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.

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

- **Hep A**
- **Rotavirus**
- **Birth Dose Hep B***

* Based on birth cohort.
Source: CDC, NIS.
Estimated Vaccination Coverage, Adolescents 13-15 years, 2006-2009

* 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 → direct and indirect effects, antibiotic use impacts

- **Communication efforts:**
  - New campaign: Immunization across the lifespan
  - Provider toolkit ([http://www.cdc.gov/VACCINES/spec-grps/hcp/conversations.htm](http://www.cdc.gov/VACCINES/spec-grps/hcp/conversations.htm))

- **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.
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.
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.
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

* 2009 estimate (66%) lower than 2008 baseline (67%).
** 2009 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

* Original estimate was 24%; revised to 28% after NCHS re-released 2008 NHIS data.
Seasonal and H1N1 Influenza Vaccination Coverage, Pregnant Women, 2009-2010

- BRFSS: 47.6% (n=163)
- H1N1 (n=161)
- NHFS: 44.5% (n=260)
- TIV (n=255)
- H1N1 (n=514)
- Harvard Poll: 42.0%
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