



Inside Edition: CDC Adult Immunization Update

2019

Candice Robinson, MD, MPH
Medical Officer
Immunization Services Division

ACIP Immunization Schedule Updates

2019 Adult Immunization Schedule

Recommended Adult Immunization Schedule for ages 19 years or older

UNITED STATES
2019

How to use the adult immunization schedule

- 1 Determine recommended vaccinations by age (Table 1)
- 2 Assess need for recommended vaccinations by medical condition or other indications (Table 2)

Table 1 Recommended Adult Immunization Schedule by Age Group
United States, 2019

Vaccine	19–21 years	22–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV) or Influenza live attenuated (LAIV)	1 dose annually				
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td booster every 10 yrs				
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)				
Varicella (VAR)	2 doses (if born in 1980 or later)				
Zoster recombinant (RZV) (preferred) or Zoster live (ZVL)	1 dose				
Human papillomavirus (HPV) Female	2 or 3 doses depending on age at initial vaccination				
Human papillomavirus (HPV) Male	2 or 3 doses depending on age at initial vaccination				
Pneumococcal conjugate (PCV13)	1 or 2 doses depending on indication				
Pneumococcal polysaccharide (PPSV23)	1 or 2 doses depending on indication				
Hepatitis A (HepA)	2 or 3 doses depending on indication				
Hepatitis B (HepB)	2 or 3 doses depending on indication				
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, then booster every 5 yrs if risk remains				
Meningococcal B (MenB)	2 or 3 doses depending on vaccine and indication				
Haemophilus influenzae type b (Hib)	1 or 3 doses depending on indication				

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection. Recommended vaccination for adults with an additional risk factor or another indication.

01/11/19

Centers for Disease Control and Prevention

Table 2 Recommended Adult Immunization Schedule by Medical Condition and Other Indications
United States, 2019

Vaccine	Pregnancy	Immuno-compromised (excluding HIV infection)	HIV infection CD4 count		Asplenia, complement deficiencies	End-stage renal disease, on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ²	Men who have sex with men
			<200	≥200							
IIV or RIV or LAIV											1 dose annually
Tdap or Td	1 dose Tdap each pregnancy										1 dose Tdap, then Td booster every 10 yrs
MMR											1 or 2 doses depending on indication
VAR											2 doses
RZV (preferred) or ZVL	DELAY										2 doses at age ≥50 yrs or 1 dose at age ≥60 yrs
HPV Female	DELAY										3 doses through age 26 yrs
HPV Male											3 doses through age 26 yrs
PCV13											1 dose
PPSV23											1, 2, or 3 doses depending on age and indication
HepA											2 or 3 doses depending on vaccine
HepB											2 or 3 doses depending on vaccine
MenACWY											1 or 2 doses depending on indication, then booster every 5 yrs if risk remains
MenB	PRECAUTION										2 or 3 doses depending on vaccine and indication
Hib											3 doses HSCT ³ recipients only

Recommended vaccination for adults who meet age requirement, lack documentation of vaccination, or lack evidence of past infection. Recommended vaccination for adults with an additional risk factor or another indication. Precaution—vaccine might be indicated if benefit of protection outweighs risk of adverse reaction. Delay vaccination until after pregnancy if vaccine is indicated. Contraindicated—vaccine should not be administered because of risk for serious adverse reaction. No recommendation.

1. Precaution for LAIV does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

02/19/19

Centers for Disease Control and Prevention | Recommended Adult Immunization Schedule, United States, 2019 | Page 3

Influenza

A decorative horizontal bar at the bottom of the slide, composed of several colored rectangular segments: dark blue, light blue, green, red, grey, and dark blue.

Influenza Vaccination Coverage, May, 2018

Age Group	U.S. Coverage	Michigan Coverage
≥18 years	37.19%	35.5%
18-64 years, w high risk conditions	32.9%	38.8%
>65 years	63.1%	59.6%

Influenza Vaccination of Pregnant Women

- Influenza **vaccination recommended** by ACIP for women who will **be pregnant during influenza season since 2004**
 - Increased risk for severe influenza illness in pregnant women, particularly during second and third trimesters
- **Pregnant women may receive any licensed, recommended, age-appropriate injectable influenza vaccine**
 - IIV or RIV
 - LAIV is contraindicated

Pregnant Women Are at Serious Risk For Complications From the Flu

- Influenza-related complications include severe illness and pneumonia
- Pregnant women are at **increased risk of influenza-related hospitalization** compared with the general population
- Risk of influenza-related hospitalization increases later in pregnancy

Vaccination Helps Protect Mom and Baby

- **Reduces risk of flu-associated acute respiratory infection in pregnant women by about 50%**
 - Reduces antibiotic use, medical visits, and loss of workdays
- **Reduces risk of influenza-associated hospitalizations by 40%**
- **Getting vaccinated can also protect a baby from flu after birth**
 - Mom passes antibodies on to the developing baby during her pregnancy
 - Flu vaccine given during pregnancy reduces risk of laboratory-confirmed influenza and influenza hospitalizations of infants during the first several months of life

Thompson MG, Kwong JC, Reagan AK, et al. Clin Infect Dis. 2019;68(9):1444–1453

Steinhardt M, Katz J, Englund JA, et al. Lancet Infect Dis 2017;17(9):981–9

Tapia MD, Sow SO, Tamboura B, et al. Lancet Infect Dis 2016;16:1026–353

Nunes et al. Human Vaccines & Immunotherapeutics 2018;14(3):758–66

Influenza Vaccination and Health Care Workers

- All persons working in health care facilities, even if not providing direct patient care, should receive annual influenza vaccine
- In 2017–18, influenza vaccination coverage for all health care workers was 78.4%
 - Ranged from 96.1% (physicians) to 71.1% (aides and assistants)
- **Why get vaccinated?**
 - You can get flu from patients and coworkers who are sick with flu
 - If you get the flu, you can spread it to others even if not sick
 - You help protect yourself, your family, and your patients

Influenza Vaccination and Health Care Personnel

- Health care personnel are at **increased risk** for influenza
- Influenza is communicable before symptoms develop
 - Most healthy adults may be able to infect others beginning the day before symptoms develop and up to 5 to 7 days after becoming sick
- Can **be infected** with the flu virus but **have no symptoms**
 - May **still spread** the virus to others
- You can **spread flu to family, friends, and vulnerable patients** even if not sick

Advisory Committee on Immunization Practices (ACIP) Updates and *MMWR* Publications

ACIP Recommendations: Hepatitis B Vaccine

Heplisav-B (HepB-CpG)

Storage

Store in the refrigerator between 2°C and 8°C (36°F and 46°F)

Ages

18 years of age and older

Schedule

Administer 2 doses separated by 4 weeks

Administration

Intramuscular (IM) injection in the deltoid
Can be administered at the same clinical visit as other vaccines. Administer in separate injection sites, 1 inch apart (if possible)

Contraindication

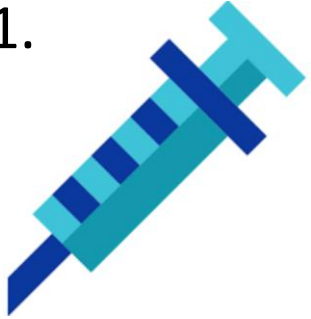
History of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any hepatitis B vaccine or to any component of Heplisav-B, including yeast

Additional Heplisav-B Considerations

- **2-dose series** only applies when **BOTH doses are Heplisav-B, administered at least 4 weeks apart**
 - Any 2 doses of Heplisav-B separated by 4 weeks is considered complete, even if the patient has had other HepB vaccine products
- Heplisav-B **may be used** interchangeably with the other hepatitis B vaccines to **complete a 3-dose series**
- Until safety data are available for Heplisav-B, providers should vaccinate pregnant women needing HepB vaccination with Engerix-B or Recombivax HB

Scenarios

1.



HepB-CpG
Heplisav-B
01/01/2018



HepB
Engerix-B or RecombivaxHB
02/01/2018



HepB-CpG
Heplisav-B
03/01/2018

Completed series
No additional doses
are needed

2.



HepB
Engerix-B or RecombivaxHB
01/01/2018



HepB-CpG
Heplisav-B
02/01/2018



HepB
Engerix-B or RecombivaxHB
05/01/2018

Completed series
No additional doses
are needed

ACIP Recommendations: HPV Vaccine

Updated Recommendations: HPV Persons 27 Through 45 Years of Age

- Vaccination not routinely recommended for persons in this age group
- **Shared clinical decision-making discussion** recommended for these persons to see if they would benefit from vaccination
 - Shared clinical decision-making criteria available in the *MMWR*

Ideally, HPV vaccination should be given in early adolescence because vaccination is most effective before exposure to HPV through sexual activity. For adults aged 27 through 45 years who are not adequately* vaccinated, clinicians can consider discussing HPV vaccination with persons who are most likely to benefit. HPV vaccination does not need to be discussed with most adults aged >26 years.

- HPV is a very common sexually transmitted infection. Most HPV infections are transient and asymptomatic and cause no clinical problems.
- Although new HPV infections are most commonly acquired in adolescence and young adulthood, some adults are at risk for acquiring new HPV infections. At any age, having a new sex partner is a risk factor for acquiring a new HPV infection.
- Persons who are in a long-term, mutually monogamous sexual partnership are not likely to acquire a new HPV infection.
- Most sexually active adults have been exposed to some HPV types, although not necessarily all of the HPV types targeted by vaccination.
- No clinical antibody test can determine whether a person is already immune or still susceptible to any given HPV type.
- HPV vaccine efficacy is high among persons who have not been exposed to vaccine-type HPV before vaccination.
- Vaccine effectiveness might be low among persons with risk factors for HPV infection or disease (e.g., adults with multiple lifetime sex partners and likely previous infection with vaccine-type HPV), as well as among persons with certain immunocompromising conditions.
- HPV vaccines are prophylactic (i.e., they prevent new HPV infections). They do not prevent progression of HPV infection to disease, decrease time to clearance of HPV infection, or treat HPV-related disease.

*Dosing schedules, intervals, and definitions of persons considered adequately vaccinated have not changed.

Considerations for shared clinical decision-making regarding HPV vaccination of adults aged 27 through 45

- HPV is a very common STI. Most HPV infections are transient, asymptomatic, and cause no clinical problems.
- New HPV infections most commonly acquired in adolescence and young adulthood; some adults are at risk for acquiring new HPV infections. At any age, having a new sex partner is a risk factor for acquiring a new HPV infection.
- Persons who are in a long-term, mutually monogamous sexual partnership are not likely to acquire a new HPV infection.
- Most sexually active adults have been exposed to some HPV types, although not necessarily all of the HPV types targeted by vaccination.

Considerations for shared clinical decision-making regarding HPV vaccination of adults aged 27 through 45 (continued)

- No clinical antibody test can determine if a person is already immune or not to any given HPV type.
- HPV vaccine efficacy is high among persons who have not been exposed to vaccine-type HPV before vaccination.
- Vaccine effectiveness might be low among persons with risk factors for HPV infection or disease (e.g., adults with multiple lifetime sex partners and likely previous infection with vaccine-type HPV), as well as among persons with certain immunocompromising conditions.
- HPV vaccines prevent new HPV infections. They do not prevent progression of HPV infection to disease, decrease time to clearance of HPV infection, or treat HPV-related disease.

ACIP Recommendations: Pneumococcal Vaccine

Pneumococcal Vaccines and Persons 65 Years of Age and Older

■ PPSV23

- **1 dose** is routinely recommended **at/after 65 years** of age regardless of PPSV23 immunization history
 - Multiple doses at/after 65 years of age are not recommended – even for persons with a high risk condition

■ PCV13

- 1 dose is currently recommended at/after 65 years of age for persons not previously vaccinated

ACIP Meeting June 2019

Pneumococcal Vote

- ACIP recommends PCV13 based on shared clinical decision-making for adults 65 years or older who do not have an immunocompromising condition and who have not previously received PCV13
- All adults 65 years or older should receive a dose of PPSV23
 - Recommendations for PPSV23 have not changed

Administering Pneumococcal Vaccines to Adults

- Administer **PCV13 before PPSV23** whenever possible
- PCV13 and PPSV23 should **not be administered** during the **same clinic visit**
 - Either vaccine may be administered with other vaccines
- **Prior doses count and do not need to be repeated**
- If either vaccine is inadvertently given earlier than the recommended interval, **do not repeat the dose**

Assessing Adults for Pneumococcal Vaccination

- **Ask which age group does the person fall into?**
 - 19 through 64 years of age?
 - Is the person at increased risk for IPD?
 - What is their immunization history?
 - 65 years of age and older?
 - What is their immunization history?

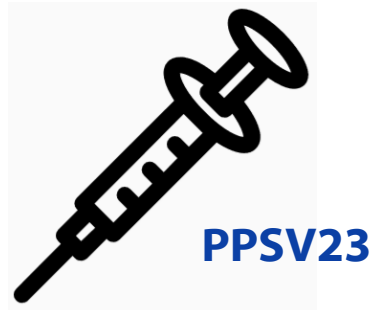
1. Age: Adults 19 Through 64 Years of Age:

2. Risk Factor: High Risk for IPD

■ **Those at high risk for IPD, include persons with:**

- Pulmonary disease (including asthma)
- Cardiac disease (excluding hypertension)
- Liver disease (including cirrhosis)
- Diabetes
- Alcoholism
- Smokers
- Residents of a long-term care facility

■ **Administer PPSV23 vaccine; PCV13 is not indicated at this time**



1. Age: 19 Through 64 Years of Age

2. Risk Factor: Higher Risk for IPD

- Those at higher risk for IPD, include persons with a:
 - CSF leak
 - Cochlear implant
- Administer PCV13 followed by PPSV23 vaccine



1. Age: 19 Through 64 Years of Age:

2. Risk Factor: Highest Risk for IPD

- Those at highest risk for IPD, include persons who:
 - Are immunocompromised (including HIV infection)
 - Have chronic renal failure or nephrotic syndrome
 - Are asplenic
- Administer PCV13 and 2 doses of PPSV23



PCV13

At least 8 weeks
apart



PPSV23

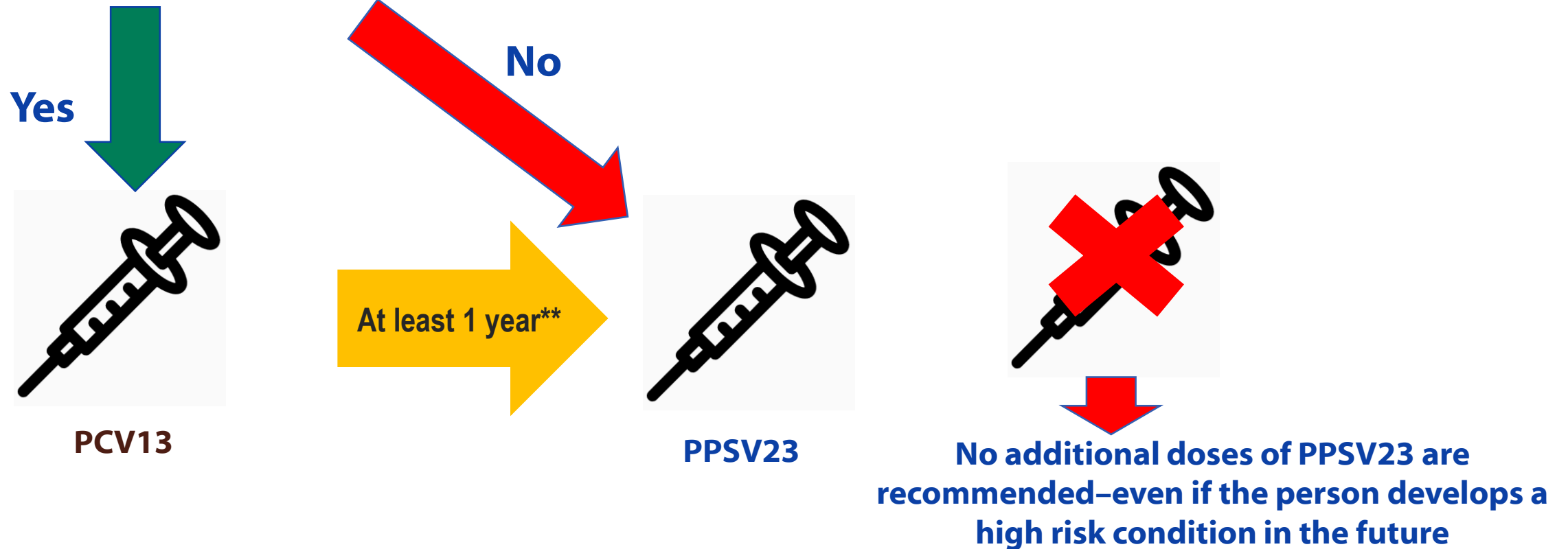
At least 5 years
apart



PPSV23

1. Age: Age 65 Years and Older, No Indication for PCV13
2. Vaccination Status: No History of PCV13 or PPSV23

Shared clinical decision making*



*Draft These recommendations have been adopted by the CDC Director and will become official once published in *MMWR*.

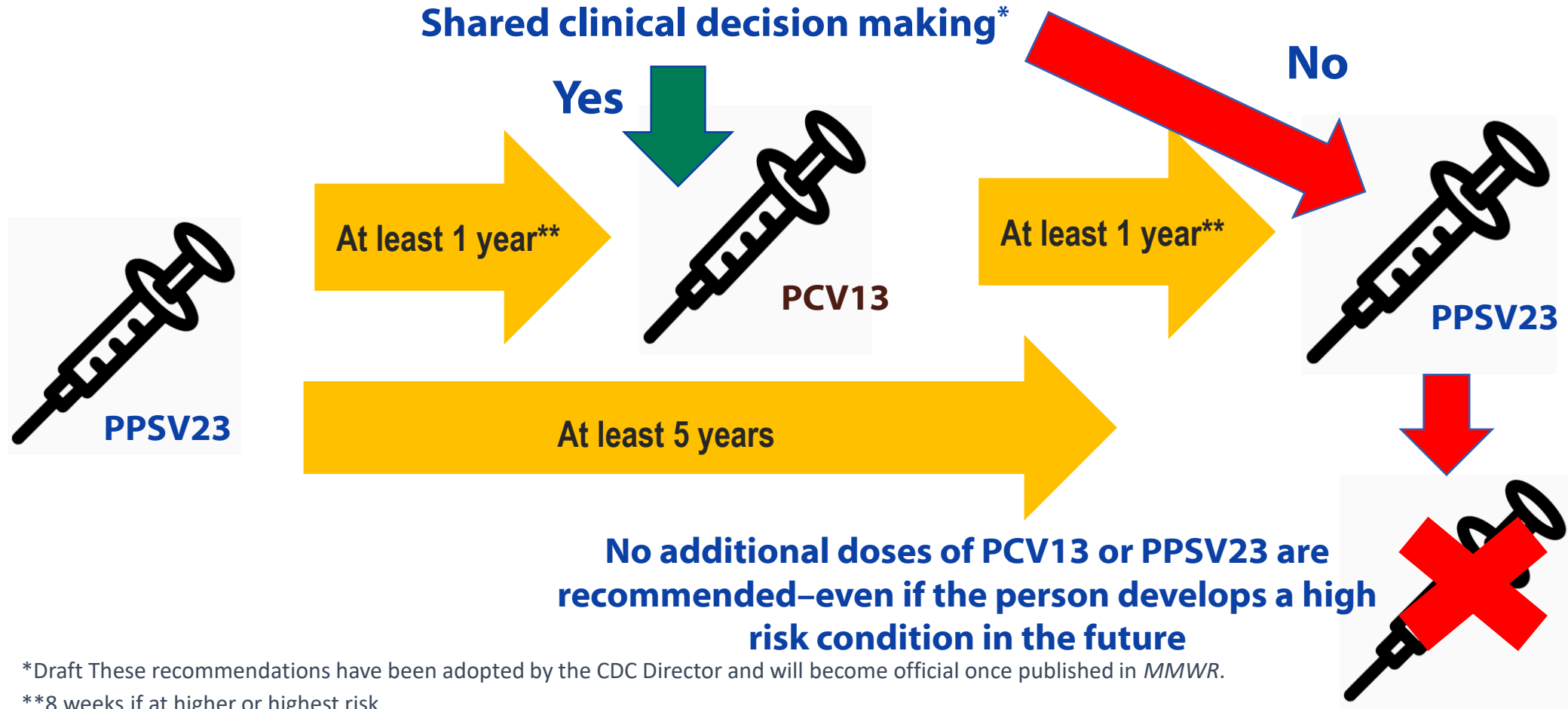
**8 weeks if at higher or highest risk

1. Age: 65 Years and Older, No Indication for PCV13

2. Vaccination Status: PPSV23 Before 65 Years of Age, No doses of PCV13

- Administer PCV13, followed by PPSV23 as below

Shared clinical decision making*

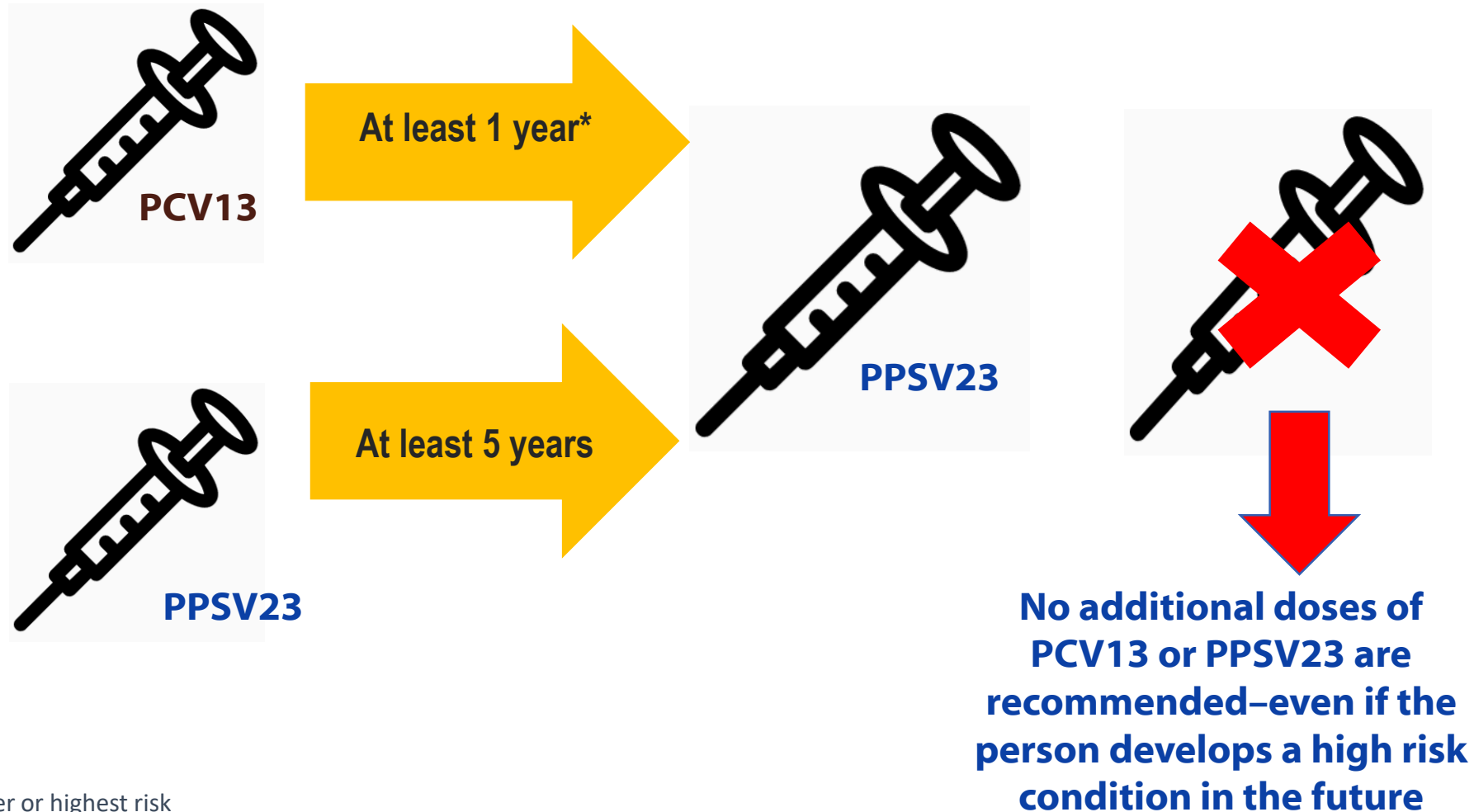


*Draft These recommendations have been adopted by the CDC Director and will become official once published in *MMWR*.

**8 weeks if at higher or highest risk

1. Age: Age 65 Years and Older

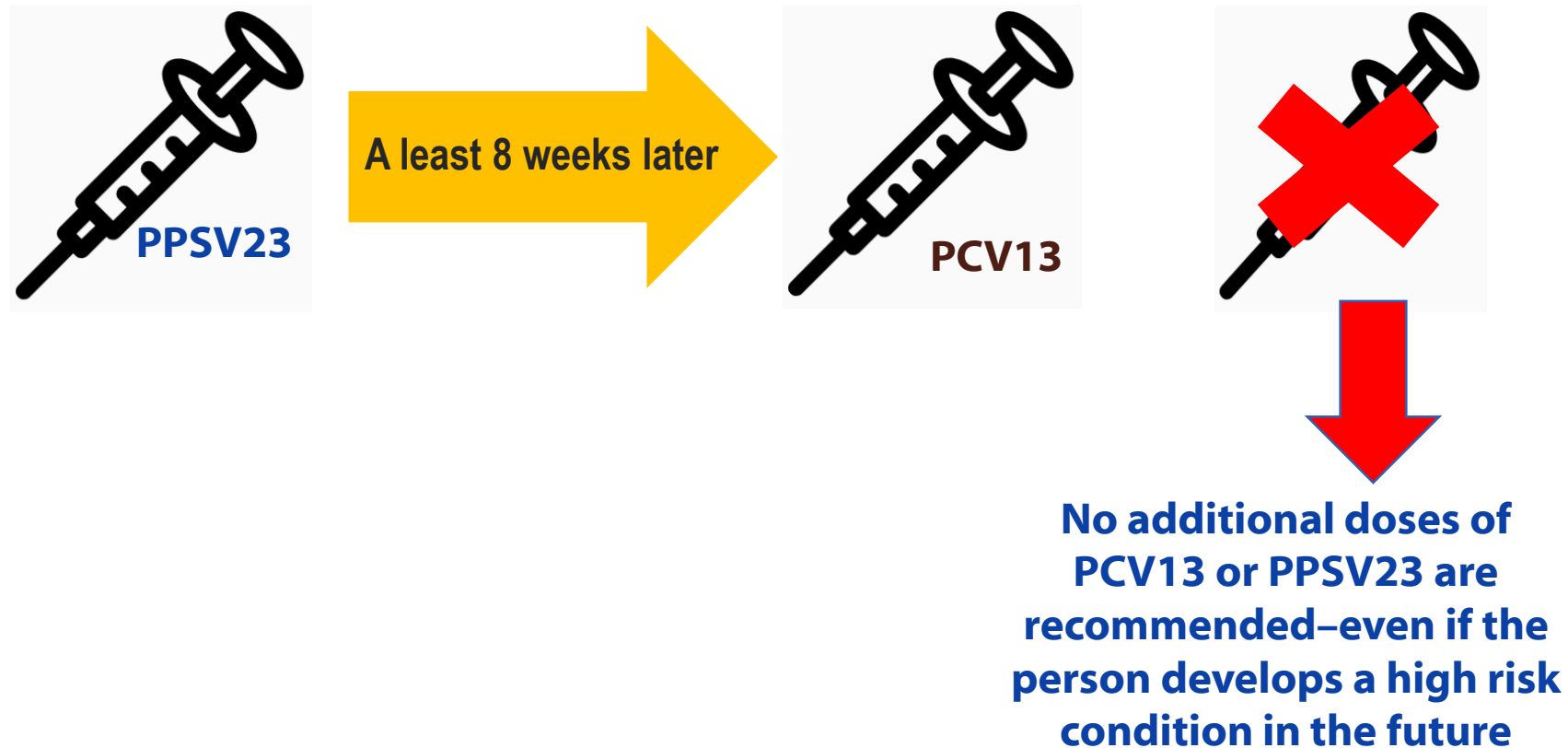
2. Vaccination Status: PCV13 and PPSV23 Before 65 Years of Age



*8 weeks if at higher or highest risk

MMWR 2015;64(34):944–47

1. Age: Age 65 Years and Older, Developed a Risk Condition
2. Vaccination Status: PPSV23 After 65 Years of Age, No PCV13



ACIP Recommendations: Tdap Vaccine

ACIP Recommendations for Pregnant Women

■ Pregnant women:

- Administer Tdap during each pregnancy, preferably at 27 through 36 weeks' gestation
- If not given during pregnancy, administer Tdap immediately **postpartum** to women **not previously vaccinated**
- Additional doses are **not indicated for previously vaccinated** postpartum women
 - History of an adolescent dose (or Tdap given at another time) = previously vaccinated

Maternal Tdap Vaccination is Very Effective in Prevention of Infant Pertussis Infection

		Definitions	
	Vaccine effectiveness (95% confidence intervals)	Infant age at pertussis onset	Mother gestational age received Tdap
<u>United Kingdom</u>			
Observational, ¹ screening method	91% (83–95%)	Younger than 3 months	At least 28 days before birth*
Case-Control, ² retrospective	91% (77–97%), unadjusted 93% (81–97%), adjusted [¶]	Younger than months	Cases: 31.5 weeks (range, 28–38) Controls: 33 weeks (range, 26–38)
<u>United States</u>			
Cohort, ³ retrospective	85% (33–98%)	Younger than 2 months	27–36 weeks
Case-Control, ⁴ retrospective	78% (44–91%)	Younger than 2 months	27–36 weeks

*2012 UK recommendation: Tdap between 28 and 38 weeks

¶Adjusted for sex, geographical area, and birth period

¹Amirthalingam G, et al. 2014; ²Dabrera G, et al. 2015; ³Winter K, et al. 2016; ⁴CDC, unpublished

Tdap and Pregnant Women

■ Vaccination coverage for pregnant women:

- 2010 and earlier <1%
- 2013 28%
- 2015 53%

■ 96% of Tdap vaccinations were administered in physicians' offices or clinics

Maternal Vaccination



Resources for healthcare professionals

Vaccines help keep your pregnant patients and their growing families healthy.

Last Updated September, 2016

Vaccine	Before pregnancy	During pregnancy	After pregnancy	Type of vaccine
Influenza	Yes	Yes, during flu season	Yes	Inactivated
Tdap	May be recommended; it is better to vaccinate during pregnancy when possible	Yes, during each pregnancy	Yes, immediately postpartum, if Tdap never received in lifetime; it is better to vaccinate during pregnancy	Toxoid/ Inactivated
Td	May be recommended	May be recommended, but Tdap is preferred	May be recommended	Toxoid
Hepatitis A	May be recommended	May be recommended	May be recommended	Inactivated
Hepatitis B	May be recommended	May be recommended	May be recommended	Inactivated
Meningococcal	May be recommended	Base decision on risk vs. benefit; inadequate data for specific recommendation	May be recommended	Inactivated
Pneumococcal	May be recommended	Base decision on risk vs. benefit; inadequate data for specific recommendation	May be recommended	Inactivated
HPV	May be recommended (through 26 years of age)	No	May be recommended (through 26 years of age)	Inactivated
MMR	May be recommended; once received, avoid conception for 4 weeks	No	May be recommended	Live
Varicella	May be recommended; once received, avoid conception for 4 weeks	No	May be recommended	Live

For more information, visit: www.cdc.gov/vaccines/pregnancy

Get an answer to your specific question by e-mailing cdcinfo@cdc.gov or calling 800-CDC-INFO (232-4636)



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS-1408215-100-104 09/27/2016

CDC Clinical Resources for Health Care Personnel: Tdap

- Pink Book webinar series with free CE www.cdc.gov/vaccines/ed/webinar-epv/index.html
- Updated ACIP recommendations www.cdc.gov/mmwr/volumes/67/rr/pdfs/rr6702a1-H.pdf
- Catch-up guidance for children 7 through 18 years of age www.cdc.gov/vaccines/schedules/downloads/child/job-aids/tdap.pdf
- HCP materials on vaccinating pregnant women www.cdc.gov/vaccines/pregnancy/hcp/index.html

Catch-Up Guidance for Children 7 through 18 Years of Age Tetanus, Diphtheria, and Pertussis-Containing Vaccines: Tdap/Td¹

IF current age is	AND # of previous Doses of DTaP, DT, Td or Tdap is	AND ²	AND	AND ²	THEN	Next Dose Due
7 through 18 years of age ³	3	Dose 1 was given before 12 months of age	It has been at least 6 calendar months since Dose 2	Any dose was Tdap	Give Dose 4 (Td) today	Td in 10 years
				No dose was	Give Dose 4	

IF current age is	AND # of previous Doses of DTaP, DT, Td or Tdap is	AND ²	AND	AND ²	THEN	Next Dose Due
7 through 18 years of age ³	3	Dose 1 was given at 12 months of age or older	7-10 years of age	4	11 years of age or older	

¹Vaccine information: Tdap: Administer to persons 7 or pertussis-containing vaccine. Tdap products not vaccinated with Tdap or with a contraindication to Tdap or Td given as doses 1-3 prior to 7 years of age.
²For children who received Tdap between 7 through a dose of Td should be given 10 years after the dose.
³Tdap may be administered regardless of the interval.
⁴Reference: Recommended immunization schedule schedules/downloads/child/0-18yrs-child-combine

Maternal Vaccination

Resources for healthcare professionals

Vaccines help keep your pregnant patients and their growing families healthy.

Last Updated September, 2016

Vaccine	Before pregnancy	During pregnancy	After pregnancy	Type of vaccine
Influenza	Yes	Yes, during flu season	Yes	Inactivated
Tdap	May be recommended; it is better to vaccinate during pregnancy when possible	Yes, during each pregnancy	Yes, immediately postpartum, if Tdap never received in lifetime; it is better to vaccinate during pregnancy	Toxoid/ Inactivated
Td	May be recommended	May be recommended, but Tdap is preferred	May be recommended	Toxoid
Hepatitis A	May be recommended	May be recommended	May be recommended	Inactivated
Hepatitis B	May be recommended	May be recommended	May be recommended	Inactivated
Meningococcal	May be recommended	Base decision on risk vs. benefit; inadequate data for specific recommendation	May be recommended	Inactivated
Pneumococcal	May be recommended	Base decision on risk vs. benefit; inadequate data for specific recommendation	May be recommended	Inactivated
HPV	May be recommended (through 26 years of age)	No	May be recommended (through 26 years of age)	Inactivated
MMR	May be recommended; once received, avoid conception for 4 weeks	No	May be recommended	Live
Varicella	May be recommended; once received, avoid conception for 4 weeks	No	May be recommended	Live

For more information, visit: www.cdc.gov/vaccines/pregnancy
Get an answer to your specific question by e-mailing cdcinfo@cdc.gov
or calling 800-CDC-INFO (232-4636)



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CHS000000-000-000-000-000-000

ACIP Recommendations: Shingrix

Adult Vaccine Supply: Shingrix

- Due to high levels of demand for GSK's Shingrix vaccine, GSK has implemented order limits and providers have experienced shipping delays
- Order limits and shipping delays will continue throughout 2019
- GSK has increased the U.S. supply available and plans to release more doses on a consistent and reliable basis in 2020

RZV Zoster Vaccine: Shingrix

- **Storage:** Store vaccine AND diluent between 2°C and 8°C (36°F and 46°F)
- **Preparation:** Use the adjuvanted diluent supplied by the manufacturer to reconstitute the vaccine just before administering
- **Schedule:** 2 doses, 2 to 6 months apart
- **Route: IM injection**
 - Site: Deltoid or the thigh may be used if necessary
 - Needle gauge: 22–25 gauge
 - Needle length: Varies by weight and injection technique
- **May administer during the same clinical visit as other needed vaccines**
 - Administer in a separate limb from other vaccines, if possible

Protect your patients with the new shingles vaccine

CDC recommends new shingles vaccine (Shingrix) for adults 50 and older

patients: 50+ years old	doses: 2-6 months apart	administer: intra- muscular in the deltoid	storage: 36° 46° refrigerate
--------------------------------------	--------------------------------------	---	---

Who should get Shingrix

Give Shingrix (Recombinant Zoster Vaccine) to immunocompetent adults 50 years and older, including those who

- had shingles in the past
- received Zostavax® (Zoster Vaccine Live) at least 8 weeks prior
- have health conditions, such as chronic renal failure, diabetes mellitus, rheumatoid arthritis, or chronic pulmonary disease
- are receiving other vaccines, such as influenza and pneumococcal vaccines, at the same visit
- are taking low-dose immunosuppressive therapy

While Shingrix is not contraindicated in immunocompromised people, it is not recommended by the Advisory Committee on Immunization Practices (ACIP) at this time. ACIP will review evidence for Shingrix in immunocompromised people as it becomes available.

Who should not get Shingrix

You should not give Shingrix to a patient who has ever had a severe allergic reaction, such as anaphylaxis, to a component of this vaccine, or after a dose of Shingrix. Consider delaying vaccination if your patient is pregnant, lactating, or experiencing an acute episode of shingles.

Administering and storing Shingrix

- Adults 50 years and older should receive 2 doses of Shingrix. Give the second dose 2 to 6 months after the first.
- Administer Shingrix intramuscularly in the deltoid region of the upper arm with a 1- to 1.5-inch needle.
- Both vials of Shingrix must be refrigerated at a temperature of 36-46° F. Do not use if exposed to temperatures below 36° F.

Reconstitution

- Prepare Shingrix by reconstituting the antigen component with the adjuvant suspension component.
- Either administer it immediately, or store it in the refrigerator and use it within 6 hours of reconstitution. Otherwise, discard it.

Cost and insurance

Shingrix is now covered by most health insurance plans. Tell your patients to contact their health insurance providers ahead of time to see if they will cover the vaccine



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

www.cdc.gov/shingles/vaccination
National Center for Immunization and Respiratory Diseases (NCIRD)

ACIP Zoster Recommendations

- Persons 50 years of age and older should be vaccinated with zoster vaccine
- **Shingrix is preferred** to Zostavax for persons 60 years and older
- **Administer 2 doses of Shingrix to immunocompetent persons**
 - Regardless of previous history of vaccination with varicella-containing vaccines—Varivax or Zostavax
 - Separate Shingrix and varicella-containing vaccines by at least 8 weeks

Ensure Your Patients Get Both Doses!

- There are currently ordering limits and intermittent shipping delays for Glaxo Shingrix vaccine
- **Use proven strategies to help patients complete the series, including:**
 - Use a reminder and recall system to contact patients when you have Shingrix
 - Give first consideration to patients due for their second dose of Shingrix
 - If you are out of Shingrix and a patient needs a second dose, refer the patient to another provider in the community that has Shingrix
 - Be sure to enter your patients' current vaccination information into your state's immunization information system (IIS)
 - As supply becomes less constrained, notify eligible patients so they can come in to get their first dose of Shingrix

RZV (Shingrix) Adverse Reactions

Local reactions	49%
Local reactions – Grade 3	9.4%
Systemic reactions (headache, malaise, fatigue)	45–78%
Systemic reactions (headache, malaise, fatigue) – Grade 3	11%

Adverse Reactions after Shingrix

- **Educate patients regarding:**
 - Potential adverse reactions, including injection site and systemic reactions
 - The need for a second dose—even if s/he has an adverse reaction
- **Offer comfort measures and strategies**



CDC Clinical Resources for Health Care Personnel: Zoster

- **Pink Book webinar series with free CE**
<https://www.cdc.gov/vaccines/ed/webinar-epv/index.html>
- **Shingles (Herpes Zoster) vaccination information for health care providers** www.cdc.gov/vaccines/vpd/shingles/hcp/index.html
- **Shingrix fact sheet**
www.cdc.gov/shingles/downloads/shingles-factsheet-hcp.pdf
- **FAQs on Shingrix** www.cdc.gov/vaccines/vpd/shingles/hcp/shingrix/faqs.html
- **Everything you need to know about Shingrix video**
www.medscape.com/viewarticle/895228?src=par_cdc_stm_mscpedt&faf=1

CDC Immunization Resources for HCP

CDC Resources for Staff Education

- **Multiple** education products available **free** through the CDC website:
 - Immunization courses (webcasts and online self-study)
 - *You Call the Shots* self-study modules
- **Continuing education available**

Immunization Education & Training

[Education and Training Home](#)

[You Call The Shots](#)

[Current Issues in Immunization NetConferences \(CIINC\)](#)

[Immunization Courses +](#)

[Continuing Education](#)


[Pink Book Webinars](#)

[<< Back to Vaccines Home](#)



CDC offers numerous education and training programs for healthcare personnel. A variety of topics and formats are available. All are based on vaccine recommendations made by the Advisory Committee on Immunization Practice (ACIP). Physicians, nurses, health educators, pharmacists, and other healthcare professionals are invited to apply for continuing education credits/contact

Expert Commentary



Running Time: 5:07 mins

Date Released: 06/27/2011

[CDC Commentary - Make No Mistake: Vaccine Administration](#)

Immunization Questions?

- Questions? E-mail CDC nipinfo@cdc.gov or www.cdc.gov/cdcinfo
- Vaccines and Immunizations website www.cdc.gov/vaccines
- HCP education www.cdc.gov/vaccines/hcp.htm
- Twitter [@DrNancyM_CDC](https://twitter.com/DrNancyM_CDC)
- Influenza www.cdc.gov/flu
- Vaccine safety www.cdc.gov/vaccinesafety

CDC Immunization Apps for Health Care Personnel



Childhood and adult immunization schedules

www.cdc.gov/vaccines/schedules/hcp/schedule-app.html



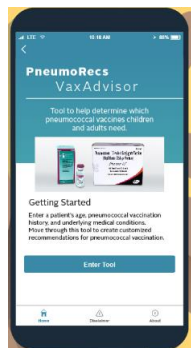
Influenza information

www.cdc.gov/flu/apps/cdc-influenza-hcp.html



Morbidity and Mortality Weekly Report (MMWR)

www.cdc.gov/mobile/applications/mobileframework/mmwrpromo.html



PneumoRecs VaxAdvisor

www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html