



Immunization Schedule Overview 2022



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Disclosure

I have no financial or other relationships to disclose regarding this presentation.



Learning Objectives:

1. Explore newly added information provided by the CDC; ways to approach reading the recommendations tables and the addition of the contraindications and precautions tables.
2. Identify updates to the Childhood/Adolescent and Adult vaccination recommendations as published by the Center for Disease Control (CDC)
3. Review immunization information for special populations.
4. Review immunization requirements for preschool/daycare/primary school/college admission in Arkansas.

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger

UNITED STATES
2022

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccine	Abbreviation(s)	Trade name(s)
Dengue vaccine	DENACYD	Dengvaxia ^a
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Daptacel ^a Infanrix ^a
Diphtheria, tetanus vaccine	DT	No trade name
<i>Haemophilus influenzae</i> type b vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActiHib ^a Hiberix ^a PedvaxHIB ^a
Hepatitis A vaccine	HepA	Havrix ^a Vaqta ^a
Hepatitis B vaccine	HepB	Engerix-B ^a Recombivax HB ^a
Human papillomavirus vaccine	HPV	Gardasil 9 ^a
Influenza vaccine (inactivated)	IIV	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist ^a Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II ^a
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D MenACWY-CRM MenACWY-TT	Menactra ^a Menveo ^a MenQuadfi ^a
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero ^a Trumenba ^a
Pneumococcal 13-valent conjugate vaccine	PCV13	Pneumovax 13 ^a
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23 ^a
Poliovirus vaccine (inactivated)	IPV	IPOL ^a
Rotavirus vaccine	RV1 RVS	Rotarix ^a RotaTeq ^a
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel ^a Boostrix ^a
Tetanus and diphtheria vaccine	Td	Tenivac ^a Tdvax [™]
Varicella vaccine	VAR	Varivax ^a
Combination vaccines (use combination vaccines instead of separate injections when appropriate)		
DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix ^a
DTaP, inactivated poliovirus, and <i>Haemophilus influenzae</i> type b vaccine	DTaP-IPV/Hib	Pentacel ^a
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix ^a Quadracel ^a
DTaP, inactivated poliovirus, <i>Haemophilus influenzae</i> type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxelis ^a
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuad ^a

*Administer recommended vaccines if immunization history is incomplete or unknown. Do not restart or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer at a subsequent visit. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

How to use the child/adolescent immunization schedule

- 1** Determine recommended vaccine by age (Table 1)
- 2** Determine recommended interval for catch-up vaccination (Table 2)
- 3** Assess need for additional recommended vaccines by medical condition or other indication (Table 3)
- 4** Review vaccine types, frequencies, intervals, and considerations for special situations (Notes)
- 5** Review contraindications and precautions for vaccine types (Appendix)

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip/) and approved by the Centers for Disease Control and Prevention (www.cdc.gov/), American Academy of Pediatrics (www.aap.org/), American Academy of Family Physicians (www.aafp.org/), American College of Obstetricians and Gynecologists (www.acog.org/), American College of Nurse-Midwives (www.midwife.org/), American Academy of Physician Assistants (www.aapa.org/), and National Association of Pediatric Nurse Practitioners (www.napnap.org/).

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department
- Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at www.vaers.hhs.gov or 800-822-7967

Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), In English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays



Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- ACIP Shared Clinical Decision-Making Recommendations www.cdc.gov/vaccines/acip/acip-scdm-faqs.html



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Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger

UNITED STATES
2022

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccine	Abbreviation(s)	Trade name(s)
Dengue vaccine	DEN4CYD	Dengvaxia*
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	DTap*
Hepatitis B vaccine	HepB	Eliquis-B* Recombivax HB*
Human papillomavirus vaccine	HPV	Gardasil 9*
Influenza vaccine (inactivated)	IIV	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist* Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II*
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D	Menactra*
	MenACWY-CRM	Menveo*
	MenACWY-TT	MenQuadfi*
Meningococcal serogroup B vaccine	MenB-4C	Bexsero*
	MenB-FHbp	Trumenba*
Pneumococcal 13-valent conjugate vaccine	PCV13	Pnevnar 13*
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23*
Poliovirus vaccine (inactivated)	IPV	IPOV*
Rotavirus vaccine	RV1 RV5	Rotarix* RotaTeq*
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel* Boostrix*
Tetanus and diphtheria vaccine	Td	Tenivac* Tdvax™
Varicella vaccine	VAR	Varivax*
Combination vaccines (use combination vaccines instead of separate injections when appropriate)		
DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix*
DTaP, inactivated poliovirus, and <i>Haemophilus influenzae</i> type b vaccine	DTaP-IPV/Hib	Pentacel*
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix* Quadracel*
DTaP, inactivated poliovirus, <i>Haemophilus influenzae</i> type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxelis*
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuad*

*Administer recommended vaccines if immunization history is incomplete or unknown. Do not restart or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer at a subsequent visit. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

How to use the child/adolescent immunization schedule

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- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- ACIP Shared Clinical Decision-Making Recommendations: www.cdc.gov/vaccines/acip/acip-scdm-faqs.html



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What you will find and where...

Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

These recommendations must be read with the notes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars. To determine minimum intervals between doses, see the catch-up schedule (Table 2).

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2–3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs
Hepatitis B (HepB)	1 st dose	← 2 nd dose →			← 3 rd dose →												
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1 st dose	2 nd dose	See Notes												
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)			1 st dose	2 nd dose	3 rd dose		← 4 th dose →					5 th dose					
<i>Haemophilus influenzae</i> type b (Hib)			1 st dose	2 nd dose	See Notes		← 3 rd or 4 th dose, See Notes →										
Pneumococcal conjugate (PCV13)			1 st dose	2 nd dose	3 rd dose		← 4 th dose →										
Inactivated poliovirus (IPV <18 yrs)			1 st dose	2 nd dose	← 3 rd dose →							4 th dose					
Influenza (IIV4)					Annual vaccination 1 or 2 doses								or	Annual vaccination 1 dose only			
Influenza (LAIV4)												Annual vaccination 1 or 2 doses		Annual vaccination 1 dose only			
Measles, mumps, rubella (MMR)					See Notes	← 1 st dose →						2 nd dose					
Varicella (VAR)						← 1 st dose →						2 nd dose					
Hepatitis A (HepA)					See Notes		2-dose series, See Notes										
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)															1 dose		
Human papillomavirus (HPV)															See Notes		
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos, MenACWY-TT ≥2 years)															1 st dose	2 nd dose	
Meningococcal B (MenB-4C, MenB-FHbp)															See Notes		
Pneumococcal polysaccharide (PPSV23)															See Notes		
Dengue (DEN4CYD; 9–16 yrs)															Seropositive in endemic areas only (See Notes)		

2022 Child and Adolescent Immunization Schedule

Table 2 Recommended Catch-up Immunization Schedule for Children and Adolescents Who Start Late or Who Are More than 1 month Behind, United States, 2022

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age. **Always use this table in conjunction with Table 1 and the notes that follow.**

Children age 4 months through 6 years					
Vaccine	Minimum Age for Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B	Birth	4 weeks	8 weeks and at least 16 weeks after first dose. minimum age for the final dose is 24 weeks.		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days.	4 weeks	4 weeks maximum age for final dose is 8 months, 0 days.		
Diphtheria, tetanus, and acellular pertussis	6 weeks	4 weeks	4 weeks	6 months	6 months
Haemophilus influenzae type b	6 weeks	No further doses needed If first dose was administered at age 15 months or older. 4 weeks If first dose was administered before the 1 st birthday. 8 weeks (as final dose) If first dose was administered at age 12 through 14 months.	No further doses needed A second dose was administered at age 15 months or older. 4 weeks If current age is younger than 12 months and first dose was administered at younger than age 7 months and at least 1 previous dose was given (IPV, DTaP, Tdap, Hib, or Varicella or unknown). 8 weeks and age 12 through 59 months (as final dose) If current age is younger than 12 months and first dose was administered at age 7 through 11 months; OR If current age is 12 through 59 months and first dose was administered before the 1 st birthday and second dose was administered at younger than 15 months; If both doses were PrequaliB and were administered before the 1 st birthday.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1 st birthday.	
Pneumococcal conjugate	6 weeks	No further doses needed for healthy children if first dose was administered at age 24 months or older. 4 weeks If first dose was administered before the 1 st birthday. 8 weeks (as final dose for healthy children) If first dose was administered at the 1 st birthday or after.	No further doses needed for healthy children if previous dose was administered at age 24 months or older. 4 weeks If current age is younger than 12 months and previous dose was administered at <7 months old. 8 weeks (as final dose for healthy children) If previous dose was administered between 7–11 months (wait until at least 12 months old); OR If current age is 12 months or older and at least 1 dose was administered before age 12 months.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age.	
Inactivated poliovirus	6 weeks	4 weeks	4 weeks If current age is <4 years. 6 months (as final dose) If current age is 4 years or older.	6 months (minimum age 4 years for final dose).	
Measles, mumps, rubella	12 months	4 weeks			
Varicella	12 months	3 months			
Hepatitis A	12 months	6 months			
Meningococcal ACWY	2 months MenACWY-GM 9 months MenACWY-C 2 years MenACWY-TT	8 weeks	See Notes	See Notes	
Children and adolescents age 7 through 18 years					
Meningococcal ACWY	Not applicable (N/A)	8 weeks			
Tetanus, diphtheria, tetanus, diphtheria, and acellular pertussis	7 years	4 weeks	4 weeks If first dose of DTaP/DT was administered before the 1 st birthday. 6 months (as final dose) If first dose of DTaP/DT or Tdap/Td was administered at or after the 1 st birthday.	6 months If first dose of DTaP/DT was administered before the 1 st birthday.	
Human papillomavirus	9 years	Routine dosing intervals are recommended.			
Hepatitis A	N/A	6 months			
Hepatitis B	N/A	4 weeks	8 weeks and at least 16 weeks after first dose.		
Inactivated poliovirus	N/A	4 weeks	6 months A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.	A fourth dose of IPV is indicated if all previous doses were administered at <4 years or if the third dose was administered <6 months after the second dose.	
Measles, mumps, rubella	N/A	4 weeks			
Varicella	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older.			
Dengue	9 years	6 months	6 months		

Table 2 = Catch-up Immunization schedule

Following the catch-up schedule for the children and adolescents who fell behind during the COVID-19 pandemic will be vital.

The screenshot shows the CDC's 'Immunization Schedules' page for children and adolescents. At the top, the CDC logo and name are displayed, along with the tagline 'CDC 24/7: Saving Lives, Protecting People™'. A search bar and a 'Vaccines site' dropdown menu are in the top right corner. Below the header, a green banner reads 'Immunization Schedules'. The main content area features the title 'Table 1. Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022'. A paragraph below the title explains that recommendations are based on age, appropriate intervals for catch-up, medical indications, and special situations. A 'Get Email Updates' button is also present. A section titled 'COVID-19 Vaccination' states that ACIP recommends use for everyone ages 12 and older. Below this, there are six boxes: 'Table 1. By age', 'Table 2. Catch-up schedule', 'Table 3. By medical indications', 'Schedule Changes & Guidance', 'Parent-friendly schedule', and 'Resources for health care providers'. Under 'Table 1. By age', there are links for '8.5"x11" print color', '8.5"x11" print black and white', and a 'Compliant version of this schedule'. Under 'Table 3. By medical indications', there are links for 'Vaccines in the Child and Adolescent Immunization Schedule' and 'Learn how to display current schedules from your website'. A 'Download Schedules App' button with the CDC logo is in the bottom right corner.

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

A-Z Index

Search Vaccines site

Advanced Search

Immunization Schedules

CDC > Schedules Home > For Health Care Providers

Table 1. Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

Always make recommendations by determining needed vaccines based on age ([Table 1](#)), determining appropriate intervals for catch-up, if needed ([Table 2](#)), assessing for medical indications ([Table 3](#)), and reviewing special situations ([Notes](#)).

[Get Email Updates](#)

COVID-19 Vaccination

ACIP recommends use of COVID-19 vaccines for everyone ages 12 and older within the scope of the Emergency Use Authorization for the particular vaccine. COVID-19 vaccine and other vaccines may be administered on the same day. See the [COVID-19 Vaccine Product Information page](#) for additional information about COVID-19 vaccines authorized for use in the United States.

Table 1. By age

Table 2. Catch-up schedule

Table 3. By medical indications

Schedule Changes & Guidance

Parent-friendly schedule

Resources for health care providers

- 8.5"x11" print color [PDF](#) [8 pages]
- 8.5"x11" print black and white [PDF](#) [8 pages]
- [Compliant version of this schedule](#)
- [Vaccines in the Child and Adolescent Immunization Schedule](#)
- [Learn how to display current schedules from your website.](#)

[Download Schedules App](#)

Please take note of Table 2 listed: **Catch-up schedule**

Table 3 Recommended Child and Adolescent Immunization Schedule by Medical Indication, United States, 2022

Always use this table in conjunction with Table 1 and the notes that follow.

VACCINE	INDICATION									
	Pregnancy	Immunocompromised status (excluding HIV infection)	HIV infection CD4+ count ¹		Kidney failure, end-stage renal disease, or on hemodialysis	Heart disease or chronic lung disease	CSF leak or cochlear implant	Asplenia or persistent complement deficiencies	Chronic liver disease	Diabetes
			<15% or total CD4 cell count of <200/mm ³	≥15% and total CD4 cell count of ≥200/mm ³						
Hepatitis B										
Rotavirus		SCID ²								
Diphtheria, tetanus, and acellular pertussis (DTaP)										
Haemophilus influenzae type b										
Pneumococcal conjugate										
Inactivated poliovirus										
Influenza (IV) or Influenza (LAIV)						Asthma, wheezing 2–4 yrs ³				
Measles, mumps, rubella	*									
Varicella	*									
Hepatitis A										
Tetanus, diphtheria, and acellular pertussis (Tdap)										
Human papillomavirus	*									
Meningococcal ACWY										
Meningococcal B										
Pneumococcal polysaccharide										
Dengue										

Vaccination according to the routine schedule recommended
Recommended for persons with an additional risk factor for which the vaccine would be indicated
Vaccination is recommended, and additional doses may be necessary based on medical condition or vaccine. See Notes.
Precaution—vaccine might be indicated if benefit of protection outweighs risk of adverse reaction
Contraindicated or not recommended—vaccine should not be administered.
*Vaccinate after pregnancy
No recommendation/not applicable

¹ For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization, "Altered Immunity" section at www.cdc.gov/vaccines/imz-manual/best-practices-guidelines/immunization/alter-immunity.

² Severe Combined Immunodeficiency

³ LAIV4 contraindicated for children 2–4 years of age with asthma or wheezing during the preceding 12 months

Table 3 = Imm Schedule by Medical Indication

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

For vaccination recommendations for persons ages 19 years or older, see the Recommended Adult Immunization Schedule, 2022.

Additional Information

COVID-19 Vaccination

COVID-19 vaccines are recommended for use within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine, or otherwise recommended by ACIP and adopted by the CDC director. Interim ACIP recommendations for the use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/hcp/acip-recs/index.html.

CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html.

- Consult relevant ACIP statements for detailed recommendations at www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For calculating intervals between doses, 4 weeks = 28 days. Intervals of ≥4 months are determined by calendar months.
- Within a number range (e.g., 12–18), a dash (–) should be read as "through."
- Vaccine doses administered ≥4 days before the minimum age or interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum age or minimum interval should not be counted as valid and should be repeated as age appropriate. The repeat dose should be spaced after the invalid dose by the recommended minimum interval. For further details, see Table 3-1, Recommended and minimum ages and intervals between vaccine doses, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/timing.html.
- Information on travel vaccination requirements and recommendations is available at www.cdc.gov/travel/.
- For vaccination of persons with immunodeficiencies, see Table 8-1, Vaccination of persons with primary and secondary immunodeficiencies, in *General Best Practice Guidelines for Immunization* at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html, and *Immunization in Special Clinical Circumstances* (in: Kimberlin DW, Brady MT, Jackson MA, Long SS, eds. *Red Book: 2018 Report of the Committee on Infectious Diseases*. 31st ed. Itasca, IL: American Academy of Pediatrics; 2018:67–111).
- For information about vaccination in the setting of a vaccine-preventable disease outbreak, contact your state or local health department.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All routine child and adolescent vaccines are covered by VICP except for pneumococcal polysaccharide vaccine (PPSV23). For more information, see www.hrsa.gov/vaccinecompensation/index.html.

Dengue vaccination (minimum age: 9 years)

Routine Vaccination

- Age 9 – 16 years living in dengue endemic areas AND have laboratory confirmation of previous dengue infection
- 3-dose series administered at 0, 6, and 12 months
- Endemic areas include Puerto Rico, American Samoa, US Virgin Islands, Federated States of Micronesia, Republic of Marshall Islands, and the Republic of Palau. For updated guidance on dengue endemic areas and pre-vaccination laboratory testing see www.cdc.gov/mmwr/volumes/69/wr/mm6905a5.htm

Diphtheria, tetanus, and pertussis (DTaP) vaccination (minimum age: 6 weeks [4 years for Kinrix or Quadracel])

Routine vaccination

- 5-dose series at 2, 4, 6, 15–18 months, 4–6 years
- Prospectively: Dose 4 may be administered as early as age 12 months if at least 6 months have elapsed since dose 3.
- Retrospectively: A 4th dose that was inadvertently administered as early as age 12 months may be counted if at least 4 months have elapsed since dose 3.

Catch-up vaccination

- Dose 5 is not necessary if dose 4 was administered at age 4 years or older and at least 6 months after dose 3.
- For other catch-up guidance, see Table 2.

Special situations

- Wound management in children less than age 7 years with history of 3 or more doses of tetanus-toxoid-containing vaccine. For all wounds except clean and minor wounds, administer DTaP if more than 5 years since last dose of tetanus-toxoid-containing vaccine. For detailed information, see www.cdc.gov/mmwr/volumes/67/rr/r6702a1.htm.

Haemophilus influenzae type b vaccination (minimum age: 6 weeks)

Routine vaccination

- ActHib, Hibex, Pentacel, or Vaxelis: 4-dose series (3 dose primary series at age 2, 4, and 6 months, followed by a booster dose* at age 12–15 months)
- Vaxelis is not recommended for use as a booster dose. A different Hib-containing vaccine should be used for the booster dose.
- PedvaxHIB: 3-dose series (2-dose primary series at age 2 and 4 months, followed by a booster dose at age 12–15 months)

Catch-up vaccination

- Dose 1 at age 7–11 months: Administer dose 2 at least 4 weeks later and dose 3 (final dose) at age 12–15 months or 8 weeks after dose 2 (whichever is later).
- Dose 1 at age 12–14 months: Administer dose 2 (final dose) at least 8 weeks after dose 1.
- Dose 1 before age 12 months and dose 2 before age 15 months: Administer dose 3 (final dose) at least 8 weeks after dose 2.

- 2 doses of PedvaxHIB before age 12 months: Administer dose 3 (final dose) at 12–59 months and at least 8 weeks after dose 2.
- 1 dose administered at age 15 months or older: No further doses needed.
- Unvaccinated at age 15–59 months: Administer 1 dose.
- Previously unvaccinated children age 60 months or older who are not considered high risk: Do not require catch-up vaccination.
- For other catch-up guidance, see Table 2. Vaxelis can be used for catch-up vaccination in children less than age 5 years. Follow the catch-up schedule even if Vaxelis is used for one or more doses. For detailed information on use of Vaxelis see www.cdc.gov/mmwr/volumes/69/wr/mm6905a5.htm

Special situations

Chemotherapy or radiation treatment:

- 12–59 months
- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose
- Doses administered within 14 days of starting therapy or during therapy should be repeated at least 3 months after therapy completion.

Hematopoietic stem cell transplant (HSCT):

- Anatomic or functional asplenia (including sickle cell disease):

- 12–59 months
- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

Unvaccinated* persons age 5 years or older

- 1 dose

Elective splenectomy:

- Unvaccinated* persons age 15 months or older
- 1 dose (preferably at least 14 days before procedure)

HIV infection:

- 12–59 months
- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose
- Unvaccinated* persons age 5–18 years
- 1 dose

Immunoglobulin deficiency, early component complement deficiency:

- 12–59 months
- Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
- 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

*Unvaccinated = Less than routine series (through age 14 months) OR no doses (age 15 months or older)

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

Catch-up vaccination

Revised bullet:

- For other catch-up guidance, see Table 2. Vaxelis can be used for catch-up vaccination in children less than age 5 years. Follow the catch-up schedule even if Vaxelis is used for one or more doses. For detailed information on use of Vaxelis see www.cdc.gov/mmwr/volumes/69/wr/mm6905a5.htm

Routine vaccination

Revised bullets

- ActHib, Hiberix, Pentacel, or Vaxelis:** 4-dose series [3 dose primary series at age 2, 4, and 6 months, followed by a booster dose* at age 12–15 months]
 - *Vaxelis is not recommended for use as a booster dose. A different Hib-containing vaccine should be used for the booster dose.
- PedvaxHIB:** 3-dose series [2-dose primary series at age 2 and 4 months, followed by a booster dose at age 12–15 months]

Catch-up vaccination

- Dose 5 is not necessary if dose 4 was administered at age 4 years or older and at least 8 months after dose 3.
- For other catch-up guidance, see Table 2.

Special situations

- Wound management in children less than age 7 years with history of 3 or more doses of tetanus-toxoid-containing vaccine. For all wounds, except clean and minor wounds, administer CTAP if more than 5 years since last dose of tetanus-toxoid-containing vaccine. For detailed information, see www.cdc.gov/mmwr/volumes/69/14/mm6914a1.htm.

Haemophilus influenzae type b vaccination (minimum age: 6 weeks)

Routine vaccination

- ActHib, Hiberix, Pentacel, or Vaxelis:** 4-dose series [3 dose primary series at age 2, 4, and 6 months, followed by a booster dose* at age 12–15 months]
 - *Vaxelis is not recommended for use as a booster dose. A different Hib-containing vaccine should be used for the booster dose.
- PedvaxHIB:** 3-dose series [2-dose primary series at age 2 and 4 months, followed by a booster dose at age 12–15 months]

Catch-up vaccination

- Dose 1 at age 7–11 months:** Administer dose 2 at least 4 weeks later and dose 3 (final dose) at age 12–15 months or 8 weeks after dose 2 (whichever is later).
- Dose 1 at age 12–14 months:** Administer dose 2 (final dose) at least 8 weeks after dose 1.
- Dose 1 before age 12 months and dose 2 before age 15 months:** Administer dose 3 (final dose) at least 8 weeks after dose 2.

- 2 doses of PedvaxHIB before age 12 months: Administer dose 3 (final dose) at 12–59 months and at least 8 weeks after dose 2.
- 1 dose administered at age 15 months or older: No further doses needed.
- Unvaccinated at age 15–59 months: Administer 1 dose.
- Previously unvaccinated children age 60 months or older who are not considered high risk: Do not require catch-up vaccination.
- For other catch-up guidance, see Table 2. Vaxelis can be used for catch-up vaccination in children less than age 5 years. Follow the catch-up schedule even if Vaxelis is used for one or more doses. For detailed information on use of Vaxelis see www.cdc.gov/mmwr/volumes/69/wr/mm6905a5.htm.

Special situations

- Chemotherapy or radiation treatment:**
 - 12–59 months:
 - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
 - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose
- Doses administered within 14 days of starting therapy or during therapy should be repeated at least 3 months after therapy completion.
- Hematopoietic stem cell transplant (HSCT):**
 - 3-dose series 4 weeks apart starting 6 to 12 months after successful transplant, regardless of Hib vaccination history
- Anatomic or functional asplenia (including sickle cell disease):**
 - 12–59 months:
 - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
 - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose
- Unvaccinated* persons age 5 years or older:**
 - 1 dose
- Elective splenectomy:**
 - Unvaccinated* persons age 15 months or older:
 - 1 dose (preferably at least 14 days before procedure)
- HIV infection:**
 - 12–59 months:
 - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
 - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose
- Unvaccinated* persons age 5–18 years:**
 - 1 dose
- Immunoglobulin deficiency, early component complement deficiency:**
 - 12–59 months:
 - Unvaccinated or only 1 dose before age 12 months: 2 doses, 8 weeks apart
 - 2 or more doses before age 12 months: 1 dose at least 8 weeks after previous dose

*Unvaccinated = Less than routine series (through age 14 months) OR no doses (age 15 months or older)

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

Hepatitis A vaccination (minimum age: 12 months for routine vaccination)

Routine vaccination

- 2-dose series (minimum interval: 6 months) at age 12–23 months

Catch-up vaccination

- Unvaccinated persons through age 16 years should complete a 2-dose series (minimum interval: 6 months).
- Persons who overtook received 1 dose at age 12 months or older should receive dose 2 at least 6 months after dose 1.
- Adolescents age 16 years or older may receive the combined HepA and HepB vaccine, **Twinrix**, as a 3-dose series (0, 1, and 6 months) or 4-dose series (3 doses at 0, 1, and 21–30 days, followed by a booster dose at 12 months).

International travel

- Persons traveling to or working in countries with high or intermediate endemic hepatitis A (www.cdc.gov/mal/):
 - Infants age 6–11 months: 1 dose before departure; revaccinate with 2 doses, separated by at least 6 months, between age 12–23 months.
 - Unvaccinated age 12 months or older: Administer dose 1 as soon as travel is considered.

Hepatitis B vaccination (minimum age: birth)

Birth dose (monovalent HepB vaccine only)

- **Mother is HBsAg-negative:** 1 dose within 24 hours of birth for all medically stable infants $\geq 2,000$ grams. Infants $< 2,000$ grams: Administer 1 dose at chronological age 1 month or hospital discharge (whichever is earlier and even if weight is still $< 2,000$ grams).
- **Mother is HBsAg-positive:**
 - Administer **HepB vaccine** and **hepatitis B immune globulin (HBIG)** (in separate limbs) within 12 hours of birth, regardless of birth weight. For infants $< 2,000$ grams, administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
 - Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose.
- **Mother's HBsAg status is unknown:**
 - Administer **HepB vaccine** within 12 hours of birth, regardless of birth weight.
 - For infants $< 2,000$ grams, administer **HBIG** in addition to HepB vaccine (in separate limbs) within 12 hours of birth. Administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.
 - Determine mother's HBsAg status as soon as possible. If mother is HBsAg-positive, administer **HBIG** to infants $\geq 2,000$ grams as soon as possible, but no later than 7 days of age.

Routine series

- 3-dose series at 0, 1–2, 6–18 months (use monovalent HepB vaccine for doses administered before age 6 weeks)
- Infants who did not receive a birth dose should begin the series as soon as feasible (see Table 2).
- Administration of 4 doses is permitted when a combination vaccine containing HepB is used after the birth dose.
- **Minimum age** for the final (3rd or 4th) dose: 24 weeks
- **Minimum intervals:** dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks (when 4 doses are administered, substitute "dose 4" for "dose 3" in these calculations)

Catch-up vaccination

- Unvaccinated persons should complete a 3-dose series at 0, 1–2, 6 months.
- Adolescents age 11–15 years may use an alternative 2-dose schedule with at least 4 months between doses (adult formulation **Recombivax HB** only).
- Adolescents age 18 years or older may receive a 2-dose series of HepB (**Heplisav-B**) at least 4 weeks apart.
- Adolescents age 18 years or older may receive the combined HepA and HepB vaccine, **Twinrix**, as a 3-dose series (0, 1, and 6 months) or 4-dose series (3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months).
- For other catch-up guidance, see Table 2.

Special situations

- Revaccination is not generally recommended for persons with a normal immune status who were vaccinated as infants, children, adolescents, or adults.
- **Post-vaccination serology testing and revaccination** (if anti-HBs < 10 mIU/mL) is recommended for certain populations, including:
 - Infants born to HBsAg-positive mothers
 - Hemodialysis patients
 - Other immunocompromised persons
- For detailed revaccination recommendations, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html.

Human papillomavirus vaccination (minimum age: 9 years)

Routine and catch-up vaccination

- HPV vaccination is routinely recommended at age 11–12 years (can start at age 9 years) and catch-up HPV vaccination is recommended for all persons through age 18 years if not adequately vaccinated.
- 2- or 3-dose series, depending on age at initial vaccination:
 - Age 9–14 years at initial vaccination: 2-dose series at 0–6/12 months (minimum interval: 6 months; repeat dose if administered too soon).
 - Age 15 years or older at initial vaccination: 3-dose series at 0–1–6 months (minimum interval: 5 months; dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon).

- Interrupted schedules: If catch-up on schedule is interrupted, the series does not need to be restarted.
- No additional dose recommended when any HPV vaccine series has been completed using the recommended dosing intervals.

Special situations

- Immunocompromising conditions, including HIV infection: 3-dose series, regardless of age at initial vaccination.
- History of sexual abuse or assault: Start at age 9 years.
- Pregnancy: Pregnancy testing not needed before vaccination. HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant.

Special situations

- Revised bullet: **Post-vaccination serology testing and revaccination** (if anti-HBs < 10 mIU/mL) is recommended for certain populations, including:

- Infants born to HBsAg-positive mothers
- Hemodialysis patients
- Other immunocompromised persons

For detailed revaccination recommendations, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html.

Notes

Recommended Child and Adolescent

Measles, mumps, and rubella vaccination (minimum age: 12 months for routine vaccination)

Routine vaccination

- 2-dose series at 12–15 months, 4–6 years
- MMR or MMRV may be administered*
- *Note: For dose 1 in children age 12–47 months, it is recommended to administer MMR and varicella vaccines separately. MMRV may be used if parents or caregivers express a preference.

Catch-up vaccination

- Unvaccinated children and adolescents: 2-dose series at least 4 weeks apart
- The maximum age for use of MMRV is 12 years.
- Minimum interval between MMRV doses: 3 months

Special situations

International travel

- Infants age 6–11 months: 1 dose before departure; revaccinate with 2-dose series at age 12–15 months (12 months for children in high-risk areas) and dose 2 as early as 4 weeks later.
- Unvaccinated children age 12 months or older: 2-dose series at least 4 weeks apart before departure

Meningococcal serogroup A,C,W,Y vaccination (minimum age: 2 months [MenACWY-CRM, Menveo], 9 months [MenACWY-D, Menactra], 2 years [MenACWY-TT, MenQuadfi])

Routine vaccination

- 2-dose series at 11–12 years, 16 years

Catch-up vaccination

- Age 13–15 years: 1 dose now and booster at age 16–18 years (minimum interval: 8 weeks)
- Age 16–18 years: 1 dose

Special situations

Anatomic or functional asplenia (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) user:

Menveo

- Dose 1 at age 3 weeks; 4-dose series at 2, 4, 6, 12 months
- Dose 1 at age 3–6 months; 3- or 4-dose series; dose 2 (and dose 3 if applicable) at least 8 weeks after previous dose until a dose is received at age 7 months or older, followed by an additional dose at least 15 weeks later and other age 12 months
- Dose 1 at age 7–23 months; 2-dose series; dose 2 at least 12 weeks after dose 1 and other age 12 months
- Dose 1 at age 24 months or older; 2-dose series at least 8 weeks apart

Menactra

- Persistent complement component deficiency or complement inhibitor use:
 - Age 9–23 months: 2-dose series at least 12 weeks apart
 - Age 24 months or older: 2-dose series at least 8 weeks apart
- Anatomic or functional asplenia, sickle cell disease, or HIV infection:
 - Age 9–23 months: Not recommended
 - Age 24 months or older: 2-dose series at least 8 weeks apart

Routine vaccination

- Added bullet: **MMR or MMRV may be administered***
- Added: ***Note: For dose 1 in children age 12–47 months, it is recommended to administer MMR and varicella vaccines separately. MMRV may be used if parents or caregivers express a preference.**

Catch-up vaccination

- Added bullet: **Minimum interval between MMRV doses: 3 months**

Note: Menactra should be administered either before or at the same time as DTaP. MenACWY vaccines may be administered simultaneously with MenB vaccines if indicated, but at a different anatomic site, if feasible.

For MenACWY booster dose recommendations for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccine information, see www.cdc.gov/men/meningitis-vaccine-recommendations-2018.html.

Meningococcal serogroup B vaccination (minimum age: 10 years [MenB-4C, Bexsero; MenB-FHbp, Trumenb])

Shared clinical decision-making

- Adolescents not at increased risk age 10–23 years: preferred age 16–18 years based on shared clinical decision-making.
 - Bexsero: 2-dose series at least 1 month apart
 - Trumenb: 2-dose series at least 6 months apart if dose 2 is administered earlier than 6 months, otherwise: 2.3rd dose at least 4 months after dose 2

Special situations

Anatomic or functional asplenia (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use:

- No history of PPV23: 1 dose PPV23 at least 8 weeks after completing all recommended PCV13 doses

Age 6–18 years

- No history of PPV23: 1 dose PPV23 at least 8 weeks after completing all recommended PCV13 doses

Cerebrospinal fluid leak, cochlear implant:

Age 4–18 years

- Any immunocompetent series with:
 - 3 PCV13 doses: 1 dose PCV13 at least 8 weeks after any prior PCV13 dose
 - Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most recent dose and administered 5 weeks apart)

- No history of PPV23: 1 dose PPV23 at least 8 weeks after any prior PCV13 dose

Age 4–18 years

- No history of either PCV13 or PPV23: 1 dose PCV13, 1 dose PPV23 at least 8 weeks later
- Any PCV13 but no PPV23: 1 dose PPV23 at least 8 weeks after the most recent dose of PCV13
- PPV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent dose of PPV23

States, 2022

months apart
2–6 months
not interchangeable the same
at the same
indications for groups listed
outbreak setting and additional
about 844-672-6229, gpo: menpr

tion

PCV13], 2 years (PPSV23)

PCV13

months

PCV13

4–59 months with any incomplete*

Table 2.

When both PCV13 and PPSV23 are
st, PCV13 and PPSV23 should not
take.
any cyanotic congenital heart
disease, lung disease (including
oral corticosteroids), diabetes

at least 8 weeks after any prior PCV13

go PCV13, 8 weeks after the most

least 8 weeks after the most recent

completing all recommended PCV13 doses

at least 8 weeks after

completing all recommended PCV13 doses

Cerebrospinal fluid leak, cochlear implant:

Age 4–18 years

Any immunocompetent series with:

3 PCV13 doses: 1 dose PCV13 at least 8 weeks after any prior PCV13

dose

Less than 3 PCV13 doses: 2 doses PCV13 (8 weeks after the most

recent dose and administered 5 weeks apart)

No history of PPV23: 1 dose PPV23 at least 8 weeks after any prior

PCV13 dose

Age 4–18 years

No history of either PCV13 or PPV23: 1 dose PCV13, 1 dose PPV23

at least 8 weeks later

Any PCV13 but no PPV23: 1 dose PPV23 at least 8 weeks after the

most recent dose of PCV13

PPV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most

recent dose of PPV23

*Remember to separate MMR and Var for first dose

Hepatitis B (minimum)

Routine vaccination

* 3-dose series at 12–23 months

Catch-up vaccination

* Unvaccinated 2-dose series at 12–23 months

* Persons who should receive

* Adolescents and young adults 16–18 years of age

* Persons traveling to intermediate-risk countries

* Persons aged 19–59 years with 1 dose at 12–23 months

* Unvaccinated persons at travel

Hepatitis B (minimum)

Birth dose

* Mother is HBsAg-negative: 1 dose within 12 hours of birth for all medically stable infants >2,000 grams; infants <2,000 grams: administer 1 dose at chronological age 1 month or hospital discharge (whichever is earlier and even if weight is still <2,000 grams)

* Mother is HBsAg-positive:

- Administer HepB vaccine and hepatitis B immune globulin (HBIG) in separate limbs within 12 hours of birth, regardless of birth weight. For infants <2,000 grams, administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.

- Test for HBsAg and anti-HBs at age 9–12 months. If HBe series is delayed, test 1–2 months after final dose.

* Mother's HBsAg status is unknown:

- Administer HepB vaccine within 12 hours of birth, regardless of birth weight.

- For infants <2,000 grams, administer HBIG in addition to HepB vaccine in separate limbs within 12 hours of birth. Administer 3 additional doses of vaccine (total of 4 doses) beginning at age 1 month.

- Determine mother's HBsAg status as soon as possible. If mother is HBsAg-positive, administer HBIG to infants <2,000 grams as soon as possible, but no later than 7 days of age.

Routine and catch-up vaccination

- Revised bullet: **No additional dose recommended when any HPV vaccine series has been completed using the recommended dosing intervals.**

Special situations

- Revised bullet: **Immunocompromising conditions, including HIV infection: 3-dose series regardless of age at initial vaccination**
- Revised bullet: **Pregnancy: Pregnancy testing not needed before vaccination; HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant**

- **Age 15 years or older at initial vaccination:** 3-dose series at 0, 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)

* **Interrupted schedules:** If vaccination schedule is interrupted, the series does not need to be restarted.

* No additional dose recommended when any HPV vaccine series has been completed using the recommended dosing intervals.

Special situations

* **Immunocompromising conditions, including HIV infection:** 3-dose series regardless of age at initial vaccination

* **History of sexual abuse or assault:** Start at age 9 years.

* **Pregnancy:** Pregnancy testing not needed before vaccination; HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant

Influenza vaccination

(minimum age: 6 months [IV], 2 years [LAIV], 18 years [recombinant influenza vaccine, RIV4])

Routine vaccination

* Use any influenza vaccine appropriate for age and health status annually.

- 2 doses, separated by at least 4 weeks, for children age 6 months–8 years who have received fewer than 2 influenza vaccine doses before July 1, 2021, or whose influenza vaccination history is unknown; administer dose 2 even if the child turns 9 between receipt of dose 1 and dose 2.

- 1 dose for children age 6 months–8 years who have received at least 2 influenza vaccine doses before July 1, 2021.

- 1 dose for all persons age 9 years or older.

* For the 2021–2022 season, see www.cdc.gov/flu/immun/2021/.

* For the 2022–23 season, see the 2022–23 ACP influenza vaccine recommendations.

Special situations

* **Egg allergy, hives only:** Any influenza vaccine appropriate for age and health status annually.

* **Egg allergy with symptoms other than hives (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention:** see Appendix listing contraindications and precautions.

* **Severe allergic reaction (e.g., anaphylaxis) to a vaccine component or a previous dose of any influenza vaccine:** see Appendix listing contraindications and precautions.

Post-vaccination serology testing and revaccination if indicated

10 mL/mL is recommended for certain populations, including:

- Infants born to HBsAg-positive mothers

- Hemodialysis patients

- Other immunocompromised persons

* For detailed revaccination recommendations, see www.cdc.gov/vaccines/imz/immun/2021-22/08-18-21.html.

Human papillomavirus vaccination

(minimum age: 9 years)

Routine and catch-up vaccination

* HPV vaccination routinely recommended at age 11–12 years (can start at age 9 years) and catch-up HPV vaccination recommended for all persons through age 18 years if not adequately vaccinated

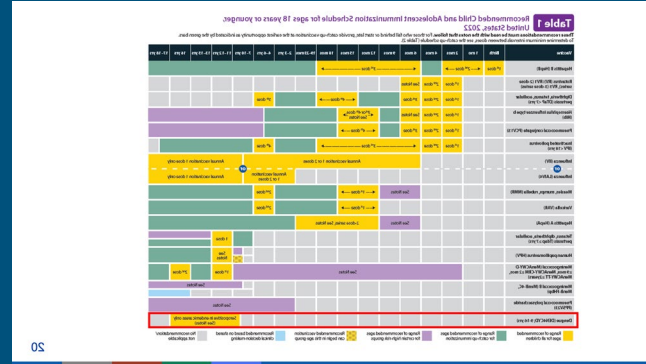
* 2- or 3-dose series depending on age at initial vaccination:

- **Age 9–14 years at initial vaccination:** 2-dose series at 0, 6–12 months (minimum interval: 5 months; repeat dose if administered too soon)

Highlighted changes for 2022

General schedule

- Added dengue vaccine to the child and adolescent schedule
- Added an appendix listing the contraindications and precautions for each vaccine type in the child and adolescent schedule
- Added a QR code to the cover page that links to the online version of the schedule



Appendix Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022		
<p>Source: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC). Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022. Adapted from Table 1 of Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization: Contraindications and Precautions for Immunization. https://www.cdc.gov/vaccines/imz/downloads/pdf/13acgp-contraindications-and-precautions-for-immunization.pdf</p>		
<p>Notes: Child and adolescent immunization schedule for ages 18 years or younger, United States, 2022. Adapted from Table 1 of Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization: Contraindications and Precautions for Immunization. https://www.cdc.gov/vaccines/imz/downloads/pdf/13acgp-contraindications-and-precautions-for-immunization.pdf</p>		
Immunization	Contraindications and Precautions	Precautions
Adjuvanted dTpa	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine 	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine
Adjuvanted dTpa	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine 	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine
Adjuvanted dTpa	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine 	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine
Adjuvanted dTpa	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine 	<ul style="list-style-type: none"> Severe allergic reaction to a component of the vaccine or to a previous dose of the vaccine Severe allergic reaction to gelatin or egg protein Severe allergic reaction to neomycin or to any other component of the vaccine Severe allergic reaction to any other component of the vaccine

Dengue Vaccination

- Age 9–16 years living in dengue endemic areas AND have laboratory confirmation of previous dengue infection
 - 3-dose series administered at 0, 6, and 12 months
- Endemic areas include Puerto Rico, American Samoa, US Virgin Islands, Federated States of Micronesia, Republic of Marshall Islands, and the Republic of Palau. For updated guidance on dengue endemic areas and pre-vaccination laboratory testing see <https://www.cdc.gov/mmwr/volumes/70/rr/rr7006a1.htm> and <https://www.cdc.gov/dengue/vaccine/hcp/index.html>.



Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger

UNITED STATES
2022

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccine	Abbreviation(s)	Trade name(s)
Dengue vaccine	DENVAXYD	Dengvaxia [®]
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Taprocin [®] Infanrix [®]
Diphtheria, tetanus vaccine	DT	No trade name
Haemophilus influenzae type b vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActHib [®] Hibvax [®] PedvaxHib [®]
Hepatitis A vaccine	HepA	Havrix [®] Vaqta [®]
Hepatitis B vaccine	HepB	Ergoferon [®] Recombivax HB [®]
Human papillomavirus vaccine	HPV	Gardasil 9 [®]
Influenza vaccine (inactivated)	IV	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist [®] Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II [®]
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D	Menactra [®]
	MenACWY-CRM	Menveo [®]
	MenACWY-TT	MenQuadfi [®]
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Bexsero [®] Trumenb [®]
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13 [®]
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23 [®]
Poliiovirus vaccine (inactivated)	IPV	IPOL [®]
Rotavirus vaccine	RV1 RV2	Rotarix [®] RotaShield [®]
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel [®] Boostrix [®]
Tetanus and diphtheria vaccine	Td	Tetavax [®] Tdyx [®]
Varicella vaccine	VAR	Varivax [®]

Combination vaccines (see combination vaccines instead of separate list when appropriate)

DTaP, hepatitis B, and inactivated poliiovirus vaccine	DTaP-HepB-IPV	Pediaris [®]
DTaP, inactivated poliiovirus, and Haemophilus influenzae type b vaccine	DTaP-IPV/Hib	Pentacox [®]
DTaP and inactivated poliiovirus vaccine	DTaP-IPV	Yivis [®] Quadracel [®]
DTaP, inactivated poliiovirus, Haemophilus influenzae type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxelis [®]
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuad [®]

* Schedule recommended vaccine if immunization history is incomplete or unknown. Do not repeat or add doses to vaccine series for scheduled intervals between doses. Where vaccine is not administered at the recommended age, administer it as soon as possible. The use of trade names is for identification purposes only and does not imply endorsement by the ACP or CDC.

How to use the child/adolescent immunization schedule

- 1 Determine recommended vaccine by age (Table 1)
- 2 Determine recommended interval for catch-up vaccination (Table 2)
- 3 Assess need for additional recommended vaccines by medical condition or other indication (Table 3)
- 4 Review vaccine types, frequencies, intervals, and considerations for special situations (Notes)
- 5 Review contraindications and precautions for vaccine types (Appendix)

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/imz/) and approved by the Centers for Disease Control and Prevention (www.cdc.gov/), American Academy of Pediatrics (www.aap.org/), American Academy of Family Physicians (www.aafp.org/), American College of Obstetricians and Gynecologists (www.acog.org/), American College of Nurse-Midwives (www.midwife.org/), American Academy of Physician Assistants (www.aapa.org/), and National Association of Pediatric Nurse Practitioners (www.napn.org/).

Report

- * Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department.
- * Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at [www.vaers.hhs.gov/](https://vaers.hhs.gov/) or 800-622-7967.

Questions or comments

Contact www.cdc.gov/od/oc/ or 800-CDC-INFO (800-232-4636), in English or Spanish, 9 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.



Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/app/schedule-app.html.

Helpful information

- * Complete ACP recommendations: www.cdc.gov/vaccines/imz/immunization/index.html
- * General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/od/oc/immunization/best-practice-guidelines/index.html
- * Vaccine information statements: www.cdc.gov/vaccines/imz/vis/index.html
- * Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/imz/manual/
- * ACP Shared Clinical Decision-Making Recommendations: www.aapn.org/vaccine-schedule/decision-making/



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Scan QR code
for more
information
on the
schedule

Appendix review is the 5th step

Notes

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

Hepatitis A vaccination (minimum age: 12 months for routine vaccination)

Routine vaccination

* 2-dose series (minimum interval: 6 months) at age 12–13 months

Catch-up vaccination

* Unvaccinated persons through age 18 years should complete a:

3-dose series (minimum interval: 6 months)

* Persons who previously received 1 dose at age 12 months or older should receive dose 2 at least 6 months after dose 1

* Adolescents age 18 years or older may receive the combined HepA and HepB vaccine, *Twixix*[®], as a 3-dose series at 0, 1, and 6 months

Routine series

* 3-dose series at 0, 1–2, & 6–18 months (use monovalent HepB vaccine for doses administered before age 6 weeks)

* Infants who did not receive a birth dose should begin the series as soon as feasible (see Table 2)

* Administration of 4 doses is permitted when a combination vaccine containing HepB is used after the birth dose

* Maximum age for the final (3rd or 4th) dose: 34 weeks

* Minimum intervals: dose 1 to dose 2: 4 weeks; dose 2 to dose 3: 8 weeks; dose 1 to dose 3: 16 weeks (when 4 doses are administered, substitute “dose 4” for “dose 3” in these calculations)

Catch-up vaccination

* Unvaccinated persons should complete a 3-dose series at 0, 1–2, & 6

Age 15 years or older at initial vaccination: 3-dose series at 0, 1–2 months, & 6 months (minimum intervals: dose 1 to dose 2: 4 weeks; dose 2 to dose 3: 12 weeks; dose 1 to dose 3: 5 months)

* Interrupted schedules: If vaccination schedule is interrupted, this series does not need to be restarted

* No additional doses recommended when any HPV vaccine series has been completed using the recommended dosing intervals

Special situations

* Immunosuppressing conditions, including HIV infection: 3-dose series regardless of age at initial vaccination

* History of sexual abuse or assault: Start at age 9 years

* Pregnancy: Pregnancy testing not needed before vaccination; HPV vaccination not recommended until after pregnancy; no intervention needed if vaccinated while pregnant

Influenza vaccination

(minimum age: 6 months [IIV], 2 years [LAIV4], 18 years [recombinant influenza vaccine, RIV4])

Routine vaccination

* Use any influenza vaccine appropriate for age and health status annually:

– 2 doses, separated by at least 4 weeks, for **children age 6 months–8 years** who have received fewer than 2 influenza vaccine doses before July 1, 2021, or whose influenza vaccination history is unknown (administer dose 2 even if the child turns 9 between receipt of dose 1 and dose 2)

– 1 dose for **children age 6 months–8 years** who have received at least 2 influenza vaccine doses before July 1, 2021

– 1 dose for **all persons age 9 years or older**

* For the 2021–2022 season, see www.cdc.gov/mmwr/volumes/70/rr/r7005a1.htm

* For the 2022–23 season, see the 2022–23 ACIP influenza vaccine recommendations

Special situations

* **Egg allergy, hives only:** Any influenza vaccine appropriate for age and health status annually

* **Egg allergy with symptoms other than hives** (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention: see Appendix listing contraindications and precautions

* **Severe allergic reaction** (e.g., anaphylaxis) to a vaccine component or a previous dose of any influenza vaccine: see Appendix listing contraindications and precautions

Special situations

- Revised bullet: **Egg allergy with symptoms other than hives** (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention: **see Appendix listing contraindications and precautions**
- Revised bullet: **Severe allergic reaction** (e.g., anaphylaxis) to a vaccine component or a previous dose of any influenza vaccine: **see Appendix listing contraindications and precautions**

Deleted bullets:

- Severe allergic reactions to vaccines can occur even in the absence of a history of previous allergic reaction. All vaccination providers should be familiar with the office emergency plan and certified in cardiopulmonary resuscitation.
- LAIV4 should not be used** in persons with the following conditions or situations:

Children with moderate to severe asthma or as soon as possible if wheezing is H5N1-positive, administer H5N1 to infants <2,000 grams as soon as possible, but no later than 7 days of age

I'm allergic to eggs; should I have the flu vaccine?



Should you
avoid it
altogether or
defer and
weigh
risks/benefits
with parents or
guardians

Appendix

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2022

Guide to Contraindications and Precautions to Commonly Used Vaccines

Adapted from Table 4-1 in Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization: Contraindication and Precautions available at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html and ACIP's Recommendations for the Prevention and Control of 2021-22 seasonal influenza with Vaccines available at www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm

Interim clinical considerations for use of COVID-19 vaccines including contraindications and precautions can be found at www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html

Vaccine	Contraindications ¹	Precautions ²
Influenza, egg-based, inactivated injectable (IIV4)	<ul style="list-style-type: none">• Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, cIIV, RIV, or LAIV of any valency)• Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg)	<ul style="list-style-type: none">• Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine• Persons with egg allergy with symptoms other than hives (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention: Any influenza vaccine appropriate for age and health status may be administered. If using egg-based IIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist.• Moderate or severe acute illness with or without fever

Addition of a QR code to scan and have a copy of the schedule on your smartphone!

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger UNITED STATES 2022

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccine	Abbreviation(s)	Trade name(s)
Dengue vaccine	DENVaxD	Dengvaxia®
Diphtheria, tetanus, and acellular pertussis vaccine	DTaP	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	DT	No trade name
Haemophilus influenzae type b vaccine	HiB (PRP-T)	ActHib® Hibivax®
	HiB (PRP-OMR)	Recombinant®
Hepatitis A vaccine	HepA	Harvix® Vaxta®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IV	Multiple
Influenza vaccine (live, attenuated)	LAIVH	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	M-M-R	M-M-R II®
Meningococcal serogroup A, C, W, Y vaccine	MenACWY-D	Menactra®
	MenACWY-CBM	Menveo®
	MenACWY-TT	MenQuadfi®
Meningococcal serogroup B vaccine	MenB-4C	Beqevac®
	MenB-FHbp	Tandemix®
Pneumococcal 13-valent conjugate vaccine	PCV13	Pneum 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Poliovirus vaccine (inactivated)	IPV	IPOL®
Rotavirus vaccine	RV1	Rotarix®
	RV5	Rotateq®
Tetanus, diphtheria, and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Tetanus and diphtheria vaccine	Td	Tenivac® Tdapex®
Vaccinia vaccine	VAR	Vaccinia®

Combination vaccines (use combination vaccines instead of separate injections when appropriate)

DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-IPV-Hib-IPV	Pediaris®
DTaP, inactivated poliovirus, and Haemophilus influenzae type b vaccine	DTaP-IPV-Hib	Pentacel®
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Imovax® Quadacel®
DTaP, inactivated poliovirus, Haemophilus influenzae type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxneer®
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuad®

*Administer recommended vaccines if immunization history is incomplete or unknown. Do not restrict or add doses to vaccine series for extended intervals between doses. When a vaccine is not administered at the recommended age, administer it at a subsequent visit. The use of trade names is for identification purposes only and does not imply endorsement by the ACP or CDC.

How to use the child/adolescent immunization schedule

- 1 Determine recommended vaccine by age (Table 1)
- 2 Determine recommended interval for catch-up vaccination (Table 2)
- 3 Assess need for additional recommended vaccine by medical condition or other indication (Table 3)
- 4 Review vaccine types, frequencies, intervals, and considerations for special situations (Notes)
- 5 Review contraindications and precautions for vaccine types (Appendix)

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/imz/) and approved by the Centers for Disease Control and Prevention (www.cdc.gov/), American Academy of Pediatrics (www.aap.org/), American Academy of Family Physicians (www.aafp.org/), American College of Obstetrics and Gynecology (www.acog.org/), American College of Nurse-Midwives (www.midwifery.org/), American Academy of Physician Assistants (www.aapa.org/), and National Association of Pediatric Nurse Practitioners (www.napn.org/).

Report

* Suspected cases of reportable vaccine-preventable diseases or outbreaks to your state or local health department.

* Clinically significant adverse events to the Vaccine Adverse Event Reporting System (VAERS) at vaers.hhs.gov/ or 800-422-7967.

Questions or comments

Contact www.cdc.gov/cv/ or 800-CDC-INFO (800-232-4636), in English or Spanish, 9 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.

Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

- * Complete ACP recommendations: www.cdc.gov/vaccines/hcp/ncn/index.html
- * General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/imz/immunization-general-vacc/index.html
- * Vaccine information statements: www.cdc.gov/vaccines/hcp/vi/index.html
- * Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/imz/ncn/surveillance-manual
- * ACP Shared Clinical Decision-Making Recommendations: www.acponline.org/shared-clinical-decisions/supplements/special/



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



Requirements for pre-school and school age children in the state of Arkansas.

<https://www.healthy.arkansas.gov/images/uploads/rules/ImmunizationRequirements.pdf>

*****A medical professional is a medical doctor (MD), advanced practice nurse (APN), doctor of osteopathy (DO), or physician assistant (PA). No self or parental history of disease will be accepted.

**TABLE II
KINDERGARTEN THROUGH GRADE TWELVE IMMUNIZATION
REQUIREMENTS***

Vaccine ► Grade ▼	Diphtheria, Tetanus, Pertussis (DTP/DT/Td/DTaP/ Tdap)	Polio (OPV – Oral or IPV – Inactivated)	MMR***** (Measles, Mumps, and Rubella)	Hep B	Meningococcal (MCV4)	Varicella	Hepatitis A
Kindergarten	4 doses (with 1 dose on or after 4 th birthday)	3 doses (with 1 dose on or after 4 th birthday and a minimum interval of 6 months between the 2 nd and 3 rd dose) OR 4 doses with 1 dose on or after 4 th birthday and a minimum interval of 6 months between the 3 rd and 4 th dose	2 doses (with dose 1 on or after 1 st birthday and dose 2 at least 28 days after dose 1)	3 doses	None	2 doses (with dose 1 on or after 1 st birthday and dose 2 at least 28 days after dose 1) *****A medical professional history of disease may be accepted in lieu of receiving vaccine.	1 dose on or after 1 st birthday

Parents have the option for Immunization Exemption within the state of Arkansas. The form includes essential information that is factual and evidence-based.

https://www.healthy.arkansas.gov/images/uploads/pdf/2022-2023_Childcare-School_Exemption_Application.pdf

You may complete the online application at <https://OnlineImmunizationExemption.ADH.Arkansas.gov/>

Arkansas Immunization Exemption Application 2022-2023 School Year

Please Note: To avoid processing delays, be sure to complete each part.

1. Select ONE of the following reasons for your exemption request:

☐ **MEDICAL** ☐ **RELIGIOUS** ☐ **PHILOSOPHICAL**
(Medical - You must attach a physician's letter stating the medical reason)

2. Child's FULL Name and Contact Information:

First _____ Middle _____ Last _____

Mailing Address _____ City _____ County _____
(Include P.O. Box and/or Apartment #)

State _____ Zip _____ Gender _____ Date of Birth _____ - _____ - _____

Race: (Select up to 3) ☐ Alaskan Native or American Indian ☐ Asian ☐ Black or African American ☐ Native Hawaiian or Pacific Islander ☐ White ☐ Other

Ethnicity: (Select 1) ☐ Hispanic or Latino ☐ Not Hispanic or Latino

3. Childcare or School Information: Select ONE: ☐ Public ^{OR} ☐ Private

Select ONE: ☐ Home/Virtual ☐ Childcare ☐ Preschool ☐ Elementary ☐ Middle ☐ Jr. High ☐ Sr. High

Facility/School _____ Public School District _____
(Home school, childcare or private school - Need school affiliation or curriculum)

Street Address _____ City _____

County _____ Zip _____ Grade _____

FIRST DAY OF ATTENDANCE FOR 2022-2023 SCHOOL YEAR: _____ / _____ /20
Month/ Day/ Year

4. Parent/Guardian Contact Information:

First _____ Middle _____ Last _____

Street/Mailing Address _____ City _____ County _____

State _____ Zip _____ Daytime Phone (____) _____ - _____ E-mail _____

Statement of Refusal to Vaccinate

Select the vaccine(s) that you **DO NOT** want your child to receive.

☐ **DTaP (Diphtheria, Tetanus & Pertussis) vaccine**

I understand by not receiving the DTaP vaccine, the child listed here is at risk of a sore throat, fever, heart complications, feeding problems, paralysis, whooping cough, respiratory complications, coma, and death.

☐ **Hib (*Haemophilus influenzae* Type b) vaccine**

I understand by not receiving the Hib vaccine, the child listed here is at risk of skin and throat infections, ear infections, meningitis, ~~pneumonia, blood infections~~, arthritis, permanent brain damage, and death.

☐ **Hepatitis A vaccine**

I understand by not receiving the Hepatitis A vaccine, the child listed here is at risk of yellow skin or eyes, "flu-like" illness, abdominal pain, loss of appetite, nausea, joint pain, and/or life-long liver problems, such as scarring of the liver and cancer or the need for a liver transplant, and death.

☐ **Hepatitis B vaccine**

I understand by not receiving the Hepatitis B vaccine, the child listed here is at risk of yellow skin or eyes, "flu-like" illness, abdominal pain, loss of appetite, nausea, joint pain, and/or life-long liver problems, such as scarring of the liver and cancer or the need for a liver transplant, and death.

☐ **MMR (Measles, Mumps & Rubella) vaccine**

I understand by not receiving the MMR vaccine, the child listed here is at risk of a rash, fever, cough, diarrhea, muscle aches, ear infections, pneumonia, headaches, seizures, meningitis, brain infections, inflammation of the testicles and ovaries, sterility, arthritis, inflammation of the pancreas, permanent deafness, brain damage, and death. Birth defects if acquired while pregnant include deafness, cataracts, heart defects, mental retardation, and liver and spleen damage in the baby.

☐ **Meningococcal (MCV4) vaccine**

I understand by not receiving the Meningococcal vaccine, the child listed here is at risk of meningitis, which is a severe infection of the covering of the brain and the spinal cord. The child is also at risk of blood infections, problems with their nervous system, loss of arms or legs, permanent deafness, suffer from strokes or seizures, and death.

☐ **Pneumococcal vaccine**

I understand by not receiving the Pneumococcal vaccine, the child listed here is at risk of severe disease including meningitis, which is a severe infection of the covering of the brain and the spinal cord. The child is also at risk of blood infections, pneumonia, permanent deafness, brain damage, and death.

☐ **Polio vaccine**

I understand by not receiving the Polio vaccine, the child listed here is at risk of a fever, sore throat, nausea, headaches, stomachaches, stiffness, paralysis that can lead to permanent disability, and death.

☐ **Td (Tetanus, Diphtheria) vaccine**

I understand by not receiving the Td vaccine, the child listed here is at risk of seizures, serious neuromuscular disease, heart problems, and death.

☐ **Tdap (Tetanus, Diphtheria, Pertussis) vaccine**

I understand by not receiving the Tdap vaccine, the child listed here is at risk of pneumonia, whooping cough, seizures, inflammation of the brain, serious neurological complications, and death.

☐ **Varicella (Chickenpox) vaccine**

I understand by not receiving the Varicella vaccine, the child listed here is at risk of a rash, fever, severe skin infections, scars, pneumonia, seizures, brain infection, and death.

I have decided to decline the required vaccine(s) as indicated above, and I have checked the appropriate box(es) for the vaccine(s) I want to decline.

I understand that if the my child is exposed to a vaccine-preventable disease for which I have chosen an exemption, he or she should expect to be excluded from childcare or school for 21 days or longer as determined by the Arkansas Department of Health. This is for the protection of the exempted child and the protection of others.

I understand that I may reconsider and accept vaccination for my child at any time in the future.

Under penalty of law, I affirm that I received and reviewed the entire application packet, including the Vaccine Information Statements from the Centers for Disease Control and Prevention regarding the risks associated with my child not being vaccinated as stated in this information and that I still request an exemption from the vaccine(s).

Release of information will be provided only to the custodial parent/guardian who completes this application and according to the notarized signature.

Signature _____
Parent/Guardian

Notary Public

State of _____ County of _____

On this ____ day of _____, 20 __, before me personally appeared _____
Parent/Guardian

known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument and acknowledged that he/she executed the same for the purposes therein contained.

In witness whereof, I hereunto set my hand and official seal.

OFFICIAL SEAL

Signature _____
Notary Public

My Commission Expires: _____

Please Return Application: CHOOSE ONE METHOD ONLY

MAIL to: Arkansas Department of Health

ATTN: Exemptions

4815 West Markham, Mail Slot #48

Little Rock, AR 72205

EMAIL to: ImmunizationSection@arkansas.gov

FAX to: (501)661-2300

Adult Immunizations 2022

Recommended Adult Immunization Schedule for ages 19 years or older

UNITED STATES
2022

How to use the adult immunization schedule

- 1** Determine recommended vaccinations by age (**Table 1**)
- 2** Assess need for additional recommended vaccinations by medical condition or other indication (**Table 2**)
- 3** Review vaccine types, frequencies, intervals and considerations for special situations (**Notes**)
- 4** Review contraindications and precautions for vaccine types (**Appendix**)

Vaccines in the Adult Immunization Schedule*

Vaccine	Abbreviation(s)	Trade name(s)
<i>Haemophilus influenzae</i> type b vaccine	Hib	ActHIB® Hiberix® PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis A and hepatitis B vaccine	HepA-HepB	Twinrix®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
Influenza vaccine (recombinant)	RIV4	Flublok® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II®
Meningococcal serogroups A, C, W, Y vaccine	MenACWY-D MenACWY-CRM MenACWY-TT	Menactra® Menveo® MenQuadfi®
Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Baxsero® Trumenba®
Pneumococcal 15-valent conjugate vaccine	PCV15	Vaxneuvance™
Pneumococcal 20-valent conjugate vaccine	PCV20	Prevnar 20™
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix

*Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American College of Physicians (www.acponline.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), American Academy of Physician Assistants (www.aapa.org), and Society for Healthcare Epidemiology of America (www.shea-online.org).

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
- Clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System at www.vaers.hhs.gov or 800-822-7967

Injury claims

All vaccines included in the adult immunization schedule except pneumococcal 23-valent polysaccharide (PPSV23) and zoster (RZV) vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation.

Questions or comments

Contact www.cdc.gov/cdc-info or 800-CDC-INFO (800-232-4636), in English or Spanish, 8 a.m.–8 p.m. ET, Monday through Friday, excluding holidays.



Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

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- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- Travel vaccine recommendations: www.cdc.gov/travel
- Recommended Child and Adolescent Immunization Schedule, United States, 2022: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html
- ACIP Shared Clinical Decision-Making Recommendations: www.cdc.gov/vaccines/acip/acip-scdm-faqs.html



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Control and Prevention



CS19021-A

Cover Page showing how to use the schedule

Recommended Adult Immunization Schedule for ages 19 years or older

UNITED STATES

2022

How to use the adult immunization schedule

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Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB® Heplisav-B®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV	Many brands
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
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Meningococcal serogroup B vaccine	MenB-4C MenB-FHbp	Baxxero® Trumenba®
Pneumococcal 15-valent conjugate vaccine	PCV15	Vaxneuvance™
Pneumococcal 20-valent conjugate vaccine	PCV20	Prevnar 20™
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Tetanus and diphtheria toxoids	Td	Tenivac® Tdvax™
Tetanus and diphtheria toxoids and acellular pertussis vaccine	Tdap	Adacel® Boostrix®
Varicella vaccine	VAR	Varivax®
Zoster vaccine, recombinant	RZV	Shingrix

*Administer recommended vaccines if vaccination history is incomplete or unknown. Do not restart or add doses to vaccine series if there are extended intervals between doses. The use of trade names is for identification purposes only and does not imply endorsement by the ACIP or CDC.

Recommended by the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/acip) and approved by the Centers for Disease Control and Prevention (www.cdc.gov), American College of Physicians (www.acponline.org), American Academy of Family Physicians (www.aafp.org), American College of Obstetricians and Gynecologists (www.acog.org), American College of Nurse-Midwives (www.midwife.org), American Academy of Physician Assistants (www.aapa.org), and Society for Healthcare Epidemiology of America (www.shea-online.org).

Report

- Suspected cases of reportable vaccine-preventable diseases or outbreaks to the local or state health department
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All vaccines included in the adult immunization schedule except pneumococcal 23-valent polysaccharide (PPSV23) and zoster (RZV) vaccines are covered by the Vaccine Injury Compensation Program. Information on how to file a vaccine injury claim is available at www.hrsa.gov/vaccinecompensation.

Questions or comments

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Download the CDC Vaccine Schedules app for providers at www.cdc.gov/vaccines/schedules/hcp/schedule-app.html.

Helpful information

- Complete ACIP recommendations: www.cdc.gov/vaccines/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html
- Vaccine information statements: www.cdc.gov/vaccines/hcp/vis/index.html
- Manual for the Surveillance of Vaccine-Preventable Diseases (including case identification and outbreak response): www.cdc.gov/vaccines/pubs/surv-manual
- Travel vaccine recommendations: www.cdc.gov/travel
- Recommended Child and Adolescent Immunization Schedule, United States, 2022: www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html
- ACIP Shared Clinical Decision-Making Recommendations: www.cdc.gov/vaccines/acip/acip-scdm-faqs.html



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Scan QR code
for access to
online schedule
CS19021-A

QR Code addition!

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2022

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV4) or Influenza recombinant (RIV4)	<div> <div>1 dose annually</div> <div>or</div> <div>1 dose annually</div> </div>			
Influenza live, attenuated (LAIV4)				
Tetanus, diphtheria, pertussis (Tdap or Td)	<div>1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)</div> <div>1 dose Tdap, then Td or Tdap booster every 10 years</div>			
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)		2 doses	
Zoster recombinant (RZV)	2 doses for immunocompromising conditions (see notes)		2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23)	<div>1 dose PCV15 followed by PPSV23</div> <div>OR</div> <div>1 dose PCV20 (see notes)</div>			<div>1 dose PCV15 followed by PPSV23</div> <div>OR</div> <div>1 dose PCV20</div>
Hepatitis A (HepA)	2 or 3 doses depending on vaccine			
Hepatitis B (HepB)	2, 3, or 4 doses depending on vaccine or condition			
Meningococcal A, C, W, Y (MenACWY)	1 or 2 doses depending on indication, see notes for booster recommendations			
Meningococcal B (MenB)	<div>2 or 3 doses depending on vaccine and indication, see notes for booster recommendations</div> <div>19 through 23 years</div>			
<i>Haemophilus influenzae</i> type b (Hib)	1 or 3 doses depending on indication			

2022 Adult Immunization Schedule

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2022

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV4)		1 dose annually		
Influenza live, attenuated (LAIV4)		1 dose annually		
Tetanus, diphtheria, pertussis (Tdap or Td)		1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)		
		1 dose Tdap, then Td or Tdap booster every 10 years		
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)	2 doses	
Zoster recombinant (RZV)		2 doses for immunocompromising conditions (see notes)	2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23)		1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20	
Hepatitis A (HepA)		2 or 3 doses depending on vaccine		
Hepatitis B (HepB)		2, 3, or 4 doses depending on vaccine or condition		
Meningococcal A, C, W, Y (MenACWY)		1 or 2 doses depending on indication, see notes for booster recommendations		
Meningococcal B (MenB)	19 through 23 years	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations		
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. Recommended vaccination based on shared clinical decision-making. No recommendation/Not applicable.

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2022

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV4)		1 dose annually		
Influenza live, attenuated (LAIV4)		1 dose annually		
Tetanus, diphtheria, pertussis (Tdap or Td)		1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)		
		1 dose Tdap, then Td or Tdap booster every 10 years		
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)	2 doses	
Zoster recombinant (RZV)		2 doses for immunocompromising conditions (see notes)	2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23)		1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20	
Hepatitis A (HepA)		2 or 3 doses depending on vaccine		
Hepatitis B (HepB)		2, 3, or 4 doses depending on vaccine or condition		
Meningococcal A, C, W, Y (MenACWY)		1 or 2 doses depending on indication, see notes for booster recommendations		
Meningococcal B (MenB)	19 through 23 years	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations		
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. Recommended vaccination based on shared clinical decision-making. No recommendation/Not applicable.

Table 1 Recommended Adult Immunization Schedule by Age Group, United States, 2022

Vaccine	19–26 years	27–49 years	50–64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV4)		1 dose annually		
Influenza live, attenuated (LAIV4)		1 dose annually		
Tetanus, diphtheria, pertussis (Tdap or Td)		1 dose Tdap each pregnancy; 1 dose Td/Tdap for wound management (see notes)		
		1 dose Tdap, then Td or Tdap booster every 10 years		
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)	2 doses	
Zoster recombinant (RZV)		2 doses for immunocompromising conditions (see notes)	2 doses	
Human papillomavirus (HPV)	2 or 3 doses depending on age at initial vaccination or condition	27 through 45 years		
Pneumococcal (PCV15, PCV20, PPSV23)		1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)	1 dose PCV15 followed by PPSV23 OR 1 dose PCV20	
Hepatitis A (HepA)		2 or 3 doses depending on vaccine		
Hepatitis B (HepB)		2, 3, or 4 doses depending on vaccine or condition		
Meningococcal A, C, W, Y (MenACWY)		1 or 2 doses depending on indication, see notes for booster recommendations		
Meningococcal B (MenB)	19 through 23 years	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations		
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. Recommended vaccination based on shared clinical decision-making. No recommendation/Not applicable.

Highlighted updates

Table 2 Recommended Adult Immunization Schedule by Medical Condition or Other Indication, United States, 2022

Vaccine	Pregnancy	Immunocompromised (excluding HIV Infection)	HIV infection CD4 percentage and count <15% or <200 mm ³ ≥15% and ≥200 mm ³	Asplenia, complement deficiencies	End-stage renal disease; or on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ²	Men who have sex with men
IIV or RIV4 or LAIV4		1 dose annually								or
LAIV4		Not Recommended				Precaution			1 dose annually	
Tdap or Td	1 dose Tdap each pregnancy	1 dose Tdap, then Td or Tdap booster every 10 years								
MMR	Not Recommended ³	Not Recommended	1 or 2 doses depending on indication							
VAR	Not Recommended ³	Not Recommended		2 doses						
RZV		2 doses at age ≥ 19 years			2 doses at age ≥ 50 years					
HPV	Not Recommended ³	3 doses through age 26 years			2 or 3 doses through age 26 years depending on age at initial vaccination or condition					
Pneumococcal (PCV15, PCV20, PPSV23)		1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)								
HepA				2 or 3 doses depending on vaccine						
HepB	3 doses (see notes)	2, 3, or 4 doses depending on vaccine or condition								
MenACWY		1 or 2 doses depending on indication, see notes for booster recommendations								
MenB	Precaution	2 or 3 doses depending on vaccine and indication, see notes for booster recommendations								
Hib		3 doses HSCT ⁴ recipients only		1 dose						

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

Recommended vaccination based on shared clinical decision-making

Precaution—vaccination might be indicated if benefit of protection outweighs risk of adverse reaction

Contraindicated or not recommended—vaccine should not be administered.
*Vaccinate after pregnancy.

No recommendation/Not applicable

1. Precaution for LAIV4 does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

Table 2 = Medical Indications

Table 2 Recommended Adult Immunization Schedule by Medical Condition or Other Indication, United States, 2022

Vaccine	Pregnancy	Immuno-compromised (excluding HIV Infection)	HIV Infection CD4 percentage and count <15% or <200 mm ³ ≥15% and ≥200 mm ³	Asplenia, complement deficiencies	End-stage renal disease; or on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ¹	Men who have sex with men
IIIV or RIV4										1 dose annually
LAIV4		Not Recommended								1 dose annually
Tdap or Td	1 dose Tdap each pregnancy									1 dose Tdap, then Td or Tdap booster every 10 years
MMR	Not Recommended ²	Not Recommended								1 or 2 doses depending on indication
VAR	Not Recommended ²	Not Recommended								2 doses
RZV			2 doses at age ≥ 19 years							2 doses at age ≥ 50 years
HPV	Not Recommended ²	3 doses through age 26 years								2 or 3 doses through age 26 years depending on age at initial vaccination or condition
Pneumococcal (PCV15, PCV20, PPSV23)										1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)
HepA										2 or 3 doses depending on vaccine
HepB	3 doses (see notes)									2, 3, or 4 doses depending on vaccine or condition
MenACWY										1 or 2 doses depending on indication, see notes for booster recommendations
MenB	Precaution									2 or 3 doses depending on vaccine and indication, see notes for booster recommendations
Hib		3 doses HSCT ³ recipients only								1 dose

1. Precaution for LAIV4 does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

Zoster Vaccine for immunocompromised individuals

Table 2 Recommended Adult Immunization Schedule by Medical Condition or Other Indication, United States, 2022

Vaccine	Pregnancy	Immuno-compromised (excluding HIV infection)	HIV Infection CD4 percentage and count <15% or <200 mm ³ ≥15% and ≥200 mm ³	Asplenia, complement deficiencies	End-stage renal disease; or on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ¹	Men who have sex with men
IIIV or RIV4										1 dose annually
LAIV4		Not Recommended								1 dose annually
Tdap or Td	1 dose Tdap each pregnancy									1 dose Tdap, then Td or Tdap booster every 10 years
MMR	Not Recommended ²	Not Recommended								1 or 2 doses depending on indication
VAR	Not Recommended ²	Not Recommended								2 doses
RZV			2 doses at age ≥ 19 years							2 doses at age ≥ 50 years
HPV	Not Recommended ²		3 doses through age 26 years							2 or 3 doses through age 26 years depending on age at initial vaccination or condition
Pneumococcal (PCV15, PCV20, PPSV23)										1 dose PCV15 followed by PPSV23 OR 1 dose PCV20 (see notes)
HepA										2 or 3 doses depending on vaccine
HepB	3 doses (see notes)									2, 3, or 4 doses depending on vaccine or condition
MenACWY										1 or 2 doses depending on indication, see notes for booster recommendations
MenB	Precaution									2 or 3 doses depending on vaccine and indication, see notes for booster recommendations
Hib		3 doses HSCT ³ recipients only								1 dose

1. Precaution for LAIV4 does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

Pneumococcal Vaccine

- Changed language to reflect the new recommendations: “Age 65 years or older who have not previously received a pneumococcal conjugate vaccine or whose previous vaccination history is unknown: 1 dose PCV15 or 1 dose PCV20. If PCV15 is used, this should be followed by a dose of PPSV23.”

- Changed language to reflect the new recommendations: "Age 19–64 years with certain underlying medical conditions or other risk factors who have not previously received a pneumococcal conjugate vaccine or whose previous vaccination history is unknown: 1 dose PCV15 or 1 dose PCV20. If PCV15 is used, this should be followed by a dose of PPSV23."

Smoking

Page 3

Added note at end of section stating: "Underlying medical conditions or other risk factors include alcoholism, chronic heart/liver/lung disease, cigarette smoking, diabetes mellitus, chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, HIV, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease or other hemoglobinopathies, CSF leak, or cochlear implant."

Pneumococcal vaccination**Routine vaccination**

- **Age 65 years or older** who have not previously received a pneumococcal conjugate vaccine or whose previous vaccination history is unknown: 1 dose PCV15 or 1 dose PCV20. If PCV15 is used, this should be followed by a dose of PPSV23. For dosing interval between PCV15 and PPSV23, see URL pending.
- For guidance for patients who have already received a previous dose of PCV13 and/or PPSV23, see URL pending.

Special situations

- **Age 19–64 years** with certain underlying medical conditions or other risk factors* who have not previously received a pneumococcal conjugate vaccine or whose previous vaccination history is unknown: 1 dose PCV15 or 1 dose PCV20. If PCV15 is used, this should be followed by a dose of PPSV23. For dosing interval between PCV15 and PPSV23, see URL pending.
- For guidance for patients who have already received a previous dose of PCV13 and/or PPSV23, see URL pending.

***Note:** Underlying medical conditions or other risk factors include alcoholism, chronic heart/liver/lung disease, cigarette smoking, diabetes mellitus, chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, HIV, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease or other hemoglobinopathies, CSF leak, or cochlear implant.

Tetanus, diphtheria, and pertussis vaccination**Routine vaccination**

- Previously did not receive Tdap at or after age 11 years: 1 dose Tdap; then Td or Tdap every 10 years

Special situations

- Previously did not receive primary vaccination series for tetanus, diphtheria, or pertussis: 1 dose Tdap; followed by 1 dose Td or Tdap at least 4 weeks after Tdap and another dose Td or Tdap 6–12 months after last Td or Tdap. Tdap can be substituted for any Td dose, but preferred as first dose; Td or Tdap every 10 years thereafter
- Pregnancy: 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36

- Wound management: Persons with 3 or more doses of tetanus-toxoid-containing vaccine: For clean and minor wounds, administer Tdap or Td if more than 10 years since last dose; otherwise, Td

Routine vaccination

- Added language regarding dosing interval: “For dosing interval between PCV15 and PPSV23, see URL pending.”

Varicella vaccination**Routine vaccination**

- No evidence of immunity to varicella: 2-dose series 4–8 weeks apart if previously did not receive varicella-containing vaccine (VAR or MMV [measles-mumps-rubella-varicella vaccine]) for children; if previously received 1 dose varicella-containing vaccine, 1 dose at least 4 weeks after first dose. Evidence of immunity: U.S.-born before 1980 (except for pregnant women and health-care personnel [see below]); documentation of 2 doses varicella-containing vaccine at least 4 weeks apart; diagnosis or verification of history of varicella or herpes zoster by a health-care provider; laboratory evidence of immunity or disease

Special situations

- Pregnancy with no evidence of immunity to varicella: VAR contraindicated during pregnancy; after pregnancy, before discharge from health-care facility, 1 dose if previously received 1 dose varicella-containing vaccine or dose 1 of 2-dose series (dose 2: 4–8 weeks later) if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980
- Health-care personnel with no evidence of immunity to varicella: 1 dose if previously received 1 dose varicella-containing vaccine; 2-dose series 4–8 weeks apart if previously did not receive any varicella-containing vaccine, regardless of whether U.S.-born before 1980
- HIV infection with CD4 percentages $\geq 15\%$ and CD4 count ≥ 200 cells/mm³ with no evidence of immunity: Vaccination may be considered (2 doses 3 months apart); VAR contraindicated for HIV infection with CD4 percentage $< 15\%$ or CD4 count < 200 cells/mm³
- Severe immunocompromising conditions: VAR contraindicated

Zoster vaccination**Routine vaccination**

- Age 50 years or older: 1 dose

Evidence of immunity: U.S.-born before 1980 (except for pregnant women and health-care personnel [see below]); documentation of 2 doses varicella-containing vaccine at least 4 weeks apart; diagnosis or verification of history of varicella or herpes zoster by a health-care provider; laboratory evidence of immunity or disease

***Note:** Underlying medical conditions or other risk factors include alcoholism, chronic heart/liver/lung disease, cigarette smoking, diabetes mellitus, chronic renal failure, nephrotic syndrome, immunodeficiency, iatrogenic immunosuppression, generalized malignancy, HIV, Hodgkin disease, leukemia, lymphoma, multiple myeloma, solid organ transplants, congenital or acquired asplenia, sickle cell disease or other hemoglobinopathies, CSF leak, or cochlear implant.

Immunocompromising conditions (including HIV): RZV recommended for use in persons age 19 years or older who are or will be immunodeficient or immunosuppressed due to disease or therapy. For detailed information, see URL pending.

- For guidance for patients who have already received a previous dose of PCV13 and/or PPSV23, see <https://www.cdc.gov/mmwr/volumes/71/wr/mm7104a1.htm>.

Table 2 Recommended Adult Immunization Schedule by Medical Condition or Other Indication, United States, 2022

Vaccine	Pregnancy	Immuno-compromised (excluding HIV Infection)	HIV Infection CD4 percentage and count <15% or <200 mm ³ ≥15% and ≥200 mm ³	Asplenia, complement deficiencies	End-stage renal disease; or on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ²	Men who have sex with men
IIIV or RIV4 <i>or</i>										
LAIV4										
Tdap or Td										
MMR										
VAR										
RZV										
HPV										
Pneumococcal (PCV15, PCV20, PPSV23)										
HepA										
HepB										
MenACWY										
MenB										
Hib										

 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
 Recommended vaccination based on shared clinical decision-making
 Precaution—vaccination might be indicated if benefit of protection outweighs risk of adverse reaction
 Contraindicated or not recommended—vaccine should not be administered.
 No recommendation/Not applicable

1. Precaution for LAIV4 does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.

Hepatitis B - special indication

Notes

Recommended Adult Immunization Schedule for ages 19 years or older, United States, 2022

For vaccine recommendations for persons 18 years of age or younger, see the Recommended Child and Adolescent Immunization Schedule.

COVID-19 Vaccination

COVID-19 vaccines are recommended within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine. ACIP recommendations for the use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz-managers/updates/specificupdates.html. CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz-managers/updates/specificupdates.html.

Routine vaccination:

- Universally recommended for all adults aged 19 through 59 years.
- Clarification of 2, 3, and 4 dose series

Special situations

At risk for hepatitis A virus infection: 2-dose series HepA or 1-dose series HepA-HepB as above.

Chronic liver disease (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, primary biliary cholangitis [PBC] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal).

HIV infection

Men who have sex with men
Injection or noninjection drug use
Persons experiencing homelessness
Work with hepatitis A virus in research laboratory or with nonhuman primates with hepatitis A virus infection
Travel in countries with high or intermediate endemic hepatitis A (HepA-HepB [Twinnix] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months)
Close, personal contact with international adoptee (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
Pregnancy if at risk for infection or severe outcome from infection during pregnancy
Settings for exposure, including health care settings, targeting services to injection or noninjection drug users in group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)

Hepatitis B vaccination

Routine vaccination

- Age 19 through 59 years: complete a 2- or 3-, or 4-dose series
 - 2-dose series only applies when 2 doses of Hepivax-B* are used at least 4 weeks apart
 - 3-dose series Engix-B or Recombivax HB at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks]
 - 3-dose series HepA-HepB (Twinnix) at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 5 months]
 - 4-dose series HepA-HepB (Twinnix) accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months
 - 4-dose series Engix-B at 0, 1, 2, and 6 months for persons on adult hemodialysis (note: each dosage is double that of normal adult dose, i.e., 2 mL instead of 1 mL)

*Note: Hepivax-B not recommended in pregnancy due to lack of safety data in pregnant women

Special

Age 60 or older

Infection

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

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Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Percutaneous or mucosal risk for exposure to blood

Incarcerated persons

Travel in countries with high or intermediate endemic hepatitis B

Sexual exposure risk

Current or recent injection drug use

Notes

Recommended Adult Immunization Schedule for ages 19 years or older, United States, 2022

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For vaccine recommendations for persons 18 years of age or younger, see the Recommended Child/Adolescent Immunization Schedule.

COVID-19 Vaccination

COVID-19 vaccines are recommended within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine, or as otherwise recommended by ACIP and adopted by the CDC director. ACIP recommendations for the use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/covid-19.html.

CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html.

Haemophilus influenzae type b vaccination

Special situations

- **Anatomical or functional asplenia** (including sickle cell disease): 1 dose if previously did not receive Hib; if elective splenectomy, 1 dose, preferably at least 14 days before splenectomy
- **Hematopoietic stem cell transplant (HSCT)**: 3-dose series 4 weeks apart starting 6–12 months after successful transplant, regardless of Hib vaccination history

Hepatitis A vaccination

Routine vaccination

- **Not at risk but want protection from hepatitis A** (identification of risk factor not required): 2-dose series HepA (Havrix 6–12 months apart or Vagta 6–18 months apart [minimum interval: 6 months]) or 3-dose series HepA-HepB (Twinrix at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 2 weeks / dose 2 to dose 3: 5 months])

Special situations

- **At risk for hepatitis A virus infection**: 2-dose series HepA or 3-dose series HepA-HepB as above

- **Chronic liver disease** (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal)
- **HIV infection**
- **Men who have sex with men**
- **Injection or noninjection drug use**
- **Persons experiencing homelessness**
- **Work with hepatitis A virus** in research laboratory or with nonhuman primates with hepatitis A virus infection
- **Travel in countries with high or intermediate endemic hepatitis A** (HepA-HepB [Twinrix] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months)
- **Close, personal contact with international adoptee** (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee's arrival)
- **Pregnancy** if at risk for infection or severe outcome from infection during pregnancy
- **Settings for exposure, including health care settings** targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor screening not required)

Hepatitis B vaccination

Routine vaccination

- **Unvaccinated persons**: complete a 2- or 3-, or 4-dose series
- 2-dose series only applies when 2 doses of Heplisav-B* are used at least 4 weeks apart
- 3-dose series Engerix-B or Recombivax HB at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 8 weeks / dose 1 to dose 3: 16 weeks])
- 3-dose series HepA-HepB (Twinrix) at 0, 1, 6 months [minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 5 months])
- 4-dose series HepA-HepB (Twinrix) accelerated schedule of 3 doses at 0, 7, and 21–30 days, followed by a booster dose at 12 months
- 4-dose series Engerix-B at 0, 1, 2, and 6 months for persons on adult hemodialysis (note: each dosage is double that of normal adult dose, i.e., 2 mL instead of 1 mL)

*Heplisav-B not recommended in pregnancy due to lack of safety data in pregnant women

Human papillomavirus vaccination

Routine vaccination

- **HPV vaccination recommended for all persons through age 26 years**: 2- or 3-dose series depending on age at initial vaccination or condition:
 - **Age 15 years or older at initial vaccination**: 3-dose series at 0, 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)
 - **Age 9–14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart**: 1 additional dose
 - **Age 9–14 years at initial vaccination and received 2 doses at least 5 months apart**: HPV vaccination series complete, no additional dose needed
- **Interrupted schedules**: If vaccination schedule is interrupted, the series does not need to be restarted
- **No additional dose recommended when any HPV vaccine series has been completed using the recommended dosing intervals.**

Shared clinical decision-making

- **Some adults age 27–45 years**: Based on shared clinical decision-making, 2- or 3-dose series as above

Special situations

- **Age ranges recommended above for routine and catch-up vaccination or shared clinical decision-making also apply in special situations**
 - **Immunocompromising conditions, including HIV infection**: 3-dose series as above, when initiating vaccination at age 9–45 years. Recommendations for routine and shared clinical decision-making similar to those for persons without immunocompromising conditions.
 - **Pregnancy**: Pregnancy testing is not needed before vaccination; HPV vaccination is not recommended until after pregnancy; no intervention needed if inadvertently vaccinated while pregnant

Influenza vaccination

Routine vaccination

- **Age 19 years or older**: 1 dose any influenza vaccine appropriate for age and health status annually
- For the 2021–2022 season, see www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm
- For the 2022–23 season, see the 2022–23 ACIP influenza vaccine recommendations.

Notes

Recommended Adult Immunization Schedule for ages 19 years or older, United States, 2022

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For vaccine recommendations for persons 18 years of age or younger, see the Recommended Child/Adolescent Immunization Schedule.

COVID-19 Vaccination

COVID-19 vaccines are recommended within the scope of the Emergency Use Authorization or Biologics License Application for the particular vaccine, or as otherwise recommended by ACIP and adopted by the CDC director. ACIP recommendations for the use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html.

CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html.

Haemophilus

Special situations

Anatomical or functional asplenia (including sickle cell disease): 1 dose if splenectomy, 1 dose if splenectomy

Hematopoietic stem cell transplant, recipient

Transplant, recipient

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Special situations

- Added wording to "Immunocompromising Conditions" for clarity: 3-dose series as above, when initiating vaccination at age 9–45 years. Recommendations for routine and shared clinical decision-making similar to those for persons without immunocompromising conditions.

Chronic liver disease (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal).

HIV infection

Men who have sex with men

Persons experiencing homelessness

Work with hepatitis A virus in research laboratory or with nonhuman primates with hepatitis A virus infection

Travel in countries with high or intermediate endemic hepatitis A (HepA-HepB [Typhoid] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days followed by a booster dose at 12 months)

Close, personal contact with international adoptee (e.g., household or regular babysitting) in first 60 days after arrival from country with high or intermediate endemic hepatitis A (administer dose 1 as soon as adoption is planned, at least 2 weeks before adoptee arrival)

Pregnancy if at risk for infection or severe outcome from infection during pregnancy

Settings for exposure, including health care settings; targeting services to injection or noninjection drug users or group homes and nonresidential day care facilities for developmentally disabled persons (individual risk factor)

Persons experiencing homelessness

Work with hepatitis A virus in research laboratory or with nonhuman primates with hepatitis A virus infection

Travel in countries with high or intermediate endemic hepatitis A (HepA-HepB [Typhoid] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days followed by a booster dose at 12 months)

CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html.

CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html.

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Human papillomavirus vaccination

Routine vaccination

HPV vaccination recommended for all persons through age 26 years: 2- or 3-dose series depending on age at initial vaccination or condition:

- Age 15 years or older at initial vaccination: 3-dose series at 0, 1–2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks / dose 2 to dose 3: 12 weeks / dose 1 to dose 3: 5 months; repeat dose if administered too soon)

- Age 9–14 years at initial vaccination and received 1 dose or 2 doses less than 5 months apart: 1 additional dose

- Age 9–14 years at initial vaccination and received 2 doses at least 5 months apart: HPV vaccination series complete, no additional dose needed

- Interrupted schedules: If vaccination schedule is interrupted, the series does not need to be restarted

- No additional dose recommended when any HPV

vaccination series has been completed using the recommended dosing intervals.

Shared clinical decision-making

- Some adults age 27–45 years: Based on shared clinical decision-making, 2- or 3-dose series as above

Special situations

- Age ranges recommended above for routine and catch-up vaccination or shared clinical decision-making also apply in special situations

- Immunocompromising conditions, including HIV infection: 3-dose series as above, when initiating vaccination at age 9–45 years. Recommendations for routine and shared clinical decision-making similar to those for persons without immunocompromising conditions.

- Pregnancy: Pregnancy testing is not needed before vaccination; HPV vaccination is not recommended until after pregnancy; no intervention needed if inadvertently vaccinated while pregnant.

- For the 2022–23 season, see the 2022–23 ACIP influenza vaccine recommendations.

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Recommended Adult Immunization Schedule for ages 19 years or older, United States, 2022

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For vaccine recommendations for persons 18 years of age or younger, see the Recommended Child/Adolescent Immunization Schedule.

COVID-19 Vaccination

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CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html.

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CDC's interim clinical considerations for use of COVID-19 vaccines can be found at www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html.

Haemophilus influenzae type b vaccination

Special situations

Anatomical or functional asplenia (including sickle cell disease): 1 dose if splenectomy, 1 dose if splenectomy

Hematopoietic stem cell transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Transplant, recipient

Special situations

- Rearranged the wording for the "pregnancy" bullet: Pregnancy testing is not needed before vaccination; HPV vaccination is not recommended until after pregnancy; no intervention needed if inadvertently vaccinated while pregnant.

Chronic liver disease (e.g., persons with hepatitis B, hepatitis C, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal).

HIV infection

Men who have sex with men

Persons experiencing homelessness

Work with hepatitis A virus in research laboratory or with nonhuman primates with hepatitis A virus infection

Travel in countries with high or intermediate endemic hepatitis A (HepA-HepB [Typhoid] may be administered on an accelerated schedule of 3 doses at 0, 7, and 21–30 days followed by a booster dose at 12 months)

CDC's interim clinical considerations for use of COVID-19 vaccines can be found at [www.cdc.gov/vaccines/imz/immunization/schedule/2](https://www.cdc.gov/vaccines/imz/immunization/schedule/2022/covid-19.html)

Special situations

- **Egg allergy, hives only:** any influenza vaccine appropriate for age and health status annually
- **Egg allergy—any symptom other than hives** (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention: see Appendix listing contraindications and precautions
- **Severe allergic reaction** (e.g., anaphylaxis) to a vaccine component or a previous dose of any influenza vaccine: see Appendix listing contraindications and precautions
- **History of Guillain-Barré syndrome within 6 weeks after previous dose of influenza vaccine:** Generally, should not be vaccinated unless vaccination benefits outweigh risks for those at higher risk for severe complications from influenza

Measles, mumps, and rubella vaccination**Routine Vaccination**

- No evidence of immunity to measles, mumps, or rubella: 1 dose
Evidence of immunity: Born before 1957 (health care personnel, see below); documentation of receipt of MMR vaccine; laboratory evidence of immunity or disease (diagnosis of disease without laboratory confirmation is not evidence of immunity)

Special situations

- **Pregnancy with no evidence of immunity to rubella:** MMR contraindicated during pregnancy; after pregnancy (before discharge from health care facility), 1 dose
- **Nonpregnant women of childbearing age with no evidence of immunity to rubella:** 1 dose
- **HIV infection with CD4 percentages $\geq 15\%$ and CD4 count ≥ 200 cells/mm³ for at least 6 months and no evidence of immunity to measles, mumps, or rubella:** 2-dose series at least 4 weeks apart; MMR contraindicated for HIV infection with CD4 percentage $< 15\%$ or CD4 count < 200 cells/mm³
- **Severe immunocompromising conditions:** MMR contraindicated

• Study
• Inter

• rubella
• did not
• receive

• Health

• Born

• to measles, mumps, or rubella: 2-dose series at least 4 weeks apart for measles or mumps or at least 1 dose for rubella

• Born before 1957 with no evidence of immunity to measles, mumps, or rubella: Consider 2-dose series at least 4 weeks apart for measles or mumps or 1 dose for rubella

Special Situations

- Condensed this section. Refer health care providers to the Appendix for more information on contraindications and precautions.

for MenB

6–23 years (aged risk for

ed clinical decision-

at least 1 month

menba) at 0, 6

than 6 months

4 months after dose

interchangeable (use

same product for all doses in series)

Special situations for MenB

- **Anatomical or functional asplenia** (including sickle cell disease), persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use, or microbiologists routinely exposed to *Neisseria meningitidis*: 2-dose primary series MenB-4C (Bexsero) at least one month apart or
 - **MenB-4C (Bexsero)** at least 1 month apart or 3-dose primary series MenB-FHbp (Trumenbi) at 0, 1–2, 6 months; if dose 2 was administered at least 6 months after dose 1, dose 3 not needed; MenB-4C and MenB-FHbp are not interchangeable (use same product for all doses in series); 1 dose MenB booster 1 year after primary series and revaccinate every 2–3 years if risk remains
 - **Pregnancy:** Delay MenB until after pregnancy unless at increased risk and vaccination benefits outweigh potential risks
 - **For MenB booster dose recommendations** for groups listed under “Special situations” and in an outbreak setting (e.g., in community or organizational settings and among men who have sex with men) and additional meningococcal vaccination information, see www.cdc.gov/menba/vaccine/28-11-1909a1.htm
- Note: MenB vaccines may be administered simultaneously with MenACWY vaccines if indicated, but at a different anatomic site, if feasible.

Meningococcal vaccination**Special situations for MenACWY**

- **Anatomical or functional asplenia** (including sickle cell disease), HIV infection, persistent complement component deficiency, complement inhibitor (e.g., eculizumab, ravulizumab) use: 2-dose series MenACWY-D (Menactra, Menveo or MenQuadfi) at least 8 weeks apart and revaccinate every 5 years if risk remains
- **Travel in countries with hyperendemic or epidemic meningococcal disease, or microbiologists routinely exposed to *Neisseria meningitidis*:** 1 dose MenACWY (Menactra, Menveo or MenQuadfi) and revaccinate every 5 years if risk remains
- **First-year college students who live in residential housing** (if not previously vaccinated at age 16 years or older) or military recruits: 1 dose MenACWY (Menactra, Menveo or MenQuadfi)
- **For MenACWY booster dose recommendations** for groups listed under “Special situations” and in an outbreak setting (e.g., in community or organizational settings and among men who have sex with men) and additional meningococcal vaccination information, see www.cdc.gov/menba/vaccine/28-11-1909a1.htm

Very specific with guidance on influenza vaccination and egg allergy

Appendix

Recommended Adult Immunization Schedule, United States, 2022

Guide to Contraindications and Precautions to Commonly Used Vaccines

Adapted from Table 4-1 in Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization: Contraindication and Precautions available at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html and ACIP's Recommendations for the Prevention and Control of 2021-22 seasonal influenza with Vaccines available at www.cdc.gov/mmwr/volumes/70/rr/rr7005a1.htm

Interim clinical considerations for use of COVID-19 vaccines including contraindications and precautions can be found at www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html

Appendix (4) for the Adult Schedule

Vaccine	Contraindications ¹	Precautions ²
Influenza, egg-based, inactivated injectable (IIIV4)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, cclIV, RIV, or LAIV of any valency) Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Persons with egg allergy with symptoms other than hives (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention: Any influenza vaccine appropriate for age and health status may be administered. If using egg-based IIIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. Moderate or severe acute illness with or without fever
Influenza, cell culture-based inactivated injectable [(cclIV4), Flucelvax® Quadrivalent]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) to any cclIV of any valency, or to any component³ of cclIV4 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, RIV, or LAIV of any valency. If using cclIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. Moderate or severe acute illness with or without fever

Vaccine	Contraindications ¹	Precautions ²
Influenza, recombinant injectable [(RIV4), Flublok® Quadrivalent]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) to any RIV of any valency, or to any component³ of RIV4 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, cclIV, or LAIV of any valency. If using RIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. Moderate or severe acute illness with or without fever
Influenza, live attenuated [LAIV4, Flumist® Quadrivalent]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, cclIV, RIV, or LAIV of any valency) Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) Adults age 50 years or older Anatomic or functional asplenia Immunocompromised due to any cause including, but not limited to, medications and HIV infection Close contacts or caregivers of severely immunosuppressed persons who require a protected environment Pregnancy Cochlear implant Active communication between the cerebrospinal fluid (CSF) and the oropharynx, nasopharynx, nose, ear or any other cranial CSF leak Received influenza antiviral medications oseltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days. 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Asthma in persons aged 5 years old or older Persons with egg allergy with symptoms other than hives (e.g., angioedema, respiratory distress) or required epinephrine or another emergency medical intervention: Any influenza vaccine appropriate for age and health status may be administered. If using LAIV4 (which is egg based), administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. Persons with underlying medical conditions (other than those listed under contraindications) that might predispose to complications after wild-type influenza virus infection [e.g., chronic pulmonary, cardiovascular (except isolated hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)] Moderate or severe acute illness with or without fever

Examples of Appendix

Thank you!

References:

- LCDR Neil Murthy, MD; U.S. Public Health Service and A. Patricia Wodi, MD; CDC Immunization Services Division
- <https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>
- <https://www.healthy.arkansas.gov/programs-services/topics/immunizations>
- https://www.healthy.arkansas.gov/images/uploads/pdf/2022-2023_College_Exemption_Application.pdf

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- <https://www.healthy.arkansas.gov/images/uploads/rules/ImmunizationRequirements.pdf>
- <https://www.healthy.arkansas.gov/programs-services/topics/immunizations>
- <https://www.cdc.gov/vaccines/schedules/downloads/child/0-18yrs-child-combined-schedule.pdf>
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