

Healthchek

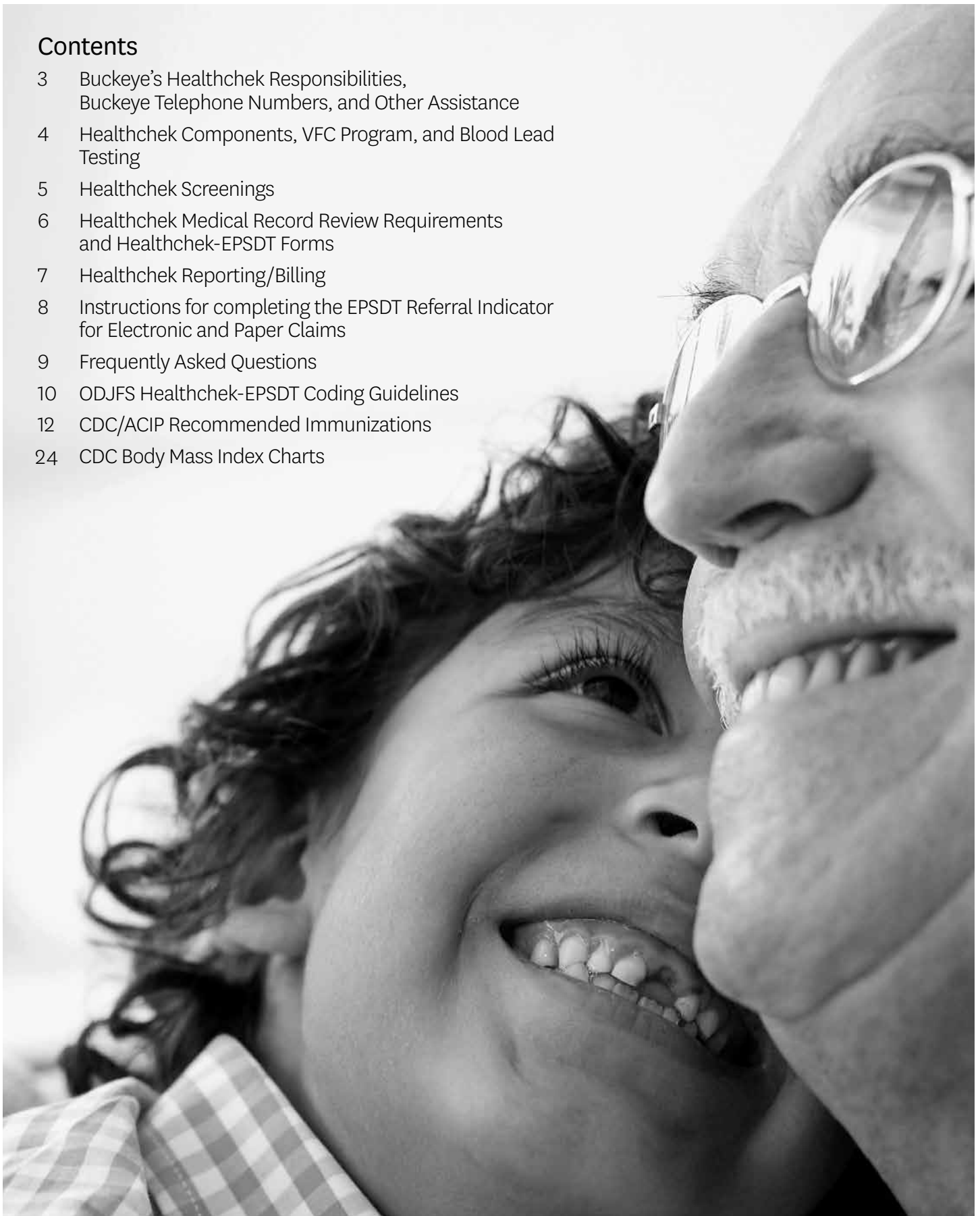
Provider Reference Manual



***EPSDT:
Early and Periodic
Screening,
Diagnosis and
Treatment***

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Buckeye Health Plan's Healthchek Responsibilities

Managed care plans must ensure that members under the age of 21 have access to services that are available in accordance with federal EPSDT requirements. This includes medically necessary services covered by Ohio Medicaid as well as any medically necessary screening, diagnostic and treatment services available to Medicaid consumers that exceed coverage or benefit limits for members under age 21. Providers can request prior authorization to exceed coverage or benefit limits for members under age 21.

Buckeye Health Plan is committed to working with our provider partners to improve the health and quality of life of our youngest members.

Here are some ways we may assist you with continuity and coordination of care for our members:

- Provide member and parent/guardian outreach and education, including telephone calls and targeted mailings.
- Remove barriers to care by assisting with transportation, scheduling appointments and referrals to social services and specialists.
- Provide outreach to non-compliant Healthchek members.

Buckeye Telephone Numbers

866-246-4356	Manager, Maternal Child Health & EPSDT
866-246-4356	Healthchek Coordinator
866-296-8731	Provider Services
866-246-4358	Customer Service
866-531-0615	Transportation Services – contact Access2Care

Other Assistance

800-282-0546 Vaccines for Children (VFC) Program

Ohio's Immunization Registry (ImpactSIIS):
<https://odhgateway.odh.ohio.gov/impact/>



Healthchek Components

Medical History	Anticipatory Guidance	Growth and Development	Immunizations	Labs
Physical Exam	Seat Belt Use	Social	Current CDC/ACIP Schedule	Urinalysis
Height and Weight	Tobacco Use	Personal		Lead
Weight to Height Ratio	Alcohol/Drug Abuse	Language		Hematocrit
Hearing Screening	Sexual Activity	Motor Skills		Hemoglobin
Vision Screening	Mental Health			Tuberculosis

VFC Program

The Vaccines for Children (VFC) program is a federally-funded program. It supplies vaccines at no cost to public and private healthcare providers who enroll and agree to immunize eligible children in their medical practice or clinic.

Buckeye PCPs are able to receive vaccines for immunizations free of charge through the Ohio Department of Health (ODH). You must be enrolled in the Ohio VFC Program and have a provider identification number (PIN) to order vaccines. If you are not enrolled, contact the Ohio Department of Health at 1-800-282-0546 for more information and to enroll. Buckeye will reimburse for the vaccines in accordance with the current Ohio Medicaid Fee Schedule and will also reimburse an administration fee for each vaccine.

Blood Lead Testing

Physicians are required to perform a blood lead screening test on all 12 and 24 month old Medicaid eligible children, (regardless of zip code or exposure to lead) as stated in the Ohio Administrative Code, rule 5101:3-14-03(H).



Healthchek Screenings

Healthchek Screenings include these health areas that must be evaluated by the PCP for members ages birth to under 21: As specified by OAC 5160-14-03, screening components, frequencies, and indications of need for further evaluation are in accordance with the most current American Academy of Pediatrics recommendations for pediatric preventive health care. (“Recommendations for Preventive Pediatric Health Care,” Bright Futures/American Academy of Pediatrics)

- Medical history and physical exams
- Vision
- Hearing
- Dental
- Nutrition
- Lab tests including blood lead level
- Immunizations
- Growth and development (social, personal, language, and motor skills)
- Mental health, substance abuse and other age appropriate counseling

All Buckeye members should have a Healthchek screening at the following ages:

Infancy	Early Childhood	Middle Childhood	Adolescence
Birth to 1 month	15 months	5 years	11 years
2 months	18 months	6 years	12 years
4 months	24 months	7 years	13 years
6 months	30 months	8 years	14 years
9 months	3 years	9 years	15 years
12 months	4 years	10 years	16 years
			17 years
			18 years
			19 years
			20 years

Healthcek Medical Record Review Requirements

To ensure all EPSDT components are being performed, services must be documented in members' chart.

Key areas of focus are:

- History & Physical Exam
 - Height and Weight
 - Height to Weight Ratio
- BMI (Value & percentile must be plotted for members under the age of 16 years of age)
- Hearing Screening
- Vision Screening
- Labs (including lead screen)
- Mental Health Assessment (ages 9 and above)
- Anticipatory Guidance
- Dental Referral
- Immunizations Up to Date

Healthcek-EPSDT Forms

The age specific Healthcek-EPSDT screening forms below may be accessed at:

<http://www.buckeyehealthplan.com/for-providers/provider-resources/healthcheck-epsdt-forms/>

- Newborn 2010 Healthcek-EPSDT Form (PDF)
- 4 Weeks 2010 Healthcek-EPSDT Form (PDF)
- 2 Months 2010 Healthcek-EPSDT Form (PDF)
- 4 Months 2010 Healthcek-EPSDT Form (PDF)
- 6 Months 2010 Healthcek-EPSDT Form (PDF)
- 9 Months 2010 Healthcek-EPSDT Form (PDF)
- 12 Months 2010 Healthcek-EPSDT Form (PDF)
- 15 Months 2010 Healthcek-EPSDT Form (PDF)
- 18 Months 2010 Healthcek-EPSDT Form (PDF)
- 24 Months 2010 Healthcek-EPSDT Form (PDF)
- 30 Months 2010 Healthcek - EPSDT Form (PDF)
- 3 years 2010 Healthcek-EPSDT Form (PDF)
- 4 years 2010 Healthcek-EPSDT Form (PDF)
- 5 years 2010 Healthcek-EPSDT Form (PDF)
- 6-10 years 2010 Healthcek-EPSDT Form (PDF)
- 11-14 years 2010 Healthcek-EPSDT Form (PDF)
- 15-20 years 2010 Healthcek-EPSDT Form (PDF)



Healthcek Reporting/Billing

EPSDT Services

Buckeye is required to report annually how many EPSDT visits, and referrals for follow-up/corrective treatment, occurred for members' ages 0-20 years.

The MITS Web Portal Billing Guide for Professional Claims may be accessed at:

http://emanuals.odjfs.state.oh.us/emanuals/DataImages.srv/emanuals/pdf/pdf_forms/PROFBILLGUIDES.PDF

HEALTHCHEK Screening Service Codes

The codes for billing HEALTHCHEK (EPSDT) screening services may be found in the "Physicians' Current Procedural Terminology (CPT)," under preventive medicine services. The new patient codes, 99381 through 99385, may be used for patients who have not received any professional services from the provider within the past three years. The established patient codes, 99391 through 99395, must be used for patients who have received professional services from the physician within the past three years.

Effective for dates of service specified below, to comply with federal reporting requirements, provide the following information when billing the department based on the date of service and type of claim submission:

1. For dates of service October 1, 2003 and after or the effective date of electronic data interchange transactions, e.g. (the 837 professional claim transaction) and based on the type of claim submission, follow these instructions:
 - a. When billing electronically using the 837 professional claim transaction, use the EPSDT referral feature in the 2300 claim information loop to indicate that an EPSDT referral was made. Put a "Y" in the Yes/No condition or response code data element to indicate that a referral was made and complete the condition indicator data element in the EPSDT referral feature area.
 - b. If billing on a paper claim form, complete item 24h on the paper claim form. Put an "E" if HealthChek services were provided and no follow-up services were required. Put an "R" if HealthChek services were provided and follow-up was made and a referral was given.
 - c. Do NOT use the modifiers NF, FR, FA, or FC since they are not H.I.P.A.A. compliant.

Instructions for completing the EPSDT Referral Indicator for Electronic and Paper Claims

Electronic claims (837 Professional)

Providers who bill electronically using the 837P format must select the appropriate response for ASC X12N 837: Loop 2300 element CRC02 – **“Was an EPSDT referral given to the patient? (YES or NO)”** and provide the appropriate condition indicator in element CRC03 of the electronic claims file. Completion of elements CRC02 and CRC03 are required for electronic claims.

If the response to element CRC02 is Y (YES), use one of the following Condition Indicator Codes in CRC03:

- **AV Available** – Patient refused referral
- **S2 Under Treatment** – Patient is currently under treatment for referred diagnostic or corrective health problem
- **ST New Services Requested** – Referral to another provider for diagnostic or corrective treatment/scheduled for another appointment with screening provider for diagnostic or corrective treatment for at least one health problem identified during an initial or periodic screening service (not including dental referrals)

If the response to element CRC02 is N (NO), use the following Condition Indicator Code in CRC03:

- **NU Not Used** – This condition indicator must be used when the submitter answers “N” in CRC02

Information regarding electronic claims submission requirements for the EPSDT Referral Indicator can be found on the ODJFS website: (<http://hipaa.oh.gov/odjfs/companionguides.htm>)



Frequently Asked Questions

Q: What is Healthchek?

Healthchek is Ohio's name for the federally mandated EPSDT services required to be provided to all Medicaid eligible children from birth to under the age of 21. EPSDT stands for: Early and Periodic Screening, Diagnosis, and Treatment (EPSDT).

Healthchek is a preventive program that provides for early intervention to keep children healthy as they grow and to discover and treat health problems early. The program combines diagnostic screening and medically necessary follow-up care and referrals.

Q: Am I permitted to file sick and Healthchek visits for the same date of service?

Yes, providers may file sick and Healthchek visits for the same date of service. Please follow standard coding guidelines for reporting the sick visit in addition to the Healthchek service. (Please note: If billing a well visit and sick visit on the same day, Buckeye does recognize the lower level E/M 99211-99212 billed with modifier 25 to be reimbursed separately when billed with preventive services CPT 99381-99397.)

Q: Whom do I contact with Healthchek billing questions?

Contact provider services at: 1-866-296-8731.

Q: What are the timely Healthchek examination requirements?

Healthchek exams are to be completed within 90 days of the initial effective date of membership for those children found to have a possible ongoing condition likely to require care management services.

Healthchek uses a periodicity schedule based on the AAP/Bright Futures Standards of Care and State guidelines.

PCPs are required to perform Healthchek medical check-ups in their entirety and at the required intervals.

All components of exams must be documented and included in the medical record of each Healthchek eligible member.

Q: What are the timely claims filing requirements for Healthchek?

Claims must be submitted within 365 days of the date of service. This is consistent with Buckeye's policy for all claims.

Q: How do I request outreach for non-compliant Healthchek members?

Participating Buckeye providers may contact the Member Services Department or Care Management at 1-866-246-4358 to request a home visit be completed when a Buckeye member is found to be non-compliant, (i.e. medical appointments), with recommended medical treatment or has been identified as high risk factors (i.e. frequent emergency room visits for routine medical care) which could negatively impact the member's health status.

Ohio Department of Job and Family Services (ODJFS) Healthchek-EPSTD Services Coding Guidelines

To receive proper payment for the Healthchek – Early and Periodic Screening, Diagnosis and Treatment (EPSTD) services you provide:

- Bill for Healthchek - EPSTD services using the appropriate preventive medicine CPT codes and ICD-10-CM Diagnosis codes
- Bill for all services provided

The following table includes the billing codes for some of the most common provider services that are payable when they are medically necessary and performed as part of a periodic Healthchek - EPSTD exam. *Interperiodic examinations will be covered when medically necessary to determine the existence of suspected physical or mental illnesses. The following code set was in effect as of March 2016*** and is subject to change. Please note this is not an exhaustive list of all covered services.

Preventive Medicine – ICD-10-CM Diagnosis
Age appropriate codes to be billed with a Healthchek - EPSTD exam
Z00.1 Encounter for newborn, infant and child health examinations
Z00.11 Newborn health examination
Z00.110 Health check for newborn under 8 days old
Z00.111 Health check for newborn 8-28 days old
Z00.12 Encounter for routine child health examination (Infants over 28 days old and child-up to age 17)
Z00.121.....with abnormal findings
Z00.129.....without abnormal findings
Z00.0 Routine medical exam, 18 and over
Z00.00.....without abnormal findings
Z00.01.....with abnormal findings
Z02 Medical exam for administrative purposes
Z02.0 Medical exam for admission to educational institution
Z02.1 Medical exam for pre-employment examination
Z02.2 Medical exam for admission to residential institution
Z02.3 Medical exam for recruitment to armed forces
Z02.4 Medical exam for driving license
Z02.5 Medical exam for participation in sport
Z02.8 OTHER administrative examinations
Z02.81 Exam for paternity testing
Z02.82 Exam for adoption services
Z02.89 Exam for other examinations: admission to prison, admission to summer camp, immigration examination...
Preventive medicine – Individual Counseling
99401 Counseling and risk reduction intervention; approximately 15 minutes
99402 Counseling and risk reduction intervention, 30 minute discussion
99403 Counseling and risk reduction intervention, 45 minute discussion
99404 Counseling and risk reduction intervention, 60 minute discussion
99406 Behavior change smoking, 3-10 min
99407 Behavior change smoking, > 10 min
97802 Medical nutrition individual, init.
97803 Medical nutrition individual, subseq.
97804 Medical nutrition, group
Laboratory Services
All covered lab services in accordance with OAC 5101:3-11 and payable per Appendix DD, OAC 5101:3-1-60
Other Physician Services
All covered physician services in accordance with OAC 5101:3-4, 5101:3-5 or 511:3-6

Hearing Services
All covered hearing services in accordance with OAC 5101:3-10 and payable per Appendix DD, OAC 5101:3-1-60
92551 Hearing test, limited study using headphones to verbally respond to sounds
92552 Hearing test, using earphones and an audiometer, more extensive
92553 Includes 92552 with the addition of sounds conducted through the patient's facial bones
92567 Hearing test to check the eardrums
New Patient Service
99381 Initial Well child visit, younger than one year old
99382 Initial Well child visit, age 1-4
99383 Initial Well child visit, age 5-11
99384 Initial Well child visit, age 12-17
99385 Initial Physical exam, age 18-39
99354 Prolonged service, office
99355 Prolonged service, office
Established Patient Service
99391 Yearly Well Child visit, younger than one year old
99392 Yearly Well Child visit, age 1-4
99393 Yearly Well Child visit, age 5-11
99394 Yearly Well Child visit, age 12-17
99395 Yearly Physical exam, age 18-39
Dental Services
Providers are encouraged to refer children, beginning at the age of two years, to a dentist.
Vision Services
A vision screening is a required component of the Healthchek - EPSTD visit. Providers are encouraged to refer children for a comprehensive vision examination, when medically necessary.
Developmental Screening
96110 Limited developmental testing
96111 Extended developmental testing

References:

- American Medical Association. (2015). 2016 Professional Edition CPT®. CPT/DBP Intellectual Property, Chicago, IL.
- NQQA. (2015). HEDIS 2016 Volume 2 VSD-Value Sets to Codes.
- Optum Coding. (2015). HCPCS Level II ICD-10.
- Optum Coding. (2015). ICD-10-CM Expert for Physicians. Optum360, USA. ISBN 978-1-62254-049-5

Ohio Department of Job and Family Services (ODJFS) Healthchek-EPSTD Services Coding Guidelines

* Please see OAC 5101:3-14-03 for the periodicity schedule.

** Active immunizations identified with a double asterisk (**) are covered only if determined medically necessary.

*** Appendix DD, OAC 5101:3-1-60, Amended 123112. Please refer to the Ohio Administrative Code (OAC) for the most current information (OAC 5101:3-14-03, 5101:3-4, 5101:3-5 or 5101:3-6 and Appendix DD, OAC 5101:3-1-60).

Immunizations
All covered immunization services in accordance with OAC 5101:3-4-12 and payable per Appendix DD, OAC 5101:3-1-60
<i>The following codes are for children 18 years and younger:</i>
90633 Hepatitis A, pediatric/adolescent, two dose schedule
90634 Hepatitis A, pediatric/adolescent, three dose schedule
90647 HIB, Vaccine, three dose schedule
90648 HIB Vaccine, four dose schedule
90649 Human Papillomavirus (HPV), three dose schedule
90650 Human Papillomavirus vaccine (HPV), three dose schedule
90651 Human Papillomavirus (HPV), three dose schedule
90655 Influenza, six to thirty-five months of age
90656 Influenza, three years of age and above
90657 Influenza, split virus, six to thirty-five months of age
90658 Influenza, split virus three years of age and above
90660 Influenza, live intranasal, adult
90680 Rotavirus vaccine, three dose schedule
90681 Rotavirus vaccine, live, oral, two dose schedule
90696 DTaP-IPV, four to six years of age
90698 DTaPIPHI, at least four doses before age 12
90700 DTaP for individuals younger than seven years of age
90702 DT for individuals younger than seven years of age
90707 MMR immunization
90710 Measles, mumps, rubella, and varicella vaccine
90713 Poliomyelitis virus, inactivated, (IPV), subcutaneous
90714 Td preservative free, for individuals seven years and older
90715 Tetanus, diphtheria toxoids and acellular pertussis, for individuals seven years or older
90716 Varicella (chickenpox), live
90723 DtaP-HepB-IPV inactivated
90732 Pneumococcal immunization for two years and older
90733 Meningococcal immunization
90734 Meningococcal Vaccine, IM
90744 Hepatitis B vaccine; Under age 11; three dose schedule
90748 HepB-HIB, combined vaccine

Immunizations (continued)
<i>The following codes are for those 19 years and older:</i>
90585** BGG, percutaneous
90586** BCG, intravesical
90632 Hepatitis A, adult
90633** Hepatitis A, pediatric/adolescent, two dose schedule
90634** Hepatitis A, pediatric/adolescent, three dose schedule
90636 Hepatitis A and Hepatitis B, adult
90647** HIB Vaccine, three dose schedule
90648** HIB Vaccine, four dose schedule
90656 Influenza, split virus, preservative free, three years of age and above
90658 Influenza, split virus, for use in individuals three years of age and above, intramuscular
90660 Influenza, intranasal, adult
90675 Rabies, intramuscular
90676 Rabies, intradermal
90707 MMR Immunization
90710** MMRV Vaccine
90714 Td preservative free, for individuals seven years and older
90715 Td, for individuals seven years and older
90716 Varicella (chickenpox) virus vaccine
90732 Pneumococcal Immunization
90734** Meningococcal Vaccine
90740 Hepatitis B, dialysis or immunosuppressed patient (three dose schedule)
90746 Hepatitis B vaccine, adult (nineteen years or older) (three dose schedule)
90747 Hepatitis B vaccine, dialysis or immunosuppressed patient dosage (four dose schedule)

HCPCS

G0008..... Influenza administration

G0009..... Pneumococcal administration

G0010..... Hep B vaccine administration

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

UNITED STATES
2023

Vaccines in the Child and Adolescent Immunization Schedule*

Vaccine	Abbreviation(s)	Trade name(s)
COVID-19	1vCOV-mRNA	Comirnaty®/Pfizer-BioNTech COVID-19 Vaccine
		SPIKEVAX®/Moderna COVID-19 Vaccine
	2vCOV-mRNA	Pfizer-BioNTech COVID-19 Vaccine, Bivalent Moderna COVID-19 Vaccine, Bivalent
	1vCOV-aPS	Novavax COVID-19 Vaccine
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®
	Hib (PRP-OMP)	PedvaxHIB®
Hepatitis A vaccine	HepA	Havrix® Vaqta®
Hepatitis B vaccine	HepB	Engerix-B® Recombivax HB®
Human papillomavirus vaccine	HPV	Gardasil 9®
Influenza vaccine (inactivated)	IIV4	Multiple
Influenza vaccine (live, attenuated)	LAIV4	FluMist® Quadrivalent
Measles, mumps, and rubella vaccine	MMR	M-M-R II® Priorix®
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®
	PCV13 PCV15	Prevnar 13® Vaxneuvance™
Pneumococcal conjugate vaccine	PPSV23	Pneumovax 23®
Pneumococcal polysaccharide vaccine	IPV	IPOL®
Poliovirus vaccine (inactivated)	RV1 RV5	Rotarix® RotaTeq®
Rotavirus vaccine	Tdap	Adacel® Boostrix®
Tetanus, diphtheria, and acellular pertussis vaccine	Td	Tenivac® Tdvax™
Tetanus and diphtheria vaccine	VAR	Varivax®
Varicella vaccine	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® Quadacel®
DTaP, inactivated poliovirus, <i>Haemophilus influenzae</i> type b, and hepatitis B vaccine	DTaP-IPV-Hib-HepB	Vaxelis®
Measles, mumps, rubella, and varicella vaccine	MMRV	ProQuad®

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

How to use the child and adolescent immunization schedule

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

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



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
- ACIP Shared Clinical Decision-Making Recommendations www.cdc.gov/vaccines/acip/acip-scdm-faqs.html



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

Scan QR code
for access to
online schedule



Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2023

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

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19–23 mos	2–3 yrs	4–6 yrs	7–10 yrs	11–12 yrs	13–15 yrs	16 yrs	17–18 yrs
Hepatitis B (HepB)	1 st dose	← 2 nd dose →		← 3 rd dose →													
Rotavirus (RV): RV1 (2-dose series), RV5 (3-dose series)			1 st dose	2 nd dose	See Notes												
Diphtheria, tetanus, acellular pertussis (DTaP <7 yrs)			1 st dose	2 nd dose	3 rd dose	← 4 th dose →			5 th dose								
Haemophilus influenzae type b (Hib)			1 st dose	2 nd dose	See Notes	← 3 rd or 4 th dose, See Notes →											
Pneumococcal conjugate (PCV13, PCV15)			1 st dose	2 nd dose	3 rd dose	← 4 th dose →											
Inactivated poliovirus (IPV <18 yrs)			1 st dose	2 nd dose	← 3 rd dose →					4 th dose							
COVID-19 (1vCOV-mRNA, 2vCOV-mRNA, 1vCOV-aPS)	2- or 3- dose primary series and booster (See Notes)																
Influenza (IIV4)	Annual vaccination 1 or 2 doses										Annual vaccination 1 dose only						
or											or						
Influenza (LAIV4)											Annual vaccination 1 or 2 doses				Annual vaccination 1 dose only		
Measles, mumps, rubella (MMR)					See Notes	← 1 st dose →			2 nd dose								
Varicella (VAR)						← 1 st dose →			2 nd dose								
Hepatitis A (HepA)					See Notes	2-dose series, See Notes											
Tetanus, diphtheria, acellular pertussis (Tdap ≥7 yrs)														1 dose			
Human papillomavirus (HPV)														See Notes			
Meningococcal (MenACWY-D ≥9 mos, MenACWY-CRM ≥2 mos, MenACWY-TT ≥2 years)			See Notes											1 st dose	2 nd dose		
Meningococcal B (MenB-4C, MenB-FHbp)														See Notes			
Pneumococcal polysaccharide (PPSV23)											See Notes						
Dengue (DEN4CYD; 9-16 yrs)													Seropositive in endemic dengue areas (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
 Recommended vaccination can begin in this age group
 Recommended vaccination based on 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, 2023

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	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B	Birth	4 weeks	8 weeks and at least 16 weeks after first dose minimum age for the final dose is 24 weeks		
Rotavirus	6 weeks Maximum age for first dose is 14 weeks, 6 days.	4 weeks	4 weeks maximum age for final dose is 8 months, 0 days		
Diphtheria, tetanus, and acellular pertussis	6 weeks	4 weeks	4 weeks	6 months	6 months
<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®, Hiberix®), 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 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 st birthday.	
Pneumococcal conjugate	6 weeks	No further doses needed for healthy children if first dose was administered at age 24 months or older 4 weeks if first dose was administered before the 1 st birthday 8 weeks (as final dose for healthy children) if first dose was administered at the 1 st birthday or after	No further doses needed for healthy children if previous dose was administered at age 24 months or older 4 weeks if current age is younger than 12 months and previous dose was administered at <7 months old 8 weeks (as final dose for healthy children) if previous dose was administered between 7–11 months (wait until at least 12 months old); OR if current age is 12 months or older and at least 1 dose was administered before age 12 months	8 weeks (as final dose) this dose is only necessary for children aged 12 through 59 months regardless of risk, or age 60 through 71 months with any risk, who received 3 doses before age 12 months.	
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	See Notes	See Notes	
Children and adolescents age 7 through 18 years					
Meningococcal ACWY	Not applicable (N/A)	8 weeks			
Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis	7 years	4 weeks	4 weeks if first dose of DTaP/DT was administered before the 1 st birthday 6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1 st birthday	6 months if first dose of DTaP/DT was administered before the 1 st birthday	
Human papillomavirus	9 years	Routine dosing intervals are recommended.			
Hepatitis A	N/A	6 months			
Hepatitis B	N/A	4 weeks	8 weeks and at least 16 weeks after first dose		
Inactivated poliovirus	N/A	4 weeks	6 months A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months after the previous dose.	A fourth dose of IPV is indicated if all previous doses were administered at <4 years or if the third dose was administered <6 months after the second dose.	
Measles, mumps, rubella	N/A	4 weeks			
Varicella	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older			
Dengue	9 years	6 months	6 months		

Table 3

Recommended Child and Adolescent Immunization Schedule by Medical Indication, United States, 2023

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

VACCINE	INDICATION									
	Pregnancy	Immunocompromised status (excluding HIV infection)	HIV infection CD4+ count ^a		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
			<15% or total CD4 cell count of <200/mm ³	≥15% and total CD4 cell count of ≥200/mm ³						
Hepatitis B	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Rotavirus	Grey	Orange	Orange	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Diphtheria, tetanus, and acellular pertussis (DTaP)	Grey	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
<i>Haemophilus influenzae</i> type b	Grey	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Pneumococcal conjugate	Grey	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Inactivated poliovirus	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
COVID-19	Yellow	See Notes	See Notes	See Notes	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Influenza (IIV4) or Influenza (LAIV4)	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Influenza (LAIV4)	Red	Red	Red	Red	Orange	Red	Red	Red	Orange	Orange
Measles, mumps, rubella	*	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Varicella	*	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Hepatitis A	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Tetanus, diphtheria, and acellular pertussis (Tdap)	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Human papillomavirus	*	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Meningococcal ACWY	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Meningococcal B	Orange	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple	Purple
Pneumococcal polysaccharide	Purple	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Dengue	Orange	Red	Red	Orange	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

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

a. 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.
 b. Severe Combined Immunodeficiency
 c. LAIV4 contraindicated for children 2–4 years of age with asthma or wheezing during the preceding 12 months

For vaccination recommendations for persons ages 19 years or older, see the Recommended Adult Immunization Schedule, 2023.

Additional information

- 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 3-2, 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, Barnett ED, Lynfield Ruth, Sawyer MH, eds. *Red Book: 2021–2024 Report of the Committee on Infectious Diseases*. 32nd ed. Itasca, IL: American Academy of Pediatrics; 2021:72–86).
- For information about vaccination in the setting of a vaccine-preventable disease outbreak, contact your state or local health department.
- The National Vaccine Injury Compensation Program (VICP) is a no-fault alternative to the traditional legal system for resolving vaccine injury claims. All vaccines included in the child and adolescent vaccine schedule are covered by VICP except dengue, PPSV23, and COVID-19 vaccines. COVID-19 vaccines that are authorized or approved by the FDA are covered by the Countermeasures Injury Compensation Program (CICP). For more information, see www.hrsa.gov/vaccinecompensation or www.hrsa.gov/cicp.

COVID-19 vaccination

(minimum age: 6 months [Moderna and Pfizer-BioNTech COVID-19 vaccines], 12 years [Novavax COVID-19 Vaccine])

Routine vaccination

- **Primary series:**
 - **Age 6 months–4 years:** 2-dose series at 0, 4–8 weeks (Moderna) or 3-dose series at 0, 3–8, 11–16 weeks (Pfizer-BioNTech)
 - **Age 5–11 years:** 2-dose series at 0, 4–8 weeks (Moderna) or 2-dose series at 0, 3–8 weeks (Pfizer-BioNTech)
 - **Age 12–18 years:** 2-dose series at 0, 4–8 weeks (Moderna) or 2-dose series at 0, 3–8 weeks (Novavax, Pfizer-BioNTech)
- For **booster dose recommendations** see www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html

Special situations

Persons who are moderately or severely immunocompromised

- **Primary series**
 - **Age 6 months–4 years:** 3-dose series at 0, 4, 8 weeks (Moderna) or 3-dose series at 0, 3, 11 weeks (Pfizer-BioNTech)
 - **Age 5–11 years:** 3-dose series at 0, 4, 8 weeks (Moderna) or 3-dose series at 0, 3, 7 weeks (Pfizer-BioNTech)
 - **Age 12–18 years:** 3-dose series at 0, 4, 8 weeks (Moderna) or 2-dose series at 0, 3 weeks (Novavax) or 3-dose series at 0, 3, 7 weeks (Pfizer-BioNTech)
- **Booster dose:** see www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html
- **Pre-exposure prophylaxis** (monoclonal antibodies) may be considered to complement COVID-19 vaccination. See www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#immunocompromised

For Janssen COVID-19 Vaccine recipients see COVID-19 schedule at www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html

Note: Administer an age-appropriate vaccine product for each dose. Current COVID-19 schedule and dosage formulation available at www.cdc.gov/vaccines/covid-19/downloads/COVID-19-immunization-schedule-ages-6months-older.pdf. For more information on Emergency Use Authorization (EUA) indications for COVID-19 vaccines, see www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/covid-19-vaccines.

Dengue vaccination

(minimum age: 9 years)

Routine vaccination

- Age 9–16 years living in areas with endemic dengue **AND** have laboratory confirmation of previous dengue infection
 - 3-dose series administered at 0, 6, and 12 months
- Endemic areas include Puerto Rico, American Samoa, US Virgin Islands, Federated States of Micronesia, Republic of Marshall Islands, and the Republic of Palau. For updated guidance on dengue endemic areas and pre-vaccination laboratory testing see www.cdc.gov/mmwr/volumes/70/rr/rr7006a1.htm?s_cid=rr7006a1_w and www.cdc.gov/dengue/vaccine/hcp/index.html
- Dengue vaccine should not be administered to children traveling to or visiting endemic dengue areas.

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[®], 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 age 12–59 months and at least 8 weeks after dose 2.
- **1 dose administered at age 15 months or older:** No further doses needed
- **Unvaccinated at age 15–59 months:** Administer 1 dose.
- **Previously unvaccinated children age 60 months or older who are not considered high risk:** Do not require catch-up vaccination

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

Special situations

- **Chemotherapy or radiation treatment:**
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)

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, **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)

Routine vaccination

- 3-dose series at age 0, 1–2, 6–18 months (**use monovalent HepB vaccine for doses administered before age 6 weeks**)
 - Birth weight $\geq 2,000$ grams: 1 dose within 24 hours of birth if medically stable
 - Birth weight $< 2,000$ grams: 1 dose at chronological age 1 month or hospital discharge (whichever is earlier and even if weight is still $< 2,000$ grams).
- Infants who did not receive a birth dose should begin the series as soon as possible (see Table 2 for minimum intervals).
- Administration of 4 doses is permitted when a combination vaccine containing HepB is used after the birth dose.
- **Minimum intervals (see Table 2):** when 4 doses are administered, substitute “dose 4” for “dose 3” in these calculations
- **Final (3rd or 4th) dose:** age 6–18 months (**minimum age 24 weeks**)
- **Mother is HBsAg-positive**
 - **Birth dose (monovalent HepB vaccine only):** administer **HepB vaccine** and **hepatitis B immune globulin (HBIG)** (in separate limbs) within 12 hours of birth, regardless of birth weight.
 - **Birth weight < 2000 grams:** administer 3 additional doses of HepB vaccine beginning at age 1 month (total of 4 doses)
 - **Final (3rd or 4th) dose:** administer at age 6 months (**minimum age 24 weeks**)
 - Test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose. Do not test before age 9 months.

• Mother is HBsAg-unknown

If other evidence suggestive of maternal hepatitis B infection exists (e.g., presence of HBV DNA, HBeAg-positive, or mother known to have chronic hepatitis B infection), manage infant as if mother is HBsAg-positive

- Birth dose (monovalent HepB vaccine only):

- Birth weight \geq 2,000 grams: administer **HepB vaccine** within 12 hours of birth. Determine mother's HBsAg status as soon as possible. If mother is determined to be HBsAg-positive, administer **HBIG** as soon as possible (in separate limb), but no later than 7 days of age.
- Birth weight <2,000 grams: administer **HepB vaccine** and **HBIG** (in separate limbs) within 12 hours of birth. Administer 3 additional doses of **HepB vaccine** beginning at age 1 month (total of 4 doses)

- Final (3rd or 4th) dose: administer at age 6 months (minimum age 24 weeks)

- If mother is determined to be HBsAg-positive or if status remains unknown, test for HBsAg and anti-HBs at age 9–12 months. If HepB series is delayed, test 1–2 months after final dose. Do not test before age 9 months.

Catch-up vaccination

- Unvaccinated persons should complete a 3-dose series at 0, 1–2, 6 months. See Table 2 for minimum intervals
- Adolescents age 11–15 years may use an alternative 2-dose schedule with at least 4 months between doses (adult formulation **Recombivax HB**® only).
- Adolescents age 18 years or older may receive:
 - **Heplisav-B**®: 2-dose series at least 4 weeks apart
 - **PreHevbrio**®: 3-dose series at 0, 1, and 6 months
 - Combined HepA and HepB vaccine, **Twinrix**®: 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
 - Persons who are predialysis or on maintenance dialysis
 - Other immunocompromised persons
 - For detailed revaccination recommendations, see www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hepb.html.

Note: Heplisav-B and PreHevbrio are not recommended in pregnancy due to lack of safety data in pregnant 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.
- **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, 2022, 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, 2022
 - 1 dose for **all persons age 9 years or older**

• For the 2022–2023 season, see www.cdc.gov/mmwr/volumes/71/rr/rr7101a1.htm.

• For the 2023–24 season, see the 2023–24 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: Any influenza vaccine appropriate for age and health status may be administered. If using egg-based IIV4 or LAIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions.
- **Severe allergic reaction (e.g., anaphylaxis) to a vaccine component or a previous dose of any influenza vaccine:** see Appendix listing contraindications and precautions
- **Close contacts (e.g., caregivers, healthcare personnel) of severely immunosuppressed persons who require a protected environment:** these persons should not receive LAIV4. If LAIV4 is given, they should avoid contact with/caring for such immunosuppressed persons for 7 days after vaccination.

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

- In mumps outbreak settings, for information about additional doses of MMR (including 3rd dose of MMR), see www.cdc.gov/mmwr/volumes/67/wr/mm6701a7.htm

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 PCV series.

• MenQuadfi[®]

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

Travel to 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 MenQuadfi[®]

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 component 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.

*Menveo has two formulations: lyophilized and liquid. The liquid formulation should not be used before age 10 years.

Note: Menactra[®] should be administered either before or at the same time as DTaP. MenACWY 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 (if dose 2 was administered at least 6 months after dose 1, dose 3 not needed; if dose 3 is administered earlier than 4 months after dose 2, a 4th dose should be administered at least 4 months after dose 3)

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], [PCV15], 2 years [PPSV23])

Routine vaccination with PCV

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

Catch-up vaccination with PCV

- Healthy children age 24–59 months with any incomplete* PCV series: 1 dose PCV
- For other catch-up guidance, see Table 2.

Note: PCV13 and PCV15 can be used interchangeably for children who are healthy or have underlying conditions. PCV15 is not indicated for children who have received 4 doses of PCV13 or another age appropriate complete PCV13 series.

Special situations

Underlying conditions below: When both PCV and PPSV23 are indicated, administer PCV first. PCV and PPSV23 should not be administered during the 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 PCV doses: 1 dose PCV (at least 8 weeks after any prior PCV dose)
 - Less than 3 PCV doses: 2 doses PCV (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 PCV doses)

Age 6–18 years

- Any incomplete* series with PCV: no further PCV doses needed
- No history of PPSV23: 1 dose PPSV23 (at least 8 weeks after completing all recommended PCV doses)

Cerebrospinal fluid leak, cochlear implant:

Age 2–5 years

- Any incomplete* series with:
 - 3 PCV doses: 1 dose PCV (at least 8 weeks after any prior PCV dose)
 - Less than 3 PCV doses: 2 doses PCV (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 PCV doses)

Age 6–18 years

- No history of either PCV or PPSV23: 1 dose PCV, 1 dose PPSV23 at least 8 weeks later
- Any PCV but no PPSV23: 1 dose PPSV23 at least 8 weeks after the most recent dose of PCV
- PPSV23 but no PCV: 1 dose PCV 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 PCV doses: 1 dose PCV (at least 8 weeks after any prior PCV dose)
 - Less than 3 PCV doses: 2 doses PCV (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 PCV doses) and a dose 2 of PPSV23 5 years later

Age 6–18 years

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

**Incomplete series* = Not having received all doses in either the recommended series or an age-appropriate catch-up series see Table 2 in ACIP pneumococcal recommendations at www.cdc.gov/mmwr/volumes/71/wr/mm7137a3.htm

For guidance on determining which pneumococcal vaccines a patient needs and when, please refer to the mobile app, which can be downloaded here: www.cdc.gov/vaccines/vpd/pneumo/hcp/pneumoapp.html

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.

Special situations

- **Adolescents aged 18 years at increased risk of exposure to poliovirus with:**
 - No evidence of a complete polio vaccination series (i.e., at least 3 doses): administer remaining doses (1, 2, or 3 doses) to complete a 3-dose series
 - Evidence of completed polio vaccination series (i.e., at least 3 doses): may administer one lifetime IPV booster

For detailed information, see: www.cdc.gov/vaccines/vpd/polio/hcp/recommendations.html

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 4 weeks 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.

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 2022-23 seasonal influenza with Vaccines available at www.cdc.gov/mmwr/volumes/71/rr/rr7101a1.htm.

For COVID-19 vaccine contraindications and precautions see www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#contraindications

Vaccine	Contraindicated or Not Recommended 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, cclIV, RIV, or LAIV of any valency) Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Moderate or severe acute illness with or without fever
Influenza, cell culture-based inactivated injectable [(cclIV4), Flucelvax [®] Quadrivalent]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) to any cclIV of any valency, or to any component³ of cclIV4 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, RIV, or LAIV of any valency. If using cclIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. Moderate or severe acute illness with or without fever
Influenza, recombinant injectable [(RIV4), Flublok [®] Quadrivalent]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) to any RIV of any valency, or to any component³ of RIV4 	<ul style="list-style-type: none"> Guillain-Barré syndrome (GBS) within 6 weeks after a previous dose of any type of influenza vaccine Persons with a history of severe allergic reaction (e.g., anaphylaxis) after a previous dose of any egg-based IIV, cclIV, or LAIV of any valency. If using RIV4, administer in medical setting under supervision of health care provider who can recognize and manage severe allergic reactions. May consult an allergist. Moderate or severe acute illness with or without fever
Influenza, live attenuated [LAIV4, Flumist [®] Quadrivalent]	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after previous dose of any influenza vaccine (i.e., any egg-based IIV, cclIV, RIV, or LAIV of any valency) Severe allergic reaction (e.g., anaphylaxis) to any vaccine component³ (excluding egg) 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 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-biologics/approved-products/vaccines-licensed-use-united-states

Appendix

Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger, United States, 2023

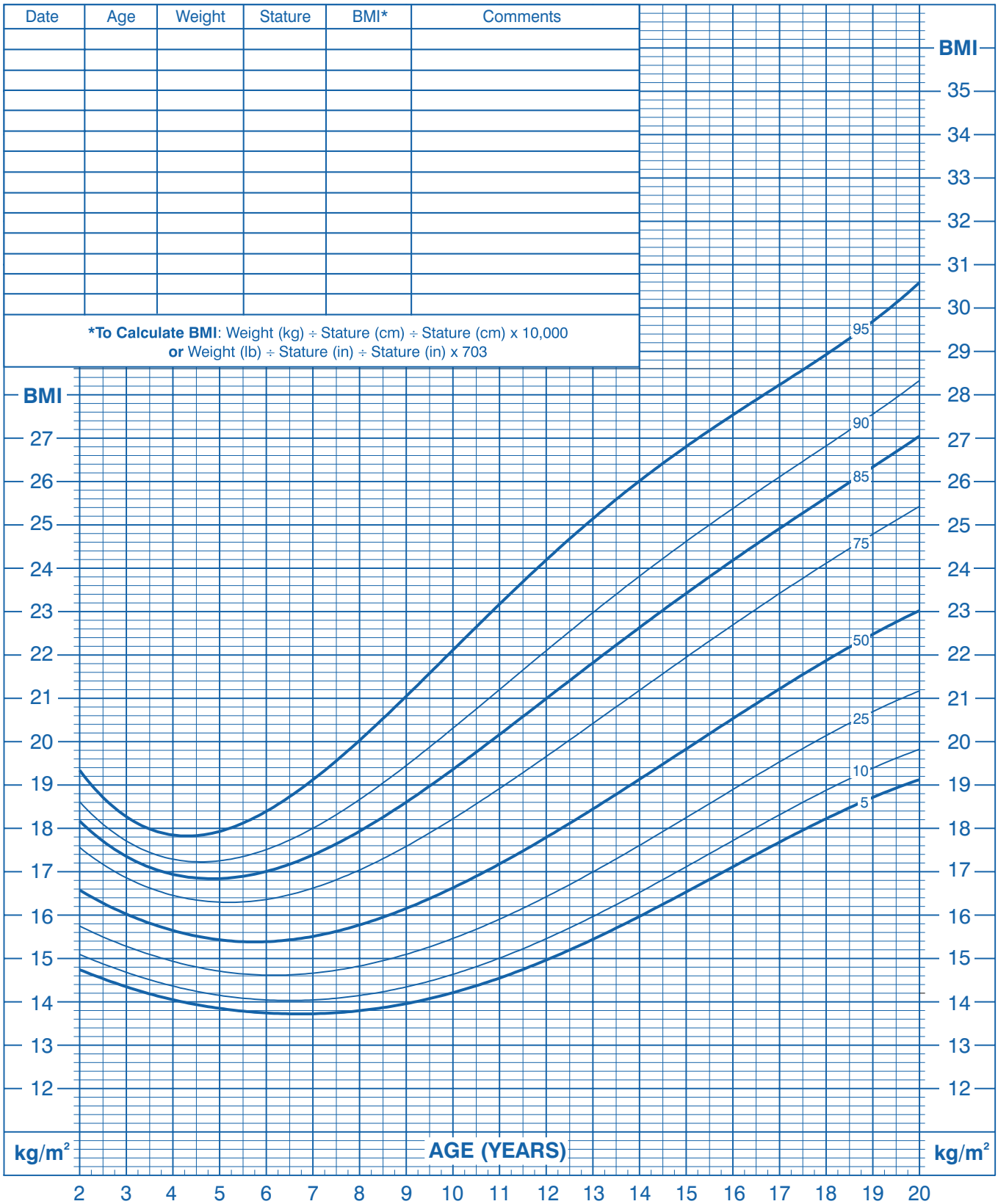
Vaccine	Contraindicated or Not Recommended ¹	Precautions ²
Dengue (DEN4CYD)	<ul style="list-style-type: none"> Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component³ Severe immunodeficiency (e.g., hematologic and solid tumors, receipt of chemotherapy, congenital immunodeficiency, long-term immunosuppressive therapy or patients with HIV infection who are severely immunocompromised) Lack of laboratory confirmation of a previous Dengue infection 	<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 (DT)	<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 	<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: 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
<i>Haemophilus influenzae</i> 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 Hiberix, 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 <i>Pregnancy: HepB only: HepB is not recommended due to lack of safety data in pregnant persons. Use other hepatitis B vaccines if HepB is indicated⁴.</i> 	<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 <i>Pregnancy: HPV vaccination not recommended.</i> 	<ul style="list-style-type: none"> Moderate or severe acute illness with or without fever
Measles, mumps, rubella (MMR) Measles, mumps, rubella, and varicella (MMRV)	<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 (≤11 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 (IGRA) testing Moderate or severe acute illness with or without fever For MMRV only: Personal or family (i.e., sibling or parent) history of seizures of any etiology
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 Men ACWY-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 (PCV)	<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
Poliovirus 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 exstrophy Moderate or severe acute illness with or without fever
Tetanus, diphtheria, and acellular pertussis (Tdap) 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 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 (≤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 If using MMRV, see MMR/MMRV for additional precautions

- 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-biologics/approved-products/vaccines-licensed-use-united-states.
- For information on the pregnancy exposure registries for persons who were inadvertently vaccinated with HepB or PreHevrio while pregnant, please visit heplisavbpregnancyregistry.com/ or www.prehevrio.com/#safety.

2 to 20 years: Boys Body mass index-for-age percentiles

NAME _____

RECORD # _____



Published May 30, 2000 (modified 10/16/00).

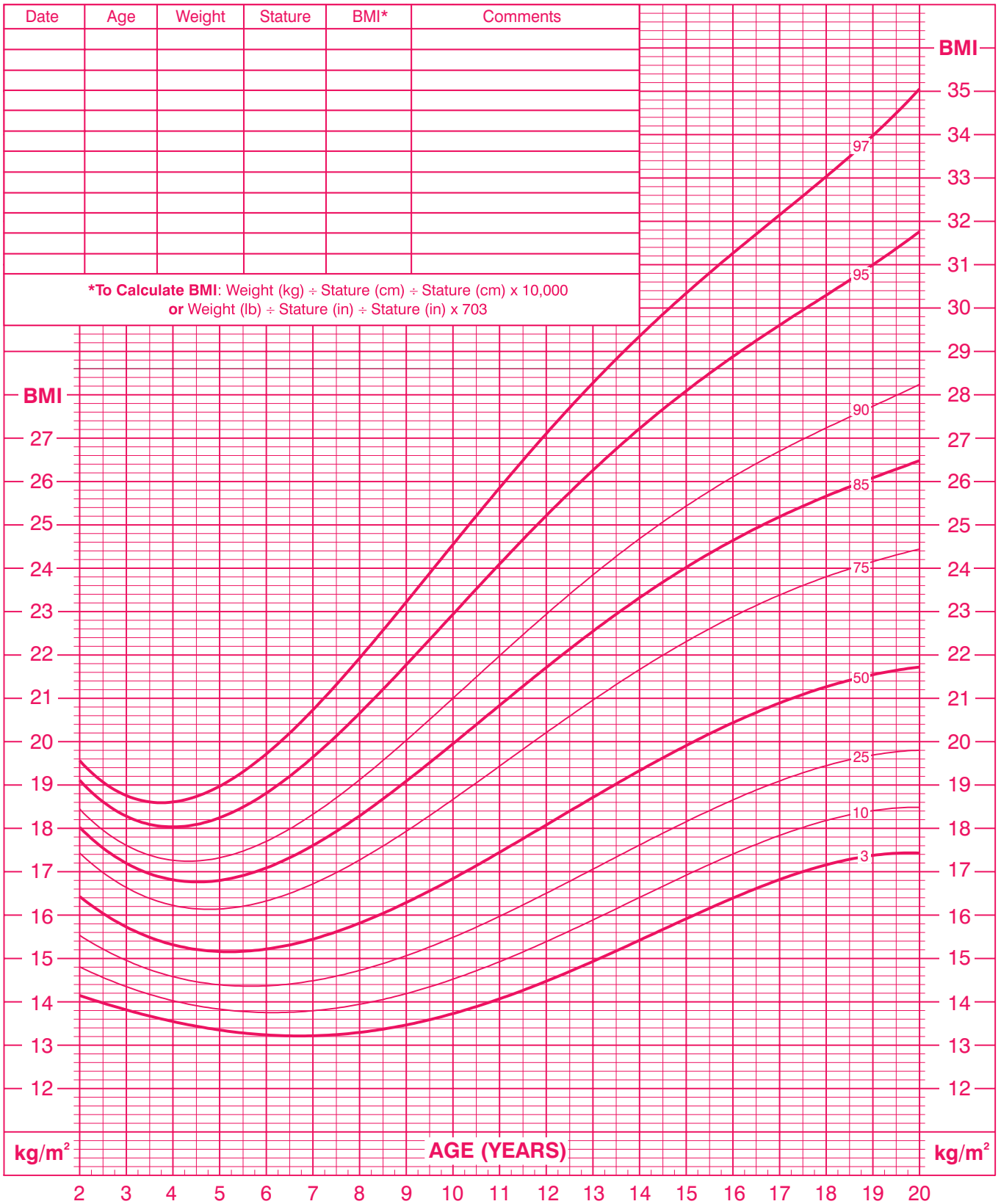
SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000). <http://www.cdc.gov/growthcharts>



2 to 20 years: Girls Body mass index-for-age percentiles

NAME _____

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Published May 30, 2000 (modified 10/16/00).
SOURCE: Developed by the National Center for Health Statistics in collaboration with
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<http://www.cdc.gov/growthcharts>







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