

# Preparing for New York State's Flu Season During a Pandemic





### Introduction

Last year's 2019–20 seasonal flu infected <u>more New Yorkers</u> than ever previously recorded by the State (see **Figure 1**). Controlling these record numbers was already a priority for the upcoming 2020–21 flu season. But with the ongoing global coronavirus pandemic, reducing rates of flu infection will be more important—and potentially more challenging—than ever.

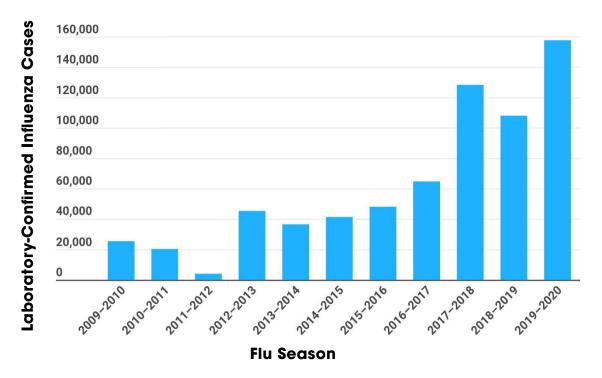
COVID-19 has infected <u>more than 445,000</u> New Yorkers as of mid-September 2020, with communities of color experiencing a <u>disproportionate</u> toll. Once the epicenter of the pandemic in the United States, new cases in New York State have <u>plateaued</u> in recent months at a lower rate, as the pandemic generates <u>other hotspots</u> across the country. However, the potential for a second outbreak in the fall could cause additional loss of life in New York State, as well as further widen long-standing racial and ethnic disparities in health outcomes.

Early and aggressive preparation for the flu season is vital to limit preventable deaths and additional strain on the health care system. To this end, New York State's Governor has asked all county health departments to prepare a combined flu and COVID testing and vaccination plan for the upcoming flu season. The pandemic will bring new challenges and require new approaches for achieving lifesaving levels of flu vaccination rates. Key actions include: prioritizing communities at higher risk for the flu; increasing vaccination access; tailoring public health messaging to resonate with New York's diverse population; and countering rising vaccine misinformation triggered by the development of a coronavirus vaccine.



### Introduction (continued)

Figure 1. Cases of the Flu in New York State, 2009-19



Note: These data are an undercount of all influenza illnesses and depend on influenza testing and reporting practices. Influenza cases include Influenza Type A, Type B, and unspecified.

Source: New York State Department of Health. "Influenza Laboratory-Confirmed Cases By County: Beginning 2009–10 Season." Accessed September 2020. <a href="https://health.data.ny.gov/Health/Influenza-Laboratory-Confirmed-Cases-By-County-Beg/ir8b-6ah6/">https://health.data.ny.gov/Health/Influenza-Laboratory-Confirmed-Cases-By-County-Beg/ir8b-6ah6/</a>



### **Key Takeaways**

- The upcoming flu season has the potential to increase the difficulty of fighting the COVID-19 pandemic for many reasons, including:
  - Large influxes of flu patients will make it more challenging for providers to discern between flu and COVID-19 and potentially increase already significant demand for COVID-19 testing.
  - Managing testing and triaging flu patients will potentially deter providers from safely triaging and treating COVID-19 patients.
  - Patients with flu will be at greater risk for poor COVID-19 health outcomes if they become infected.
- The flu season could further worsen racial and ethnic health disparities—magnified by the COVID-19 pandemic—as people of color in New York State have historically had lower flu vaccination rates
- Even if New York State's flu cases do not surpass last year's record-setting number, a more typical infection rate could still overstress the health care system amidst the pandemic.
- For these reasons, it will be more important than ever for New York to take early and
  aggressive actions to encourage uptake of the flu vaccine this year, including: increased
  number of vaccination locations, greater outreach that is reflective of New York State's
  diverse population, and efforts to counter rising misinformation regarding vaccines.



### Why Does the Upcoming Flu Season Matter More than Ever?

### POTENTIAL SECOND WAVE OF COVID-19 INFECTIONS COULD COINCIDE WITH THE FLU SEASON

Flu season begins in October and peaks between December and February. Experts are warning that a second wave of COVID-19 infections may hit this fall, concurring with the start of the flu season. There are early reports that social distancing rules are helping to reduce the spread of the flu in other parts of the world. However, a poorly controlled flu season stands to exacerbate the severity of the COVID-19 pandemic. That risk will be greater as New York and other states look to reopen schools and all businesses in the fall. Flu prevention will be key to avoid burdening an already stressed health system with additional patients. Lowering rates of flu infection will also help preserve COVID-19 testing supplies and reduce potentially dangerous co-infections of flu and COVID-19.

#### FLU INFECTION WILL COMPLICATE COVID-19 TESTING

Influenza viruses and the novel coronavirus both affect the respiratory tract, and therefore can present similar symptoms in patients. Definitively differentiating whether a patient has the flu or COVID-19 requires laboratory testing. Although New York State is meeting its goal for daily COVID-19 testing, many testing sites are failing to return results quickly enough to be meaningful. The flu season will likely increase demand for COVID-19 testing, as patients with flu symptoms seek additional testing to rule out a COVID-19 diagnosis and further add to backlogs.

#### **HEALTH CARE SYSTEMS ARE ALREADY STRESSED BECAUSE OF COVID-19**

More than 22,000 patients were hospitalized in New York State with laboratory-confirmed flu during the 2019–20 flu season. If similar numbers of New Yorkers are infected with the flu this year, this will further strain health systems already stressed by the COVID-19 pandemic and divert resources from coronavirus testing and treatment. This is particularly problematic if rapid testing for COVID-19 is not in place by the peak of the upcoming flu season to distinguish patients with the flu from those with coronavirus. The inability to quickly differentiate between flu and COVID-19 patients could require both sets of patients to be subject to strict and resource-intensive quarantine protocols.

#### **CO-INFECTION MAY INCREASE COVID-19 SEVERITY**

Although the number of cases to date are limited, <u>co-infection</u> between the flu and COVID-19 is possible. An infection of two respiratory pathogens could impact the severity of COVID-19 cases, potentially affecting the duration or outcomes of the diseases. More research is needed to determine the risks of co-infection.



### Will the Upcoming Flu Season Widen Health Disparities?

Generations of systemic inequities have created serious health disparities in New York State by race, ethnicity, and immigration status. The COVID-19 pandemic has widened these disparities by disproportionately sickening and killing people of color. A poorly controlled flu season stands to widen these disparities if it disproportionately impacts the communities most harmed by COVID-19.

### THE PANDEMIC HAS HAD A DISPROPORTIONATE IMPACT ON MINORITY POPULATIONS

Nationwide, Black and Hispanic residents have been more <u>likely both to contract the coronavirus and to die from it</u>. Black and Hispanic residents have died at <u>more than twice</u> the rate of white residents in New York City and at <u>more than three-and-a-half times</u> the rate of white residents in New York State (in this report, non-Hispanic Black residents are referred to as Black and non-Hispanic white residents are referred to as white).

Communities of color and low-income communities are more likely to have pre-existing health conditions that increase the likelihood of contracting COVID-19 as well as its lethality. Black and Hispanic workers are also well represented in the frontline workforce (including industrial truck operators, meatpackers, nursing assistants, and correctional officers)—increasing their exposure to the virus. Unequal distribution of health resources, lack of educational and job opportunities, limited access to healthy foods, and exposure to environmental hazards further contribute to the disproportionate toll coronavirus has taken on these groups. Emerging evidence is also pointing to more limited availability of COVID-19 testing sites in communities with a greater proportion of people of color, relative to whiter neighborhoods.

Immigrant communities have also experienced <u>high rates</u> of COVID-19 infection. Undocumented immigrants have reported <u>avoiding seeking health care</u> out of fear of retaliation because of their immigration status, potentially increasing the danger of a coronavirus infection.

### FLU VACCINATION RATES ARE HISTORICALLY LOWER AMONG COMMUNITIES OF COLOR

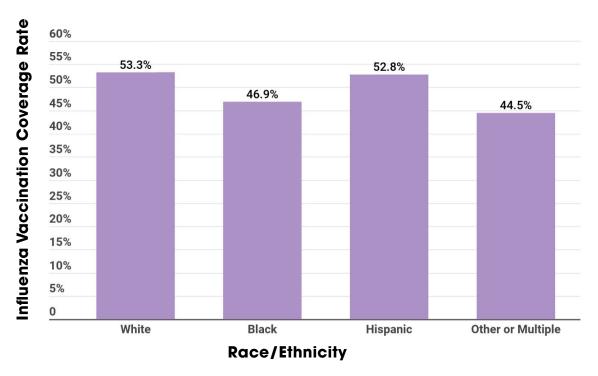
It is likely that a severe flu season would widen the health disparities already magnified by the COVID-19 pandemic, because rates of flu vaccination and flu deaths themselves disproportionately affect communities of color. Nationwide, a significantly lower proportion of Black, Hispanic, Asian, and American Indian/Alaska Native adults receive a flu vaccine than white residents. This increases the risk of flu infection among minority populations. In New York State, Black New Yorkers have the lowest rates of flu vaccination than all other races



### Will the Upcoming Flu Season Widen Health Disparities? (continued)

and ethnicities with available data, with a vaccination rate approximately 12% lower than white residents in 2018 (see Figure 2). In New York City, Black residents had vaccination rates nearly 16% lower than white residents in 2017. Experts believe that this disparity in vaccination uptake is explained by issues related to health care access (e.g., opportunity costs of forgoing work, out-of-pocket costs, insufficient number of vaccination locations, and language barriers), ineffective public health messaging, and historic distrust of vaccination programs because of systemic racism. Black residents nationwide also die at higher rates than white residents from the flu. Lower flu vaccination rates and higher case fatality rates among communities of color mean that a severe flu season could further widen health disparities in New York State.

Figure 2. Differences in Vaccination Rates by Race and Ethnicity in New York State, 2018–19 Flu Season



Note: White is white only, non-Hispanic. Black is Black only, non-Hispanic. Other or multiple races is non-Hispanic. Source: Centers for Disease Control and Prevention. "2018–19 Influenza Season Vaccination Coverage Dashboard." FluVaxView. Accessed September 2020. https://www.cdc.gov/flu/fluvaxview/reportshtml/reportil/index.html



# What New Barriers to Flu Vaccination Will the Pandemic Create for New Yorkers?

Even before the coronavirus pandemic, significant barriers prevented New Yorkers from receiving the flu shot. During the 2018–19 flu season, <u>less than half</u> of adults in New York State received the flu vaccine. That is well below the 70% uptake goal sought out by the federal government under the <u>Healthy People 2020 Initiative</u>. Even for high-risk populations, such as the elderly, New York's vaccine uptake is generally <u>lower</u> than stated uptake goals.

In the midst of a pandemic, additional challenges may drive the rate of vaccination even lower, including loss of employer-sponsored insurance. Losing insurance can cut off access to usual places of medical care that typically supply the flu shot. In addition, there are concerns of the increases in demand and logistical challenges as a result of social distancing requirements.

With the uncertainties around the pandemic, it is not clear what the ramifications would be if flu vaccination rates end up being lower than normal. On one hand, preventive measures for COVID-19—including social distancing, the wearing of masks, and frequent hand-washing—can help limit the spread of the flu. On the other hand, even a small increase in flu infections might be enough to overwhelm hospital capacity if COVID-19 cases rise this fall.

#### LOSS OF JOB-BASED INSURANCE

The COVID-19 pandemic has triggered widespread job loss across New York State. An August 2020 U.S. Census survey estimates that more than 730,000 New Yorkers were laid off as a result of the pandemic. As of early September 2020, more than 1.5 million New Yorkers have filed a claim for Pandemic Unemployment Assistance since March 2020. Although some of these newly unemployed residents have obtained health insurance coverage through Medicaid, COBRA, or the State marketplace, many are newly uninsured.

Lack of insurance can pose a significant barrier to obtaining a flu shot. Although free or low-cost flu shots are available at some local health departments and federally qualified community health centers, all residents may not be able to easily access these sites because of <u>limited hours</u>, lack of transportation, or inconvenient locations. The out-of-pocket cost of a flu shot for an adult at a major nationwide pharmacy costs <u>\$50</u>, which may pose a financial barrier for many uninsured New Yorkers.

#### **INCREASED DEMAND**

Major vaccine manufacturers have announced they plan to <u>increase production</u> of flu vaccines to prepare for an anticipated spike in demand during the upcoming flu season. <u>Two vaccine manufacturers</u> have reported that they have received an increase in pre-orders from retailers and health care systems for the vaccine. The Centers for Disease Control and Prevention



# What New Barriers to Flu Vaccination Will the Pandemic Create for New Yorkers? (continued)

(CDC), which typically purchases 500,000 flu vaccines for uninsured adults, ordered an additional 9.3 million adult doses this year.

Although difficult to predict, it is possible that demand for the flu vaccine will increase in New York State, as residents seek to stay healthy in the face of a potential second wave of the coronavirus. In Australia, for example, where flu season typically begins in April, a pharmacy chain reported that it had administered more flu vaccines by April 7, 2020, than it had for the entire flu season the previous year. If demand in New York State similarly increases, this could pose barriers to access, including shortages at particular retailers or crowding at vaccination sites. The 2013 flu season, uncomplicated by a global pandemic, triggered vaccine shortages across the State.

#### **SOCIAL DISTANCING REQUIREMENTS**

Following social distancing and infection control guidelines while administering vaccines will be an added challenge for the upcoming flu season. Administration sites must consider how to best follow CDC health guidelines and ensure the safety of every patient. Residents in New York City who have historically relied on public transit may be unable or unwilling to access administration sites because of a fear of COVID-19 transmission on buses and trains. For example, subway ridership in New York City remains about 70% lower in mid-September 2020 than it was during pre-pandemic periods, despite the reopening of many places of business. It is unclear whether residents will be willing to take modes of public transportation to access a flu vaccine, as well as what the consequences might be of increasing public transportation ridership.



### What Can Be Done to Mitigate Barriers?

#### INCREASE THE NUMBER OF VACCINATION LOCATIONS

Increasing the number of free and low-cost flu vaccination locations will help expand vaccine access and reduce crowding at administration sites. Off-site clinics, express-lane services, and drive-through visits similar to COVID-19 testing sites can all be used to increase access to vaccination sites. Other strategies are to bundle vaccines with non-vaccination medical appointments and provide vaccinations at nonclinical sites such as grocery stores, schools and universities, houses of worship, businesses, and social service locations. The New York City Department of Health and Mental Hygiene has already conducted outreach to hundreds of independent pharmacies in the outer boroughs to increase flu vaccine access in the neighborhoods most heavily hit by COVID-19.

#### **ENSURE EQUITABLE VACCINE DISTRIBUTION**

It is important to also compensate for the uneven distribution of medical providers across the State and potential increases in demand for the flu shot to ensure that medically underserved areas receive an adequate supply of flu vaccines. Some states, such as <u>Florida</u>, have used standing orders to authorize non-physician personnel to provide flu vaccines, expanding access to areas of the state that may have fewer physicians. Similarly, dentists have been used to increase vaccine access in Oregon.

Beyond vaccine doses themselves, medical supplies, such as personal protective equipment, will also need to be equitably distributed across the State so that vaccines can be administered effectively and safely. At risk is the repetition of the <u>inequitable distribution of medical supplies</u> in New York City at the height of the COVID-19 pandemic, when public hospitals struggled to acquire the supplies that better-resourced network hospitals could access. Federal and State relief for hospital systems should also compensate for differing shares of Medicaid patients and overall <u>financial reserves</u> among hospitals to ensure that relief is equitable.

#### DISSEMINATE INFORMATION ON VACCINATION LOCATIONS

Flu vaccine information should convey not only the importance of getting vaccinated but also how a patient can most quickly and conveniently get a flu shot in their area. Digital platforms, such as <a href="NYC Health Map">NYC Health Map</a> and <a href="VaccineFinder.org">VaccineFinder.org</a>, help users find low-cost and free flu vaccine locations in their neighborhoods. New Yorkers should also be encouraged to <a href="Vaccinate early">vaccinate early</a> to avoid large crowds before the height of the flu season.



### What Can Be Done to Mitigate Barriers? (continued)

Traditional methods of sharing information on vaccination locations (e.g., signage in public transit, billboards, pamphlets) are likely to be less effective for the upcoming flu season, as fewer people are spending time in the public places where these materials are typically posted. As a result, public health departments should invest in digital methods of communication to ensure that vaccination location information reaches all communities. Public service announcements on TV and radio; notifications on popular websites and applications (e.g., Google, Facebook, YouTube); and texting campaigns can spread the message to communities, even when staying at home. Nondigital methods, such as mailers and flyers in essential businesses, should complement these efforts.

To help reach minority populations, publicity campaigns should be available in multiple languages, be written in plain language, and feel culturally relevant. Community-specific information, like the fact that receiving a flu vaccination will not impact a person's immigration status, should be included when appropriate. Networks of community-based organizations and community health workers can also be used to connect with people historically not reached by publicity campaigns.



## How Will Misinformation Related to COVID-19 Make Flu Vaccine Communication More Difficult?

Despite the critical role science has played in understanding COVID-19, the pandemic has fanned the flames of an existing social movement of anti-science in the United States. This movement ranges from skepticism of public health information to outright denial of scientific fact and flouting of public health ordinances. Science itself is increasingly becoming a partisan issue, and attitudes toward public health measures, such as social distancing, mask wearing, and school reopenings, are becoming cornerstones of political identities. As social distancing and state shutdowns have increased the way people connect digitally, the anti-science movement has spread quickly online.

While pharmaceutical companies worldwide work to swiftly develop a vaccine for the coronavirus, the anti-science movement is generating distrust of the safety of the future coronavirus vaccine. An August 2020 poll found that 35% of Americans would not get an FDA-approved coronavirus vaccine if it were available to them right now. There is also a new group of prior immunization supporters who are becoming vaccine hesitant because of distrust of the current federal administration's ability to manage the COVID-19 pandemic and concerns over an aggressive vaccine development timeline.

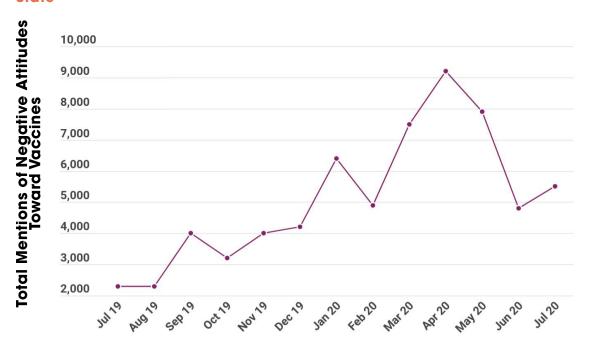
Besides jeopardizing the effectiveness of an eventual coronavirus immunization program, this surge of vaccine distrust is dangerous for the upcoming flu season. Anti-coronavirus vaccine information online has the potential to generate distrust of other vaccines, including for the flu. Already, the United States struggles with meeting flu vaccination goals despite strong evidence for flu vaccines' continued <u>safety record</u> and ability to prevent influenza and influenza-related <u>outcomes</u> in both <u>general</u> and <u>higher-risk</u> adult populations. In New York State alone, online mentions of negative attitudes toward vaccines were nearly 2.4 times higher in July 2020 than in July 2019. These mentions spiked precipitously during the initial outbreak of COVID-19 in the State from February to April 2020 (see **Figure 3**).

Relatedly, The National Academies of Sciences, Engineering, and Medicine released for public comment in September 2020 a <u>discussion draft</u> of a preliminary framework to assist policymakers in planning for equitable allocation of a COVID-19 vaccine. NYSHealth provided <u>comments</u> supporting the Academies' framework, including the mitigation of health inequities, as well as offering recommendations for countering vaccine misinformation and disinformation.



# How Will Misinformation Related to COVID-19 Make Flu Vaccine Communication More Difficult? (continued)

Figure 3. Online Mentions of Negative Attitudes Toward Vaccines in New York State



Note: The Public Good Projects uses a software platform that collects all publicly available media data across multiple media channels, including social and digital media, YouTube, Vimeo, online forums, online Q&A websites, and review sites. Because some social media companies place restrictions on the data third-parties can access from their sites, these data are likely an undercount of the true total mentions.

Source: Project VCTR. "New York State Dashboard." The Public Good Projects. Accessed September 2020.



# What Can Be Done to Fight Vaccine Misinformation and Disinformation?

<u>False information</u> related to vaccinations that circulates online often takes the form of misinformation (drawing conclusions from incorrect underlying facts) and disinformation (the deliberate spreading of incorrect information).

Vaccine misinformation can be mitigated when it is countered with accurate information. This can be accomplished when reputable organizations publish clear, consistent, and personally relevant messaging distributed through multiple channels. Messaging should also make clear that the flu vaccine does not protect against the coronavirus. Trusted messengers are vital for countering vaccine disinformation. Physicians, community leaders, politicians, and even celebrities all have the power to correct vaccine misinformation and shape public opinion.

Combatting vaccine disinformation requires its own set of strategies. Advocates argue that direct intervention by social media and technology companies is needed to combat disinformation. In March 2019, Facebook began demoting groups and pages that spread incorrect information about vaccines and excluding them from users' search recommendations and predictions. Facebook has also started displaying messages to users who interact with vaccine disinformation, directing them to the World Health Organization's website. Different social media platforms require unique solutions. For example, experts believe Facebook should prioritize setting standards for group administrators, whereas Twitter should target bots, which are autonomous programs that can spread spam or a virus over a network such as the internet.

Other innovative organizations are stepping up to combat the surge of vaccine disinformation. The Public Good Projects, a public health nonprofit, tracks communications spread by antivaccine organizations and bots through a media surveillance system called <u>Project VCTR</u>. This information can better equip public health officials, health care systems, and health care providers to counter vaccine disinformation.



# What Innovative Flu Vaccine Programs Have Other States Implemented that New York Should Consider?

New York State has an impressive track record in deploying effective immunization campaigns. For example, as part of New York City's mass prophylaxis plan, the Department of Health and Mental Hygiene maintains a network of Point of Dispensing (POD) emergency medicine distribution sites designed to distribute free medication, vaccination, and other medical supplies during a public health emergency. During the H1N1 pandemic in fall 2009, New York City operationalized POD sites across the 5 boroughs and vaccinated nearly 50,000 New Yorkers. Operationalizing the POD network could be an effective strategy to prevent flu infections during a potential resurgence of COVID-19 this fall.

In addition to its own history of immunization campaigns, New York can also look to innovative flu vaccination programs in other states. In August 2020, Massachusetts <u>announced</u> that all children six months of age or older attending childcare, K–12, and colleges and universities will be required to receive the flu shot by December 31st. California's public university system also <u>announced</u> that, as a result of the coronavirus pandemic, it will require all students and employees to get the flu vaccine by November 1, 2020. In New York State, only New York City children in <u>childcare and pre-K</u> are required to receive the flu vaccine, a policy that began prior to the pandemic.

In Hawaii, state education and health agencies collaborate to provide pop-up vaccination clinics in schools. For most children, cost is not a major barrier to flu vaccination, as all Medicaid-eligible, uninsured, and underinsured children can receive free flu vaccinations through the federal <u>Vaccines for Children</u> program. However, issues of convenience can pose a significant barrier, and school-based vaccination clinics help parents overcome these challenges. The program, <u>"Stop Flu at School"</u> has been in existence for nearly a decade.

In May 2019, <u>Oregon</u> passed the first law in the country permitting dentists to administer vaccinations to patients, including young children. The Oregon Health and Science University School of Dentistry developed dental student training on vaccine science, administration, policies, and procedures, which was approved by the Oregon Board of Dentistry for all dentists in the state.

A county health department in Florida used standing orders to dramatically increase childhood vaccination rates. <u>Standing orders</u> authorize health care personnel, such as nurses and pharmacists, to administer vaccinations according to a protocol approved by an authorized medical practitioner. This allows patients to be vaccinated without the examination or direct order of the attending provider at the time of immunization, greatly



# What Innovative Flu Vaccine Programs Have Other States Implemented that New York Should Consider? (continued)

expanding the capacity of a health center to administer vaccinations. In Florida, the Duval County Department of Health <u>instituted a standing order</u> at local clinics for staff to administer vaccines, which resulted in a significant increase in childhood vaccination rates.

In many states, including <u>New Jersey</u>, <u>Delaware</u>, <u>Kentucky</u>, and <u>Louisiana</u>, hospitals and county health departments have experimented with providing drive-through flu vaccination. The programs are popular not only for their convenience and speed but also because they increase access to flu vaccination for residents with limited mobility. This could be particularly helpful in upstate regions of New York State, which tend to be more rural and have less convenient access to public transportation.



### **Conclusion**

The coronavirus pandemic has resulted in a devastating loss of life in New York State, as well as magnified existing health disparities caused by systemic inequity. Aggressively preparing for the upcoming flu season could help the State effectively mitigate the harm of a potential second wave of COVID-19. New York State has engaged in some strategies for years such as producing effective messaging materials. Other strategies, such as creating socially distanced immunization sites, will have to be newly developed. Key strategies include: prioritizing communities at higher risk for the flu; increasing vaccination access; tailoring public health messaging to resonate with New York State's diverse population; and countering rising vaccine misinformation triggered by the development of the coronavirus vaccine. Together, these strategies have the potential to prevent additional loss of life and the widening of health disparities this coming flu season.



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