

Pediatric Preventive Health Care Guidelines

Recommended Immunization Schedule for Persons 0-18 Years. Per Centers for Disease Control

	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19-23 months	2-3 years	4-6 years	7-10 years	11-12 years	13-18 years
Hepatitis B ¹	HepB	HepB		see footnote 1	HepB			HepB Series						
Rotavirus ²			Rota	Rota	Rota									
Diphtheria, Tetanus, Pertussis ³			DTaP	DTaP	DTaP		DTaP				DTaP	see footnote 3	Tdap	Tdap
Haemophilus influenzae type b ⁴			Hib	Hib	Hib ⁴		Hib							
Pneumococcal ⁵			PCV	PCV	PCV		PCV				PPV			
Inactivated Poliovirus ⁶			IPV	IPV			IPV				IPV	IPV Series		
Influenza ⁷							Influenza (Yearly)				Influenza (Yearly)			
Measles, Mumps, Rubella ⁸							MMR				MMR	MMR Series		
Varicella ⁹							Varicella				Varicella	Varicella Series		
Hepatitis A ¹⁰							HepA (2 doses)				HepA Series			
Meningococcal ¹¹											MCV4	MCV4	MCV4	
Human Papillomavirus ¹²											see footnote ¹²	HPV (3 doses)	HPV Series	

Range of recommended ages	Catch-up immunization	Certain high-risk groups
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RECOMMENDED IMMUNIZATION SCHEDULE FOR PERSONS AGED 0-18 YEARS PER CENTERS FOR DISEASE CONTROL
 This schedule indicates the recommended ages for routine administration of currently licensed childhood vaccines, as of December 1, 2007, for children aged 0 through 6 years. Additional information is available at www.cdc.gov/vaccines/recs/schedules. Any dose not administered at the recommended age should be administered at any subsequent visit, when indicated and feasible. Additional vaccines may be licensed and recommended during the year. Licensed combination vaccines may be used whenever any components of the combination are indicated and other components of the vaccine are not contraindicated and if approved by the Food and Drug Administration for that dose of the series. Providers should consult the respective Advisory Committee on Immunization Practices statement for detailed recommendations, including for high risk conditions: <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). Guidance about how to obtain and complete VAERS form is available at www.vaers.hhs.gov or by telephone, (800) 822-7967.

HISTORY & PHYSICAL *

	0-24 Months	2-6 Years	7-10 Years	11-21 Years
Initial Health Assessment (IHA) Initial History/Physical	Complete within 120 days of enrollment in SFHP or documented as done within 12 months prior to enrollment. Must include "Staying Healthy" Assessment for Medi-Cal members			
"Staying Healthy" Assessment for Medi-Cal Members	Administer age-appropriate document once between ages 0 and 3. Update at each well visit	Administer age-appropriate document once between ages 4 and 8. Update annually	Administer age-appropriate document once between ages 9 and 11. Update at each well visit	Administer age-appropriate document once between ages 12 and 17. Update annually
Complete History and Physical (Unclothed Exam)	At birth and 2-4 days, and at 1, 2, 4, 6, 9, 12, 15, 18, and 24 months	Annually	8 and 10 years of age	Annually
Head Circumference	Every well visit	NA		
Height and Weight	Every well visit			
Developmental / Behavioral Assessment & Anticipatory Guidance	Every well visit			
Blood Pressure	NA	Every well visit starting at age 3		
Vision Screening	Subjective screening (including history) at every well visit	<ul style="list-style-type: none"> Objective vision test as part of a well visit, at ages 3 - 10, 12, 15, and 18 Subjective screening (including history) at all other well visits 		
Hearing Screening	Subjective screening (including history) at every well child visit	<ul style="list-style-type: none"> Objective hearing test (audiometry) as part of a well visit at 4 - 10, 12, 15, and 18 Subjective screening (including history) at all other well visits 		
Nutritional Assessment	Every well visit. Refer to WIC through age 5 years	Every well visit		
Dental Assessment / Referral	Dental inspection including mouth and gums at every well visit First dental referral between 1 & 3 years and annually thereafter			
LABORATORY / DIAGNOSTIC STUDIES				
Urinalysis	NA	At age 5	NA	Annual dipstick UA for leukocytes if sexually active
Hematocrit / Hemoglobin	<ul style="list-style-type: none"> Once between 9 and 12 months Once between 15 months and 5 years at time of kindergarten admission. PRN if high risk 		High risk	Menstruating Females: Annually Males: age 13
Hereditary & Metabolic Screening	PKU, Thyroid, Galactosemia and Hemoglobinopathies by 1 month	NA		
Lead Testing To report call Children's Environmental Health Program: (415) 554-8931	Between 9-12 months and at 24 months. Repeat as needed for high risk. Report if BLL is ≥ 10 mcg/dl (this level is specific to San Francisco County)			
Tuberculosis Screening	Annual risk assessment and symptom screen <ul style="list-style-type: none"> If any TB risk present: PPD or QuantiFERON TB test (QFT) If exposed: PPD or QFT immediately and repeated in 8 - 10 weeks If + PPD or QFT or symptoms present (cough >3 weeks or 2 other symptoms present, eg. weight loss, fever, or night sweats): order CXR, evaluate for active TB or refer to the TB clinic For consultation call TB Control: (415) 206-8524 or visit: www.sfdph.org/dph/comupg/oservices/medSvs/TB/TBScreen.asp			
Cholesterol Screening	Screen if parental or grandparental history of CHD ≤ 55 years of age OR if a parent has cholesterol ≥ 240 mg/dl			
Screening for Sexually Transmitted Infections For consultation call San Francisco City Clinic: (415) 487-5500 or visit: www.dph.sf.ca.us/sfcityclinic/STDProtocol/STDProtocols2006.pdf	NA		<ul style="list-style-type: none"> Sexually active females under 25: Screen for Chlamydia annually Men of any age who have sex with men: Screen for STI annually Heterosexual males: Conduct diagnostic testing if symptomatic or if partner is diagnosed with STI Men and women over 25: Diagnostic testing if symptomatic. 	
Cervical Cancer Screening Guidelines per USPSTF	NA		Begin screening 3 years after onset of sexual activity or at age 21, whichever occurs first. Continue screening every 1-3 years	
Rubella Antibody Screening	NA		Rubella serology followed by immediate vaccination for non-immune women of child bearing age. Vaccination following delivery for non-immune pregnant women	
EDUCATION / ANTICIPATORY GUIDANCE				
Assessment and guidance at every visit as appropriate for patient's age. Topics may include violence, injury prevention, safety, tobacco exposure or use, drugs / alcohol use, diet / nutrition, exercise, transition to adult provider				

* Source(s): American Academy of Pediatrics, U.S. Preventive Services Task Force 2007, San Francisco Department of Public Health, American Academy of Family Physicians, Advisory Committee on Immunization Practices

Information about reporting reactions after immunization is available online at <http://www.vaers.hhs.gov> or by telephone via the 24-hour national toll-free information line **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 immunization, is available from the National Center for Immunization and Respiratory Diseases at <http://www.cdc.gov/nip/default.htm> or telephone, **800-CDC-INFO (800-232-4636)**.

Recommended Immunization Schedule for Persons 0-18 Years Per Centers for Disease Control

- Hepatitis B vaccine (HepB).**
 - Administer the 3-dose series to those who were not previously vaccinated.
 - A 2-dose series of Recombivax HB® is licensed for children aged 11-15 years.
 - At birth:**
 - Administer monovalent HepB to all newborns prior to 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 the HBsAg status as soon as possible and if HBsAg-positive, administer HBIG (no later than age 1 week).
 - If mother is HBsAg-negative, the birth dose can be delayed. In rare cases, with a provider's order and a copy of the mother's negative HBsAg laboratory report in the infant's medical record.
 - After the birth dose:**
 - The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1-2 months. The final dose should be administered no earlier than age 24 weeks. Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg after completion of at least 3 doses of a licensed HepB series, at age 9-18 months (generally at the next well-child visit).
 - It is permissible to administer 4 doses of HepB when combination vaccines are administered after the birth dose. If monovalent HepB is used for doses after the birth dose, a dose at age 4 months is not needed.

- Rotavirus vaccine (Rota).**
 - (Minimum age: 6 weeks)
 - Administer the first dose at age 6-12 weeks.
 - Do not start the series later than age 12 weeks.
 - Administer the final dose in the series by age 32 weeks. Do not administer any dose later than age 32 weeks.
 - Data on safety and efficacy outside of these age ranges are insufficient.
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).** (Minimum age: 6 weeks for DTaP 10 years for BOOSTRIX® and 17 years for ADACEL™)
 - The fourth dose of DTaP may be administered as early as age 12 months, provided 6 months have elapsed since the third dose.
 - Administer the final dose in the series at age 4-6 years.
 - Administer at age 11-12 years for those who have completed the recommended childhood DTaP/DTaP vaccination series and have not received a tetanus and diphtheria toxoids (Td) booster dose.
 - 13-18 year olds who missed the 11-12 year Tdap or received Td only, are encouraged to receive one dose of Tdap 5 years after the last Td/DTaP dose.
- Haemophilus influenzae type b conjugate vaccine (Hib).** (Minimum age: 6 weeks)
 - If PRP-OMP (PedvaxiHB® or ComVax® [Merck]) is administered at ages 2 and 4 months, a dose at age 6 months is not required.
 - TriHibit® (DTaP/Hib) combination products should not be used for primary immunization but can be used as boosters following any Hib vaccine in children age 12 months or older.
- Pneumococcal vaccine.** (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPV])
 - Administer one dose of PCV to all healthy children aged 24-59 months having any incomplete schedule.

- Administer PPV to people aged 2 years and older with underlying medical conditions or in high-risk groups.
- Inactivated poliovirus vaccine (IPV).** (Minimum age: 6 weeks)
 - For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if the third dose was administered at age 4 years or older.
 - 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.
- Influenza vaccine.** (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])
 - Children receiving TIV should receive 0.25 mL of age 6-35 mos or 0.5 mL if age 3 years or older.
 - Administer 2 doses (separated by 4 weeks or longer) to children younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time last season, but only received one dose.
- Measles, mumps, and rubella vaccine (MMR).** (Minimum age: 12 months)
 - Administer the second dose of MMR at age 4-6 years. MMR may be administered before age 4-6 years, provided 4 weeks or more have elapsed since the first dose.

- Varicella vaccine.** (Minimum age: 12 months)
 - Administer second dose at age 4-6 years; may be administered 3 months or more after first dose.
 - Don't repeat second dose if administered 28 days or more after first dose.
- Human papillomavirus vaccine (HPV).** (Minimum age: 9 years)
 - Administer the first dose of the HPV vaccine series to females at age 11-12 years.
 - Administer the second dose 2 months after the first dose and the third dose 6 months after the first dose.
 - Administer the HPV vaccine series to females at age 13-18 years if not previously vaccinated.
- Meningococcal vaccine.** (Minimum age: 2 years for meningococcal conjugate vaccine [MCV4] and for meningococcal polysaccharide vaccine [MPSV4])
 - MCV4 is recommended for children aged 2-10 years with terminal complement deficiencies or anatomic or functional asplenia and certain other high-risk groups.
 - Persons who received MPSV4 3 or more years prior and remain at increased risk for meningococcal disease should be vaccinated with MCV4.
- Meningococcal vaccine.** (Minimum age: 12 months)
 - Administer MCV4 at age 11-12 years and at age 13-18 years if not previously vaccinated. MPSV4 is an acceptable alternative.
 - Administer MCV4 to previously unvaccinated college freshmen living in dormitories.

Catch-up Immunization Schedule for Persons Aged 4 Months-18 Years Who Start Late or Who Are More Than 1 Month Behind

- Hepatitis B vaccine (HepB).**
 - Administer the 3-dose series to those who were not previously vaccinated.
 - A 2-dose series of Recombivax HB® is licensed for children aged 11-15 years.
- Rotavirus vaccine (Rota).**
 - Do not start the series later than age 12 weeks.
 - Administer the final dose in the series by age 32 weeks.
 - Do not administer a dose later than age 32 weeks.
 - Data on safety and efficacy outside of these age ranges are insufficient.
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).**
 - The fifth dose is not necessary if the fourth dose was administered at age 4 years or older.
 - DTaP is not indicated for persons aged 7 years or older.

- Haemophilus influenzae type b conjugate vaccine (Hib).**
 - Vaccine is not generally recommended for children aged 5 years or older.
 - If current age is younger than 12 months and the first 2 doses were PRP-OMP (PedvaxiHB® or ComVax® [Merck]), the third (and final) dose should be administered at age 12-15 months and at least 8 weeks after the second dose.
 - If first dose was administered at age 7-11 months, administer 2 doses separated by 4 weeks plus a booster at age 12-15 months.
- Pneumococcal conjugate vaccine (PCV).**
 - Administer one dose of PCV to all healthy children aged 24-59 months having any incomplete schedule.
 - For children with underlying medical conditions administer 2 doses of PCV at least 8 weeks apart if previously received less than 3 doses or 1 dose of PCV if previously received 3 doses.
- Inactivated poliovirus vaccine (IPV).**
 - For children who received an all-IPV or all-oral poliovirus (OPV) series, a fourth dose is not necessary if third dose was administered at age 4 years or older.
 - 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 persons aged 18 years and older.
- Measles, mumps, and rubella vaccine (MMR).**
 - The second dose of MMR is recommended routinely at age 4-6 years but may be administered earlier if desired.
 - If not previously vaccinated, administer 2 doses of MMR during any visit with 4 or more weeks between the doses.

- Varicella vaccine.**
 - The second dose of varicella vaccine is recommended routinely at age 4-6 years but may be administered earlier if desired.
 - Do not repeat the second dose in persons younger than 13 years of age if administered 28 or more days after the first dose.
- Hepatitis A vaccine (HepA).**
 - HepA is recommended for certain groups of children, including in areas where vaccination programs target older children. See *MMWR* 2006,55(No. RR-7):1-23.
- Tetanus and diphtheria toxoids vaccine (Td) and tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).**
 - Tdap should be substituted for a single dose of Td in the primary catch-up series or as a booster if age appropriate; use Td for other doses.
 - A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose. A booster (fourth) dose is needed if any of the previous doses were administered at younger than 12 months of age. Refer to ACIP recommendations for further information.
 - See *MMWR* 2006,55(No. RR-3).
- Human papillomavirus vaccine (HPV).**
 - Administer the HPV vaccine series to females at age 13-18 years if not previously vaccinated.

The above guidelines are compiled from a list of sources and are not a substitute for the medical judgment of physicians. Updated May 2008.