Administering Injectable Influenza and COVID-19 Vaccines on the Same Day: Clinical Considerations

JoEllen Wolicki, BSN, RN
Nurse Educator
Immunization Services Division
Communication and Education Branch
Timing and Spacing of COVID-19 Vaccines

- During influenza season, CDC recognizes there may be compelling logistical advantages to offering patients COVID-19 and influenza vaccines on the same day, and providers can encourage patients to receive these on the same day.

- There are limited data on the safety of coadministration of COVID-19 vaccines with other vaccines, including flu vaccine. Based on experience with coadministration of inactivated vaccines in general, safety problems are not anticipated.

Vaccine Finder [www.vaccines.gov/search/](http://www.vaccines.gov/search/)
COVID-19 Vaccines and Other Vaccines

- COVID-19 vaccines and other vaccines may be coadministered with ALL other vaccines including:
  - Non-live vaccines
  - Live, attenuated vaccines

Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States
www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html#dosing-schedule
COVID-19 Vaccine and Passive Antibody Products

- COVID-19 vaccination should be temporarily deferred after receiving passive antibody products for SARS-CoV-2:
  - Post-exposure prophylaxis: Defer COVID-19 vaccination for 30 days
  - COVID-19 treatment: Defer COVID-19 vaccination for 90 days
- This guidance applies to COVID-19 vaccine ONLY.

Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States
www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html#dosing-schedule
Clinical Considerations: Coadministration and Other Routinely Vaccines

- Almost all vaccine can be administered at the same clinical visit.
- Some vaccines should NOT be coadministered on the same day, including:
  - PCV13 (Prevnar) and PPSV23 (Pneumovax)
  - PCV13 (Prevanr and MenACWY (Menactra))

*Epidemiology and Prevention of Vaccine-Preventable Diseases* [www.cdc.gov/vaccines/pubs/pinkbook/index.html](http://www.cdc.gov/vaccines/pubs/pinkbook/index.html)
Clinical Considerations

Best Practices

Clinical Resources
Best Practices: Preparation

- Prepare vaccines in a clean, designated medication area.
- Perform proper hand hygiene before vaccine preparation.
- Always check the expiration dates on the vaccine and diluent, if needed.
- Always check the BUD, if applicable, on the vaccine.
  - The BUD replaces the manufacturer’s expiration date.
  - DO NOT prepare/administer vaccine past the BUD.

CDC Epidemiology and Prevention of Vaccine Preventable Diseases, Vaccine Administration chapter
www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html
Prepare each injectable vaccine using a separate needle and syringe.
Best Practices: Preparing More Than One Vaccine

- Label each syringe with the:
  - Name and the dosage (amount) of the vaccine
  - Lot number
  - Initials of the preparer
  - Exact beyond-use time, if applicable
# Injectable Influenza and COVID-19 Vaccines: Route and Site

<table>
<thead>
<tr>
<th>Vaccines</th>
<th>Route</th>
<th>Recommended Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 Vaccine</td>
<td>Intramuscular (IM) injection</td>
<td>Deltoid muscle* in the upper arm</td>
</tr>
<tr>
<td>Non-live Influenza Vaccine–IIV4, aIIV, cclV4, HD-IIIV, RIV4</td>
<td>Intramuscular (IM) injection</td>
<td>Deltoid muscle* in the upper arm</td>
</tr>
</tbody>
</table>

*The vastus lateralis muscle in the anterolateral thigh may be used as an alternate site.*
EACH recommended site can be used for more than one injection. Separate injection sites by at least 1-inch apart, if possible.

CDC Epidemiology and Prevention of Vaccine Preventable Diseases, Vaccine Administration chapter
www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html
Administer vaccines that are most likely to cause injection site reactions in different limbs, if possible.

CDC Epidemiology and Prevention of Vaccine Preventable Diseases, Vaccine Administration chapter
www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html
COVID-19 Vaccine and Other Vaccines

- COVID-19 vaccine is associated with local reactions including:
  - Pain
  - Redness
  - Swelling

Vaccine Finder [www.vaccines.gov/search/](http://www.vaccines.gov/search/)
Pain and Vaccine Injections

- The order of vaccine injections matter.
- Some vaccines are painful when they are injected.
- Administer these vaccines last.

CDC Epidemiology and Prevention of Vaccine Preventable Diseases, Vaccine Administration chapter
www.cdc.gov/vaccines/pubs/pinkbook/vac-admin.html
Clinical Resources

- Multiple clinical education programs and materials are available free through the CDC website:
  - Vaccine administration
  - You Call the Shots self-study modules
  - COVID-19 vaccine materials
- Continuing education available

Coadministration and Other Routinely Recommended Vaccines

Table 1: Recommended Adult Immunization Schedule by Age Group, United States, 2021

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>19–29 years</th>
<th>30–64 years</th>
<th>≥65 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza inactivated (FluVax)</td>
<td>Not Required</td>
<td>Not Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Influenza live, attenuated (Flublok)</td>
<td>Not Required</td>
<td>Not Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Tetanus, diphtheria, pertussis (Tdap)</td>
<td>1 dose every 10 years</td>
<td>1 dose every 10 years</td>
<td>1 dose every 10 years</td>
</tr>
<tr>
<td>Meningococcal (MenB)</td>
<td>Not Recommended</td>
<td>Not Recommended</td>
<td>Not Recommended</td>
</tr>
<tr>
<td>Pneumococcal conjugate (PCV13)</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
</tr>
<tr>
<td>Pneumococcal polysaccharide (PPSV23)</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
</tr>
<tr>
<td>Hepatitis A (HepA)</td>
<td>Not Recommended</td>
<td>Not Required</td>
<td>Not Recommended</td>
</tr>
<tr>
<td>Hepatitis B (HepB)</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
</tr>
<tr>
<td>Measles, mumps, rubella (MMR)</td>
<td>Not Recommended</td>
<td>Not Required</td>
<td>Not Recommended</td>
</tr>
<tr>
<td>Varicella (VAR)</td>
<td>Not Recommended</td>
<td>Not Required</td>
<td>Not Required</td>
</tr>
<tr>
<td>Zoster recombinant (ZDV)</td>
<td>Not Recommended</td>
<td>Not Required</td>
<td>Not Required</td>
</tr>
</tbody>
</table>

Table 2: Recommended Adult Immunization Schedule by Medical Condition and Other Indications, United States, 2021

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Vaccine</th>
<th>Pregnancy</th>
<th>Immune-compromising conditions (HVV)</th>
<th>HIV infection</th>
<th>AIDS</th>
<th>Hepatitis</th>
<th>Pregnancy</th>
<th>Measles</th>
<th>Varicella</th>
<th>Shingles</th>
<th>Other indications</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. or H. influenzae sero groups</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBV</td>
<td>Not Recommended</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tdap</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MMR</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>var</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tdap for Tdap each pregnancy</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 dose Tdap, then Td or Tdap booster every 10 years</td>
<td>Not Recommended</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 or 2 doses depending on indication</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 doses</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 doses at age ≥50 years</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 doses through age 26 years</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 or 3 doses through age 26 years depending on age at initial vaccination or condition</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 dose</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1, 2, or 3 doses depending on age and indication</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 doses depending on vaccine</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2, 3, or 4 doses depending on vaccine or condition</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≥66 years</td>
<td>Not Required</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td>1 dose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommended Adult Immunization Schedule for ages 19 years or older, United States, 2021: www.cdc.gov/vaccines/schedules/hcp/imz/adult.html
Administering More Than One Vaccine on the Same Day: Clinical Considerations: www.cdc.gov/vaccines/covid-19/training-education/webinars.html
Vaccine Administration Resources

CDC vaccine administration resource library
www.cdc.gov/vaccines/hcp/admin/resource-library.html
CDC COVID-19 Vaccines Resources
CDC Resources


- *You Call the Shots Vaccine Administration*: [www2.cdc.gov/vaccines/ed/vaxadmin/va/ce.asp](http://www2.cdc.gov/vaccines/ed/vaxadmin/va/ce.asp)

- CDC Vaccine Administration Resource Library: [www.cdc.gov/vaccines/hcp/admin/resource-library.html](http://www.cdc.gov/vaccines/hcp/admin/resource-library.html)

- CDC Injection Safety website: [www.cdc.gov/injectionsafety/providers.html](http://www.cdc.gov/injectionsafety/providers.html)