

Quality Reporting ______ and Performance Measures

Appropriate Testing for Pharyngitis (CWP)

This HEDIS measure looks at the percentage of episodes for members 3 years of age and older who were diagnosed with pharyngitis, dispensed an antibiotic and received a group A streptococcus (strep) test for the episode.

Code your services correctly

Use the following codes to identify pharyngitis and strep tests:

Description	ICD-10-CM	СРТ
Pharyngitis (including tonsillitis)	J02.0, J02.8, J02.9, J03.00, J03.01,	
	J03.80, J03.81, J03.90, J03.91	
Group A streptococcal tests		87070, 87071, 87081, 87430,
		87650-87652, 87880

Best practices and helpful tips:

- This measure looks at members who received group A strep tests with a diagnosis of pharyngitis, tonsillitis or streptococcal sore throats and were appropriately dispensed antibiotics within three days of the diagnosis.
- Document the performance of a rapid strep test, or the parent or caregivers' refusal of testing in medical records.
- Pharyngitis is the only condition among upper respiratory infections (URIs) whose diagnosis can be validated through lab results. It serves as an indicator of appropriate antibiotic use among all respiratory tract infections. A strep test (rapid assay or throat culture) is the test for group A strep pharyngitis.
- Due to considerable evidence that prescribing antibiotics is not the first line of treatment for colds or sore throats caused by viruses, pediatric *Clinical Practice Guidelines* recommend that only children with lab-confirmed group A strep or other bacteria-related ailments be treated with appropriate antibiotics.
- If a patient tests negative for group A strep but insists on an antibiotic:
 - Refer to the illness as a sore throat due to a cold; patients tend to associate the label with a less-frequent need for antibiotics.
 - Discuss ways to treat symptoms with patients:
 - Get extra rest.
 - Drink plenty of fluids.
 - Eat ice chips or use throat spray or lozenges for sore throats.
 - Use over-the-counter medications. Write a prescription for symptom relief, if applicable.
 - Use a cool-mist vaporizer and nasal spray for congestion.
- Educate patients on the difference between bacterial and viral infections.
- Educate patients and their parents or caregivers on how they can try prevent infection by:
 - Washing hands frequently.
 - Keeping an infected person's eating utensils and drinking glasses separate from other family members.
 - o Thoroughly washing an infected toddler's toys in hot water with disinfectant soap.

Please note: The codes and tips listed do not guarantee reimbursement. The information provided is based on HEDIS MY 2022 technical specifications, the 2022 CMS technical specifications and the 2022 EPSDT Services Health Check Program Manual and is subject to change based on guidance given by the National Committee for Quality Assurance (NCQA), the Centers for Medicare & Medicaid Services (CMS) and state recommendations. Please refer to the appropriate agency for additional guidance.

- Keeping a child diagnosed with a sore throat out of school or day care until he or she has taken antibiotics for at least 24 hours and until symptoms improve.
- Be sure to contact our Pharmacy department at **800-454-3730** to verify required preauthorization of medications.

• Antibiotic medications include but may not be limited t

Description	Prescriptions		
Aminopenicillins	Amoxicillin	•	Ampicillin
Beta-lactamase inhibitors	Amoxicillin-clavulanate		
First generation	Cefadroxil	•	Cephalexin
cephalosporins	Cefazolin		
Folate antagonist	• Trimethoprim		
Lincomycin derivatives	Clindamycin		
Macrolides	Azithromycin	٠	Erythromycin
	Clarithromycin		
Natural penicillins	Penicillin G potassium	•	Penicillin V potassium
	Penicillin G sodium	•	Penicillin G benzathine
Quinolones	Ciprofloxacin	•	Moxifloxacin
	Levofloxacin	•	Ofloxacin
Second generation	• Cefaclor	•	Cefuroxime
cephalosporins	Cefprozil		
Sulfonamides	Sulfamethoxazole-trimethoprim		
Tetracyclines	Doxycycline	•	Tetracycline
	Minocycline		
Third generation	• Cefdinir	•	Ceftibuten
cephalosporins	• Cefixime	•	Cefditoren
	Cefpodoxime	•	Ceftriaxone

Note: Not all medications listed above are in our Formulary. Prior authorization and/or step therapy may be required.

How can we help?

- Offering current Clinical Practice Guidelines on our provider self-service web site
- Providing your office with resources such as health education materials (for example., Ameritips)
- Offering nonemergency transportation for our members to appointments

Contact your Provider Solutions representative for additional details and questions.

Other resources

You can find more information and tools online:

- CDC Antibiotic Prescribing and Use https://www.cdc.gov/antibiotic-use/?s_cid=NCEZID-AntibioticUse-005
- CDC bronchitis https://www.cdc.gov/antibiotic-use/community/for-patients/commonillnesses/bronchitis.html
- CDC Get Smart: Know When Antibiotics Work campaign materials and more https://www.cdc.gov/antibiotic-use/index.html
 - Prescription Pad for Viral Infection
 - Get Smart: Know When Antibiotics Work

- Cold or Flu: Antibiotics Don't Work for You
- Medicaid Formulary https://client.formularynavigator.com/Search.aspx?siteCode=7596004980
- Pharmacy Information https://provider.amerigroup.com/georgiaprovider/resources/pharmacy-information

Notes

Asthma Medication Ratio (AMR)

This HEDIS measure looks at the percentage of members 5 to 64 years of age with persistent asthma who had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year.

Code your services correctly

Use the following codes to appropriately document asthma:

Description	ICD-10-CM
Asthma	J45.21, J45.22, J45.30-J45.32, J45.40-J45.42, J45.50-J45.52, J45.901, J45.902,
	J45.909, J45.991, J45.998

Best practices and helpful tips:

- Be sure to keep notes of every time you prescribe an asthma medication.
 - For members with asthma, you should:
 - Prescribe controller medication.
 - Educate members in identifying asthma triggers.
 - o Remind members to get their controller medication filled regularly.
 - Remind members not to stop taking the controller medications even if they are feeling better and are symptom-free.
 - Create and maintain an asthma action plan.
 - Offer annual flu shots in your office or inform your patients of the importance of getting the vaccine and where they can get it.
 - Ensure members have an understanding on the importance of utilizing medications correctly (long term controller to achieve and maintain control of persistent asthma vs short-acting/quick-reliever to treat acute symptoms and exacerbations)
- Be sure to contact the Pharmacy department at **800-454-3730** to verify required preauthorization of medications.
- Medications for asthma include but may not be limited to:

Туре	Description	Prescriptions
Controller	Antiasthmatic combinations	Dyphylline-guaifenesin
	Antibody inhibitors	• Omalizumab
	Anti-interleukin-4	• Dupilumab
	Anti-interleukin-5	BenralizumabMepolizumab
	Inhaled steroid combinations	 Budesonide- formoterol Fluticasone-vilanterol Formoterol-mometasone
	Inhaled corticosteroids	 Beclomethasone Budesonide Flunisolide Flunisolide Mometasone
	Leukotriene modifiers	Montelukast Zafirlukast Zileuton
	Methylxanthines	• Theophylline

Туре	Description	Prescriptions	
Reliever	Short-acting, inhaled beta-2 agonists	Albuterol	• Levalbuterol

Note: Not all medications listed above are in our Formulary. Prior authorization and/or step therapy may be required.

How can we help?

- Offering current *Clinical Practice Guidelines* on our provider self-service website
- Providing individualized reports of your patients that are due or overdue for services
- Providing education to members on the importance of asthma control, medication compliance and controller medications through various sources, such as phone calls, newsletters and health education materials
- Offering our disease management program to our members
- Assisting with scheduling appointments for our members, if needed

Contact your Provider Solutions representative for additional details and questions.

Other resources

You can find more information and tools online:

- CDC's Asthma Action Plan https://www.cdc.gov/asthma/actionplan.html
- Disease Management Centralized Care Unit —
 https://providers.amerigroup.com/Pages/ga-about-dmccu.aspx
- Medicaid Formulary https://client.formularynavigator.com/Search.aspx?siteCode=7596004980
- Pharmacy Information https://provider.amerigroup.com/georgiaprovider/resources/pharmacy-information

Notes

Please note: The codes and tips listed do not guarantee reimbursement. The information provided is based on HEDIS MY 2022 technical specifications, the 2022 CMS technical specifications and the 2022 EPSDT Services Health Check Program Manual and is subject to change based on guidance given by the National Committee for Quality Assurance (NCQA), the Centers for Medicare & Medicaid Services (CMS) and state recommendations. Please refer to the appropriate agency for additional guidance.

Well-Care Visits for Children and Adolescents (W30, WCV)

These HEDIS measures look at members who had the recommended number of well visits. Rates are reported for the following measures:

- Well-Child Visits in the First 30 Months of Life (W30):
 - **0 to 14 months** Six or more well-child visits with a PCP on or before turning 15 months old. Visits must be at least two weeks apart.
 - **15 to 30 months -** Two or more well-child visits with a PCP between 15 months and 30 months old. Visits must be at least two weeks apart.
- Child and Adolescent Well-Care Visits (WCV):
 - Members 3 to 21 years of age who had at least one comprehensive well-care visit with a PCP or an OB/GYN during the current year

Record your efforts

Make sure that your medical record documentation for each visit reflects all the following:

- Date of the visit(s)
- A health history
- A physical developmental history
- A mental developmental history
- A physical exam
- Health education and anticipatory guidance

Code your services correctly

Proper coding is critical to ensure accurate reporting of these measures, and it may also decrease the need for medical record reviews. Use the following codes to document comprehensive well-care visits:

Description	СРТ	ICD-10-CM	HCPCS
Well-care visit	99381-99385, 99391-	Z00.00, Z00.01, Z00.110, Z00.111, Z00.121,	G0438, G0439,
	99395, 99461	Z00.129, Z00.2, Z00.3, Z02.5, Z76.1, Z76.2	S0302

Best practices and helpful tips:

- When billing office visits for preventive health services, providers must:
 - Include the appropriate diagnosis code on the claim.
 - Include the applicable EPSDT Referral Code (NU, AV, S2, ST).
 - Use the applicable POS codes, if applicable. POS 99 may be applicable in certain instances.
 - Use the required modifier(s), when applicable:
 - Modifier EP for all preventive health visits (modifiers 90 or 91 may be applicable as well)
 - Modifier HA for catch-up visits
 - Modifier 25:
 - When a vaccine is administered during the preventive visit or
 - To indicate that a significant, separately identifiable E&M service was provided on the same day as the preventive health visit
- Medical records to supplement HEDIS data can be sent to the HEDIS team via secure inbox at ga1hphedis@amerigroup.com or secure fax at **888-220-6712**.

- Follow the *AAP Bright Futures Recommendations Periodicity Schedule* of preventive pediatric healthcare for well-child visits:
 - If Bright Futures guidelines are followed, members should have at least eight visits prior to turning 15 months old. All visits must occur on or before the child turns 15 months old. Consider scheduling the 15th month visit around 14 months.
 - Appropriate screenings may be an important part of these visits as well (such as lead, developmental, and/or depression screenings).
 - Appropriate immunizations are an important part of these visits. Administer immunizations in accordance with the ACIP. Utilize the Georgia Registry of Immunization Transactions & Services (GRITS) database to document administered vaccines.
 - EPSDT services require a dental/oral health assessment.
 - Height, weight, BMI percentile, and counseling for nutrition and physical activity should be completed at least once per year as part of a well visit; however, these services may be completed during a visit other than a well-child visit (i.e. sick visit).
 - For patients under 20 on the date of service, document their BMI <u>percentile</u>. For patients 20 and older, document their BMI <u>value</u>.
 - Services specific to an acute or chronic condition do not count for counseling for nutrition or physical activity.
- It is recommended that all Health Check providers enroll in the Vaccines For Children (VFC) program to provide immunizations to Medicaid eligible children whose ages are birth through eighteen (18) years of age.
- Use your member roster to contact patients who are due for their annual well visit or are new to your practice. Appointment reminders by text, email, postcard, or phone call work well for most parents and guardians.
- Consider offering evening, early morning and/or weekend office hours to accommodate working parents and guardians.
- Sick visits and sports physicals may be missed opportunities to complete a well visit and may count for a well-visit if the appropriate documentation is included.
- EPSDT preventive health screenings are exempt from third-party liability. Even if the member has other health insurance, you may file Medicaid first for preventive health services. This will ensure accurate and timely reporting of EPSDT services.
- If utilizing an electronic medical record (EMR) system, consider:
 - Creating a flag to track patients who are due or past due for preventive services. If you do not use an EMR, consider creating a manual tracking method.
 - Electronic data sharing with your health plan to capture supplemental data (*Additional clinical information about a member that may not have been submitted on a claim*).

How can we help?

- Providing individualized reports of your patients that are due or overdue for services
- Assisting with scheduling appointments for our members, if needed
- Offering nonemergency transportation for our members to appointments
- Providing education to members on the importance of well-visits through various sources, such as phone calls, text messages, newsletters, and/or health education materials
- Encouraging preventive care through our CHIP Rewards program

Contact your Provider Solutions representative for additional details and questions.

Other resources

You can find more information and tools online:

- AAP Periodicity Schedule https://www.aap.org/en-us/Documents/periodicity schedule.pdf
- ACIP Immunization Schedule https://www.cdc.gov/vaccines/schedules/hcp/index.html
- Bright Futures Tools https://brightfutures.aap.org/materials-and-tools/Pages/default.aspx
- Georgia Registry of Immunization Transactions & Services https://www.grits.state.ga.us/production/security_ui.showLogin
- Printable growth charts:
 - o Girls https://www.cdc.gov/growthcharts/data/set2clinical/cj411074.pdf
 - o Boys https://www.cdc.gov/growthcharts/data/set1clinical/cj41l023.pdf
- VFC program https://dph.georgia.gov/vaccines-children-program

Notes

Avoidance of Antibiotic Treatment for Respiratory Infections (AAB, URI)

These HEDIS measures look at the percentage of episodes for members 3 months of age and older who were diagnosed with the respiratory infections below and were **not** dispensed an antibiotic prescription. Rates are reported for the following measures:

- Appropriate Treatment for Upper Respiratory Infection (URI) diagnosed with URI and were not dispensed an antibiotic prescription
- Avoidance of Antibiotic Treatment for Acute Bronchitis/Bronchiolitis (AAB) diagnosed with acute bronchitis/bronchiolitis and were not dispensed an antibiotic prescription

Code your services correctly

Use the following codes to identify acute bronchitis/upper respiratory infections:

Description	ICD-10-CM
Acute bronchitis (AAB)	J20.3-J20.9, J21.0, J21.1, J21.8, J21.9
Upper Respiratory Infection (URI)	J00, J06.0, J06.9

Best practices and helpful tips:

- A higher rate indicates better performance for these measures.
- There is considerable evidence that prescribing antibiotics for uncomplicated acute bronchitis is not necessary unless associated with a comorbid diagnosis, such as chronic obstructive pulmonary disease (COPD), emphysema, cystic fibrosis, respiratory diseases, immune system disorders and malignant neoplasms. If prescribing an antibiotic for a bacterial infection (or comorbid condition) in patients with uncomplicated acute bronchitis, be sure to use the diagnosis code for the bacterial infection and/or comorbid condition.
- Educate patients on the difference between bacterial and viral infections is a key factor in the success of this measure. Reducing the unnecessary use of antibiotics is the goal of this measure.
 - Be equipped to teach patients about the real cause of their illness and explain how using antibiotics when they are not needed can be harmful and cause antibiotic resistance.
 - Educate patients on the effects of frequently using antibiotics for a viral infection by using educational tools that are available.
 - o Post educational materials in your waiting room and treatment areas for patients.
- Focus your discussion on things patients can do to treat the symptoms of URI and the common cold, like:
 - o Getting extra rest.
 - Drinking plenty of fluids.
 - Treating the symptoms with over-the-counter medications. Write a prescription for symptom relief, if applicable.
 - Using a cool mist vaporizer/nasal spray for congestion.
 - Using ice chips or throat spray/lozenges for sore throats.
- Don't let patients pressure you into writing antibiotic prescriptions for URIs. If a parent/caregiver insists on an antibiotic, refer to the illness as a common cold; parents and caregivers tend to associate this label with a less-frequent need for antibiotics.
- Offer annual flu shots in your office or inform your patients on the importance of getting the vaccine and where they can get it.

Please note: The codes and tips listed do not guarantee reimbursement. The information provided is based on HEDIS MY 2022 technical specifications, the 2022 CMS technical specifications and the 2022 EPSDT Services Health Check Program Manual and is subject to change based on guidance given by the National Committee for Quality Assurance (NCQA), the Centers for Medicare & Medicaid Services (CMS) and state recommendations. Please refer to the appropriate agency for additional guidance.

How can we help?

- Offering current *Clinical Practice Guidelines* on our provider self-service website
- Offering nonemergency transportation for our members to appointments

Contact your Provider Solutions representative for additional details and questions.

Other resources

You can find more information and tools online:

- CDC Antibiotic Prescribing and Use https://www.cdc.gov/antibiotic-use/?s_cid=NCEZID-AntibioticUse-005
- CDC bronchitis https://www.cdc.gov/getsmart/community/for-patients/common-illnesses/bronchitis.html
- CDC Get Smart: Know When Antibiotics Work campaign materials and more https://www.cdc.gov/getsmart:
 - Prescription Pad for Viral Infection
 - Get Smart: Know When Antibiotics Work
 - Cold or Flu: Antibiotics Don't Work for You

Notes

Immunizations for Children and Adolescents (CIS, IMA)

The immunization HEDIS measures look at:

• **Immunizations for children (CIS):** Children turning 2 years of age in the current year who received the following immunizations on or before their 2nd birthday.

Immunization	Minimum required dose(s)	Immunization	Minimum required dose(s)
DTaP/DT	4	VZV	1
IPV	3	PCV	4
MMR	1	Hep A	1
Hib	3	Rotavirus	2 or 3
Hep B	3	Influenza ¹	2

• <u>Immunizations for adolescents (IMA)</u>: Adolescents turning 13 years of age in the current year who received the following immunizations on or before their 13th birthday.

Immunization	Minimum required dose(s)
HPV	2 or 3
Tdap or Td	1
Meningococcal	1

Record your efforts

Make sure that your medical record documentation reflects all the following:

- Date of the immunization (historic and current)
- The name of the specific antigen administered
- Evidence of anaphylactic reaction to any vaccine or its components, if applicable
- Parent refusal, documented history of illness or seropositive test result
- The date of the first Hep B vaccine given at the hospital and name of the hospital, if available

Code your services correctly

Proper coding is critical to ensure accurate reporting of these measures, and it may also decrease the need for medical record reviews. Use the following codes to document immunizations for children and adolescents:

Description	Immunization	СРТ
Immunizations	DTap	90697, 90698, 90700, 90723
for children	IPV	90697, 90698, 90713, 90723
	MMR	90707, 90710
	Hib	90644-90648, 90697, 90698, 90721, 90748
	Hep B	90697, 90723, 90740, 90744, 90747, 90748
	VZV	90710, 90716
	PCV	90670
	Hep A	90633
	Rotavirus (2 dose)	90681
	Rotavirus (3 dose)	90680
	Influenza	90655, 90657, 90661, 90673, 90685-90689

Description	Immunization	СРТ
	Influenza LAIV	90660, 90672
Immunizations	HPV^4	90649-90651
for adolescents	Meningococcal	90619, 90733, 90734
	Tdap	90715
	Td	90714, 90718

Best practices and helpful tips:

- In order for several vaccines to be considered compliant, they must be administered within the applicable timeframes, as noted below:
 - MMR, VZV, and Hep A vaccinations must be administered on or between the child's first and second birthdays.
 - One of the two LAIV vaccines can be administered on the child's 2nd birthday.
 - Meningococcal must be administered on or between the member's 11th and 13th birthdays.
 - o Tdap or Td must be administered on or between the member's 10th and 13th birthdays.
 - HPV must be administered on or between the member's 9th and 13th birthdays. There must be at least 146 days between the first and second dose of the HPV vaccine. For example, if the service date for the first vaccine was March 1, then the service date for the second vaccine must be after July 25.
- Follow the *AAP Bright Futures Recommendations Periodicity Schedule* of preventive pediatric healthcare for well-child visits:
 - Appropriate screenings may be an important part of these visits as well (such as lead, developmental, and/or depression screenings).
 - o EPSDT services require a dental/oral health assessment.
 - Height, weight, BMI percentile, and counseling for nutrition and physical activity should be completed at least once per year as part of a well visit; however, these services may be completed during a visit other than a well-child visit (for example, sick visit).
 - For patients <u>under 20</u> on the date of service, document their BMI <u>percentile</u>. For patients 20 and older, document their BMI value.
 - Services specific to an acute or chronic condition do not count for counseling for nutrition or physical activity.
 - When billing office visits for preventive health services, providers must:
 - Include the appropriate diagnosis code on the claim.
 - o Include the applicable EPSDT Referral Code (NU, AV, S2, ST).
 - Use the applicable POS codes, if applicable. POS 99 may be applicable in certain instances.
 - Use the required modifier(s), when applicable:
 - Modifier EP for all preventive health visits (modifiers 90 or 91 may be applicable as well)
 - Modifier HA for catch-up visits
 - Modifier 25:
 - When a vaccine is administered during the preventive visit or
 - To indicate that a significant, separately identifiable E&M service was provided on the same day as the preventive health visit

- Once you give members their needed immunizations, let us and the state know by recording the immunizations in the Georgia Registry of Immunization Transactions and Services (GRITS) database.
- Parental or patient refusal does **not** count as compliance for immunizations.
- Consider offering evening, early morning and/or weekend office hours to accommodate working young adults or parents with children involved in after-school activities.
- Enroll in the Vaccines for Children (VFC) program to receive vaccines. For questions about enrollment and vaccine orders, contact the VFC program at **800-848-3868**.
- EPSDT preventive health screenings are exempt from third-party liability. Even if the member has other health insurance, you may file Medicaid first for preventive health services. This will ensure accurate and timely reporting of EPSDT services.
- Medical records to supplement HEDIS data can be sent to the HEDIS team via secure inbox at ga1hphedis@amerigroup.com or secure fax for to **888-220-6712**.
- If utilizing an electronic medical record (EMR) system:
 - Consider creating a flag to track patients who are due or past due for immunizations. If you do not use an EMR, consider creating a manual tracking method.
 - Consider electronic data sharing with your health plan to capture supplemental data (*additional clinical information about a member that may not have been submitted on a claim*).

How can we help?

- Providing you with individual reports of your patients overdue for services, if needed
- Assisting with scheduling appointments for our members, if needed
- Providing education to members on the importance of immunizations and well-visits through various sources, such as phone calls, text messages, newsletters and/or health education materials
- Offering nonemergency transportation for our members to appointments
- Encouraging preventive care through our CHIP Rewards program

Contact your Provider Solutions representative for additional details and questions.

Other resources

You can find more information and tools online:

- *ACIP Immunization Schedule* https://www.cdc.gov/vaccines/schedules/hcp/index.html
- *AAP HPV Champion Toolkit* https://www.aap.org/en-us/advocacy-and-policy/aap-healthinitiatives/immunizations/HPV-Champion-Toolkit/Pages/HPV-Champion-Toolkit.aspx
- VFC program https://dph.georgia.gov/vaccines-children-program

Notes



Bright Futures Guidelines

Recommendations for Preventive Pediatric Health Care



Bright Futures/American Academy of Pediatrics



Each child and family is unique; therefore, these Recommendations for Preventive Pediatric Health Care are designed Refer to the specific guidance by age as listed in the Bright Futures Guidelines (Hagan JF, Shaw JS, Duncan PM, eds. Copyright © 2021 by the American Academy of Pediatrics, updated March 2021 for the care of children who are receiving competent parenting, have no manifestations of any important health problems, and are growing and developing in a satisfactory fashion. Developmental, psychosocial, and chronic Bright Futures: Guidelines for Health Supervision of Infants. Children, and Adolescents. 4th ed. American Academy of Pediatrics; 2017). disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits. Additional visits also may become necessary if circumstances suggest variations from normal. The recommendations in this statement do not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate. These recommendations represent a consensus by the American Academy of Pediatrics (AAP) and Bright Futures. The Bright Futures/American Academy of Pediatrics Recommendations for Preventive Pediatric Health Care are

The AAP continues to emphasize the great importance of continuity of care in comprehensive health supervision updated annually. and the need to avoid fragmentation of care.

AGE! HISTORY	- rannedr	Newborns	1000	ay a dite		4				15 mo	18 mo	24 mo	30 mo	3 y	49	5 y	6y	79	8 y	9 y	10 y	11 y	12.y	13 y	14 y	15 y	16 y	17 9	18 y	19 y	20 y
Initial/Interval MEASUREMENTS	•	•	•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•
						•																					•				
Length/Height and Weight Head Circumference	-				1.																			-	-						
Weight for Length	-																	-	-	-					-				-		-
Body Mass index		-	-	-	-	-	-	-		-	-																				
Blood Pressure*	-	*	*	+	*	*	*	*	*	*	*	+	*																		
SENSORY SCREENING		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-
Vision?		+	*	*		*	+	*	+	*	*	+						*		*		*		*	*			*	*	*	*
Hearing				-		+	*	*		+	*	+	+	+				+		+		+	-			-			+	-	-
EVELOPMENTAL/BEHAVIORAL HEALTH			-	-	-	-		-	-	-	-	-	-	-	-	-		-		-	-	-	-					1		-	-
Developmental Screening ^a			-	-	-	-			-	-									-			-	-	-	-			+ +			-
Autism Spectrum Disorder Screening ¹⁰					-	-	-	-					-												-	-		++			-
Developmental Surveillance													-				•									•	•				
Psychosocial/Behavioral Assessment ¹⁹																															
Tobacco, Alcohol, or Drug Use Assessment**	-		-	-	-	-	-	-		-	-	-	-	-	-	-		-	-	-		*	*	*	*	*	*		*	*	*
Depression Screening ¹⁰	-		1	1	-		-													-		-									
Maternal Depression Screening*																													-	-	
PHYSICAL EXAMINATION*	-																					•									
PROCEDURES ¹⁴	-		1	1	1	1						1		-					1												-
Newborn Blood		•19	.20 .	-	-	-					-																				
Newborn Bilirubin ²¹				1	-	1							-									1					1		-		
Critical Congenital Heart Defect®																				1											
limmunization ²⁸		•																		•		•					•				
Anemia ³⁸						*				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*
Lead®					1.1		*	*	€ CF ★ 36		*	• or +36		*	*	*	*												1		
Tuberculosis ²⁷				*			*		*	-	1000	*	-	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Dyslipidemia ²⁸						1			0			*			*		*		*	-		-	*	*	*	*	*	-			- •
Sexually Transmitted Infections ²⁹									8			1								1		*	*	*	*	1	*	*	*	*	*
HIV ^{er}									Û.											2		*	*	*	*	-	-		-	*	*
Hepatitis C Wrus Infection ¹¹					1	1		10.00	2									1.1.1	1.	1		1					-				
Cervical Dysplasia*													1		100	1.							1				11.00		1.000		
ORAL HEALTH®							\$ 34	•24	*		*	*	*	*	*	*	*			1						1					
Flucinide Varnish#							-				- • -					>					-										
Fluoride Supplementation ¹⁸						1	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				
ANTICIPATORY GUIDANCE			•	•																							•	•			

and planned method of feeding, per The Prenatal Visit⁺ (https://pediatacs.appublications.org/content/142/1/e20181218). 3. Newborns should have an evaluation after birth, and benastfeeding should be encouraged (and instruction and support should

be affered).

4. Newborns should have an evaluation within 3 to 5 days of birth and within 48 to 72 hours after discharge from the hospital the explore a should be an owned and the should be a start of a should be assessed and the should be a should be assessed and the should b Mik" (http://pediatrics.acopublications.org/content/129/3/e827.5ull). Newborns discharged less than 48 hours after delivery must be examined within 48 hours of discharge, per "Hospital Stay for Healthy Term Newborns" (http:// pediatrics a appublications.prg/content/125/2/405 fully-

Screen, per Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent 5 Overweight and Obesity: Summary Report" (http://pediatrics.appublications.org/content/120/Supplement_4/S164/hill) Screening should occur per "Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and 6

Adolescents" (http://pediatrics.aappublications.org/content/140/3/e2017/1904). Blood pressure measurement in infants and children with specific risk conditions should be performed at visits before age 3 years.

(http://pediatrics.aappublications.org/content/137/1/e20153597).
Confirm Initial screen was completed, verify results, and follow up, as appropriate. Newborns should be screened, per "Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs" (http://pediatrics.aappublications.org/content/120/4/898.full). Verify results as soon as possible, and follow up, as appropriate.

Screen with audiometry including 6,000 and 8,000 Hz high frequencies once between 11 and 14 years, once between 15 and 17 years, and once between 18 and 21 years. See "The Sensitivity of Adolescent Hearing Screens Significantly improves by Adding High Frequencies" (https://www.sciencedirect.com/science/article/abs/pii/S1054139X16000483). 11. Screening should occur per "Promoting Optimal Development: Identifying Infants and Young Children With Developmental

Disorders Through Developmental Surveillance and Screening* (https://podiatrics.aappublications.org/content/145/1/ e20193449L 12. Screening should occur per "Identification, Evaluation, and Management of Children With Autism Spectrum Disorder

(https://pediatrics.aappublications.org/content/145/1/e20193447).

 A recommended assessment tool is available at http://craftLorg.
 Recommended screening using the Patient Health Questionnaire (PHQ) 2 or other tools available in the GLAD-PC toolkit and at https://downloads.aap.org/AAP/PDF/Mental_Health_Tools_for_Peclatrics.pdf. 16. Screening should occur per Theorporating Recognition and Management of Peri natal Dennes

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the American Academy of Pediatrics except for one copy for personal use.

- (https://pedatrics.appublications.org/content/1431/ia20153359)
 12. At each vick, age-appropriate physical examination is assential, with infant totally undothed and older children undressed and suitably depade. See 'Use of Chapmones During the Physical Examination of the Pedattic Patient'
- (http://pediatrics.aappublications.org/content/127/5/991 full). These may be modified, depending on entry point into schedule and individual ne

19. Confirm initial screen was accomplished, verify results, and follow up, as appropriate. The Recommended Uniform Screening Panel (https://www.hrsa.gov/advisory-committees/hentable-disorders.insp/index.html), as determined by The Secretary's Advisory Committee on Hentable Disorders in Newborns and Children, and state newborn screening laws/regulations vww.babydinsteat.org/newbom-screening/states) establish the criteria for and coverage of newbom screening procedures and programs. (continued)

KEY: • = to be performed 🔹 = risk assessment to be performed with appropriate action to follow, if positive - range during which a service may be provided WAC(202) PSF(8) 1-155/0221

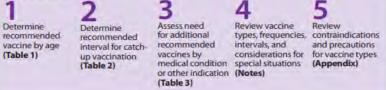
CDC Immunization Schedule

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

2022

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
Haemophilus influenzae type b vaccine	Hib (PRP-T) Hib (PRP-OMP)	ActHIB" Hiberix" PedvaxHIB"
Hepatitis A vaccine	НерА	Havrix" Vaqta"
Hepatitis B vaccine	НерВ	Engerix-B* Recombivax HB*
Human papillomavirus vaccine	HPV	Gardasil 9"
Influenza vaccine (inactivated)	IIV4	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist [®] Quadrivalen
Measles, mumps, and rubella vaccine	MMR	M-M-RII
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	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 sepan	ate injections when a	opropriate)
DTaP, hepatitis B, and inactivated poliovirus vaccine	DTaP-HepB-IPV	Pediarix*
DTaP, inactivated poliovirus, and Haemophilus influenzae type b vaccine	DTaP-IPV/Hib	Pentacel*
DTaP and inactivated poliovirus vaccine	DTaP-IPV	Kinrix" Quadracel"
DTaP, inactivated poliovirus, Haemophilus influenzae type b, and hepatitis B vaccine	DTaP-IPV-Hib- HepB	Vaxelis®
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuade

How to use the child and adolescent immunization schedule



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.aafp.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 Associates (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

D

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/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 Scan OR code ACIP Shared Clinical Decision-Making Recommendations. for access to www.cdc.gov/vaccines/acip/acip-scdm-fags.html 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

Vaccine Birth 1 mo 2 mos 4 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 6 mos Hepatitis B (HepB) 1^e dose 4-2" dose ----3rd dose 4-Rotavirus (RV): RV1 (2-dose series), 1º dose 2rd dose See Notes RV5 (3-dose series) Diphtheria, tetanus, acellular pertussis - 4th dose ----> 1nd dose 2nd dose ∃≝ dose 5ⁱⁿ dose (DTaP <7 yrs) 3"t or 4th dose, Haemophilus influenzae type b (Hib) T^u dose 2nd dose See Note See Notes Pneumococcal conjugate (PCV13) 2^{re}dose -4th dose ----1[™] dose ₹[#] dose Inactivated poliovirus 1º dose 2^{re} dose 3^{td} dose 4th dose (IPV <18 yrs) Influenza (IIV4) Annual vaccination T or 2 doses Annual vaccination 1 dose only OF OF Annual vaccination Influenza (LAIV4) Annual vaccination 1 dose only 1 or 2 doses Measles, mumps, rubella (MMR) See Notes < 1" dose ----> 2nd dose Varicella (VAR) I dose ----> 2nd dose Hepatitis A (HepA) See Notes 2-dose series, See Notes Tetanus, diphtheria, acellular pertussis 1 dose (Tdap≥7 yrs) See Human papillomavirus (HPV) Notes Meningococcal (MenACWY-D ≥9 mos. MenACWY-CRM ≥2 mos, MenACWY-TT See Notes 1[#] dose 2rd dose ≥2years) See Notes Meningococcal B (MenB-4C, MenB-FHbp) Pneumococcal polysaccharide See Notes (PPSV23) Seropositive in endemic areas only Dengue (DEN4CYD; 9-16 yrs) (See Notes) Range of recommended ages No recommendation/ Range of recommended Range of recommended ages Recommended vaccination Recommended vaccination based ages for all children for catch-up vaccination for certain high-risk groups can begin in this age group on shared clinical decision-making not applicable

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).

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	1	Minimum Interval Between Doses		
	Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose
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° 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-1 (ActHib", Pentacel", Hiberb", 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" birthday and second dose was administered at younger than 15 months; OR If both doses were PedvaxHIB" and were administered before the 1st birthday	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1 ^e 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 th birthday 8 weeks (as final dose for healthy children) if first dose was administered at the 1 th 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-CRM 9 months MenACWY-D 2 years MenACWY-T		See Notes	See Notes	
			Children and adolescents age 7 through 18 years		
Meningococcal ACWY	Not applicable (N/A)	8 weeks	enter an and addressents age remoting it to years		
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 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.

					IN	DICATION				
			HIV infection	CD4+ count ¹						
VACCINE	Pregnancy	Immunocom- promised status (excluding HIV infection)	<15% or total CD4 cell count of <200/mm ³	≥15% and total CD4 cell count of ≥200/mm ³	Kidney failure, end-stage renal disease, or on hemodialysis	Heart disease or chronic lung disease	CSF leak or cochlear implant	Asplenia or persistent complement component deficiencies	Chronic liver disease	Diabetes
Hepatitis B										
Rotavirus		SCID ²								
Diphtheria, tetanus, and acellular pertussis (DTaP)										
Haemophilus influenzae type b			SERVER.	(181E)))						
Pneumococcal conjugate									24.8	
Inactivated poliovirus										
Influenza (IIV4)										
Influenza (LAIV4)	1		and the second			Asthma, wheezing: 2–4yrs ³				
Measles, mumps, rubella	*									
Varicella	*		1 1							
Hepatitis A										
Tetanus, diphtheria, and acellular pertussis (Tdap)										
Human papillomavirus			1993							
Meningococcal ACWY										
Meningococcal B							The second second			
Pneumococcal polysaccharide									0.13	HR:
Dengue	1									
Vaccination according routine schedule recommended	to the	Recommended for persons with an additio factor for which the vac would be indicated	nal risk 11 an cine n	accination is recom nd additional doses ecessary based on r ondition or vaccine.	may be nedical	Precaution—vaccine night be indicated if benefit of protection outweighs risk of adverse reaction	recommen not be adm	cated or not ided—vaccine should ninistered after pregnancy	No recomm applicable	endation/no

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 and Table 4-1 (footnote J) at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.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.

- 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 vaccinepreventable 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/mwwr/ volumes/70/rt/rr/206a1.htmls.cid=rr/206a1_w and www.cdc.gov/ dengue/vaccine/hcp/index.html

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/tr/rr6702a1.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 catchup 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:

- 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 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:

- 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

-1 dose

 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 = 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 18 years should complete a 2-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, Twinrix⁸, 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 Hep8 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).

- 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 Recombivas HB^o 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, Twintix⁸, 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 < 10mlU/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 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.
- 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/ rr7005a1.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., angloedema, 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

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

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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 age 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) 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 8 weeks apart Menactra® must be administered at least 4 weeks after completion

of PCV13 series. MenOuadfi[®]

- 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 MenOuadfi*

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 MenQuadfi*

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/rr6909a1.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/rr6909a1 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:

Age 2-5 years

- 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)
- Age 6-18 years
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after completing) all recommended PCV13 doses)
- Cerebrospinal fluid leak, cochlear implant:
- Age 2-5 years

· 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)

Age 6-18 years

- No history of either PCV13 or PPSV23: 1 dose PCV13, 1 dose PPSV23 at least 8 weeks later
- Any PCV13 but no PPSV23: 1 dose PPSV23 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:

Age 2-5 years

- 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) and a dose 2 of PPSV23 5 years later

Age 6-18 years

- No history of either PCV13 or PPSV23: 1 dose PCV13, 2 doses PPSV23 (dose 1 of PPSV23 administered 8 weeks after PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23)
- Any PCV13 but no PPSV23: 2 doses PPSV23 (dose 1 of PPSV23) administered 8 weeks after the most recent dose of PCV13 and dose 2 of PPSV23 administered at least 5 years after dose 1 of PPSV23)
- PPSV23 but no PCV13: 1 dose PCV13 at least 8 weeks after the most recent PPSV23 dose and a dose 2 of PPSV23 administered 5 years after dose 1 of PPSV23 and at least 8 weeks after a dose of PCV13

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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_%20cid=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 RotaTeq* 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.

Tetanus, diphtheria, and pertussis (Tdap) vaccination

(minimum age: 11 years for routine vaccination, 7 years for catch-up vaccination)

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.

Catch-up vaccination

 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

Varicella vaccination

(minimum age: 12 months)

Routine vaccination

- * 2-dose series at age 12-15 months, 4-6 years
- VAR or MMRV may be administered*
- Dose 2 may be administered as early as 3 months after dose 1 (a dose inadvertently administered after at least 4weeks may be counted as valid)

*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

- Ensure persons age 7–18 years without evidence of immunity (see MMWR 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.

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/aciprecs/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)	 Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, RIV, or LAIV of any valency) Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) 	 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 {(ccllV4), Flucelvax* Quadrivalent]	 Severe allergic reaction (e.g., anaphylaxis) to any cclIV of any valency, or to any component³ of cclIV4 	 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 cclV4, 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]	 Severe allergic reaction (e.g., anaphylaxis) to any RIV of any valency, or to any component³ of RIV4 	 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, ccIIV, 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]	 Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, ccIIV, 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 soltamivir or zanamivir within the previous 48 hours, peramivir within the previous 5 days, or baloxavir within the previous 17 days 	 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., angloedema, 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

 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

 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

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-blologics/approved-products/vaccines-licensed-use-united-states

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Vaccine	Contraindications ¹	Precautions ²
Dengue (DEN4CYD)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ 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 HIV infection without evidence of severe immunosuppression Moderate or severe acute illness with or without fever
Diphtheria, tetanus, pertussis (DTaP) Tetanus, diphtheria (DT)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component⁸ 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 	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: Progressive neurologic disorder, including infantile spasms, uncontrolled epilepsy, progressive encephalopathy; defer DTaP until neurologic status clarified and stabilized Moderate or severe acute illness with or without fever
Haemophilus influenzae type b (Hib)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ For Hiberix, ActHib, and PedvaxHiB only: History of severe allergic reaction to dry natural latex Less than age 6 weeks 	Moderate or severe acute illness with or without fever
Hepatitis A (HepA)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ including neomycin 	Moderate or severe acute illness with or without fever
Hepatitis B (HepB)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component ¹ including yeast For Heplisav-B only: Pregnancy	Moderate or severe acute illness with or without fever
Hepatitis A- Hepatitis B vaccine [HepA-HepB, (Twinrix*)]	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ including neomycin and yeast 	Moderate or severe acute illness with or without fever
Human papillomavirus (HPV)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ 	Moderate or severe acute illness with or without fever
Measles, mumps, rubella (MMR)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component ¹ 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	Recent (s11 months) receipt of antibody-containing blood product (specific interval depends on product History of thrombocytopenia or thrombocytopenic purpura Need for tuberculin skin testing or interferon-gamma release assay (JGRA) testing Moderate or severe acute illness with or without fever
Meningococcal ACWY (MenACWY) [MenACWY-CRM (Menveo"); MenACWY-D (Menactra"); MenACWY-TT (MenQuadfi")]	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ For MenACWY-D and Men ACWY-CRM only: severe allergic reaction to any diphtheria toxoid– or CRM197– containing vaccine For MenACWY-Tr only: severe allergic reaction to a tetanus toxoid-containing vaccine 	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®)]	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component ^a	Pregnancy For Men8-4C only: Latex sensitivity Moderate or severe acute illness with or without fever
Pneumococcal conjugate (PCV13)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ Severe allergic reaction (e.g., anaphylaxis) to any diphtheria-toxoid- containing vaccine or its component¹ 	Moderate or severe acute illness with or without fever
Pneumococcal polysacchande (PPSV23)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component ^a	Moderate or severe acute illness with or without fever
Poliovirus vaccine, inactivated (IPV)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ 	Pregnancy Moderate or severe acute illness with or without fever
Rotavirus (RV) [RV1 (Rotarix"), RVS (RotaTeq")]	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component ^a Severe combined immunodeficiency (SCID) History of intussusception	Altered immunocompetence other than SCID Orronic gastrointestinal disease RV1 only: Spina bifida or bladder exstrophy Moderate or severe acute Illness with or without fever
Tetanus, diphtheria, and acellular pertussis (Tdap) Tetanus, diphtheria (Td)	 Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component¹ 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 	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)	Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component ³ 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	Recent (<11 months) receipt of antibody-containing blood product (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 precartion is present, a vaccine amount root be duministered. Note: A line deneral best Practice Guidelines for Immunization. www.cdc.gov/vaccines/hcp/acp-recs/general-recs/contraindications.html
 When a precartion 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/acp-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.

References

In addition to the other resource sections contained within this booklet, below are additional resources/references:

- Advisory Committee on Immunization Practices immunization schedule https://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html
- Agency for Healthcare Research and Quality https://www.qualitymeasures.ahrq.gov
- AAP Dentistry periodicity schedule http://www.aapd.org/assets/1/7/Periodicity-AAPDSchedule.pdf
- American Academy of Pediatrics (AAP) https://www.aap.org
- Amerigroup Community Care of Georgia Formulary https://client.formularynavigator.com/Search.aspx?siteCode=7596004980
- Amerigroup provider self-service website https://providers.amerigroup.com/ga
- Bright Futures https://www.brightfutures.org
- Bright Futures Guidelines https://brightfutures.aap.org/materials-and-tools/ guidelines-and-pocket-guide/Pages/default.aspx
- Bright Futures Periodicity Schedule https://www.aap.org/en-us/Documents/periodicity schedule.pdf
- CMS Adult Health Care Quality Measures https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-coreset/index.html
- CMS Children's Health Care Quality Measures https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-coreset/index.html
- Georgia Department of Community Health (DCH) https://dch.georgia.gov
- Georgia Department of Public Health https://dph.georgia.gov
- Georgia Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services (Health Check program) https://www.mmis.georgia.gov/portal/PubAccess.Provider%20Information/Provider%20M anuals/tabId/54/Default.aspx
- Georgia Medicaid Management Information System https://www.mmis.georgia.gov/portal
- Georgia Part 1 Policies and Procedures for Medicaid/PeachCare for Kids https://www.mmis.georgia.gov/portal/PubAccess.Provider%20Information/Provider%20M anuals/tabId/54/Default.aspx
- National Committee for Quality Assurance HEDIS and Performance Measurement https://www.ncqa.org/hedis-quality-measurement
- National Quality Forum http://www.qualityforum.org
- U.S. Preventive Services Task Force https://www.uspreventiveservicestaskforce.org

