

2007/8

Pediatric Routine Preventive Care Recommendations

These recommendations represent a core set of clinical guidelines for average-risk patients from the general population. The guidelines should not supplant clinical judgment or the needs of individual patients. These guidelines are intended as quality-practice recommendations and are not intended as a description of benefits, conditions of payment, or any other legal requirements of any particular health plan or payor. Each health plan or payor makes its own determination of coverage and benefits. In the event that these practice recommendations are inconsistent with any applicable laws or regulations, such laws or regulations take precedence.

HEALTH MAINTENANCE VISIT

At Every Age

1. Initial/Interval History and Physical Exam.

2. Developmental Assessment and Anticipatory Guidance:

- Physical—gross/fine motor and sexual development;
- Cognitive—self-help and self-care skills; problem solving and reasoning abilities;
- Language—expression, comprehension, and articulation;
- Social—Assess social integration and peer relations including school performance and family issues.
Ask about daycare arrangements for infants, toddlers, and preschoolers.

3. Assessment of immunization status and administration of needed immunizations.

- Refer to Massachusetts Department of Public Health (DPH) 2007 Childhood Immunization Guidelines.

4. Assessment of medications and herbal remedies.

5. Behavioral Health.

- At age 0–2 months, ask mother about postpartum depression or history of prenatal depression. Refer to primary care provider or mental health professional if screened positive.
- Assess behavioral health including aggression, depression, anxiety, and risk-taking behavior. At provider discretion, utilize behavioral health screening tools, e.g., BITSEA, ASQ:SE, CBCL, PSC, PEDS, M-CHAT, PHQ-9.
- Free consultations on any behavioral health issue are available through the Massachusetts Child Psychiatry Access Project to all primary care providers who see children and adolescents. Go to www.MCPAP.org or call 617-350-1923 to enroll.
- For more information or support for families with child and adolescent behavioral health issues, call the Parent Resource Network Line (PAL) 866-815-8122.

Frequency

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–17 (Adolescence)	18–21 (Young Adult)
<ul style="list-style-type: none"> • Ages 1–2 weeks, and 1, 2, 4, 6, 9, and 12 months. • Assess breastfeeding infants between 3–5 days of age. 	<ul style="list-style-type: none"> • Ages 15, 18, 24 months, and 3 and 4 years. 	<ul style="list-style-type: none"> • Annually. 	<ul style="list-style-type: none"> • Annually. 	<ul style="list-style-type: none"> • Annually.

RECOMMENDED SCREENING AND ROUTINE LABS

Anemia: Hb/Hct

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
<ul style="list-style-type: none"> Once between ages 9–12 months. At clinician discretion, conduct detailed assessment of infants at high risk for iron deficiency (note: Hb/Hct not sufficient for diagnosis of iron deficiency). 	<ul style="list-style-type: none"> As needed at clinician discretion. 	<ul style="list-style-type: none"> As needed at clinician discretion. 	<ul style="list-style-type: none"> Starting at age 12, screen all nonpregnant adolescents for anemia every 5–10 years during well visit. Annually screen for anemia if at high risk (<i>i.e.</i>, extensive menstrual or other blood loss, low iron intake or a previous diagnosis of iron-deficiency anemia).

Blood Pressure

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–17 (Adolescence)	18–21 (Young Adult)
	<ul style="list-style-type: none"> At every well visit starting at age 3 years. 	<ul style="list-style-type: none"> At every well visit. 	<ul style="list-style-type: none"> At every well visit. 	<ul style="list-style-type: none"> At every well visit.

Cholesterol

0–1 (Infancy)	1–17 (Early Childhood–Adolescence)	18–21 (Young Adult)
	<ul style="list-style-type: none"> Screen children age 2–17 years at least once if they have a family history of premature cardiovascular disease (CVD) or parent with known lipid disorder and/or a parent with BMI >85 percentile. Premature CVD is defined as definite heart attack, stroke, or sudden death before age 55 years in a first-degree male relative, or before age 65 in a first-degree female relative. 	<ul style="list-style-type: none"> Screen once if not screened previously.

Growth Assessment

0–1 (Infancy)	1–21 (Early Childhood–Young Adult)
<ul style="list-style-type: none"> Assess growth parameters using height and weight, and head circumference. 	<ul style="list-style-type: none"> Assess growth parameters using height and weight; include head circumference until 2 years of age. Screen annually for healthy weight. Consult the CDC’s growth and body mass index (BMI) charts specifically for ages 2–20 years. Counsel on the benefits of physical activity and a healthy diet to maintain a desirable weight for height. Provide more focused evaluation and counseling for children with BMI >85th percentile or with significant change in BMI. Screen annually for eating disorders starting in middle childhood. Ask about body image and dieting patterns.

Urinalysis

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–17 (Adolescence)	18–21 (Young Adult)
		<ul style="list-style-type: none"> Conduct once at age 5 at clinician discretion. 		

INFECTIOUS DISEASE SCREENING

Sexually Transmitted Infections (*Chlamydia, Gonorrhea, HPV, Syphilis*) and Sexual Health

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
		<ul style="list-style-type: none"> Counsel all patients regarding schedule of HPV vaccine. 	<p>For chlamydia and gonorrhea:</p> <ul style="list-style-type: none"> Screen all sexually active patients annually. Consider urine-based screening for female patients when a pelvic examination is not performed. <p>For HPV:</p> <ul style="list-style-type: none"> Counsel all patients regarding schedule of HPV vaccine. <p>For syphilis:</p> <ul style="list-style-type: none"> Screen if at risk. Risk factors include: history of and/or current sexually transmitted infection; having more than one sexual partner within the past 6 months; exchanging sex for money or drugs; and males engaging in sex with other males. <p>General Counseling:</p> <ul style="list-style-type: none"> Counsel regarding safe and healthy sexual behaviors: Ask annually about involvement in sexual behaviors with sensitivity to sexual orientation. Counsel about responsible sexual behaviors, including abstinence. Inform patients of the risk of unintended pregnancy and sexually transmitted infections. Ask about use/motivation to use contraceptive methods. Consider preconception counseling, if appropriate.

HIV

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
			<ul style="list-style-type: none"> Advise about risk factors for HIV infection. Routine testing of all patients at increased risk. Risk factors include: males engaging in sex with other males; drug abuse; history of prior sexually transmitted infections; new or multiple sex partners; and inconsistent use of condoms. CDC recommends annual testing for those at increased risk and routine HIV screening for all individuals 13 years of age and older.

Hepatitis C

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
		<ul style="list-style-type: none"> Perform anti-hepatitis C virus test after age 12 months in children with hepatitis C virus-infected mothers. 	<ul style="list-style-type: none"> Periodic testing of all patients at high risk. Risk factors include: illicit injection drug use and/or receipt of a blood transfusion or solid organ transplant before July 1992 (<i>if not previously tested</i>); long-term kidney dialysis; evidence of liver disease; a tattoo or body piercing by non-sterile needle; risky sexual practices (<i>not using condoms; multiple sex partners</i>).

Tuberculosis (TB)

0–21 (Infancy–Young Adult)
<ul style="list-style-type: none"> Tuberculin skin testing for all patients at high risk. Risk factors include having spent time with someone with known or suspected TB; coming from a country where TB is very common; having HIV infection; having injected illicit drugs; living in U.S. where TB is more common (<i>e.g., shelters, migrant farm camps, prisons</i>); or spending time with others with these risk factors. Determine the need for repeat skin testing by the likelihood of continued exposure to infectious TB.

OTHER SCREENING

Clinical Breast Exam

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–17 (Adolescence)	18–21 (Young Adult)
				<ul style="list-style-type: none"> Starting at age 20, perform clinical breast exam and provide self-exam instruction.

Testicular Exam

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
			<ul style="list-style-type: none"> Perform clinical testicular exam and provide self-exam instruction annually beginning at age 15.

Pelvic Exam/Pap Test

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
			<ul style="list-style-type: none"> Perform Pap test and pelvic exam at 3 years after first sexual intercourse or by age 21 and thereafter every 1–3 years based on risk factors, at clinician discretion. If under then age 30, should perform Pap test annually.

GENERAL COUNSELING AND GUIDANCE

(Note: Parents should not be present during counseling for adolescents and young adults ages 11–21)

Diet/Nutrition

0–1 (Infancy)	1–10 (Early–Middle Childhood)	11–21 (Adolescence–Young Adult)
<ul style="list-style-type: none"> • Ask about dietary habits. • Promote breastfeeding as best form of infant nutrition. • Counsel breast milk as a sole source of nutrition for first 4 to 6 months. Recommend breastfeeding for at least 1 year, if possible. Infants weaned before 12 months should receive iron-fortified infant formula. Whole milk can be given to children at age 1 year. • Counsel for breastfed infants to receive 200 IU of oral vitamin D drops daily beginning during the first 2 months of life and continuing until the daily consumption of fortified formula or milk is 500 mL. (16 ounces/2 cups). • Counsel not to restrict fat or cholesterol. 	<ul style="list-style-type: none"> • Ask about dietary habits. • Counsel about the benefits of a healthy diet, ways to achieve a healthy diet, and safe weight management. • Advise whole milk until age 2 and then switch to low-fat milk beginning at age 2. 	<ul style="list-style-type: none"> • Ask annually about dietary habits. • Counsel about the benefits of a healthy diet, ways to achieve a healthy diet, and safe weight management. • Counsel to maintain adequate calcium and vitamin D intake to prevent osteoporosis. • Counsel against sugar-sweetened and caffeinated drinks. • Advise patients at risk of becoming pregnant to take a daily multivitamin containing .4 mg folate.

Sun Safety

0–1 (Infancy)	1–21 (Early Childhood– Young Adult)
<ul style="list-style-type: none"> • Encourage limits of time in the sun, minimizing exposure between the hours of 10:00 A.M.–4:00 P.M. • Encourage use of sunscreen with SPF 15, reapplying every two hours and fully covering skin with clothing and hats. 	<ul style="list-style-type: none"> • Encourage limits of time in the sun, minimizing exposure between the hours of 10:00 am–4:00 pm. • Encourage use of sunscreen with SPF 15, reapplying every two hours and fully covering skin with clothing and hats. • Discourage use of tanning booths. • Starting at age 20, perform skin exams every three years. Perform skin exams more frequently at clinician discretion based on risk factors, including: age; personal history of skin cancer or repeated sunburns early in life; family history; certain types and a large number of moles; light skin, light hair, and light eye color; sun-sensitive skin; and chronic exposure to the sun. • Educate about skin cancer.

Physical Activity

0–1 (Infancy)	1–4 (Early Childhood)	5–21 (Middle Childhood–Young Adult)
<ul style="list-style-type: none"> Encourage opportunities for physical activity. 	<ul style="list-style-type: none"> Ask about physical activities. Encourage opportunities for physical activity each day. Encourage parents to be role models for physical activity. 	<ul style="list-style-type: none"> Ask about frequency, type, and duration of physical activities. Encourage daily physical activity (<i>at least one hour a day</i>). Counsel on the importance of regular moderate-to-vigorous physical activity as a way to prevent illness in adult life. Encourage parents to be role models for physical activity.

Oral Care

0–1 (Infancy)	1–21 (Early Childhood–Young Adult)
<ul style="list-style-type: none"> Counsel against bottle propping when feeding infants and babies. Counsel against bottles to bed. Assess oral health at each visit and need for fluoride supplementation at 6 months based upon availability in water supply and dietary source of fluoride. Encourage drinking from a cup by the first birthday and discourage the use of trainer or “sippy” cups. 	<ul style="list-style-type: none"> Assess oral health at each visit and need for fluoride supplementation up to age 14 based on availability in water supply and dietary source of fluoride. Counsel on good dental hygiene habits. Encourage dental visits starting no later than the third birthday and every six months thereafter. For children at risk, encourage dental visits starting 6 months after eruption of first tooth or no later than the first birthday. Counsel on use of mouth guards when playing sports.

Sleep Habits

0–1 (Infancy)	1–21 (Early Childhood– Young Adult)
<ul style="list-style-type: none"> Advise that infants be placed on their backs when putting them to sleep until at least 6 months of age. Advise that side positioning is no longer considered a safe alternative. Encourage parents to discuss safe sleep practices with daycare providers. 	<ul style="list-style-type: none"> Ask about sleep habits including chronic snoring. Encourage proper sleep amounts by age group: <ul style="list-style-type: none"> 3–11 months: 14–15 hours 1–3 years: 12–14 hours 3–5 years: 11–13 hours 5–12 years: 10–11 hours Teen: 9.25 hours. Discourage placement of computers and TVs in bedrooms. Encourage parents to discuss safe sleep practices for young children with daycare providers.

Safety/Injury and Violence Prevention

0–1 (Infancy)	1–4 (Early Childhood)	5–21 (Middle Childhood–Young Adult)
<ul style="list-style-type: none"> • Provide annual age-specific safety and injury prevention counseling. For example: <ul style="list-style-type: none"> • Shaken-baby syndrome; • Bath safety; • Smoke and carbon monoxide detectors in the home; • Childproofing the home (<i>including use of window guards</i>); • First-aid knowledge; and • Poison Control Hotline: 1-800-222-1222. 	<ul style="list-style-type: none"> • Provide annual age-specific safety and injury prevention counseling. For example: <ul style="list-style-type: none"> • Water, bike, and sports safety (<i>including use of helmets</i>); • Neighborhood safety (<i>pedestrian, playground, strangers</i>); • Lock-up of matches, guns, and poisons (Poison Control Hotline: 1-800-222-1222); • Emphasize gun safety in the home and/or when visiting friends’ homes. Counsel about the dangers of having a gun, especially a handgun, in the home. 	<ul style="list-style-type: none"> • Provide annual age-specific injury prevention and safety counseling. For example: <ul style="list-style-type: none"> • Water, bike, and sports safety (<i>including use of helmets; mouth guards, and protective sports gear</i>); • Neighborhood and after-school safety (<i>strangers, home alone, job</i>); and • Potential risks of tattooing or body piercing; • Assess need for violence-prevention counseling; • Ask adolescents about partner violence; and • Emphasize gun safety in the home and/or when visiting friends’ homes. Counsel about the dangers of having a gun, especially a handgun, in the home.

Media Exposure

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–17 (Adolescence)	18–21 (Young Adult)
<ul style="list-style-type: none"> • Discourage television viewing for children under 2 years. 	<ul style="list-style-type: none"> • Discourage television viewing for children under 2 years. • Ask about frequency of TV/video watching. Counsel on impact of TV, computer games, and videos as a risk factor for being overweight, low school performance, and violent behavior. Encourage limiting of screen time (<i>TV, computer</i>) viewing to one hour a day. • Discourage placement of computers and TVs in bedrooms. 		<ul style="list-style-type: none"> • Ask about frequency of TV/video watching and computer use (<i>including instant messaging, chat rooms, and email</i>). • Counsel on impact of TV/video watching and computer use (including instant messaging, chat rooms, and email), as a risk factor for low school performance, being overweight, and violent behavior. • Encourage limiting of screen time (<i>TV, computer</i>) viewing to two hours a day. • Counsel on impact of advertising on tobacco and alcohol use. • Discourage placement of computers and TVs in bedrooms. • Discourage use of loud ear phones. 	

Alcohol/Substance Abuse

0–10 (Infancy–Mid. Childhood)	11–21 (Adolescence–Young Adult)
<ul style="list-style-type: none"> • Ask parents about family history of alcoholism and substance abuse and attitudes about alcohol use. • Counsel parents about the effects of alcohol and substance abuse. • Advise pregnant women to stop drinking alcohol during pregnancy and of the potential harmful effects of drug use on fetal development. • For information, resources, or treatment referral, contact the Massachusetts Substance Abuse Information and Education Helpline at 1-800-327-5050. 	
	<ul style="list-style-type: none"> • Ask about use of alcohol, drugs, and other abusable substances (e.g., inhalants) and about use of over-the-counter or prescription drugs for nonmedical purposes, including anabolic steroids. Consider using a screening tool, such as the CRAFFT. • Counsel about the effects of alcohol/substance abuse. • Counsel not to drink and drive or ride with someone who is under the influence of alcohol or other substance.

Tobacco

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Mid. Childhood)	11–21 (Adolescence–Young Adult)
<ul style="list-style-type: none"> • Counsel parents who smoke on the potentially harmful effects of smoking on fetal and child health and on the benefits of maintaining a smoke-free home. Refer parents to a smoking-cessation program or to their own PCP for help in quitting. See Quitworks at www.quitworks.org. 			
		<ul style="list-style-type: none"> • Counsel patients not to begin smoking. 	<ul style="list-style-type: none"> • Counsel patients not to begin smoking. • Advise tobacco users to quit, especially patients who are pregnant. • Assess readiness to quit. • Assist tobacco users in quitting, especially patients who are pregnant. Provide brief counseling. Consider use of smoking cessation pharmacotherapy for adolescents. Offer to enroll patients 18 and older for Quitworks services. • Arrange follow-up.

Family Violence/Abuse

0–21 (Infancy–Young Adult)
<ul style="list-style-type: none"> • Be alert to signs of family violence, including: facial/body bruising; depression; anxiety; failure to keep medical appointments; reluctance to answer questions about discipline in the home; or frequent office visits for complaints not supported by medical evaluation of the child. • Be alert to signs of child physical/sexual abuse. Refer to <i>Identifying and Responding to Domestic Violence: Consensus Recommendations for Child and Adolescent Health</i> produced by the Family Violence Prevention Fund and endorsed by American Academy of Pediatrics and American Academy of Family Physicians and other physical/sexual abuse resource publications. • For more information or help, contact the National Domestic Violence Hotline at 1-800-799-SAFE (<i>live phone lines 24/7</i>) or Childhelp’s National Child Abuse Hotline at 1-800-4-A-CHILD (1-800-422-4453). • For adolescents, counsel on safe and appropriate dating and relationships as well as strategies for avoiding or resolving conflicts with friends and peers. • Ask about relationships with peers and bullying.

Motor Vehicle Injury Prevention

0–1 (Infancy)	1–10 (Early–Middle Childhood)	11–21 (Adolescence–Young Adult)
<ul style="list-style-type: none"> • Ask about use of safety belts and child safety seats. Remind parents of the MA child passenger safety law. Counsel that children should remain in rear-facing safety seats until they weigh at least 20 lbs. and are 1 year of age. Infants who weigh 20 lbs. before age 1 year should ride rear-facing in a convertible seat or infant seat approved for higher weights until age 1 year. To locate a child safety seat inspection station call 1-866-SEAT-CHECK or log on to www.seatcheck.org. • Inform about danger of front-seat airbags for children under the age of 12 years. • Counsel parents against driving under the influence of alcohol/drugs. 	<ul style="list-style-type: none"> • Ask about use of safety belts and child safety seats. Remind parents of the MA child passenger safety law. Children must be in an appropriate child passenger safety restraint: forward-facing safety seat until they weigh 40 lbs; booster seat until they are 4’9” tall or at least 8 years of age. To locate a child safety seat inspection station call 1-866-SEAT-CHECK or log onto www.seatcheck.org. • Inform about danger of front-seat airbags for children under the age of 12 years. • Counsel parents against driving under the influence of alcohol/drugs. 	<ul style="list-style-type: none"> • Ask about the use of safety belts and motorcycle helmets. • Inform about danger of front-seat airbags for children under the age of 12 years. • Counsel against driving under the influence of alcohol/drugs or getting in a car with someone under the influence of alcohol/drugs. • Counsel against excessive speed and other risk-taking behaviors while driving, such as cell-phone use.