

Update on Adolescent Vaccination Activities

National Vaccine Advisory Committee Meeting

September 15, 2009

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**National Center for Immunization and Respiratory Diseases
Centers for Disease Control and Prevention**



**DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION**



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Overview

- **Background**
- **2008 Adolescent vaccination coverage levels**
- **CDC activities**

NVAC Adolescent WG

- Request from Asst. Secretary of Health:
 - Identify the key issues affecting implementation of an adolescent immunization program
 - Develop recommendations to address the challenges identified
- AVWG formed: 2005

Adolescent WG Members

Gary Freed

Jaime Fergie

Lance Gordon

Sharon Humiston

Trish Parnell

Mary-Beth Petraco

Andrew Pavia

Adele Young

Robin Curtis

Dan Hopfensperger

David Johnson

Allison Kennedy

Lauri Markowitz

Mary McCauley

Shannon Stokley

AVWG Reports Adopted by NVAC

- **The Promise and Challenge of Adolescent Immunization: 5/11/07**
(AJPM 2008;35:152-157)
- **Mandates for Adolescent Immunizations: Recommendations from the National Vaccine Advisory Committee (NVAC) Adolescent Immunization Working Group: 10/22/07**
(AJPM 2008;35:145-151)
- **Adolescent Vaccination: Recommendations from the National Vaccine Advisory Committee – Adolescent Working Group: 6/3/08**
(AJPM 2009;36:278-279)

Adolescent Recommendations: Key Areas Addressed

- **Venue/Healthcare Utilization**
- **Consent**
- **Communication/Public Engagement**
- **Surveillance**
- **School Mandates**

CDC Activities

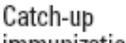
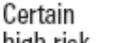
- **Sep 2008: CDC adolescent activities presented to NVAC**
- **Sep 2009: Update**

Adolescent Vaccination Coverage

Adolescent vaccination schedule

Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2009

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	see footnote 1		Tdap	Tdap	
Human Papillomavirus ²	see footnote 2		HPV (3 doses)	HPV Series	
Meningococcal ³		MCV	MCV	MCV	
Influenza ⁴		Influenza (Yearly)			
Pneumococcal ⁵		PPSV			
Hepatitis A ⁶		HepA Series			
Hepatitis B ⁷		HepB Series			
Inactivated Poliovirus ⁸		IPV Series			
Measles, Mumps, Rubella ⁹		MMR Series			
Varicella ¹⁰		Varicella Series			

Range of recommended ages

Catch-up immunization

Certain high-risk groups

This schedule indicates the recommended ages for routine administration of currently licensed vaccines, as of December 1, 2008, for children aged 7 through 18 years. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. Licensed combination vaccines may be used whenever any component of the combination is indicated and other components are not contraindicated and if approved by the Food and Drug Administration for that dose of

the series. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations, including 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 a VAERS form is available at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

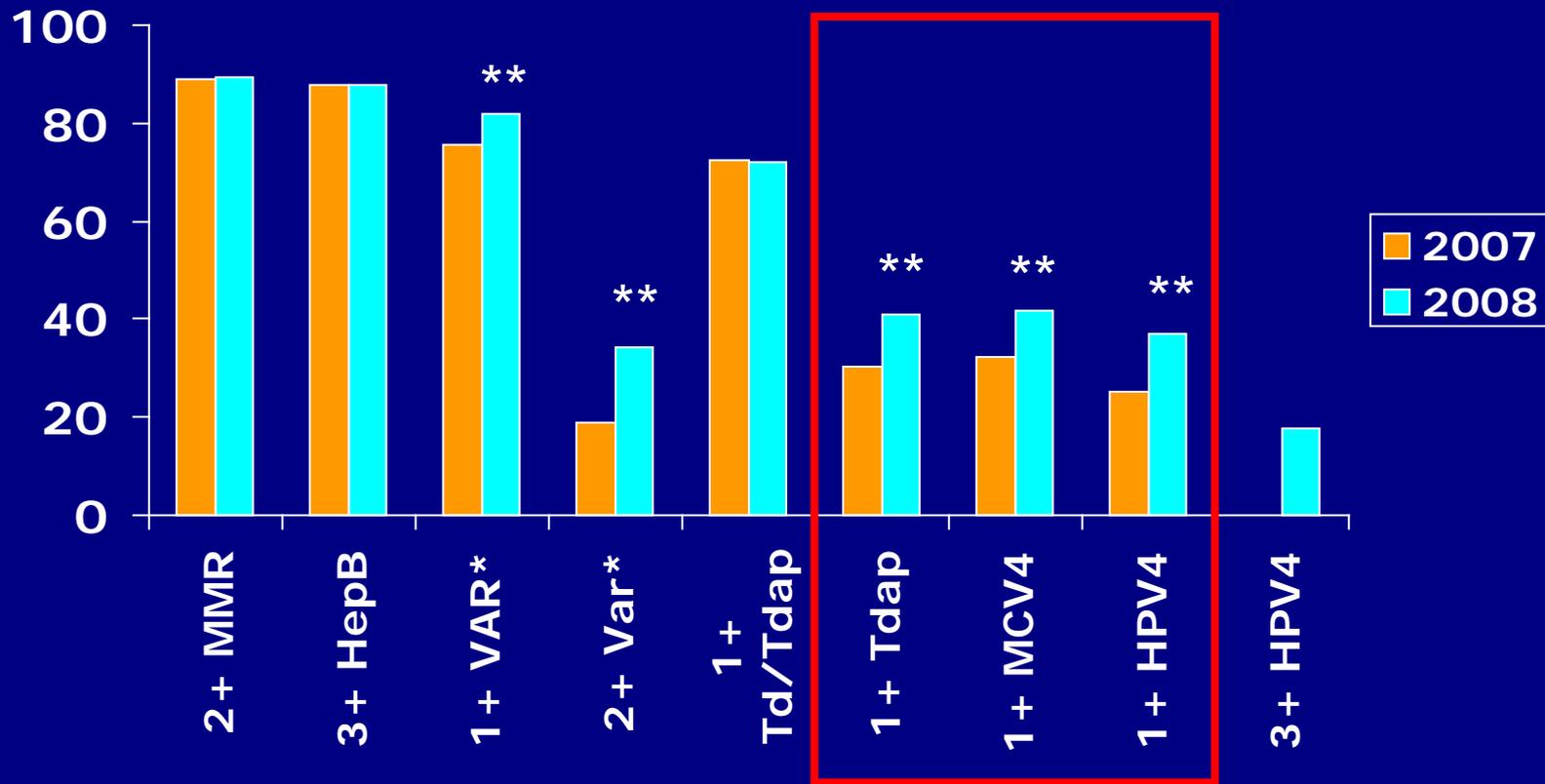
National Immunization Survey – Teen (NIS-Teen)

- **Uses National Immunization Survey (NIS) sample frame methodology**
 - **Random digit dialing telephone survey**
 - **National sample of parents/guardians of adolescents 13-17 years old**
 - **Consent obtained to contact providers**
 - **Immunization history questionnaire sent to providers for immunization histories**
 - **Started during the 4th quarter of 2006**

NIS-Teen

- **Changes to 2008 survey**
 - **Includes 4 quarters of data (Jan-Dec)**
 - **Increased sample size allows analysis by:**
 - **State**
 - **Race/ethnicity**
 - **Poverty status**

Estimated vaccination coverage among adolescents aged 13-17 years, 2008 NIS-Teen



*Among adolescents without a reported history of varicella disease

** significantly different $p < 0.05$

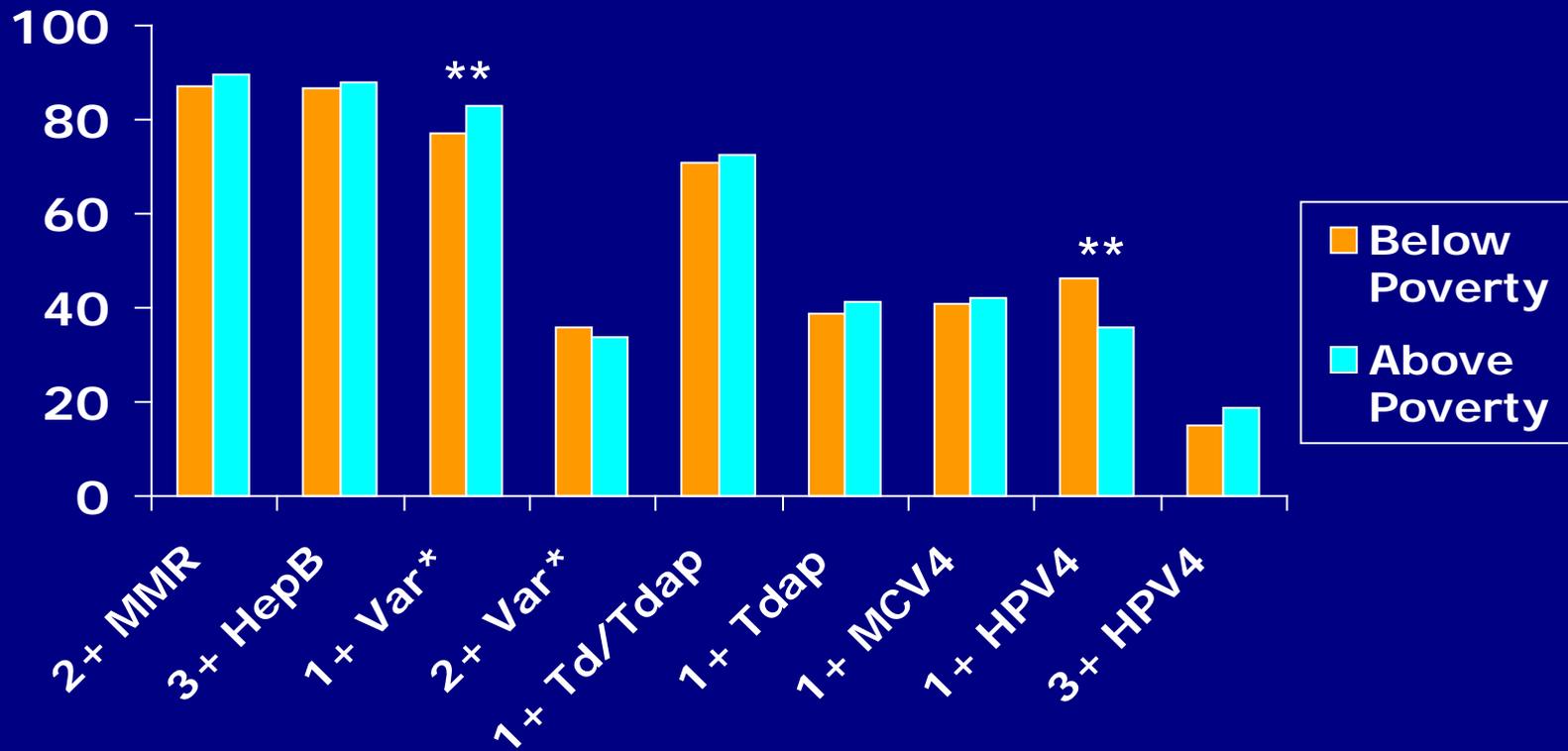
State Level Results

- **Substantial variation by state**
 - 1+ Tdap: 19.3% (SD) to 63.0% (CO)
 - 1+ MCV4: 14.0% (SD) to 62.6% (RI)
 - 1+ HPV4: 15.8% (MS) to 54.4% (NH)
- **3 states had coverage above 50% for all 3 vaccines (Tdap, MCV4, HPV4)**
 - AZ, NH, NY

Race/Ethnicity Significant Findings

- **1+ Tdap:**
 - Blacks lower than Whites (36.0% vs 41.7%)
- **1+ MCV4:**
 - Hispanics higher than Whites (46.8% vs 39.7%)
- **1+ HPV4:**
 - Hispanics higher than Whites (44.4% vs 35.0%)
- **1+ Var:**
 - Blacks lower than Whites (74.0% vs 82.8%)

Estimated vaccination coverage among adolescents aged 13-17 years by poverty status, 2008 NIS-Teen



*Among adolescents without a reported history of varicella disease

** significantly different $p < 0.05$

Dissemination of Data

- **Scheduled for publication in MMWR on Sep 18**
- **Posting of online tables by end Sept**
- **Release of the public use file later this year**

Expanded influenza recommendations

- Monitor through NIS, NHIS, IIS
- NHIS (2007-08 season)
 - 13-17 yr olds = 16.7%
- IIS sentinel sites (2008-09 season)
 - 11-12 yr olds = 16.8%
 - 13-18 yr olds = 10.9%

CDC Adolescent Vaccination Activities

CDC Adolescent Activities

- **Effective strategies for implementation of vaccine recommendations**
- **Monitoring vaccination coverage**
- **Communication, education, training, and partnerships**
- **Disease epidemiology and surveillance**
- **Vaccine safety**
- **Supporting adolescent vaccination providers, programs, and other stakeholders**

Recent Findings: Formative Research

- **Parents and adolescents favor the medical home setting for adolescent vaccination**
- **Stakeholder interest varies by complementary setting and vaccine**
- **Complementary settings, such as school-based health centers, may be most useful for vaccinating underserved adolescents**

Evaluating New Technologies

- **Cooperative agreement awarded to Univ of Michigan Sep 2009**
- **Evaluate the feasibility of using new technologies for disseminating reminder/recall messages**
 - **Text messaging**
 - **Email**
 - **Phone**
- **Target population: children 0-18 years**
- **Project length: 2 years**

Strategies In the Medical Home

- **Cooperative agreement awarded to Univ of Rochester**
- **Identify and evaluate rigorously a feasible, generalizable, and sustainable strategy for increasing adolescent vaccination delivery within medical homes**
- **Project length: 3 years**

ARRA Funding

- **Grantees received ARRA funding to help implement their immunization program**
 - **Some activities will be targeted to adolescents**
- **\$3 million to support MeningNet**
 - **expand the ongoing meningococcal VE study**

Evaluating NIS-Teen Data

- **Several analyses of NIS-Teen are planned**
- **Examples include:**
 - **Comparison of states with and without school requirements**
 - **Comparison of states by vaccine financing policy**
 - **Factors associated with under-vaccination**
 - **Comparison of parent vs provider reported immunization histories**

Thank you!