

2022-23 BROOME COUNTY

SCHOOL NURSE

IMMUNIZATION

RESOURCE GUIDE



TABLE OF CONTENTS

Resources for Understanding School Immunization Requirements

Provided documents:

- 2022-23 School Year NYS Immunization Requirements
- ACIP Child & Adolescent Immunization Schedule

Resources for Understanding "In Process"

Resources for Understanding Immunization Records

Resources for Understanding Medical Exemptions

Provided documents:

- Medical Exemption Review Procedures for Schools Outside New York City
- DOH-5077 (Medical Exemption Form)

RESOURCES FOR UNDERSTANDING SCHOOL IMMUNIZATION REQUIREMENTS

2022-23 School Year NYS Immunization Requirements

Dose requirements must be read with footnotes.
Click [here](#) or scan QR code.



ACIP Child & Adolescent Immunization Schedule

See Table 1 for standard schedule, Table 2 for catch-up schedule, and Table 3 for recommendations by medical indication.
Click [here](#) or scan QR code.

Public Health Law 2164

Defines school immunization requirements and school responsibility in enforcing them.
Click [here](#) or scan QR code.



NYCRR Title 10 SubPart 66-I

Defines school immunization requirements and school responsibility in enforcing them.
Click [here](#) or scan QR code.

REMINDER: SCHOOLS MUST NOTIFY THE LOCAL HEALTH DEPARTMENT OF EXCLUDED STUDENTS. FAX PREFERRED.

2022-23 School Year

New York State Immunization Requirements for School Entrance/Attendance¹

NOTES:

Children in a prekindergarten setting should be age-appropriately immunized. The number of doses depends on the schedule recommended by the Advisory Committee on Immunization Practices (ACIP). Intervals between doses of vaccine should be in accordance with the ACIP-recommended immunization schedule for persons 0 through 18 years of age. Doses received before the minimum age or intervals are not valid and do not count toward the number of doses listed below. See footnotes for specific information for each vaccine. Children who are enrolling in grade-less classes should meet the immunization requirements of the grades for which they are age equivalent.

Dose requirements MUST be read with the footnotes of this schedule

Vaccines	Prekindergarten (Day Care, Head Start, Nursery or Pre-k)	Kindergarten and Grades 1, 2, 3, 4 and 5	Grades 6, 7, 8, 9, 10 and 11	Grade 12
Diphtheria and Tetanus toxoid-containing vaccine and Pertussis vaccine (DTaP/DTP/Tdap)²	4 doses	5 doses or 4 doses if the 4th dose was received at 4 years or older or 3 doses if 7 years or older and the series was started at 1 year or older	3 doses	
Tetanus and Diphtheria toxoid-containing vaccine and Pertussis vaccine adolescent booster (Tdap)³		Not applicable	1 dose	
Polio vaccine (IPV/OPV)⁴	3 doses	4 doses or 3 doses if the 3rd dose was received at 4 years or older		
Measles, Mumps and Rubella vaccine (MMR)⁵	1 dose	2 doses		
Hepatitis B vaccine⁶	3 doses	3 doses or 2 doses of adult hepatitis B vaccine (Recombivax) for children who received the doses at least 4 months apart between the ages of 11 through 15 years		
Varicella (Chickenpox) vaccine⁷	1 dose	2 doses		
Meningococcal conjugate vaccine (MenACWY)⁸		Not applicable	Grades 7, 8, 9, 10 and 11: 1 dose	2 doses or 1 dose if the dose was received at 16 years or older
Haemophilus influenzae type b conjugate vaccine (Hib)⁹	1 to 4 doses	Not applicable		
Pneumococcal Conjugate vaccine (PCV)¹⁰	1 to 4 doses	Not applicable		

1. Demonstrated serologic evidence of measles, mumps or rubella antibodies or laboratory confirmation of these diseases is acceptable proof of immunity to these diseases. Serologic tests for polio are acceptable proof of immunity only if the test was performed before September 1, 2019 and all three serotypes were positive. A positive blood test for hepatitis B surface antibody is acceptable proof of immunity to hepatitis B. Demonstrated serologic evidence of varicella antibodies, laboratory confirmation of varicella disease or diagnosis by a physician, physician assistant or nurse practitioner that a child has had varicella disease is acceptable proof of immunity to varicella.
 2. Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. (Minimum age: 6 weeks)
 - a. Children starting the series on time should receive a 5-dose series of DTaP vaccine at 2 months, 4 months, 6 months and at 15 through 18 months and at 4 years or older. The fourth dose may be received as early as age 12 months, provided at least 6 months have elapsed since the third dose. However, the fourth dose of DTaP need not be repeated if it was administered at least 4 months after the third dose of DTaP. The final dose in the series must be received on or after the fourth birthday and at least 6 months after the previous dose.
 - b. If the fourth dose of DTaP was administered at 4 years or older, and at least 6 months after dose 3, the fifth (booster) dose of DTaP vaccine is not required.
 - c. For children born before 1/1/2005, only immunity to diphtheria is required and doses of DT and Td can meet this requirement.
 - d. Children 7 years and older who are not fully immunized with the childhood DTaP vaccine series should receive Tdap vaccine as the first dose in the catch-up series; if additional doses are needed, use Td or Tdap vaccine. If the first dose was received before their first birthday, then 4 doses are required, as long as the final dose was received at 4 years or older. If the first dose was received on or after the first birthday, then 3 doses are required, as long as the final dose was received at 4 years or older.
 3. Tetanus and diphtheria toxoids and acellular pertussis (Tdap) adolescent booster vaccine. (Minimum age for grades 6, 7 and 8: 10 years; minimum age for grades 9 through 12: 7 years)
 - a. Students 11 years or older entering grades 6 through 12 are required to have one dose of Tdap.
 - b. In addition to the grade 6 through 12 requirement, Tdap may also be given as part of the catch-up series for students 7 years of age and older who are not fully immunized with the childhood DTaP series, as described above. In school year 2022-2023, only doses of Tdap given at age 10 years or older will satisfy the Tdap requirement for students in grades 6, 7 and 8; however, doses of Tdap given at age 7 years or older will satisfy the requirement for students in grades 9 through 12.
 - c. Students who are 10 years old in grade 6 and who have not yet received a Tdap vaccine are in compliance until they turn 11 years old.
 4. Inactivated polio vaccine (IPV) or oral polio vaccine (OPV). (Minimum age: 6 weeks)
 - a. Children starting the series on time should receive a series of IPV at 2 months, 4 months and at 6 through 18 months, and at 4 years or older. The final dose in the series must be received on or after the fourth birthday and at least 6 months after the previous dose.
 - b. For students who received their fourth dose before age 4 and prior to August 7, 2010, 4 doses separated by at least 4 weeks is sufficient.
 - c. If the third dose of polio vaccine was received at 4 years or older and at least 6 months after the previous dose, the fourth dose of polio vaccine is not required.
 - d. For children with a record of OPV, only trivalent OPV (tOPV) counts toward NYS school polio vaccine requirements. Doses of OPV given before April 1, 2016 should be counted unless specifically noted as monovalent, bivalent or as given during a poliovirus immunization campaign. Doses of OPV given on or after April 1, 2016 should not be counted.
 5. Measles, mumps, and rubella (MMR) vaccine. (Minimum age: 12 months)
 - a. The first dose of MMR vaccine must have been received on or after the first birthday. The second dose must have been received at least 28 days (4 weeks) after the first dose to be considered valid.
 - b. Measles: One dose is required for prekindergarten. Two doses are required for grades kindergarten through 12.
 - c. Mumps: One dose is required for prekindergarten. Two doses are required for grades kindergarten through 12.
 - d. Rubella: At least one dose is required for all grades (prekindergarten through 12).
6. Hepatitis B vaccine
 - a. Dose 1 may be given at birth or anytime thereafter. Dose 2 must be given at least 4 weeks (28 days) after dose 1. Dose 3 must be at least 8 weeks after dose 2 AND at least 16 weeks after dose 1 AND no earlier than age 24 weeks (when 4 doses are given, substitute "dose 4" for "dose 3" in these calculations).
 - b. Two doses of adult hepatitis B vaccine (Recombivax) received at least 4 months apart at age 11 through 15 years will meet the requirement.
 7. Varicella (chickenpox) vaccine. (Minimum age: 12 months)
 - a. The first dose of varicella vaccine must have been received on or after the first birthday. The second dose must have been received at least 28 days (4 weeks) after the first dose to be considered valid.
 - b. For children younger than 13 years, the recommended minimum interval between doses is 3 months (if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid); for persons 13 years and older, the minimum interval between doses is 4 weeks.
 8. Meningococcal conjugate ACWY vaccine (MenACWY). (Minimum age for grades 7, 8 and 9: 10 years; minimum age for grades 10 through 12: 6 weeks).
 - a. One dose of meningococcal conjugate vaccine (Menactra, Mencevo or MenQuadfi) is required for students entering grades 7, 8, 9, 10 and 11.
 - b. For students in grade 12, if the first dose of meningococcal conjugate vaccine was received at 16 years or older, the second (booster) dose is not required.
 - c. The second dose must have been received at 16 years or older. The minimum interval between doses is 8 weeks.
 9. Haemophilus influenzae type b (Hib) conjugate vaccine. (Minimum age: 6 weeks)
 - a. Children starting the series on time should receive Hib vaccine at 2 months, 4 months, 6 months and at 12 through 15 months. Children older than 15 months must get caught up according to the ACIP catch-up schedule. The final dose must be received on or after 12 months.
 - b. If 2 doses of vaccine were received before age 12 months, only 3 doses are required with dose 3 at 12 through 15 months and at least 8 weeks after dose 2.
 - c. If dose 1 was received at age 12 through 14 months, only 2 doses are required with dose 2 at least 8 weeks after dose 1.
 - d. If dose 1 was received at 15 months or older, only 1 dose is required.
 - e. Hib vaccine is not required for children 5 years or older.
 10. Pneumococcal conjugate vaccine (PCV). (Minimum age: 6 weeks)
 - a. Children starting the series on time should receive PCV vaccine at 2 months, 4 months, 6 months and at 12 through 15 months. Children older than 15 months must get caught up according to the ACIP catch-up schedule. The final dose must be received on or after 12 months.
 - b. Unvaccinated children ages 7 through 11 months are required to receive 2 doses, at least 4 weeks apart, followed by a third dose at 12 through 15 months.
 - c. Unvaccinated children ages 12 through 23 months are required to receive 2 doses of vaccine at least 8 weeks apart.
 - d. If one dose of vaccine was received at 24 months or older, no further doses are required.
 - e. PCV is not required for children 5 years or older.
 - f. For further information, refer to the PCV chart available in the School Survey Instruction Booklet at: www.health.ny.gov/prevention/immunization/schools

For further information, contact:

**New York State Department of Health
Bureau of Immunization
Room 649, Corning Tower ESP
Albany, NY 12237
(518) 473-4437**

**New York City Department of Health and Mental Hygiene
Program Support Unit, Bureau of Immunization,
42-09 28th Street, 5th floor
Long Island City, NY 11101
(347) 396-2433**

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

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	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	DT	No trade name
<i>Haemophilus influenzae</i> type b vaccine	Hib (PRP-T)	ActHIB® Hiberix®
Hepatitis A vaccine	Hib (PRP-OMP)	PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis B vaccine	HepB	Enerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IV4	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	MenACWY-TT	Mencev®
MenB-4C		MenQuadfi® Bexsero®
MenB-FHbp		Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Poliovirus vaccine (inactivated)	IPV	IPOL®
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®

How to use the child and adolescent immunization schedule

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

- 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 800-232-4636, 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 Advisory Committee on Immunization Practices (ACIP) recommendations: www.cdc.gov/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/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

Scan QR code
for access to
online schedule



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



*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.

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 ↓ 3 rd dose →						
Rotavirus (RV); RV1 (2-dose series), RV5 (3-dose series)	1 st dose ↓ 2 nd dose →	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 →						
<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)																	
Inactivated poliovirus (IPV) <18 yrs	1 st dose ↓ 2 nd dose	3 rd dose ↓ 4 th dose →									3 rd dose ↓ 3 rd dose →						
Influenza (IIV4) or Influenza (LAIV4)												Annual vaccination 1 or 2 doses or Annual vaccination 1 dose only					
Measles, mumps, rubella (MMR)												Annual vaccination 1 or 2 doses or Annual vaccination 1 dose only					
Varicella (VAR)													2 nd dose				
Hepatitis A (HepA)													2 nd dose				
Tetanus, diphtheria, acellular pertussis (Tdap) ≥7 yrs														1 st dose			
Human papillomavirus (HPV)														1 dose			
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos, MenACWY-TT ≥2 years)														See Notes	1 st dose	2 nd dose	
Meninococcal B (MenB-4C, MenB-FHbp)														See Notes	See Notes	See Notes	
Pneumococcal polysaccharide (PPSV23)														See Notes	See Notes	See Notes	
Dengue (DEN4CYD; 9–16 yrs)															Seropositive in endemic areas only (See Notes)		

Range of recommended ages for all children
Range of recommended ages for catch-up vaccination
Range of recommended ages for certain high-risk groups
Range of recommended ages for shared clinical decision-making
No recommendation/not applicable

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	Minimum Interval Between Doses	
Hepatitis B	Birth	4 weeks	8 weeks and at least 16 weeks after first dose minimum age for the final dose is 24 weeks	6 months	Dose 4 to Dose 5
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	6 months	
Diphtheria, tetanus, and acellular pertussis	6 weeks	4 weeks	4 weeks	6 months	
<i>Haemophilus influenzae</i> 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 if previous 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 PRP-T (ActHib®, Pentacel® Hibertrix®, Vaxelis® 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; OR if both doses were PedvaxHIB® 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 age 12 months or for children at high risk who received 3 doses at any age.	
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 (minimum age 4 years for final dose)	
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-CRM 9 months MenACWY-D 2 years MenACWY-TT	8 weeks			
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 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.	
Human papillomavirus	9 years	Routine dosing intervals are recommended.			
Hepatitis A	N/A	6 months			
Hepatitis B	N/A	4 weeks			
Inactivated poliovirus	N/A	4 weeks	8 weeks and at least 16 weeks after first dose 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.		
Measles, mumps, rubella	N/A	4 weeks			
Varicella	N/A	3 months if age 13 years 4 weeks if age 13 years or older			
Dengue	9 years	6 months			

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	Pregnancy	INDICATION						Chronic liver disease	Diabetes
		Immunocompromised status (excluding HIV infection)	HIV infection CD4+ count ¹	≥15% or total CD4 cell count of <200/mm ³	Kidney failure, end-stage renal disease, or on hemodialysis	CSF leak or cochlear implant	Asplenia or persistent complement component deficiencies		
Hepatitis B									
Rotavirus		SCID ²							
Diphtheria, tetanus, and acellular pertussis (DTaP)									
<i>Haemophilus influenzae</i> type b									
Pneumococcal conjugate									
Inactivated poliovirus									
Influenza (IIV4) — Or Influenza (LAIV4)					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	
								No recommendation/not applicable	
								*Vaccinate after pregnancy	

1 For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization, "Altered Immunocompetence," at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html.

2 Severe Combined Immunodeficiency

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

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. 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.

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 other catch-up guidance, see Table 2. Vaxellis® can be used for catch-up vaccination in children less than age 5 years. Follow the catch-up schedule even if Vaxellis® is used for one or more doses. For detailed information on use of Vaxellis® 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 age 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/rr6702a1.htm.

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

Routine vaccination

- ActHIB®, Hibrix®, Pentacel®, or Vaxella®:** 4-dose series (3 dose primary series at age 2, 4, and 6 months, followed by a booster dose* at age 12–15 months)
 - *Vaxella® 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.

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

Special situations

- Chemotherapy or radiation treatment:**
 - Age 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):**
 - Age 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 ages 5 years or older*

- Elective splenectomy:**
 - Unvaccinated* persons age 15 months or older*

- HIV infection:**
 - Age 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*

- Immunoglobulin deficiency, early component complement deficiency:**
 - Age 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*

- *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

Catch-up vaccination

- Unvaccinated persons through age 18 years should complete a 2-dose series (minimum interval: 6 months) at age 12–23 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, **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).

International travel

- Persons traveling to or working in countries with high or intermediate endemic hepatitis A (www.cdc.gov/travel/):
 - 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:

- All medically stable infants ≥2,000 grams: 1 dose within 24 hours of birth
- 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 ≥2,000 grams as soon as possible, but no later than 7 days of age.

Routine series

- 3-dose series at age 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).
- 3-dose series, even for those who initiate vaccination at age 9 through 14 years.
- History of sexual abuse or assault:** Start at age 9 years.

- 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 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, **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).

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 < 10mIU/ml) is recommended for certain populations, including:
 - Infants born to HBsAg-positive mothers
 - Hemodialysis patients
 - Other immunocompromised persons

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)
 - **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, even for those who initiate vaccination at age 9 through 14 years.
- 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.

Catch-up vaccination

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.

- 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/rr005a1.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

Measles, mumps, and rubella vaccination

(minimum age: 12 months for routine vaccination)

Routine vaccination

- 2-dose series at age 12–15 months, age 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
- 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.

- 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.

Notes

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

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

Routine vaccination

- 2-dose series at age 11–12 years; 16 years
- 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) use:

- Menveo

- Dose 1 at age 2 months: 4-dose series (additional 3 doses at age 4, 6 and 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 12 weeks later and after age 12 months)
- Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after 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 4 weeks after completion of PCV13 series.

- **MenQuadrifl**
- Dose 1 at age 24 months or older: 2-dose series at least 8 weeks apart

Travel in countries with hyperendemic or epidemic meningococcal disease, including countries in the African meningitis belt or during the Hajj (www.cdc.gov/travel/):

- Children less than age 24 months:
 - Menveo® (age 2–23 months)
 - Dose 1 at age 2 months: 4-dose series (additional 3 doses at age 4, 6 and 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 12 weeks later and after age 12 months)
 - Dose 1 at age 7–23 months: 2-dose series (dose 2 at least 12 weeks after dose 1 and after age 12 months)
 - Menactra® (age 9–23 months)
 - 2-dose series (dose 2 at least 12 weeks after dose 1; dose 2 may be administered as early as 8 weeks after dose 1 in travelers)
 - Children age 2 years or older: 1 dose Menveo®, Menactra®, or MenQuadrifl®

First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:

- 1 dose Menveo®, Menactra®, or MenQuadrifl®

Adolescent vaccination of children who received MenACWY prior to age 10 years:

- Children for whom boosters are recommended because of an ongoing increased risk of meningococcal disease (e.g., those with complement deficiency, HIV, or asplenia). Follow the booster schedule for persons at increased risk.

- **Children for whom boosters are not recommended** (e.g., a healthy child who received a single dose for travel to a country where meningococcal disease is endemic): Administer MenACWY according to the recommended adolescent schedule with dose 1 at age 11–12 years and dose 2 at age 16 years.

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 vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/r6909a1.htm.

Meningococcal serogroup B vaccination

(minimum age: 10 years [MenB-4C, Bexsero®, MenB-FHbp, Trumenba®])

Shared clinical decision-making

- Adolescents not at increased risk age 16–23 years (preferred age 16–18 years) based on shared clinical decision-making:
 - Bexsero®: 2-dose series at least 1 month apart
 - Trumenba®: 2-dose series at least 6 months apart; if dose 2 is administered earlier than 6 months, administer a 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:
• Bexsero®: 2-dose series at least 1 month apart

- Trumenba®: 3-dose series at 0, 1–2, 6 months

Note: Bexsero® and Trumenba® are not interchangeable; the same product should be used for all doses in a series.

For MenB booster dose recommendations for groups listed under "Special situations" and in an outbreak setting and additional meningococcal vaccination information, see www.cdc.gov/mmwr/volumes/69/rr/r6909a1.htm.

Pneumococcal vaccination

(minimum age: 6 weeks [PCV13], 2 years [PPSV23])

Routine vaccination with PCV13

• 4-dose series at age 2, 4, 6, 12–15 months

Catch-up vaccination with PCV13

• 1 dose for healthy children age 24–59 months with any incomplete* PCV13 series

- For other catch-up guidance, see Table 2.

Special situations

Underlying conditions below: When both PCV13 and PPSV23 are indicated, administer PCV13 first. PCV13 and PPSV23 should not be administered during same visit.

Chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma treated with high-dose, oral corticosteroids); diabetes mellitus:

- Any incomplete* 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 8 weeks apart)
 - No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after completing all recommended PCV13 doses)
 - No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after completing all recommended PCV13 doses)

Cerebrospinal fluid leak, cochlear implant:

- Any incomplete* 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 8 weeks apart)
 - No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)
 - Any PCV13 but no PPSV23: 1 dose PCV13, 1 dose PPSV23 at least 8 weeks later
 - Any PCV13 but no PPSV23: 1 dose PCV13 at least 8 weeks after the most recent dose of PCV13
 - PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent dose of PPSV23

Sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiency; HIV infection; chronic renal failure; nephrotic syndrome; malignant neoplasms; leukemias; lymphomas; Hodgkin disease, and other diseases associated with treatment with immunosuppressive drugs or radiation therapy; solid organ transplantation; multiple myeloma:

- Any incomplete* 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 8 weeks apart)
 - No history of either PCV13 or PPSV23: 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)
 - Any PCV13 but no PPSV23: 1 dose PCV13, 1 dose PPSV23 at least 8 weeks later
 - Any PCV13 but no PPSV23: 1 dose PCV13 at least 8 weeks after the most recent dose of PCV13
 - PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent dose of PPSV23

First-year college students who live in residential housing (if not previously vaccinated at age 16 years or older) or military recruits:

- 1 dose PPSV23 and at least 8 weeks after a dose of PCV13

Notes

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

Chronic liver disease, alcoholism:

- Age 6–18 years
- No history of PPSV23; 1 dose PPSV23 (at least 8 weeks after any prior PCV13 dose)

*Incomplete series = Not having received all doses in either the recommended series or an age-appropriate catch-up series. See Tables 8, 9, and 11 in the ACIP pneumococcal vaccine recommendations (www.cdc.gov/mmwr/pdf/rr/rr5911.pdf) for complete schedule details.

Poliovirus vaccination (minimum age: 6 weeks)

Routine vaccination

- 4-dose series at ages 2, 4, 6–18 months, 4–6 years; administer the final dose on or after age 4 years and at least 6 months after the previous dose.
- 4 or more doses of IPV can be administered before age 4 years when a combination vaccine containing IPV is used. However, a dose is still recommended on or after age 4 years and at least 6 months after the previous dose.

Catch-up vaccination

- In the first 6 months of life, use minimum ages and intervals only for travel to a polio-endemic region or during an outbreak.
- IPV is not routinely recommended for U.S. residents age 18 years or older.

Series containing oral polio vaccine (OPV), either mixed OPV-IPV or OPV-only series:

- Total number of doses needed to complete the series is the same as that recommended for the U.S. IPV schedule. See www.cdc.gov/mmwr/volumes/66/wr/mm6601a6.htm?s_cid=mm6601a6_w.
- Only trivalent OPV (tOPV) counts toward the U.S. vaccination requirements.

- Doses of OPV administered before April 1, 2016, should be counted (unless specifically noted as administered during a campaign).

- Doses of OPV administered on or after April 1, 2016, should not be counted.

- For guidance to assess doses documented as “OPV,” see www.cdc.gov/mmwr/volumes/66/wr/mm6606a7.htm?s_cid=mm6606a7_w.

• For other catch-up guidance, see Table 2.

Rotavirus vaccination (minimum age: 6 weeks)

Routine vaccination

- Rotarix®: 2-dose series at age 2 and 4 months
- Rotateq®: 3-dose series at age 2, 4, and 6 months
- If any dose in the series is either Rotarix® or unknown, default to 3-dose series.

Catch-up vaccination

- Do not start the series on or after age 15 weeks, 0 days.
- The maximum age for the final dose is 8 months, 0 days.
- For other catch-up guidance, see Table 2.

Varicella vaccination (minimum age: 12 months)

Routine vaccination

- 2-dose series at age 12–15 months, 4–6 years
 - VAR or MMR may be administered*
 - Dose 2 may be administered as early as 3 months after dose 1 (a dose inadvertently administered after at least 4 weeks may be counted as dose 1)
- *Note: For dose 1 in children age 12–47 months, it is recommended to administer MMR and varicella vaccines separately. MMR may be used if parents or caregivers express a preference.

Catch-up vaccination

- Ensure persons age 7–18 years without evidence of immunity (see MMR at www.cdc.gov/mmwr/pdf/rr/rr5604.pdf) have a 2-dose series:
 - Age 7–12 years: routine interval: 3 months (a dose inadvertently administered after at least 4 weeks may be counted as valid)
 - Age 13 years and older: routine interval: 4–8 weeks (minimum interval: 4 weeks)
- The maximum age for use of MMRV is 12 years.

Routine vaccination

- Adolescents age 11–12 years: 1 dose Tdap
- Pregnancy: 1 dose Tdap during each pregnancy, preferably in early part of gestational weeks 27–36.
- Tdap may be administered regardless of the interval since the last tetanus- and diphtheria-toxoid-containing vaccine.
- Adolescents age 13–18 years who have not received Tdap:
 - 1 dose Tdap, then Td or Tdap booster every 10 years
 - Persons age 7–18 years not fully vaccinated* with DTaP: 1 dose Tdap as part of the catch-up series (preferably the first dose); if additional doses are needed, use Td or Tdap.
- Tdap administered at age 7–10 years:
 - Children age 7–9 years who receive Tdap should receive the routine Tdap dose at age 11–12 years.
 - Children age 10 years who receive Tdap do not need the routine Tdap dose at age 11–12 years.
- DTaP inadvertently administered on or after age 7 years:
 - Children age 7–9 years: DTaP may count as part of catch-up series. Administer routine Tdap dose at age 11–12 years.
 - Children age 10–18 years: Count dose of DTaP as the adolescent Tdap booster.

*For other catch-up guidance, see Table 2.

Special situations

- Wound management in persons age 7 years or older with history of 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 of tetanus-toxoid-containing vaccine; for all other wounds, administer Tdap or Td if more than 5 years since last dose of tetanus-toxoid-containing vaccine. Tdap is preferred for persons age 11 years or older who have not previously received Tdap or whose Tdap history is unknown. If a tetanus-toxoid-containing vaccine is indicated for a pregnant adolescent, use Tdap.
- For detailed information, see www.cdc.gov/mmwr/volumes/69/wr/mm6903a5.htm.

*Fully vaccinated = 5 valid doses of DTaP OR 4 valid doses of DTaP if dose 4 was administered at age 4 years or older

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, ccIV, 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
Influenza, cell culture-based inactivated injectable [(ccIIV4), Flucelvax® Quadrivalent]	<ul style="list-style-type: none">• Severe allergic reaction (e.g., anaphylaxis) to any ccIIV of any valency, or to any component³ of ccIIV4.	<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 ccIIV4, 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, 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, ccIV, 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, ccIV, RIV, or LAIV of any valency)• Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg)• Children age 2 – 4 years with a history of asthma or wheezing• 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• Children and adolescents receiving aspirin or salicylate-containing medications• 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

1. When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html

2. When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahta L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html

3. Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at www.fda.gov/vaccines-blood-biologics/approved-products/vaccines-licensed-use-united-states

Appendix

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

Vaccine	Contraindications ¹	Precautions ²
Dengue (DEN4CYD)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) 	<ul style="list-style-type: none"> Pregnancy HIV infection without evidence of severe immunosuppression Moderate or severe acute illness with or without fever
Diphtheria, tetanus, pertussis (DTaP) Tetanus, diphtheria (Td)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For DtaP only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP or DTaP <p>For DtaP only: Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy</p> <p>For DtaP only: Progressive encephalopathy, defer DTaP until neurologic status clarified and stabilized</p> <p>Moderate or severe acute illness with or without fever</p>	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid—containing or tetanus-toxoid—containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine For DtaP only: Moderate or severe acute illness with or without fever Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy Moderate or severe acute illness with or without fever
Haemophilus influenzae type b (Hib)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For Hibrix, ActHib, and PedvaxHIB only: History of severe allergic reaction to dry natural latex Less than age 6 weeks 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis A (HepA)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis B (HepB)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including yeast For Hepisav-B only: Pregnancy 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis A-Hepatitis B vaccine [HepA-HepB, (Twinrix®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin and yeast 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Human papillomavirus (HPV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Measles, mumps, rubella (MMR)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Pregnancy Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent 	<ul style="list-style-type: none"> Recent (\leq11 months) receipt of antibody-containing blood products (specific interval depends on product) History of thrombocytopenic or thrombocytocytic purpura Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing Moderate or severe acute illness with or without fever
Meningococcal ACWY (MenACWY) [MenACWY-CRM (Menveo®); MenACWY-D (Menactra®); MenACWY-TT (MenQuadfi®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For MenACWY-D and MenACWY-CRM only: severe allergic reaction to any diphtheria toxoid—or CRM197—containing vaccine For MenACWY-TT only: severe allergic reaction to a tetanus toxoid-containing vaccine 	<ul style="list-style-type: none"> For MenACWY-CRM only: Preterm birth if less than age 9 months Moderate or severe acute illness with or without fever
Meningococcal B (MenB) [MenB-4C (Bexsero®); MenB-FHbp (Trumenba®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Pregnancy For MenB-4C only: Latex sensitivity Moderate or severe acute illness with or without fever
Pneumococcal conjugate (PCV13)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe allergic reaction (e.g., anaphylaxis) to any diphtheria-toxoid-containing vaccine or its component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Pneumococcal polysaccharide (PPSV23)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Polio virus vaccine, inactivated (IPV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Pregnancy Moderate or severe acute illness with or without fever
Rotavirus (RV) [RV1 (Rotarix®), RV5 (Rotateq®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe combined immunodeficiency (SCID) History of intussusception 	<ul style="list-style-type: none"> Altered immunocompetence other than SCID Chronic gastrointestinal disease RV1 only: Spina bifida or bladder extrophy
Tetanus, diphtheria, and acellular pertussis (Tdap)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For Tdap only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP, DTaP or Tdap 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid—containing or tetanus-toxoid—containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine For Tdap only: Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized Moderate or severe acute illness with or without fever
Varicella (VAR)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Pregnancy Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent 	<ul style="list-style-type: none"> Recent (\leq11 months) receipt of antibody-containing blood products (specific interval depends on product) Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination) Use of aspirin or aspirin-containing products Moderate or severe acute illness with or without fever

- When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahati L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
- When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahati L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
- Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at www.fda.gov/vaccines-blood-biologics/approved-products/vaccines-licensed-use-united-states.

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

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	Daptacel® Infanrix®
Diphtheria, tetanus vaccine	DT	No trade name
<i>Haemophilus influenzae</i> type b vaccine	Hib (PRP-T)	ActHIB® Hiberix®
Hepatitis A vaccine	Hib (PRP-OMP)	PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis B vaccine	HepB	Enerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IV4	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	MenACWY-TT	Mencev®
MenB-4C		MenQuadfi® Bexsero®
MenB-FHbp		Trumenba®
Pneumococcal 13-valent conjugate vaccine	PCV13	Prevnar 13®
Pneumococcal 23-valent polysaccharide vaccine	PPSV23	Pneumovax 23®
Poliovirus vaccine (inactivated)	IPV	IPOL®
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	Pediariix®
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®

How to use the child and adolescent immunization schedule

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

- 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 800-232-4636, 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 Advisory Committee on Immunization Practices (ACIP) recommendations: www.cdc.gov/hcp/acip-recs/index.html
- General Best Practice Guidelines for Immunization (including contraindications and precautions): www.cdc.gov/vaccines/hcp/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-scdm-faqs.html

Scan QR code
for access to
online schedule



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



*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.

Appendix

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

Vaccine	Contraindications ¹	Precautions ²
Dengue (DEN4CYD)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) 	<ul style="list-style-type: none"> Pregnancy HIV infection without evidence of severe immunosuppression Moderate or severe acute illness with or without fever
Diphtheria, tetanus, pertussis (DTaP) Tetanus, diphtheria (Td)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For DtaP only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP or DTaP <p>For DtaP only: Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy</p> <p>For DtaP only: Progressive encephalopathy, defer DTaP until neurologic status clarified and stabilized</p> <p>Moderate or severe acute illness with or without fever</p>	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid—containing or tetanus-toxoid—containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine For DtaP only: Moderate or severe acute illness with or without fever Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy Moderate or severe acute illness with or without fever
Haemophilus influenzae type b (Hib)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For Hibrix, ActHib, and PedvaxHIB only: History of severe allergic reaction to dry natural latex Less than age 6 weeks 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis A (HepA)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis B (HepB)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including yeast For Hepisav-B only: Pregnancy 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Hepatitis A-Hepatitis B vaccine [HepA-HepB, (Twinrix®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin and yeast 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Human papillomavirus (HPV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Measles, mumps, rubella (MMR)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Pregnancy Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent 	<ul style="list-style-type: none"> Recent (\leq11 months) receipt of antibody-containing blood products (specific interval depends on product) History of thrombocytopenic or thrombocytocytic purpura Need for tuberculin skin testing or interferon-gamma release assay (IGRA) testing Moderate or severe acute illness with or without fever
Meningococcal ACWY (MenACWY) [MenACWY-CRM (Menveo®); MenACWY-D (Menactra®); MenACWY-TT (MenQuadfi®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For MenACWY-D and MenACWY-CRM only: severe allergic reaction to any diphtheria toxoid—or CRM197—containing vaccine For MenACWY-TT only: severe allergic reaction to a tetanus toxoid-containing vaccine 	<ul style="list-style-type: none"> For MenACWY-CRM only: Preterm birth if less than age 9 months Moderate or severe acute illness with or without fever
Meningococcal B (MenB) [MenB-4C (Bexsero®); MenB-FHbp (Trumenba®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Pregnancy For MenB-4C only: Latex sensitivity Moderate or severe acute illness with or without fever
Pneumococcal conjugate (PCV13)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe allergic reaction (e.g., anaphylaxis) to any diphtheria-toxoid-containing vaccine or its component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Pneumococcal polysaccharide (PPSV23)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Polio virus vaccine, inactivated (IPV)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ 	<ul style="list-style-type: none"> Pregnancy Moderate or severe acute illness with or without fever
Rotavirus (RV) [RV1 (Rotarix®), RV5 (Rotateq®)]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe combined immunodeficiency (SCID) History of intussusception 	<ul style="list-style-type: none"> Altered immunocompetence other than SCID Chronic gastrointestinal disease RV1 only: Spina bifida or bladder extrophy
Tetanus, diphtheria, and acellular pertussis (Tdap)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ For Tdap only: Encephalopathy (e.g., coma, decreased level of consciousness, prolonged seizures) not attributable to another identifiable cause within 7 days of administration of previous dose of DTP, DTaP or Tdap 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of tetanus-toxoid-containing vaccine History of Arthus-type hypersensitivity reactions after a previous dose of diphtheria-toxoid—containing or tetanus-toxoid—containing vaccine; defer vaccination until at least 10 years have elapsed since the last tetanus-toxoid-containing vaccine For Tdap only: Progressive or unstable neurological disorder, uncontrolled seizures, or progressive encephalopathy until a treatment regimen has been established and the condition has stabilized Moderate or severe acute illness with or without fever
Varicella (VAR)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Pregnancy Family history of altered immunocompetence, unless verified clinically or by laboratory testing as immunocompetent 	<ul style="list-style-type: none"> Recent (\leq11 months) receipt of antibody-containing blood products (specific interval depends on product) Receipt of specific antiviral drugs (acyclovir, famciclovir, or valacyclovir) 24 hours before vaccination (avoid use of these antiviral drugs for 14 days after vaccination) Use of aspirin or aspirin-containing products Moderate or severe acute illness with or without fever

- When a contraindication is present, a vaccine should NOT be administered. Kroger A, Bahati L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
- When a precaution is present, vaccination should generally be deferred but might be indicated if the benefit of protection from the vaccine outweighs the risk for an adverse reaction. Kroger A, Bahati L, Hunter P. ACIP General Best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html
- Vaccination providers should check FDA-approved prescribing information for the most complete and updated information, including contraindications, warnings, and precautions. Package inserts for U.S.-licensed vaccines are available at www.fda.gov/vaccines-blood-biologics/approved-products/vaccines-licensed-use-united-states.

RESOURCES FOR UNDERSTANDING "IN PROCESS"

Q: What does it mean to be "in process"?

A: "In process" is defined as a child that has received at least the first dose of each required vaccine series and has age appropriate appointments to complete the series according to the ACIP catch-up schedule.

There is a 14-day grace period (or 30 days for students coming from out-of-state/ country) to provide proof of being up-to-date or in process on all required immunizations. If a student is not up-to-date or in process within 14/ 30 days, they must be excluded from school until they provide proof of being up-to-date or in-process for all required immunizations.

Students can become out of compliance at any time during the school year, and should be excluded when appropriate.

Example 1

A 6 year old is starting school in New York State and has not received any polio immunizations. School starts on September 8th. The student must receive their 1st dose and have appointments for 2 subsequent doses scheduled by September 23rd*. If not, they will not be allowed to attend school on the 23rd or going forward until they are in compliance.

*Start of school + 14 days = Period before exclusion

Example 2

The same 6 year old received their 1st dose of the polio vaccination on September 19th and scheduled their 2nd dose on October 17th and their 3rd dose on April 17th. They miss their 2nd dose appointment. They must be excluded from school until they get their 2nd dose and reschedule their 3rd.

This student was in process but then fell out of compliance and must be excluded.

RESOURCES FOR UNDERSTANDING IMMUNIZATION RECORDS

Vaccine Acronyms and Abbreviations

Common abbreviations for vaccines you might see on US immunization records, including old or non-standard terms.

Click [here](#) or scan QR code.



ACIP Acronyms for Vaccines

Abbreviations and trade names used in ACIP vaccine recommendations that you might see on immunization records.

Click [here](#) or scan QR code.

UPD Terms in Multiple Languages

Reference chart of vaccine-preventable disease terms in Eastern and Western European languages.

Click [here](#) or scan QR code.



REMINDER: OFFICIAL RECORDS FROM ANOTHER COUNTRY ARE ACCEPTABLE PROOF OF IMMUNIZATION WITHOUT A HEALTH PRACTITIONER'S SIGNATURE. AN UNOFFICIAL RECORD, SUCH AS ONE FROM A CLINIC IN ANOTHER COUNTRY, IS UNACCEPTABLE UNLESS IT IS REVIEWED AND SIGNED BY A HEALTH PRACTITIONER LICENSED IN NYS.

RESOURCES FOR UNDERSTANDING MEDICAL EXEMPTIONS

Medical Exemption Review Procedure

Procedure for schools outside of New York City to review and accept medical exemptions to school immunization.

Click [here](#) or scan QR code.



DOH-5077

Medical exemption form. This form must be used for medical exemptions to school immunization.

Click [here](#) or scan QR code.

NYSDOH School Immunization Webpage

More information on school immunization requirements, exemptions, and survey.

Click [here](#) or scan QR code.



REMINDER: MEDICAL EXEMPTIONS TO SCHOOL IMMUNIZATION ARE THE ONLY EXEMPTIONS PERMITTED IN NYS. NON-MEDICAL EXEMPTIONS WERE REMOVED IN 2019.

Medical Exemption Review Procedures for Schools Outside New York City

Medical exemptions may, but are not required to, be submitted to the New York State Department of Health, (NYSDOH) Bureau of Immunization for review. The Medical Director, Bureau of Immunization, will make a recommendation based on whether the stated contraindication(s)/precaution(s) are determined to be valid and support medical exemption.

Initial Process:

1. Parent/guardian submits a signed medical exemption statement (DOH-5077) from the student's physician, who must be licensed to practice medicine in New York State, to the school. The medical exemption statement should specify which immunization is detrimental to the child's health, provide information as to why the immunization may be detrimental to the child's health based on a determination that the child has a medical contraindication or precaution to a specific immunization consistent with the contraindication guidance of the Advisory Committee on Immunization Practices or other nationally recognized evidence-based standard of care, and specify the length of time the immunization is medically contraindicated, if known.
2. Principal or person in charge of school (or designee) reviews the exemption statement to determine if it meets Public Health Law (PHL) Section 2164 and 10 NYCRR subpart 66-1, and accepts or denies the exemption based on whether the exemption statement meets the requirements. The school may request additional documentation from the parent/guardian. The parent/guardian may be granted up to 14 days to submit the additional documentation. PHL 2164 requires schools to exclude students who are not in compliance with the law until they come into compliance. The school may grant up to 14 days for students to come into compliance before excluding the students from school.
3. In making a determination on a medical exemption request, the school should seek the appropriate medical consultation (e.g., the school's medical director). If needed following medical consultation, the principal or person in charge of the school (or their designee) may forward the medical exemption request to NYSDOH, Bureau of Immunization for further review and make a recommendation to assist him or her with determining whether to accept or deny the exemption request. The student's redacted immunization record or New York State Immunization Information System (NYSIIS) or Citywide Immunization Registry (CIR) record must also be submitted to determine the student's current immunization status. These documents may be submitted via fax (518-474-5500) or email (osas@health.ny.gov) to the School Assessment and Compliance Unit at the Bureau of Immunization.
4. NYSDOH School Assessment Unit staff initially reviews medical exemption requests, consults with a Public Health Program Nurse as needed, and forwards them to the Medical Director for final review. As appropriate, NYSDOH School Assessment Unit staff requests additional supporting details from the school. The student may remain in school while the medical exemption is being reviewed.

Notification of Decision:

1. The principal or person in charge of the school (or their designee) is notified in writing of the Medical Director's recommendation.
2. After the appropriate medical consultation has occurred, the principal or person in charge of a school is responsible for making the final determination on the medical exemption request.

Renewal Process:

1. A medical exemption must be reissued annually. The principal or person in charge of school (or designee) notifies the parent of the need for renewal. Once the medical exemption statement has been accepted as meeting the requirements of a medical exemption as defined by PHL 2164, the student is deemed to be in compliance with PHL 2164 and allowed to attend school for the academic school year.

Contact Information for the NYSDOH School Assessment and Compliance Unit:

Phone: 518-474-1944

FAX: 518-474-5500

Email: osas@health.ny.gov

Appeal Process for Schools Outside the 5 Boroughs of New York City:

The parent has 30 days from receipt of the district's written denial of the medical exemption request to send a 310 appeal to the Commissioner of Education. Directions on how to file a 310 appeal are posted on the State Education Department's (SED) website at <http://www.counsel.nysed.gov/appeals>.

Questions regarding the appeal process can be directed to SED Student Support Services 518-486-6090 or studentsupportservices@mail.nysed.gov. State Education Department will notify the school if the student's stay has been granted.

Review and Appeals Process for Schools in New York City:

Contact the Office of School Health at:

28-11 Queens Plaza North, 4th Floor, Room 402
Long Island City, NY 11101
(718) 391-8383

Immunization Requirements for School Attendance Medical Exemption Statement for Children 0-18 Years of Age

NOTE: THIS EXEMPTION FORM APPLIES ONLY TO IMMUNIZATIONS REQUIRED FOR SCHOOL ATTENDANCE

Instructions:

1. Complete information (name, DOB etc.).
2. Indicate which vaccine(s) the medical exemption is referring to.
3. Complete contraindication/precaution information.
4. Complete date exemption ends, if applicable.
5. Complete medical provider information. Retain copy for file. Return original to facility or person requesting form.

-
1. Patient's Name _____
 2. Patient's Date of Birth _____
 3. Patient's Address _____
 4. Name of Educational Institution _____
-

Guidance for medical exemptions for vaccination can be obtained from the contraindications, indications, and precautions described in the vaccine manufacturers' package insert and by the most recent recommendations of the Advisory Committee on Immunization Practices (ACIP) available in the Centers for Disease Control and Prevention publication, Guide to Vaccine Contraindications and Precautions. This guide can be found at the following website: <http://www.cdc.gov/vaccines/recs/vac-admin/contraindications.htm>.

Please indicate which vaccine(s) the medical exemption is referring to:

- | | |
|---|---|
| <input type="checkbox"/> Haemophilus Influenzae type b (Hib) | <input type="checkbox"/> Measles, Mumps, and Rubella (MMR) |
| <input type="checkbox"/> Polio (IPV or OPV) | <input type="checkbox"/> Varicella (Chickenpox) |
| <input type="checkbox"/> Hepatitis B (Hep B) | <input type="checkbox"/> Pneumococcal Conjugate Vaccine (PCV) |
| <input type="checkbox"/> Tetanus, Diphtheria, Pertussis (DTaP, DTP, Tdap) | <input type="checkbox"/> Meningococcal Vaccine (MenACWY) |

Please describe the patient's contraindication(s)/precaution(s) here: _____

Date exemption ends (if applicable)

A New York State licensed physician must complete this medical exemption statement and provide their information below:

Name (print) _____ NYS Medical License # _____

Address _____

Telephone _____

Signature _____ Date _____

For Institution Use ONLY: Medical Exemption Status Accepted Not Accepted Date: _____