New Jersey Department of Health and Senior Services Vaccine Preventable Disease Program Childhood and Adolescent Recommended Vaccines

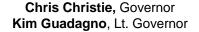






September 2011









New Jersey Department of Health and Senior Services Vaccine Preventable Disease Program Childhood and Adolescent Recommended Vaccines

Antigens	Vaccine	Approved	CDC/AAP/AAFP	NJ Requirements
		Age	Recommended Schedule	
Diphtheria, Tetanus, and acellular Pertussis (DTaP)	Daptacel (Aventis Pasteur)	6 wks through 6 yrs (prior to 7 th birthday)	5 dose series recommended to be administered at 2, 4, 6, and 15-20 months of age. A booster dose is recommended for children 4 to 6 years of age.	<u>Age 1-6 years:</u> 4 doses, with one dose given on or after the 4 th
Diphtheria, Tetanus, and acellular Pertussis (DTaP)	Infanrix (GSK)	6 wks through 6 yrs (prior to 7 th birthday)	5 dose series recommended to be administered at 2, 4, 6 months, and 15-20 months of age. A booster dose is recommended for children 4 to 6 years of age.	birthday, OR any 5 doses. Age 7-9 years: 3 doses of Td or any previously administered combination of DTP, DTaP,
Diphtheria, Tetanus, and acellular Pertussis (DTaP)	Tripedia (Aventis Pasteur)	6 wks through 6 yrs (prior to 7 th birthday)	 5 dose series recommended to be administered at 2, 4, 6 and 15-18 months of age. A booster dose is recommended for children 4 to 6 years of age. 	and DT to equal 3 doses. Comments Any child entering pre-
Diphtheria, Tetanus, and acellular Pertussis (DTaP), and Haemophilus influenzae type b (Hib)	TriHIBit (sanofi pasteur)	12 mos. through 4 yrs (prior to 5 th birthday)	 Use as the final dose for the primary series. Should not be used at ages 2, 4, and 6 months for the primary series. 	school, and/or pre- Kindergarten needs a minimum of 4 doses and a booster dose after the 4 th birthday for Kindergarten
Diphtheria, Tetanus, and acellular Pertussis (DTaP), Hepatitis B and inactivated Polio (IPV)	Pediarix (GSK)	6 wks through 6 yrs (prior to 7 th birthday)	 3 dose series recommended to be administered at 2, 4, and 6 months of age. Recommended to be used as the first 3 doses of the primary series. Recommended to not be used for 4th dose. 	attendance requirements. Pupils after the seventh birthday should receive adult type Td.

Diphtheria, Tetanus, and acellular Pertussis (DTaP), inactivated Polio (IPV), and Haemophilus influenzae tybe b (Hib)	Pentacel (sanofi pasteur)	6 wks through 4 yrs (prior to 5 th birthday)	4 dose series recommended to be administered at 2, 4, 6, and 15-18 months of age.	Please note: There is no acceptable titer test for pertussis.
Diphtheria, Tetanus, and acellular Pertussis (DTaP), inactivated Polio (IPV)	Kinrix (GSK)	4 through 6 yrs (prior to 7 th birthday)	A single dose to be used as the fifth dose in the diphtheria, tetanus, and acellular pertussis (DTaP) vaccine series and the fourth dose in the inactivated poliovirus vaccine (IPV) series in children 4 through 6 years of age whose previous DTaP vaccine doses have been with INFANRIX and/or PEDIARIX for the first three doses and INFANRIX for the fourth dose.	Age 1-6 years: 4 doses, with one dose given on or after the 4 th birthday, OR any 5 doses. Age 7-9 years: 3 doses of Td or any previously administered combination of DTP, DTaP, and DT to equal 3 doses.
Diphtheria and Tetanus (DT)	DT (Aventis Pasteur)	6 wks through 6 yrs (prior to 7 th birthday)	 Recommended to be used as a 3 or 4 dose series separated by 4-8 wks. Those who receive all four primary doses before the fourth birthday should receive a booster dose. This booster dose is not necessary if the fourth dose in the primary series was given after the fourth birthday. 	Comments Any child entering preschool, and/or pre-Kindergarten needs a minimum of 4 doses and a booster dose after the 4 th birthday for Kindergarten attendance requirements. Pupils after the seventh birthday should receive adult type Td. Please note: There is no acceptable titer test for pertussis.

Tetanus diphtheria (Td)	DECAVAC (Aventis Pasteur) OR Td (Generic) (Mass Biologics)	≥ 7 yrs	 May be used as a 3 dose primary series for those 7 years of age and older. May be used to complete the primary series for those who only received 1 or 2 doses of any combination of DTaP. 	Age 7-9 years: 3 doses of Td or any previously administered combination of DTP, DTaP, and DT to equal 3 doses. Comments Pupils after the seventh birthday should receive adult type Td.
Tetanus diphtheria, acellular Pertussis (Tdap)	Boostrix (GSK)	≥ 10 years	One time booster dose. ACIP has expanded recommendations for the use of Tdap. Please see the CDC 2011 Recommended Immunization Schedule for Persons Aged 7 Through 18 Years. For further guidance, please visit: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6001a4.htm?s_cid=mm6001a4_w	Tdap Grade 6 Entering Grade 6 (or comparable age level for Special Ed programs): 1 dose. Comments For pupils entering Grade 6 on or after 9-1-08 and
Tetanus diphtheria, acellular Pertussis (Tdap)	Adacel (sanofi pasteur)	11 through 64 yrs	One time booster dose. ACIP has expanded recommendations for the use of Tdap. Please see the CDC 2011 Recommended Immunization Schedule for Persons Aged 7 Through 18 Years. For further guidance, please visit: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6001a4.htm?scid=mm6001a4_w	A child is not required to have a Tdap dose until FIVE years after the last DTP/DTaP or Td dose.

Haemophilus influenzae type b (Hib) Haemophilus influenzae type b (Hib) Haemophilus influenzae type b (Hib)	ActHib (sanofi pasteur) Hiberix (GSK) PedvaxHIB (Merck)	2 mos through 18 mos 15 mos through 4 yrs (prior to 5 th birthday) 2 mos through 5 yrs (prior to 6 th birthday)	 4 dose series recommended to be administered at 2, 4, 6, and 15-18 months of age. Used as a booster dose in children who have received a primary series with a Hib conjugate vaccine. Two doses recommended to be administered at 2 and 4 months of age. A dose at 6 months is not indicated. In infants completing the primary two-dose regimen before 12 months of age, a booster dose should be administered at 12 to 15 months of age, but not earlier than 2 months after the second dose. 	HIB Age 2-11 Months: 2 doses Age 12-59 Months: 1 dose Comments Mandated only for children enrolled in child care, preschool, or pre-Kindergarten: Minimum of 2 doses of Hibcontaining vaccine is needed if between the ages of 2-11 months. Minimum of 1 dose of Hibcontaining vaccine is needed after the first birthday.
Hepatitis A Hepatitis A	Havrix (GSK)	≥ 12 mos ≥ 12 mos	 2 dose series with the second dose administered 6-12 months later. 2 dose series with the second dose 	Hepatitis A There is no Hepatitis A vaccine requirement for
	(Merck)		administered 6-18 months later.	school entry in NJ.
Hepatitis A Hepatitis B	Twinrix (GSK)	≥ 18 yrs	 3 dose series recommended to be administered on a 0, 1, and 6 month schedule. Alternatively, a 4-dose schedule, given on days 0, 7 and 21 to 30 followed by a booster dose at month 12 may be used. 	Hepatitis A/Hepatitis B There is no Hepatitis A vaccine requirement for school entry in NJ. Please refer to NJ requirements for Hepatitis B vaccines.
Hepatitis B	Engerix-B (GSK)	≥ 0 mos	3 doses with the first dose administered on elected date; second dose: 1 month later; third dose: 6 months after first dose.	Hepatitis B K-Grade 12: 3 doses or

Hepatitis B	Recombivax- HB (Merck) Available as Pediatric and Adult Formulations.	<u>></u> 0 mos	 3 doses with the first dose: on elected date; second dose: 1 month later; third dose: 6 months after first dose. An alternate two-dose series recommended to be administered to adolescents (11 through 15 years of age) with the first dose given on elected date and second dose: 4-6 months later. 	Comments If a child is between 11-15 years of age and has not received 3 prior doses of Hepatitis B then the child is eligible to receive 2-dose Hepatitis B adolescent formulation.
Hepatitis B and Haemophilus influenzae type b (Hib)	Comvax (Merck)	6 wks through 14 mos (prior to 15 months)	3 dose series recommended to be administered at 2, 4, and 12 though 15 months of age.	Hepatitis B/Hib Please refer to NJ requirements for Hepatitis B and Hib vaccines.
Human Papillomavirus (HPV)	Gardasil (Merck)	9 through 26 yrs	 3 dose series recommended to be administered in females with the first dose given on elected date; second dose 1-2 months later, and the last dose 6 months after the first dose. May be given in a 3 dose series to males ages 9-26 years to reduce their likelihood of acquiring genital warts. 	HPV There is no HPV vaccine requirement for school entry in NJ.
Human Papillomavirus (HPV)	Cervarix (GSK)	9 through 25 yrs	3 dose series recommended to be administered in females with the first dose given on elected date; second dose 1-2 months later, and the last dose 6 months after the first dose. Note: Not approved for use in males.	HPV There is no HPV vaccine requirement for school entry in NJ.
Influenza (flu)	Various	<u>></u> 6 mos	 Recommended seasonally for individuals 6 months of age and older. 	Influenza Ages 6-59 Months: 1 dose annually.

			 All children younger than 9 years receiving seasonal influenza vaccine for the first time should receive two doses separated by at least 4 weeks. Children younger than 9 years who did not receive at least 1 dose of the 2010-2011 seasonal influenza vaccine should receive 2 doses, separated by at least 4 weeks, regardless of their previous influenza vaccination history. Children younger than 9 years whose vaccination history is unknown should receive 2 doses separated by at least 4 weeks. Children younger than 9 years who received 1 dose of seasonal influenza vaccine during the 2010-2011 season require only 1 dose this season. 	Comments For children enrolled in child care, pre-school, or pre-Kindergarten on or after 9-1-08, 1 dose to be given between September 1 and December 31 of each year. Students entering school after December 31 up until March 31st must receive 1 dose since it is still flu season.
Measles, Mumps, Rubella (live) (MMR)	M-M-R II (Merck)	<u>></u> 12 mos	 Two dose schedule recommended to be administered with the 1st dose at 12-15 months and the 2nd dose at age 4 through 6 years. Note: The 2nd dose may be given before age 4, provided at least 28 days have elapsed since the first dose was given Adults are recommended to receive 2 doses if previously not vaccinated. The minimum interval between the two doses is 28 days. 	MMR 2 doses of a live measles- containing vaccine, and 1 dose each of live mumps and rubella-containing vaccine on or after the first birthday. Comments Any child over 15 months of age entering child care, pre-school, or pre- Kindergarten needs a minimum of 1 dose of measles, mumps, and rubella vaccine. Kindergarten entry requires 2 doses of measles- containing vaccine.

				Intervals between first and second measles-containing vaccine doses recommended to not be less than 28 days. Laboratory evidence of immunity is acceptable.
Measles, Mumps, Rubella and Varicella (MMRV)	ProQuad (Merck)	12 mos through 12 yrs (prior to 13 th birthday)	Two dose series with the 1 st dose recommended to be administered at 12-15 months and the second dose for 4 through 6 years. Note: At least 28 days should elapse between a dose of a measles-containing vaccine such as M-M-R® II (measles, mumps, and rubella virus vaccine live) and a dose of ProQuad. At least 3 months should elapse between a dose of varicella-containing vaccine and ProQuad. Note: For the first dose at age 12-47 months, either the trivalent MMR vaccine and varicella vaccine can be given in separate injections, or the quadrivalent MMRV vaccine may be used. Clinicians considering MMRV vaccine administration should discuss the benefits and risks of both vaccination options with parents. Unless parents express a preference for MMRV vaccine, the CDC recommends that MMR vaccine and varicella vaccine should be administered for the first dose in this age group.	Measles, Mumps, Rubella and Varicella Please refer to NJ requirements for MMR and Varicella vaccines.

Meningococcal Conjugate Vaccine	Menveo (Novartis)	2 though 55 yrs	1 dose recommended to be administered for 2-10 years olds if high risk, otherwise routinely	Meningococcal
(MCV4)	(140vaitis)		recommended for age 11 and older.	Entering Grade 6
			ACIP recently expanded meningococcal	(or comparable age level for Special Ed programs):
			conjugate vaccine (MCV4) recommendations in adolescents and persons at high risk. Please	1 dose
			see the 2011 CDC immunization schedules. For	<u>Comments</u>
			further guidance, please visit:	For pupils entering Grade 6 on or after 9-1-08 and
			http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6003a3.htm?s_cid=mm6003a3_e	born on or after 1-1-97.
			http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6030a3.htm	This applies to students when they turn 11 years of
Meningococcal	Menactra	9 months	Can be administered to children 9-23 months	age AND attending Grade
Conjugate Vaccine (MCV4)	(sanofi pasteur)	through 55 yrs	of age if considered high risk. Given as a two dose series three months apart.	6.
			1 dose recommended to be administered for 2-10 years olds if high risk, otherwise routinely recommended for age 11 and older.	
			ACIP recently expanded meningococcal conjugate vaccine (MCV4) recommendations in adolescents and persons at high risk. Please see the 2011 CDC immunization schedules. For further guidance, please visit:	
			http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6003a3.htm? s_cid=mm6003a3_e	
			http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6030a3.htm	

Meningococcal Polysaccharide Vaccine (MPSV4)	Menomune (sanofi pasteur)	≥ 2 yrs	 2 doses may be recommended for children 3 months to 2 years of age under special circumstances given 3 months apart. Used for high-risk adults age 56 and older for vaccination and/or revaccination.
Pneumococcal 13- Valent Conjugate Vaccine (PCV-13) Pneumococcal Polysaccharide (PPSV)	Prevnar 13 (Wyeth) Pneumovax 23 (Merck)	6 wks through 5 yrs ≥ 2 yrs	 4 dose series recommended to be administered at 2, 4, 6, and 12-15 months. Infants and children who began immunization with PCV7 may complete series by switching to PCV13 at any point in schedule Children who have completed infant series with PCV7 should be administered a single PCV13 dose during the second year of life Note: Children who miss their shots at these ages should still get the vaccine. The number of doses and the intervals between doses will depend on the child's age. Ask your health care provider for details. I dose recommended for all adults 65 and older. Two doses may be given to high-risk individuals. The vaccine is also recommended for anyone at the series administered at 2, 4, 6, and 12-15 months. Age 2-11 months: 2 doses Age 12-59 months: 1 dose Mandated only for children enrolled in child care, preschool, or pre-Kindergarten: Minimum of 2 doses of pneumococcal conjugate vaccine is needed if between the ages of 2-11 months. Minimum of 1 dose of pneumococcal conjugate vaccine is needed after the first birthday.
			2 through 64 years of age if some other risk factor is present (e.g. on the basis of medical, occupational, lifestyle, or other indications). Note: Minimum age to use this vaccine is 2 years.
Polio (Inactivated)	IPOL (Sanofi Pasteur)	<u>></u> 6 wks	4 doses series recommended to be administered at ages 2, 4, 6 to 18 months and 4 to 6 years. Note: Routine primary poliovirus vaccination of adults (generally those 18 years of age or older) residing in the US is not recommended. Polio Age 1-6 years: 3 doses, with one dose given on or after the 4 th birthday, OR any 4 doses. Age 7 or Older: Any 3 doses

				Comments Any child entering preschool, and/or pre-Kindergarten needs a minimum of 3 doses. Kindergarten entry requires a booster dose after the fourth birthday.
				Either inactivated polio vaccine (IPV) or oral polio vaccine (OPV) separately or in combination is acceptable. Polio vaccine is not required for pupils 18 years
Rotavirus Vaccine (RV) Live, Oral	Rotarix (GSK)	6 through 24 wks	 2 dose series that recommended to be administered at 2 months and 4 months. Vaccination should not be initiated for infants age 15 wks 0 days and older. 	or older. Rotatvirus There is no Rotavirus vaccine requirement for school entry in NJ.
Rotavirus Vaccine (RV) Live, Oral, Pentavalent	RotaTeq (Merck)	6 through 32 wks	 3 dose series recommended to be administered at 2 months and 4 months. Vaccination should not be initiated for infants age 15 wks 0 days and older. The maximum age for the final dose in the series 8 months 0 days. 	
Varicella (Chickenpox)	Varivax (Merck)	≥ 12 mos	 Two doses recommended for individuals 12 months of age and older. Second dose recommended between 4-6 years of age. 	Varicella 1 dose on or after the first birthday

Note: Second dose recommended to be administered before age 4 years, with a minimum of a 3 month interval after the first dose. • Adults are recommended to receive 2 doses if previously not vaccinated. Note: Adolescents and adults 13 years of age and older should receive the first dose at elected date and a second dose 4 to 8 wks later.	Comments All children 19 months of age and older enrolled in a child care/ pre-school center or children born on or after 1-1-98 entering school for the first time in Kindergarten or Grade 1 need 1 dose of varicella vaccine. Laboratory evidence of immunity, physician's statement or a parental statement of previous varicella disease is
	acceptable.

Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2011

For those who fall behind or start late, see the catch-up schedule

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years	
Hepatitis B1	••••••	НерВ	He	рВ	:		Не	pB			••••••••••••••••••••••••••••••••••••••		
Rotavirus ²				RV	RV	RV ²							Range of
Diphtheria, Tetanus	s, Pertussis ³			DTaP	DTaP	DTaP	see footnote ³	רם	TaP			DTaP	ages for
Haemophilus influe	enzae type b ⁴			Hib	Hib	Hib ⁴	:	ib					children
Pneumococcal ⁵				PCV	PCV	PCV	P	CV			PF	PSV	
Inactivated Poliovir	us ⁶			IPV	IPV		IF	V				IPV	
Influenza ⁷									ienza (Ye	arly)			Range of recomme
Measles, Mumps, I	Rubella ⁸						MI	MR	5	see footnote	•	MMR	ages for one high-risk
Varicella ⁹							Vari	cella		see footnote	9	Varicella	
Hepatitis A ¹⁰								HepA (2	2 doses)		НерА	Series	
Meningococcal ¹¹											Mo	CV4	

This schedule includes recommendations in effect as of December 21, 2010. 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. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: http://www.cdc.gov/vaccines/pubs/acip-list.htm. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at http://www.vaers.hhs.gov or by telephone, 800-822-7967. Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

Hepatitis B vaccine (HepB). (Minimum age: birth) At birth:

- Administer monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis B surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if HBsAg-positive, administer HBIG (no later than age 1 week).

Doses following the birth dose:

- The second dose should be administered at age 1 or 2 months. Monovalent HepB should be used for doses administered before age 6 weeks.
- Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg 1 to 2 months after completion of at least 3 doses of the HepB series, at age 9 through 18 months (generally at the next well-child visit).
- Administration of 4 doses of HepB to infants is permissible when a combination vaccine containing HepB is administered after the birth dose.
- Infants who did not receive a birth dose should receive 3 doses of HepB on a schedule of 0, 1, and 6 months.
- The final (3rd or 4th) dose in the HepB series should be administered no earlier than age 24 weeks.

2. Rotavirus vaccine (RV). (Minimum age: 6 weeks)

- Administer the first dose at age 6 through 14 weeks (maximum age: 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
- If Rotarix is administered at ages 2 and 4 months, a dose at 6 months is not indicated.
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). (Minimum age: 6 weeks)
 - The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
- Haemophilus influenzae type b conjugate vaccine (Hib). (Minimum age: 6 weeks)
 - If PRP-OMP (PedvaxHIB or Comvax [HepB-Hib]) is administered at ages 2 and 4 months, a dose at age 6 months is not indicated.
 - Hiberix should not be used for doses at ages 2, 4, or 6 months for the primary series but can be used as the final dose in children aged 12 months through 4 years.
- Pneumococcal vaccine. (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPSV])
 - PCV is recommended for all children aged younger than 5 years. Administer 1 dose of PCV to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
 - not completely vaccinated for their age.

 A PCV series begun with 7-valent PCV (PCV7) should be completed with 13-valent PCV (PCV13).
 - A single supplemental dose of PCV13 is recommended for all children aged 14 through 59 months who have received an age-appropriate series of PCV7.
 - A single supplemental dose of PCV13 is recommended for all children aged 60 through 71 months with underlying medical conditions who have received an age-appropriate series of PCV7.

- The supplemental dose of PCV13 should be administered at least 8 weeks after the previous dose of PCV7. See MMWR 2010:59(No. RR-11).
- Administer PPSV at least 8 weeks after last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant.
- 6. Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)
 - If 4 or more doses are administered prior to age 4 years an additional dose should be administered at age 4 through 6 years.
 - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- Influenza vaccine (seasonal). (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])
 - For healthy children aged 2 years and older (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used, except LAIV should not be given to children aged 2 through 4 years who have had wheezing in the past 12 months.
 - Administer 2 doses (separated by at least 4 weeks) to children aged 6 months
 through 8 years who are receiving seasonal influenza vaccine for the first time
 or who were vaccinated for the first time during the previous influenza season
 but only received 1 dose.
 - Children aged 6 months through 8 years who received no doses of monovalent 2009 H1N1 vaccine should receive 2 doses of 2010–2011 seasonal influenza vaccine. See MMWR 2010;59(No. RR-8):33–34.
- 8. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)
 - The second dose may be administered before age 4 years, provided at least 4 weeks have elapsed since the first dose.
- 9. Varicella vaccine. (Minimum age: 12 months)
 - The second dose may be administered before age 4 years, provided at least 3 months have elapsed since the first dose.
 - For children aged 12 months through 12 years the recommended minimum interval between doses is 3 months. However, if the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.
- 10. Hepatitis A vaccine (HepA). (Minimum age: 12 months)
 - · Administer 2 doses at least 6 months apart.
 - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
- Meningococcal conjugate vaccine, quadrivalent (MCV4). (Minimum age: 2 years)
 - Administer 2 doses of MCV4 at least 8 weeks apart to children aged 2 through 10 years with persistent complement component deficiency and anatomic or functional asplenia, and 1 dose every 5 years thereafter.
 - Persons with human immunodeficiency virus (HIV) infection who are vaccinated with MCV4 should receive 2 doses at least 8 weeks apart.
 - Administer 1 dose of MCV4 to children aged 2 through 10 years who travel to countries with highly endemic or epidemic disease and during outbreaks caused by a vaccine serogroup.
 - Administer MCV4 to children at continued risk for meningococcal disease who were previously vaccinated with MCV4 or meningococcal polysaccharide vaccine after 3 years if the first dose was administered at age 2 through 6 years.

Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2011

For those who fall behind or start late, see the schedule below and the catch-up schedule

Vaccine ▼ Age ►	7–10 years	11-12 years	13–18 years			
Tetanus, Diphtheria, Pertussis ¹		Tdap	Tdap			
Human Papillomavirus ²	see footnote ²	HPV (3 doses)(females)	HPV Series	Range of recommend ages for all children		
Meningococcal ³	MCV4	MCV4	MCV4			
Influenza ⁴		Influenza (Yearly)				
Pneumococcal ⁵		Pneumococcal		Range		
Hepatitis A ⁶		HepA Series		recommages for catch-u		
Hepatitis B ⁷	Hep B Series					
Inactivated Poliovirus ⁸		IPV Series				
Measles, Mumps, Rubella ⁹		MMR Series		Range of recommende		
Varicella ¹⁰		Varicella Series		ages for ce high-risk gr		

This schedule includes recommendations in effect as of December 21, 2010. 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. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: http://www.cdc.gov/vaccines/pubs/acip-list.htm. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at http://www.vaers.hhs.gov or by telephone, 800-822-7967.

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

- Persons aged 11 through 18 years who have not received Tdap should receive a dose followed by Td booster doses every 10 years thereafter.
- Persons aged 7 through 10 years who are not fully immunized against pertussis (including those never vaccinated or with unknown pertussis vaccination status) should receive a single dose of Tdap. Refer to the catch-up schedule if additional doses of tetanus and diphtheria toxoid—containing vaccine are needed.
- Tdap can be administered regardless of the interval since the last tetanus and diphtheria toxoid—containing vaccine.

2. Human papillomavirus vaccine (HPV). (Minimum age: 9 years)

- Quadrivalent HPV vaccine (HPV4) or bivalent HPV vaccine (HPV2) is recommended for the prevention of cervical precancers and cancers in females.
- HPV4 is recommended for prevention of cervical precancers, cancers, and genital warts in females.
- HPV4 may be administered in a 3-dose series to males aged 9 through 18 years to reduce their likelihood of genital warts.
- Administer the second dose 1 to 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).

Meningococcal conjugate vaccine, quadrivalent (MCV4). (Minimum age: 2 years)

- Administer MCV4 at age 11 through 12 years with a booster dose at age 16 years.
- Administer 1 dose at age 13 through 18 years if not previously vaccinated.
- Persons who received their first dose at age 13 through 15 years should receive a booster dose at age 16 through 18 years.
- Administer 1 dose to previously unvaccinated college freshmen living in a dormitory.
- Administer 2 doses at least 8 weeks apart to children aged 2 through 10 years with persistent complement component deficiency and anatomic or functional asplenia, and 1 dose every 5 years thereafter.
- Persons with HIV infection who are vaccinated with MCV4 should receive 2 doses at least 8 weeks apart.
- Administer 1 dose of MCV4 to children aged 2 through 10 years who travel to countries with highly endemic or epidemic disease and during outbreaks caused by a vaccine serogroup.
- Administer MCV4 to children at continued risk for meningococcal disease who
 were previously vaccinated with MCV4 or meningococcal polysaccharide vaccine after 3 years (if first dose administered at age 2 through 6 years) or after 5
 years (if first dose administered at age 7 years or older).

4. Influenza vaccine (seasonal).

- For healthy nonpregnant persons aged 7 through 18 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used.
- Administer 2 doses (separated by at least 4 weeks) to children aged 6 months through 8 years who are receiving seasonal influenza vaccine for the first

- time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
- Children 6 months through 8 years of age who received no doses of monovalent 2009 H1N1 vaccine should receive 2 doses of 2010-2011 seasonal influenza vaccine. See MMWR 2010;59(No. RR-8):33–34.

5. Pneumococcal vaccines.

- A single dose of 13-valent pneumococcal conjugate vaccine (PCV13) may be administered to children aged 6 through 18 years who have functional or anatomic asplenia, HIV infection or other immunocompromising condition, cochlear implant or CSF leak. See MMWR 2010;59(No. RR-11).
- The dose of PCV13 should be administered at least 8 weeks after the previous dose of PCV7.
- Administer pneumococcal polysaccharide vaccine at least 8 weeks after the last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant. A single revaccination should be administered after 5 years to children with functional or anatomic asplenia or an immunocompromising condition.

6. Hepatitis A vaccine (HepA).

- Administer 2 doses at least 6 months apart.
- HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, or who are at increased risk for infection, or for whom immunity against hepatitis A is desired.

7. Hepatitis B vaccine (HepB).

- Administer the 3-dose series to those not previously vaccinated. For those with incomplete vaccination, follow the catch-up schedule.
- A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.

8. Inactivated poliovirus vaccine (IPV).

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following 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.

9. Measles, mumps, and rubella vaccine (MMR).

• The minimum interval between the 2 doses of MMR is 4 weeks.

10. Varicella vaccine.

- For persons aged 7 through 18 years without evidence of immunity (see MMWR 2007;56[No. RR-4]), administer 2 doses if not previously vaccinated or the second dose if only 1 dose has been administered.
- For persons aged 7 through 12 years, the recommended minimum interval between doses is 3 months. However, 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.

Catch-up Immunization Schedule for Persons Aged 4 Months Through 18 Years Who Start Late or Who Are More Than 1 Month Behind—United States • 2011

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age

		PERSONS AGED 4 MON	THS THROUGH 6 YEARS					
Vaccine	Minimum Age Minimum Interval Between Doses							
vaccine	for Dose 1	Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5			
Hepatitis B ¹	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)					
Rotavirus ²	6 wks	4 weeks	4 weeks ²	***************************************				
Diphtheria, Tetanus, Pertussis3	6 wks	4 weeks	4 weeks	6 months	6 months ³			
Haemophilus influenzae type b ⁴	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12–14 months No further doses needed if first dose administered at age 15 months or older	4 weeks ⁴ if current age is younger than 12 months 8 weeks (as final dose) ⁴ if current age is 12 months or older and first dose administered at younger than age 12 months and second dose administered at younger than 15 months No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months				
Pneumococcal ⁵	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months No further doses needed for healthy children if first dose administered at age 24 months or older	4 weeks if current age is younger than 12 months 8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months or for children at high risk who received 3 doses at any age				
Inactivated Poliovirus ⁶	6 wks	4 weeks	4 weeks	6 months ⁶				
Measles, Mumps, Rubella ⁷	12 mos	4 weeks						
Varicella ⁸	12 mos	3 months						
Hepatitis A ⁹	12 mos	6 months						
		PERSONS AGED 7T	HROUGH 18 YEARS					
Tetanus, Diphtheria/ Tetanus, Diphtheria, Pertussis ¹⁰	7 yrs ¹⁰	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at 12 months or older	6 months if first dose administered at younger than age 12 months				
Human Papillomavirus ¹¹	9 yrs	Routine dosing intervals are recommended (females) ¹¹						
Hepatitis A ⁹	12 mos	6 months						
Hepatitis B ¹	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)					
Inactivated Poliovirus ⁶	6 wks	4 weeks	4 weeks ⁶	6 months ⁶				
Measles, Mumps, Rubella ⁷	12 mos	4 weeks						
Varicella ⁸	12 mos	3 months if person is younger than age 13 years 4 weeks						
		if person is aged 13 years or older						

1. Hepatitis B vaccine (HepB).

- Administer the 3-dose series to those not previously vaccinated.
- The minimum age for the third dose of HepB is 24 weeks.
- A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.

2. Rotavirus vaccine (RV).

- The maximum age for the first dose 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.
- If Rotarix was administered for the first and second doses, a third dose is not indicated.

3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).

The fifth dose is not necessary if the fourth dose was administered at age 4 vears or older.

Haemophilus influenzae type b conjugate vaccine (Hib).

- 1 dose of Hib vaccine should be considered for unvaccinated persons aged 5 years or older who have sickle cell disease, leukemia, or HIV infection, or who have had a splenectomy
- If the first 2 doses were PRP-OMP (PedvaxHIB or Comvax), and 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 final dose at age 12 through 15 months.

5. Pneumococcal vaccine.

- Administer 1 dose of 13-valent pneumococcal conjugate vaccine (PCV13) to all healthy children aged 24 through 59 months with any incomplete PCV schedule (PCV7 or PCV13)
- For children aged 24 through 71 months with underlying medical conditions, administer 1 dose of PCV13 if 3 doses of PCV were received previously or administer 2 doses of PCV13 at least 8 weeks apart if fewer than 3 doses of PCV were received previously.
- A single dose of PCV13 is recommended for certain children with underlying medical conditions through 18 years of age. See age-specific schedules for details
- Administer pneumococcal polysaccharide vaccine (PPSV) to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant, at least 8 weeks after the last dose of PCV. A single revaccination should be administered after 5 years to children with functional or anatomic asplenia or an immunocompromising condition. See MMWR 2010;59(No. RR-11).

6. Inactivated poliovirus vaccine (IPV).

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following 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 following the previous dose.
- 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).

7. Measles, mumps, and rubella vaccine (MMR).

Administer the second dose routinely at age 4 through 6 years. The minimum interval between the 2 doses of MMR is 4 weeks.

Varicella vaccine.

- Administer the second dose routinely at age 4 through 6 years.
- If the second dose was administered at least 4 weeks after the first dose, it can be accepted as valid.

9. Hepatitis A vaccine (HepA).

- · HepA is recommended for children aged older than age 23 months who live in areas where vaccination programs target older children, or who are at increased risk for infection, or for whom immunity against hepatitis A is desired.

 10. Tetanus and diphtheria toxoids (Td) and tetanus and diphtheria toxoids and
- acellular pertussis vaccine (Tdap).

 - Doses of DTaP are counted as part of the Td/Tdap series.
 Tdap should be substituted for a single dose of Td in the catch-up series for children aged 7 through 10 years or as a booster for children aged 11 through 18 years; use Td for other doses.

11. Human papillomavirus vaccine (HPV).

- · Administer the series to females at age 13 through 18 years if not previously vaccinated or have not completed the vaccine series.
- · Quadrivalent HPV vaccine (HPV4) may be administered in a 3-dose series to males aged 9 through 18 years to reduce their likelihood of genital warts.
- Use recommended routine dosing intervals for series catch-up (i.e., the second and third doses should be administered at 1 to 2 and 6 months after the first dose). The minimum interval between the first and second doses is 4 weeks. The minimum interval between the second and third doses is 12 weeks, and the third dose should be administered at least 24 weeks after the first dose.

This information is provided to you by the New Jersey Department of Health and Senior Services, Vaccine Preventable Disease Program 609-826-4860

For Additional Information:

New Jersey Vaccine Preventable Disease Program http://nj.gov/health/cd/vpdp/

New Jersey Vaccines for Children Program https://njiis.nj.gov/njiis/html/vfc.html

New Jersey Immunization Information System https://njiis.nj.gov/njiis/

Centers for Disease Control and Prevention

http://www.cdc.gov/vaccines/

ACIP Recommendations

http://www.cdc.gov/vaccines/pubs/ACIP-list.htm

Vaccine Information Statements

http://www.cdc.gov/vaccines/pubs/vis/

Immunization Action Coalition

http://www.immunize.org/

Vaccine Package Inserts

http://www.immunize.org/packageinserts/