



Vaccine Preventable Disease Control Program (VPDCP) Nursing Unit

Los Angeles County
Department of Public Health



By the end of this presentation, participants will know how to:

- Describe the role of the Public Health Nurse (PHN) in the VPDCP
- State the role of vaccinations in the prevention of disease
- Describe the different recommended immunization schedules
- Discuss vaccine recommendations for pregnant women
- Describe the Standards of Adult Immunization Practices





Role of the PHN



The goal of the VPDCP

- Decrease vaccine – preventable diseases (VPDs) by increasing vaccine rates



1. Professional Education and Training

- Vaccination Schedules (Children and Adults)
- Vaccination of Special Populations
- Health Care Personnel
- School Law Requirements
- Vaccine Administration (i.e. ISI)
- Vaccine Storage and Handling
- Emergency Preparedness



2. Screening VPD Reports reported to VPDC

- Conduct initial screening of measles and mumps reports
- Provide clinical guidance on specimen collection, vaccination, and disease control
- Assess barriers to maternal Tdap vaccination for infant (<12 months of age) pertussis cases



3. Perinatal Hepatitis B Unit

- Consult with prenatal/OB providers, laboratories, delivery hospitals
- Oversee case management activities of all HBsAg + pregnant women, including household/sexual contacts & infants
- Develop education materials for prenatal/pediatric providers and patients
- Develop procedures to enhance case management activities



Strategy to Eliminate Hepatitis B Virus Transmission— United States

- Prevent perinatal HBV transmission
 - Routine testing of **all** pregnant women for HBsAg during **each** pregnancy
 - HBV **DNA testing** for all HBsAg+ women
 - Antiviral therapy if DNA is $\geq 200,000$ IU/mL
 - Prophylaxis (**HBIG and Hep B**) for infants born to HBsAg+ women
- **Universal vaccination** of all infants at birth
- Routine vaccination of previously unvaccinated children and adolescents
- Vaccination of adults at high risk



4. Conduct VFC Compliance Visits (Audits)

- Assess immunization practices to ensure providers meet VFC and CDC Guidelines:
 - Storage and handling
 - Vaccine administration
 - Medical record review

5. Consult with schools and parents regarding vaccine requirements for school entry



6. Collaborate w/ Emergency Preparedness Division

- Consult on pandemic flu, anthrax, and smallpox vaccinations
- Participate in emergency exercises to prepare DPH workforce

7. General Consultations

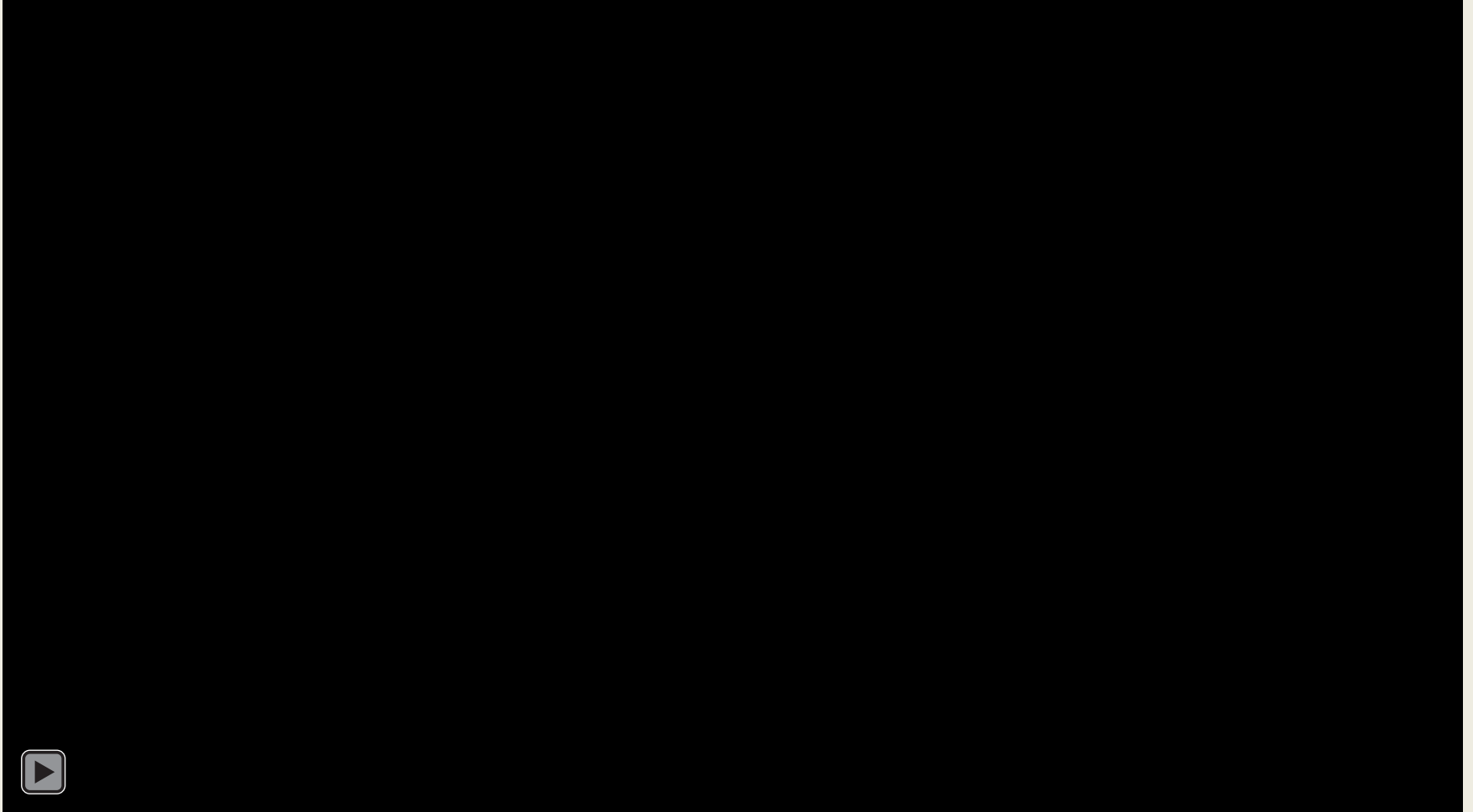
- Travel vaccine recommendations
- Vaccine recommendations
- School vaccine requirements



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







Vaccine Schedule By Age



Table 1 Recommended Child and Adolescent Immunization Schedule for ages 18 years or younger United States, 2019

These recommendations must be read with the Notes 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 Table 1. To determine minimum intervals between doses, see the catch-up schedule (Table 2). School entry and adolescent vaccine age groups are shaded in gray.

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 yrs	17-18 yrs
Hepatitis B (HepB)	1 st dose	2 nd dose			3 rd dose												
Rotavirus (RV) RV1 (2-dose series); RV5 (3-dose series)		1 st dose	2 nd dose	See Notes													
Diphtheria, tetanus, & acellular pertussis (DTaP: <7 yrs)		1 st dose	2 nd dose	3 rd dose			4 th dose					5 th dose					
Haemophilus influenzae type b (Hib)		1 st dose	2 nd dose	See Notes			3 rd or 4 th dose										
Pneumococcal conjugate (PCV13)		1 st dose	2 nd dose	3 rd dose			4 th dose										
Inactivated poliovirus (IPV: <18 yrs)		1 st dose	2 nd dose		3 rd dose							4 th dose					
Influenza (IIV)					Annual vaccination 1 or 2 doses									Annual vaccination 1 dose only			
Influenza (LAIV)												Annual vaccination 1 or 2 doses		Annual vaccination 1 dose only			
Measles, mumps, rubella (MMR)					See Notes		1 st dose					2 nd dose					
Varicella (VAR)							1 st dose					2 nd dose					
Hepatitis A (HepA)					See Notes		2-dose series, See Notes										
Meningococcal (MenACWY-D ≥9 mos; MenACWY-CRM ≥2 mos)					See Notes								1 st dose		2 nd dose		
Tetanus, diphtheria, & acellular pertussis (Tdap: ≥7 yrs)																	Tdap
Human papillomavirus (HPV)																	See Notes
Meningococcal B																	See Notes
Pneumococcal polysaccharide (PPSV23)																	See Notes

Table 1 Recommended Adult Immunization Schedule by Age Group United States, 2019

Vaccine	19-21 years	22-26 years	27-49 years	50-64 years	≥65 years
Influenza inactivated (IIV) or Influenza recombinant (RIV) OR Influenza live attenuated (LAIV)	1 dose annually				
Tetanus, diphtheria, pertussis (Tdap or Td)	1 dose Tdap, then Td booster every 10 yrs				
Measles, mumps, rubella (MMR)	1 or 2 doses depending on indication (if born in 1957 or later)				
Varicella (VAR)	2 doses (if born in 1980 or later)				
Zoster recombinant (RZV) (preferred) OR Zoster live (ZVL)	2 doses				
Human papillomavirus (HPV) Female	2 or 3 doses depending on age at initial vaccination				
Human papillomavirus (HPV) Male	2 or 3 doses depending on age at initial vaccination				
Pneumococcal conjugate (PCV13)					1 dose
Pneumococcal polysaccharide (PPSV23)			1 or 2 doses depending on indication		1 dose
Hepatitis A (HepA)		2 or 3 doses depending on vaccine			
Hepatitis B (HepB)		2 or 3 doses depending on vaccine			
Meningococcal A, C, W, Y (MenACWY)		1 or 2 doses depending on indication, then booster every 5 yrs if risk remains			
Meningococcal B (MenB)		2 or 3 doses depending on vaccine and indication			
Haemophilus influenzae type b (Hib)		1 or 3 doses depending on indication			

www.cdc.gov/vaccines/schedules/hcp/index.html



Medical Indications/Condition



Table 3 Recommended Child and Adolescent Immunization Schedule by Medical Indication United States, 2019

VACCINE	INDICATION									
	Pregnancy	Immunocompromised status (excluding HIV infection)	HIV infection CD4+ count ¹ <15% and total CD4 cell count of <200/mm ³	≥15% and total CD4 cell count of ≥200/mm ³	Kidney failure, end-stage renal disease, on hemodialysis	Heart disease, chronic lung disease	CSF leaks/cochlear implants	Asplenia and persistent complement deficiencies	Chronic liver disease	Diabetes
Hepatitis B										
Rotavirus		SCID ²								
Diphtheria, tetanus, & acellular pertussis (DTaP)										
Hemophilus influenzae type b										
Pneumococcal conjugate										
Inactivated poliovirus										
Influenza (IV)										
Influenza (LAIV)					Asthma, wheezing: 2-4 yrs ³					
Measles, mumps, rubella										
Varicella										
Hepatitis A										
Meningococcal ACWY										
Tetanus, diphtheria, & acellular pertussis (Tdap)										
Human papillomavirus										
Meningococcal B										
Pneumococcal polysaccharide										

1 For additional information regarding HIV laboratory parameters and use of live vaccines, see the General Best Practice Guidelines for Immunization "Altered Immunocompetence" at www.cdc.gov/vaccines/hcp/acip-recs/general-recs/immunocompetence.html, and Table 4-1 (footnote D) at: www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html.
 2 Severe Combined Immunodeficiency
 3 LAIV contraindicated for children 2-4 years of age with asthma or wheezing during the preceding 12 months.
 02/27/19 Centers for Disease Control and Prevention | Recommended Child and Adolescent Immunization Schedule, United States, 2019 | Page 4

Table 2 Recommended Adult Immunization Schedule by Medical Condition and Other Indications United States, 2019

Vaccine	Pregnancy	Immunocompromised (excluding HIV infection)	HIV infection CD4 count		Asplenia, complement deficiencies	End-stage renal disease, on hemodialysis	Heart or lung disease, alcoholism ¹	Chronic liver disease	Diabetes	Health care personnel ²	Men who have sex with men
			<200	≥200							
IIV or RIV											1 dose annually
LAIV		CONTRAINDICATED									1 dose annually
Tdap or Td	1 dose Tdap each pregnancy										1 dose Tdap, then Td booster every 10 yrs
MMR		CONTRAINDICATED									1 or 2 doses depending on indication
VAR		CONTRAINDICATED									2 doses
RZV (preferred)	DELAY										2 doses at age ≥50 yrs
ZVL		CONTRAINDICATED									1 dose at age ≥60 yrs
HPV Female	DELAY		3 doses through age 26 yrs								2 or 3 doses through age 26 yrs
HPV Male			3 doses through age 26 yrs								2 or 3 doses through age 26 yrs
PCV13											1 dose
PPSV23											1, 2, or 3 doses depending on age and indication
HepA											2 or 3 doses depending on vaccine
HepB											2 or 3 doses depending on vaccine
MenACWY											1 or 2 doses depending on indication then booster every 5 yrs if risk remains
MenB	PRECAUTION										2 or 3 doses depending on vaccine and indication
Hib			3 doses HSCT recipients only								1 dose

1. Precaution for LAIV does not apply to alcoholism. 2. See notes for influenza; hepatitis B; measles, mumps, and rubella; and varicella vaccinations. 3. Hematopoietic stem cell transplant.
 02/27/19 Centers for Disease Control and Prevention | Recommended Adult Immunization Schedule, United States, 2019 | Page 3

www.cdc.gov/vaccines/schedules/hcp/index.html



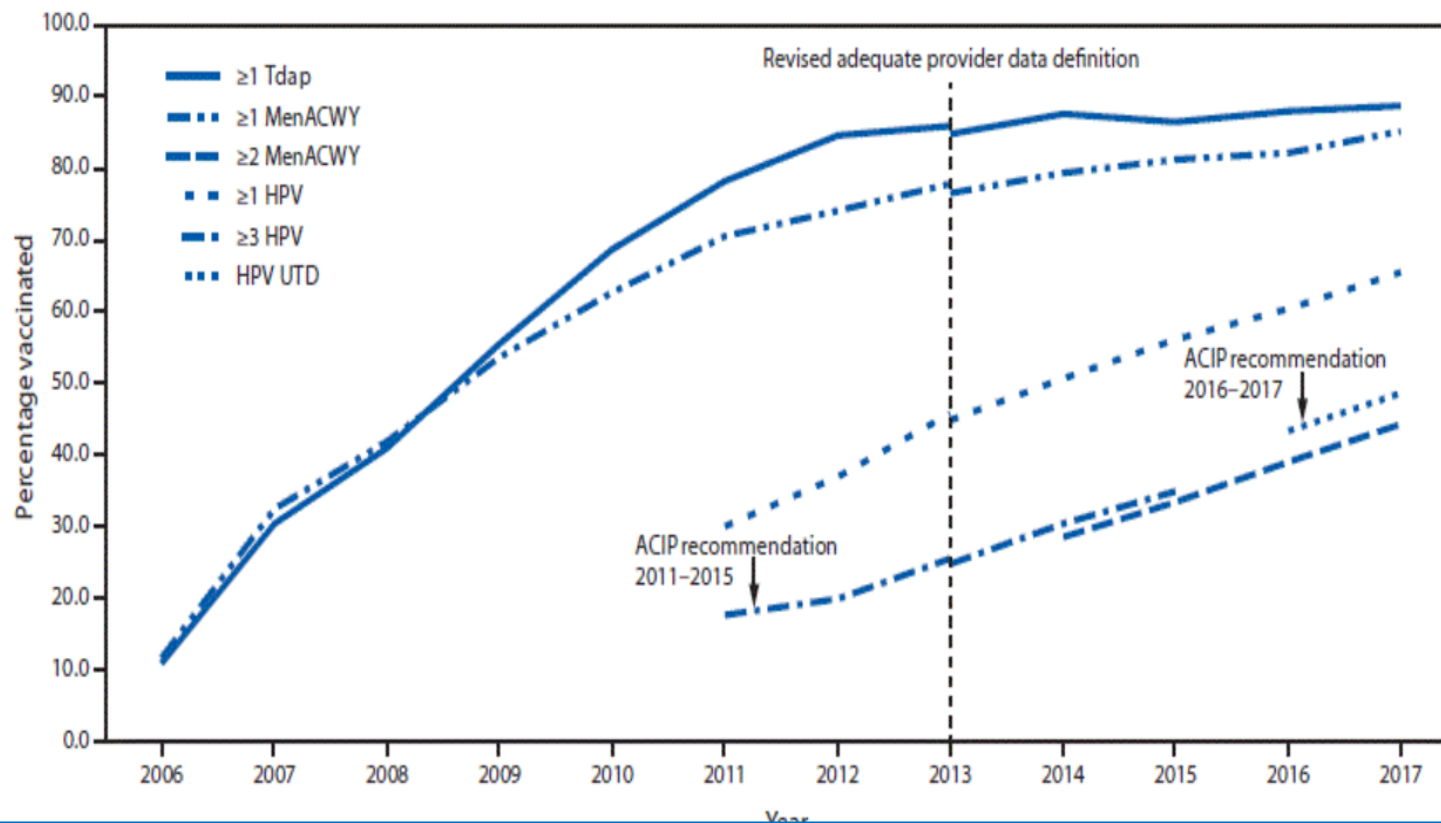
- No evidence exists of risk to the fetus from vaccinating pregnant women
 - Tdap recommended with **every** pregnancy
- Benefits outweigh the risk
- Live vaccines (i.e. MMR, Chickenpox, LAIV) **not** recommended
- Vaccines do not interfere with breast feeding



Adolescent Immunization Coverage Levels



FIGURE. Estimated coverage with selected vaccines and doses* among adolescents aged 13–17 years, by survey year and ACIP recommendations† — National Immunization Survey–Teen, United States, 2006–2017^s



- Adults may become **seriously ill** and be **hospitalized** because of VPDs
- Immunizations help **protect** adults from unnecessary suffering caused by VPDs
- Immunity from some vaccines may **wane** over time
- Risk for VPDs due to job, lifestyle, travel, or health conditions



Adult Vaccination Rates



- Adult **vaccination rates** are extremely **low**.
- Most adults are **NOT** aware that they need vaccines
- **Missed opportunities** to vaccinate
- Recommendation from their healthcare professional is the **strongest predictor** of whether patients get vaccinated



Travel Vaccine Recommendations



COUNTY OF LOS ANGELES
Public Health



- Vaccine are the most safe and effective way to prevent disease
- Screen all patients for immunization status during every encounter
- Give a strong recommendation for vaccines
- Vaccines protect both mother and baby before, during and after pregnancy
- Adult need vaccines too!





Immunization Resources



Immunization Resources



- Vaccine Preventable Disease Control Program
www.publichealth.lacounty.gov/ip/
- California Department of Public Health Immunization Branch
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/immunize.aspx>
- CDC - www.cdc.gov/vaccines/
- Shots for School <https://www.shotsforschool.org/>
- Epidemiology & Prevention of VPDs “Pink Book”
www.cdc.gov/vaccines/pubs/pinkbook/genrec.html
- EZIZ www.eziz.org
- Immunize Action Coalition www.immunize.org/





THANK YOU!

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