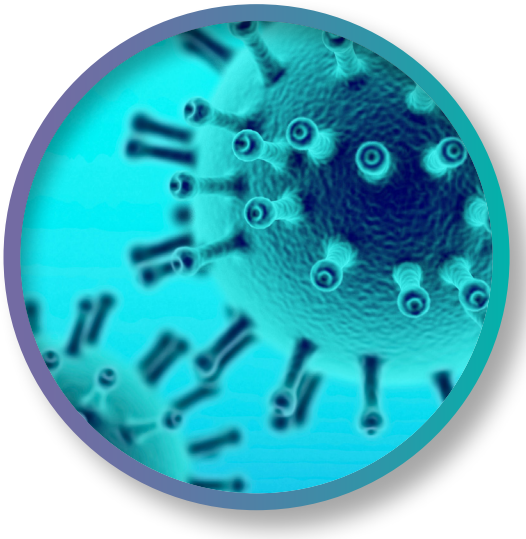
Encouraging Uptake of COVID-19 Vaccines in Fall 2023

The Issue

The COVID-19 public health emergency may have ended, but SARS-CoV-2 is still very much with us. Maintaining immunity in the general population and protecting vulnerable populations from serious COVID-19 disease depends on the ongoing uptake of reformulated vaccines that better target today's circulating variants. Pharmacists contribute to successful COVID-19 vaccine uptake by helping patients make the shift from what *has* been needed until now to what *will* be needed going forward.

Sound Bites



- COVID-19 gives most people mild symptoms, but SARS-CoV-2 infection still can cause severe illness, hospitalization, and death. People with weak immune systems and chronic diseases are especially vulnerable. Long COVID is a concern for anyone who becomes infected.
- The COVID-19 vaccines available until now—the original forms and the bivalent booster forms—targeted earlier strains of SARS-CoV-2 and are less effective against today's circulating variants.
- The 2023–2024 COVID-19 vaccine targets the most recent SARS-CoV-2 variants. Getting the recommended dose(s) of this vaccine gives you the best protection against serious COVID-19 disease and Long COVID.
- Most people still will be able to get COVID-19 vaccines at no cost.

What We Know

The COVID-19 public health emergency may have ended, but the pandemic is still very much with us. SARS-CoV-2 will be part of our lives for the foreseeable future.

How and to what extent the virus continues to affect us depends on several factors. One important factor is the emergence of new variants. Another important factor is widespread uptake of COVID-19 vaccines that target the currently circulating variants. The importance of vaccination may be heightened by the COVID-19 cases in your community.

In the most pessimistic projections from the COVID-19 Scenario Modeling Hub, there would be 839,000 hospitalizations and 87,000 deaths from COVID-19 in the United States between September 2023 and April 2024.[1] This means we can expect COVID-19 to remain among the leading causes of death in our country. The pessimistic scenario assumes a high (50%) rate of immune escape of circulating SARS-CoV-2 variants (i.e., antibodies are not able to neutralize the virus and therefore the virus "escapes") and minimal uptake of a vaccine that targets the circulating variants.[1]

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In the most optimistic scenario—with a low (20%) rate of immune escape and reasonable vaccine uptake in all age groups—the projections decrease by about half to 484,000 hospitalizations and 45,000 deaths in the next 8 months (September 2023 to April 2024).[1]

Pharmacists contribute to successful COVID-19 vaccine uptake by shifting mindsets—their patients' and their own—from what *has* been needed until now to what *will* be needed going forward.

Switch to Annual Vaccine Reformulation

Beginning in fall 2023, COVID-19 vaccines may be treated more like influenza vaccines. The U.S. Food and Drug Administration (FDA) expects to address SARS-CoV-2 evolution at least annually (during the spring of each year). The FDA will convene its Vaccines and Related Biological Products Advisory Committee in June each year regarding strain selection for fall vaccination.[3]

For fall 2023, COVID-19 vaccines from Moderna, Pfizer-BioNTech, and Novavax are reformulated as monovalent vaccines targeting the Omicron XBB.1.5 variant.[4] The XBB sublineages accounted for more than 95% of the circulating virus variants in the United States as of early June 2023.[4] The XBB family of variants includes variants known variously as EG.5, Eris, and others. The reformulated 2023 vaccine is expected to provide good cross-protection even against emerging subvariants, including EG.5.[5]

Switch to Simpler Vaccination Recommendations

The FDA and Centers for Disease Control and Prevention (CDC) seek to simplify COVID-19 vaccine recommendations as much as possible. For most Americans, the likely recommendation will be for a single dose of the current year's vaccine formulation, without regard to any prior COVID-19 vaccination.[6] This recommendation would supersede the original approach (and associated terminology) of a primary vaccine series with booster doses.

That primary-plus-booster approach is no longer needed because the vast majority of Americans 16 years of age and older—96% in one study—have antibodies from either previous SARS-CoV-2 infection or vaccination (or both).[7] In essence, every vaccine dose going forward is a "booster" dose, even in unvaccinated people.

The biggest question during this fall's transition away from the original primary series plus booster(s) approach may be *when* to get the 2023–2024 COVID-19 vaccine. One question is about the interval between vaccine doses. Until now, the CDC has recommended allowing 4 or more months between doses of updated COVID-19 vaccine (e.g., between doses of bivalent vaccine).[8] Additionally, because reinfection is less likely in the weeks to months following SARS-CoV-2 infection, people have typically been delaying vaccination by 3 months from8:

- The date when COVID-19 symptoms started.
- The date of the first positive COVID-19 test (for asymptomatic infections).

Another question is about the timing of vaccine doses. According to COVID-19 Scenario Modeling Hub projections, the main period of COVID-19 activity over the next 2 years will occur in late fall and early winter, with peaks projected between November and mid-January.[1] It takes about 2 weeks after vaccination to reach full protection; protection is highest during the first 3 months after vaccination.[5,9] Early to mid-October would be optimal timing for predicted virus activity. However, some people (especially people in higher-risk groups) may seek to time the vaccine dose before a specific event (e.g., large family gathering, overseas travel).

Transition to the Traditional Health Care Market

The 2023–2024 COVID-19 vaccines are the first to be sold directly from manufacturers to clinical practices (referred to as "the traditional health care market") rather than purchased and distributed by the U.S. Government. Most Americans will get vaccinated at no cost through their health insurance (e.g., private insurance, Medicare Part B or Part D, Medicaid). Uninsured children will receive COVID-19 vaccines through the existing Vaccines for Children (VFC) program.[10] Uninsured adults will receive COVID-19 vaccines through a new temporary program called the "Bridge Access Program for COVID-19 Vaccines and Treatments."[10] The Bridge Access Program is still being formed, and many details are not yet available.

Making the Case for the 2023–2024 COVID-19 Vaccines

Although most people with COVID-19 have mild symptoms, certain vulnerable populations (e.g., older adults, people who are immunocompromised, people with underlying health conditions) remain at higher risk of serious disease, including severe illness, hospitalization, and death. Anyone who is infected with SARS-CoV-2 can experience Long COVID, a condition where symptoms that surface after recovering from COVID-19 linger for weeks, months, or even years.

Staying up to date with recommended COVID-19 vaccinations is the best protection against serious COVID-19 disease. People who received any previous vaccine doses need to know that SARS-CoV-2 continues to evolve, and the protection afforded by previous COVID-19 vaccine doses likely has waned. Data from the CDC-funded VISION Network showed that for the bivalent booster, vaccine effectiveness against COVID-19–associated hospitalization decreased from 62% for doses administered within the previous 2 months to 24% for doses administered 4 to 6 months previously.[11] Vaccine effectiveness against critical illness was more sustained but still decreased from 69% to 50% by 4 to 6 months after vaccination.[11]

Research also suggests that people who are not vaccinated against COVID-19 have a higher risk of developing Long COVID after SARS-CoV-2 infection or reinfection compared with people who have been vaccinated.[12]

Recommendations for COVID-19 vaccinations will continue to evolve. Pharmacists should visit the CDC website regularly to check current recommendations and clinical considerations for various age groups and at-risk populations, as well as track the COVID-19 case reports for their community.

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