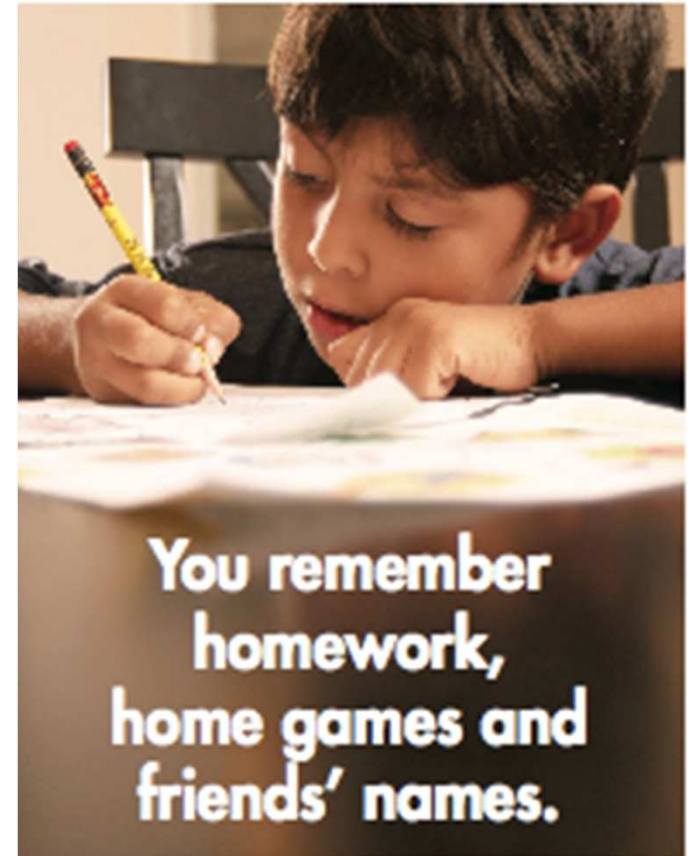


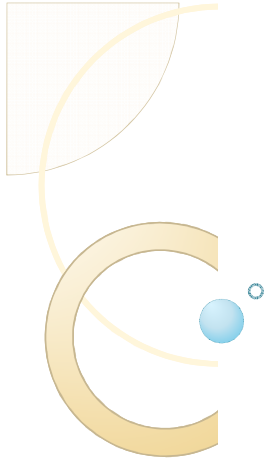


Importance of Student IMMUNIZATION



Don't forget vaccines.

June 2011



Student Immunization

**Are YOU a
Believer?**

Student Immunization

- Required
- Recommended

- Delivery
- Registry
- Tracking

Student Immunization Required: Importance

- Affirm Societal Common Good
- Shared Belief
 - ↓ Disease
 - ↓ Morbidity
 - ↓ Mortality





**A shot lasts
a second.
Diseases last
much longer.**

No one likes needles.
Here are some ideas to
make getting them easier.

www.vaccine.chop.edu/parents

BUT Are You a Believer?

Disease Burden: Serious diseases

- Active
- Lurking
- Eradicated
- Future Benefit

Good Vaccines

- Effective
- Safe



Disease Burden

DISEASE	Peak		2004-06	
	Cases	Deaths	Cases	Deaths
Polio	42,033	2,720	0	0
Measles	763,094	552	55	0
Pertussis	265,269	7,518	15,632	27
Hib	>20,000	>1,000	<50	<5
Varicella	5,358,595	138	612,768	19

Roush: JAMA 2007



Importance Student Immunization

Measles: Herd Immunity

- ↓ Rates of disease
- ↓ Outbreaks
- ↓ Spread
- ↑ Safety Net
- ↑ Uptake of new

- Schools major site of transmission
- Vaccinated schools fewer outbreaks
- Care of exposed
- Boosters

Measles: Lurking



Miserable: Fever, rash,
coryza, conjunctivitis

Redbook on-line: AAP

- 18% Hospitalized
 - 6% Pneumonia
 - 0.1% Encephalitis
 - 0.2% Deaths
- 1989-1991 Outbreak
 - 11,000 hospitalized
 - 150 died

Measles 2011: 1st nine weeks

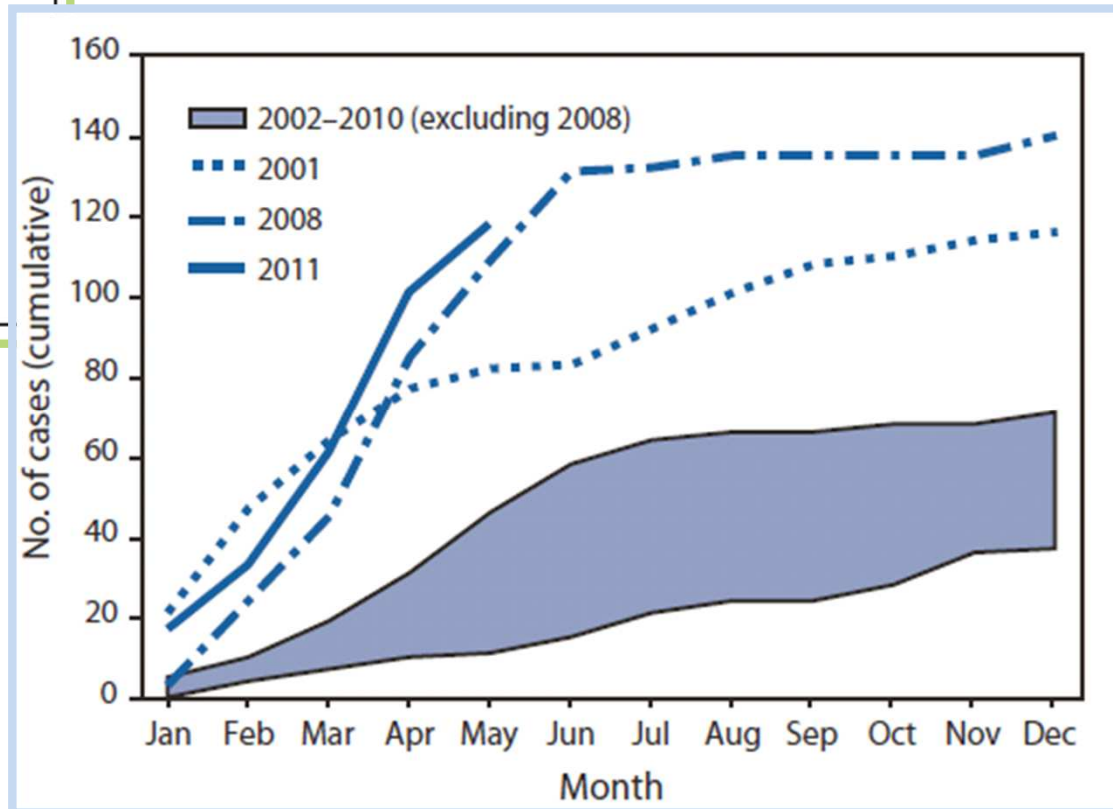
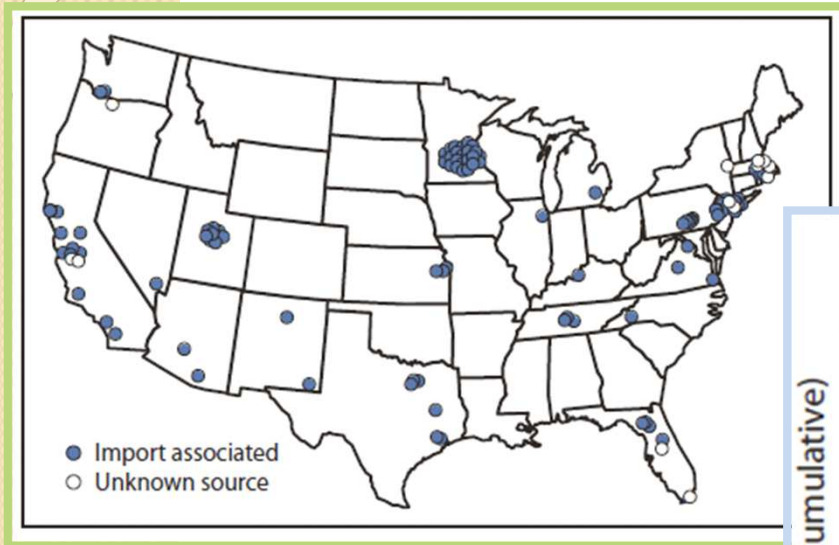
US: 118 cases

- Ages 3mo-68yrs
- 89% unvaccinated
- 40% hospitalized
- 9% pneumonia
- Transmission
 - Households
 - Childcare
 - Schools
 - ED
 - Community events

Imported: France

- 10,000 / 4mo
- 360 severe pneumonia
- 12 encephalitis
- 6 deaths

Measles: MMWR May 27, 2011

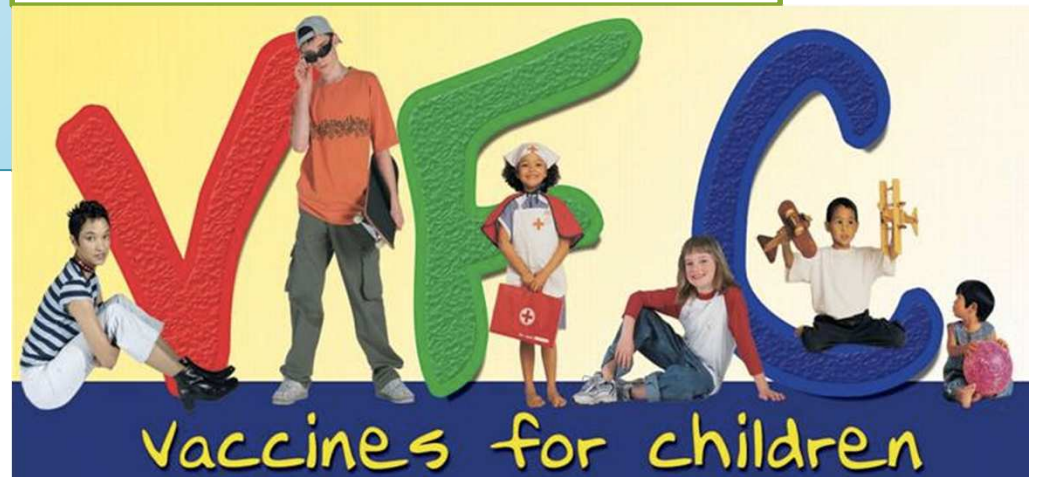


Required Student Immunization

Pros: Herd Immunity

- Privileged
- Disadvantaged
- Access
- VFC

- Increase Demand
- Enhance Access
- Address Barriers





Student Immunization

- Model: Common Good
- Expand coverage
 - Preschool/Daycare
 - College
 - Camps
 - Workplace
 - Senior Homes



School: Delivery

Collaborative

Medical home

Health Department

On site

Campaigns

School based health centers

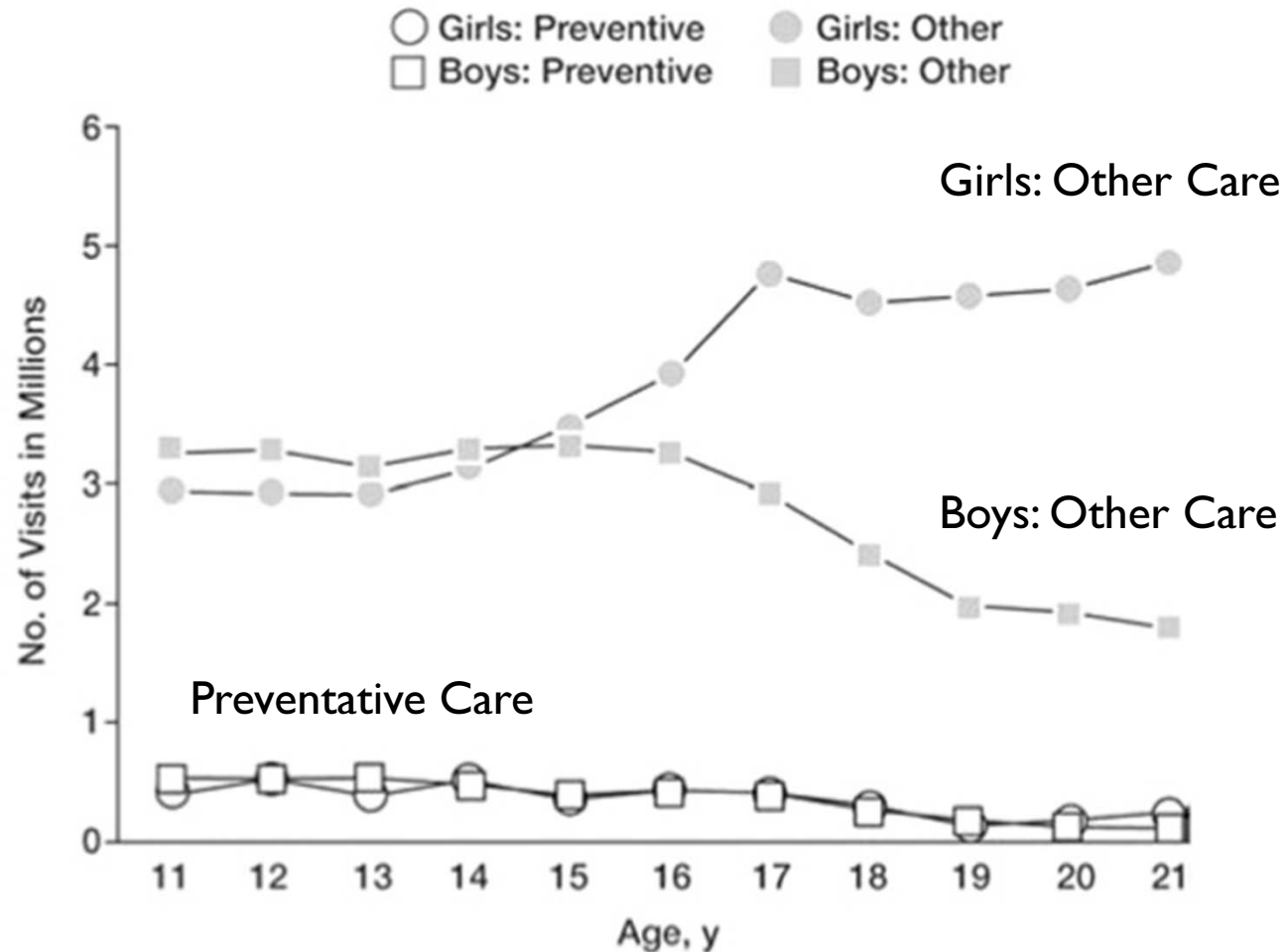


Recommended Immunizations

- **School advantage**
 - Awareness / Education
 - Entry points
- **Special populations**
 - Pregnant
 - Chronic diseases
 - Delivery
 - Registry
 - → Required

ADOLESCENT CHALLENGE

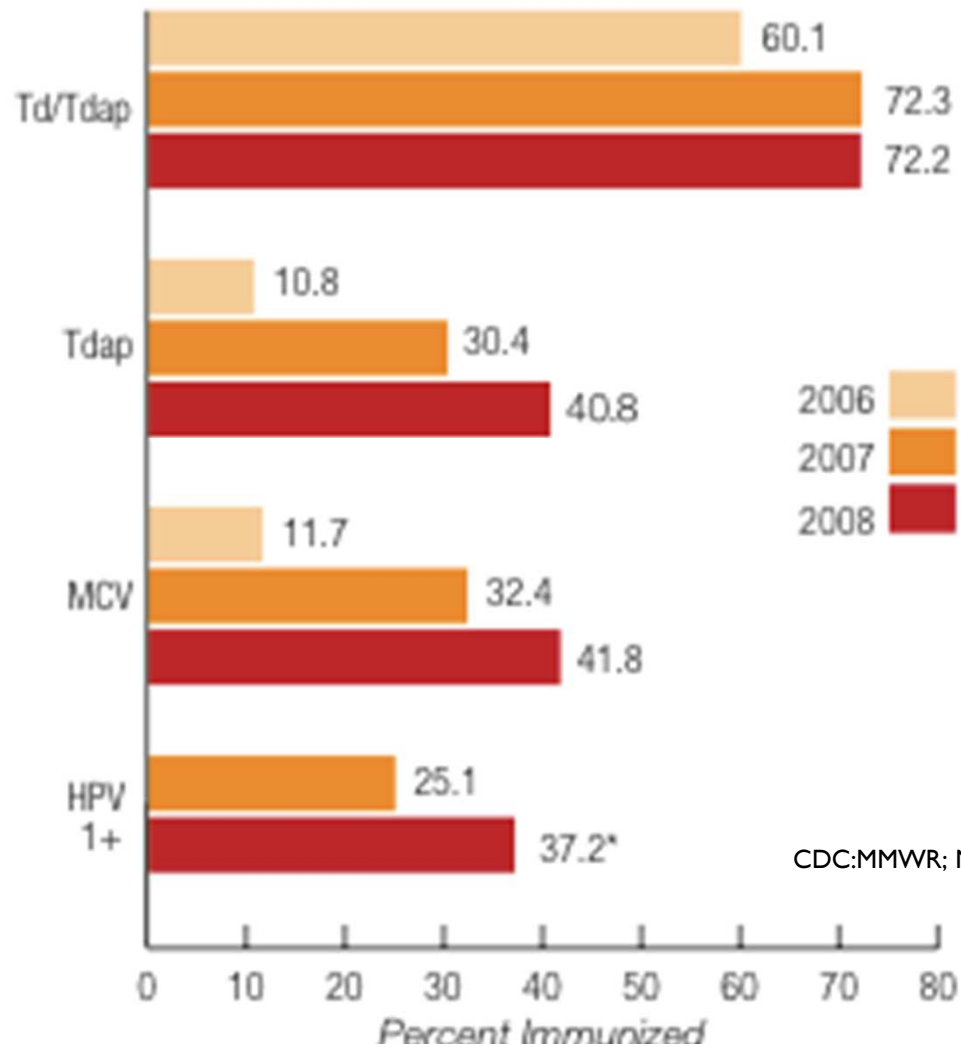
Number of preventive care visits for adolescents [51].



Poland G A Clin Infect Dis. 2010;50:S45-S53

ADOLESCENT CHALLENGE

Comparison of Vaccination Rates in Adolescents 13-17, U.S.—2006-08



Importance of Adolescent School Immunization: Required/Recommended

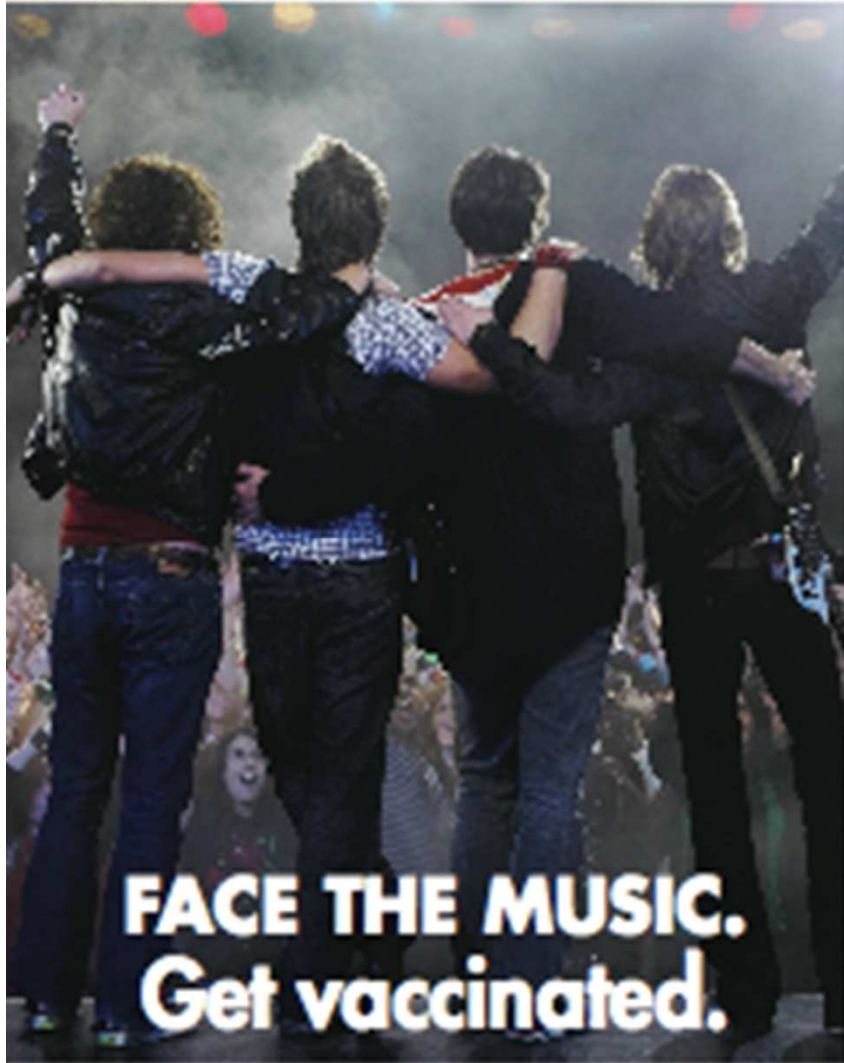
- Status - Availability – Safety – Seriousness
 - Participant in decision
 - Changing concerns
 - Media Sources





Immunization Education:

Informative is Effective



HPV Parents

- 37% willing ↩ Opposed
- 65% willing ↩ Undecided



Schools: Education Business

- CDC website: www.cdc.gov
 - VIS Vaccine information sheets
 - Fast facts
 - Vaccine Preventable Diseases
 - How vaccines prevent disease
- Immunization Action Coalition
- WV Immunization Initiatives
- Medical Societies: AAP and AAFP
- National Foundation for Infectious Diseases
- Children's Hospital of Philadelphia



References: Other

- AAP Redbook on-line
- Adolescent Medicine: State of the Art Reviews (AM: STARS) *Infectious Diseases and Immunizations*. August 2010: 21; 2
- MMWR: May 27, 2011; 60(20) 666-668
- Roush: JAMA 2007; 298: 2155
- Rand: Arch Pediatric Adolescent Med. 2007; 161: 252-259

Student Immunization



Believer?