [↑](#footnote-ref-199)
199. *Id.* [↑](#footnote-ref-200)
200. Nicole Javorsky, “NYC Faces Uphill Climb in Vaccinating Older New Yorkers,” January 29, 2021. Accessed at: <https://citylimits.org/2021/01/29/nyc-faces-uphill-climb-in-vaccinating-older-new-yorkers/>. [↑](#footnote-ref-201)
201. # Office of the Mayor, “Vaccine for All: City to Offer Transportation for NYC Seniors,” January 17, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/035-21/vaccine-all-city-offer-transportation-nyc-seniors>.

     [↑](#footnote-ref-202)
202. *Id.* [↑](#footnote-ref-203)
203. CUNY SPH, ***Vaccine Confidence Grows Under New Administration, Latest CUNY SPH Survey Reveals*, January 2021. Accessed at:** <https://sph.cuny.edu/research/covid-19-tracking-survey/january-vaccines/> [↑](#footnote-ref-204)
204. # CUNY SPH, ***Vaccine Confidence Grows Under New Administration, Latest CUNY SPH Survey Reveals*, January 2021, available at** <https://sph.cuny.edu/research/covid-19-tracking-survey/january-vaccines/>

     [↑](#footnote-ref-205)
205. *Id.* [↑](#footnote-ref-206)
206. # Dean Russel, “NYC Nursing Home Gave Dozens of Veterans Experimental COVID-19 Treatments. Some Families Had No Idea,” (Feb. 8, 2021). Accessed at: https://www.thecity.nyc/2021/2/8/22269886/nyc-nursing-home-veterans-cuomo-covid-cocktail

     [↑](#footnote-ref-207)
207. # Office of the Mayor, “Vaccine for All: City to Offer Transportation for NYC Seniors,” January 17, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/035-21/vaccine-all-city-offer-transportation-nyc-seniors>

     [↑](#footnote-ref-208)
208. Sydney Pereira, “New Yorkers Eligible for COVID Vaccine Report Frustrations with City Registration Websites”, Gothamist, January 11, 2021, available at <https://gothamist.com/news/new-yorkers-eligible-vaccine-report-frustrations-city-registration-websites>. [↑](#footnote-ref-209)
209. # Sharon Otterman, “The Maddening Red Tape Facing Older People Who Want the Vaccine,” January 15, 2021*,* <https://www.nytimes.com/2021/01/14/nyregion/covid-vaccine-older-people-senior-citizens.html>

     [↑](#footnote-ref-210)
210. # Nicole Javorsky, “NYC Faces Uphill Climb in Vaccinating Older New Yorkers,” January 29, 2021. Accessed at: <https://citylimits.org/2021/01/29/nyc-faces-uphill-climb-in-vaccinating-older-new-yorkers/>.

     [↑](#footnote-ref-211)
211. *Id.* [↑](#footnote-ref-212)
212. # Sharon Otterman, “The Maddening Red Tape Facing Older People Who Want the Vaccine,” January 15, 2021. Accessed at:<https://www.nytimes.com/2021/01/14/nyregion/covid-vaccine-older-people-senior-citizens.html>.

     [↑](#footnote-ref-213)
213. # *Id.*

     [↑](#footnote-ref-214)
214. # *Id.*

     [↑](#footnote-ref-215)
215. # Office of the Mayor, “Vaccine for All: City to Offer Transportation for NYC Seniors,” January 17, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/035-21/vaccine-all-city-offer-transportation-nyc-seniors>.

     [↑](#footnote-ref-216)
216. # *Id.*

     [↑](#footnote-ref-217)
217. *Id.* [↑](#footnote-ref-218)
218. # Office of the Mayor, “Vaccine for All: City to Offer Transportation for NYC Seniors,” January 17, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/035-21/vaccine-all-city-offer-transportation-nyc-seniors>.

     [↑](#footnote-ref-219)
219. # *Id.*

     [↑](#footnote-ref-220)
220. # *Id.*

     [↑](#footnote-ref-221)
221. # Office of the Mayor, “Vaccine For All: City Expands Vaccination Effort For Seniors” February 12, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/104-21/vaccine-all-city-expands-vaccination-effort-seniors>.

     [↑](#footnote-ref-222)
222. *Id.* [↑](#footnote-ref-223)
223. *Id.* [↑](#footnote-ref-224)
224. *Id.* [↑](#footnote-ref-225)
225. *Id.* [↑](#footnote-ref-226)
226. Testimony of NYC Aging, NYC Council Committees on Aging and Technology hearing. January 22, 2021. [↑](#footnote-ref-227)
227. *Id.*. [↑](#footnote-ref-228)
228. Office of the Mayor, “Vaccine for All: City to Offer Transportation for NYC Seniors,” January 17, 2021. Accessed at: <https://www1.nyc.gov/office-of-the-mayor/news/035-21/vaccine-all-city-offer-transportation-nyc-seniors>. [↑](#footnote-ref-229)
229. Testimony of Advocates, NYC Council Committees on Aging and Immigration hearing. February 10, 2021. [↑](#footnote-ref-230)
230. Testimony of Advocates, NYC Council Committees on Aging and Technology hearing. January 22, 2021. [↑](#footnote-ref-231)
231. Testimony of NYC Aging, NYC Council Committees on Aging and Immigration hearing. February 10, 2021. [↑](#footnote-ref-232)