

Disclosure

- ☐ No financial interests
- ☐ I will discuss off label use of Tdap vaccine in pregnant women

**seven things you need to know
about vaccines and vaccine-
preventable diseases**

1. Vaccines save lives.

Vaccines for Children

20 years of protecting America's children

The Vaccines for Children program was established in 1994 to make vaccines available to uninsured children. VFC has helped prevent disease and save lives...big time!

CDC estimates that vaccination of children born between 1994 and 2013 will:

prevent **322 million** illnesses



help avoid **732,000** deaths



save nearly **\$1.4 trillion** in total societal costs
(that includes \$295 billion in direct costs)



MMWR: Benefits from Immunization During the Vaccines for Children Program Era — United States, 1994–2013

HCORR-404 | 04.23.2014



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

www.cdc.gov/features/vfcprogram

507,300 diphtheria deaths

20,300 pertussis deaths

57,300 measles deaths

59,700 hepatitis B deaths

55,000 pneumococcal deaths

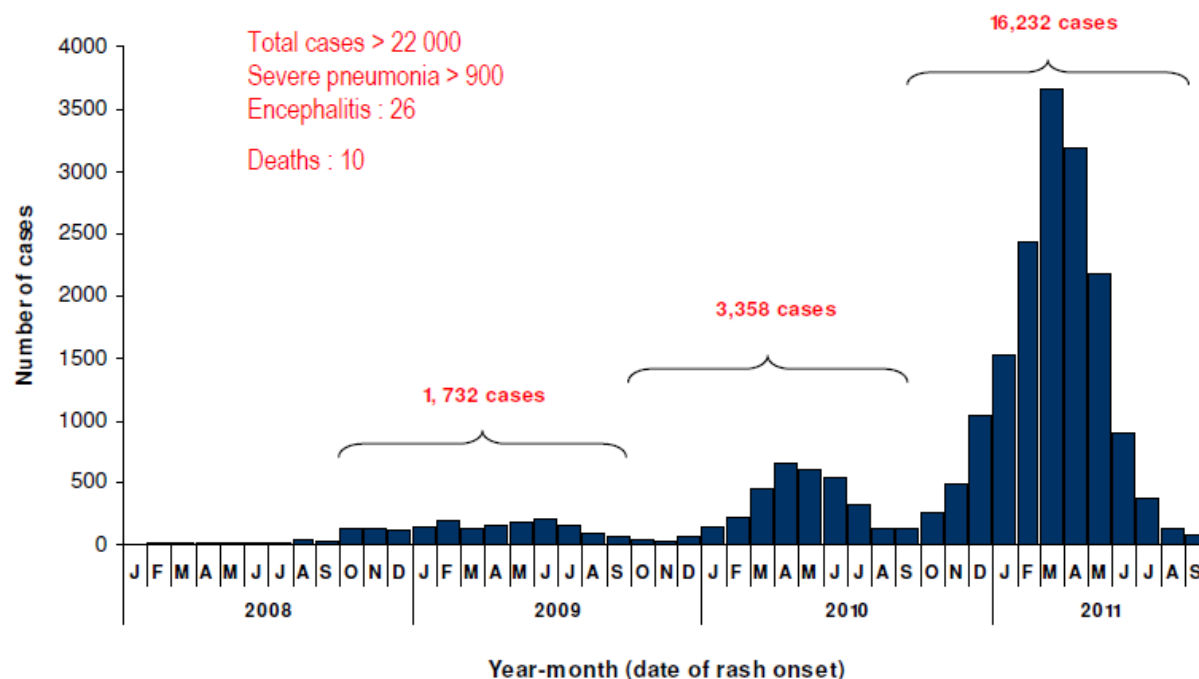
13,700 *Haemophilus influenzae* type b deaths

14,800 polio deaths

2. Measles is still a threat.



Number of measles cases per month, mandatory reporting, France,
January 2008 – September 2011 (provisional data for September 2011)



Source : mandatory reporting data - InVS

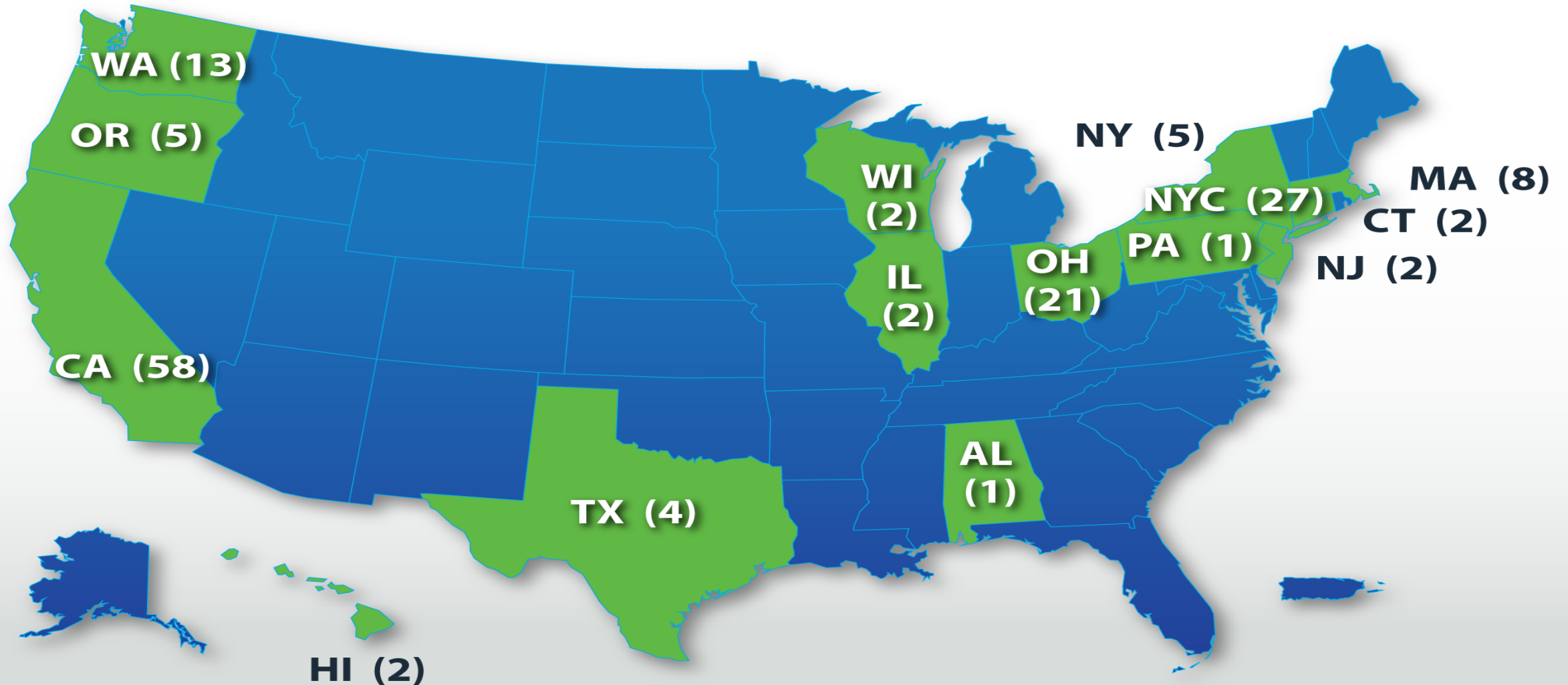
>22,000 cases of measles
26 cases of encephalitis
10 deaths

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Measles outbreak in Western Europe has dire consequences

Measles in the U.S.

From January 1 to April 25, 2014, 154 cases* were reported to CDC by 14 states



*Provisional data reported to CDC's National Center for Immunizations and Respiratory Diseases

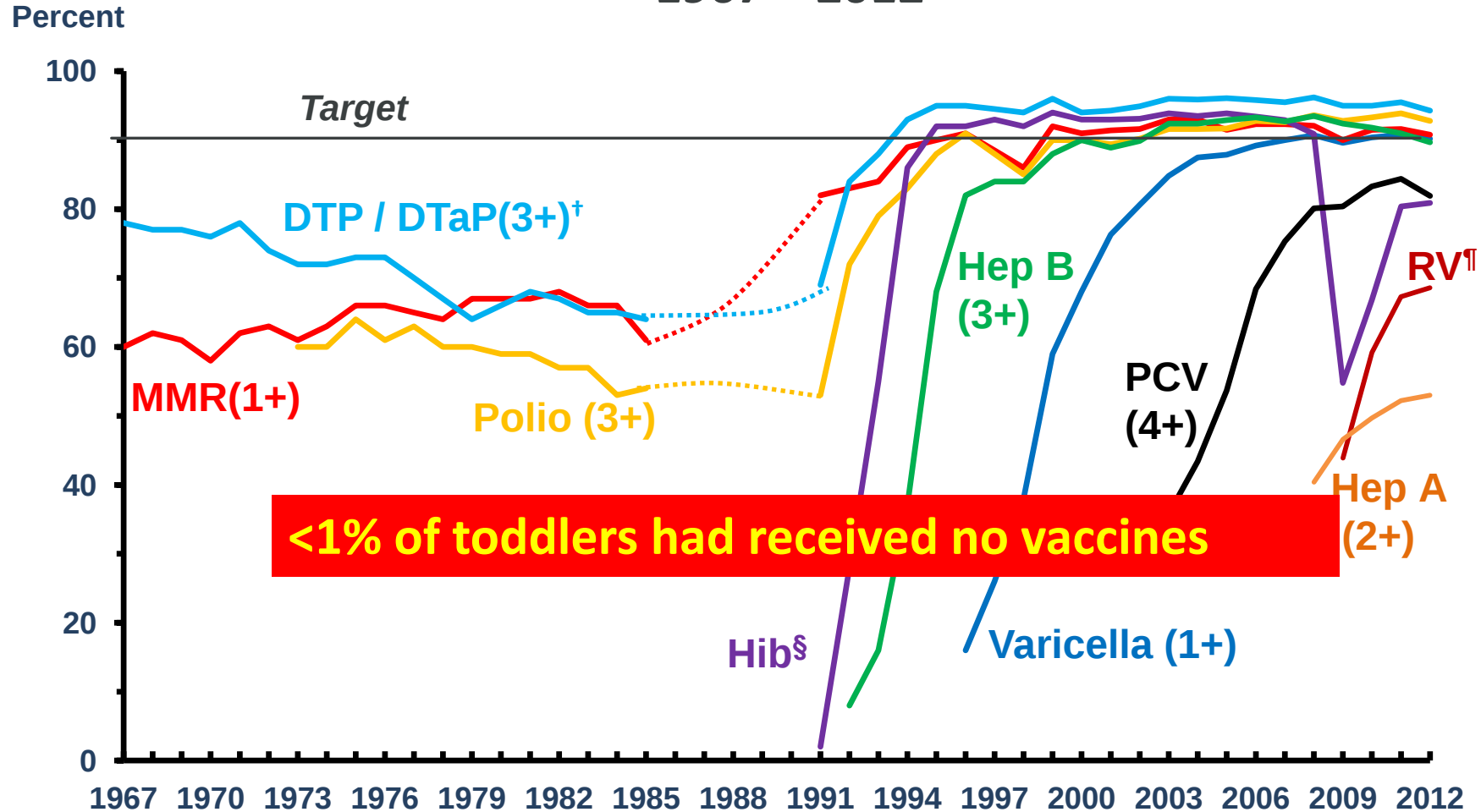


U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

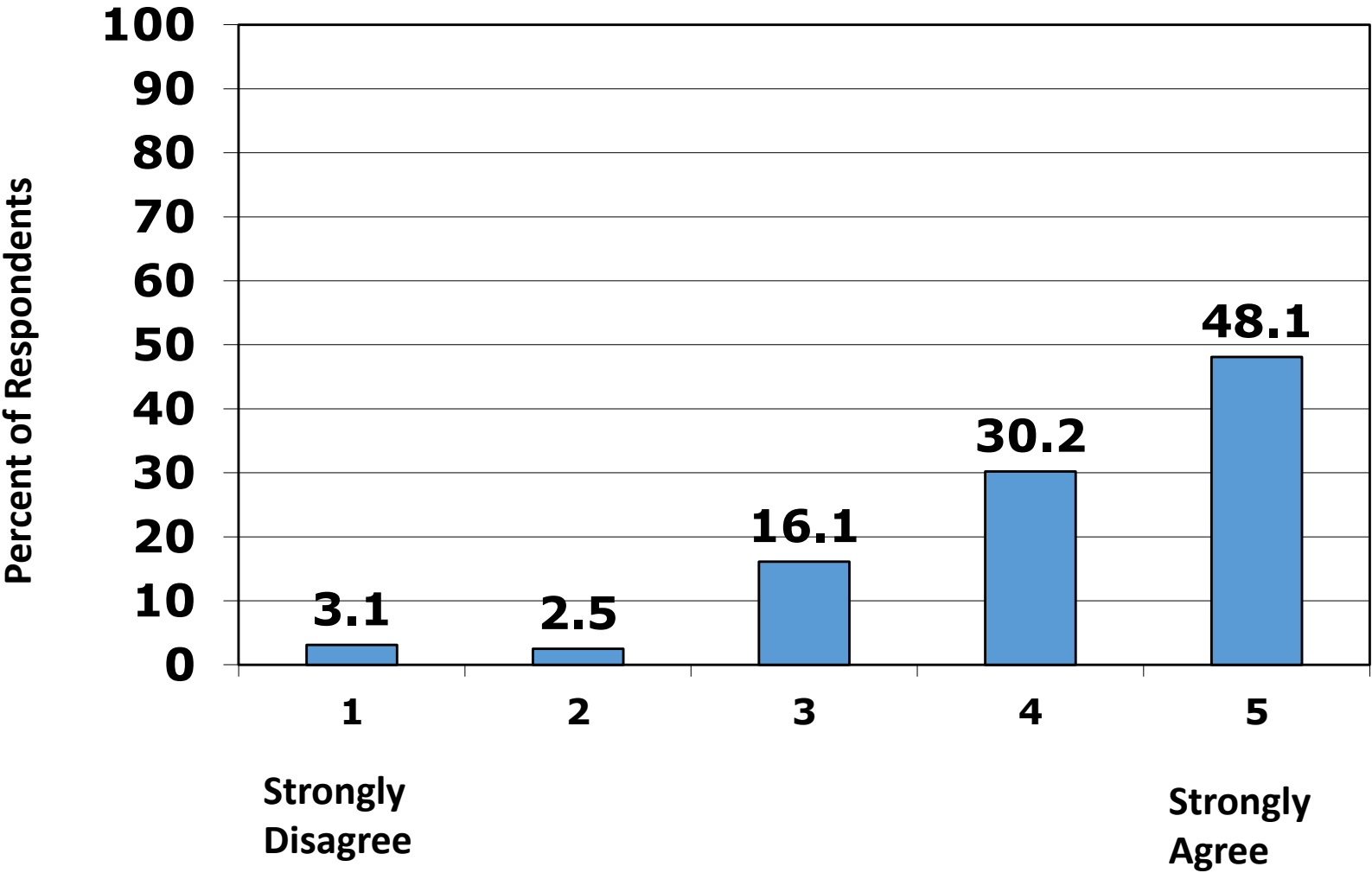


3. Nationally, vaccination of young children continues to be the norm.

Vaccine Coverage Rates Among Preschool-Aged Children: 1967 – 2012



Getting my child immunized is the right thing to do.



WIRED GEAR SCIENCE ENTERTAINMENT BUSINESS SECURITY DES

An Epidemic of Fear: How Panicked Parents Skipping Shots Endangers Us All

By Amy Wallace  October 19, 2009 | 3:00 pm | Categories: [Wired News](#) 2009

Oct. 2009

CBSNEWS

Video US World Politics Entertainment Health

Vaccination Rates Decline: How Many Children at Risk?

By CAROLINE BLAKE  CBS NEWS  September 17, 2010, 12:30 PM

Sept. 2010

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Childhood diseases return as parents refuse vaccines

By Liz Szabo, USA TODAY

Updated 6:15

June 2011

CDC Home



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

Press Release

Immunization Rates Remain Stable at High Levels Among the Nation's 19- Through 35-Month-Old Children

Aug. 2009

CDC Home



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

Press Release

CDC Survey Finds Childhood Immunization Rates Remain High

Sept. 2010

CDC Home



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives. Protecting People.™

Press Release

CDC national survey finds early childhood immunization rates increasing

Sept. 2011

4. Not all outbreaks of vaccine-preventable diseases are caused by lack of vaccination.

Ohio mumps outbreak grows

Michelle Healy, USA TODAY

4:14 p.m. EDT April 16, 2014

Most of the cases are connected to Ohio State University.

Mumps outbreak hits Fordham University

By Frank Rosario

February 21, 2014 | 4:56am

Third U.S. Mumps Outbreak This Year Happens in New Jersey

This week, New Jersey joined New York and Ohio as the third U.S. location to have a mumps outbreak this year—and it probably won't be the last. Is it time for mandatory vaccines?

Mumps outbreak on UI campus

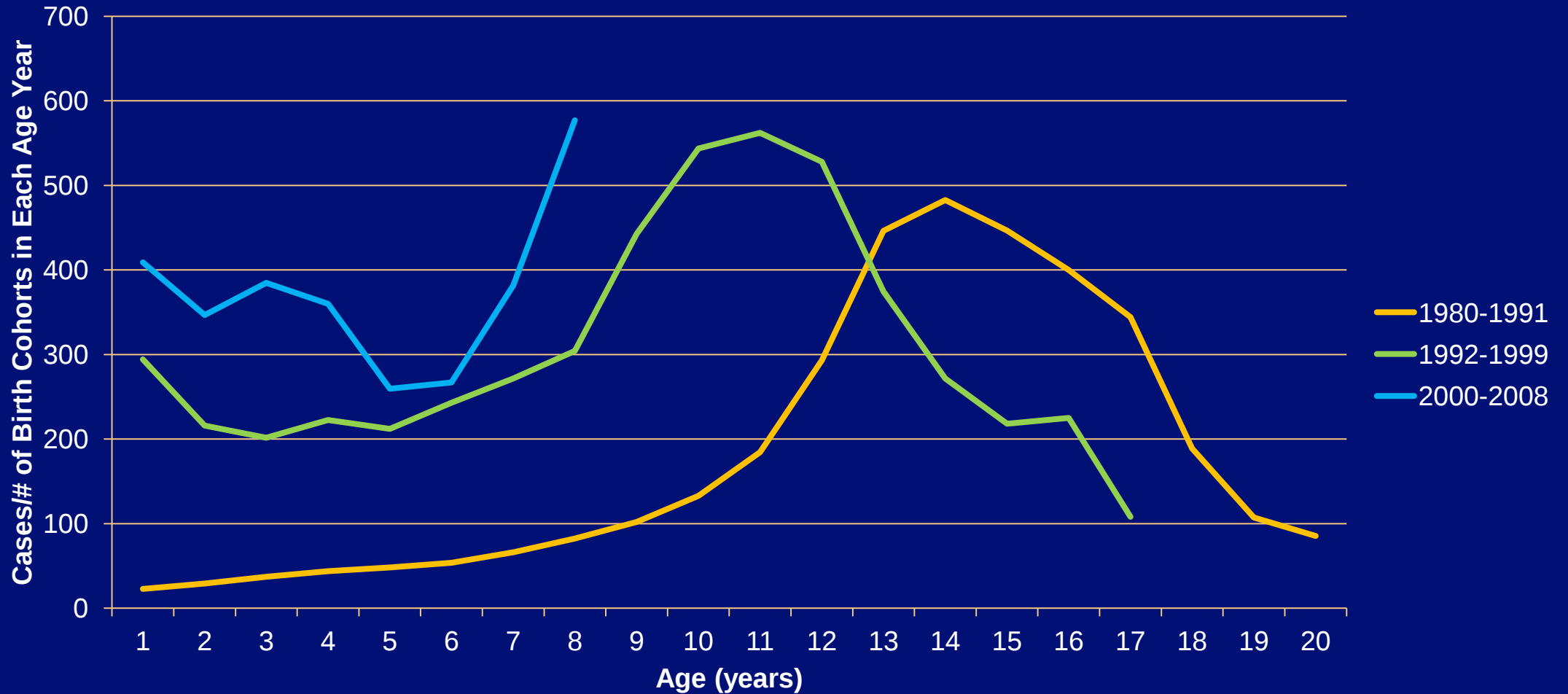
Mon, 04/28/2014 - 5:52pm | Debra Pressey

CHAMPAIGN — Nine University of Illinois students have become sickened with mumps in an outbreak that began just after spring break and has continued with about two new cases a week....

**4a. We cannot prevent outbreaks
of pertussis with our current
pertussis vaccine.**

Waning immunity by vaccine type

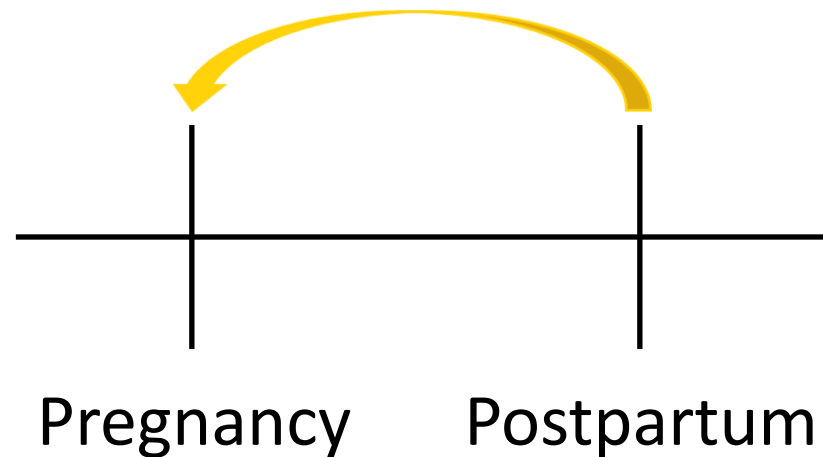
Pertussis Cases by Birth Cohort



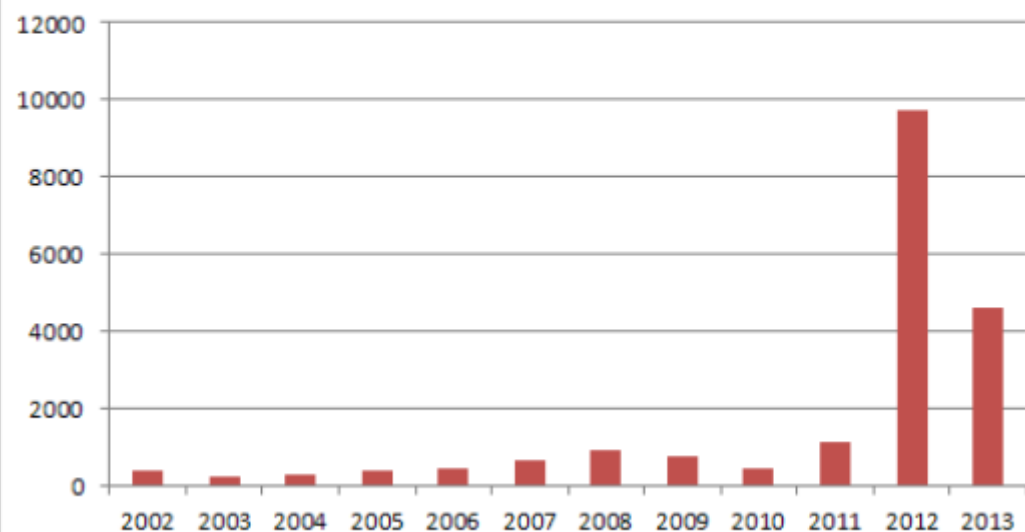
**5. We can protect young infants
from pertussis with our current
vaccine.**

Shifting the Timing of Mother's Tdap Dose: Postpartum to Pregnancy

- ❑ Provides earlier protection to mother
- ❑ Transfers high levels of transplacental maternal antibodies to infants
 - Likely provides direct immunity to infant



Confirmed cases of pertussis (whooping cough) in England and Wales, 2002-2013 (provisional figures for 2012 and 2013; England only for 2013)



Source: Public Health England

Whooping cough vaccine a 'no-brainer' during pregnancy

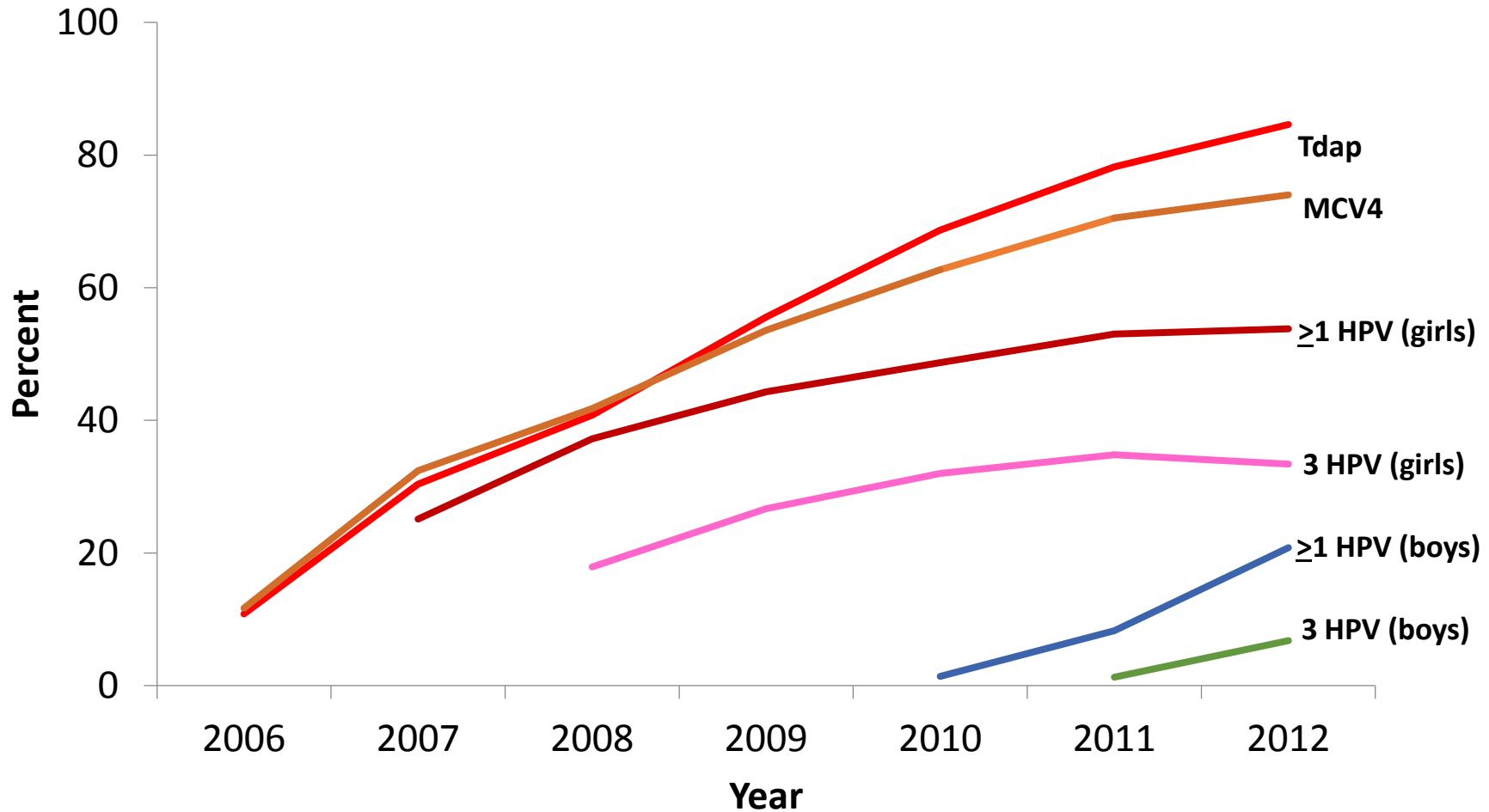
 COMMENTS (46)



Zoe was just four weeks old when she got whooping cough, and had to spend a month in hospital

**6. More young people need to get
HPV vaccine to protect them from
cancer.**

National Estimated Vaccination Coverage Levels among Adolescents 13-17 Years, NIS-Teen, 2006-2012



Source: MMWR. 2013;62;685-93

**7. Health care providers should
make a strong recommendation
for HPV vaccine.**

Top 5 reasons for not vaccinating daughter, among parents with no intention to vaccinate in the next 12 months, NIS-Teen 2012

Reason	%
Not needed or necessary	19.1%
Not recommended by provider	14.2%
Safety concern/side effects	13.3%
Lack of knowledge	12.6%
Not sexually active	10.1%

Response categories are not mutually exclusive

1. Vaccines save lives.

26 million:

number of girls under 13 years of age in the United States

168,400:

number who will develop cervical cancer if none are vaccinated

54,100:

number will die from cervical cancer if none are vaccinated

For each year we stay at 30% coverage instead of achieving 80%,

4,400:

number of future cervical cancer cases we will not prevent

1,400:

number of cervical cancer deaths we will not prevent

Thank you

www.cdc.gov/vaccines

www.cdc.gov/vaccines/youarethekey