



Immunization Program Nursing Unit

Los Angeles County
Department of Public Health



Objectives



- State the role of vaccinations in the prevention of disease.
- Describe the different recommended immunization schedules.
- Describe the role of the PHN in the Immunization Program.

**What would happen if
we stopped vaccinations?**



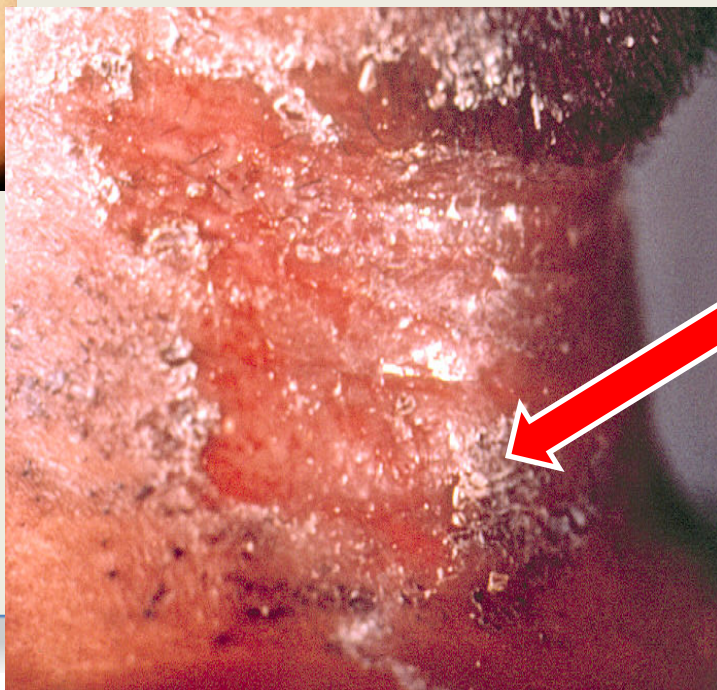
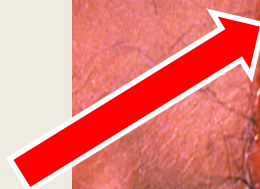
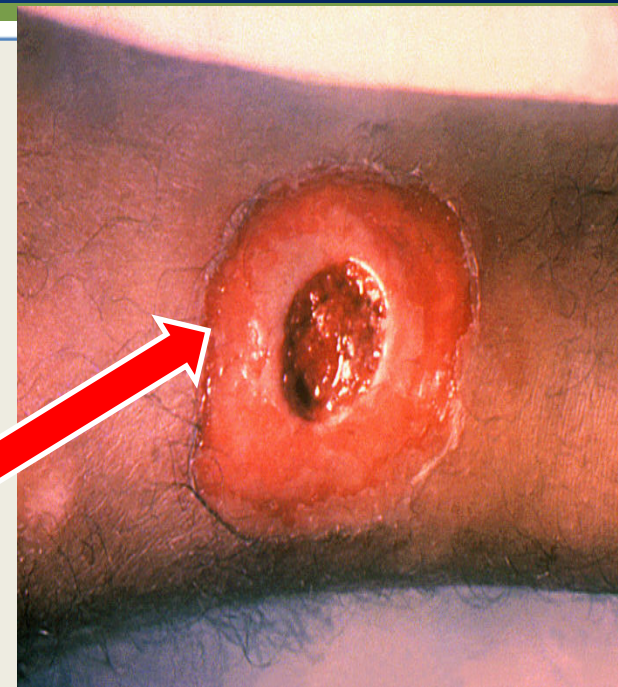




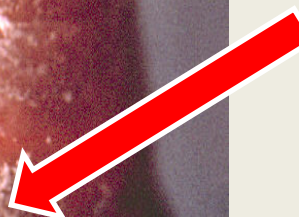
Thick gray coating on
the back of the throat

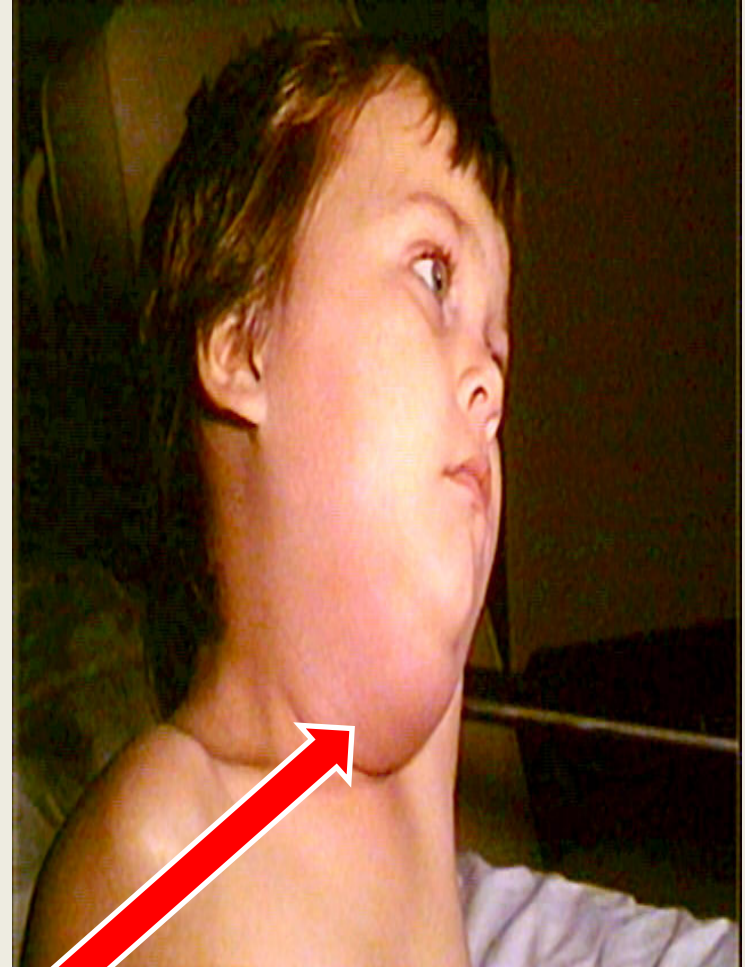


Skin lesion on the leg



Skin lesion on neck





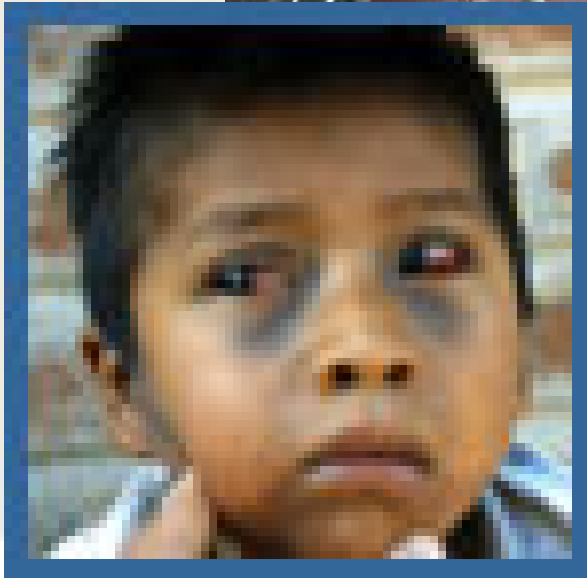
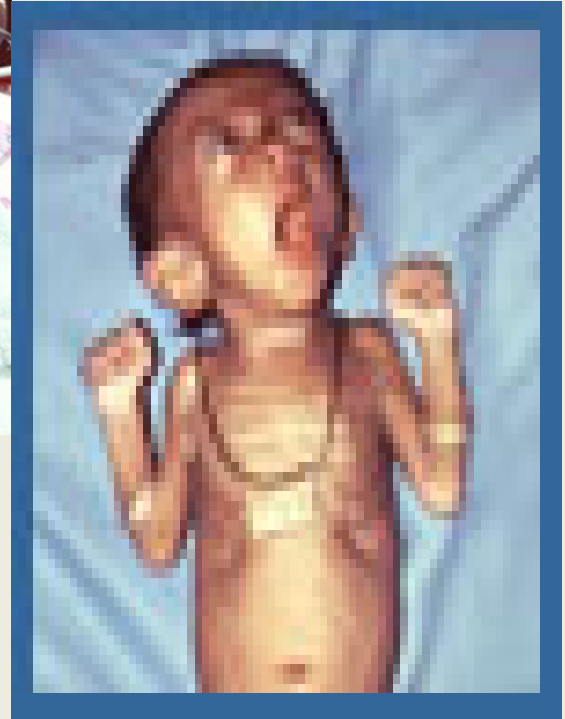
What virus causes swollen parotid glands?



What viruses most commonly affect the liver?



**This disease is characterized by a rash, cough, and conjunctivitis.
Can you name this disease?**





This disease has been eradicated in the Western hemisphere, and European and Western Pacific regions.











Figure 1. Recommended immunization schedule for persons aged 0 through 18 years – United States, 2015.

(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 shaded.

Vaccine	Birth	1 mo	2 mos	4 mos	6 mos	9 mos	12 mos	15 mos	18 mos	19-23 mos	2-3 yrs	4-6 yrs	7-10 yrs	11-12 yrs	13-15 yrs	16-18 yrs
Hepatitis B ¹ (HepB)	1 st dose	← 2 nd dose →			← 3 rd dose →											
Rotavirus ² (RV) RV1 (2-dose series); RV5 (3-dose series)			1 st dose	2 nd dose	See footnote 2											
Diphtheria, tetanus, & acellular pertussis ³ (DTaP: <7 yrs)			1 st dose	2 nd dose	3 rd dose				← 4 th dose →			5 th dose				
Tetanus, diphtheria, & acellular pertussis ⁴ (Tdap: ≥7 yrs)														(Tdap)		
Haemophilus influenzae type b ⁵ (Hib)			1 st dose	2 nd dose	See footnote 5				← 3 rd or 4 th dose → See footnote 5							
Pneumococcal conjugate ⁶ (PCV13)			1 st dose	2 nd dose	3 rd dose				← 4 th dose →							
Pneumococcal polysaccharide ⁶ (PPSV23)																
Inactivated poliovirus ⁷ (IPV: <18 yrs)			1 st dose	2 nd dose	← 3 rd dose →							4 th dose				
Influenza ⁸ (IV; LAIV) 2 doses for some: See footnote 8					Annual vaccination (IV only) 1 or 2 doses						Annual vaccination (LAIV or IV) 1 or 2 doses		Annual vaccination (LAIV or IV) 1 dose only			
Measles, mumps, rubella ⁹ (MMR)					See footnote 9		← 1 st dose →					2 nd dose				
Varicella ¹⁰ (VAR)							← 1 st dose →					2 nd dose				
Hepatitis A ¹¹ (HepA)							← 2-dose series, See footnote 11 →									
Human papillomavirus ¹² (HPV2: females only; HPV4: males and females)															(3-dose series)	
Meningococcal ¹³ (Hib-MenCY ≥ 6 weeks; MenACWY-D ≥ 9 mos; MenACWY-CRM ≥ 2 mos)			See footnote 13											1 st dose		Booster

Range of recommended ages for all children
Range of recommended ages for catch-up immunization
Range of recommended ages for certain high-risk groups
Range of recommended ages during which catch-up is encouraged and for certain high-risk groups
Not routinely recommended

This schedule includes recommendations in effect as of January 1, 2015. 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). 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>).

NOTE: The above recommendations must be read along with the footnotes of this schedule.



FIGURE 2. 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, 2015.

The figure 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. Always use this table in conjunction with Figure 1 and the footnotes that follow.

Children age 4 months through 6 years					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		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; Minimum age for the final dose is 24 weeks.		
Rotavirus ²	6 weeks	4 weeks	4 weeks ²		
Diphtheria, tetanus, and acellular pertussis ³	6 weeks	4 weeks	4 weeks	6 months	6 months ⁴
Haemophilus influenzae type b ⁵	6 weeks	4 weeks if first dose was administered before the 1 st birthday. 8 weeks (as final dose) if first dose was administered at age 12 through 14 months. No further doses needed if first dose was administered at age 15 months or older.	4 weeks ⁶ if current age is younger than 12 months and first dose was administered at younger than age 7 months, and at least 1 previous dose was PRP-T (ActHib, Pentacel) or unknown. 8 weeks and age 12 through 59 months (as final dose) ⁷ - if current age is younger than 12 months and first dose was administered at age 7 through 11 months; GB - if current age is 12 through 59 months and first dose was administered at younger than 15 months; GB - if both doses were PRP-OMP (Pneumovax, Comvax) and were administered before the 1 st birthday. No further doses needed if previous dose was administered at age 15 months or older.	8 weeks (as final dose) This dose only necessary for children age 12 through 59 months who received 3 doses before the 1 st birthday.	
Pneumococcal ⁸	6 weeks	4 weeks if first dose administered before the 1 st birthday. 8 weeks (as final dose for healthy children) if first dose was administered at the 1 st birthday or after. 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 and previous dose given at <7 months old. 8 weeks (as final dose for healthy children) if previous dose given between 7-11 months (wait until at least 12 months old); GB if current age is 12 months or older and at least 1 dose was given before age 12 months. 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 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 ⁹	6 weeks	4 weeks ⁷	4 weeks ⁷	6 months ⁷ (minimum age 4 years for final dose).	
Meningococcal ¹⁰	6 weeks	8 weeks ¹¹	See footnote 13	See footnote 13	
Measles, mumps, rubella ¹²	12 months	4 weeks			
Varicella ¹³	12 months	3 months			
Hepatitis A ¹⁴	12 months	6 months			
Children and adolescents age 7 through 18 years					
Tetanus, diphtheria, tetanus, diphtheria, and acellular pertussis ³	7 years ¹	4 weeks	4 weeks if first dose of DTaP/DT was administered before the 1 st birthday. 6 months (as final dose) if first dose of DTaP/DT was administered at or after the 1 st birthday.	6 months if first dose of DTaP/DT was administered before the 1 st birthday.	
Human papillomavirus ¹⁵	9 years	Routine dosing intervals are recommended. ¹⁶			
Hepatitis A ¹⁴	Not applicable (N/A)	6 months			
Hepatitis B ¹	N/A	4 weeks	8 weeks and at least 16 weeks after first dose.		
Inactivated poliovirus ⁹	N/A	4 weeks	4 weeks ⁷	6 months ⁷	
Meningococcal ¹⁰	N/A	8 weeks ¹¹			
Measles, mumps, rubella ¹²	N/A				
Varicella ¹³	N/A	3 months if younger than age 13 years. 4 weeks if age 13 years or older.			

NOTE: The above recommendations must be read along with the footnotes of this schedule.

Recommended Adult Immunization Schedule—United States - 2014

Note: These recommendations must be read with the footnotes that follow containing number of doses, intervals between doses, and other important information.

Figure 1. Recommended adult immunization schedule, by vaccine and age group¹

VACCINE	AGE GROUP	19-29 years	22-26 years	27-49 years	50-59 years	60-64 years	≥ 65 years
Influenza ^{1,2}		1 dose annually					
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,2}		Substitute 1-time dose of Tdap for Td booster; then boost with Td every 10 yrs					
Varicella ^{1,2}		2 doses					
Human papillomavirus (HPV) Female ^{1,2}		3 doses					
Human papillomavirus (HPV) Male ^{1,2}		3 doses					
Zoster ⁴		1 dose					
Measles, mumps, rubella (MMR) ^{1,2}		1 or 2 doses					
Pneumococcal 13-valent conjugate (PCV13) ^{1,2}		1 dose					
Pneumococcal polysaccharide (PPSV23) ^{1,2,3}		1 or 2 doses					
Meningococcal ^{1,2}		1 or more doses					
Hepatitis A ^{1,2}		2 doses					
Hepatitis B ^{1,2}		3 doses					
Haemophilus influenzae type b (Hib) ^{1,2}		1 or 3 doses					

¹Covered by the Vaccine Injury Compensation Program

- For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster
- Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)
- No recommendation

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at www.vaers.hhs.gov or by telephone, 800-622-7967. Information on how to file a Vaccine Injury Compensation Program claim is available at www.hrsa.gov/vaccinecompensation or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20005, telephone, 202-357-8400. Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is also available at www.cdc.gov/vaccines or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 8:00 a.m. - 8:00 p.m. Eastern Time, Monday - Friday, excluding holidays. 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. The recommendations in this schedule were approved by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices (ACIP), the American Academy of Family Physicians (AAFP), the American College of Physicians (ACP), American College of Obstetricians and Gynecologists (ACOG) and American College of Nurse-Midwives (ACNM).

Figure 2. Vaccines that might be indicated for adults based on medical and other indications¹

VACCINE	INDICATION	Pregnancy	Immune-compromising conditions (excluding human immunodeficiency virus (HIV)) ^{1,2,3,4,5,6,7}	HIV infection CD4+ T lymphocyte count ^{8,9,10,11,12}	Men who have sex with men (MSM) ¹³	Heart disease, chronic lung disease, chronic alcoholism	Asplenia (including elective splenectomy and persistent complement component deficiencies) ¹⁴	Chronic liver disease	Diabetes	Healthcare personnel ¹⁵
Influenza ^{1,2}										
Tetanus, diphtheria, pertussis (Td/Tdap) ^{1,2}										
Varicella ^{1,2}										
Human papillomavirus (HPV) Female ^{1,2}										
Human papillomavirus (HPV) Male ^{1,2}										
Zoster ⁴										
Measles, mumps, rubella (MMR) ^{1,2}										
Pneumococcal 13-valent conjugate (PCV13) ^{1,2}										
Pneumococcal polysaccharide (PPSV23) ^{1,2,3}										
Meningococcal ^{1,2}										
Hepatitis A ^{1,2}										
Hepatitis B ^{1,2}										
Haemophilus influenzae type b (Hib) ^{1,2}										

¹Covered by the Vaccine Injury Compensation Program

- For all persons in this category who meet the age requirements and who lack documentation of vaccination or have no evidence of previous infection; zoster vaccine recommended regardless of prior episode of zoster
- Recommended if some other risk factor is present (e.g., on the basis of medical, occupational, lifestyle, or other indications)
- No recommendation



These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults age 19 years and older, as of February 1, 2014. For all vaccines being recommended on the Adult Immunization Schedule, a vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those used primarily for travelers or that are issued during the year, consult the manufacturers' package inserts and the complete statements from the Advisory Committee on Immunization Practices (www.cdc.gov/vaccines/imz/immunization-practices). 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.

Do we administer vaccines?

No

How do we interact with Community Health Services (CHS)?

Consultation

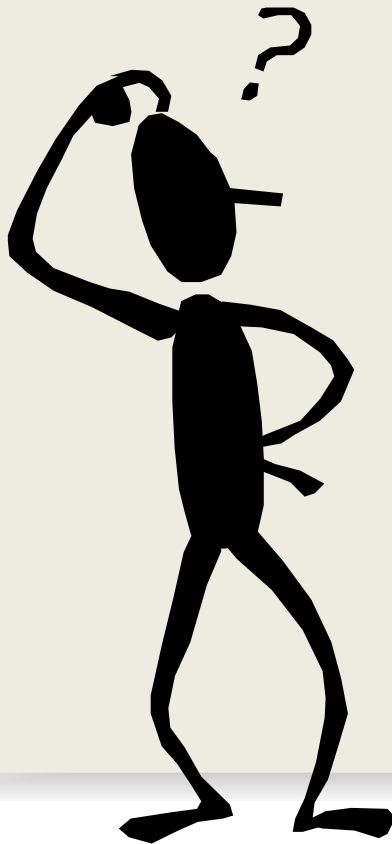
Flu campaigns

Classes on immunization practices

Services Provided:

- Professional Education and Training
 - Vaccination schedule
 - Vaccination of special populations (i.e. healthcare workers, adults, adolescents)
 - Immunization Skills Institute
- Compliance Audits
 - Assess immunization practices to ensure providers meet CDC Standards
 - Birthing hospitals
- Provide consultation on immunization-related issues
- Case management for pregnant women with Hepatitis B

QUESTIONS?????





THANK YOU!

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