I. **PURPOSE:** The well child visit is an opportunity for parent and physician to work together in the goal of healthy children. While physicians are experts in child health, parents are the expert on their children. A team approach in the well child visit can best develop optimum physical, emotional and developmental health for the child. (American Academy of Pediatrics (AAP) Department of Research on well child visits).

II. **POPULATION:** Newborn through 18 years of age.

III. **GUIDELINE:**

Well Child Care (WCC) visit Periodicity and Recommended Screening:

1. Newborn visit schedule:
   a. All babies discharged from newborn nursery will be evaluated in outpatient services within 48-72 hours of discharge. For babies discharged from hospital at less than 48 hours of age, the outpatient appointment is recommended within 48 hours of discharge whenever possible.

2. Well Child Visit schedule:
   a. Newborn weight, feeding, and jaundice check by 5 days of age (can be a nurse visit)
   b. 2 weeks of age
   c. 6-8 weeks of age (if possible scheduled prior to 56 days of life so that infant’s mother can obtain her post-partum check at same time and meet HEDIS measures)
   d. 4, 6, 9, 12 and 15 months of age
   e. 18, 24 and 30 months of age (30 months of age if there are provider or parental concerns or if child has not had WCC in > 12 months)
   f. Annually from 3 to 18 years of age

3. Visits to include an age-appropriate history and physical exam

4. Well Child Visit vital measurements:
   a. Height and weight: every WCC, and every visit ≥ 3 years of age
   b. OFC: every WCC ≥ 2 years of age
   c. Blood pressure: every WCC ≥ 3 years of age (at younger ages if indicated)
   d. Body Mass Index (BMI): every WCC ≥ 2 years of age, and every visit ≥ 3 years of age

5. Sensory Screening
   a. Hearing
      i. All newborns in nursery or refer to audiology at first WCC during infancy
      ii. Initiate formal screening at 4 years of age and perform at each subsequent WCC through 10 years of age.
   b. Vision
      i. Based on child’s ability to participate, attempt to initiate standard screening method at 3 years of age and perform again at each subsequent WCC.

6. Preschool Development/Behavioral Screening

**NOTE:**
This guideline is designed to assist providers by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinicians judgment or to establish a protocol for all patients with a particular condition.
Guideline Number: DHMP_PG1003  
Guideline Subject: Well Child Visit Guideline

Page 2 of 4

a. Ages and Stages Questionnaire (ASQ) should be administered at each WCC between 9 months of age and 48 months of age.
b. Recommendations:
   i. One (1) ASQ by 15 months of age
   ii. Two (2) ASQs by 24 months of age
   iii. Three (3) ASQs by 36 months of age
c. Adolescent Psychosocial/Behavioral Assessment
   i. Complete at every WCC ≥ 11 years of age
d. Oral Health and Screening
   i. Assessment of oral health and dental preventive counseling at every WCC
   ii. Application of fluoride varnish at every WCC from first tooth eruption up to 36 months of age
   iii. Referral to dentist by first year or first tooth eruption for high risk children; 24-36 months of age for all children;
       and at 6 years of age for all children.

B. Laboratory Screening

1. Newborn Metabolic Screening
   a. Obtain on every newborn in nursery
   b. Second screen at 2 weeks of age

2. Anemia
   a. Complete Blood Count (CBC) for all children at 12-15 months of age
      i. Consider screening at 9 months of age for high risk infants (e.g., on whole milk, very low birth weight)
   b. Consider re-screening at 2 years of age in conjunction with lead screening for high risk children
   c. Check CBC in older children only if there is a clinical concern for anemia

3. Dyslipidemia

4. Lead
   a. All children at 12-15 months of age and at 2 years of age WCC
   b. Obtain on children 3-6 years of age if not previously screened

5. Sexually Transmitted Infection (STI) screening
   a. Annually for all sexually active adolescents
   b. Increase frequency if new partners or unprotected intercourse
   c. Other screenings as indicated (HIV and RPR if GC is positive, or if two (2) or more partners in past six (6) months,
      history of STI; intercourse in exchange for money, drugs or housing; anal intercourse; intravenous drug abuse)

6. Pap/HPV screening: Cervical cytologic screening should be avoided under 21 years of age (new recommendation as of
   November 2009)

C. Patient Education and Anticipatory Guidance

1. Nutrition, Dental, Injury, Behavior and Development Counseling

NOTE: This guideline is designed to assist providers by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinicians judgment or to establish a protocol for all patients with a particular condition.
2. Age appropriate per “Bright Futures” forms

3. Condom instruction
   a. Assess need at every adolescent visit

4. Family planning counseling
   a. Pediatric visits
      i. Parental education as appropriate
   b. Adolescents
      i. Annually as appropriate, to include discussion of birth control options, efficacy and side effects, STI/HIV prevention and abstinence
   c. Sexual Health education
      i. Pre-Adolescence
         1) Developmentally appropriate discussion (consider “As Boys Grow” and “As Girls Grow”)
   d. Substance Abuse counseling
      i. Annual (and as needed) counseling for all adolescents to include tobacco, alcohol and other substances of abuse

D. Social

1. Sexual Activity History
   a. Annually after 11 years of age as appropriate based on development

2. Tobacco Exposure, Use and Education
   a. Assessment at every visit (patient and parent), with education at every WCC (and as needed)

3. Child Abuse Assessment – provider discretion

4. Domestic Violence/Home Safety Assessment – provider discretion

5. Mental Health Needs Assessment
   a. Adolescents
      i. Assessment of possible school/learning, behavioral, legal, emotional, family/friends or sexual behavior concerns/problems
      ii. For high risk adolescents, administer PHQ-9 to screen for depression (all adolescents if adequate follow-up can be identified).

E. Immunization and Tuberculin Screening

1. Immunization – administer AAP/AAFP/CDC recommended immunizations

2. Tuberculosis
   a. Screen all high-risk children (defined by tuberculosis risk assessment) by 15-18 months of age and at other ages as indicated using Tuberculin Skin Testing (TST) (or TB blood test when available)
   b. With continued exposure risks (e.g., child travel) after initial negative PPD, consider testing every 1-3 years
   c. Skin testing is done regardless of BCG history

NOTE:
This guideline is designed to assist providers by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinicians judgment or to establish a protocol for all patients with a particular condition.
IV. ATTACHMENTS:

American Academy of Pediatrics: Bright Futures/AAP periodicity schedule 2014
http://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf

Centers for Disease Control Recommended Childhood and Adolescent Immunization Schedule - United States:

V. REFERENCES:

American Academy of Pediatrics: Bright Futures/AAP periodicity schedule 2014
http://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf

Centers for Disease Control Recommended Childhood and Adolescent Immunization Schedule - United States:

The Agency for Healthcare Research and Quality website: Guide to Clinical Preventive Services: U.S. Preventive Services Task Force:
http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/guide/section3.html

NOTE:
This guideline is designed to assist providers by providing an analytical framework for the evaluation and treatment of patients, and is not intended either to replace a clinician's judgment or to establish a protocol for all patients with a particular condition.
Each child and family is unique; therefore, these Recommendations for Preventive Pediatric Health Care are designed for the care of children who have competent, caring parents, have no manifestations of any important health problems, and are growing and developing in satisfactory fashion. Additional visits may become necessary if circumstances suggest variations from the usual. Developmental, psychosocial, and chronic disease issues for children and adolescents may require frequent counseling and treatment visits separate from preventive care visits.

These guidelines represent a 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 guidance by age as listed in Bright Futures guidelines (Hagan JF, Shaw JS, Duncan PM, eds. Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2008).

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

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Summary of changes made to the
2014 Bright Futures/AAP Recommendations for Preventive Pediatric Health Care
(Periodicity Schedule)

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. These include:

- Footnote 4- Breastfeeding and the Use of Human Milk (2012): http://pediatrics.aappublications.org/content/129/3/827.full and Hospital Stay for Healthy Term Newborns (2010): http://pediatrics.aappublications.org/content/125/2/405.full

New references were added for several footnotes, also with no change to recommendations in the Periodicity Schedule:

- Footnote 13- Use of Chaparones During the Physical Examination of the Pediatric Patient (2011): http://pediatrics.aappublications.org/content/127/5/991.full
- Footnote 15- The Recommended Uniform Newborn Screening Panel (http://www.bpa.gov/advisorycommittees/mchb/advisory/heritabledisorders/recommendedpanel/uniformscreeningpanel.pdf), as determined by The Secretary’s Advisory Committee on Heritable Disorders in Newborns and Children, and state newborn screening laws/regulations (http://genesc-r-us.uthscsa.edu/sites/genes-r-us/files/nbsdisorders.pdf), establish the criteria for and coverage of newborn screening procedures and programs. Follow-up must be provided, as appropriate, by the pediatrician.

For consistency, the title of “Tuberculin Test” has been changed to “Tuberculosis Testing.” The title of “Newborn Metabolic/Hemoglobin Screening” has been changed to “Newborn Blood Screening.”
Recommended Immunization Schedules for Persons Aged 0 Through 18 Years
UNITED STATES, 2014

This schedule includes recommendations in effect as of January 1, 2014. 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).

The Recommended Immunization Schedules for Persons Aged 0 Through 18 Years are approved by the

Advisory Committee on Immunization Practices (http://www.cdc.gov/vaccines/acip)

American Academy of Pediatrics (http://www.aap.org)

American Academy of Family Physicians (http://www.aafp.org)

American College of Obstetricians and Gynecologists (http://www.acog.org)
Figure 1. Recommended immunization schedule for persons aged 0 through 18 years – United States, 2014.

(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 in bold.

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Birth</th>
<th>1 mo</th>
<th>2 mos</th>
<th>4 mos</th>
<th>6 mos</th>
<th>9 mos</th>
<th>12 mos</th>
<th>15 mos</th>
<th>18 mos</th>
<th>19–23 mos</th>
<th>2-3 yrs</th>
<th>4-6 yrs</th>
<th>7-10 yrs</th>
<th>11-12 yrs</th>
<th>13–15 yrs</th>
<th>16–18 yrs</th>
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<tr>
<td><strong>Hepatitis B</strong> (HepB)</td>
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<td><strong>Rotavirus</strong> (RV)</td>
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<td>1&quot;dose</td>
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<td><strong>Diphtheria, tetanus, &amp; acellular pertussis</strong> (DTaP: &lt;7 yrs)</td>
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<td>1&quot;dose</td>
<td>2&quot;dose</td>
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<td><strong>Tetanus, diphtheria, &amp; acellular pertussis</strong> (Tdap: ≥7 yrs)</td>
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<td>1&quot;dose</td>
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<td><strong>Haemophilus influenzae type b</strong> (Hib)</td>
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<td><strong>Pneumococcal conjugate</strong> (PCV13)</td>
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<td><strong>Pneumococcal polysaccharide</strong> (PPSV23)</td>
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<td><strong>Inactivated poliovirus</strong> (IPV) (&lt;18 yrs)</td>
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<td><strong>Influenza</strong> (IIV; LAIV)</td>
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<td><strong>Measles, mumps, rubella</strong> (MMR)</td>
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<td><strong>Varicella</strong> (VAR)</td>
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<td><strong>Hepatitis A</strong> (HepA)</td>
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<td>1&quot;dose</td>
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<tr>
<td><strong>Human papillomavirus</strong> (HPV2: females only; HPV4: males and females)</td>
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<td>1&quot;dose</td>
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<td><strong>Meningococcal</strong> (Hib-MenCY ≥ 6 weeks; MenACWY-D ≥9 mos; MenACWY-CRM ≥ 2 mos)</td>
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<td>1&quot;dose</td>
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**NOTE:** The above recommendations must be read along with the footnotes of this schedule.

This schedule includes recommendations in effect as of January 1, 2014. 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](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).
The above recommendations must be read along with the footnotes of this 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 weeks 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.

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) 1 to 2 months after completion of the HepB series, at age 9 through 18 months (preferably at the next well-child visit).
   - 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]: 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.

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. Tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine. (Minimum age: 10 years for Boostrix, 11 years for 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 5 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.

5. *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.
5. 

5. Haemophilus influenzae type b (Hib) conjugate vaccine (cont’d).


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 the first 2 doses were PRP-OMP (PedvaxHIB or COMVAX), and were administered at age 11 months or younger, the third (and final) dose should be administered at age 12 through 15 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, regardless of Hib vaccine used for first dose.
- If first dose is administered at younger than 12 months of age and second dose is given between 12 through 14 months of age, a third (and final) dose should be given 8 weeks later.
- For all 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 refer to the meningococcal vaccine footnotes and also MMWR March 22, 2013; 62(RR02):1-22, available at http://www.cdc.gov/mmwr/pdf/rr/rr6202.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 or 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 children 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 re-vaccinated 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.
- 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 human immunodeficiency virus (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.

6. Pneumococcal vaccines. (Minimum age: 6 weeks for PCV13, 2 years for PPV23)

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 dose 1 of PCV13 to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.

Catch-up guidance, see Figure 2.

Vaccination of persons with high-risk conditions with PCV13 and PPV23:

- All recommended PCV13 doses should be administered prior to PPV23 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; generalized malignancy; solid organ transplantation; or multiple myelomas:
  1. Administer 1 dose of PCV13 if 3 doses of PCV (PCV7 and/or PCV13) were received previously.
  2. Administer 2 doses of PCV13 at least 8 weeks apart if fewer than 3 doses of PCV (PCV7 and/or PCV13) were received previously.

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

Routine vaccination:

- Administer 4 doses 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 for 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 months after the previous dose.
- 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. IPV is not routinely recommended for U.S. residents aged 18 years or older.
- For other catch-up guidance, see Figure 2.

8. Influenza vaccine. (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) those with asthma, 2) children 2 through 4 years who had wheezing in the past 12 months, or 3) those who have any other medical conditions that predispose them to influenza complications. For all other contraindications to use of LAIV, please refer to MMWR 2013; 62 (No. RR-7):1-43, available at http://www.cdc.gov/mmwr/pdf/rr/rr6207.pdf.

For children aged 6 months through 8 years:

- For the 2013–14 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 may also need 2 doses. For additional guidance, please follow dosing guidelines in the 2013–14 ACIP influenza vaccine recommendations, MMWR 2013; 62 (No. RR-7):1-43, available at http://www.cdc.gov/mmwr/pdf/rr/rr6207.pdf.

- For the 2014–15 season, follow dosing guidelines in the 2014 ACIP influenza vaccine recommendations.

For persons aged 9 years and older:

- Administer 1 dose.
For further guidance on the use of the vaccines mentioned below, see: http://www.cdc.gov/vaccines/hcp/acip-recs/index.html.

9. 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.

10. 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 MMRV 2007: S6 [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.

11. 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 two doses is 6 months.
   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 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 HIV-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.

12. Human papillomavirus (HPV) vaccines. (Minimum age: 9 years for HPV2 [Cervarix] and HPV4 [Gardasil])
   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. Either HPV2 or HPV4 may be used for females, and only HPV4 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 24 weeks after the first dose and 16 weeks after the second dose (minimum interval of 12 weeks).
   Catch-up vaccination:
   • Administer the vaccine series to females (either HPV2 or HPV4) and males (HPV4) at age 13 through 18 years if not previously vaccinated.
   • Use recommended routine dosing intervals (see above) for vaccine series catch-up.

13. Meningococcal conjugate vaccines. (Minimum age: 6 weeks for Hib-MenHibrix, 9 months for MenACWY-D [Menactra], 2 months for MenACWY-CRM [Menveo])
   Routine vaccination:
   • Administer a single dose of Menactra or Menveo vaccine at age 11 through 12 years, with a booster dose at least 16 through 18 months.
   • 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 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.

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):  
  1. For children younger than 19 months of age, administer a 4-dose infant series of MenHibrix or Menveo at 2, 4, 6, and 12 through 15 months of age.
  2. For children aged 19 through 23 months who have not completed a series of MenHibrix or Menveo, administer 2 primary doses of Menveo at least 3 months apart.
  3. For children aged 24 months and older who have not received a complete series of MenHibrix or Menveo, administer 2 doses of Menveo at least 2 months apart.

Children with persistent complement component deficiency:  
• For children younger than 19 months of age, administer a 4-dose infant series of either MenHibrix or Menveo at 2, 4, 6, and 12 through 15 months of age.
• For children 7 through 23 months who have not received vaccination, two options exist depending on age and vaccine brand:  
  a. For children who initiate vaccination with Menveo at 7 months through 23 months of age, a 2-dose series should be administered with the second dose after 12 months of age and at least 3 months after the first dose.
  b. For children who initiate vaccination with Menactra at 9 months through 23 months of age, a 2-dose series of Menactra should be administered at least 3 months apart.
  c. For children aged 24 months and older who have not received a complete series of MenHibrix, Menveo, or Menactra, administer 2 primary doses of either Menactra or Menveo at least 2 months apart.
• 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.
• For other catch-up recommendations for these persons, refer to MMWR 2013; 62(RR02);1-22, available at http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6202a1.htm.

Catch-up recommendations for persons with high-risk conditions:
  1. If MenHibrix is administered to achieve protection against meningococcal disease, a complete age-appropriate series of MenHibrix should be administered.
  2. 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. For children who initiate vaccination with Menveo at 7 months through 9 months of age, a 2-dose series should be administered with the second dose after 12 months of age and at least 3 months after the first dose.
  4. For other catch-up recommendations for these persons, refer to MMWR 2013; 62(RR02);1-22, available at http://www.cdc.gov/mmwr/pdf/rr/rr6202a1.pdf.

For 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, available at http://www.cdc.gov/mmwr/pdf/rr/rr6202.pdf.