

## Immunization Schedule – (Updated - March 2015)

2 month:	DTaP-IPV-HBV (Pediarix), Hib, Prevnar-13, Rotarix <sup>1</sup>
4 month:	Pediarix, Hib, Prevnar-13, Rotarix <sup>1</sup>
6 month:	Pediarix, Hib (unless Merck's PRP-OMP version, then skip this dose), Prevnar 13
2-23m:	Meningococcal [Menveo (2m – 24m)] <sup>2</sup>
12 month:	MMR <sup>3,4</sup> , Varicella <sup>1,4</sup> , Hep A
15 month:	DTaP, Hib, Prevnar 13
18 month:	catch-up <sup>5</sup>
24 month:	Hep A
2y-10y:	Meningococcal (Menveo <sup>2</sup> or Menactra <sup>2,6</sup> )
2y-11y:	Pneumovax <sup>7</sup> or Prevnar-13 <sup>7</sup>
4 year:	MMR <sup>3,4</sup> , Varivax <sup>1,4</sup> , IPV, DTaP
5y+:	Hib <sup>8</sup>
7-10yrs:	Tdap as 1st dose of catch-up dosing series is recommended
10 year:	Tdap (Boostrix or Adacel) – if entering 6 <sup>th</sup> grade
11 year:	Tdap, Meningococcal (Menveo or Menactra) <sup>9</sup> , HPV (Gardasil) <sup>10</sup>

<sup>1</sup>Live vaccines (MMR, Varivax, Rotarix, intranasal influenza, oral typhoid, and for yellow fever) are not given to those with suspected immunodeficiency unless cleared by a specialist. For actual guidelines, see *MMWR* 60(2) p21, table 13 on page 48 (issued January 28, 2011). Generally postpone tuberculosis testing (PPD or IGRA) till 28 days after a live attenuated viral vaccine (p24).

<sup>2</sup>Meningococcal vaccine is recommended in children who have anatomic or functional asplenia (including sickle cell disease), persistent complement component deficiencies (e.g., C5--C9, properdin, factor H, or factor D), children who are traveling to countries where meningococcal disease is hyperendemic or epidemic, and children who are in a defined risk group during a community or institutional meningococcal outbreak. Check individual vaccine guidelines [*MMWR* 62(RR02):1-22, issued March 22, 2013 and *MMWR* 63(24): 527-530, 2014]

<sup>3</sup>Measles vaccination might suppress tuberculin reactivity temporarily. If tuberculin testing (tuberculin or IGRA) is performed after the day of the MMR vaccination, the testing should be postponed for >4 weeks. [*MMWR* 60(2) p24 ]

<sup>4</sup>Live-viral vaccines (excepting live oral vaccines like Rotarix or typhoid) are to be given on the same day otherwise a 28-day waiting period is required. [*MMWR* 60(2) pp. 5,8-9,19, Table 3]

<sup>5</sup>All brands of Hib conjugate, hepatitis B, hepatitis A, rotavirus, and quadrivalent meningococcal conjugate vaccines are interchangeable within their respective series [*MMWR* 60(2), p10]

<sup>6</sup>Menactra is recommended for functional/anatomic asplenia. Offer 2 doses spaced 2 months apart and given 4 weeks after completion of the Prevnar series; and Menactra should not be administered within 28 days of Tdap unless it is being given on the same day. [*MMWR* 60(40): 1391(see table), and 60(2) table 3, page 38]

<sup>7</sup>Pneumovax – dosed in patients with functional/anatomic asplenia, CHF or cyanotic heart disease, diabetes mellitus, CRF or nephrotic syndrome, cochlear implants, immunosuppressed or immunodeficient states; repeat dosing in 5 years in asplenia and immunocompromised patients – *MMWR* 59(11):1-18, Tables 2, 12 (issued December 10, 2010). Prevnar-13 should be given to 6-18yo if not previously used with some of the high risk groups – [*MMWR* 62(25):521-524, 2013].

<sup>8</sup>Hib vaccine is recommended in an unvaccinated child or teen (or adult) with functional or anatomic asplenia, and also in an HIV infected child or teen (but not adult) – [*MMWR* 63(1):8, issued Feb 28, 2014]

<sup>9</sup>Meningococcal vaccine is recommended at ages 11 through 12 years with a booster dose at age 16 years. Patients who received their first dose at age 13 through 15 years should receive a booster dose at age 16 through 18 years. One dose is recommended at age 16 years or older (no booster)(give one dose to unvaccinated college freshman).

<sup>10</sup>Gardasil is approved and recommended for boys as well as girls. The 2<sup>nd</sup> dose is given 1-2 months after the 1<sup>st</sup> dose, and the 3<sup>rd</sup> dose is given 24 weeks after the 1<sup>st</sup> dose, 12-16 weeks after the second dose. Catch up dosing is given at ages 13-21y. *MMWR* 59(20):630-632 (5/28/10), *MMWR* 60(50):1705-1708 (12/23/11), *MMWR* 63(RR05) Aug 29, 2014