**Vaccine Update- Childhood**

**Hepatitis B Vaccine HepB (Give IM)**
- Birth dose MUST be monovalent vaccine, and administered before hospital discharge (No combination vaccines)
- Vaccinate all children age 0 through 18 years of age
- Give at 0, 1-2, and 6 months of age
- Final Dose (6-18 months) no earlier than 24 weeks
- Administration of 4 doses of HepB vaccine to infants is permissible when combination vaccines containing HepB are administered after the birth dose.
  - Pediarex (DTaP-HepB-IPV) – at 2, 4, and 6 months of age
  - COMVAX (HepB-Hib) – at 2, 4, and 12-15 months of age
- Do Not restart series or add doses, no matter how long since previous dose

**Rotavirus Vaccine RV (Give orally)**
- Routine vaccination of all infants without a contraindication
- 2 or 3 dose schedule depending upon vaccine used
  - Rotarix (RV 1) – 2 dose schedule – Give at 2, and 4 months of age
  - RotaTeq (RV 5) – 3 dose schedule- Give at 2, 4, and 6 months of age
- Minimum age for first dose is 6 weeks
- Maximum age for first dose is 14 weeks 6 days
- Do not begin series in infants 15 weeks 0 days or older
- Administer the final dose by age 8 months 0 days
- Intervals between doses may be as short as 4 weeks
- ACIP does not set a maximum interval between doses
- Do not repeat dose if infant regurgitates or spits out dose
- Suggest administering RV vaccine prior to injectable vaccines
- RV vaccine may be administered at any time, before, concurrent with, or administration of any blood product or antibody containing product

**Hepatitis A Vaccine HepA (Give IM)**
- Give 2 doses to all children at age 1 year (12-23 months) spaced 6 months apart
- Minimum age of first dose is 12 months of age
- Children not vaccinated by age 2 can be vaccinated at subsequent visits
- Vaccine is also recommended for children older than age 1 who live in areas where vaccination programs target older children or who are at increased risk of infection.
- Children generally have asymptomatic or unrecognized illness so they may serve as a source of infection, particularly for household or other close contacts.

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Vaccine Update- Childhood

Varicella Vaccine Var (Give SC)

- Two dose schedule recommended to reduce varicella breakthrough disease and decrease varicella outbreaks. Breakthrough disease can occur in up to 30% of patients receiving one dose of vaccine. Breakthrough disease is contagious.
- Give at 12 months, and 4-6 years of age
- The minimal interval between doses varies by age of child
  - If 12 months through 12 years of age- minimal interval = 3 months
  - If 13 years or older – minimal interval = 4 weeks
- Give a 2nd dose to all older children and adolescents with history of only 1 dose
- Two doses are recommended for all persons older than 4-6 years of age who do not have evidence of varicella immunity.
- If Varicella, MMR, LAIV are not given on the same day, space them at least 28 days apart
- MMRV (ProQuad) may be used when both MMR and Varicella are indicated
- MMRV is only approved from 12 months through 12 years of age
- ACIP does not express a preference for use of MMRV vaccine over separate injections of equivalent component vaccines i.e., MMR and Varicella Vaccine

New Combination Vaccines

Pentacel (Sanofi Pasteur) FDA licensed June 20, 2008

- DTaP-IPV/Hib Combination
- Approved for 4 doses at 2, 4, 6 and 15-18 months of age
- Not approved for booster doses at 4-6 years of age
- Licensed for children 6 weeks through 4 years

Kinrix (GlaxoSmithKline) FDA Licensed June 24, 2008

- DTaP-IPV Combination
- Approved for 5th dose of DTaP and 4th dose of IPV in children age 4-6 years who received Infanrix and/or Pediarix for the first three doses and Infanrix for the fourth dose of DTaP
Vaccine Update- Adolescent/Adult

(Consider observing adolescents/young adults after vaccination. Syncope may occur).

Pertussis Vaccine Tdap (Give IM)
- One single dose of Tdap replaces Td at 11-12 years of age
- Give a one-time dose of Tdap to adolescents age 11-12 years if 5 years have elapsed since last DTaP, then boost every 10 years with Td.
- Persons aged 12 -18 yrs who have not received Tdap should receive one dose.
- Give one dose to adults age 19-64 years of age if >10 years since last Td. If contact with an infant < 12 months of age, consider giving Tdap at a shorter interval of 2 years since the last Td. Shorter intervals can be used.
- Boostrix – approved for 10-64 yrs of age with minimum age - 10 yrs of age
- Adacel- approved for 11-64 years of age with minimum age - 11 years of age

Meningococcal Conjugate Vaccine MCV (Give IM)
- Give single dose to 11-12 year olds
- Administer at age 13-18 yrs if not previously vaccinated
- Vaccinate all college freshmen living in dorms who have not been vaccinated
- (College freshmen do not need a dose, if they received a dose at 11-12 years)
- Vaccinate at risk persons 2 years and older with risk factors i.e., non-functioning spleen, travel to Mecca, Saudi Arabia etc...
- For at risk persons ages 56 years and older, use MPSV4
- MCV is preferred for all persons age 2-55 years, MPSV4 acceptable alternative
- Menactra = MCV or MCV4
- Menomune = MPSV4 (Give SC)

Human Papillomavirus Vaccine HPV (Give IM)
- Routine vaccination of females 11-12 years of age (Not licensed for Males)
- 3 dose schedule at 0, 2 and 6 months. * There is no accelerated schedule for series catch-up. Follow routine recommended schedule at 0, 2 and 6 month interval.
- Give 2nd dose 2 months after 1st dose,
- Give the 3rd dose 6 months after the 1st dose
- Vaccine approved for 9 – 26 year olds
- Vaccinate 13-26 year old females, not previously vaccinated
- Minimum age -9 years of age
- Minimum intervals between doses:
  - 4 weeks between doses 1 and 2

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12 weeks between doses 2 and 3
24 weeks between dose 1 and 3
● Pap testing or screening for HPV DNA/Antibody prior to HPV not recommended
● Vaccine not recommended for use in pregnancy

Influenza Vaccine (TIV- give IM)
● Give 2 doses to first-time recipients age 6 months through 8 years, spaced 4wks apart.
● Provide 2 doses to children < 9 years of age who were vaccinated for the first time during the previous influenza season but only received 1 dose.
● 1 dose of TIV may be administered annually for persons 9 years or older
● Vaccinate all children annually ages 6 months through 18 years
● Vaccinate all adults age 50 years and older
● Vaccinate all persons 6 months-18 yrs receiving chronic aspirin therapy
● Vaccinate persons 6 months of age and older with chronic illnesses including
  ● Metabolic (i.e., diabetes)
  ● Immunosuppression, including HIV
  ● Renal dysfunction
  ● Pulmonary (i.e., asthma, COPD)
  ● Cardiovascular (i.e., CHF)
  ● Hemoglobinopathy
  ● Neurologic and muscular conditions
  ● any condition that can compromise respiratory function or the handling of respiratory secretions
● Vaccinate all residents of long-term care facilities
● Vaccinate pregnant women
● Contacts of all of the above should receive TIV.
● LAIV (intranasal) may be given to healthy, non-pregnant persons age 2-49 years.
● Live vaccines (LAIV) not administered on the same day should be administered at least 4 wks apart.