Immunization Coalition of Los Angeles County (ICLAC)
Fall Vaccine Forum

Vaccine Updates:
What’s New and Improved

10/18/2022

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Assistant Professor of Clinical Pharmacy, USC School of Pharmacy
President, California Pharmacists Association
Vice Chair, ICLAC Steering Committee
Disclosures

- Richard Dang
  - President, California Pharmacists Association
  - Vice Chair, Immunization Collation of Los Angeles County
  - Advisory Board, GSK
Objectives

1) In our summer forum we discussed, CDC ACIP’s updated immunization schedules and recommendations and focused on:
   1) Pneumococcal
   2) Hepatitis B
   3) Shingles

2) Today, we will discuss updates on:
   1) COVID19
   2) MPX
   3) PCV15
   4) Vaccines in the pipeline
### Recent FDA Vaccine Product Approvals

<table>
<thead>
<tr>
<th>Vaccine Description</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smallpox and Monkeypox (JYNNEOS)</td>
<td>6/2021</td>
</tr>
<tr>
<td>Pneumococcal (Vaxneuvance, PCV15)</td>
<td>7/2021</td>
</tr>
<tr>
<td>Tick-borne encephalitis (Ticovac)</td>
<td>8/2021</td>
</tr>
<tr>
<td>Pneumococcal (Prevnar 20, PCV20)</td>
<td>8/2021</td>
</tr>
<tr>
<td>Hepatitis B (Prehevbrio)</td>
<td>11/2021</td>
</tr>
<tr>
<td>COVID-19 (Comintarty, pfizer)</td>
<td>12/2021</td>
</tr>
<tr>
<td>COVID-19 (Spikevax, moderna)</td>
<td>1/2022</td>
</tr>
<tr>
<td>Measles, mumps, rubella (Priorix)</td>
<td>6/2022</td>
</tr>
<tr>
<td>COVID-19 (Novavax)-EUA</td>
<td>7/2022</td>
</tr>
<tr>
<td>COVID-19 bivalent-EUA</td>
<td>8/2022</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td></td>
</tr>
<tr>
<td>Dengue</td>
<td>12/2021</td>
</tr>
<tr>
<td>Zoster</td>
<td>1/2022</td>
</tr>
<tr>
<td>Ebola</td>
<td>2/2022</td>
</tr>
<tr>
<td>Hep B</td>
<td>4/2022</td>
</tr>
<tr>
<td>Rabies</td>
<td>5/2022</td>
</tr>
<tr>
<td>Orthopoxviruses</td>
<td>6/2022</td>
</tr>
<tr>
<td>Influenza</td>
<td>8/2022</td>
</tr>
<tr>
<td>Pneumococcal</td>
<td>9/2022</td>
</tr>
<tr>
<td>Cholera</td>
<td>9/2022</td>
</tr>
<tr>
<td>COVID-19</td>
<td>10/2022</td>
</tr>
</tbody>
</table>

### Recent ACIP Recommendation Updates

<table>
<thead>
<tr>
<th>Vaccine Description</th>
<th>Approval Date</th>
</tr>
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<tbody>
<tr>
<td>Dengue</td>
<td>12/2021</td>
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<tr>
<td>Zoster</td>
<td>1/2022</td>
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<tr>
<td>Ebola</td>
<td>2/2022</td>
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<td>COVID-19</td>
<td>10/2022</td>
</tr>
</tbody>
</table>

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http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm093833.htm  
https://www.cdc.gov/vaccines/hcp/acip-recs/index.html
COVID19
Summary of COVID-19 Preventative Agents & Treatments

COVID-19 Vaccines
- Monoclonal Antibodies for PreP
  - Evusheld (tixagevimab + cilgavimab, AZ)

None currently authorized for use in any US state or territory.

Oral Antivirals
- Paxlovid (nirmatrelvir + ritonavir, Pfizer)
- Lagevrio (molnupiravir, Merck) – Alternative

Monoclonal Antibodies
- Bebtelovimab (Lilly) – Alternative
- Veklury® (remdesivir, Gilead)

Hospital Admissions
- Hospitalized, no acute medical problems
- Hospitalized, not on oxygen
- Hospitalized, on oxygen
- Hospitalized, high flow oxygen/non-invasive ventilation
- Hospitalized, mechanical ventilation/ECMO

Please see NIH Current Inpatient Therapies (https://www.covid19treatmentguidelines.nih.gov/therapies/)

- There is currently ample supply of all authorized therapeutics – every eligible patient should have access to these medications

Therapeutic Management of Nonhospitalized Adults With COVID-19
Therapeutic Management of Hospitalized Adults With COVID-19
COVID19 Vaccines – Recent Updates

• Authorization of new, updated COVID19 boosters
  • Bivalent vaccines
    • Pfizer for 12+ years, Moderna for 18+ years (on Aug 31)
    • Pfizer for 5+ years, Moderna for 6+ years (on Oct 12)
  • Monovalent vaccines no longer used for boosters, only for primary series
  • Simplified booster recommendations
    • For all indicated age groups, 2 months after completion of primary series
• Incorporation of Evusheld™ for immunocompromised individuals
Immunization Coalition of Los Angeles County

U.S. COVID-19 Vaccine Administration by Vaccine Type

- Pfizer-BioNTech original: 372,455,530
- Pfizer-BioNTech updated booster: 9,523,294
- Moderna original: 235,757,021
- Moderna updated booster: 5,254,470
- J&J/Janssen: 18,916,447
- Novavax: 35,302
- Other: 690,663

Total Doses Administered

COVID-19 VACCINATIONS IN LA COUNTY

- Residents Vaccinated:
  - 8,291,470 (80.7%)

- Fully vaccinated: 7,504,720
- With 1+ additional dose**: 4,261,236

Residents 12+ Vaccinated with Bivalent Booster

- 472,360 (5.4%)
COVID-19 Vaccination Schedule Infographic for People who are NOT Moderately or Severely Immunocompromised

People ages 6 months through 4 years

- Moderna
  - Primary
  - In 4-8 weeks
  - OR

- Pfizer-BioNTech
  - Primary
  - In 3-8 weeks
  - In at least 8 weeks

People ages 5 through 11 years

- Moderna or Pfizer-BioNTech
  - Primary
  - In 3-8 weeks (Pfizer) or 4-8 weeks (Moderna)
  - In at least 2 months

People ages 12 years and older

- Moderna, Novavax, or Pfizer-BioNTech
  - Primary
  - In 3-8 weeks (Novavax, Pfizer) OR In 4-8 weeks (Moderna)
  - In at least 2 months

- Bivalent mRNA booster

People ages 18 years and older who previously received Janssen primary series dose

- Primary
  - In at least 2 months

- Bivalent mRNA booster

### Immunization Coalition of Los Angeles County

#### Currently Available Dose Presentations

<table>
<thead>
<tr>
<th>Dose Per Vial</th>
<th>Moderna COVID-19 Vaccine Primary Series (12 years of age and older)</th>
<th>Moderna COVID-19 Vaccine Primary Series* (6 through 11 years of age)</th>
<th>Moderna COVID-19 Vaccine Primary Series (6 months through 5 years of age)</th>
<th>Moderna COVID-19 Vaccine, Bivalent Booster Dose (6 years of age and older)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Series Doses only: maximum of 11 doses (range: 10-11 doses)</td>
<td>Primary Series Doses: 5 doses</td>
<td>Primary Series Doses: 10 doses</td>
<td>Bivalent Booster Dose for 12 years of age and older: 5 doses</td>
<td>Bivalent Booster Dose for 6 through 11 years of age: 10 doses</td>
</tr>
<tr>
<td>Dose Volume</td>
<td>Primary Series Dose: Each 0.5 mL</td>
<td>Primary Series Dose: Each 0.5 mL</td>
<td>Primary Series Dose: Each 0.25 mL</td>
<td>Bivalent Booster Doses 12 years of age and older: Each 0.5 mL 6 through 11 years of age: Each 0.25 mL</td>
</tr>
<tr>
<td>Vial Label</td>
<td>Blue border</td>
<td>Purple border</td>
<td>Magenta border</td>
<td>Gray border</td>
</tr>
<tr>
<td>Carton</td>
<td>NDC 80777-273-10</td>
<td>NDC 80777-275-05</td>
<td>NDC 80777-279-05</td>
<td>NDC 80777-282-05</td>
</tr>
</tbody>
</table>

Resources | Moderna COVID-19 Vaccine (EUA) (modernatx.com)
# Immunization Coalition of Los Angeles County

Verify the vials (including labels) prior to preparation and administration to help avoid dosing errors.

## Primary Series Only

<table>
<thead>
<tr>
<th>Age Group</th>
<th>12 years and older*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vial Cap Color</td>
<td>Gray</td>
</tr>
<tr>
<td>Dose</td>
<td>30 mcg</td>
</tr>
<tr>
<td>Dose Volume</td>
<td>0.5 mL</td>
</tr>
<tr>
<td>Amount of Diluent Needed per Vial</td>
<td>NO DILUTION</td>
</tr>
<tr>
<td>Doses per Vial</td>
<td>6 doses per vial</td>
</tr>
</tbody>
</table>

**Notes:**
- Vials with a white cap contain the Pfizer-BioNTech COVID-19 vaccine (mRNA), which is not dilutable.

## Booster Dose Only

<table>
<thead>
<tr>
<th>Age Group</th>
<th>12 years and older (See additional information in teal box to the right of table)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vial Cap Color</td>
<td>Gray</td>
</tr>
<tr>
<td>Dose</td>
<td>30 mcg</td>
</tr>
<tr>
<td>Dose Volume</td>
<td>0.3 mL</td>
</tr>
<tr>
<td>Amount of Diluent Needed per Vial</td>
<td>NO DILUTION</td>
</tr>
<tr>
<td>Doses per Vial</td>
<td>Multiple dose vials: 8 doses per vial</td>
</tr>
</tbody>
</table>

**Notes:**
- Vials with a white cap contain the Pfizer-BioNTech COVID-19 vaccine (Bivalent), which is not dilutable.

### Vial Cap Color

- **Primary Series Only**
  - 6 months through 4 years (See additional information in boxed maroon text to the right of table)
  - Vial Cap Color: Maroon
  - Dose: 3 mcg
  - Dose Volume: 0.2 mL
  - Amount of Diluent Needed per Vial: 2.2 mL
  - Doses per Vial: 10 doses per vial (after dilution)

- **Primary Series Only**
  - 5 through 11 years ("Age 5y to <12y" on vial label)
  - Vial Cap Color: Orange
  - Dose: 10 mcg
  - Dose Volume: 0.2 mL
  - Amount of Diluent Needed per Vial: 1.3 mL
  - Doses per Vial: 10 doses per vial (after dilution)

- **Booster Dose Only**
  - 5 through 11 years ("Age 5y to <12y" on vial label)
  - Vial Cap Color: Orange
  - Dose: 10 mcg
  - Dose Volume: 0.2 mL
  - Amount of Diluent Needed per Vial: 1.3 mL
  - Doses per Vial: 10 doses per vial (after dilution)
Coadministration?

• YES

• Coadministration of COVID-19 vaccines and other vaccines (i.e. influenza, etc) is allowed and recommended
  • Except special considerations for orthopoxvirus vaccine

• General best practice to receive all indicated, age-appropriate vaccines simultaneously (at the same visit)
COVID-19 Vaccination Schedule Infographic for People who are Moderately or Severely Immunocompromised

People ages 6 months through 4 years
- Moderna
  - Primary
    - In 4 weeks
- Pfizer-BioNTech
  - Primary
    - In 3 weeks
- OR-
  - Primary
    - In at least 4 weeks

People ages 5 through 11 years
- Moderna or Pfizer-BioNTech
  - Primary
    - In 3 weeks (Pfizer) or 4 weeks (Moderna)
- OR-
  - Primary
    - In at least 2 months

People ages 12 years and older
- Moderna or Pfizer-BioNTech
  - Primary
    - In 3 weeks (Pfizer) or 4 weeks (Moderna)
  - OR-
    - Primary
      - In at least 4 weeks

People ages 18 years and older who previously received Janssen primary series dose
- Novavax
  - Primary
    - In 3 weeks

Monoclonal antibodies (EVUSHELD™) for COVID-19 pre-exposure prophylaxis
People ages 12 years and older (must weigh at least 40kg)

Any dose (Primary or booster)
  - In at least 2 weeks

EVUSHELD™ dose every 6 months

No minimum interval from EVUSHELD™ to COVID-19 vaccine

Any subsequent COVID-19 vaccine dose

At least 2 weeks from COVID-19 vaccine to EVUSHELD™

*Administer an age-appropriate mRNA bivalent booster (i.e., Pfizer-BioNTech for people age 5 years and either Pfizer-BioNTech or Moderna for people ages 6 years and older). For people who previously received a monoclonal booster dose(s), the bivalent booster dose is administered at least 2 months after the last monoclonal booster dose.

†Janssen COVID-19 Vaccine should only be used in certain limited situations. See: https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us-appendix.html#appendix-a

Interim Clinical Considerations for Use of COVID-19 Vaccines | CDC
EVUSHELD™
(tixagevimab co-packaged with cilgavimab)

• EUA on December 2021
• Two long-acting monoclonal antibodies (COVID-19 therapeutic)
• For use as pre-exposure prophylaxis (PrEP) of COVID-19 in immunocompromised individuals
• For use in adults and pediatric populations
  • 12 years and above weighing at least 40kg

Monoclonal antibodies (EVUSHELD™) for COVID-19 pre-exposure prophylaxis

People ages 12 years and older (must weigh at least 40kg)
EVUSHELD STORAGE, DOSING & ADMINISTRATION GUIDE

EVUSHELD is a combination of 2 long-acting monoclonal antibodies (LAABs), tixagevimab and cilgavimab.

Each EVUSHELD carton contains two vials; one of each antibody. Each vial contains an overfill to allow the withdrawal of 150 mg (1.5 mL).

Initial Dosing

The initial dosage of EVUSHELD in adults and pediatric individuals (12 years of age and older weighing at least 40 kg) is 300 mg of tixagevimab and 300 mg of cilgavimab administered as two separate consecutive intramuscular (IM) injections.

Repeat Dosing

The repeat dosage of EVUSHELD in adults and pediatric individuals (12 years of age and older weighing at least 40 kg) is 300 mg of tixagevimab and 300 mg of cilgavimab administered every 6 months. Repeat dosing should be timed from the date of the most recent EVUSHELD dose.

Dosing for Individuals Who Initially Received 150 mg of Tixagevimab and 150 mg of Cilgavimab

Individuals who have already received the previously authorized initial dose (150 mg of tixagevimab and 150 mg of cilgavimab) should receive an additional EVUSHELD dose as soon as possible.

- If the patient received their initial dose ≤3 months ago, the patient should receive a dose of 150 mg of tixagevimab and 150 mg of cilgavimab, refer to Table 2.
- If the patient received their initial dose >3 months ago, the patient should receive a dose of 300 mg of tixagevimab and 300 mg of cilgavimab, refer to Table 1.

Table 1. Dosage of 300 mg of Tixagevimab and 300 mg of Cilgavimab

<table>
<thead>
<tr>
<th>Antibody dose</th>
<th>Number of vials needed</th>
<th>Volume to withdraw from vial(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>tixagevimab 300 mg</td>
<td>2 vials</td>
<td>3 mL</td>
</tr>
<tr>
<td>cilgavimab 300 mg</td>
<td>2 vials</td>
<td>3 mL</td>
</tr>
</tbody>
</table>

300 mg of tixagevimab and 300 mg of cilgavimab are to be administered as separate, consecutive intramuscular injections.

Table 2. Dosage of 150 mg of Tixagevimab and 150 mg of Cilgavimab

<table>
<thead>
<tr>
<th>Antibody dose</th>
<th>Number of vials needed</th>
<th>Volume to withdraw from vial</th>
</tr>
</thead>
<tbody>
<tr>
<td>tixagevimab 150 mg</td>
<td>1 vial</td>
<td>1.5 mL</td>
</tr>
<tr>
<td>cilgavimab 150 mg</td>
<td>1 vial</td>
<td>1.5 mL</td>
</tr>
</tbody>
</table>

150 mg of tixagevimab and 150 mg of cilgavimab are to be administered as separate, consecutive intramuscular injections.
Immunocompromised Conditions

- Medical conditions or treatments that may result in moderate to severe immune compromise and an inadequate immune response to COVID-19 vaccination include **but are not limited to**:
  - Active treatment for solid tumor and hematologic malignancies
  - Hematologic malignancies associated with poor responses to COVID-19 vaccines regardless of current treatment status (e.g., chronic lymphocytic leukemia, non-Hodgkin lymphoma, multiple myeloma, acute leukemia)
  - Receipt of solid-organ transplant or an islet transplant and taking immunosuppressive therapy
  - Receipt of chimeric antigen receptor (CAR)-T-cell or hematopoietic stem cell transplant (within 2 years of transplantation or taking immunosuppression therapy)
  - Moderate or severe primary immunodeficiency (e.g., common variable immunodeficiency disease, severe combined immunodeficiency, DiGeorge syndrome, Wiskott-Aldrich syndrome)
  - Advanced or untreated HIV infection (people with HIV and CD4 cell counts immunosuppressive drugs, cancer chemotherapeutic agents classified as severely immunosuppressive, and biologic agents that are immunosuppressive or immunomodulatory (e.g., B-cell depleting agents)

EVUSHELD Fact Sheet for Healthcare Providers: https://www.fda.gov/media/154701/download
Key Points

• **EVUSHELD™** may be less effective at preventing COVID-19 because it does not neutralize all circulating variants.

• However:
  • **EVUSHELD™** has neutralizing activity against the most prevalent current SARS-CoV-2 viral variant/subvariant (Omicron BA.5)
  • **EVUSHELD™** has a long half-life (85 days) and is intended to protect against both current and future variants, and it is unknown what variants will be circulating in the future.
  • **EVUSHELD™** is currently the only authorized or approved product in the U.S. for preexposure prophylaxis of COVID-19 for individuals who may not mount an adequate immune response to COVID-19 vaccines or for whom vaccination is not recommended.

• FDA continues to recommend **EVUSHELD™** as an appropriate COVID-19 prevention option, in combination with other preventative measures as appropriate (such as getting vaccinated and boosted)
MPX/Orthopoxvirus
hMPXV Cases in the U.S.
26,778 Cases in the U.S. | 5,135 Cases in CA (#1)

As of 10/11/22

Territories PR

2022 U.S. Map & Case Count | Monkeypox | Poxvirus | CDC
hMPXV Case Trends

Daily Monkeypox Cases Reported* and 7 Day Daily Average

Number of Cases


As of 10/5/22
hMPXV Vaccination Rates

906,325 Doses Administered\(^1\)
235,363 total doses have been administered to 157,853 persons in California\(^2\)
56,574 persons in Los Angeles County\(^2\)

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\(^1\)As of 10/11/22
\(^2\)As of 10/16/22
JYNNEOS

- Live vaccine produced from the strain Modified Vaccinia Ankara-Bavarian Nordic (MVABN), an attenuated, non-replicating orthopoxvirus
- Approved for smallpox and hMPXV in adults (18 years and over) [SC] (2019)
  - 85% effective against smallpox
  - Inferred effectiveness for hMPXV from animal studies
- Emergency authorization for hMPXV [ID] and under 18 years (2022)
  - Based on antibody studies; and dose-sparing sparing strategy and studies from other vaccines
JYNNEOS

• Approved or authorized for prevention of smallpox and hMPXV disease
• 2 doses at day 0 and day 28
  • 0.5 mL SC or 0.1 mL ID (forearm, deltoid, upper back)
• ADR: Primarily local site reactions
  • Higher rates of reaction for ID
• Use ID for most individuals except if history of keloids or under 18 years
Coadministration?

• JYNNEOS may be administered without regard to timing of other vaccines; includes simultaneous administration of JYNNEOS and other vaccines on the same day

• Additional considerations if administering a COVID-19 vaccine
  • Adolescent or young adult males, might consider waiting 4 weeks after orthopoxvirus vaccination (either JYNNEOS or ACAM2000) before receiving a Moderna, Novavax, or Pfizer-BioNTech COVID-19 vaccine, because of the observed risk for myocarditis and/or pericarditis
Pneumococcal
# Pneumococcal Vaccine Timing

**Age 65+ Years: All**

**Age 19-64 Years: Only if High-Risk[^]**

## A. Unknown or No Prior Doses of PCV13 or PPSV23

<table>
<thead>
<tr>
<th>Option A1</th>
<th>Option A2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PCV20</strong>&lt;br&gt;Prevnar20[^]*&lt;br&gt;(No PPSV23)</td>
<td><strong>PCV15</strong>&lt;br&gt;Vaxneuvance[^]<em>&lt;br&gt;≥1 year interval if: healthy 65+ or 19+ with other risks[^]</em>&lt;br&gt;Consider ≥8 week interval if: 19+ at highest-risk[^]*&lt;br&gt;<strong>PPSV23</strong>&lt;br&gt;Pneumovax[^] 23</td>
</tr>
</tbody>
</table>

## B. Previously Received PPSV23

| ≥1 year since PPSV23 | **PCV20**<br>Prevnar20[^]*<br>OR | **PCV15**<br>Vaxneuvance[^]* |

## C. Previously Received PCV13

| ≥1 year since PCV13 | **PPSV23**<br>Pneumovax[^] 23<br>OR | **PCV20**<br>Prevnar20[^]*<br>If PPSV23 unavailable |

## D. Previously Completed Series of PCV13 and PPSV23 in Any Order

No Additional Doses Needed

[^]: PCV13 = Pneumococcal Conjugate Vaccine
PPSV23 = Pneumococcal Polysaccharide Vaccine

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[https://eziz.org/assets/docs/IMM-1152.pdf](https://eziz.org/assets/docs/IMM-1152.pdf)
PCV20 in Children

- **PCV20 Licensure anticipated Q2 '23**
- **PCV15 Licensure June 2022**

Timeline:
- **February 2022**
  - Pediatric Pneumococcal disease epi
  - Phase 2/3 PCV15 studies in children
  - EtR (part 1)/GRADE
- **June 2022**
  - Updates on PCV15 use in children
  - Cost-effectiveness analysis
  - Updated EtR
  - Vote
- **October 2022**
  - Address questions related to PCV15 and PCV20 use in adults
Vaccines in the ACIP Pipeline
### HPV vaccines licensed in the United States

<table>
<thead>
<tr>
<th>Vaccine and brand name</th>
<th>Quadrivalent (4vHPV)</th>
<th>Bivalent (2vHPV)</th>
<th>9-valent (9vHPV)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gardasil</td>
<td>Cervarix</td>
<td>Gardasil 9</td>
</tr>
<tr>
<td>Types</td>
<td>16, 18, 6, 11</td>
<td>16, 18</td>
<td>16, 18, 6, 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>31, 33, 45, 52, 58</td>
</tr>
<tr>
<td>Adjuvant</td>
<td>225 µg AAHS (amorphous aluminium hydroxyphosphate sulfate)</td>
<td>AS04 (500 µg aluminium hydroxide, 50 µg 3-O-deacetylated diphosphoryl lipid A)</td>
<td>500 µg AAHS (amorphous aluminium hydroxyphosphate sulfate)</td>
</tr>
<tr>
<td>Year licensed</td>
<td>2006</td>
<td>2009</td>
<td>2014</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Merck &amp; Co.</td>
<td>GlaxoSmithKline</td>
<td>Merck &amp; Co.</td>
</tr>
</tbody>
</table>

- Before 2015, almost all HPV vaccine used in the United States was 4vHPV
- Since the end of 2016, only 9vHPV has been available in the United States

### HPV vaccination recommendations, United States

- **Recommendation for females**
  - Routine: 11 or 12 years
  - Catch-up: through 26 years
  - 3-dose schedule

- **Recommendation for males**
  - Routine: 11 or 12 years
  - Catch-up: through 21 years
  - 3-dose schedule

- **2-dose schedule**
  - If first dose age <15 years

- **Harmonization of catch-up**
  - through age 26 years
  - Shared clinical decision-making: 27–45 years

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NOW: Ongoing evaluation of a one-dose vaccine schedule

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ACIP June 22-23, 2022 Presentation Slides | Immunization Practices | CDC
Respiratory syncytial virus (RSV)

Adult RSV Vaccine Products Expected to be Reviewed by the WG

- **GSK**
  - Protein-based + adjuvant

- **Pfizer**
  - Protein-based

- **Janssen Pharmaceutical**
  - Adenovirus vector + soluble protein

- **Moderna**
  - mRNA

- **Bavarian Nordic**
  - Vaccinia vector
## Tentative ACIP timeline*

**Respiratory syncytial virus (RSV)**

<table>
<thead>
<tr>
<th></th>
<th>2022</th>
<th>2023</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>June</strong></td>
<td>Epidemiology and burden of RSV disease</td>
<td>ACIP votes on 1–2 vaccine products</td>
</tr>
<tr>
<td><strong>October</strong></td>
<td>1–2 manufacturer presentations</td>
<td>ACIP votes on 1–2 vaccine products</td>
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<tr>
<td><strong>February</strong></td>
<td>GRADE for 1–2 vaccine products</td>
<td>Cost effectiveness</td>
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<td>GRADE for 1–2 vaccine products</td>
<td>EtR for 1–2 vaccine products</td>
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<td>Cost effectiveness</td>
<td>Policy options for 1–2 products</td>
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<tr>
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<td>EtR for 1–2 vaccine products</td>
<td>Policy options for 1–2 products</td>
</tr>
</tbody>
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*Subject to change*
Future Discussions on ACIP Agenda

• October 19 Meeting
  • RSV
  • Pneumococcal
  • COVID-19
  • Chikungunya
  • Poliovirus
  • Meningococcal
  • Influenza
  • MPX
  • Dengue
QUESTIONS?

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