Modern vaccine boosters: What doctors must know

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What’s the news: Millions more people in the U.S. will soon be able to receive a booster dose of the COVID-19 vaccines from Moderna and Johnson & Johnson (J&J). This comes almost a month after a booster dose of Pfizer-BioNTech’s COVID-19 vaccine received emergency use authorization (EUA) from the Food and Drug Administration (FDA) and was recommended by Centers for Disease Control and Prevention (CDC).

The Moderna COVID-19 vaccine booster—which is half the dose of the original shot—was cleared for people 65 or older. Adults at risk of severe illness or complications because of an underlying medical condition or at risk of exposure because of occupational or institutional setting may also get the booster from Moderna.

The booster can be administered at least six months after the second shot of the two-dose Moderna COVID-19 vaccine series. Reported adverse events demonstrate that there is a very small but increased risk of inflammatory heart conditions such as myocarditis for men under 40 and particularly for those 18–24 years old. These rare cases of myocarditis have also been reported in people who received the Pfizer vaccine. Learn what to tell patients about myocarditis after COVID-19 vaccination.

A booster shot is also available for adults who got the Johnson & Johnson vaccine at least two months ago. The one-dose vaccine with a booster dose of the J&J vaccine provides 94% protection against symptomatic infection. Reported adverse events demonstrate that there is an increased risk of a rare type of blood clot, especially for women 18–49 years old with the J&J vaccine. Discover what physicians should know about the J&J vaccine and brain blood clots.

FDA’s authorization and CDC’s recommendations allow for heterologous boosting—aka “mixing and matching”—with a single dose of any of the authorized COVID-19 vaccine boosters. Physicians should keep in mind clinical considerations, including rare adverse events, and perform an individual benefit-risk assessment to inform patients about which booster vaccine to use. Heterologous dosing may only
be considered for the booster dose, though.

COVID-19 vaccine boosters may also be given with other vaccines without regard to timing. If multiple vaccines are administered at a single visit, administer each injection in a different injection site. Find out what to know about coadministration of flu and COVID-19 vaccines.

To get a booster of one of the three available COVID-19 vaccines, it will be provided based on patient self-assessment. That means that if a person says they fall into one of the eligibility categories and they have had their second dose of Moderna or Pfizer after six months—or after two months for J&J—they will be eligible for a booster dose.

Find the latest information on COVID-19 booster doses from the CDC.

Why it’s important: The emergence of the COVID-19 Delta variant as the dominant strain of SARS-CoV-2 in the United States triggered a decline in vaccine effectiveness, particularly among seniors. But the good news is that data also shows that receiving a booster dose of Moderna, J&J or Pfizer COVID-19 vaccines increases immune response.

This news comes as the U.S. death toll from the COVID-19 pandemic exceeds 730,000. To date, nearly 220 million Americans have received at least one dose of a COVID-19 vaccine while almost 190 million—more than half—are fully vaccinated.

“We believe the FDA’s authorization and the CDC’s recommendations in support of booster doses, including the flexibility to mix-and-match products, will help provide continued protection against COVID-19 for those who need it most,” said AMA Immediate Past President Susan R. Bailey, MD. “The balance of benefits and risks for booster doses varies, and we encourage those who have questions to reach out to their physician or vaccine provider.”

“The scientific evidence is clear that the vaccines against COVID-19 are safe and remain effective in preventing hospitalization and severe disease,” Dr. Bailey added. “We continue to strongly urge everyone who has not yet been vaccinated against COVID-19 and is eligible, including pregnant people, to get vaccinated as soon as possible to protect themselves and their loved ones. We also encourage the public to continue taking evidence-based public health measures, such as physical distancing and wearing face masks, to help protect those not yet eligible for vaccination.”

Learn more: The AMA has developed frequently-asked-questions documents on COVID-19 vaccination covering safety, allocation and distribution, administration and more. There are two FAQs, one designed to answer patients’ questions (PDF) and another to address physicians’ COVID-19 vaccine questions (PDF).
Dr. Bailey urged that anyone with questions about COVID-19 vaccines “speak with their physician and review trusted resources, including getvaccineanswers.org.”

The AMA recognizes the critical importance of scientific integrity, transparency and public trust as we fight to contain the global spread of COVID-19 and plan for the authorization, distribution and administration of COVID-19 vaccines. Stay up to date with the AMA on COVID-19 vaccine development.