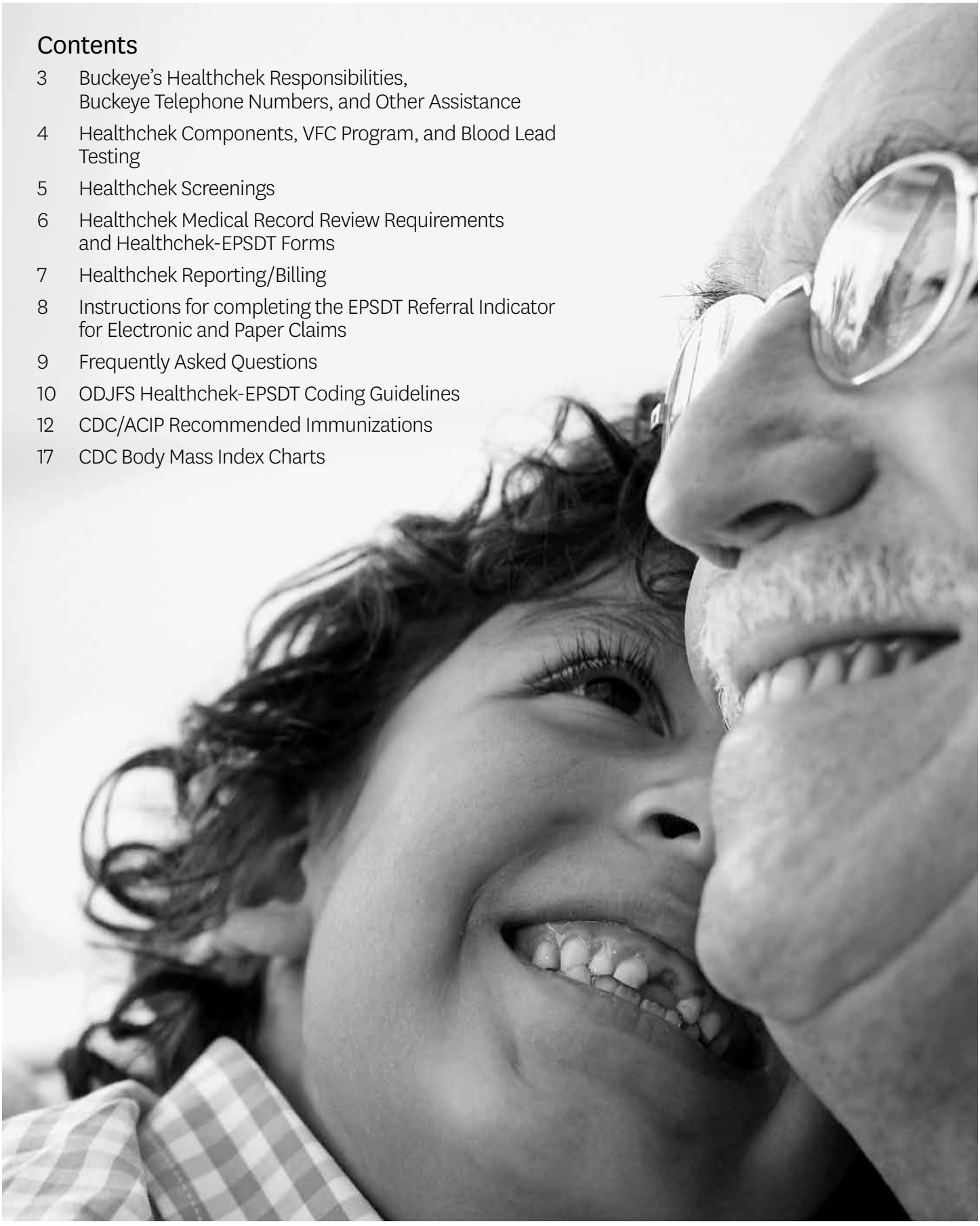
buckeye health plan

Healthchek
Provider Reference Manual

EPSDT: Early and Periodic Screening, Diagnosis and Treatment

BuckeyeHealthPlan.com

Contents



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

Healthchek 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

Healthchek-EPSDT Forms

The age specific Healthchek-EPSDT screening forms below may be accessed at:
http://www.buckeyehealthplan.com/for-providers/provider-resources/healthcheck-epsdt-forms/

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

Healthchek 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-EPSDT Services Coding Guidelines

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

- Bill for Healthchek - EPSDT 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 - EPSDT exam. *Interperiodic examinations will be covered when medically necessary to deter¬mine 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 - EPSDT 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 - EPSDT 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.
- NCQA. (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-EPSDT 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
The following codes are for children 18 years and younger:
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

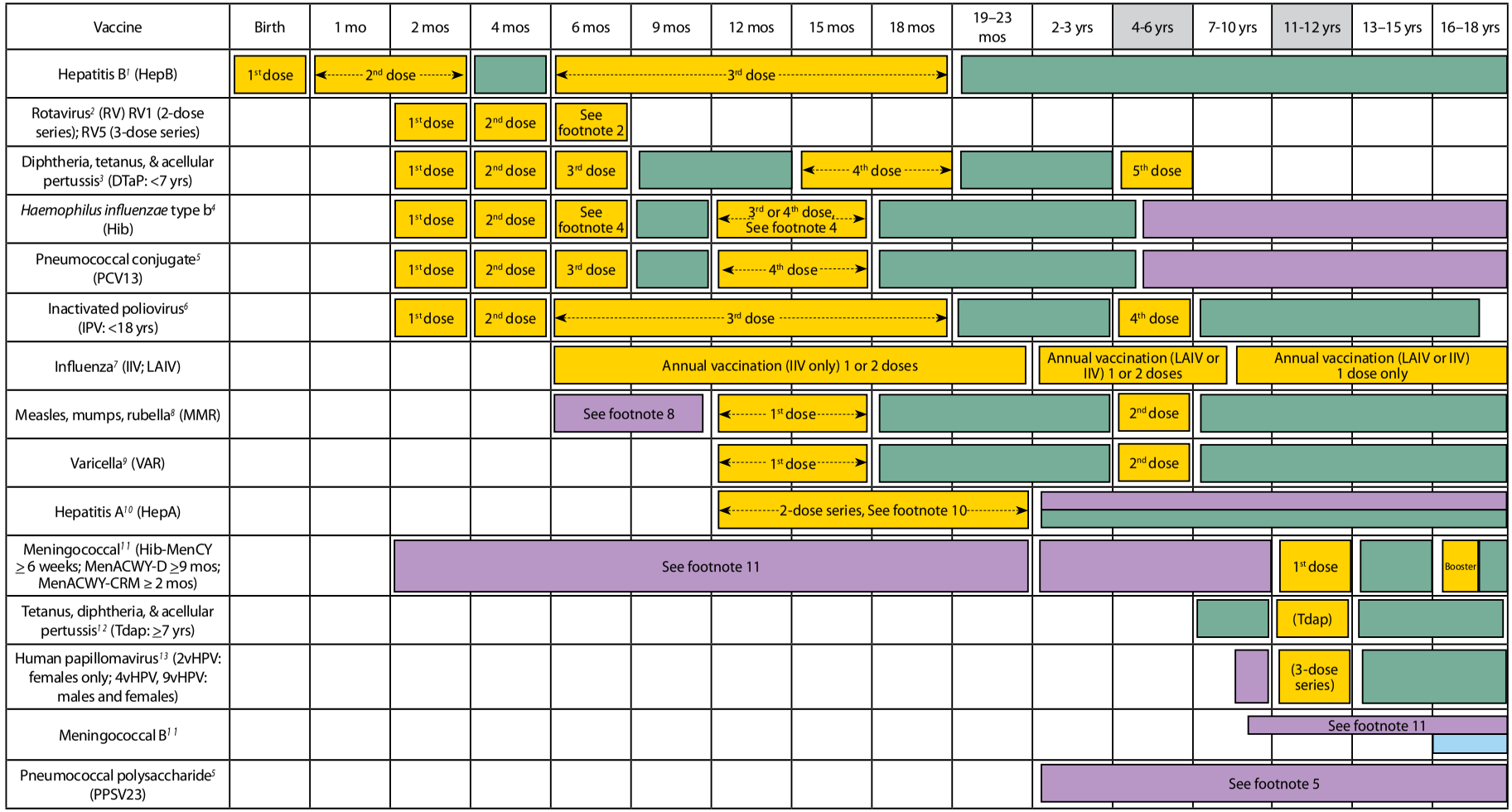
Immunizations (continued)
The following codes are for those 19 years and older:
90585** BGG, percutaneous
90586** BCG, intravesical
90632 Hepatitis A, adult
90633** Hepatitis A, pediatric/adolescent, two dose schedule
90634** Hepatitis A, pediatric/adolescent, three dose schedule
90636 Hepatitis A and 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

Figure 1. Recommended immunization schedule for persons aged 0 through 18 years – United States, 2016.

(FOR THOSE WHO FALL BEHIND OR START LATE, SEE THE CATCH-UP SCHEDULE [FIGURE 2]).

These recommendations must be read with the footnotes that follow. For those who fall behind or start late, provide catch-up vaccination at the earliest opportunity as indicated by the green bars in Figure 1. To determine minimum intervals between doses, see the catch-up schedule (Figure 2). School entry and adolescent vaccine age groups are shaded.



This schedule includes recommendations in effect as of January 1, 2016. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Vaccination providers should consult the relevant Advisory Committee on Immunization Practices (ACIP) statement for detailed recommendations, available online at http://www.cdc.gov/vaccines/hcp/acip-recs/index.html. Clinically significant adverse events that follow vaccination should be reported to the Vaccine Adverse Event Reporting System (VAERS) online (http://www.vaers.hhs.gov) or by telephone (800-822-7967). Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including precautions and contraindications for vaccination, is available from CDC online (http://www.cdc.gov/vaccines/recs/vac-admin/contraindications.htm) or by telephone (800-CDC-INFO [800-232-4636]).

This schedule is approved by the Advisory Committee on Immunization Practices (http//www.cdc.gov/vaccines/acip), the American Academy of Pediatrics (http://www.aap.org), the American Academy of Family Physicians (http://www.aafp.org), and the American College of Obstetricians and Gynecologists (http://www.acog.org).

NOTE: The above recommendations must be read along with the footnotes of ....s schedule.

FIGURE 2. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind —United States, 2016.

The figure 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 Figure 1 and the footnotes 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[1]	Birth	4 weeks	8 weeks *and* at least 16 weeks after first dose. Minimum age for the final dose is 24 weeks.		
Rotavirus[2]	6 weeks	4 weeks	4 weeks[2]		
Diphtheria, tetanus, and acellular pertussis[3]	6 weeks	4 weeks	4 weeks	6 months	6 months[3]
Haemophilus influenzae type b[4]	6 weeks	4 weeks if first dose was administered before the 1st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older.	4 weeks[4] 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) or unknown. 8 weeks *and* age 12 through 59 months (as final dose)[4] • if current age is younger than 12 months **and** first dose was administered at age 7 through 11 months (wait until at least 12 months old); OR • if current age is 12 through 59 months **and** first dose was administered before the 1st birthday, **and** second dose administered at younger than 15 months; OR • if both doses were PRP-OMP (PedvaxHIB; Comvax) **and** were administered before the 1st birthday (wait until at least 12 months old). No further doses needed if previous dose was administered at age 15 months or older.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1st birthday.	
Pneumococcal[5]	6 weeks	4 weeks if first dose administered before the 1st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1st birthday or after. No further doses needed for healthy children if first dose administered at age 24 months or older.	4 weeks if current age is younger than 12 months and previous dose given at <7months old. 8 weeks (as final dose for healthy children) if previous dose given 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 given before age 12 months. No further doses needed for healthy children if previous dose administered at age 24 months or older.	8 weeks (as final dose) This dose only necessary for children aged 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]	6 weeks	4 weeks[6]	4 weeks[6]	6 months[6] (minimum age 4 years for final dose).	
Measles, mumps, rubella[8]	12 months	4 weeks			
Varicella[9]	12 months	3 months			
Hepatitis A[10]	12 months	6 months			
Meningococcal[11] (Hib-MenCY ≥ 6 weeks; MenACWY-D ≥9 mos; MenACWY-CRM ≥ 2 mos)	6 weeks	8 weeks[11]	See footnote 11	See footnote 11	
Children and adolescents age 7 through 18 years					
Meningococcal[11] (Hib-MenCY ≥ 6 weeks; MenACWY-D ≥9 mos; MenACWY-CRM ≥ 2 mos)	Not Applicable (N/A)	8 weeks[11]			
Tetanus, diphtheria; tetanus, diphtheria, and acellular pertussis[12]	7 years[12]	4 weeks	4 weeks if first dose of DTaP/DT was administered before the 1st birthday. 6 months (as final dose) if first dose of DTaP/DT or Tdap/Td was administered at or after the 1st birthday.	6 months if first dose of DTaP/DT was administered before the 1st birthday.	
Human papillomavirus[13]	9 years	Routine dosing intervals are recommended.[13]			
Hepatitis A[10]	N/A	6 months			
Hepatitis B[1]	N/A	4 weeks	8 weeks **and** at least 16 weeks after first dose.		
Inactivated poliovirus[6]	N/A	4 weeks	4 weeks[6]	6 months[6]	
Measles, mumps, rubella[8]	N/A	4 weeks			
Varicella[9]	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older.			

NOTE: The above recommendations must be read along with the footnotes of this schedule.

Footnotes — Recommended immunization schedule for persons aged 0 through 18 years—United States, 2016

For further guidance on the use of the vaccines mentioned below, see: http://www.cdc.gov/vaccines/hcp/acip-recs/index.html.
For vaccine recommendations for persons 19 years of age and older, see the Adult Immunization Schedule.

Additional information

- For contraindications and precautions to use of a vaccine and for additional information regarding that vaccine, vaccination providers should consult the relevant ACIP statement available online at http://www.cdc.gov/vaccines/hcp/acip-recs/index.html.
- For purposes of calculating intervals between doses, 4 weeks = 28 days. Intervals of 4 months or greater are determined by calendar months.
- Vaccine doses administered 4 days or less before the minimum interval are considered valid. Doses of any vaccine administered ≥5 days earlier than the minimum interval or minimum age should not be counted as valid doses 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 *MMWR, General Recommendations on Immunization and Reports* / Vol. 60 / No. 2; Table 1. *Recommended and minimum ages and intervals between vaccine doses* available online at http://www.cdc.gov/mmwr/pdf/rr/rr6002.pdf.
- Information on travel vaccine requirements and recommendations is available at http://wwwnc.cdc.gov/travel/destinations/list.
- For vaccination of persons with primary and secondary immunodeficiencies, see Table 13, "*Vaccination of persons with primary and secondary immunodeficiencies*," in *General Recommendations on Immunization* (ACIP), available at http://www.cdc.gov/mmwr/pdf/rr/rr6002.pdf.; and American Academy of Pediatrics. "Immunization in Special Clinical Circumstances," in Kimberlin DW, Brady MT, Jackson MA, Long SS eds. *Red Book: 2015 report of the Committee on Infectious Diseases. 30th ed.* Elk Grove Village, IL: American Academy of Pediatrics.

1. Hepatitis B (HepB) vaccine. (Minimum age: birth)

Routine vaccination:

At birth:

- Administer monovalent HepB vaccine to all newborns before hospital discharge.
- For infants born to hepatitis B surface antigen (HBsAg)-positive mothers, administer HepB vaccine and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth. These infants should be tested for HBsAg and antibody to HBsAg (anti-HBs) at age 9 through 18 months (preferably at the next well-child visit) or 1 to 2 months after completion of the HepB series if the series was delayed; CDC recently recommended testing occur at age 9 through 12 months; see http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6439a6.htm.
- If mother's HBsAg status is unknown, within 12 hours of birth administer HepB vaccine regardless of birth weight. For infants weighing less than 2,000 grams, administer HBIG in addition to HepB vaccine within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if mother is HBsAg-positive, also administer HBIG for infants weighing 2,000 grams or more as soon as possible, but no later than age 7 days.

Doses following the birth dose:

- The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks.
- Infants who did not receive a birth dose should receive 3 doses of a HepB-containing vaccine on a schedule of 0, 1 to 2 months, and 6 months starting as soon as feasible. See Figure 2.
- Administer the second dose 1 to 2 months after the first dose (minimum interval of 4 weeks), administer the third dose at least 8 weeks after the second dose AND at least 16 weeks after the **first** dose. The final (third or fourth) dose in the HepB vaccine series should be administered **no earlier than age 24 weeks**.
- Administration of a total of 4 doses of HepB vaccine is permitted when a combination vaccine containing HepB is administered after the birth dose.

Catch-up vaccination:

- Unvaccinated persons should complete a 3-dose series.
- A 2-dose series (doses separated by at least 4 months) of adult formulation Recombivax HB is licensed for use in children aged 11 through 15 years.
- For other catch-up guidance, see Figure 2.

2. Rotavirus (RV) vaccines. (Minimum age: 6 weeks for both RV1 [Rotarix] and RV5 [RotaTeq])

Routine vaccination:

Administer a series of RV vaccine to all infants as follows:

1. If Rotarix is used, administer a 2-dose series at 2 and 4 months of age.
2. If RotaTeq is used, administer a 3-dose series at ages 2, 4, and 6 months.
3. If any dose in the series was RotaTeq or vaccine product is unknown for any dose in the series, a total of 3 doses of RV vaccine should be administered.

Catch-up vaccination:

- The maximum age for the first dose in the series is 14 weeks, 6 days; vaccination should not be initiated for infants aged 15 weeks, 0 days or older.
- The maximum age for the final dose in the series is 8 months, 0 days.
- For other catch-up guidance, see Figure 2.

3. Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine. (Minimum age: 6 weeks. Exception: DTaP-IPV [Kinrix, Quadracel]: 4 years)

Routine vaccination:

- Administer a 5-dose series of DTaP vaccine at ages 2, 4, 6, 15 through 18 months, and 4 through 6 years. The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
- Inadvertent administration of 4th DTaP dose early: If the fourth dose of DTaP was administered at least 4 months, but less than 6 months, after the third dose of DTaP, it need not be repeated.

3. Diphtheria and tetanus toxoids and acellular pertussis (DTaP) vaccine (cont'd)

Catch-up vaccination:

- The fifth dose of DTaP vaccine is not necessary if the fourth dose was administered at age 4 years or older.
- For other catch-up guidance, see Figure 2.

4. *Haemophilus influenzae* type b (Hib) conjugate vaccine. (Minimum age: 6 weeks for PRP-T [ACTHIB, DTaP-IPV/Hib (Pentacel) and Hib-MenCY (MenHibrix)], PRP-OMP [PedvaxHIB or COMVAX], 12 months for PRP-T [Hiberix])

Routine vaccination:

- Administer a 2- or 3-dose Hib vaccine primary series and a booster dose (dose 3 or 4 depending on vaccine used in primary series) at age 12 through 15 months to complete a full Hib vaccine series.
- The primary series with ActHIB, MenHibrix, or Pentacel consists of 3 doses and should be administered at 2, 4, and 6 months of age. The primary series with PedvaxHib or COMVAX consists of 2 doses and should be administered at 2 and 4 months of age; a dose at age 6 months is not indicated.
- One booster dose (dose 3 or 4 depending on vaccine used in primary series) of any Hib vaccine should be administered at age 12 through 15 months. An exception is Hiberix vaccine. Hiberix should only be used for the booster (final) dose in children aged 12 months through 4 years who have received at least 1 prior dose of Hib-containing vaccine.
- For recommendations on the use of MenHibrix in patients at increased risk for meningococcal disease, please refer to the meningococcal vaccine footnotes and also to *MMWR* February 28, 2014 / 63(RR01);1-13, available at http://www.cdc.gov/mmwr/PDF/rr/rr6301.pdf.

Catch-up vaccination:

- If dose 1 was administered at ages 12 through 14 months, administer a second (final) dose at least 8 weeks after dose 1, regardless of Hib vaccine used in the primary series.
- If both doses were PRP-OMP (PedvaxHIB or COMVAX), and were administered before the first birthday, the third (and final) dose should be administered at age 12 through 59 months and at least 8 weeks after the second dose.
- If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a third (and final) dose at age 12 through 15 months or 8 weeks after second dose, whichever is later.
- If first dose is administered before the first birthday and second dose administered at younger than 15 months, a third (and final) dose should be administered 8 weeks later.
- For unvaccinated children aged 15 months or older, administer only 1 dose.
- For other catch-up guidance, see Figure 2. For catch-up guidance related to MenHibrix, please see the meningococcal vaccine footnotes and also *MMWR* February 28, 2014 / 63(RR01);1-13, available at http://www.cdc.gov/mmwr/PDF/rr/rr6301.pdf.

Vaccination of persons with high-risk conditions:

- Children aged 12 through 59 months who are at increased risk for Hib disease, including chemotherapy recipients and those with anatomic or functional asplenia (including sickle cell disease), human immunodeficiency virus (HIV) infection, immunoglobulin deficiency, or early component complement deficiency, who have received either no doses or only 1 dose of Hib vaccine before 12 months of age, should receive 2 additional doses of Hib vaccine 8 weeks apart; children who received 2 or more doses of Hib vaccine before 12 months of age should receive 1 additional dose.
- For patients younger than 5 years of age undergoing chemotherapy or radiation treatment who received a Hib vaccine dose(s) within 14 days of starting therapy or during therapy, repeat the dose(s) at least 3 months following therapy completion.
- Recipients of hematopoietic stem cell transplant (HSCT) should be revaccinated with a 3-dose regimen of Hib vaccine starting 6 to 12 months after successful transplant, regardless of vaccination history; doses should be administered at least 4 weeks apart.
- A single dose of any Hib-containing vaccine should be administered to unimmunized* children and adolescents 15 months of age and older undergoing an elective splenectomy; if possible, vaccine should be administered at least 14 days before procedure.

For further guidance on the use of the vaccines mentioned below, see: http://www.cdc.gov/vaccines/hcp/acip-recs/index.html.

4. ***Haemophilus influenzae* type b (Hib) conjugate vaccine (cont'd)**
   - Hib vaccine is not routinely recommended for patients 5 years or older. However, 1 dose of Hib vaccine should be administered to unimmunized* persons aged 5 years or older who have anatomic or functional asplenia (including sickle cell disease) and unvaccinated persons 5 through 18 years of age with HIV infection.

   ** Patients who have not received a primary series and booster dose or at least 1 dose of Hib vaccine after 14 months of age are considered unimmunized.*

5. **Pneumococcal vaccines. (Minimum age: 6 weeks for PCV13, 2 years for PPSV23)**

   Routine vaccination with PCV13:
   - Administer a 4-dose series of PCV13 vaccine at ages 2, 4, and 6 months and at age 12 through 15 months.
   - For children aged 14 through 59 months who have received an age-appropriate series of 7-valent PCV (PCV7), administer a single supplemental dose of 13-valent PCV (PCV13).

   Catch-up vaccination with PCV13:
   - Administer 1 dose of PCV13 to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
   - For other catch-up guidance, see Figure 2.

   Vaccination of persons with high-risk conditions with PCV13 and PPSV23:
   - All recommended PCV13 doses should be administered prior to PPSV23 vaccination if possible.
   - For children 2 through 5 years of age with any of the following conditions: chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure); chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy); diabetes mellitus; cerebrospinal fluid leak; cochlear implant; sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; solid organ transplantation; or congenital immunodeficiency:
     1. Administer 1 dose of PCV13 if any incomplete schedule of 3 doses of PCV (PCV7 and/or PCV13) were received previously.
     2. Administer 2 doses of PCV13 at least 8 weeks apart if unvaccinated or any incomplete schedule of fewer than 3 doses of PCV (PCV7 and/or PCV13) were received previously.
     3. Administer 1 supplemental dose of PCV13 if 4 doses of PCV7 or other age-appropriate complete PCV7 series was received previously.
     4. The minimum interval between doses of PCV (PCV7 or PCV13) is 8 weeks.
     5. For children with no history of PPSV23 vaccination, administer PPSV23 at least 8 weeks after the most recent dose of PCV13.
   - For children aged 6 through 18 years who have cerebrospinal fluid leak; cochlear implant; sickle cell disease and other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiencies; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; generalized malignancy; solid organ transplantation; or multiple myeloma:
     1. If neither PCV13 nor PPSV23 has been received previously, administer 1 dose of PCV13 now and 1 dose of PPSV23 at least 8 weeks later.
     2. If PCV13 has been received previously but PPSV23 has not, administer 1 dose of PPSV23 at least 8 weeks after the most recent dose of PCV13.
     3. If PPSV23 has been received but PCV13 has not, administer 1 dose of PCV13 at least 8 weeks after the most recent dose of PPSV23.
   - For children aged 6 through 18 years with chronic heart disease (particularly cyanotic congenital heart disease and cardiac failure), chronic lung disease (including asthma if treated with high-dose oral corticosteroid therapy), diabetes mellitus, alcoholism, or chronic liver disease, who have not received PPSV23, administer 1 dose of PPSV23. If PCV13 has been received previously, then PPSV23 should be administered at least 8 weeks after any prior PCV13 dose.
   - A single revaccination with PPSV23 should be administered 5 years after the first dose to children with sickle cell disease or other hemoglobinopathies; anatomic or functional asplenia; congenital or acquired immunodeficiencies; HIV infection; chronic renal failure; nephrotic syndrome; diseases associated with treatment with immunosuppressive drugs or radiation therapy, including malignant neoplasms, leukemias, lymphomas, and Hodgkin disease; generalized malignancy; solid organ transplantation; or multiple myeloma.

6. **Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)**

   Routine vaccination:
   - Administer a 4-dose series of IPV at ages 2, 4, 6 through 18 months, and 4 through 6 years. The final dose in the series should be administered on or after the fourth birthday and at least 6 months after the previous dose.

   Catch-up vaccination:
   - In the first 6 months of life, minimum age and minimum intervals are only recommended if the person is at risk of imminent exposure to circulating poliovirus (i.e., travel to a polio-endemic region or during an outbreak).
   - If 4 or more doses are administered before age 4 years, an additional dose should be administered at age 4 through 6 years and at least 6 months after the previous dose.
   - A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 month after the previous dose.

6. **Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks) (cont'd)**
   - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age. If only OPV were administered, and all doses were given prior to 4 years of age, one dose of IPV should be given at 4 years or older, at least 4 weeks after the last OPV dose.
   - IPV is not routinely recommended for U.S. residents aged 18 years or older.
   - For other catch-up guidance, see Figure 2.

7. **Influenza vaccines. (Minimum age: 6 months for inactivated influenza vaccine [IIV], 2 years for live, attenuated influenza vaccine [LAIV])**

   Routine vaccination:
   - Administer influenza vaccine annually to all children beginning at age 6 months. For most healthy, nonpregnant persons aged 2 through 49 years, either LAIV or IIV may be used. However, LAIV should NOT be administered to some persons, including 1) persons who have experienced severe allergic reactions to LAIV, any of its components, or to a previous dose of any other influenza vaccine; 2) children 2 through 17 years receiving aspirin or aspirin-containing products; 3) persons who are allergic to eggs; 4) pregnant women; 5) immunosuppressed persons; 6) children 2 through 4 years of age with asthma or who had wheezing in the past 12 months; or 7) persons who have taken influenza antiviral medications in the previous 48 hours. For all other contraindications and precautions to use of LAIV, see *MMWR* August 7, 2015 / 64(30):818-25 available at http://www.cdc.gov/mmwr/pdf/wk/mm6430.pdf.

   For children aged 6 months through 8 years:
   - For the 2015-16 season, administer 2 doses (separated by at least 4 weeks) to children who are receiving influenza vaccine for the first time. Some children in this age group who have been vaccinated previously will also need 2 doses. For additional guidance, follow dosing guidelines in the 2015-16 ACIP influenza vaccine recommendations, *MMWR* August 7, 2015 / 64(30):818-25, available at http://www.cdc.gov/mmwr/pdf/wk/mm6430.pdf.
   - For the 2016-17 season, follow dosing guidelines in the 2016 ACIP influenza vaccine recommendations.

   For persons aged 9 years and older:
   - Administer 1 dose.

8. **Measles, mumps, and rubella (MMR) vaccine. (Minimum age: 12 months for routine vaccination)**

   Routine vaccination:
   - Administer a 2-dose series of MMR vaccine at ages 12 through 15 months and 4 through 6 years. The second dose may be administered before age 4 years, provided at least 4 weeks have elapsed since the first dose.
   - Administer 1 dose of MMR vaccine to infants aged 6 through 11 months before departure from the United States for international travel. These children should be revaccinated with 2 doses of MMR vaccine, the first at age 12 through 15 months (12 months if the child remains in an area where disease risk is high), and the second dose at least 4 weeks later.
   - Administer 2 doses of MMR vaccine to children aged 12 months and older before departure from the United States for international travel. The first dose should be administered on or after age 12 months and the second dose at least 4 weeks later.

   Catch-up vaccination:
   - Ensure that all school-aged children and adolescents have had 2 doses of MMR vaccine; the minimum interval between the 2 doses is 4 weeks.

9. **Varicella (VAR) vaccine. (Minimum age: 12 months)**

   Routine vaccination:
   - Administer a 2-dose series of VAR vaccine at ages 12 through 15 months and 4 through 6 years. The second dose may be administered before age 4 years, provided at least 3 months have elapsed since the first dose. If the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.

   Catch-up vaccination:
   - Ensure that all persons aged 7 through 18 years without evidence of immunity (see *MMWR* 2007 / 56 [No. RR-4], available at http://www.cdc.gov/mmwr/pdf/rr/rr5604.pdf) have 2 doses of varicella vaccine. For children aged 7 through 12 years, the recommended minimum interval between doses is 3 months (if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid); for persons aged 13 years and older, the minimum interval between doses is 4 weeks.

10. **Hepatitis A (HepA) vaccine. (Minimum age: 12 months)**

    Routine vaccination:
    - Initiate the 2-dose HepA vaccine series at 12 through 23 months; separate the 2 doses by 6 to 18 months.
    - Children who have received 1 dose of HepA vaccine before age 24 months should receive a second dose 6 to 18 months after the first dose.
    - For any person aged 2 years and older who has not already received the HepA vaccine series, 2 doses of HepA vaccine separated by 6 to 18 months may be administered if immunity against hepatitis A virus infection is desired.

    Catch-up vaccination:
    - The minimum interval between the 2 doses is 6 months.

For further guidance on the use of the vaccines mentioned below, see: http://www.cdc.gov/vaccines/hcp/acip-recs/index.html.

10. Hepatitis A (HepA) vaccine (cont'd)

Special populations:

- Administer 2 doses of HepA vaccine at least 6 months apart to previously unvaccinated persons who live in areas where vaccination programs target older children, or who are at increased risk for infection. This includes persons traveling to or working in countries that have high or intermediate endemicity of infection; men having sex with men; users of injection and non-injection illicit drugs; persons who work with HAV-infected primates or with HAV in a research laboratory; persons with clotting-factor disorders; persons with chronic liver disease; and persons who anticipate close personal contact (e.g., household or regular babysitting) with an international adoptee during the first 60 days after arrival in the United States from a country with high or intermediate endemicity. The first dose should be administered as soon as the adoption is planned, ideally 2 or more weeks before the arrival of the adoptee.

11. Meningococcal vaccines. (Minimum age: 6 weeks for Hib-MenCY [MenHibrix], 9 months for MenACWY-D [Menactra], 2 months for MenACWY-CRM [Menveo], 10 years for serogroup B meningococcal [MenB] vaccines: MenB-4C [Bexsero] and MenB-FHbp [Trumenba])

Routine vaccination:

- Administer a single dose of Menactra or Menveo vaccine at age 11 through 12 years, with a booster dose at age 16 years.
- Adolescents aged 11 through 18 years with human immunodeficiency virus (HIV) infection should receive a 2-dose primary series of Menactra or Menveo with at least 8 weeks between doses.
- For children aged 2 months through 18 years with high-risk conditions, see below.

Catch-up vaccination:

- Administer Menactra or Menveo vaccine at age 13 through 18 years if not previously vaccinated.
- If the first dose is administered at age 13 through 15 years, a booster dose should be administered at age 16 through 18 years with a minimum interval of at least 8 weeks between doses.
- If the first dose is administered at age 16 years or older, a booster dose is not needed.
- For other catch-up guidance, see Figure 2.

Clinical discretion:

- Young adults aged 16 through 23 years (preferred age range is 16 through 18 years) may be vaccinated with either a 2-dose series of Bexsero or a 3-dose series of Trumenba vaccine to provide short-term protection against most strains of serogroup B meningococcal disease. The two MenB vaccines are not interchangeable; the same vaccine product must be used for all doses.

Vaccination of persons with high-risk conditions and other persons at increased risk of disease:

Children with anatomic or functional asplenia (including sickle cell disease):

Meningococcal conjugate ACWY vaccines:

1. Menveo
   - *Children who initiate vaccination at 8 weeks:* Administer doses at 2, 4, 6, and 12 months of age.
   - *Unvaccinated children who initiate vaccination at 7 through 23 months:* Administer 2 doses, with the second dose at least 12 weeks after the first dose AND after the first birthday.
   - *Children 24 months and older who have not received a complete series:* Administer 2 primary doses at least 8 weeks apart.
2. MenHibrix
   - *Children who initiate vaccination at 6 weeks:* Administer doses at 2, 4, 6, and 12 through 15 months of age.
   - If the first dose of MenHibrix is given at or after 12 months of age, a total of 2 doses should be given at least 8 weeks apart to ensure protection against serogroups C and Y meningococcal disease.
3. Menactra
   - *Children 24 months and older who have not received a complete series:* Administer 2 primary doses at least 8 weeks apart. If Menactra is administered to a child with asplenia (including sickle cell disease), do not administer Menactra until 2 years of age and at least 4 weeks after the completion of all PCV13 doses.

Meningococcal B vaccines:

1. Bexsero or Trumenba
   - *Persons 10 years or older who have not received a complete series.* Administer a 2-dose series of Bexsero, at least 1 month apart. Or a 3-dose series of Trumenba, with the second dose at least 2 months after the first and the third dose at least 6 months after the first. The two MenB vaccines are not interchangeable; the same vaccine product must be used for all doses.

Children with persistent complement component deficiency (includes persons with inherited or chronic deficiencies in C3, C5-9, properidin, factor D, factor H, or taking eculizumab (Soliriis®):

Meningococcal conjugate ACWY vaccines:

1. Menveo
   - *Children who initiate vaccination at 8 weeks:* Administer doses at 2, 4, 6, and 12 months of age.
   - *Unvaccinated children who initiate vaccination at 7 through 23 months:* Administer 2 doses, with the second dose at least 12 weeks after the first dose AND after the first birthday.
   - *Children 24 months and older who have not received a complete series:* Administer 2 primary doses at least 8 weeks apart.
2. MenHibrix
   - *Children who initiate vaccination 6 weeks:* Administer doses at 2, 4, 6, and 12 through 15 months of age.
   - If the first dose of MenHibrix is given at or after 12 months of age, a total of 2 doses should be given at least 8 weeks apart to ensure protection against serogroups C and Y meningococcal disease.

11. Meningococcal vaccines (cont'd)

3. Menactra
   - *Children 9 through 23 months:* Administer 2 primary doses at least 12 weeks apart.
   - *Children 24 months and older who have not received a complete series:* Administer 2 primary doses at least 8 weeks apart.

Meningococcal B vaccines:

1. Bexsero or Trumenba
   - *Persons 10 years or older who have not received a complete series.* Administer a 2-dose series of Bexsero, at least 1 month apart. Or a 3-dose series of Trumenba, with the second dose at least 2 months after the first and the third dose at least 6 months after the first. The two MenB vaccines are not interchangeable; the same vaccine product must be used for all doses.

For children who travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic, including countries in the African meningitis belt or the Hajj

- administer an age-appropriate formulation and series of Menactra or Menveo for protection against serogroups A and W meningococcal disease. Prior receipt of MenHibrix is not sufficient for children traveling to the meningitis belt or the Hajj because it does not contain serogroups A or W.

For children at risk during a community outbreak attributable to a vaccine serogroup

- administer or complete an age- and formulation-appropriate series of MenHibrix, Menactra, or Menveo, Bexsero or Trumenba.

For booster doses among persons with high-risk conditions, refer to *MMWR* 2013 / 62(RR02);1-22, available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6202a1.htm.

For other catch-up recommendations for these persons, and complete information on use of meningococcal vaccines, including guidance related to vaccination of persons at increased risk of infection, see *MMWR* March 22, 2013 / 62(RR02);1-22, and *MMWR* October 23, 2015 / 64(41); 1171-1176 available at http://www.cdc.gov/mmwr/pdf/rr/rr6202.pdf, and http://www.cdc.gov/mmwr/pdf/wk/mm6441.pdf.

12. Tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine. (Minimum age: 10 years for both Boostrix and Adacel)

Routine vaccination:

- Administer 1 dose of Tdap vaccine to all adolescents aged 11 through 12 years.
- Tdap may be administered regardless of the interval since the last tetanus and diphtheria toxoid-containing vaccine.
- Administer 1 dose of Tdap vaccine to pregnant adolescents during each pregnancy (preferred during 27 through 36 weeks gestation) regardless of time since prior Td or Tdap vaccination.

Catch-up vaccination:

- Persons aged 7 years and older who are not fully immunized with DTaP vaccine should receive Tdap vaccine as 1 (preferably the first) dose in the catch-up series; if additional doses are needed, use Td vaccine. For children 7 through 10 years who receive a dose of Tdap as part of the catch-up series, an adolescent Tdap vaccine dose at age 11 through 12 years should NOT be administered. Td should be administered instead 10 years after the Tdap dose.
- Persons aged 11 through 18 years who have not received Tdap vaccine should receive a dose followed by tetanus and diphtheria toxoids (Td) booster doses every 10 years thereafter.
- Inadvertent doses of DTaP vaccine:
  - If administered inadvertently to a child aged 7 through 10 years may count as part of the catch-up series. This dose may count as the adolescent Tdap dose, or the child can later receive a Tdap booster dose at age 11 through 12 years.
  - If administered inadvertently to an adolescent aged 11 through 18 years, the dose should be counted as the adolescent Tdap booster.
- For other catch-up guidance, see Figure 2.

13. Human papillomavirus (HPV) vaccines. (Minimum age: 9 years for 2vHPV [Cervarix], 4vHPV [Gardasil] and 9vHPV [Gardasil 9])

Routine vaccination:

- Administer a 3-dose series of HPV vaccine on a schedule of 0, 1-2, and 6 months to all adolescents aged 11 through 12 years. 9vHPV, 4vHPV or 2vHPV may be used for females, and only 9vHPV or 4vHPV may be used for males.
- The vaccine series may be started at age 9 years.
- Administer the second dose 1 to 2 months after the first dose (minimum interval of 4 weeks); administer the third dose 16 weeks after the second dose (minimum interval of 12 weeks) and 24 weeks after the first dose.
- Administer HPV vaccine beginning at age 9 years to children and youth with any history of sexual abuse or assault who have not initiated or completed the 3-dose series.

Catch-up vaccination:

- Administer the vaccine series to females (2vHPV or 4vHPV or 9vHPV) and males (4vHPV or 9vHPV) at age 13 through 18 years if not previously vaccinated.
- Use recommended routine dosing intervals (see Routine vaccination above) for vaccine series catch-up.

CS260933-A

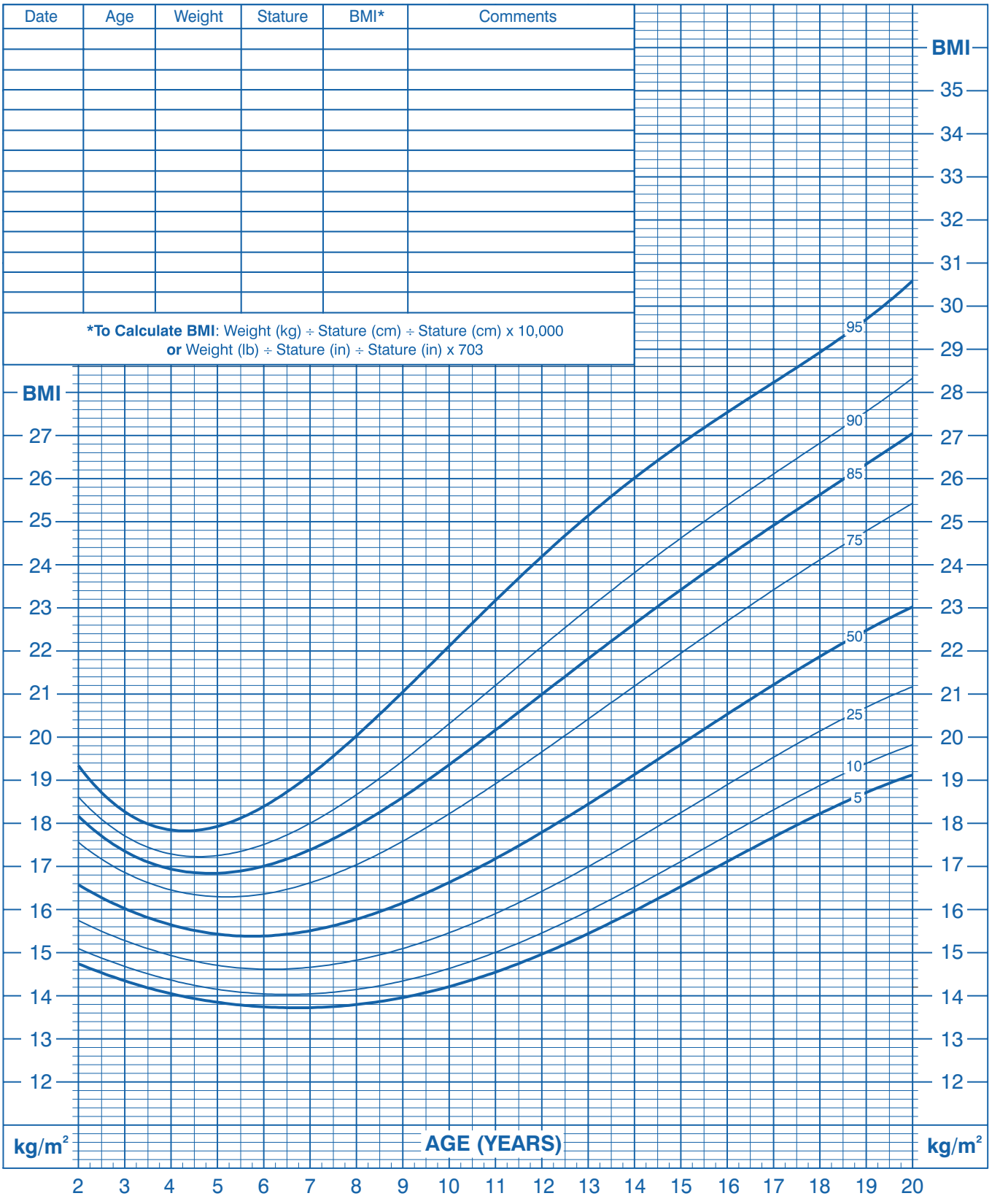
2 to 20 years: Boys
Body mass index-for-age percentiles

NAME _____

RECORD # _____

Date	Age	Weight	Stature	BMI*	Comments

***To Calculate BMI**: Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



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

SAFER • HEALTHIER • PEOPLE™

17

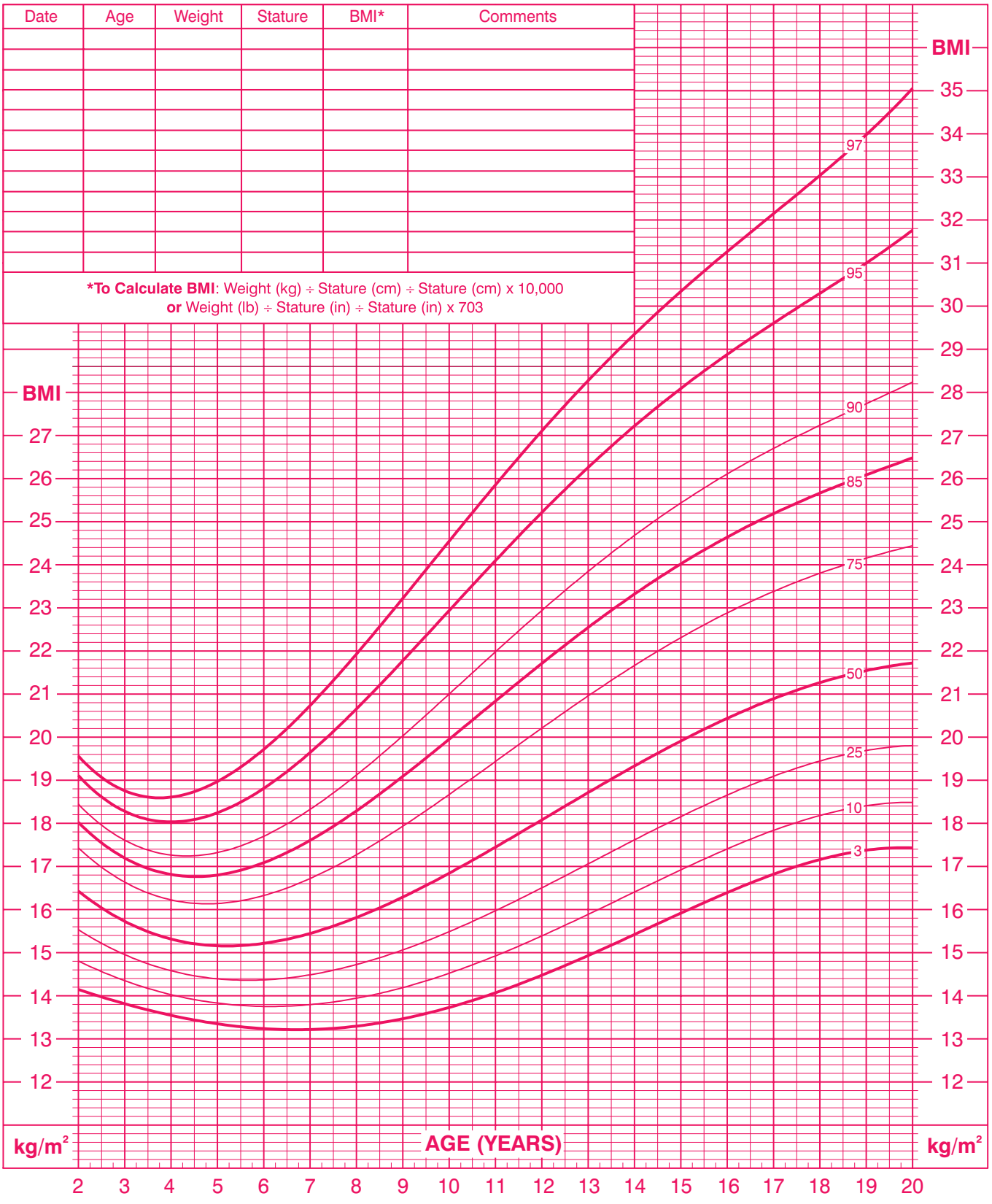
2 to 20 years: Girls
Body mass index-for-age percentiles

NAME _____

RECORD # _____

Date	Age	Weight	Stature	BMI*	Comments

***To Calculate BMI**: Weight (kg) ÷ Stature (cm) ÷ Stature (cm) x 10,000
or Weight (lb) ÷ Stature (in) ÷ Stature (in) x 703



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

CDC
SAFER • HEALTHIER • PEOPLE™

4349 Easton Way, Suite 400
Columbus, OH 43219
1-866-549-8289
TTY: 1-800-750-0750

BuckeyeHealthPlan.com