



Department of Health

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Dear Colleagues:

As I write this, New York State had administered more than 4.3 million doses of COVID-19 vaccine. Currently, more than 10 million New Yorkers are eligible to be vaccinated statewide. We are confident that with the gradually increasing number of doses we are receiving weekly from the federal government; we will vaccinate even higher numbers of our residents over the next five months.

But we are also sprinting to stay ahead of two significant challenges: vaccine hesitancy among BIPOC (Black, Indigenous and People of Color) and the spread of new coronavirus variants that current vaccines may be less effective at fighting. This month I'd like to discuss how we can work to remove doubts about vaccination among BIPOC New Yorkers and update you on the work that our Wadsworth Public Health Laboratory has been doing to test for and identify new virus variants.

Vaccination and Black History. COVID-19 has disproportionately affected BIPOC communities in the United States. The skepticism of vaccines and other government health interventions among this population has a long (and warranted) history. The federal government's Tuskegee Experiment in the early 1930s is one of the more infamous examples. Black men in Alabama were denied treatment for syphilis and the government secretly documented how the disease destroyed their bodies over decades. Throughout the 20th century, BIPOC, poor, disabled, and mentally ill women were forced to undergo sterilization at federally funded programs in 32 states, including New York. These are just two of the many times medicine was coopted to perpetuate injustices to the BIPOC community.

This history is a stain on our nation, and mitigating its lasting consequences is the responsibility of everyone in public health. We need to reassure skeptical populations that the vaccines aren't secret government experiments but needed measures to stop the pandemic and protect the recipient from illness and death. We also need to acknowledge concerns about trying "new" medicines and false information spreading on social media about the vaccine's negative effects on fertility. Most importantly, we need to approach the conversation with respect for the individual and their previous experiences. And we need to address other barriers to vaccination within BIPOC communities. In Black communities alone, social determinants of health that result in disparities contributed to the COVID-19 infection rate being [nearly three times the rate](#) of white Americans and [2.1 times more likely to die](#) of COVID-19 than white Americans.

A [recent study](#) by the University of Pittsburgh School of Pharmacy and West Health Policy Center found that Black residents are significantly more likely than white residents to live more than a mile from the closest vaccination facility. Researchers analyzed 69 counties across the United States, including those in New York City. The study found that Black people are less likely than white people to live near a pharmacy, clinic, hospital, or health center that can administer COVID-19 vaccines. The [CDC reported](#) that only 5% of COVID-19 vaccine recipients

in the first month of the rollout were Black—a disturbingly low number when Blacks represent 13.4% of the U.S. population.

New York State began COVID vaccinations with the counsel of a Vaccine Equity Task Force. We quickly learned that we needed to take intentional and culturally responsive steps to reach BIPOC New Yorkers. One approach to this is partnering with community health centers, Federal Emergency Management Agency (FEMA) and others to open mass vaccination sites in BIPOC communities: The Armory in Upper Manhattan, Yankee Stadium in the Bronx, York College in Queens, and Medgar Evers College in Brooklyn. Additional vaccination sites in Buffalo, Rochester, Albany, and Yonkers communities historically underserved by healthcare systems and disproportionately impacted by COVID-19 will be opening shortly.

We are additionally investing great effort in establishing pop-up vaccination sites at public housing complexes, community and cultural centers, and churches serving BIPOC and economically disadvantaged communities. We have established 90 of these pop-ups since mid-January and plan to set dates for all 33 NYCHA Senior Housing Developments, which house more than 7,600 seniors. We will eventually have pop-ups at more than 300 churches and cultural centers.

The great challenge of vaccinations at this scale has repeatedly called to my mind a little-remembered crisis faced by New York City in 1947—a small but potentially devastating [outbreak of smallpox](#), which hadn't been seen in the city in years. Smallpox is probably the deadliest communicable disease that the World Health Organization officially declared eradicated. But that was in 1980. Thirty-three years before, it was found to have been brought to New York by a man traveling from Mexico City. Thanks to the actions of Health Commissioner Israel Weinstein, New York City managed to vaccinate 6,350,000 people in its five boroughs in less than a month. Only one person died from the disease other than Patient Zero, and there were only 12 infections.

This is an amazing story for public health: vaccinations were administered to millions in public and private hospitals, clinics, and police stations. But the truly amazing aspect to consider in 2021 is public engagement. In 1947, individuals of all ethnicities willingly waited for hours in the rain to get their smallpox vaccination. President Truman when he was in town rolled up his sleeve to get vaccinated. My father, a pediatrician practicing in the Bronx, was delighted to have the honor of vaccinating the boxing champ and American hero Joe Louis.

The smallpox experience reminds us that a willing public plus fair and equal access is essential to ending pandemics. The Department of Health will continue to identify and address obstacles so that BIPOC individuals can conveniently get vaccinated locally in spaces that have proven to be trustworthy with safe and supportive providers. We will continue to partner with health providers in BIPOC communities that are not only proficient in vaccination, but in the language and culture of these communities. We will ensure the availability of vaccine education materials produced in multiple languages, so individuals can make informed decisions.

Variant Investigations at Wadsworth. Since the first cases of COVID-19 were identified in New York State in March 2020, the Department's public health laboratory has been using samples from COVID-19 patients to carry out whole genome sequencing of the SARS-CoV-2 virus. This sequencing has enabled us to track the genetic diversity of SARS-CoV-2 in place and time. While sequencing more than 6100 samples, we have watched a variant of SARS-CoV-2 with a D614G substitution in the gene encoding the spike protein replace the initial SARS-CoV-2 reference strain first isolated in the Wuhan market in China. Several other variants

with other mutations have also been identified, although these do not appear to confer significant advantages or disadvantages to the virus's transmissibility or its ability to cause severe illness.

As new variants emerged globally, Wadsworth ramped up sequencing efforts at the end of December and now sequences approximately 90 virus samples per day. All of these have various mutations in that same spike protein:

- The B.1.1.7 variant, commonly referred to as the “UK variant,” has a 35% to 75% increase in transmissibility over the predominant strain currently circulating. As of this writing, there have been at least 170 detections of this variant in New York.

The B.1.351 variant, commonly referred to as the “South African variant,” has a 150% increase in transmissibility, and existing vaccines may not provide as much protection against it. There is increasing concern about infections with this strain, even if the individual had been infected with a different strain previously. As of this writing, there have been at least 2 detections of this variant in New York.

- The P.1 variant, commonly referred to as the “Brazilian variant,” is the one we know the least about, but preliminary data suggests an increase in transmissibility. There have been no findings of P.1 in New York as of this writing, but it has been found in other states.
- The B.1.526 variant has recently become prevalent in New York State, particularly in the New York City metropolitan area. This variant has mutations in the spike protein that contribute to immune escape from monoclonal antibodies as well as neutralizing antibodies in COVID-19 convalescent plasma.

The presence of these variants—with their concomitant mutations to the spike protein that allows them to more easily enter cells and replicate—can potentially lead to higher viral loads, higher transmissibility rates, a greater number of cases, and a larger burden on our state's healthcare system.

The work at Wadsworth continues to be performed with the cooperation of a network of commercial and hospital labs that have agreed to send samples to Wadsworth for this increasingly vital task. Several commercial and academic labs in the state are also contributing to this effort by sharing sequencing data. New York State is continually working to be able to identify new and/or emerging variants of the SARS-CoV-2 virus.

Every month—as New York State moves more and more vials into wider, more robust distribution chains—we move closer to the world of “normal” that all of us so desperately miss. New York State providers continue to do fantastic work reassuring patients about the safety of COVID vaccines and affirming their efficacy. Thank you for helping us stay strong and focused as we close in on offering New Yorkers the best protection from this challenging disease.

Sincerely,



Howard A. Zucker, M.D., J.D.
Commissioner of Health