



# **Vaccination in the Time of COVID-19: Overcoming the Growing Threat of Vaccine-Preventable Diseases**

## **Part 2 - Vaccinating Patients in a Pharmacy Setting**



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# Faculty



**Gina D. Moore, PharmD, MBA**

Associate Professor, Associate Dean

Department of Clinical Pharmacy

University of Colorado Skaggs School of Pharmacy

and Pharmaceutical Sciences

Aurora, CO



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UAN: 0430-0000-22-143-L06-P

Credits: 1.0 hour (0.10 CEU)

Type of Activity: Knowledge



# Learning Objectives

At the conclusion of the activity, the learner will be better able to:

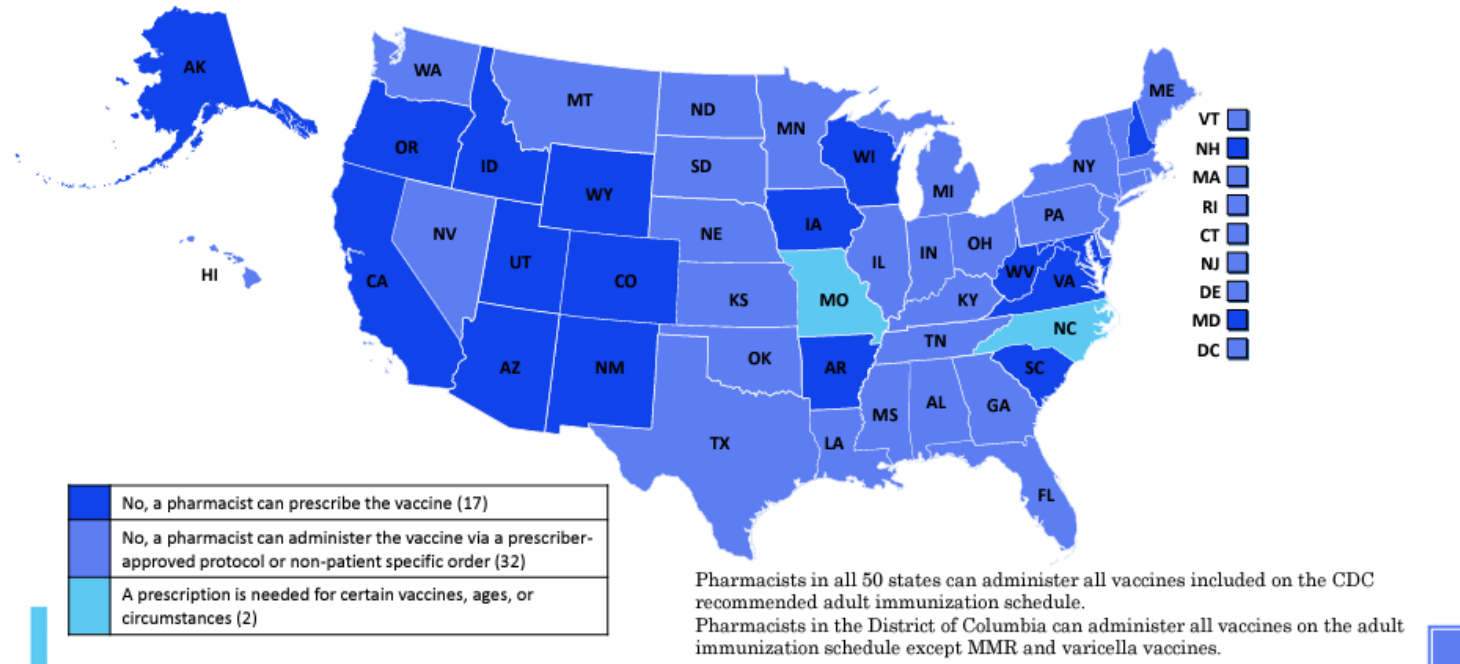
- **Describe** the currently available influenza vaccine products and which are appropriate for various patient populations
- **Discuss** vaccine recommendation changes for 2022
- **Explain** the feasibility of simultaneous administration of multiple vaccines for patients presenting for a COVID-19 vaccine

# Vaccines Commonly Given in a Pharmacy

- Influenza
- Varicella
- Herpes Zoster
- Pneumococcal
- Hepatitis A & B
- COVID-19

# Pharmacist Prescriptive Authority – Adult Vaccines

DOES A PATIENT NEED A PRESCRIPTION FOR A PHARMACIST TO ADMINISTER A VACCINE ON THE ADULT IMMUNIZATION SCHEDULE?



<https://naspa.us/resource/pharmacist-authority-to-immunize/> (accessed 10/18/22)

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# Pharmacist Vaccine Authority - Influenza

## Pharmacist Authority to Administer Influenza Vaccines

Pharmacists can administer influenza vaccines in all 50 states and the District of Columbia.

The chart to the right shows age limits for pharmacists to administer the vaccine without a patient-specific prescription.

- States with an asterisk can administer influenza vaccines to any age with a prescription.
- New Jersey can administer influenza vaccines to ages 7+ with a prescription.
- North Carolina can administer influenza vaccines to ages 6+ with a prescription.
- Hawaii and West Virginia can administer influenza vaccines to ages 11+ with a prescription.

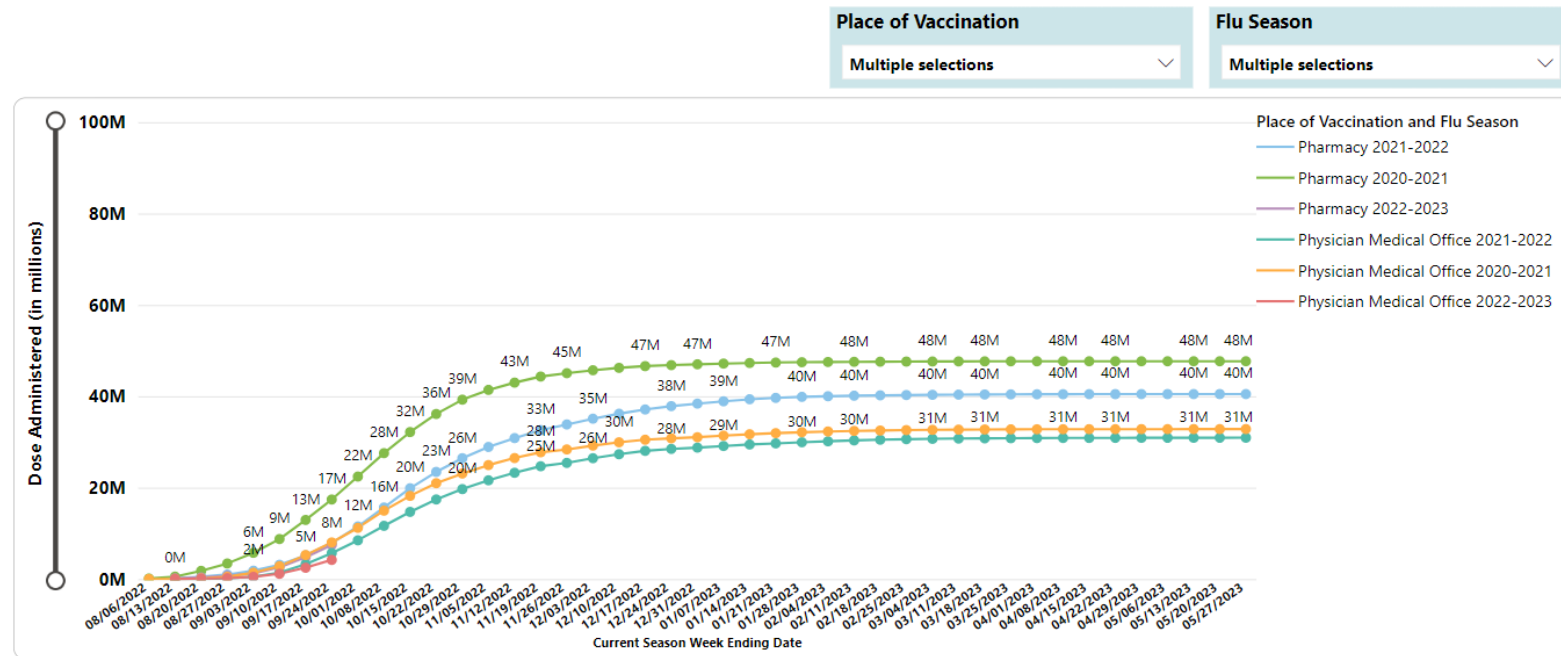
Age	States
Any age / 6 months+	AL, AK, CA, CO, DE, ID, IA, MI, MS, NE, NV, NH, NM, OK, SD, TN, UT, VT, VA, WA
2 years+	NY
3 years+	AZ, AR, MD, ND
6 years+	KS, MN, WI*
7 years+	FL, IL, LA*, ME, MO*, MT, OH, OR*, TX*, WY
9 years+	KY*, MA, PA, RI
10 years+	NJ <sup>^</sup> , NC <sup>^</sup>
11 years+	IN*
12 years+	CT, DC*, SC*
13 years+	GA*
18 years+	HI <sup>^</sup> , WV <sup>^</sup>

<https://naspa.us/resource/pharmacist-authority-to-immunize/> (accessed 10/18/22)

# Influenza Vaccinations in Pharmacies

**Figure 6. Weekly Cumulative Estimated Number of Influenza Vaccinations Administered in Pharmacies and Physician Medical Offices by Flu Season\*, Adults 18 years and older, United States**

**Data Source(s): IQVIA Pharmacy and Physician Medical Office Claims**  
**Pharmacy Data are current through week ending September 24, 2022**  
**Medical Office Data are current through week ending September 24, 2022**



<https://www.cdc.gov/flu/fluview/dashboard/vaccination-administered.html> (accessed 10/18/22)

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# Influenza Vaccine

## Current Recommendations

- Available vaccines (all quadrivalent)
  - Standard-dose flu vaccine (Afluria, Fluarix, FluLaval, Fluzone)
  - Cell-based influenza vaccine (Flucelvax)
  - Live attenuated influenza vaccine (FluMist; nasal spray)
- Unless  $\geq 65$  years of age, no specific vaccine is preferred

<https://www.cdc.gov/> (accessed 10/18/22)



# Influenza Vaccine Recommendations for Older Adults

- Should preferentially receive a higher dose or adjuvanted influenza vaccine
  - Fluzone High-Dose Quadrivalent vaccine
  - Flublok Quadrivalent recombinant flu vaccine
  - Fluad Quadrivalent adjuvanted flu vaccine
- If none of the above are available, provide any other age-appropriate influenza vaccine

<https://www.cdc.gov/> (accessed 10/18/22)

# Influenza Vaccine – Product considerations

Vaccine type	Brand names	Description	Age	Considerations
Standard inactivated quadrivalent flu vaccine	Afluria Fluarix FluLaval Fluzone	Virus grown in eggs	≥ 6 months	
Cell-based	Flucelvax	Virus grown in cell culture (egg-free)	≥ 6 months	May theoretically offer improved vaccine effectiveness; less egg-adapted changes
Live-attenuated flu nasal spray	FluMist	Attenuated (weakened) flu virus	2 – 49 years	Avoid in pregnancy, immunosuppression, children 2 – 17 with receiving ASA or salicylate meds, asplenia, cochlear implants, CSF leaks

<https://www.cdc.gov/flu> (accessed 10/30/22)

# Influenza Vaccine for Older Adults ( ≥ 65 years)

## Product considerations

Vaccine type	Brand names	Abbreviation	Description	Age
Adjuvanted	Fluad	aIIV4 (quadrivalent adjuvanted inactivated influenza vaccine)	MF59 adjuvant	≥ 65 years
High-dose	Fluzone High-Dose	HD-IIV4 (high dose inactivated influenza vaccine quadrivalent)	4x the antigen as Fluzone	≥ 65 years
Recombinant	Flublok	RIV4 (quadrivalent recombinant influenza vaccine)	Made without virus, but contains 3X the antigen	≥ 18 years, but one of 3 vaccines specifically recommended for ≥ 65 years)

<https://www.cdc.gov/flu/professionals/acip/summary/summary-recommendations.htm#65years> (accessed 10/30/22)

# Influenza Vaccine Products and doses



TABLE 1. Influenza vaccines — United States, 2022–23 influenza season\*

Trade name (manufacturer)	Presentations	Age indication	µg HA (IV4s and RIV4) or virus count (LAIV4) for each vaccine virus (per dose)	Route	Mercury (from thimerosal, if present), µg/0.5 mL
<b>IV4 (standard-dose, egg-based vaccines<sup>a</sup>)</b>					
Afluria Quadrivalent (Seqirus)	0.5-mL PFS <sup>b</sup>	≥3 yrs <sup>d</sup>	15 µg/0.5 mL	IM <sup>e</sup>	—**
	5.0-mL MDV <sup>b</sup>	≥6 mos <sup>f</sup> (needle and syringe) 18 through 64 yrs (jet injector)	7.5 µg/0.25 mL 15 µg/0.5 mL	IM <sup>e</sup>	24.5
Fluarix Quadrivalent (GlaxoSmithKline)	0.5-mL PFS	≥6 mos	15 µg/0.5 mL	IM <sup>e</sup>	—
FluLaval Quadrivalent (GlaxoSmithKline)	0.5-mL PFS	≥6 mos	15 µg/0.5 mL	IM <sup>e</sup>	—
Fluzone Quadrivalent (Sanofi Pasteur)	0.5-mL PFS <sup>b</sup>	≥6 mos <sup>g</sup>	15 µg/0.5 mL	IM <sup>e</sup>	—
	0.5-mL SDV <sup>h</sup>	≥6 mos <sup>g</sup>	15 µg/0.5 mL	IM <sup>e</sup>	—
	5.0-mL MDV <sup>b</sup>	≥6 mos <sup>g</sup>	7.5 µg/0.25 mL 15 µg/0.5 mL	IM <sup>e</sup>	25
<b>ccIV4 (standard-dose, cell culture-based vaccine)</b>					
Flucelvax Quadrivalent (Seqirus)	0.5-mL PFS	≥6 mos	15 µg/0.5 mL	IM <sup>e</sup>	—
	5.0-mL MDV	≥6 mos	15 µg/0.5 mL	IM <sup>e</sup>	25
<b>HD-IV4 (high-dose, egg-based vaccine<sup>a</sup>)</b>					
Fluzone High-Dose Quadrivalent (Sanofi Pasteur)	0.7-mL PFS	≥65 yrs	60 µg/0.7 mL	IM <sup>e</sup>	—
<b>aIV4 (standard-dose, egg-based vaccine<sup>a</sup> with MF59 adjuvant)</b>					
Fluad Quadrivalent (Seqirus)	0.5-mL PFS	≥65 yrs	15 µg/0.5 mL	IM <sup>e</sup>	—
<b>RIV4 (recombinant HA vaccine)</b>					
Flublok Quadrivalent (Sanofi Pasteur)	0.5-mL PFS	≥18 yrs	45 µg/0.5 mL	IM <sup>e</sup>	—
<b>LAIV4 (egg-based vaccine<sup>a</sup>)</b>					
FluMist Quadrivalent (AstraZeneca)	0.2-mL prefilled single-use intranasal sprayer	2 through 49 yrs	10 <sup>5.5–7.5</sup> fluorescent focus units/0.2 mL	NAS	—

<https://www.cdc.gov/mmwr/volumes/71> (accessed 10/18/22)

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# When should vaccinations be provided?

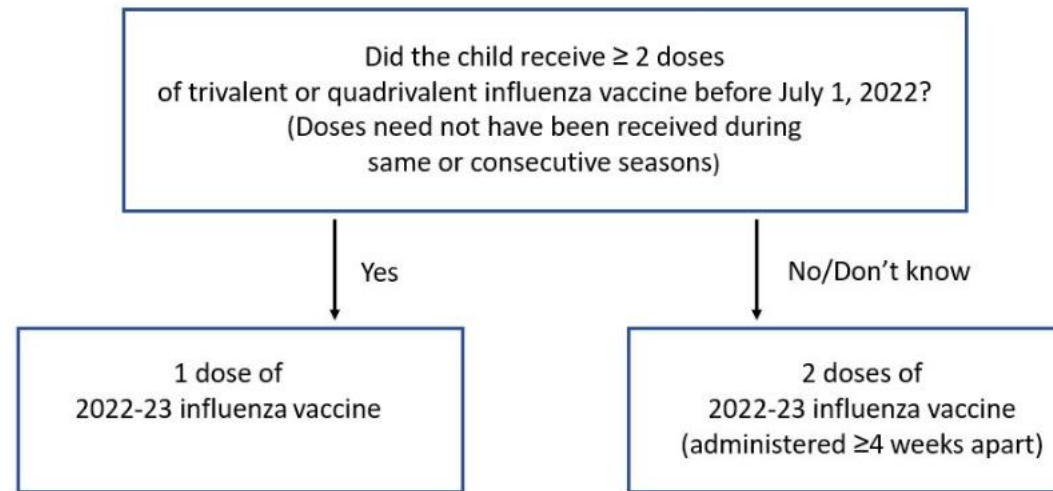
- **Vaccinations should ideally be provided during September and October**
  - Vaccinations during July and August are not recommended for most people, especially:
    - Adults  $\geq$  65 years of age
    - Pregnant persons in the first and second trimester
  - Vaccines may be offered throughout the season as long as the flu virus is circulating
- **Children 6 months – 8 years of age who require two doses should receive the first dose as soon as vaccine products are available**

<https://www.cdc.gov/flu> (accessed 10/30/22)



# How many doses should be provided?

- For persons over age 9, only one dose is needed
- For 6 months to 8 years:



<https://www.cdc.gov/flu> (accessed 10/30/22)



## Can I provide flu vaccine to a person with egg allergies?

### **For persons with a history of hives only following egg exposure**

- **Any recommended flu vaccine appropriate for the person's age and health status may be offered**

### **For persons with other symptoms following egg exposure (angioedema, respiratory distress, lightheadedness, repeated emesis, or required epinephrine)**

- **Cell-based or recombinant preferred**
- **If another flu vaccine is provided, administer in inpatient or outpatient setting, supervised by a provider who can recognize and manage severe allergic reactions**

<https://www.cdc.gov/flu> (accessed 10/30/22)



# Flu vaccine side effects

- **Generally mild**

- Soreness, swelling and/or redness at immunization site
- Low grade headache
- Fever
- Nausea
- Muscle aches
- Fatigue

- **Rare risk of Guillain-Barre syndrome**

<https://www.cdc.gov/flu> (accessed 10/30/22)

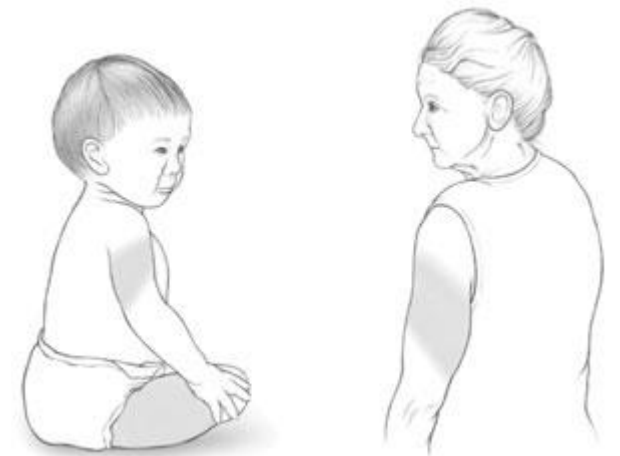


# Varicella Vaccine

# Varicella vaccine – basic facts

## Varicella Virus Vaccine Live (Varivax®)

- Lyophilized vaccine, reconstituted with accompanying sterile diluent
- 0.5 mL injected subcutaneously in outer aspect of the deltoid muscle or high anterolateral area of the thigh



### Needle Length and Gauge for *Subcutaneous* Injection

Age and Gender	Needle Length and Gauge	Injection Site
All ages and both genders	5/8-inch (16 mm); 23- to 25-gauge	Thigh for infants younger than age 12 months*; upper outer triceps area for persons age 12 months and older

\*May be administered into the upper outer triceps area if necessary

<https://www.cdc.gov/vaccines/vpd/varicella/>  
(accessed 10/30/22)

# Varicella vaccine – dosage

Dosage		
Age	Children 12 months to 12 years	Adolescents and Adults 13 years and older
1st Dose	0.5-mL dose administered subcutaneously	0.5-mL dose administered subcutaneously on elected date
2nd Dose	If administered, 0.5-mL dose a minimum of 3 months after the first dose	0.5-mL dose to be administered a minimum of 4 weeks after the first dose

<https://www.merckvaccines.com/varivax/dosing-administration/> (accessed 10/30/22)

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# Varicella vaccine – Contraindications

- History of anaphylaxis to gelatin, neomycin, or any component of the vaccine
- Blood dyscrasias, leukemia, lymphoma, other malignancies affecting the bone marrow or lymphatic system
- Primary or acquired immunodeficiency
- Prolonged, high-dose immunosuppressive therapy
- Family history of congenital hereditary immunodeficiency
- Pregnancy

<https://www.cdc.gov/vaccines/vpd/varicella/>  
(accessed 10/30/22)

# Varicella vaccine – Other considerations

- Avoid in patients with moderate to severe illness, until resolved
- Do not give salicylates for 6 weeks after receiving varicella vaccine (association of Reye's syndrome)

<https://www.cdc.gov/vaccines/vpd/varicella/>  
(accessed 10/30/22)





# Herpes Zoster (Shingles) Vaccine



# Herpes zoster (Shingles) vaccine

## Basic facts

### Given to adults $\geq$ 50 years

- 99% of adults over 50 have dormant herpes zoster virus
- 1 out of 3 will get shingles in their lifetime if not vaccinated

### Two-dose series

- The second dose should be given 2 - 6 months after the first dose
- If more than 6 months have passed since the first dose, administer the second dose as soon as possible
  - Do not restart the series

<https://www.cdc.gov/vaccines/vpd/shingles>  
(accessed 10/30/22)



# Herpes zoster (Shingles) vaccine

## Considerations

- Do not given to individuals with a history of anaphylaxis to any vaccine component or after a previous Shingrix dose
- Fainting can occur following injectable vaccines. Monitor patients and avoid fall injuries

[https://gskpro.com/content/dam/global/hcportal/en\\_US/Prescribing\\_Information/Shingrix/pdf/SHINGRIX.PDF](https://gskpro.com/content/dam/global/hcportal/en_US/Prescribing_Information/Shingrix/pdf/SHINGRIX.PDF) (accessed 10/30/22)



# Herpes zoster (Shingles) vaccine

## Storage and administration

### Recombinant zoster vaccine (Shingrix®)

- Store in the refrigerator – do not freeze
- Single vial of lyophilized gE antigen reconstituted with accompanying vial of ASO1<sub>8</sub> adjuvant
  - Resulting dose is 0.5 mL
- Administer immediately or store in refrigerator once reconstituted. Discard if not given within 6 hours.
- Administer intramuscularly

<https://www.cdc.gov/vaccines/vpd/shingles>  
(accessed 10/30/22)



# Herpes zoster (Shingles) vaccine Side Effects and Counseling

## **The majority of people will have a sore arm**

- Sometimes accompanied by redness and swelling

## **Many people will also have fatigue, muscle pain, headache, shivering, fever, stomach pain or nausea.**

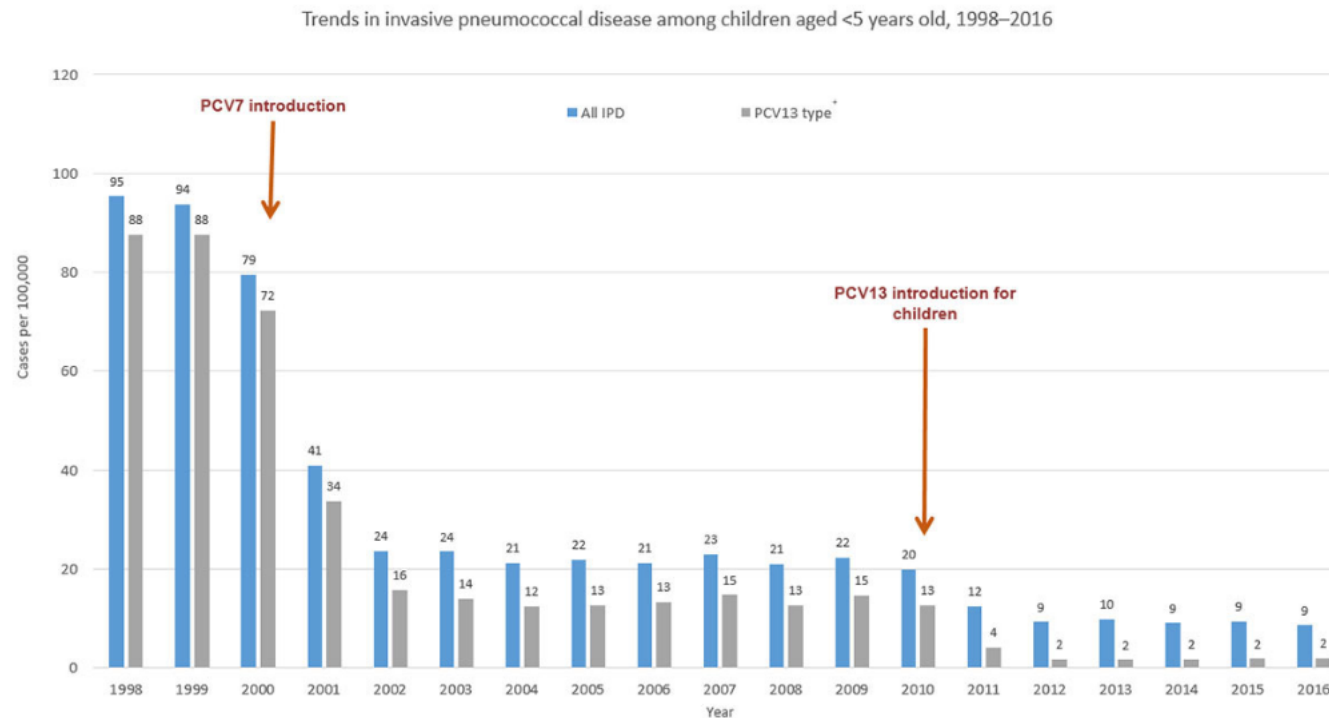
- About 1 in 6 people will experience these side effects severe enough to prevent them from doing regular activities
- Recipient should plan to avoid strenuous activities for a few days
- Remind patients that these side effects generally just last a couple of days; shingles pain may last a lifetime

<https://www.cdc.gov/vaccines/vpd/shingles>  
(accessed 10/30/22)



# Pneumococcal Vaccine

# Pneumococcal vaccine Effectiveness



\*PCV13 serotype: 1, 3, 4, 5, 6A, 6B, 7F, 9V, 14, 18C, 19A, 19F, and 23F

<https://www.cdc.gov/vaccines/vpd/pneumo/>  
(accessed 10/30/22)

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# Pneumococcal vaccine basic facts

## Two different types of vaccine

- **Pneumococcal conjugate vaccines**
  - PCV13 (Pevnar 13®)
  - PCV15 (Vaxneuvance®)
  - PCV20 (Pevnar 20®)
- **Pneumococcal polysaccharide vaccine**
  - PPSV23 (Pneumovax 23®)

**All 0.5 mL administered intramuscularly**

<https://www.cdc.gov/vaccines/vpd/pneumo/>  
(accessed 10/30/22)





# Pneumococcal vaccine

## Who Should Get it?

### **All children younger than 5 years of age**

- **Also should be given to children 5 – 18 with certain medical conditions**
  - **PCV13 or PCV15**

### **Adults older than age 65 (who have never received a pneumococcal conjugate vaccine)**

- **Also, adults age 19 – 64 with certain medical conditions or risk factors**
  - **PCV15 or PCV20**

<https://www.cdc.gov/vaccines/vpd/pneumo/>  
(accessed 10/30/22)



# Pneumococcal vaccine

## Who Should Get it?

### **What about PPSV23 (Pneumovax)?**

- Recommended for children 2 – 18 at increased risk of pneumococcal disease
- Adults 19 and older who received PCV15

<https://www.cdc.gov/vaccines/vpd/pneumo/public/index.html> (accessed 10/30/22)



# Pneumococcal vaccine

## Who Should NOT Get it?

- **Children < 2 years of age should not get PPSV23**
- **All persons < 19 years of age should not get PCV20**
- **And, anyone with a serious reaction to:**
  - A previous pneumococcal vaccine
  - Diphtheria toxoid (i.e., DTaP)

<https://www.cdc.gov/vaccines/vpd/pneumo/>  
(accessed 10/30/22)

# Pneumococcal vaccine

## Product Comparisons

Abbreviation	Brand Name	Age
PCV13	Prevnar 13 <sup>®</sup>	<ul style="list-style-type: none"><li>• Children age 2, 4, 6, and 12 – 15 months</li><li>• Older children who need it</li></ul>
PCV15	Vaxneuvance <sup>®</sup>	<ul style="list-style-type: none"><li>• Children age 2, 4, 6, and 12 – 15 months</li><li>• Older children who need it</li><li>• Adults ≥ 65 years of age</li><li>• Older adults that need it <b>(followed by PPSV23)</b></li></ul>
PCV20	Prevnar 20 <sup>®</sup>	<ul style="list-style-type: none"><li>• Adults ≥ 65 years of age</li><li>• Older adults that need it <b>(single dose; follow-up PCV20 not needed)</b></li></ul>
PPSV23	Pneumovax23 <sup>®</sup>	<ul style="list-style-type: none"><li>• Adults ≥ 65 years of age</li><li>• Older adults that need it <b>(after PCV15)</b></li></ul>

<https://www.cdc.gov/vaccines/vpd/pneumo/public/index.html> (accessed 10/30/22)

# Pneumococcal vaccine

## Dosage Schedule

### Birth to 15 Months

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos
<a href="#">Pneumococcal conjugate</a> ⓘ (PCV13)			1 <sup>st</sup> dose	2 <sup>nd</sup> dose	3 <sup>rd</sup> dose		←4 <sup>th</sup> dose→	

### Ages 19+

Vaccine	19-26 years	27-49 years	50-64 years	≥65 years
<a href="#">Pneumococcal</a> ⓘ (PCV15, PCV20, PPSV23)	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 ( <a href="#">see notes</a> )			1 dose PCV15 followed by PPSV23 OR 1 dose PCV20

<https://www.cdc.gov/vaccines/vpd/pneumo/public/index.html> (accessed 10/30/22)

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# Hepatitis A & B Vaccines

# Hepatitis A & B Vaccines

## Available Products

Hepatitis A	Havrix®	HepA	GlaxoSmithKline	IM	2	Pediatric: 12 months- 18 years Adult: ≥19 years	Inactivated, Adj.
	Vaqta®	HepA	Merck	IM	2	Pediatric: 12 months- 18 years Adult: ≥19 years	Inactivated, Adj.
Hepatitis B	Engerix-B®	HepB	GlaxoSmithKline	IM	3	Pediatric: Birth-19 years Adult: ≥20 years	Recombinant, Adj.
	Recombivax HB®	HepB	Merck	IM	3	Pediatric: Birth-19 years Adult: ≥20 years	Recombinant, Adj.
	Heplisav-B®	HepB	Dynavax Technologies	IM	2	≥18 years	Recombinant, Adj.
Hepatitis A, Hepatitis B	Twinrix®	HepA-HepB	GlaxoSmithKline	IM	3	≥18 years	Inactivated/Recombinant, Adj. Pediatric HepA + Adult HepB

<https://www.cdc.gov/vaccines/vpd/hepa>  
(accessed 10/30/22)

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# Hepatitis A vaccine basic facts

## Two different types of vaccine

- **Single type (Hepatitis A only; Havrix®, Vaqta®)**
  - Given to all children, 12 – 23 months
    - Two doses, 6 months apart
  - Also indicated for at-risk adults
    - International travelers
    - Men who have casual sex with other men
    - Occupational risk
    - Homelessness
    - HIV
    - Chronic liver disease
- **Combination (Hepatitis A and B; Twinrix®)**
  - Administered to individuals 18 years and older
  - Three doses, over 6 months

<https://www.cdc.gov/vaccines/vpd/hepa>  
(accessed 10/30/22)





# Hepatitis B vaccine

## Who should receive it?

- **Recommended for all children within 24 hours of birth, followed by vaccine series**
- **Vaccination of children and adolescents less than 19 years of age not previously vaccinated**
- **Adults aged 19 – 59**
- **Adults  $\geq$  age 60 with risk factors**
  - **Sex partners of individuals with B, individuals with multiple partners or seeking treatment for STDs, men who have sex with men, individuals with percutaneous or mucosal exposure to blood**
  - **Individuals over age 60 without risk factors MAY receive Hepatitis B vaccine**
- **Universal vaccination should occur in high-risk settings (e.g., correctional facilities)**

<https://www.cdc.gov/vaccines/vpd/hepb/index.html> (accessed 10/30/22)



# Hepatitis B vaccine

## Dosage

### **Single antigen Hepatitis B vaccines**

- Engerix-B, Recombivax HB
  - 3 doses at 0, 1, and 6 months
- Heplisav-B
  - 2 doses at 0 and 1 months

### **Three antigen Hepatitis B vaccine**

- PreHevbrio
  - 3 doses at 0, 1, and 6 month

<https://www.cdc.gov/vaccines/vpd/hepb/index.html> (accessed 10/30/22)



# Hepatitis B vaccine

## Administration Considerations

- **0.5 mL dose administered IM (deltoid muscle)**
- **If the vaccine series is interrupted:**
  - **Between the first and second dose – administer the second dose as soon as possible; separate the second and third doses by at least 8 weeks**
  - **Between the second and third doses – administer as soon as possible, at least 8 weeks after the second dose**

<https://www.cdc.gov/vaccines/vpd/hepb>  
(accessed 10/30/22)



# Hepatitis B vaccine

## Adverse Effects

- **In healthy adults**
  - **17% experienced injection site effects (soreness, redness, mild swelling)**
  - **15% experienced systemic effects (fever, diarrhea, fatigue/weakness, diminished appetite)**

[https://www.merck.com/product/usa/pi\\_circulars/r/recombivax\\_hb/recombivax\\_pi.pdf](https://www.merck.com/product/usa/pi_circulars/r/recombivax_hb/recombivax_pi.pdf) (accessed 10/30/22)



# COVID-19 Vaccines

# Pharmacist Prescriptive Authority – COVID 19 Vaccines

## Pharmacist Authority to Administer COVID-19 Vaccines

Pharmacists can administer COVID-19 vaccines under state authority in 49 states.

- Under current state authority, South Carolina would require prescriptions for all COVID-19 vaccines administered by pharmacists.
- Under current authority, the District of Columbia and Missouri would not allow pharmacists to administer COVID-19 vaccines.

The chart to the right shows age limits for pharmacists to administer the vaccine without a patient-specific prescription.

- State with an asterisk can administer COVID-19 vaccines to any age with a prescription.
- North Carolina and Arizona can administer COVID-19 vaccines to ages 6+ with a prescription.
- Delaware can administer vaccines to ages younger than 18 if the dose is the same concentration as an adult dose.
- Hawaii can administer COVID-19 vaccines to ages 14+ with a prescription.
- West Virginia can administer COVID-19 vaccines to ages 11+ with a prescription.

Age	States
Any age	AL, AK, CA, CO, ID, MI, MS, NE, NV, NH, NM, OK, SD, TN, UT, VT, WA
3 years+	AR, ME, MD, ND, VA*
6 years+	MN, WI*
7 years+	IL, MT, OH, OR*, WY
9 years+	KY*, MA
10 years+	NC^
11 years+	IN*
12 years+	DE^, KS
13 years+	AZ^, GA*
14 years+	TX*
17 years+	LA*
18 years+	CT, FL, IA*, HI^, NJ, NY, PA, RI, WV^

<https://naspa.us/resource/pharmacist-authority-to-immunize/> (accessed 10/18/22)

# COVID-19 vaccine types\*

Company	Vaccine type	Age	Considerations
Pfizer-BioNTech	mRNA	≥ 6 months (doses and product vary)	Available both as a monovalent and bivalent product
Moderna	mRNA	≥ 6 months (doses and product vary)	Available both as a monovalent and bivalent product
Novavax	protein subunit	≥ 12 years	Monovalent product
Johnson & Johnson Janssen	Viral vector	≥ 18 years	Limited to use when individual has contraindication to mRNA or Novavax vaccine, other vaccines aren't available

\*current as of 10/31/22

[www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/overview-2022-10-30.html](https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/overview-2022-10-30.html) (accessed 10/30/22)

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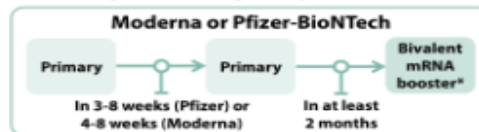
# COVID-19 vaccine Dosage schedule\*

## COVID-19 Vaccination Schedule Infographic for People who are NOT Moderately or Severely Immunocompromised

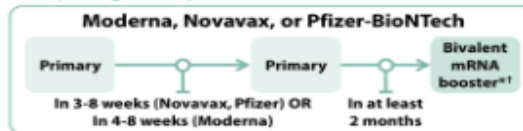
### People ages 6 months through 4 years



### People ages 5 through 11 years



### People ages 12 years and older



### People ages 18 years and older who previously received Janssen primary series dose<sup>†</sup>



\*current as of 10/31/22

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/overview-2019-ncov-vaccines.html> (accessed 10/30/22)

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# COVID-19 vaccine Considerations

- Do not administer to patients who experienced a severe allergic reaction to a previous COVID-19 vaccine
- Do not administer to patients who have experienced a severe allergic reaction to any vaccine component
- Severe allergic reactions are possible, but are rare. Signs include difficulty breathing, swelling of the face and/or throat, fast heartbeat, rash, and dizziness.
- Myocarditis and pericarditis have occurred in rare cases following vaccine administration, most commonly in adult males under 40

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/overview-2019-ncov.html> (accessed 10/30/22)

# Vaccine Safety - General

- [Vaccine Adverse Event Reporting System \(VAERS\)](#)
  - Frontline system of vaccine safety monitoring in the US
  - Online reporting or written pdf form
  - Reporting encouraged to assess safety concerns

# Vaccine Safety – Documentation and Reporting

- Vaccine information sheets (VIS) required by law to be offered (must document the date VIS given)
- National Childhood Vaccine Injury Act requires the followings the following:
  - Date of administration
  - Vaccine manufacturer
  - Vaccine lot number
  - Name/title of the person who administered the vaccine and address of the facility
- [Immunization Information Systems \(IISs\)](#)

# Other References

- [ACIP 2022 - 2023 Summary of Flu Vaccine Recommendations](#)
- [CDC Varicella Vaccination Information for Healthcare Professionals](#)
- [CDC COVID-19 Immunization Schedule](#)



## Questions & Answers



# Thank You!