

Pediatric Routine Preventive Care Guidelines

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. If these practice recommendations are inconsistent with any applicable laws or regulations, such laws or regulations take precedence.

PERIODIC HEALTH EVALUATION – At Every Age

1. Initial/Interval History and Physical Exam

2. Age-Appropriate 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 – social integration and peer relations, including school performance and family issues;
- Ask about educational day care arrangements for infants, toddlers, and preschoolers, and school and activities for older children.

3. Assessment of Immunization Status and Administration of Needed Immunizations

- Refer to [Massachusetts Department of Public Health \(DPH\) 2014 Childhood Immunization Guidelines](#).

4. Assessment of Medications and Herbal Remedies

5. Behavioral Health

- At age 0–6 months, ask about parental postpartum depression or history of prenatal depression.
- Refer to primary care provider or mental health professional if screened positive.
- Assess age-appropriate behavioral health, including aggression, depression, anxiety, and risk-taking behavior.
- At provider discretion, use behavioral health screening tools. See the [MassHealth-Approved Screening Tools](#) for examples.
- 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. Visit www.MCPAP.org to enroll.
- For more information or support for families with child and adolescent behavioral health issues, visit the Parent/Professional Advocacy League's website at <http://ppal.net> or call 866-815-8122.

PERIODIC HEALTH EVALUATION – Frequency

0–1 (Infancy)	1–4 (Early Childhood)	5–10 (Middle Childhood)	11–17 (Adolescence)	18–21 (Young Adult)
• Ages 1–2 weeks; 1, 2, 4, 6, 9, and 12 months • Assess breastfeeding infants between 2 and 5 days of age.	• Ages 15, 18, and 24 months; 3 and 4 years	• Annually	• Annually	• Annually

RECOMMENDED SCREENING AND ROUTINE LABS

Anemia: Hb/Hct

0-1 (Infancy)	1-10 (Early Childhood–Middle Childhood)	11-21 (Adolescence–Young Adult)
- Once between ages 9 and 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).	Conduct assessment, including dietary iron sufficiency, at clinician discretion.	- Starting at age 12, screen all nonpregnant female adolescents for anemia every 5–10 years during well visit. - Annually screen for anemia if at high risk (e.g., extensive menstrual or other blood loss, low iron intake or previous diagnosis of iron-deficiency anemia).

Blood Pressure

0-1 (Infancy)	1-4 (Early Childhood)	5-21 (Middle Childhood–Young Adult)
Selective screening for high blood pressure at every well visit	- Selective screening for high blood pressure through age 2.5 - At every well visit starting at age 3 years	At every well visit

Cholesterol

0-1 (Infancy)	1-4 (Early Childhood)	5-10 (Middle Childhood)	11-21 (Adolescence–Young Adult)
N/A	Screen if child has a family history of premature cardiovascular disease (CVD), parent with known lipid disorder and/or is overweight/obese, or if child has risk factors or high-risk conditions.	- Screen if child has a family history of premature cardiovascular disease (CVD), parent with known lipid disorder and/or is overweight/obese, or if child has risk factors or high-risk conditions. - Starting at age 9, screen child at least once if not previously screened.	Screen once if not screened previously, or if family history is newly positive.

Growth Assessment

0-1 (Infancy)	1-21 (Early Childhood-Young Adult)
Assess growth parameters using length, weight, and head circumference.	- Assess growth parameters using length/height and weight; include head circumference until 2 years of age. - Screen annually for healthy weight. Plot value on 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 $\geq$ 85th percentile or with significant increase in BMI percentile. - Screen annually for eating disorders starting in middle childhood. Ask about body image and dieting patterns.

Lead

0-10 (Infancy-Middle Childhood)	11-21 (Adolescence-Young Adult)
Massachusetts law requires lead screening according to the schedule below: - Initial screening between 9 and 12 months of age; - Annually at ages 2 and 3; - At age 4 if child lives in a city/town with high risk for childhood lead poisoning; and - Upon entry to kindergarten if not previously screened. For information from the Massachusetts Department of Public Health refer to DPH Childhood Lead Poisoning Prevention Program.	N/A

Newborn Metabolic Screening

0-1 (Infancy)	1-21 (Early Childhood-Young Adult)
Verify that newborn has received all state-required newborn metabolic screenings, especially if infant was not born in a hospital setting or born outside Massachusetts. For more information, visit www.umassmed.edu/nbs/index.aspx.	N/A

Autism

0-1 (Infancy)	1-4 (Early Childhood)	5-21 (Middle Childhood-Young Adult)
N/A	Screen at 18 and 24 months using a validated assessment tool such as M-CHAT or SWYC.	Screen at clinician discretion.

SENSORY SCREENING

Hearing

0-1 (Infancy)	1-17 (Early Childhood-Adolescence)	18-21 (Young Adult)
- Assess newborn before hospital discharge or by age 1 month. - Conduct subjective assessment at all other routine checkups.	- Conduct objective hearing screening at ages 4, 5, 6, 8, and 10 years. Conduct at older ages at clinician discretion. If test is performed in another setting, such as a school, it does not need to be repeated by the provider, but findings should be documented in child's medical record. - If a language delay or a risk of hearing loss exists, conduct audiologic monitoring every 6 months until age 3 years. - Make subjective assessment at all other routine checkups.	N/A

Vision/Eye Care

0-1 (Infancy)	1-17 (Early Childhood-Adolescence)	18-21 (Young Adult)
- Assess newborn before hospital discharge or by age 2 weeks: corneal light reflex and red reflex. - Evaluate fixation preference, alignment, and eye disease by age 6 months.	- Visual acuity test at ages 3, 4, 5, 6, 8, 10, 12, and 15 years. Document in medical record if test is performed in another setting such as a school. - Screen for strabismus between ages 3 and 5 years. - Child must be screened at entry to kindergarten if not screened during the prior year per the Massachusetts Preschool Vision Screening Protocol.	Visual acuity test at age 18. Document in medical record if test is performed in another setting such as a school.

INFECTIOUS DISEASE SCREENING

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

0–10 (Infancy–Middle Childhood)	11–21 (Adolescence–Young Adult)
N/A	<i>Chlamydia and gonorrhea</i> - Screen all sexually active female patients annually. Consider urine-based screening for female patients when a pelvic examination is not performed. <i>HPV</i> - Recommend vaccination and counsel all patients regarding schedule of HPV vaccine. <i>Syphilis</i> - 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. <i>General counseling regarding safe and healthy sexual behaviors</i> - Obtain sexual history and ask annually about involvement in sexual behaviors with sensitivity to sexual orientation. - Counsel about responsible sexual behaviors. - 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

0–10 (Infancy–Middle Childhood)	11–21 (Adolescence–Young Adult)
N/A	- Counsel about risk factors for HIV infection. - Confidentially screen all patients for HIV once between ages 16 and 18. - Routine screening of all patients at increased risk. Risk factors include injection-drug users and their sex partners, persons who exchange sex for money or drugs, sex partners of HIV-infected persons, and men who have had sex with men or heterosexual persons who themselves or whose sex partners have had more than one sex partner since their most recent HIV test. - Note that the 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)	1-10 (Early Childhood–Middle Childhood)	11-21 (Adolescence–Young Adult)
N/A	Perform anti-hepatitis C virus test after age 12 months in children with hepatitis C virus-infected mothers.	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 (if not previously tested); long-term kidney dialysis; evidence of liver disease; a tattoo or body piercing by non-sterile needle; and risky sexual practices (not using condoms and multiple sex partners).

Tuberculosis (TB)

0-21 (Infancy–Young Adult)
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 (e.g., shelters, migrant farm camps, prisons); 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

0-17 (Infancy–Adolescence)	18-21 (Young Adult)
N/A	Starting at age 20, perform clinical breast exam every 1-2 years and counsel on the benefits and limitations of breast self-exam.

Pelvic Exam/Pap Test

0-17 (Infancy–Middle Adolescence)	18-21 (Adolescence–Young Adult)
N/A	Initiate pelvic exam and Pap test at age 21, or earlier, based on risk factors, at clinician discretion.

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)
• 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 400 IU of oral vitamin D drops daily beginning soon after birth 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. • Refer eligible families to WIC for help with supplemental nutritional or other needs.	• 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. • Refer eligible families to WIC for help with supplemental nutritional or other needs.	• Ask 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. • Counsel against sugar-sweetened and caffeinated drinks. • Advise patients at risk of becoming pregnant to take a daily multivitamin containing 0.4 mg folate. • Refer eligible families to WIC for help with supplemental nutritional or other needs.

Sun Safety

0–10 (Infancy–Middle Childhood)	11–21 (Adolescence–Young Adult)
• Advise that infants younger than 6 months of age should be kept out of direct sunlight. • Encourage limits of time in the sun, minimizing exposure between 10 a.m.–4 p.m. • Encourage use of sunscreen with at least a minimum of SPF 15, reapplying every two hours and fully covering skin with clothing and hats.	• Encourage limiting time in the sun, minimizing exposure between 10 a.m. – 4 p.m. • Encourage use of sunscreen with at least a minimum SPF 15, reapplying every two hours and fully covering skin with clothing and hats. • Discourage use of indoor tanning. • 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)
Encourage opportunities for play time and other physical activity.	- Ask about play time and other physical activities. - Encourage opportunities for physical activity each day. - Encourage parents to be role models for physical activity.	- Ask about frequency, type, and duration of play time and other physical activities. - Encourage daily physical activity (at least one hour a day). - 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)
- 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 brushing with a soft toothbrush/cloth and water at age 6 months. - Encourage weaning from bottle and drinking from a cup by the first birthday. - Apply fluoride varnish to primary teeth of all infants and children who may be at risk for developing dental caries.	- 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, including brushing twice daily. Encourage dental visits beginning at 12 months or after eruption of first tooth. - Counsel on use of mouth guards when playing sports.

Sleep Habits

0-1 (Infancy)	1-21 (Early Childhood-Young Adult)
- 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. - Counsel parents on safe sleeping practices, including ABC guidelines (Alone, on Back, in a Crib). - Encourage parents to discuss safe sleep practices with daycare providers. - Encourage proper sleep amounts (14-15 hours) for age 3-11 months.	- Ask about sleep habits including chronic snoring. - Encourage proper sleep amounts by age group: 1-3 years: 12-14 hours 3-5 years: 11-13 hours 5-12 years: 10-11 hours - Teen: 8.25-9.25 hours - Discourage placement of computers and TVs in bedrooms. - Encourage parents to talk with daycare providers about safe sleep practices for their children.

Safety/Injury and Violence Prevention

0-1 (Infancy)	1-4 (Early Childhood)	5-21 (Middle Childhood-Young Adult)
Provide annual age-specific safety and injury-prevention counseling. For example • Shaken-baby syndrome; • Bath and water temperature safety; • Smoke and carbon monoxide detectors in the home; • Childproofing the home (including use of window guards); • Falls; • First-aid and CPR knowledge; and • Poison Control Hotline: 1-800-222-1222.	Provide annual age-specific safety and injury prevention counseling. For example • Water, bike, and sports safety (including use of helmets); • Neighborhood safety (pedestrian, playground, strangers); • Lock-up of matches, guns, and poisons (Poison Control Hotline: 1-800-222-1222); and • Emphasis on 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.	• Provide annual age-specific injury prevention and safety counseling. For example • Water, bike, and sports safety (including use of helmets, mouth guards, and protective sports gear); • Neighborhood and after-school safety (strangers, home alone, job); • Relationships with peers and bullying; and • Potential risks of tattooing or body piercing. • Assess need for violence-prevention counseling. • Ask adolescents about partner violence. • 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-Middle Childhood)	1-4 (Early Childhood)	5-21 (Middle Childhood-Young Adult)
• Discourage screen time for children under 2 years.	• Discourage screen time for children under 2 years, and limit screen time to one hour per day for 2-4 year olds. • Ask about frequency of age-appropriate screen time, including TV, computer, and mobile electronic devices (e.g., handheld video games, cell phones). • Discourage placement of computer and TV in bedroom. • Counsel on impact of screen time as a risk factor for overweight status, low school performance, and violent behavior.	• Ask about frequency of age-appropriate screen time, including TV, computer, and mobile electronic devices (e.g., handheld video games, cell phones). • Counsel on impact of screen time as a risk factor for low school performance, overweight status, and violent behavior. • Encourage discussions on internet safety (e.g., behavior on social media). • Encourage limiting screen time viewing to two hours a day. • Discourage placement of computer and TV in bedroom. • Discuss limits on text messaging and cell phone use (e.g., no phone in bedroom close to bedtime). • Discourage listening to loud-frequency sound on earphones.

Alcohol/Substance Use

0-10 (Infancy–Middle Childhood)	11-21 (Adolescence–Young Adult)
• Ask parents about family history, including all intake of alcohol, substance use, and attitudes about alcohol use. • Counsel parents about the potential harmful effects of alcohol and substance use. • Advise pregnant women against all intake of alcohol during pregnancy and of the 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.	
	• Ask about use of alcohol, drugs, and other substances (e.g., inhalants) and about use of over-the-counter or prescription drugs for nonmedical purposes, including anabolic steroids or prescription narcotics. Consider using a screening tool such as the CRAFFT. • Counsel about the potential harmful effects of alcohol and substance use. • Counsel not to drive under the influence of drugs or alcohol or ride with someone who is under the influence of alcohol or other substance. • Ages 18-21 only: Screen for alcohol misuse by using a validated assessment tool such as CRAFFT, DAST, or AuditC. Provide brief behavioral counseling to people engaged in risky or hazardous behavior.

Tobacco

0–4 (Infancy–Early Childhood)	5–10 (Middle Childhood)	11–21 (Adolescence–Young Adult)
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 PCP for help in quitting. Visit Quitworks at www.quitworks.org.	- 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 PCP for help in quitting. Visit Quitworks at www.quitworks.org. - Counsel patients not to begin smoking. Provide interventions, such as education and brief counseling, to prevent initiation of smoking.	- Counsel parents who smoke on the potentially harmful effects of smoking and the use of tobacco products 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 PCP for help in quitting. Visit Quitworks at www.quitworks.org. - Counsel patients not to start using tobacco or other substances, such as e-cigarettes, smokeless tobacco, cigars, or herbal substances. - 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 (patients younger than 18 will need consent from guardian to enroll) for Quitworks services. - Arrange follow-up.

Family Violence/Abuse

0–21 (Infancy–Young Adult)
- Screen for 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. - Screen for 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 the American Academy of Pediatrics and American Academy of Family Physicians. - 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)
• Ask about use of safety belts and child safety seats. • Counsel that children should remain in rear-facing safety seats until they are at least 2 years old or until they reach either the height or weight limit of their rear-facing child safety seat. See the Massachusetts Executive Office of Public Safety and Security Child Passenger Safety website for more information. • Inform about danger of front-seat airbags for children aged 11 and younger. • Counsel parents against driving under the influence of alcohol/drugs.	• Ask about use of safety belts and child safety seats. • Counsel that children should remain in rear-facing safety seats until they are at least 2 years old or until they reach either the height or weight limit of their rear-facing, child safety seat. Children must be in an appropriate child passenger safety restraint and forward-facing safety seat until they weigh 40 lbs; booster seat until they are 4'9" tall or at least 8 years of age. See the Massachusetts Executive Office of Public Safety and Security Child Passenger Safety website for more information. • Inform about danger of front-seat airbags for children aged 11 and younger. • Counsel parents against driving under the influence of alcohol/drugs.	• Counsel parents that children aged 12 and younger who have outgrown their booster seat should always use a seatbelt and ride in the back seat. • Ask about the use of safety belts and motorcycle helmets. • Inform about danger of front-seat airbags for children aged 11 and younger. • 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. • Inform that cell phone use (including texting) while driving is prohibited by Massachusetts law for teens aged 17 and younger, and texting while driving is prohibited by Massachusetts law at all ages.