Update to Pediatric Preventive Care

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UNECDM
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Disclosure

I have no actual or potential conflict of interest in relation to this program or presentation.
Objectives

- To review the updated 2015 recommendations from the American Academy of Pediatrics
- To provide the tools and references for various pediatric screenings.
- To promote a forum for providers to share office procedures and tools for preventive care.
Well-Child Care

- Well care is one of the hallmarks of a family-centered medical home
- Incorporates all things important to the health of a child
- Time to review necessary vaccinations, check on growth, development, and behavior
- Allows time for sharing information that is pertinent to child’s well being
2015 Recommendations

- Consensus by the American Academy of Pediatrics (AAP) and Bright Futures
- Emphasizes continuity of care and comprehensive health supervision
- Not exclusive
- Recommendations

- Published as a Policy Statement in the journal PEDIATRICS Volume 136, number 3, September 2015
# 2015 Recommendations for Preventive Pediatric Health Care

## Bright Futures

These guidelines represent consensus by the American Academy of Pediatrics (AAP) and Bright Futures. The AAP continues to emphasize the great importance of continuity of care in comprehensive health supervision and the need to avoid fragmentation of care.

Refer to the specific guidelines by age as listed in Bright Futures guidelines (Hagan JF, Shaw JS, Duncan PM, et al. Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents. 2nd ed. Elkins Village, IL: American Academy of Pediatrics; 2000).

The recommendations in this statement do not indicate an exclusive course of treatment or indicate medical care. Variations, taking into account individual circumstances, may be appropriate.

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### Key

- **A** = to be performed
- **H** = risk assessment to be performed with appropriate action to follow if positive
- **D** = differential diagnosis
- **S** = screening
- **E** = education
- **R** = referral
- **C** = counseling
- **P** = prescription
- **M** = medication
- **R** = records
- **F** = follow-up
- **T** = teaching
- **H** = health
- **L** = long-term
- **I** = immediate
- **N** = normal
- **A** = abnormal
- **S** = significant

- **N** = not recommended

### Ages

- **Preterm**
- **Term**
- **By age in months**
- **3 mos**
- **6 mos**
- **9 mos**
- **12 mos**
- **15 mos**
- **18 mos**
- **24 mos**
- **36 mos**
- **48 mos**
- **60 mos**
- **72 mos**
- **84 mos**
- **96 mos**
- **108 mos**
- **120 mos**

### Ages

- **Infancy**
- **Early Childhood**
- **Middle Childhood**
- **Adolescence**

### Measurements

- **Height**
- **Weight**
- **Head Circumference**
- **Body Mass Index**

### Screening

- **Urinalysis**
- **Blood Pressure**
- **Sensitivity to Anesthesia**
- **Screening for Glaucoma**
- **Pylori Infection Testing**
- **Cystic Fibrosis Screening**
- **Hepatitis C Infection Testing**
- **HIV Infection Testing**

### Educational/Behavioral Assessment

- **Autism Screening**
- **ADHD Screening**

### Preventive Services

- **Immunizations**
- **Antihypertensive Medication Use Assessment**
- **Depression Screening**
- **Drug Use Assessment**
- **Vision Screening**
- **Hearing Screening**
- **Osteopenia Screening**
- **Oral Health**
- **Nutritional Status**

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Schedule

http://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf
Summary of Changes Made to the 2015 Bright Futures/AAP Recommendations for Preventive Pediatric Health Care (Periodicity Schedule)

This schedule reflects changes approved in May 2015 and published in September 2015. For updates, visit www.aap.org/periodicityschedule

Changes Made May 2015
- Oral Health- a subheading has been added for fluoride varnish, with a recommendation from 6 months through 5 years.

Changes Made March 2014
- Changes to Developmental/Behavioral Assessment
- Alcohol and Drug Use Assessment- information regarding a recommended screening tool (CRAFT) was added.
- Depression screening for depression at ages 11 through 21 has been added, along with suggested screening tools.

Changes to Procedures
- Dyslipidemia screening- an additional screening between 9 and 11 years of age has been added. The reference has been updated to the AAP-endorsed National Heart Blood and Lung Institute policy (http://www.nhlbi.nih.gov/guidelines/ped/index.htm).
- Hematocrit or hemoglobin- a risk assessment has been added at 15 and 30 months. The reference has been updated to the current AAP policy (http://pediatrics.aappublications.org/content/123/3/560.full).
- STI/HIV screening- a screen for HIV has been added between 16 and 18 years. Information on screening adolescents for HIV has been added in the footnotes. STI screening now references recommendations made in the AAP Red Book. This category was previously titled "STI Screening."
- Cervical dysplasia- adolescents should no longer be routinely screened for cervical dysplasia until age 21. Indications for pelvic exams before age 21 are noted in the 2010 AAP statement "Gynecologic Examination for Adolescents in the Pediatric Office Setting" (http://pediatrics.aappublications.org/content/120/5/863.full).
- Critical Congenital Heart Disease- screening for critical congenital heart disease using pulse oximetry should be performed in newborns, after 24 hours of age, before discharge from the hospital, per the 2011 AAP statement, "Endorsement of Health and Human Services Recommendation for Pulse Oximetry Screening for Critical Congenital Heart Disease" (http://pediatrics.aappublications.org/content/121/1/90.full).

Footnotes

Footnote 25 wording has been edited and also includes reference to the 2014 clinical report, "Fluoride Use in Caries Prevention in the Primary Care Setting" (http://pediatrics.aappublications.org/content/134/4/622.full) and 2014 policy statement, "Maintaining and Improving the Oral Health of Young Children" (http://pediatrics.aappublications.org/content/134/4/1224.full).

Footnote 26 has been added to the new fluoride varnish subheading: see US Preventive Services Task Force recommendations (http://www.uspreventiveservicestaskforce.org/uspstf/). Once teeth are present, fluoride varnish may be applied to all children every 3 to 6 months in the primary care or dental office. Indications for fluoride use are noted in the 2014 AAP clinical report "Fluoride Use in Caries Prevention in the Primary Care Setting" (http://pediatrics.aappublications.org/content/134/4/622.full).

For several recommendations, the AAP Policy has been updated since 2007, but there have been no changes in the timing of recommendations on the Periodicity Schedule. Those include the following:


Footnote 4- Breastfeeding and the Use of Human Milk (2012): http://pediatrics.aappublications.org/content/129/3/567.full and Hospital Stay for Healthy Term Newborns (2010): http://pediatrics.aappublications.org/content/125/2/405.full

Footnote 8- Year 2007 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs (2007); http://pediatrics.aappublications.org/content/119/2/484.full

Footnote 9- Identification and Evaluation of Children With Autism Spectrum Disorders (2007); http://pediatrics.aappublications.org/content/120/9/1163.full

Footnote 17- Immunization Schedule (2014); http://aapprechebook.aappublications.org/content/2/3/Schedule0-5ys.pdf, http://aapprechebook.aappublications.org/content/2/5/Schedule7-11yrs.pdf, and http://aapprechebook.aappublications.org/content/2/6/ScheduleCatchup.pdf

Footnote 19- Centers for Disease Control and Prevention Advisory Committee on Childhood Lead Poisoning Prevention statement "Low Level Lead Exposure Harms Children; A Renewed Call for Primary Prevention" (2012); http://www.cdc.gov/nceh/lead/ACCPH/Final_Document_050712.pdf


For consistency, the title of "Tuberculosis Testing: The Role of "Newborn Metabolite/Hemoglobin Screening" has been changed to "Newborn Blood Screening."
Every Visit

- History
- Measurements
  - Weight and height/length
  - Head Circumference (newborn-24 months)
  - Weight for length (newborn -18 months)
  - BMI (24 months-21 years)
  - Blood Pressure (3 years-21 years)*
- Physical Exam
- Anticipatory Guidance
- Psychosocial/Behavioral/Developmental Assessment
Sensory Screening

- Vision
  - 3yr, 4yr, 5yr, 6yr, 8yr, 10yr, 12yr, 15yr, 18yr
  - Ages 3-5
    - HOTV, Lea Chart, Snellen Chart
  - Older-Snellen Chart

- Hearing
  - Newborn, 4yr, 5yr, 6yr, 8yr, 10yr
  - OAE, ABR, Behavioral Pure Tone Audiometry, Impedance testing
Developmental/Behavioral Assessment

- **Developmental Screening**
  - 9 months, 18 months, 30 months*
  - CPT Code 96110

- **Ages & Stages Questionnaires (ASQ)**
  - Parent completed, 10-15 minutes
  - Assesses communication, gross motor, problem-solving, and personal adaptive skills
  - Ages 2 months through 5 years

- [http://pediatrics.aappublications.org/content/118/1/405.full](http://pediatrics.aappublications.org/content/118/1/405.full)
1. Developmental concerns should be included as one of several health topics addressed at each pediatric preventive care visit throughout the first 5 years of life.  

2. **Developmental surveillance** is a flexible, longitudinal, continuous, and cumulative process whereby knowledgeable health care professionals identify children who may have developmental problems. There are 5 components of developmental surveillance: eliciting and attending to the parents' concerns about their child's development, documenting and maintaining a developmental history, making accurate observations of the child, identifying the risk and protective factors, and maintaining an accurate record and documenting the process and findings.

3. The concerns of both parents and child health professionals should be included in determining whether surveillance suggests the child may be at risk of developmental delay. If either parent or the child health professional expresses concern about the child's development, a developmental screening to address the concern specifically should be conducted.

4. All children should receive developmental screening using a standardized test. In the absence of established risk factors or parental or provider concerns, a general developmental screen is recommended at the 9-, 18-, and 30-month visits. Additionally, autism-specific screening is recommended for all children at the 18-month visit.

5a and 5b. **Developmental screening** is the administration of a brief standardized tool aiding the identification of children at risk of a developmental disorder. Developmental screening that targets the area of concern is indicated whenever a problem is identified during developmental surveillance.

6a and 6b. When the results of the periodic screening tool are normal, the child health professional can inform the parents and continue with other aspects of the preventive visit. When a screening tool is administered as a result of concerns about development, an early return visit to provide additional developmental surveillance should be scheduled even if the screening tool results do not indicate a risk of delay.

7-8. If screening results are concerning, the child should be scheduled for developmental and medical evaluations. **Developmental evaluation** is aimed at identifying the specific developmental disorder or disorders affecting the child. In addition to the developmental evaluation, a **medical diagnostic evaluation** to identify an underlying etiology should be undertaken. **Early developmental intervention/early childhood services** can be particularly valuable when a child is first identified to be at high risk of delayed development, because these programs often provide evaluation services and can offer other services to the child and family even before an evaluation is complete. Establishing an effective and efficient partnership with early childhood professionals is an important component of successful care coordination for children.

9. If a developmental disorder is identified, the child should be identified as a child with special health care needs and chronic condition management should be initiated (see No. 10 below). If a developmental disorder is not identified through medical and developmental evaluation, the child should be scheduled for an early return visit for further surveillance. More frequent visits, with particular attention paid to areas of concern, will allow the child to be promptly referred for further evaluation if any further evidence of delayed development or a specific disorder emerges.

10. When a child is discovered to have a significant developmental disorder, that child becomes a child with special health care needs, even if that child does not have a specific disease etiology identified. Such a child should be identified by the medical home for appropriate chronic condition management and regular monitoring and entered into the practice's children and youth with special health care needs registry.
Developmental/Behavioral Assessment

- **Autism Screening**
  - 18 months and 24 months
  - CPT Code 96110

- **M-CHAT-R/F**
  - [https://www.m-chat.org/_references/mchatdotorg.pdf](https://www.m-chat.org/_references/mchatdotorg.pdf)
  - Parent completed, 5-10 minutes

- [http://pediatrics.aappublications.org/content/120/5/1183.full](http://pediatrics.aappublications.org/content/120/5/1183.full)
Surveillance and Screening Algorithm: Autism Spectrum Disorders (ASDs)

1a - Developmental concerns, including those also of social or verbal deficits, should be included as one of several health topics addressed at each pediatric preventive care visit through the first 5 years of life. (Go to step 2)

1b - If the parents request, or when a concern is identified at a previous visit, a child may be scheduled for a “problem targeted” clinic visit because of concerns about ASD. Parent concerns may be based on observed behaviors, social or language deficits, issues raised by other caregivers, or heightened anxiety produced by ASD coverage in the media. (Go to step 2)

2 - Developmental surveillance is a flexible, longitudinal, continuous, and cumulative process whereby health care professionals identify children who may have developmental problems. There are 5 components of developmental surveillance: eliciting and affirming to the parents’ concerns about their child’s development, documenting and maintaining a developmental history, making accurate observations of the child, identifying the risk and protective factors, and maintaining an accurate record and documenting the process and findings. The concerns of parents, other caregivers, and pediatricians should be included in determining whether surveillance suggests that the child may be at risk of an ASD. In addition, younger siblings of children with an ASD should also be considered at risk, because they are 50 times more likely to develop symptoms of an ASD than children without a sibling with an ASD. Scoring risk factors will help determine the next steps. (Go to step 3)

3 - Scoring risk factors:

- If the child has only 1 risk factor, either a sibling with ASD or the concern of a parent, scoring is complete. (Go to step 4)
- If the child is <16 months, score 1. (Go to step 5)
- If the child is ≥16 months, score 2. (Go to step 6)

4 - In the absence of established risk factors and parent/provider concerns (scored), a level 1 ASD specific tool should be administered at the 18- and 24-month visits. (Go to step 5a) If this is not an 18- or 24-month visit, (Go to step 5b).

Note: To the AAP policy, “Screening Infants and Young Children With Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening: A general developmental screen is recommended at the 9-, 18-, and 24- or 30-month visits and an ASD screening is recommended at the 18-month visit. The clinical report also recommends an ASD screening at the 24-month visit to identify children who may regress after 18 months of age.

5 - In the absence of established risk factors and parent/provider concerns (scored), a level 1 ASD specific tool should be administered at 18- and 24-month visits. (Go to step 5). If this is not an 18- or 24-month visit, (Go to step 5b).

5a - Before the child’s age is <18 months, the pediatrician should use a tool that specifically addresses the clinical characteristics of ASDs, such as those that target social-communication skills. (Go to step 6a)

5b - If the child is ≥18 months, administer ASD-Specific Screening Tool. (Go to step 6b)

5c - For all children ages 18-24 months regardless of risk factors, the pediatrician should use an ASD specific screening tool. (Go to step 6c)

6 - In the absence of established risk factors and parent/provider concerns (scored), a level 1 ASD specific tool should be administered at the 18- and 24-month visits. (Go to step 6). If this is not an 18- or 24-month visit, (Go to step 6b).

6a - If the result of the ASD screening tool is negative, (Go to step 7a). When the result of the screening tool is positive, (Go to step 7b)

7a - If the child demonstrates risk but has a negative screening result, information about ASDs should be provided to parents. The pediatrician should schedule an extra visit within 1 month to address any residual ASD concerns or additional developmental behaviors concerns after a negative screening result. The child will then re-enter the “yes and no” approach is discussed. If the only risk factor is a sibling with an ASD, the pediatrician should maintain a higher index of suspicion and address ASD symptoms at each preventive care visit, and seek help up within 1 month if it is not necessary unless a parent concern subsequently arises.

7b - If the screen is positive for possible ASD in step 6a or 6b, the pediatrician should provide peer-reviewed and evidence-based interventions for ASD. Because a positive screening result does not establish a diagnosis of ASD, the child should be referred to a comprehensive ASD evaluation at early intervention or early childhood intervention services depending on child’s age and an educational evaluation. A referral diagnosis is not needed to access intervention services. These programs often provide evaluations and other services even before a medical evaluation is completed. A referral to intervention services or school age is indicated when other developmental issues concern exist, even though the ASD screening result is negative. The child should be scheduled for a follow-up visit and will then re-enter the algorithm at 16. All communication between the referral sources and the pediatrician should be coordinated.

Additional resources for parents about ASDs include “In Your One-Year-Old Communication with You!” and “Understanding Autism Spectrum Disorders.”

Chris Plauché Johnson, and Scott M. Myers Pediatrics 2007;120:1183-1215

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Alcohol and Drug Use Assessment

- Risk assessment to be performed with appropriate action to follow, if positive
- Ages 11 years through 21 years

- Screening tool: CRAFFT
  - [https://brightfutures.aap.org/Bright%20Futures%20Documents/Screening.pdf](https://brightfutures.aap.org/Bright%20Futures%20Documents/Screening.pdf)
Depression Screening

- Ages 11-21 years
- Patient Health Questionnaire (PHQ)-2 or other tools available in the GLAD-PC toolkit
- PHQ-2 Bright Futures and Instructions:
  - [https://brightfutures.aap.org/Bright%20Futures%20Documents/PHQ-2%20Questionnaire.pdf](https://brightfutures.aap.org/Bright%20Futures%20Documents/PHQ-2%20Questionnaire.pdf)
  - [https://brightfutures.aap.org/Bright%20Futures%20Documents/PHQ-2%20Instructions%20for%20Use.pdf](https://brightfutures.aap.org/Bright%20Futures%20Documents/PHQ-2%20Instructions%20for%20Use.pdf)
- PHQ-9 Modified for Teens
  - [http://www.pedpsychiatry.org/pdf/depression/PHQ-9%20Modified%20for%20Teens.pdf](http://www.pedpsychiatry.org/pdf/depression/PHQ-9%20Modified%20for%20Teens.pdf)
Depression Screening

- **PHQ-2**
  - Over the past 2 weeks, how often have you been bothered by any of the following problems?
    - Little interest or pleasure in doing things
    - Feeling down, depressed, or hopeless
  - **Answers options:**
    - 0 = not at all
    - 1 = several days
    - 2 = more than half the days
    - 3 = nearly every day

- A score of 3 points or more on this version has a sensitivity of 83% and specificity of 92% for major depressive episode
- If score is 3 or higher, evaluated using PHQ-9
Immunizations
Should be addressed at every visit
2015 Recommended Immunizations for Children from 7 Through 18 Years Old

7-10 YEARS
- Tetanus, Diphtheria, Pertussis (Tdap) Vaccine
- Meningococcal Conjugate Vaccine (MCV4) Dose 1
- Influenza (Flu) Vaccine
- Pneumococcal Vaccine
- Hepatitis A (HepA) Vaccine Series
- Hepatitis B (HepB) Vaccine Series
- Inactivated Polio Vaccine (IPV) Series
- Mumps, Rubella, Measles (MMR) Vaccine Series

10-14 YEARS
- Tetanus, Diphtheria, Pertussis (Tdap) Vaccine
- Human Papillomavirus (HPV) Vaccine (9 doses)1
- Meningococcal Conjugate Vaccine (MCV4) Dose 2
- Influenza (Flu) Vaccine
- Pneumococcal Vaccine
- Hepatitis A (HepA) Vaccine Series
- Hepatitis B (HepB) Vaccine Series
- Inactivated Polio Vaccine (IPV) Series
- Mumps, Rubella, Measles (MMR) Vaccine Series

13-18 YEARS
- Tetanus, Diphtheria, Pertussis (Tdap) Vaccine
- Human Papillomavirus (HPV) Vaccine (3 doses)1
- Meningococcal Conjugate Vaccine (MCV4) Dose 3
- Influenza (Flu) Vaccine
- Pneumococcal Vaccine
- Hepatitis A (HepA) Vaccine Series
- Hepatitis B (HepB) Vaccine Series
- Inactivated Polio Vaccine (IPV) Series
- Mumps, Rubella, Measles (MMR) Vaccine Series
- Varicella Vaccine Series

16 YEARS
- Tetanus, Diphtheria, Pertussis (Tdap) Vaccine
- Influenza (Flu) Vaccine
- Pneumococcal Vaccine
- Hepatitis A (HepA) Vaccine Series
- Hepatitis B (HepB) Vaccine Series
- Inactivated Polio Vaccine (IPV) Series
- Mumps, Rubella, Measles (MMR) Vaccine Series
- Varicella Vaccine Series

FOOTNOTES
1 Tdap vaccine is combination vaccine that is recommended at age 11 or 12 to protect against tetanus, diphtheria and pertussis. If your child has not received any or all of the DTaP vaccine series, or if you don’t know if your child has received these shots, your child needs a single dose of Tdap when they are 7-10 years old. Talk to your child’s health care provider to find out if they need additional catch-up vaccines.
2 All 11 or 12 year olds — both girls and boys — should receive 3 doses of HPV vaccine to protect against HPV-related disease. Either HPV vaccine (Cervarix® or Gardasil®) can be given to girls and young women, and only one HPV vaccine (Gardasil®) can be given to boys and young men.
3 Meningococcal conjugate vaccine (MCV4) is recommended at age 11 or 12. A booster shot is recommended at age 16. Teens who received MCV for the first time at age 13 through 15 years will need a one-time booster dose between the ages of 16 and 18 years. If your teenager missed getting the vaccine altogether, ask their health care provider about getting it now, especially if your teenager is about to move into a college dorm or military barracks.
4 Everyone 6 months of age and older — including pregnant women and teens — should get a flu vaccine every year. Children under the age of 9 years may require more than one dose. Talk to your child’s health care provider to find out if they need more than one dose.
5 Poliovirus Vaccine, Poliovirus Vaccine (IPV), and Poliovirus Vaccine (PPV23) are recommended for some children 6 through 18 years old with certain medical conditions that put them at high risk. Talk to your healthcare provider about pneumococcal vaccine and what factors may place your child at high risk for pneumococcal disease.
6 Hepatitis A vaccination is recommended for older children with certain medical conditions that place them at high risk. HepA vaccine is licensed, safe, and effective for all children of all ages. Even if your child is not at high risk, you may decide you want your child protected against HepA. Talk to your healthcare provider about HepA vaccine and what factors may place your child at high risk for HepA.

For more information, call toll free 1-800-CDC-INF (1-800-232-4636) or visit http://www.cdc.gov/vaccines/teens
Vaccine Schedules

Hep B #1 given in hospital
- 1 month - Hep B #2
- 2, 4, & 6 months - Pentacel (DTaP, IPV, Hib), Prevnar, Rotateq
- 9 months - Hep B #3
- 12 months - Prevnar #4, ActHib #4, Hep A #1
- 15 months - MMR, Varicella
- 18 months - DtaP #4, Hep A #2

Hep B #1 NOT given in hospital
- 2, & 4 months - Pediarix (DTaP, Hep B, IPV), Prevnar, Pedvax (Hib), Rotateq
- 6 months - Pediarix #3, Prevnar #3, Rotateq #3
- 12 months - Prevnar #4, Pedvax #3, Hep A #1
- 15 months - MMR, Varicella
- 18 months - DtaP #4, Hep A #2
Vaccine Schedule

- 4/5 yo – ProQuad (MMR/Varicella), Kinrix (Dtap/IPV)
- 11 yo – TdaP, Menactra #1, HPV #1
  - HPV #2 and HPV #3 at nurse visits
- 16 yo – Menactra #2
Influenza 2015-2016

Available in trivalent and quadrivalent formulation

Trivalent:
- A/California/7/2009 (H1N1)-like virus
- A/Switzerland/9715293/2013 (H3N2)-like virus
- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

Quadrivalent:
- Plus B/Brisbane/60/2008-like virus (B/Victoria lineage)
Influenza

- Indicated for all children and adolescents 6 months of age and older
- 6 months-8 years
  - 1st timers: need 2nd dose at least 4 weeks after 1st dose
  - 1 dose if had at least 2 doses prior to July 2015
Has the child received ≥2 total doses of trivalent or quadrivalent influenza vaccine before July 1, 2015*

Yes

1 dose of 2015–16 influenza vaccine

No or don’t know

2 doses† of 2015–16 influenza vaccine

* The two doses need not have been received during the same season or consecutive seasons.
† Doses should be administered ≥4 weeks apart.
Administration of IIV (inactivated influenza vaccine) for all children and adolescents with underlying medical conditions associated with an elevated risk of complications from influenza, including the following:

- Children under 2 years old
- Asthma or other chronic pulmonary diseases, including cystic fibrosis
- Hemodynamically significant cardiac disease
- Immunosuppressive disorders or therapy
- HIV infection
- Sickle cell anemia and other hemoglobinopathies
- Diseases that necessitate long-term aspirin therapy, including juvenile idiopathic arthritis or Kawasaki disease
- Chronic renal dysfunction
- Chronic metabolic disease, including diabetes mellitus
- Any condition that can compromise respiratory function or handling of secretions or can increase the risk of aspiration, such as neurodevelopmental disorders, spinal cord injuries, seizure disorders, or neuromuscular abnormalities
- Morbid obesity
- Pregnancy
- Egg allergy
Can the patient eat lightly cooked egg (e.g., scrambled egg) without reaction?  

Yes: Administer vaccine per usual protocol

No

After eating eggs or egg-containing foods, does the patient experience ONLY hives?  

Yes: Administer RIV3, if patient aged ≥18 years  
OR  
Administer IIV; observe for reaction for at least 30 minutes after vaccination.

No

After eating eggs or egg-containing foods, does the patient experience symptoms such as  
- cardiovascular changes (e.g., hypotension)  
- respiratory distress (e.g., wheezing)  
- gastrointestinal symptoms (e.g., nausea or vomiting)  
- reaction requiring epinephrine  
- reaction requiring emergency medical attention.

Yes: Administer RIV3, if patient aged ≥18 years  
OR  
If RIV3 is not available, or if patient is aged <18 years, IIV should be administered by a physician with experience in the recognition and management of severe allergic conditions. Observe for reaction for at least 30 minutes after vaccination.
Influenza
Contraindications to LAIV

- Children who have a moderate to severe febrile illness.
- Children with an amount of nasal congestion that would notably impede vaccine delivery.
- Children 2 - 4 years of age with a history of recurrent wheezing or a medically attended wheezing episode in the previous 12 months.
- Children who have received other live virus vaccines within the past 4 weeks; however, other live virus vaccines can be given on the same day as LAIV.
- Children taking an influenza antiviral medication (oseltamivir or zanamivir), until 48 hours after stopping the influenza antiviral therapy.
Dyslipidemia Screening

Once at age 9-11 years (10 yo)
- Fasting or non-fasting

Once at 18-21 years (18 yo)
- Fasting

Obesity Screening

- TSH, FT4, Fasting Lipid panel, Vit D 25-OH, Fasting Glucose
- Provider dependent
STI/HIV Screening

- Detailed history
- All sexually active females and high risk males-test annually for Chlamydia/Gonorrhea.
- Routine screening for HIV should be offered to all adolescents age 16-18 yo
- High risk adolescents should be screened annually for HIV

**Consider confidentiality**
Cervical Dysplasia Screening

- Cervical Cancer is the 2\textsuperscript{nd} most common cancer in woman worldwide.
- Risk factors are persistent infection with high-risk HPV, impaired immunity, cigarette smoking, increased parity, and prolonged oral contraceptive use.
- HPV is the most common STI in the US.
- 1\textsuperscript{st} Pap test ~ 3 years after onset of vaginal intercourse, no later than 21 years old.
Assess if the child has a dental home
  If there is no dental home—perform a risk assessment and refer to dental home (age 6 months and up)
  http://www2.aap.org/oralhealth/docs/riskassessmenttool.pdf

Recommend brushing with fluoride toothpaste in proper dosage for age
  Smear - 6 months-3 yrs
  Pea size - 3 yrs and up = approx 0.25mg -0.38mg of fluoride

Supervise children younger than 8 years old when brushing
Oral Health

- **Fluoride varnish**
- Medicaid only will reimburse
- Ages 6 months - 5 years (up to 6th birthday)
- Should be applied to the teeth of all infants and children at least once every 6 months
  - Dry teeth with gauze
  - Paint varnish onto teeth
- Afterward instructed to eat soft foods and not brush that evening. Resume normal care the next day
If primary water source is deficient in fluoride (<0.6ppm), consider oral fluoride supplementation.

There are many sources of fluoride in the water supply and in processed food to consider.

The risk of fluorosis is high if supplements are given to a child consuming fluoridated water.

My Water’s Fluoride: 
http://apps.nccd.cdc.gov/MWF/Index.asp
<table>
<thead>
<tr>
<th>Age</th>
<th>Fluoride ion level in drinking water (ppm)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;0.3 ppm</td>
</tr>
<tr>
<td>Birth to 6 months</td>
<td>None</td>
</tr>
<tr>
<td>6 months to 3 years</td>
<td>0.25 mg/day**</td>
</tr>
<tr>
<td>3 years to 6 years</td>
<td>0.50 mg/day</td>
</tr>
<tr>
<td>6 years to 16 years</td>
<td>1.0 mg/day</td>
</tr>
</tbody>
</table>

*1.0 part per million (ppm) = 1 miligram/liter (mg/L) **2.2 mg sodium fluoride contains 1 mg fluoride ion.
Car Seat Guidelines

- Rear facing until 2 years old
  - Or until they reach the max weight and height for the seat
- Belt positioning booster seat until they are 4ft 9 inches (57 inches) and are between 8-12 years old
- Children should ride in the rear of the vehicle until they are 13 years old

- [https://www.healthychildren.org/English/safety-prevention/on-the-go/Pages/Car-Safety-Seats-Information-for-Families.aspx](https://www.healthychildren.org/English/safety-prevention/on-the-go/Pages/Car-Safety-Seats-Information-for-Families.aspx)
Other Assessments

- **Newborn Blood Screening** by 2 months old
- **Critical Congenital Heart Defect Screening** after 24 hours of age, before discharge from the hospital
- **Hematocrit or Hemoglobin/Lead** - 12 months
- **Tuberculosis Testing** - based on recognition of high-risk factors
Summary

- Developmental Screening- Ages and Stages
  - 2 months through 60 months
  - Give correct ages, can adjust for prematurity
  - Billing for ASQ at 9, 18, and 30 months

- Autism Screening with M-CHAT R/F at 18 and 24 months

- Lead and H/H screening at 12 months

- Vision at 3, 4, 5, 6, 8, 10, 12, 15, and 18 years

- Hearing at 4, 5, 6, 8, and 10 years
Lipids
- 10 yr-fasting or non-fasting
- 18 yr-fasting
- If high risk at any time, check between 12-17 years

Obesity-Provider dependent (TSH, FT4, Fasting lipid panel, vitamin D-25 OH, fasting glucose)

Depression – ages 11-21 yrs using PHQ-2, then PHQ-9 if positive
Summary Con’t

- **STIs**
  - All sexually active females and high risk males tested annually for Chlamydia/Gonorrhea
  - Routine screening for HIV should be offered to all adolescents age 16-18
  - High risk adolescents should be screened annually for HIV

- **Fluoride**-assess at 12 month visit for dental home
  - Brush with fluoride toothpaste
  - Assess the need for oral fluoride
  - Fluoride varnish for Mainecare every 6 months if no dental home
References

1. (2015). Retrieved 2015, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.htm#Fig1