

NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE Dave A. Chokshi, MD, MSc Commissioner

October 4, 2021

Dear Colleague,

The <u>Centers for Disease Control and Prevention</u> (CDC) strongly recommends COVID-19 vaccination for all people age 12 years and older, regardless of whether they previously had COVID-19. Several studies indicate that being fully vaccinated provides stronger and longer lasting protection than natural immunity alone, particularly against reinfection with SARS-CoV-2 variants. The CDC also recommends against using SARS-CoV-2 antibody testing to guide decisions around vaccination. This letter summarizes key evidence supporting these recommendations.

Reinfection and vaccination: People who have recovered from COVID-19 may have some protection against <u>SARS-CoV-2 reinfection</u> and <u>severe COVID-19 disease</u>, particularly against the strain to which they were initially exposed. However, an individual's immune response can vary depending on <u>how</u> <u>severe their illness was</u>, time since infection, and their <u>age</u> and comorbidities. COVID-19 vaccines provide additional protection to previously infected people. In an observational <u>study</u> of people with prior SARS-CoV-2 infection, unvaccinated people were more than twice as likely than fully vaccinated people to get reinfected. Laboratory <u>studies</u> suggest that antibodies produced following vaccination with Pfizer-BioNTech or Moderna mRNA vaccines target a <u>broader range</u> and provide <u>greater neutralization</u> (inactivation) of variants than do antibodies from prior infection.

Antibody testing: The CDC, U.S. Food and Drug Administration and Infectious Diseases Society of America recommend against using antibody testing to assess whether a patient should receive COVID-19 vaccination or to assess for immunity following vaccination. Antibody testing can provide evidence of recent or past COVID-19 infection or vaccination. However, <u>available antibody tests</u> vary widely in <u>performance</u> and none are approved to assess whether a person is <u>protected</u> against SARS-CoV-2. Antibody levels may not correlate with clinical protection, and antibody tests do not detect SARS-CoV-2specific T cells that also play an important role in immunity. Furthermore, some antibody tests do not detect antibodies induced by vaccination. Neutralization tests used as surrogates of protection in scientific studies are not available for commercial use.

Counseling patients: We urge you to counsel patients that COVID-19 vaccines are safe and effective, and to recommend vaccination for everyone age 12 years and older, including people with prior SARS-CoV-2 infection. Encourage patients with current infection to get vaccinated when their isolation period ends. Explain that vaccination boosts the immune response in previously infected people and may provide more durable protection against COVID-19 and greater immunity against variants than natural immunity alone. **Counsel patients of all ages that getting vaccinated is far safer than getting COVID-19**.

Sincerely,

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Jane R. Zucker, MD, MSc Assistant Commissioner Bureau of Immunization