

Influenza Vaccination Coverage, United States, 2011-12 Season

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Advisory Committee on Immunization Practices (ACIP)
October 25, 2012



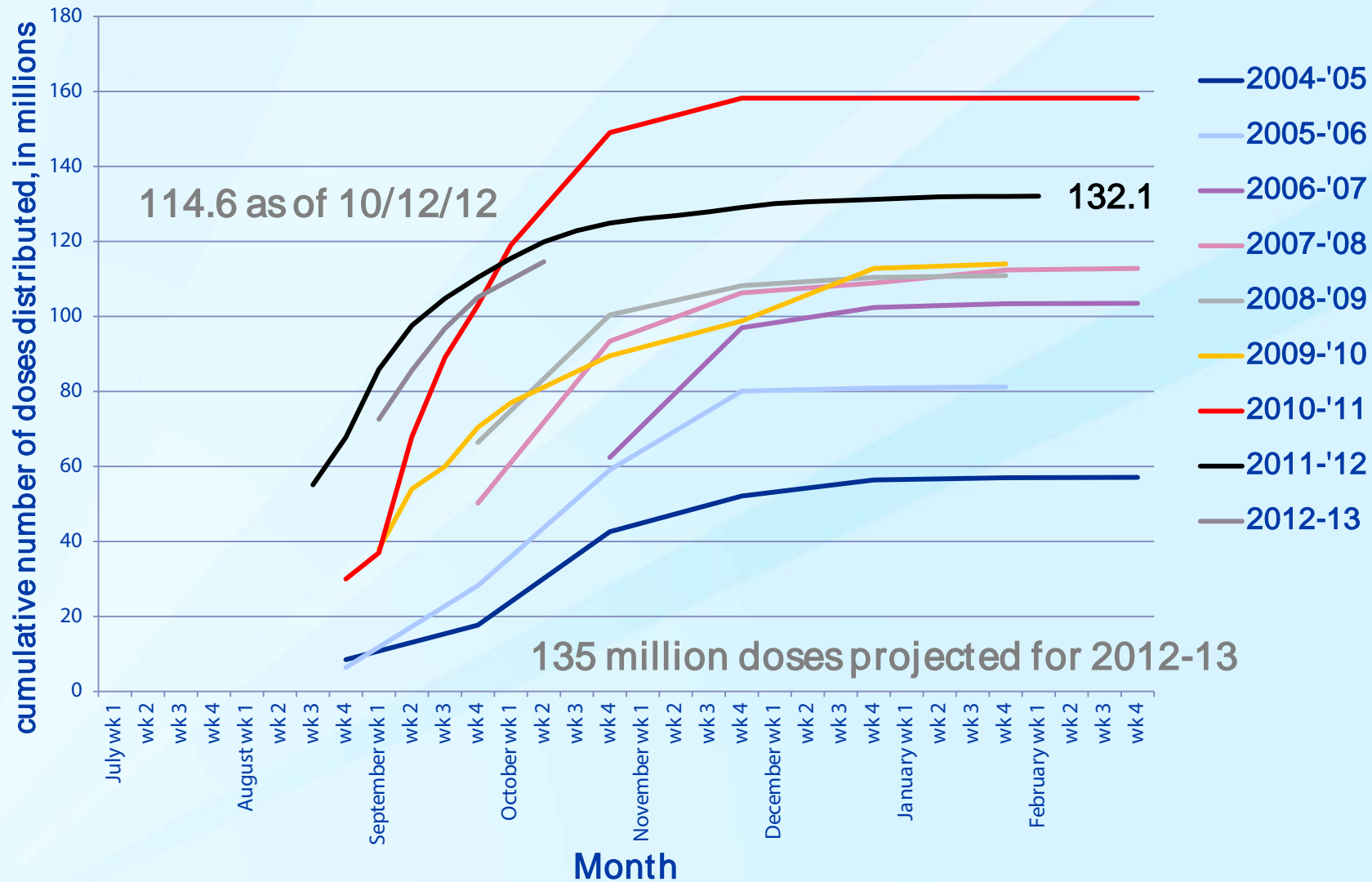
2011-12 Influenza Season Overview

- ❑ **Second “post-pandemic” season**
- ❑ **Second season with universal flu vaccination recommendations**
 - added group was 18-49 healthy non household contacts—15% of US population
- ❑ **All vaccine strains remained the same as the previous season**
- ❑ **Relatively mild and late influenza season**

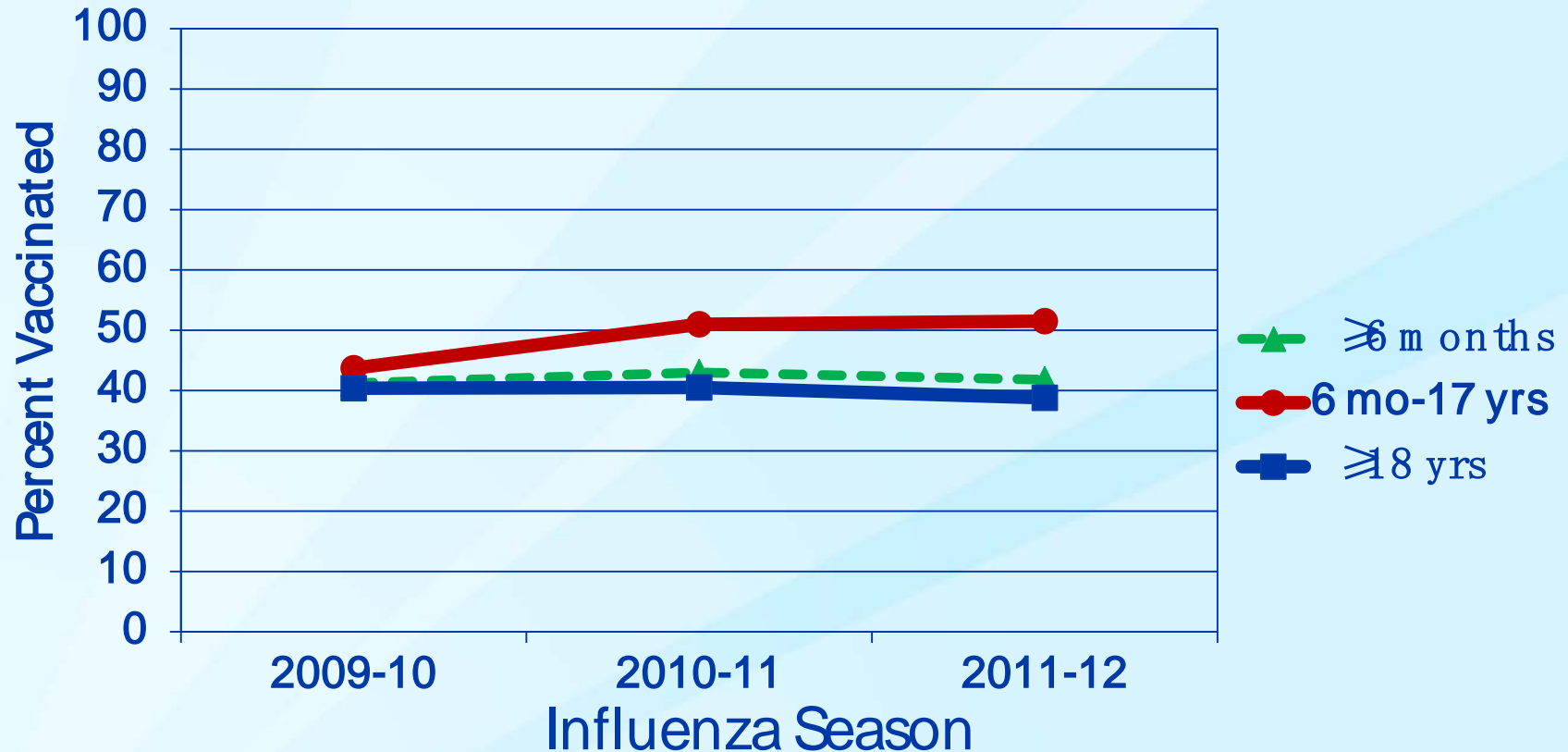
2011-12 Influenza Vaccination Data Methods

- ❑ Updates interim estimates previously posted online
- ❑ General population
 - Final estimates from interviews Sept. 2011-June 2012
 - Children (6mo-17yrs) from National Immunization Survey (n=96,254)
 - Adults (≥ 18 yrs) from Behavioral Risk Factor Surveillance System (n=367,500)
 - Online report at: http://www.cdc.gov/flu/professionals/vaccination/coverage_1112estimates.htm
- ❑ April 2012 internet panel surveys
 - Healthcare personnel (n=2,348)
 - MMWR September 28, 2012 / Vol. 61 / No. 38 / Pg. 753 - 757
 - Pregnant women (n=1,660)
 - MMWR September 28, 2012 / Vol. 61 / No. 38 / Pg. 758 - 763

Cumulative doses of influenza vaccines distributed by month, by season: 2004-'05 - 2012-'13 (to date)



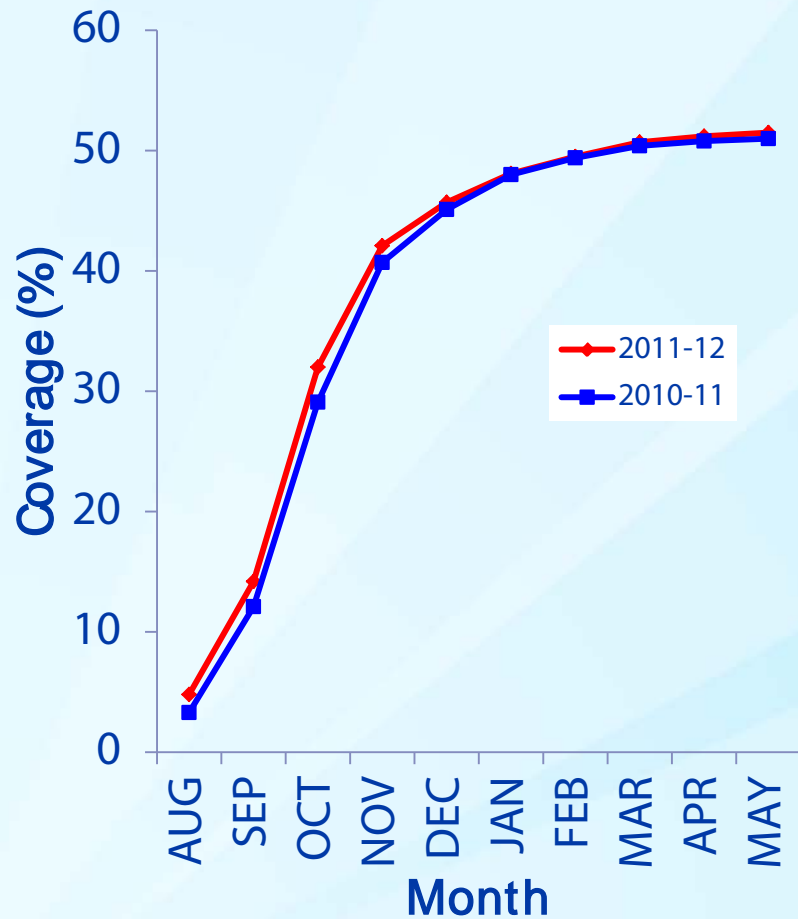
Recent Trends in Seasonal (Trivalent) Influenza Vaccination



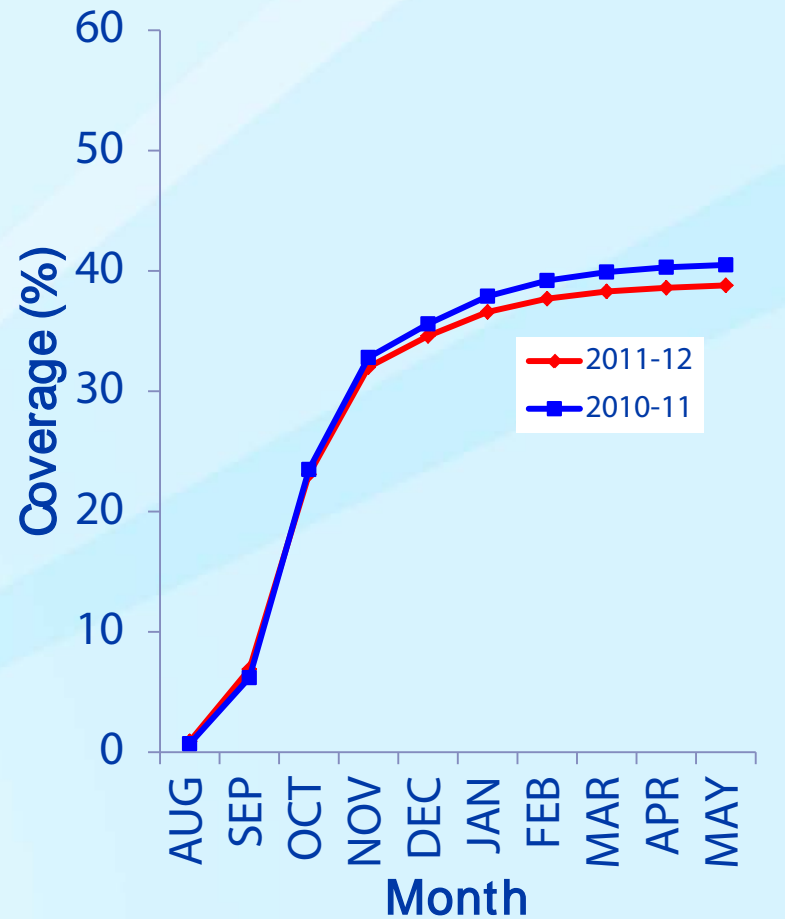
Sources: National Immunization Survey (NIS) (6 mo-17 yrs) and Behavioral Risk Factor Surveillance System (BRFSS) (≥18 yrs); trends for adults and persons ≥6 months may be affected by changes in BRFSS methodology in 2011 (adding households with only cellular telephone service and changes to weighting methods)

Cumulative Influenza Vaccination Coverage by Month: 2010-11 and 2011-12 Seasons

Children 6 mo – 17 yrs



Adults ≥ 18 yrs



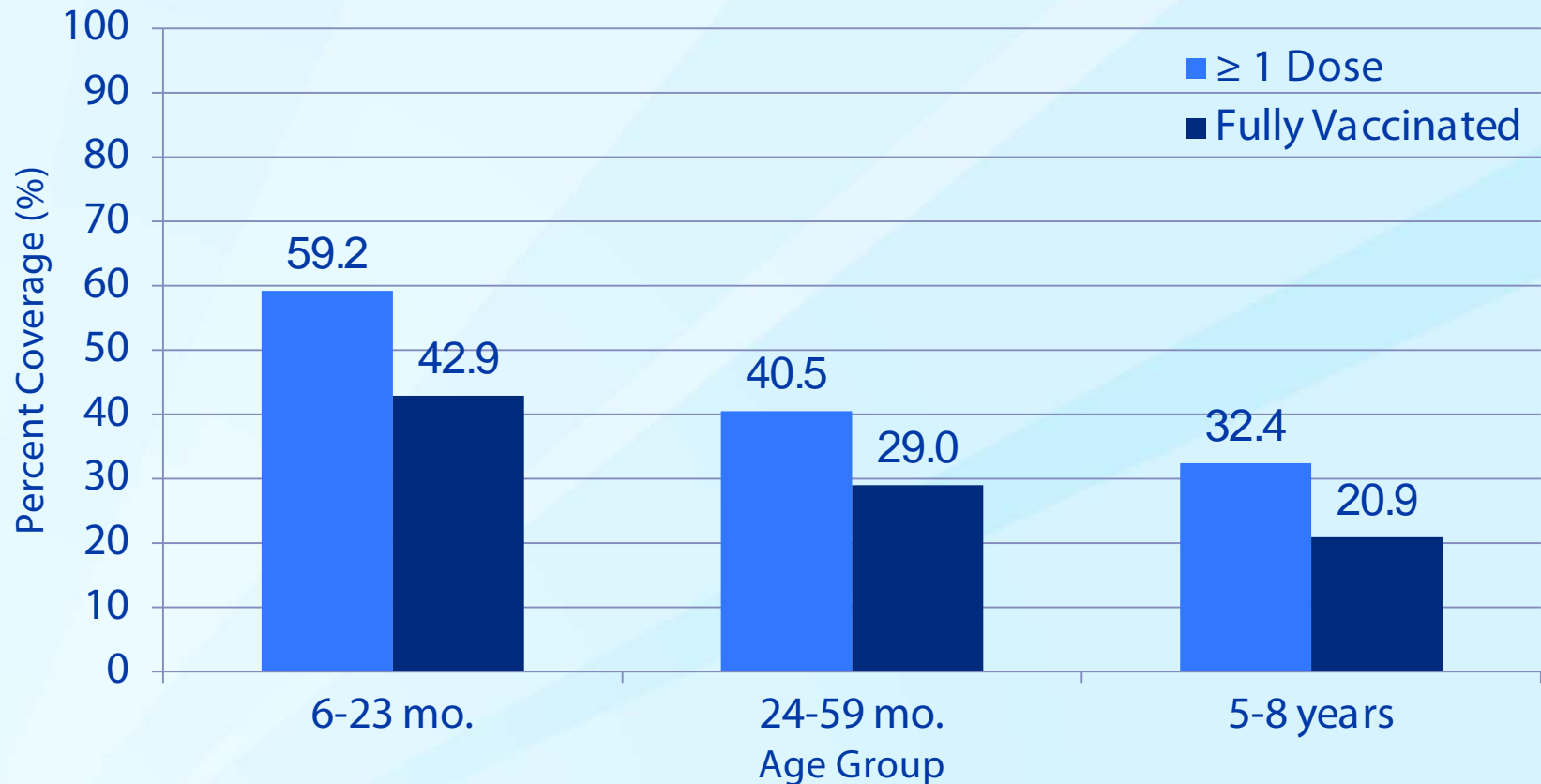
Influenza Vaccination Coverage Among Children: 2010-11 and 2011-12 Seasons

Group	2010-11 (%)	2011-12 (%)	Difference (%)
Children, 6 mos-17 years	51.0	51.5	+0.5
6-23 mos	68.2	74.6	+6.4*
2-4 yrs	60.6	63.3	+2.7
5-12 yrs	54.7	54.2	-0.5
13-17 yrs	34.5	33.7	-0.8

* Statistically significant difference, $p < 0.05$

Source: National Immunization Survey (NIS)

Influenza Vaccination Coverage by Age Group, IISentinel Sites, 2011-2012 Season



Number of children evaluated across all 8 site:

- 255,107 6-23 month olds
- 888,320 24-59 month olds
- 1,397,379 5-8 year olds

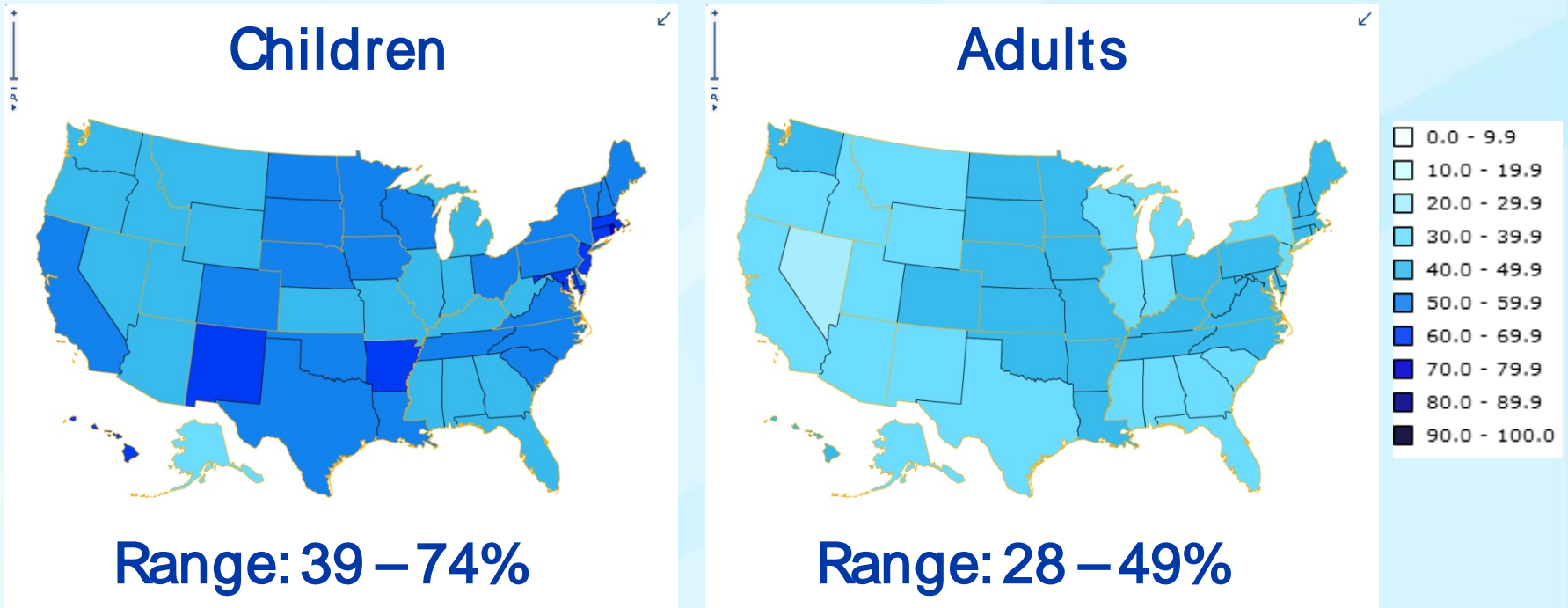
Influenza Vaccination Coverage Among Adults: 2010-11 and 2011-12 Seasons

Group	2010-11 (%)	2011-12 (%)	Difference (%)
Persons \geq 18 yrs	40.5	38.8	-1.7*
Persons 18-49 yrs, all	30.5	28.6	-1.9*
Persons 18-49 yrs, high risk	39.0	36.8	-2.2
Persons 50-64 yrs	44.5	42.7	-1.8*
Persons \geq 65 yrs	66.6	64.9	-1.7*

* Statistically significant difference, $p < 0.05$

Differences may be affected by changes in BRFSS methodology in 2011 (adding households with only cellular telephone service and changes to weighting methods)

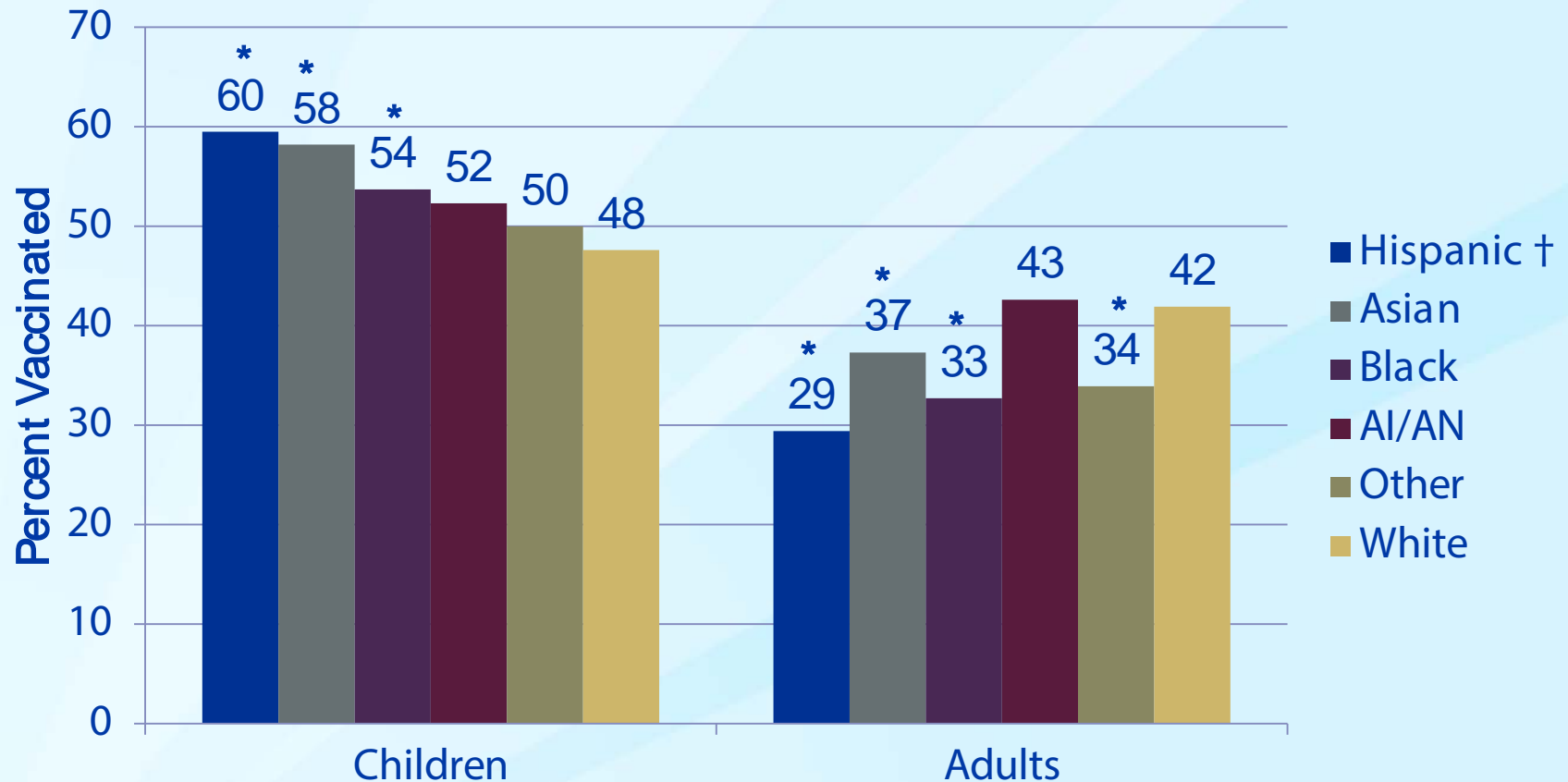
Influenza Vaccination Coverage by State, Children and Adults, 2011-12 Season



Source: Behavioral Risk Factor Surveillance System, September 2011-June 2012. and National Immunization Survey, September 2011-June 2012.

Online at: <http://www.cdc.gov/flu/professionals/vaccination/reporti1112/reporti/>

Influenza Vaccination Coverage by Race/Ethnicity, 2011-12 Season

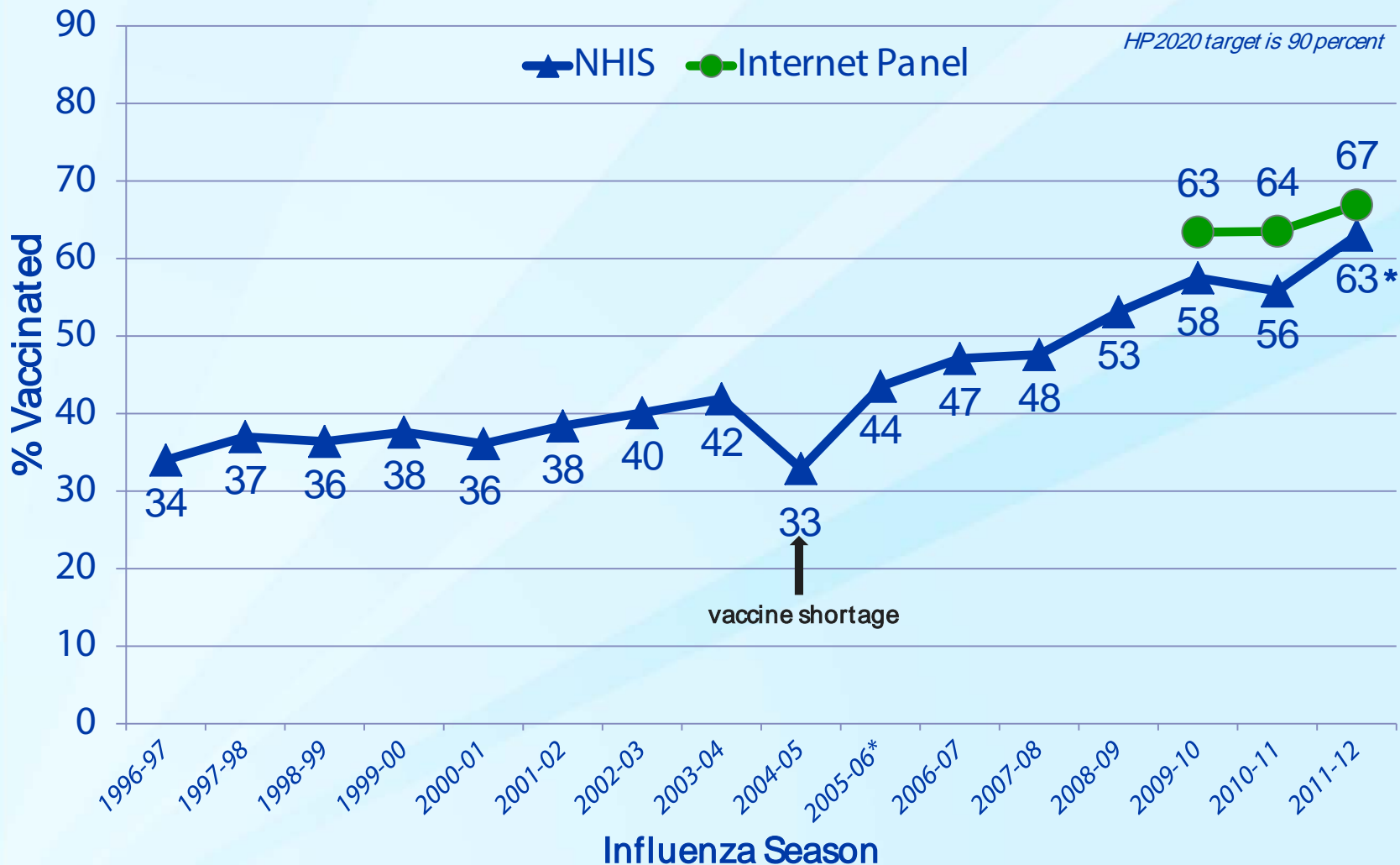


* Statistically significant difference compared to non-Hispanic whites

† Other racial/ethnic groups exclude Hispanics

Sources: National Immunization Survey (NIS) (6 months-17 years) and Behavioral Risk Factor Surveillance System (BRFSS) (≥18 years)

Estimated Influenza Vaccination (trivalent) Coverage, Healthcare Personnel

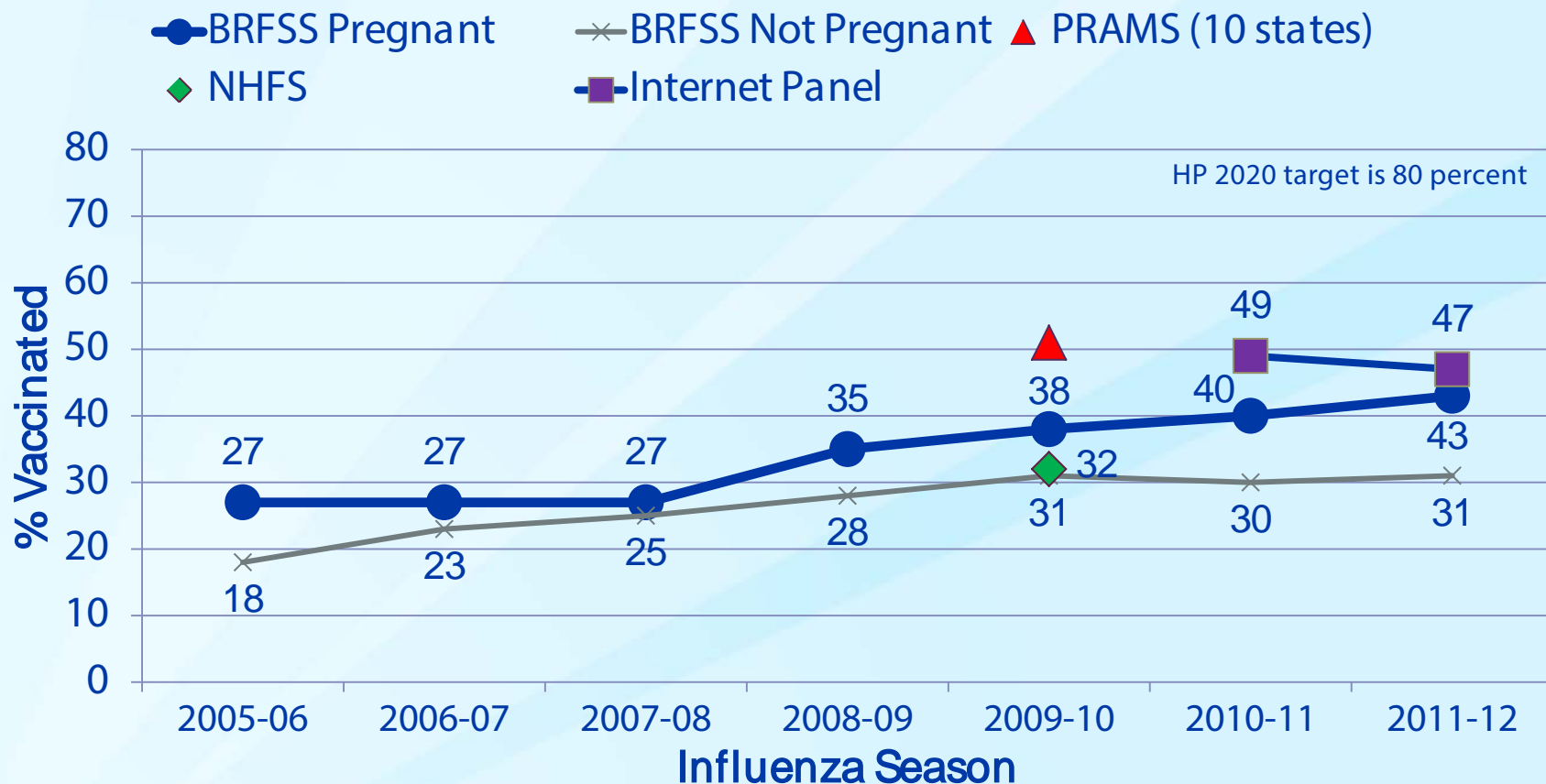


* NHIS estimate for 2011-12 season is preliminary. Methodology used to estimate influenza vaccination coverage among healthcare personnel changed during the 2005-06 season

Sources: Internet Panel Surveys - MMWR2012;61(38);

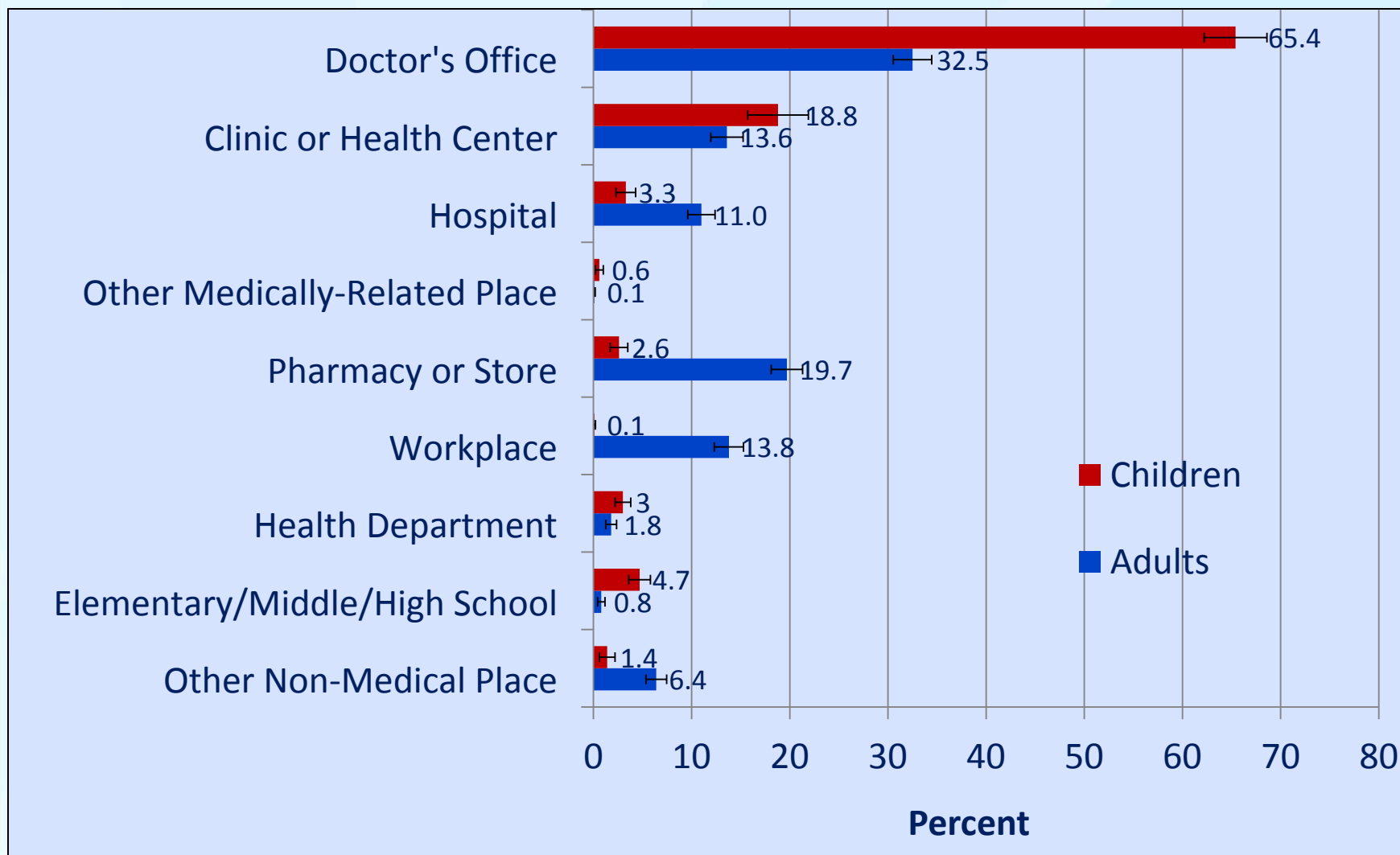
National Health Interview Survey (NHIS) - Lu et al. CDC unpublished and http://www.cdc.gov/flu/pdf/professionals/nhis89_08fluvaxtrendtab.pdf;

Estimated Influenza Vaccination (trivalent) Coverage, Pregnant Women*



* Behavioral Risk Factor Surveillance (BRFSS) data from December-February interviews only, for women 18-44 years pregnant or not pregnant when interviewed. Differences in influenza vaccination coverage between pregnant and not pregnant women were statistically significant ($p < 0.05$) only for the 2009-10, 2010-11, and 2011-12 seasons. Other estimates for pregnant women from PRAMS (MMWR December 3, 2010 / 59(47);1541-1545); NHFS (Ding et al. Am. J. Obstetrics & Gynecology, June 2011 Supplement); and internet panel survey (MMWR August 19, 2011 / 60(32);1078-1082, MMWR September 28, 2012 / 61(8); 758 - 763)

Place of Vaccination by age group, March 2012 NIS and NFS*



*March 2012 National Immunization Survey (NIS) data for children 6 months through 17 years of age

March 2012 National Flu Survey (NFS) data for adults ≥ 18 years of age

Summary

- ❑ Coverage for children for the 2011-12 season was similar to 2010-11 season coverage
- ❑ Coverage for adults for the 2011-12 season was 1.7 percentage points lower than for the 2010-11 season
 - Changes in adult coverage may be due to changes made to the Behavioral Risk Factor Surveillance System (BRFSS)
- ❑ Coverage among children was highest among Hispanic and non-Hispanic Asian children

Summary

- ❑ **Racial/ethnic disparities among adults persist**
- ❑ **Wide variations in coverage among states**
- ❑ **Maintained last season's increases for pregnant women and healthcare personnel**
- ❑ **The most common places for vaccination among both adults and children were medical locations**
 - **Retail settings and work places were other important venues for adults**

Limitations

- ❑ Tracking trends by season complicated by multiple data sources with different timeliness and methods
- ❑ In 2011, BRFSS added households with only cellular telephone service to the sampling frame and made changes to weighting methods
 - Data from before 2011 may not be directly comparable
- ❑ Self-reported vaccination, not validated by medical records
- ❑ Survey estimates may not be representative
 - Telephone survey response rates low
 - Representativeness of internet panel survey estimates needs further evaluation

Recommendations

- ❑ Increase influenza vaccination coverage among all groups
- ❑ Reduce disparities in coverage among adults
- ❑ Implement proven interventions to increase coverage*
 - Enhancing Access to Vaccination Services
 - Increasing Community Demand for Vaccinations
 - Provider- or System-Based Interventions
 - Community-Based Interventions Implemented in Combination

FluVaxView

CDC Source for Influenza Vaccination Coverage Data
<http://www.cdc.gov/flu/fluvoxview/index.htm>

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Seasonal Influenza (Flu)

Seasonal Influenza (Flu)

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Influenza Vaccination Coverage

FluVaxView

Influenza vaccination coverage for the United States is estimated annually by CDC utilizing data from several nationally representative surveys: the [National Immunization Survey \(NIS\)](#), the [Behavioral Risk Factor Surveillance System \(BRFSS\)](#), the [National Flu Survey \(NFS\)](#), the [National Health Interview Survey \(NHIS\)](#), and internet panel surveys of [pregnant women](#) and [health care personnel](#). This page provides vaccination coverage estimates for 2011-12 and previous influenza seasons. Reports, interactive figures and data tables are provided.

New to FluVaxView

[Flu Vaccination Coverage, United States, 2011-12 Influenza Season](#)

2011-12 Flu Season Interactive Reports >> View national and state-level influenza vaccination coverage estimates using interactive maps, trend lines, bar charts and data tables.

[Report I - Interactive Map](#)

[Report II - Comparison Table](#)

2011-12 Fast Facts

Flu can be very serious, even among healthy people. Flu vaccine is our best protection, safe, recommended for everyone 6 months and older, including pregnant women, and is especially important for the young, elderly and people chronic health issues.

Done

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Thank You

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333

Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

National Center for Immunization and Respiratory Diseases

Immunization Services Division

