



Addressing Concerns About Administering COVID-19 Vaccines With Other Vaccines

The Issue

As the number of Americans eligible for COVID-19 vaccine booster shots continues to increase, the likelihood of needing a COVID-19 vaccine dose around the same time as another vaccine (e.g., influenza vaccine, vaccines required for school entry) also is increasing. Some people may be concerned about the safety of vaccines administered simultaneously. Others may balk at the prospect of receiving “too many” vaccines. People also may have questions about the optimal timing of different vaccines.

Sound Bites

- > Simultaneous administration of vaccines—administering more than one vaccine on the same day, at different anatomic sites, and not combined in the same syringe—is safe and recommended as an immunization “best practice.”
- > COVID-19 vaccines may be administered without regard to the timing of most other vaccines.
- > If the urgency to become immune is not a consideration, it may be preferable for some people (particularly male adolescents and young adult men) to wait 4 weeks after vaccinations such as the monkeypox vaccine before receiving COVID-19 vaccination because of possible heightened risk for myocarditis and pericarditis. In the setting of an orthopoxvirus outbreak like monkeypox, no minimum interval is necessary.
- > The FDA says COVID-19 boosters can be given as soon as 2 months after a previous dose. However, some infectious disease experts recommend waiting 3 to 6 months after a previous COVID-19 vaccine dose or COVID-19 infection before getting a booster (or additional booster).
- > Getting immunity from a COVID-19 booster shot or seasonal influenza vaccine is more important than trying to time the spacing between vaccinations perfectly.

What We Know

As of September 2022, everyone 12 years of age and older in the United States became eligible for the updated bivalent COVID-19 booster vaccine. (Children 5 to 11 years of age remained eligible for the original COVID-19 booster vaccine.) The updated boosters were authorized around the time that many Americans would be thinking about an annual flu shot and school-aged children would be getting required vaccinations—including vaccine doses they may have missed during the pandemic.

The availability and need for multiple types of vaccination raise questions about the timing and safety of vaccine coadministration. Some people are inclined to “pick and choose” among needed vaccines. Others are dealing with “vaccine fatigue.”¹

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Fortunately, these questions have fairly straightforward answers. Simultaneous administration of vaccines—defined by the Centers for Disease Control and Administration (CDC) as administering more than one vaccine on the same clinic day, at different anatomic sites, and not combined in the same syringe—is both safe and recommended as an immunization “best practice.”² Administering multiple vaccines during a single visit increases the probability that a child, adolescent, or adult will develop immunity and be up to date on recommended immunization.

Simultaneous Administration of COVID-19 Vaccines With Other Vaccines

The CDC states that COVID-19 vaccines may be administered without regard to the timing of other vaccines.³ Orthopoxvirus vaccines, like the monkeypox vaccine, are an exception; (see additional considerations in the section below on COVID-19 Vaccine and Orthopoxvirus Vaccine).

Experimental evidence and extensive clinical experience with non-COVID-19 vaccines have shown generally similar immunogenicity and adverse event profiles when vaccines are administered simultaneously as when they are administered alone.² Studies that compared coadministration of COVID-19 and seasonal influenza vaccines with separate administration of these vaccines found similar levels of immunogenicity and similar or slightly higher reactogenicity; no specific safety concerns were identified.³

In accordance with general best practices, the CDC recommends routine administration of all age-appropriate doses of vaccines simultaneously for children, adolescents, and adults for whom no specific contraindications exist at the time of the health care visit.³ Each injection should be administered in a different site, such as a different limb or an injection site in the same limb, with injection sites separated by 1 inch or more if possible. Other reactogenic vaccines (e.g., meningococcal B [MenB]; tetanus, diphtheria, and acellular pertussis [Tdap]; recombinant zoster) should be administered in different limbs whenever possible.⁴ The anterolateral thigh may be used in adults as well as children.

Pharmacists who need additional information can access extensive [CDC guidance on Multiple Injections/Coadministration of Vaccines](#).

COVID-19 Vaccine and Orthopoxvirus Vaccine

In July 2022, the Director-General of the World Health Organization declared the escalating global monkeypox outbreak a Public Health Emergency of International Concern. In an orthopoxvirus outbreak like monkeypox—when orthopoxvirus vaccination is recommended for prophylaxis in high-risk individuals—the CDC states that no minimum interval between COVID-19 vaccination and orthopoxvirus vaccination is necessary.³

If urgency to induce immunity is not a consideration, it may be preferable for people (particularly male adolescents and young adult men) to wait 4 weeks after orthopoxvirus vaccination before receiving a COVID-19 vaccine because of the possible heightened risk for myocarditis and pericarditis.³

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Optimal Timing of COVID-19 Vaccine Boosters and Influenza Vaccine

The U.S. Food and Drug Administration authorized bivalent formulations of mRNA vaccines for use as a single booster dose at least 2 months following primary or booster vaccination among people 12 years and older. However, some infectious disease experts suggest that a longer interval—waiting 3 to 6 months after a previous COVID-19 vaccine dose or COVID-19 infection—might result in greater immunogenicity.

The CDC recommends September and October as good times to vaccinate most Americans against influenza, with everyone ideally vaccinated by the end of October.⁵ (Children needing two doses and pregnant women can be vaccinated before September.) For fall 2022, many people will ask whether to get a COVID-19 booster and flu shots separately or simultaneously.

Experts advise that getting the shots is more important than trying to time them. As long as minimum dosing intervals are not violated, it is better to administer multiple vaccines at a convenient time than to risk the patient not returning for recommended vaccination and remaining vulnerable.

This approach holds true for simultaneous administration of any vaccines with the COVID-19 vaccine. When patients seek a COVID-19 vaccine or booster, pharmacists can use the opportunity to alert patients to other recommended vaccines (e.g., zoster vaccine, human papillomavirus vaccine) and encourage administration during the same appointment. Conversely, pharmacists can recommend COVID-19 primary series or booster doses to patients or parents who visit the pharmacy for the administration of other vaccines for themselves or their children.

Pharmacists who need to discuss the administration of multiple vaccines with parents can find detailed information on the Immunize.org website and the resource [Too Many Vaccines? What You Should Know](#) developed by the Vaccine Education Center at Children's Hospital of Philadelphia.^{6,7}



References

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