Vax Matters



February 26, 2021



New Jersey Marks COVID-19 Pandemic Milestone; 1.8M Vaccines Bring Hope

It has been one year since the first New Jersey resident tested positive for COVID-19, and while we are still on our journey, there is a hopeful light at the end of this once-in-a-lifetime tunnel.

The state was hard hit very early in the pandemic, but no one would have been able to envision the unprecedented toll the virus would have in the months ahead.

Thousands of lives have been lost -20,000+ grand-parents, parents, sons, daughters, friends and community members. Hundreds of thousands of cases. Profound impacts on how we mourn, how we go to work, to school or go about our daily lives; how we mark life's milestones or socialize; how we even walk down the street.

"COVID-19 has confronted all of us with the challenge of a lifetime and has impacted every aspect of our lives," said New Jersey Department of Health (NJDOH) Commissioner Judith Persichilli. "We are forever changed as individuals and



Vaccinations continued this week at the First Baptist Church of Lincoln Gardens in Somerset as part of the state's community-based vaccination partnership. As of Friday, 2,429 First Baptist community members have been vaccinated.

as a state but there is no doubt of our strength, courage and resilience as we continue to move forward."

Combating the virus

From the beginning, our dedicated healthcare workers in hospitals, local health departments, long-term care facilities and community health centers, along with first responders have been true healthcare heroes. Other essential workers also have been on the frontlines and also deserve our gratitude and thanks.

As a state, we have responded to every challenge – scouring the market for personal protective and other much-needed equipment; putting in place stringent safeguards to protect New Jersey residents, particularly our most vulnerable communities; issuing a call for retired health workers to join our efforts; turning hospital cafeterias into bed space and standing up field medical stations; and setting up testing sites throughout New Jersey.

Throughout the pandemic, NJDOH's work on the COVID-19 response and vaccination planning has been done with an equity lens. As one example, we have stepped up efforts to increase vaccination

among communities of color through our community-based vaccination partnership with underserved communities.

Thanks to the hard work of our residents, we saw infection rates drop by the end of April and into May, and through the state's continued diligent efforts, disease rates remained low throughout the summer.

A second surge in the fall and early winter then brought even more hospitalizations and deaths. However, this time we were better prepared and had learned much to be better able to care for COVID-19 patients. While the holidays brought additional cases, finally, we are seeing a steady drop in 2021.

Looking ahead

Through it all, we continued to learn more about the science of the virus – how it is spread, how to better protect ourselves, and novel treatments to help treat patients and reduce the risk of death.

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Vaccination Progress

- 1.8M+ total vaccine doses administered
- 1.2M+ first doses administered
- 636,000+ people fully vaccinated



COVID-19 One Year Later: What Have We Learned

By Dr. Eddy Bresnitz

The SARS CoV-2 virus, the cause of COVID-19 disease, arrived in the U.S. in January 2020, with the first reported case in New Jersey on March 4. Within a very short time, we have learned much about the virus: how it is transmitted, the range of disease, who is most impacted, how to treat it and how to prevent it.

The public has become familiar with terms well known to public health care professionals such as quarantine, isolation, incubation period, social distancing, contact tracing, masking, asymptomatic transmission, community protection, Emergency Use Authorization (EUA), variants, monoclonal antibodies, spike protein and more.

Initially, public health experts did not emphasize the importance of wearing face masks as a preventive measure.

With additional laboratory, environmental, epidemiologic and clinical analyses, it was determined that droplets and sometimes airborne (floating) virus created by singing, especially in indoor spaces, were an important factor in transmitting virus.

It also became clear that virus could be easily transmitted even from those who had no symptoms. Since droplet and airborne viruses put people at risk of infection, and since the virus could be spread from those with no symptoms, many jurisdictions, including New Jersey, began to recommend or mandate the wearing of masks in public settings.

The most significant scientific progress, other than treatments such as remdesivir and monoclonal antibodies, has been the unprecedented rapid development of several novel vaccines.

The first two made available to the U.S. public use a technology called messenger RNA (mRNA) that produces the SARS CoV-2 spike protein which stimulates immunity and prevents about 95% of COVID-19 disease, especially severe disease. Several additional vaccines using different technologies are currently in the pipeline for use in the U.S.

While we have learned much in the space of a year, we have much more to learn.

What percentage of the population needs to be vaccinated to control the spread of the virus? Will the vaccines prevent transmission of the virus in asymptomatic, infected individuals? What is the durability of the different vaccines? Will we need a booster dose and how often? Will the vaccines be effective against viral variants?

Until then, we will have to do everything we can do to prevent disease: wear a mask, avoid crowds, maintain good hygiene, physically distance from others and get vaccinated when it's our turn.

Eddy Bresnitz, MD, MSCE, is Medical Advisor to NJDOH on the COVID-19 response and Chair of the COVID-19 Professional Advisory Committee.

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Vaccines are bringing hope to residents from mega-sites to community-based sites to pop-up sites with interfaith and community partners in underserved communities, and a call center to help residents (1-855-568-0545).

Our job continues. We remember and honor those we have lost and continue our efforts to protect the health of all New Jerseyans.

Vaccine supply continues to increase, enabling growing numbers of our residents to be vaccinated. The proposed new budget supports the State's aggressive and equity-oriented pandemic response and vaccine distribution programs.

With our continued efforts to mask, physically distance, get tested if we feel ill AND get vaccinated, we will continue to drive down the spread of the virus in New Jersey.

Partner Hotlines Help Answer Public's Questions

More than a month before the first New Jersey resident tested positive for COVID-19, NJDOH set up a hotline to answer the public's questions about the emerging virus.

The hotline, 1-800-222-1222, is operated 24/7 by trained health care professionals from the New Jersey Poison Information and Education System (NJPIES), also known as the New Jersey Poison Center. NJPIES is a division of the Department of Emergency Medicine at Rutgers New Jersey Medical School. Since it opened on January 28, 2020, NJPIES has responded to more than 90,000 calls. At the beginning, the calls were about symptoms of COVID-19, questions about testing and whether people who feel sick should go to the emergency department. Since vaccination began on December 15, the calls have transitioned to questions about the safety of the vaccine, side effects and whether people with certain medical conditions should get the vaccine.

NJ 211, a statewide information and referral service, also began a COVID-19 hotline on March 18, 2020. Since then, NJ 211 has handled 80,022 contacts and currently has 139,000 text subscribers enrolled in NJCOVID. During the first six weeks of operation, 1.4 million messages were sent to 121,000 subscribers.

The Johnson & Johnson Vaccine: A Q&A with NJDOH's Dr. Eddy Bresnitz

A single-dose COVID-19 vaccine from Johnson & Johnson was reviewed Friday by the Vaccines and Related Biological Products Advisory Committee, a subcommittee of the U.S. Food and Drug Administration (FDA). If approved, the FDA would then consider Emergency Use Authorization, which would make it the third vaccine authorized in the U.S. Dr. Eddy Bresnitz shares his thoughts.

How is the Johnson & Johnson vaccine different from the Pfizer and Moderna vaccines authorized so far?

The J&J vaccine is a single-dose vaccine, while the Moderna and Pfizer vaccines are two-dose. All the vaccines are given intramuscularly. Unlike the Pfizer and Moderna vaccines, which require a freezer for storage, the Johnson & Johnson vaccine requires basic refrigeration.

The proposed use for the Johnson & Johnson vaccine under the Emergency Use Authorization (EUA) would be for active immunization in individuals 18 years of age and older (like Moderna), whereas the Pfizer vaccine is authorized for age 16 and older.

The FDA released data on the Johnson & Johnson vaccine earlier this week. What have we learned?

The clinical trial was conducted in over 40,000 adults in the U.S., South Africa and six countries in Latin America, including Brazil. In the U.S. at 28 days post vaccination, vaccine efficacy was about 75% for preventing moderate-severe disease, 86% for preventing severe disease and 100% for preventing hospitalization.

In general, vaccine efficacy was similar in sub-groups including by age, race, ethnicity and underlying co-morbidities. A limited interim analysis in a small sub-group suggests potential efficacy against disease transmission.

All the vaccines have similar favorable safety profiles with local injection site reactions (pain, swelling, redness) and systemic reactions (headache, muscle aches, fever, fatigue) with most reactions being mild-moderate in nature resolving in one to two days. People who received the J&J vaccines tended to have significantly far fewer of these reactions with a single dose. There were no documented anaphylactic reactions and no specific safety concerns in subgroup analyses.

What's next for the Johnson & Johnson vaccine?

There are several data gaps that will require longer term follow-up, additional data collection and analyses. Many of these are also true for the Pfizer and Moderna vaccines. These include:

- Duration of protection
- Vaccine effectiveness in:
 - certain populations at higher risk of severe COVID-19
 - individuals previously infected with SARS-CoV-2
 - pediatric populations
 - pregnant women
- Vaccine effectiveness against:
 - asymptomatic infection
 - long-term effects of COVID-19 disease
 - mortality
 - transmission of SARS-CoV-2
- Eventual filing for full licensure
- Completion of a two-dose study

If the vaccine receives Emergency Use Authorization, how soon could we see it deployed in New Jersey?

We should start receiving vaccine within the first week of March.

Resources

Vaccines and Related Biological Products Advisory Committee Meeting Briefing Document

COVID-19 Information Hub Vaccine Page

<u>Community-Based Vaccination</u> Sites

NJDOH COVID-19 Vaccination Page

New Jersey COVID-19 Vaccination Plan