## Healthy People 2020 Baseline Data and Strategies to Achieve Targets

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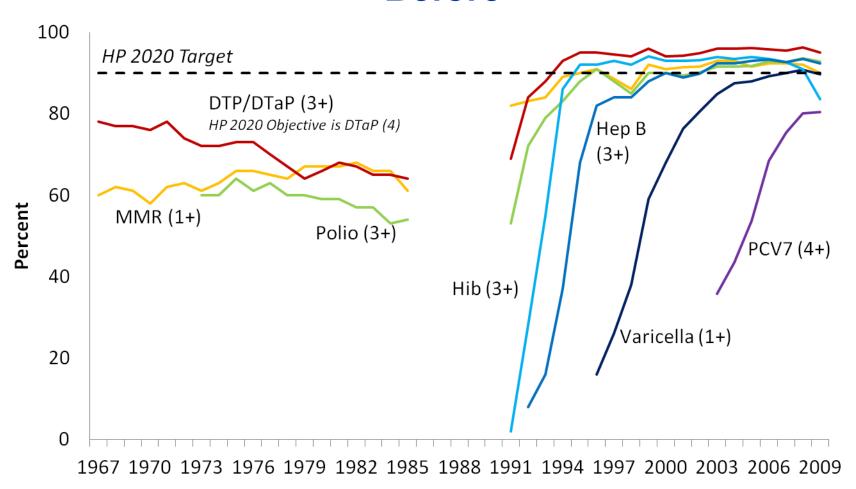
# Healthy People 2020 Immunization and Infectious Disease Objectives

- 21 of 32 objectives directly or indirectly related to immunization or vaccines
  - Disease occurrence -- reduce, eliminate, sustain elimination (n=6)
  - Vaccination coverage -- individual, series (n=9)
  - Systems-related -- IIS, provider assessment, school tracking (n=4)
  - Vaccine safety (developmental) (n=1)
  - Other antibiotic use for ear infections (n=1)

## Primary Data Sources for Immunization and Vaccine-preventable Disease Objectives

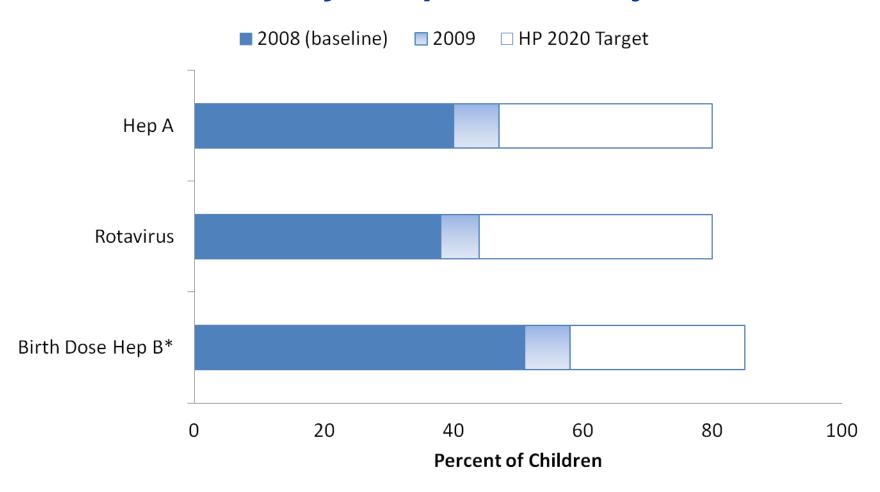
- **□** National Notifiable Diseases Surveillance System (NNDSS)
- □ Active Bacterial Core surveillance (ABCs)/Emerging Infections Program Network (EIP)
- **■** National Immunization Survey (NIS)
- National Health Interview Survey (NHIS)
- School Immunization Assessment Survey

### Estimated Vaccination Coverage, Children 19-35 Months, Vaccines Recommended 2000 and Before



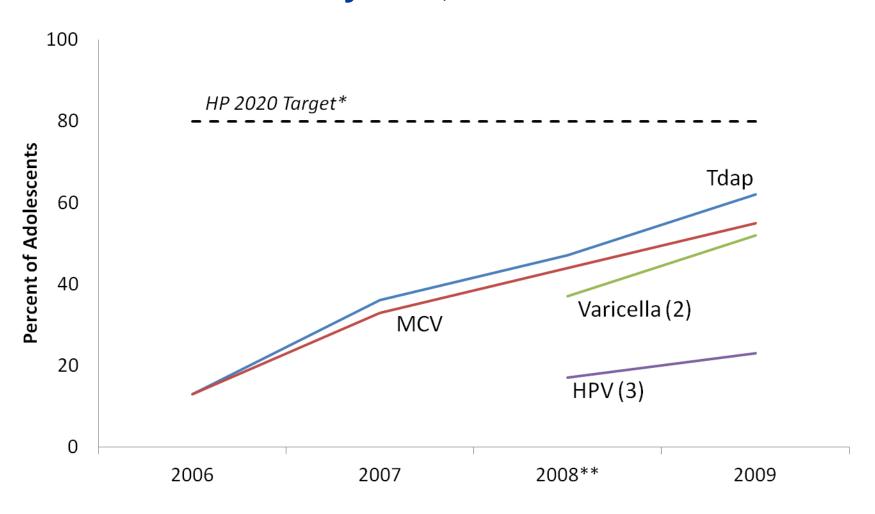
Children in the USIS (1967-1985) and NHIS were 24-35 months of age. Children in the NIS (1994-2009) were 19-35 months of age. Source: USIS (1967-1985), NHIS (1991-1993), and NIS (1994-2009). No data from 1986-1990 due to cancellation of USIS.

# Est. Vaccination Coverage, Children 19-35 Mos., New Healthy People 2020 Objectives



<sup>\*</sup> Based on birth cohort. Source: CDC, NIS.

## Estimated Vaccination Coverage, Adolescents 13-15 years, 2006-2009



<sup>\*</sup> Target is 90 percent for two doses of varicella.

HPV coverage – females only.

\*\* Baseline for HP 2020.

Source: CDC, NIS-Teen.

## Strategies to Achieve Healthy People 2020 Targets

- **□** Implementation of new vaccines or policies:
  - PCV13  $\rightarrow$  direct and indirect effects, antibiotic use impacts
- **□** Communication efforts:
  - New campaign: Immunization across the lifespan
  - Provider toolkit (<a href="http://www.cdc.gov/VACCINES/spec-grps/hcp/conversations.htm">http://www.cdc.gov/VACCINES/spec-grps/hcp/conversations.htm</a>)
- **□** Information technology initiatives:
  - IIS/EMR interoperability; Decision-support
- Increased VFC/AFIX visits → increased coverage
- **□** Reduced financial barriers
  - Expanded insurance, no co-pays for ACIP recommended vaccines

## Strategies to Achieve Healthy People 2020 Objectives (continued)

- Enhanced partnerships:
  - Obstetric-gynecology providers building off H1N1 experience
  - Non-traditional venues (e.g., pharmacies, schools, workplaces)
- **□** Targeted, multiyear efforts to reduce disparities
- Incentivized reporting of HCP flu vaccination from institutions

### **ADDITIONAL SLIDES**

## 21 of 32 Objectives Directly or Indirectly Related to Immunization or Vaccines

- □ IID-1, IID-3-4, IID-23-25: Reduce, eliminate, or maintain elimination of cases of vaccine-preventable diseases.
- □ IID-5: Reduce the number of courses of antibiotics for ear infections for young children.
- □ IID-7: Achieve and maintain effective vaccination coverage levels for universally recommended vaccines among young children.
- □ IID-8: Increase the proportion of children aged 19 to 35 months who receive the recommended doses of DTaP, polio, MMR, Hib, hepatitis B, varicella and PCV vaccines.

# 21 of 32 Objectives Directly or Indirectly Related to Immunization or Vaccines (continued)

- □ IID-9: Percentage of children in the U.S. who received zero doses of recommended vaccines by 19-35 months.
- □ IID-10: Maintain vaccination coverage levels for children in kindergarten.
- □ IID-11: Increase routine vaccination coverage levels for adolescents.
- IID-12: Increase the percentage of children and adults who are vaccinated annually against seasonal influenza.

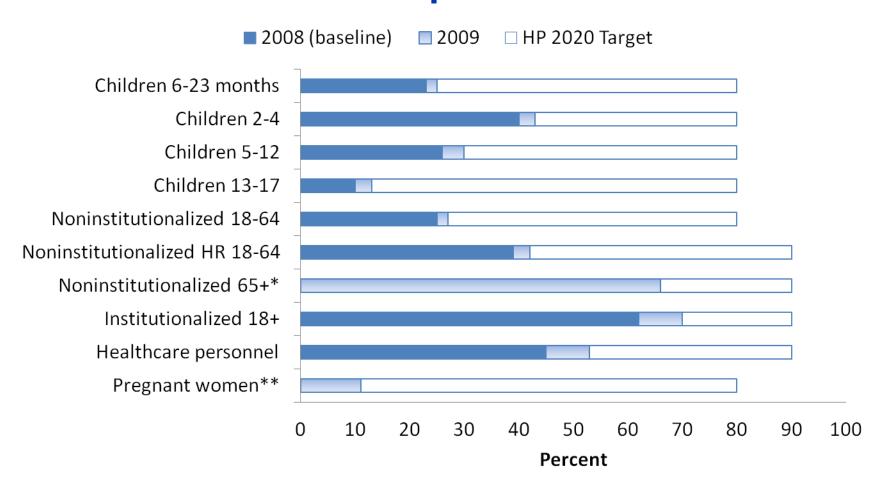
# 21 of 32 Objectives Directly or Indirectly Related to Immunization or Vaccines (continued)

- □ IID-13: Increase the percentage of adults who are vaccinated against pneumococcal disease.
- □ IID-14: Increase the percentage of adults who are vaccinated against zoster (shingles).
- □ IID-15: Increase hepatitis B vaccine coverage among high-risk populations.
- □ IID-16 (Developmental): Increase the scientific knowledge on vaccine safety and adverse events.
- □ IID-17: Increase the percentage of providers who have had vaccination coverage levels among children in their practice population measured within the past year.

# 21 of 32 Objectives Directly or Indirectly Related to Immunization or Vaccines (continued)

- □ IID-18: Increase the proportion of children under 6 years of age whose immunization records are in fully operational, population-based immunization information systems.
- IID-19: Increase the number of States collecting kindergarten vaccination coverage data according to CDC minimum standards.
- □ IID-20: Increase the number of States that have 80 percent of adolescents with two or more age-appropriate immunizations recorded in immunization information systems (adolescents aged 11 to 18 years).

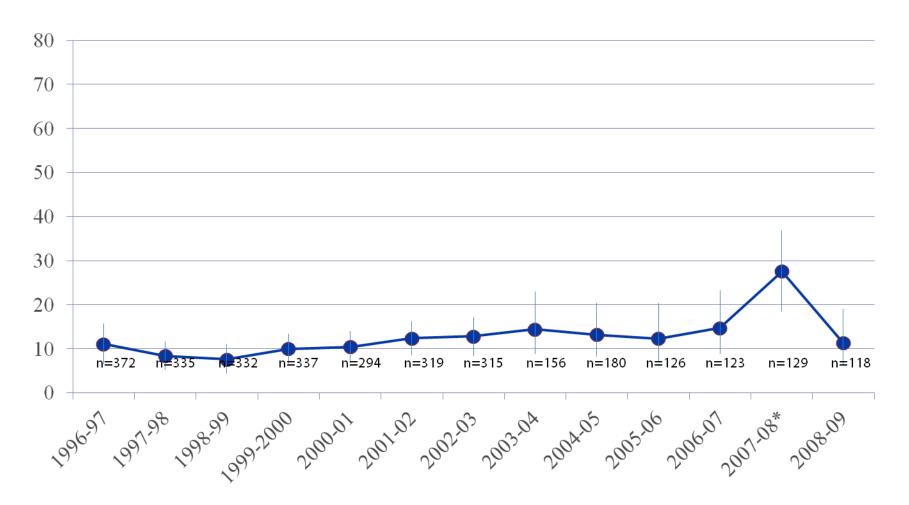
## Estimated Influenza Vaccination Coverage, Select Populations



<sup>\* 2009</sup> estimate (66%) lower than 2008 baseline (67%).

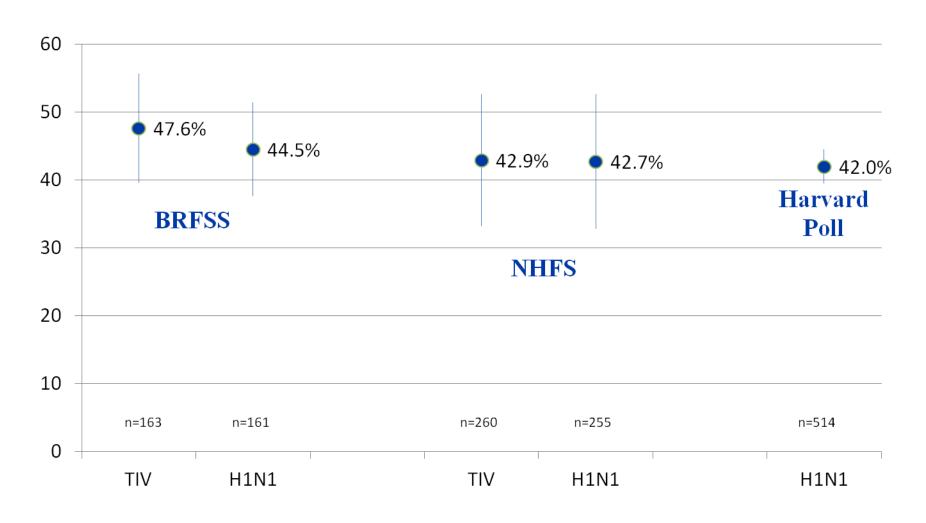
<sup>\*\* 2009</sup> estimate (11%) lower than 2008 baseline (28%); 2009 sample size small (n=118) with 95% confidence interval 6-19%. Source: CDC, NIS, NHIS.

## Seasonal Influenza Vaccination Coverage, Pregnant Women, NHIS, 1997-2009



<sup>\*</sup> Original estimate was 24%; revised to 28% after NCHS re-released 2008 NHIS data.

## Seasonal and H1N1 Influenza Vaccination Coverage, Pregnant Women, 2009-2010



### Seasonal Influenza Vaccination Coverage for Pregnant Women, Data Sources

#### ■ NHIS is current data source but not optimal:

- Small sample size
- Women currently pregnant February-August when responding to survey may not have been pregnant during flu season
- Add question on pregnancy during flu season (e.g., September-January)?

#### **□** Other options:

- PRAMS
  - Larger sample size, definitive ascertainment of pregnancy timing, but not timely and not all states participate

## Seasonal Influenza Vaccination Coverage for Pregnant Women, Data Sources (continued)

#### **□** Other options (continued):

- Rapid Flu Surveys (e.g., Internet panel surveys)
  - In-season and rapid post-season estimates, but validity and sustainability unclear

#### BRFSS

- Larger sample size, but only asks if currently pregnant
- Difficult to add new question on pregnancy during flu season to core survey