

Influenza Vaccination Distribution and Coverage, United States, 2012-13 Season

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2012-13 Influenza Season Overview

- ❑ Third season with universal influenza vaccination recommendation
- ❑ Third influenza season since the 2009 H1N1 pandemic
- ❑ 2012-13 season influenza activity:
 - Began early
 - Moderately severe
 - Duration longer than average
- ❑ Spot influenza vaccine shortages in January 2013

Update to *Healthy People* 2020 Influenza Vaccination Objectives (IID-12)

❑ Ten objectives consolidated into four:

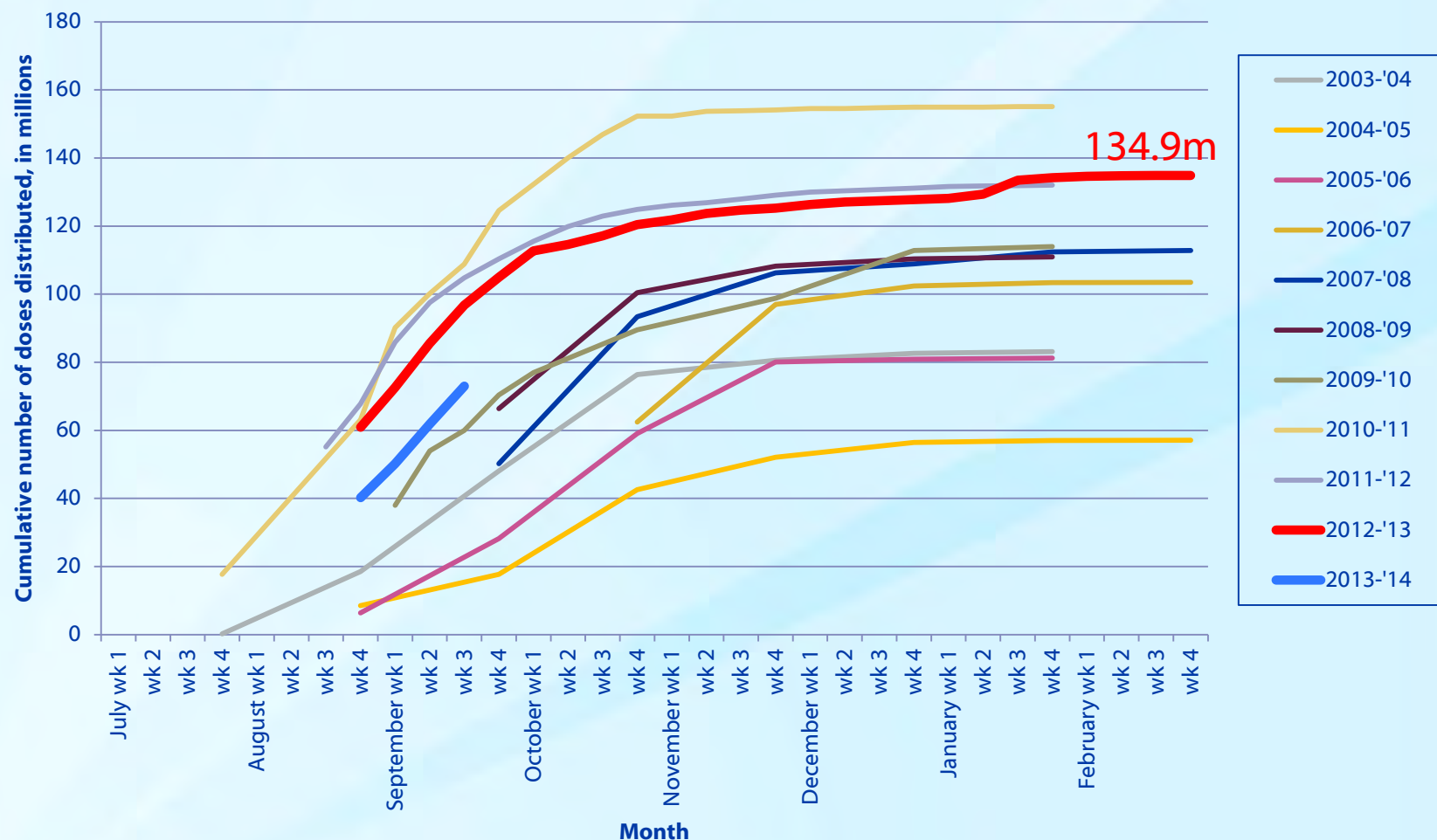
- Children 6 months - 17 years (target 70%, source NHIS)
- Adults ≥ 18 years (target 70%, source NHIS)
- Healthcare Personnel (target 90%, source NHIS)
- Pregnant Women (developmental pending data source, no target set)

❑ Approved May 15, 2013 by the HP2020 Federal Interagency Workgroup

- Not yet updated on main HP2020 website
- See Immunization and Infectious Disease progress review:
 - <http://www.healthypeople.gov/2020/topicsobjectives2020/downloads/HP2020IIDandGHProgressReviewData.xlsx>
 - http://www.cdc.gov/nchs/healthy_people/hp2020/hp2020_IID_GH_progress_review.htm

❑ Will continue to track the various populations

Cumulative doses of influenza vaccines distributed by month, by season: 2003-'04 - 2013-'14

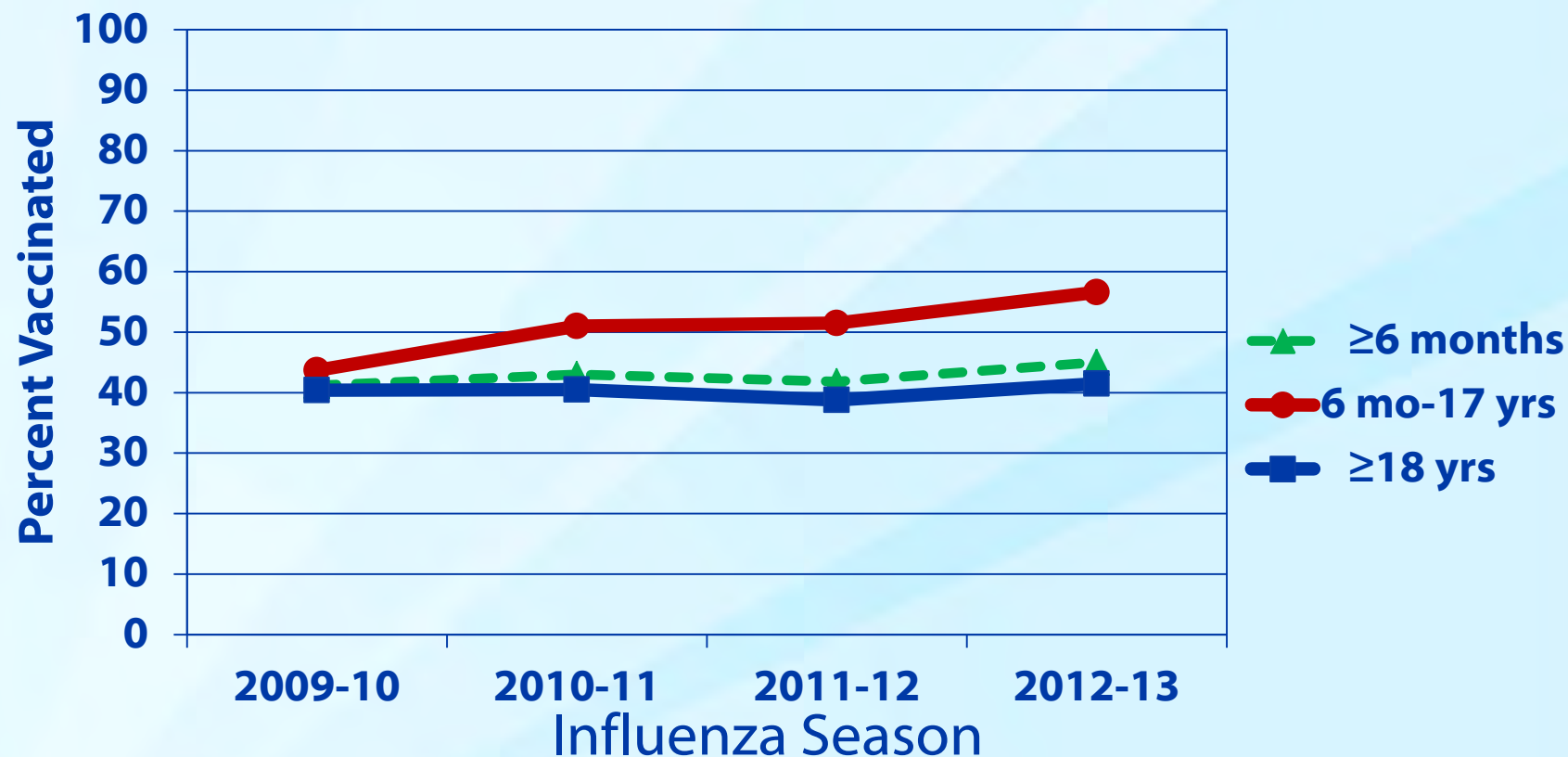


Manufacturers project 135-139 million doses of flu vaccine will be produced during the 2013-14 season.

2012-13 Influenza Vaccination Data Methods

- ❑ **Updates interim estimates previously posted online**
- ❑ **General population**
 - Children (6mo-17yrs) from National Immunization Survey (n=100,829), interviews Oct. 2012 - June 2013
 - Adults (≥ 18 yrs) from Behavioral Risk Factor Surveillance System (n=348,686), interviews Sept. 2012 - June 2013
 - Online report at: <http://www.cdc.gov/flu/fluview/coverage-1213estimates.htm>
- ❑ **April 2013 internet panel surveys**
 - Healthcare personnel (n=1,944)
 - MMWR September 27, 2013 / Vol. 62 / No. 38 / Pg. 781-786
 - Pregnant women (n=1,702)
 - MMWR September 27, 2013 / Vol. 62 / No. 38 / Pg. 787-792

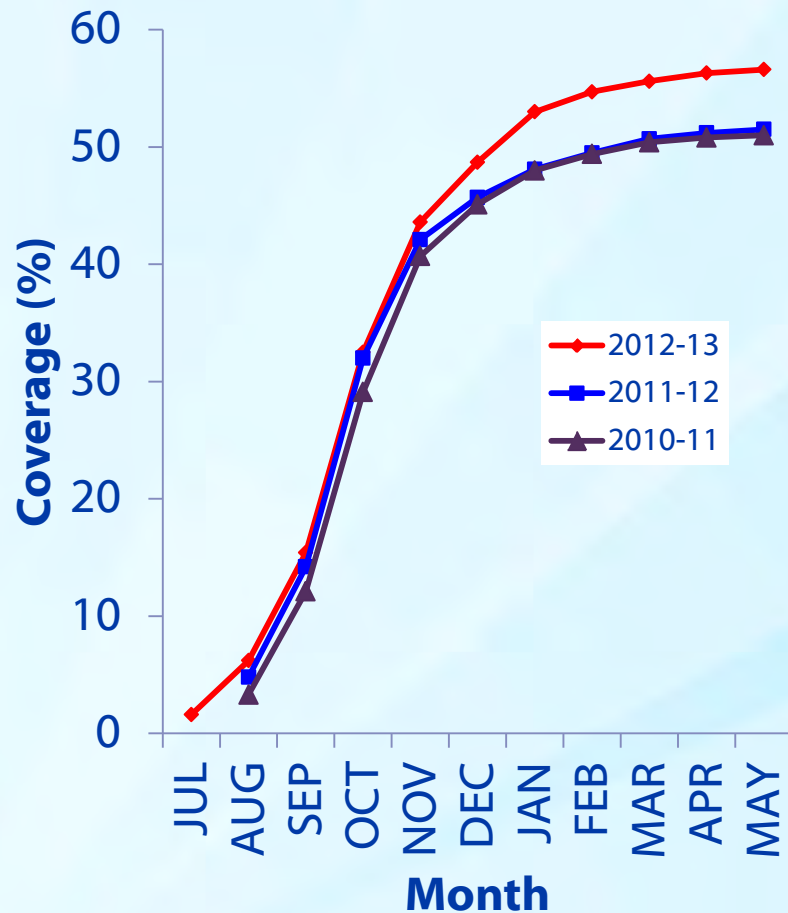
Recent Trends in Seasonal (Trivalent) Influenza Vaccination



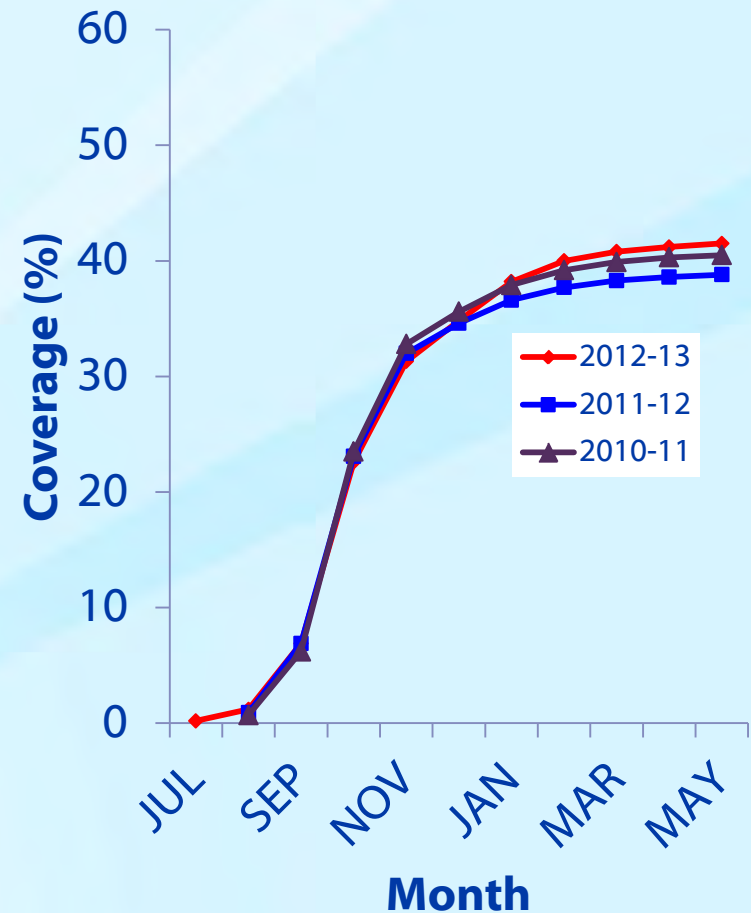
Sources: National Immunization Survey (NIS) (6 mo-17 yrs) and Behavioral Risk Factor Surveillance System (BRFSS) (≥18 yrs); trends for adults and persons ≥6 months may be affected by changes in BRFSS methodology in 2011, affecting 2011-12 and subsequent seasons (adding households with only cellular telephone service and changes to weighting methods)

Cumulative Influenza Vaccination Coverage by Month: 2010-11 through 2012-13 Seasons

Children 6 mo – 17 yrs



Adults ≥18 yrs



Online at: <http://www.cdc.gov/flu/fluview/coverage-1213estimates.htm>

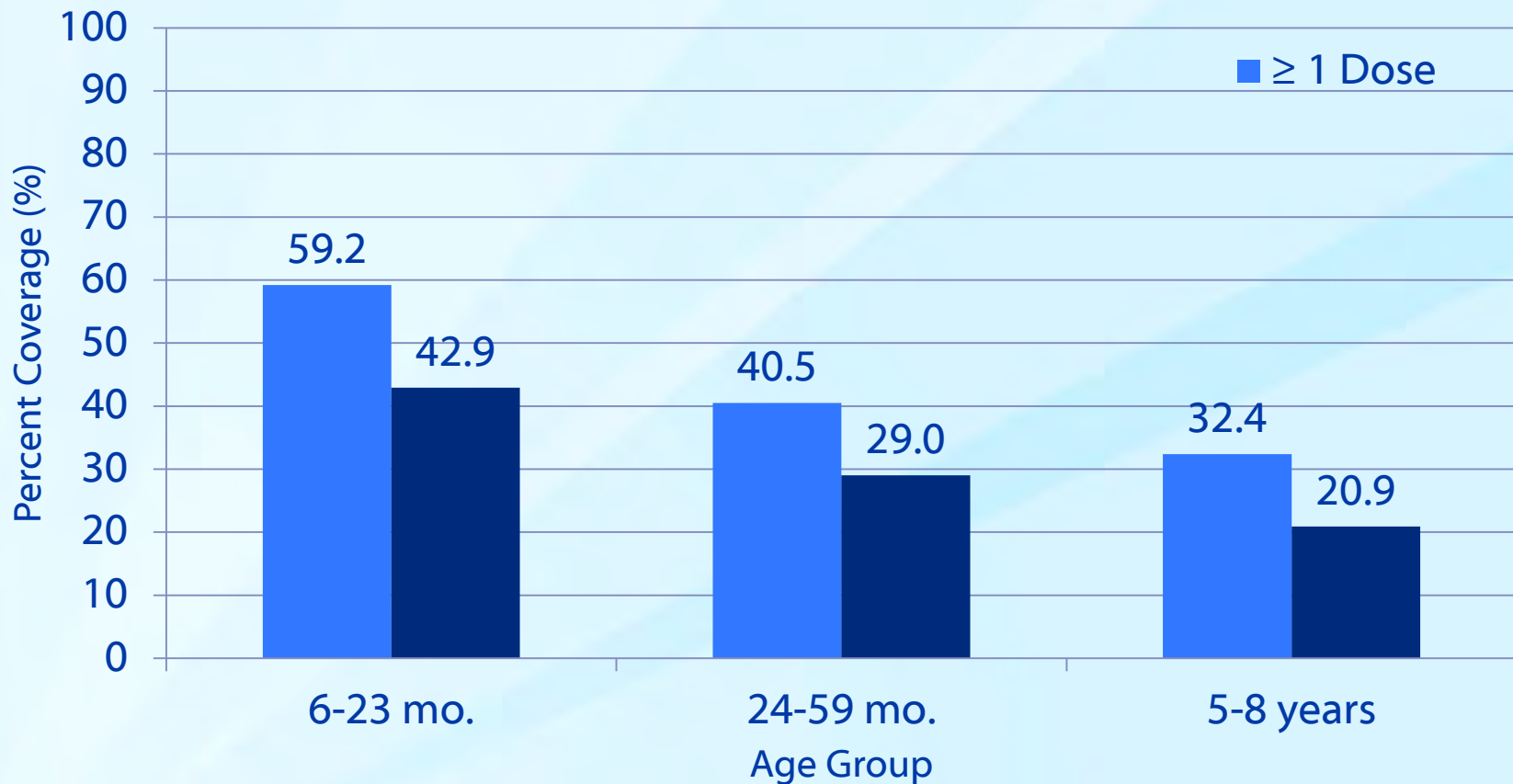
Influenza Vaccination Coverage Among Children: 2011-12 and 2012-13 Seasons

| Group | 2011-12 (%) | 2012-13 (%) | Difference (%) |
|---------------------------------|----------------|----------------|-------------------|
| Children, 6 mos-17 years | 51.5 | 56.6 | +5.1* |
| 6-23 mos | 74.6 | 76.9 | +2.3 |
| 2-4 yrs | 63.3 | 65.8 | +2.5 |
| 5-12 yrs | 54.2 | 58.6 | +4.4* |
| 13-17 yrs | 33.7 | 42.5 | +8.8* |

* Statistically significant difference, $p < 0.05$

Source: National Immunization Survey (NIS)

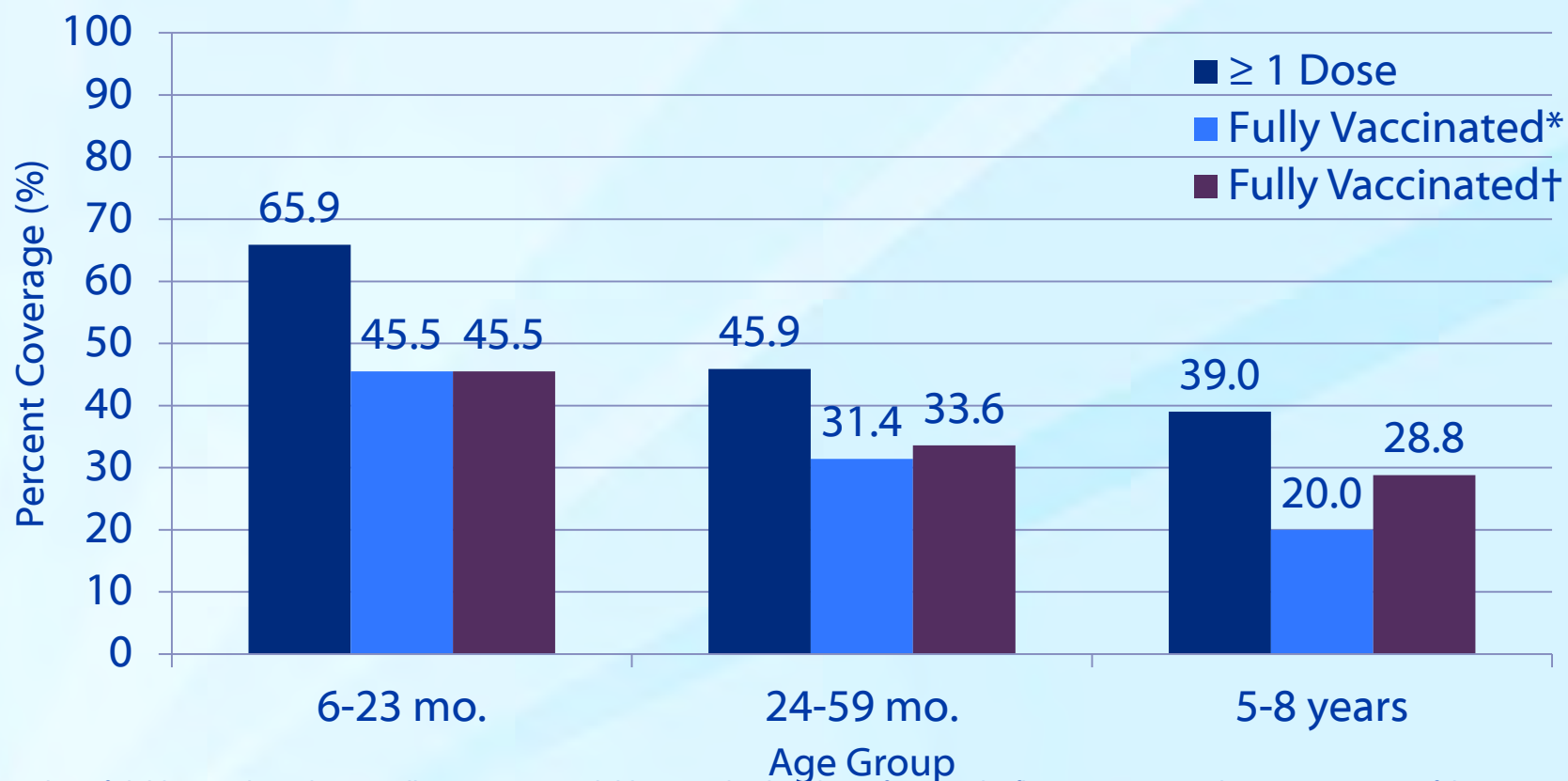
Influenza Vaccination Coverage by Age Group, IIS Sentinel Sites, 2011-2012 Season



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 by Age Group, IIS Sentinel Sites, 2012-2013 Season



Number of children evaluated across all 6 sites:

- 216,003 6-23 month olds
- 908,919 24-59 month olds
- 1,488,628 5-8 year olds

* Children need only 1 dose of seasonal influenza vaccine in the 2012-13 season if they received ≥ 2 doses of seasonal influenza vaccine from 7/1/2010-6/30/2012. All other children require 2 doses.

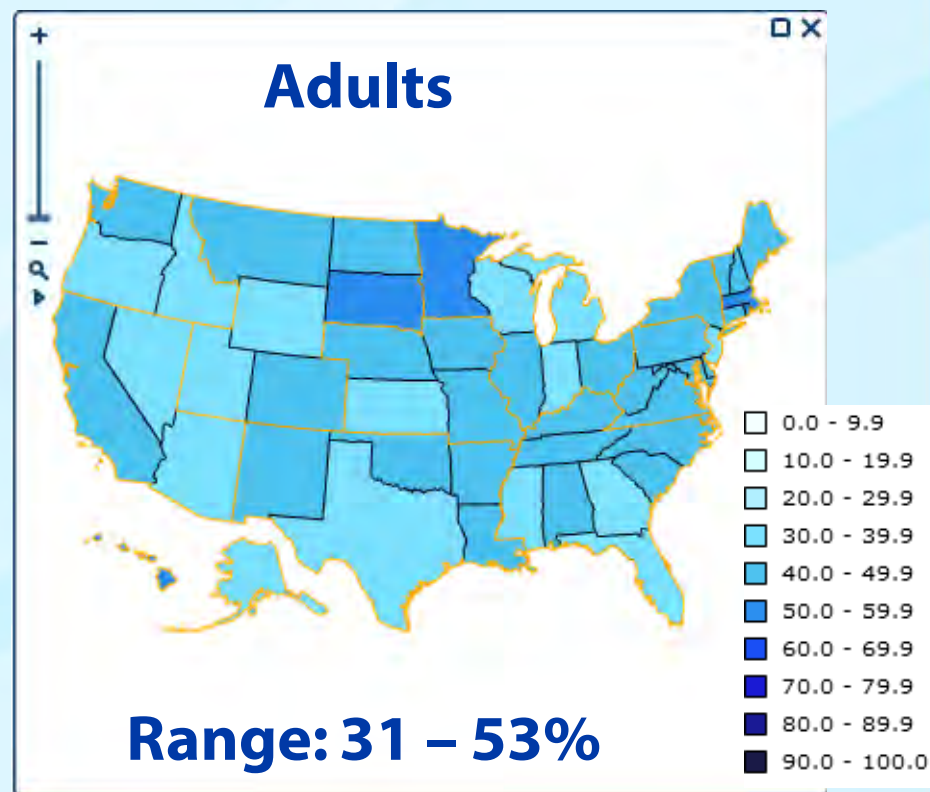
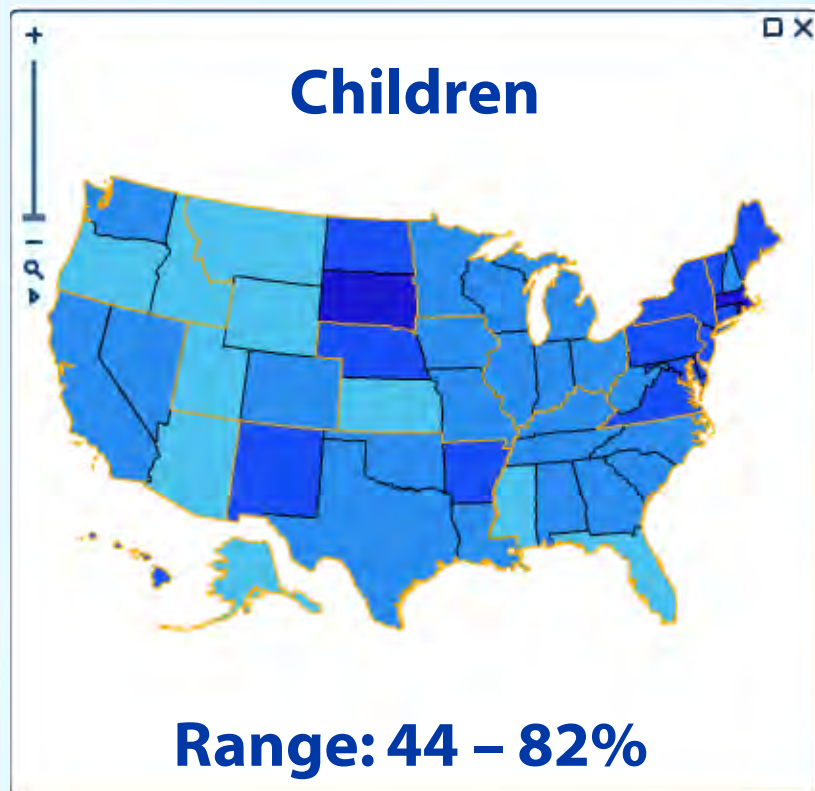
† Children need only 1 dose in 2012-13 if they received: 1) ≥ 2 doses of seasonal influenza vaccine since July 1, 2010; 2) ≥ 2 doses of seasonal influenza vaccine before July 1, 2010, and ≥ 1 dose of monovalent 2009(H1N1) vaccine; or 3) ≥ 1 dose of seasonal influenza vaccine before July 1, 2010, and ≥ 1 dose of seasonal influenza vaccine since July 1, 2010. Children for whom one of these conditions is not met require 2 doses in 2012-2013. MMWR 61:613-18.

Influenza Vaccination Coverage Among Adults: 2011-12 and 2012-13 Seasons

| Group | 2011-12 (%) | 2012-13 (%) | Difference (%) |
|------------------------------|----------------|----------------|-------------------|
| Persons \geq 18 yrs | 38.8 | 41.5 | +2.7* |
| Persons 18-49 yrs, all | 28.6 | 31.1 | +2.5* |
| Persons 18-49 yrs, high risk | 36.8 | 39.8 | +3.0* |
| Persons 50-64 yrs | 42.7 | 45.1 | +2.4* |
| Persons \geq 65 yrs | 64.9 | 66.2 | +1.3* |

* Statistically significant difference, $p < 0.05$

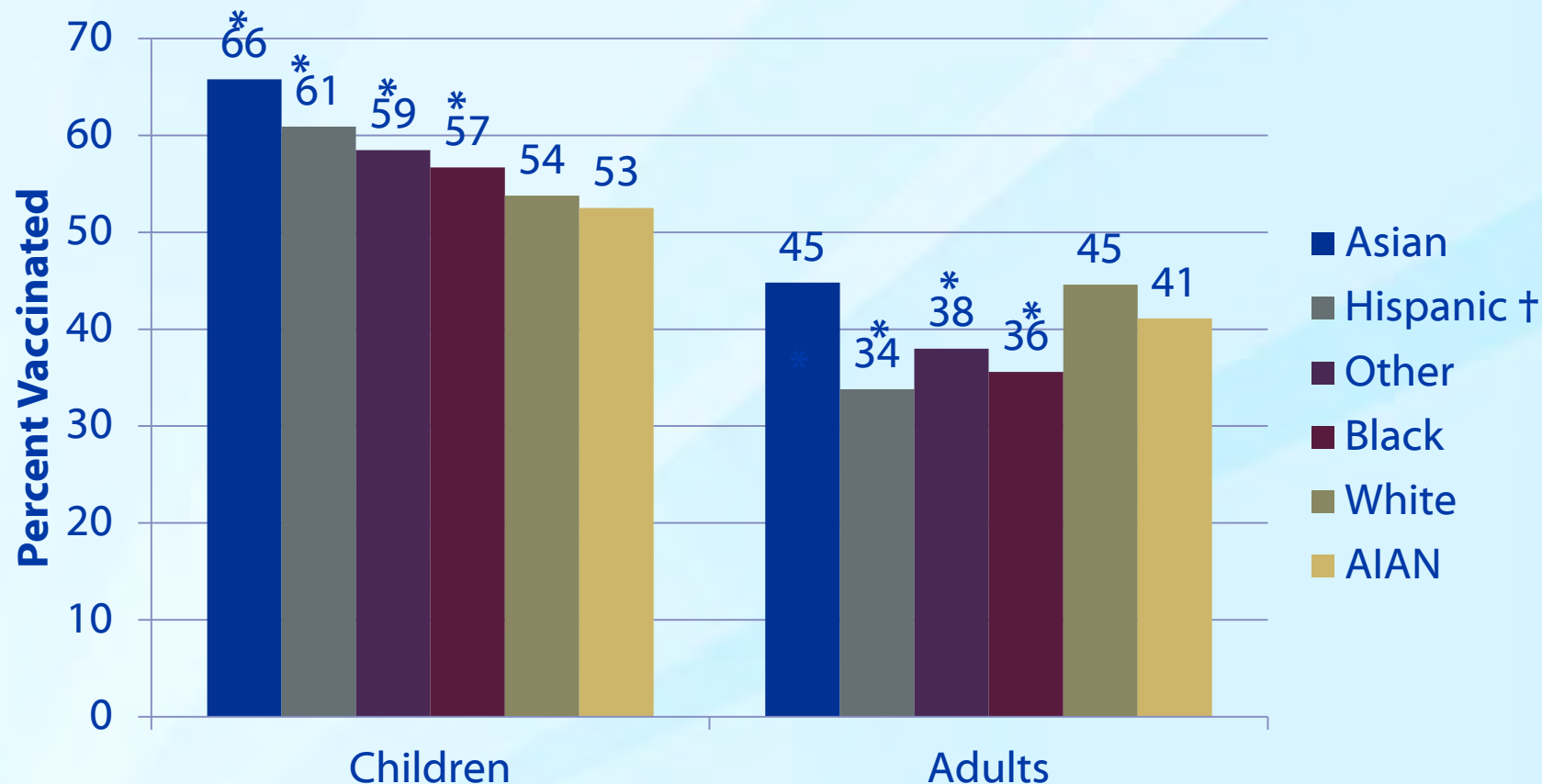
Influenza Vaccination Coverage by State, Children and Adults, 2012-13 Season



Source: Behavioral Risk Factor Surveillance System, September 2012-June 2013. and National Immunization Survey, October 2012-June 2013.

Online at: <http://www.cdc.gov/flu/fluview/reports/reporti1213/reporti/index.htm>

Influenza Vaccination Coverage by Race/Ethnicity, 2012-13 Season

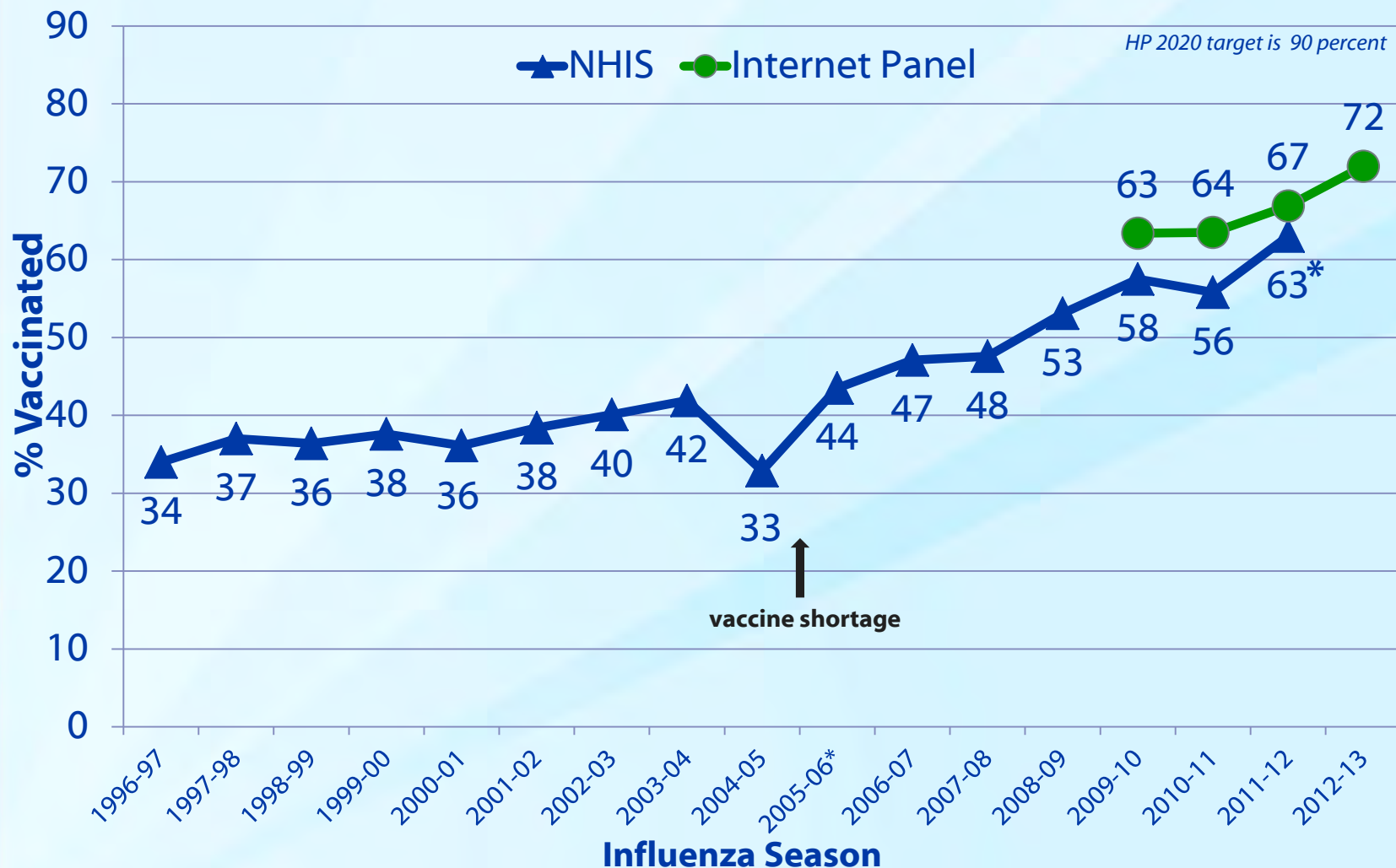


* Statistically significant difference compared to non-Hispanic whites

† Other racial/ethnic groups exclude Hispanics

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

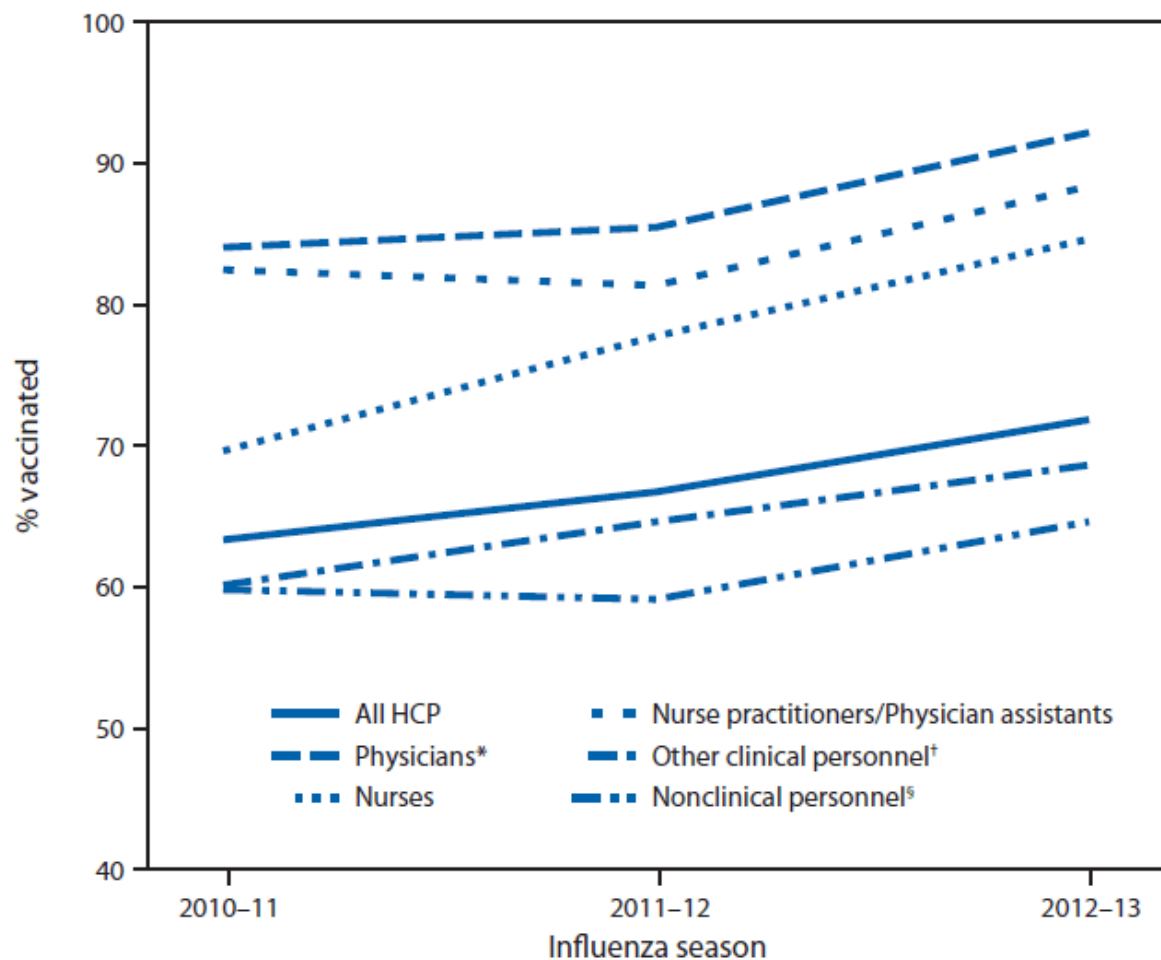
Estimated Influenza Vaccination (trivalent) Coverage, Healthcare Personnel



* 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 - MMWR 2013;62(38); National Health Interview Survey (NHIS) - Lu et al. AJE in press and http://www.cdc.gov/flu/pdf/professionals/nhis89_08fluvaxtrendtab.pdf; NHIS is data source for HP2020 objective

FIGURE 1. Percentage of health-care personnel (HCP) who received influenza vaccination, by occupation type — Internet panel survey, United States, 2010–11, 2011–12, and 2012–13 influenza seasons

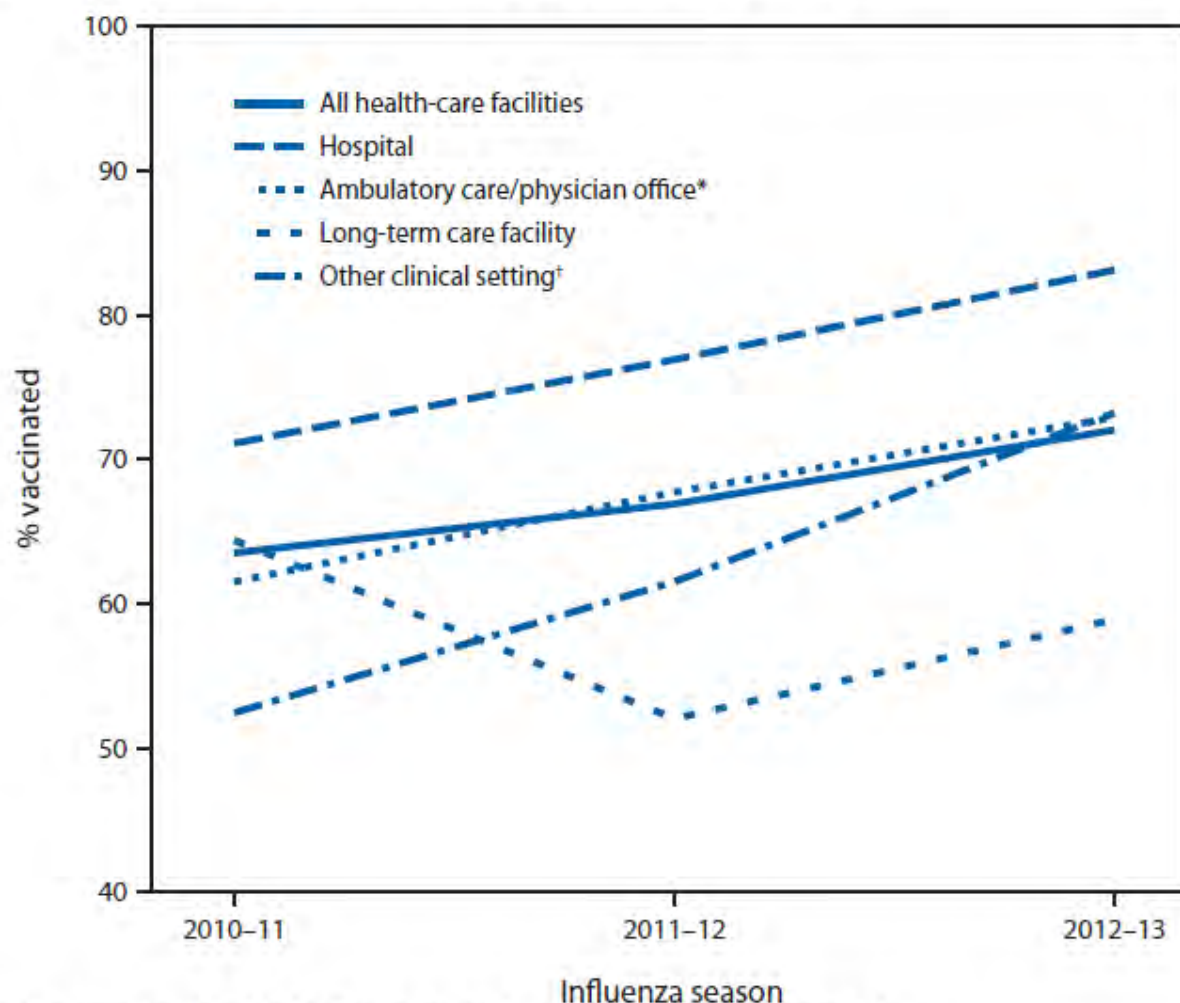


* Included dentists in 2010–11 season.

† All seasons include pharmacists, allied health professionals, technicians, technologists, assistants, or aides. Dentists were added starting from the 2011–12 season.

§ Administrative support staff or manager, and nonclinical support staff (e.g., food service workers, housekeeping staff, maintenance staff, janitors and laundry workers).

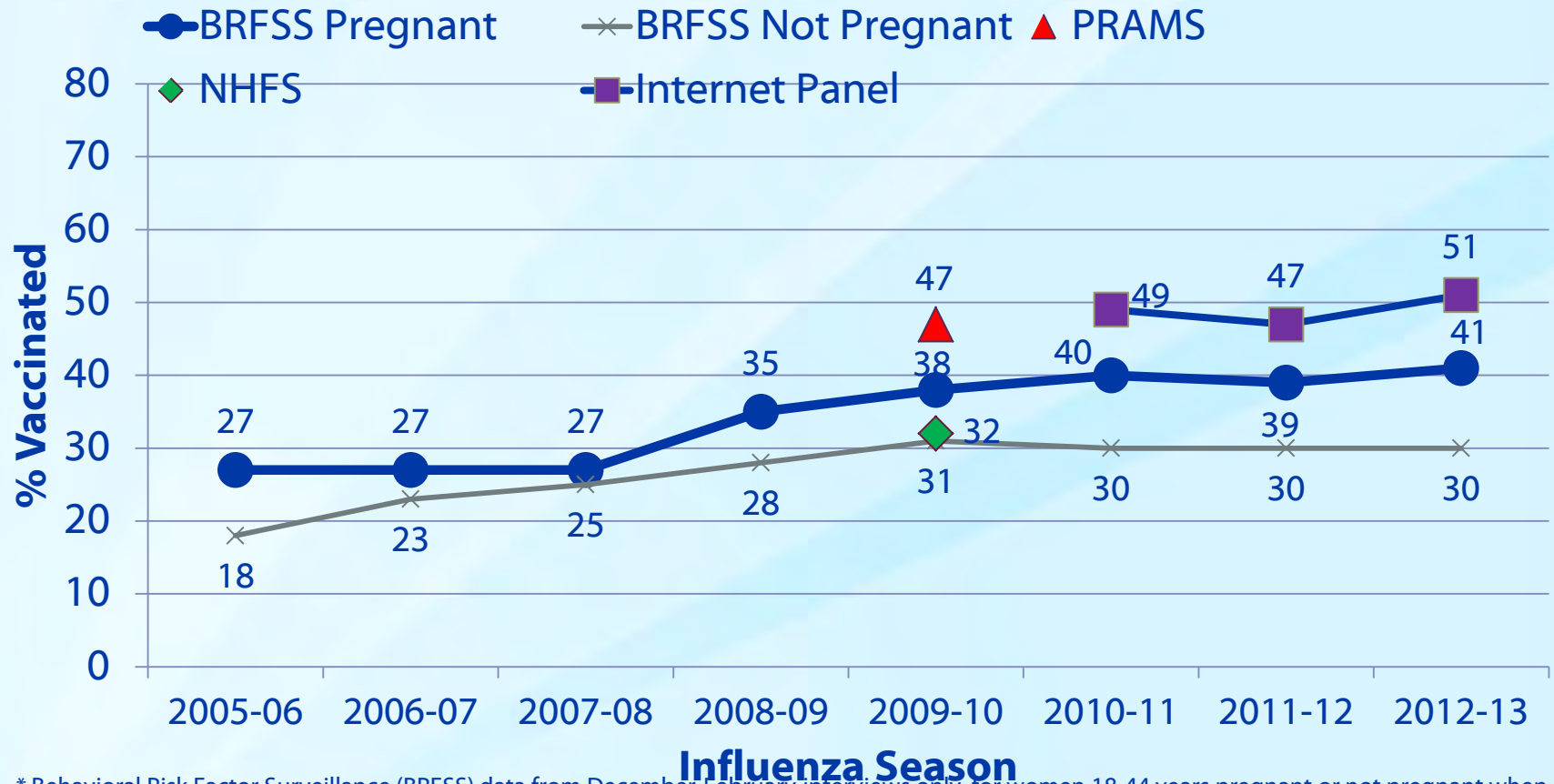
FIGURE 2. Percentage of health-care personnel (HCP) who received influenza vaccination, by occupational setting — Internet panel survey, United States, 2010–11, 2011–12, and 2012–13 influenza seasons



* Ambulatory care (physician's office, medical clinic, and other ambulatory care setting).

† Including dental offices, pharmacies, nonhospital laboratories, medical-related schools, emergency medical technician sites, and home health-care sites.

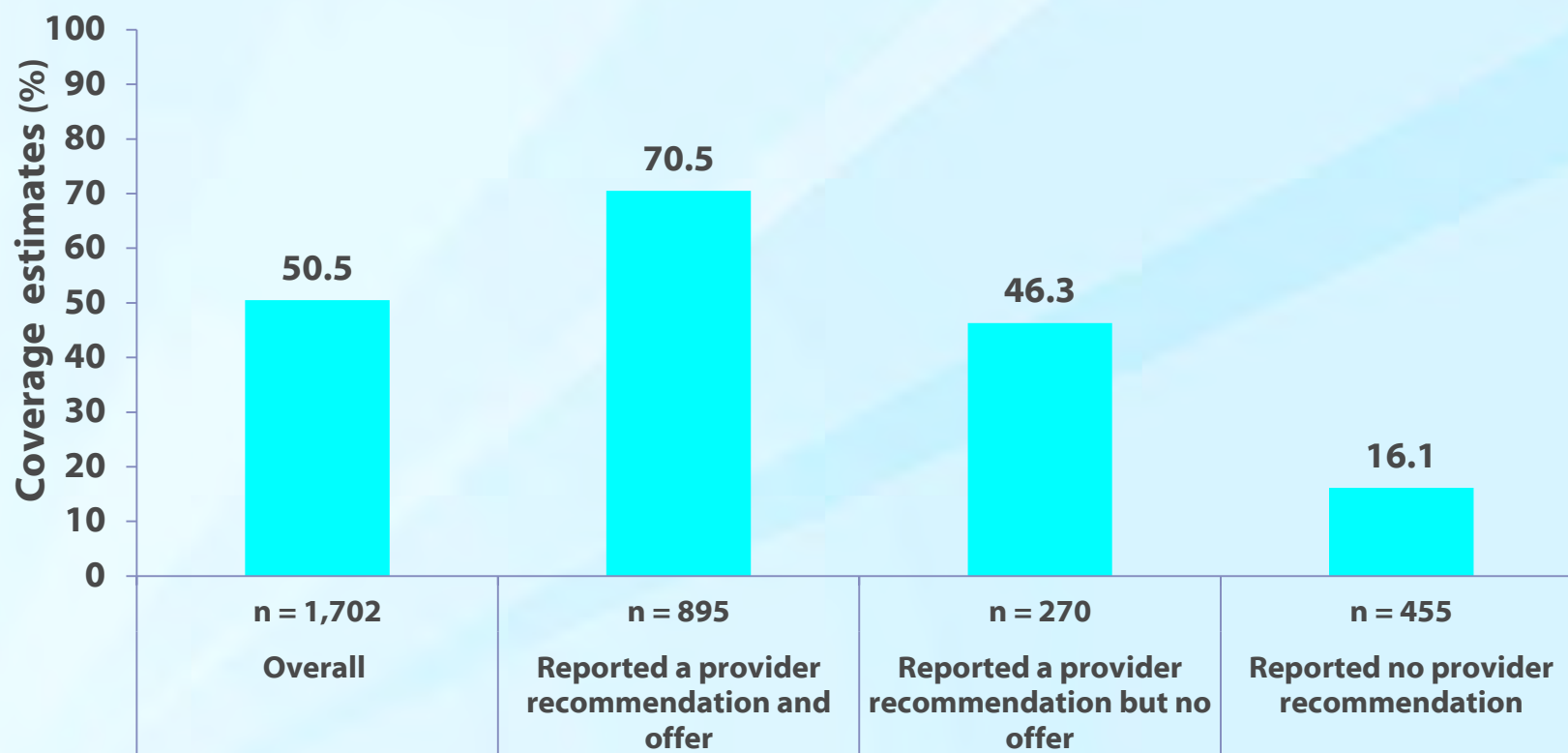
Estimated Influenza Vaccination (trivalent) Coverage, Pregnant Women*



* Behavioral Risk Factor Surveillance (BRFSS) data from December-February interviews only, for women 18-44 years pregnant or not pregnant when interviewed; sample sizes for pregnant women per season ranged from 400-800. Differences in influenza vaccination coverage between pregnant and not pregnant women were statistically significant ($p < 0.05$) for 2005-06 and 2008-09 through 2012-13 seasons (age adjusted), $p < 0.05$. Other estimates for pregnant women from PRAMS (MMWR February 24, 2012 / 61(07):113-118); 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(38):758-763, MMWR September 27, 2013 / 62(38):787-792)

Vaccination coverage by provider recommendation and/or offer

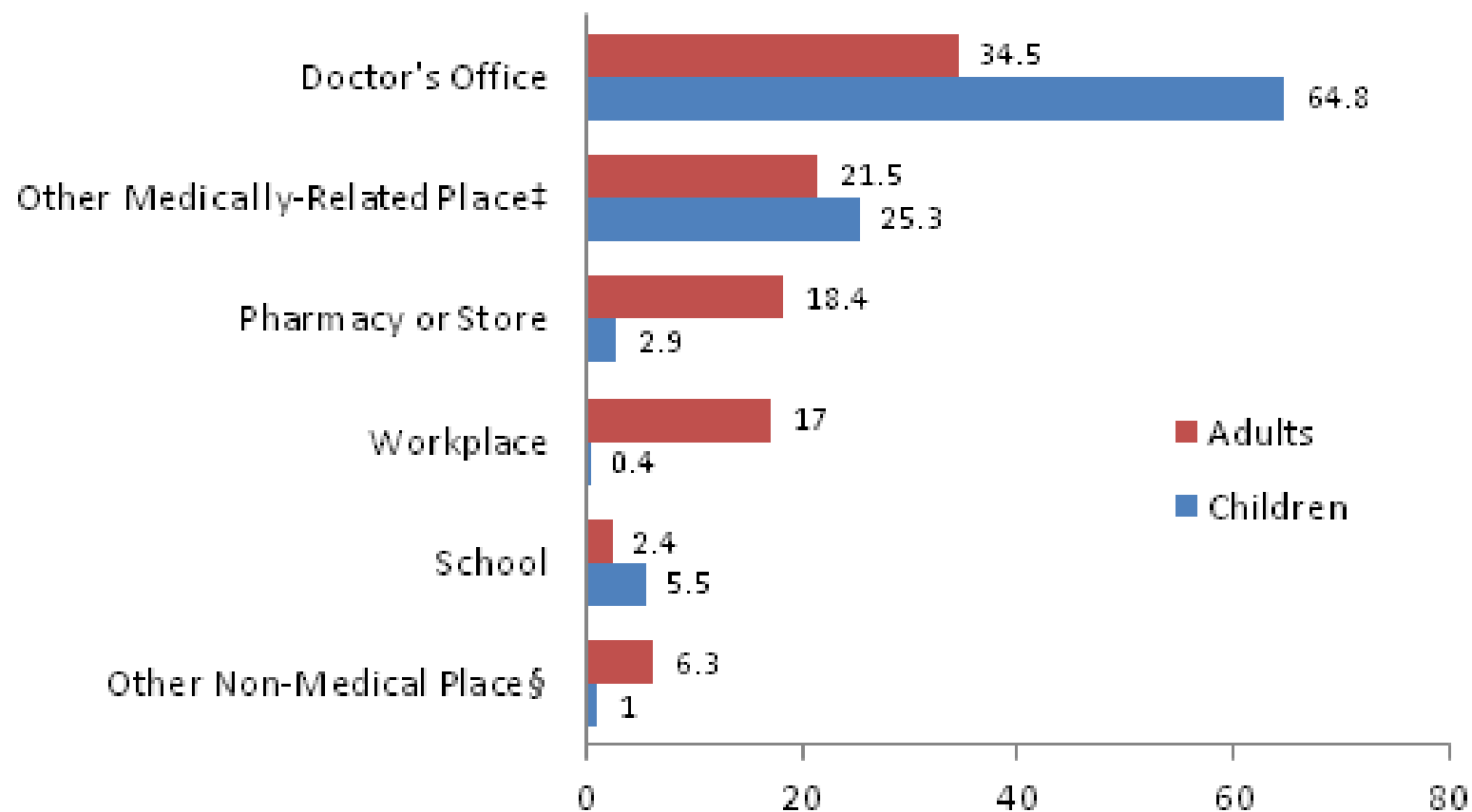
Influenza vaccination before and during pregnancy overall and by provider recommendation and offer* for influenza vaccination among women pregnant anytime between October 2012 - January 2013, Internet Panel Survey, 2012-13 Influenza Season



*Women who didn't visit a provider since August 2012 (n=27) or women who didn't know whether they received provider recommendation or offer (n=55) were excluded from this analysis.

Place of Vaccination by age group, November 2012 NIS and NIFS*

Figure 2. Place of vaccination for children and adults, early 2012-13 flu season, National Immunization Survey and National Internet Flu Survey



*October 4 – November 17, 2012 National Immunization Survey (NIS) data for children 6 months through 17 years of age
November 2-15, 2012 National Internet Flu Survey (NIFS) data for adults ≥ 18 years of age

Summary

- ❑ **Influenza vaccination coverage for the 2012-13 season increased 5 percentage points from the prior season among children**
 - Increases for children 5-12 (+4.4) and 13-17 (+8.8) years
- ❑ **Coverage for adults increased 3 percentage points**
 - Increases in each age group
- ❑ **Among children, coverage higher than non-Hispanic whites for Asians, Hispanics, blacks, and children of other/multiple races**

Summary

- ❑ **Racial/ethnic disparities among adults persist**
- ❑ **Wide variations in coverage among states**
- ❑ **Maintained last season's increases for pregnant women**
- ❑ **Increased coverage for 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**
 - MMWR Surveillance Summary October 11, 2013 on data sources, methods and summary through 2011-12 season
- ❑ **Change in definition of vaccination status for pregnant women in Internet Panel Surveys**
 - Include vaccinations in July
 - Exclude vaccinations received after pregnancy
- ❑ **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**
 - Strong provider recommendations for and offers of vaccination**
 - Community-Based Interventions Implemented in Combination**
 - Immunization information systems (IIS) should be used at the point of care and at the population level to guide clinical and public health vaccination decisions.**

*The Guide to Community Preventive Services: <http://www.thecommunityguide.org/vaccines/index.html>

FluVaxView

CDC Source for Influenza Vaccination Coverage Data

<http://www.cdc.gov/flu/fluvoxview/index.htm>

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Seasonal Influenza (Flu)

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- Information For Partners
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- Avian Influenza A (H7N9) Virus
- Swine Flu
- Influenza A (H3N2) Variant Virus

[Seasonal Influenza \(Flu\)](#)

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FluVaxView

The CDC estimates annual influenza vaccination coverage for the United States by utilizing data from several nationally representative surveys: the [Behavioral Risk Factor Surveillance System](#) (BRFSS), the [National Health Interview Survey](#) (NHIS), and the [National Immunization Survey](#) (NIS), and internet panel surveys of [adults](#), [health care personnel](#) and [pregnant women](#). This page provides [vaccination coverage estimates for 2012-13](#) and previous influenza seasons. Reports, interactive figures and data tables are provided.

What's New

- [FluVaxView Interactive!](#)
- [2012-13 Flu Vaccination Coverage](#)
- [Health Care Personnel MMWR](#)
- [Pregnant Women MMWR](#)
- **Podcasts:**
 - "A Minute of Health with CDC" [0:59]
 - "A Cup of Health with CDC" [3:38]

FluVaxView Topics

| | |
|---|--|
| FluVaxView Interactive! National and State-Level Data using Interactive Maps, Trend Lines, Bar Charts, Tables and More... | Vaccination Trends Tables and Reports on Influenza Vaccination Trends across Seasons, Pneumococcal Vaccination Trends... |
| 2012-13 Flu Season Coverage Estimates for the 2012-13 Season, Reports by General Population, Health Care Personnel, and Pregnant... | 2011-12 Flu Season Coverage Estimates for the 2011-12 Season, Reports by General Population, Health Care Personnel, and Pregnant... |
| 2010-11 Flu Season Coverage Estimates for the 2010-11 Season, Reports by General Population, and Select Populations... | 2009-10 and Earlier Flu Season Coverage Estimates for the 2009-10 Season, Reports by General Population for Seasonal and H1N1 Vaccination... |

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Fact:

Unlike the common cold, it is possible to vaccinate against the flu virus. Do you know your flu facts?

www.cdc.gov/flu

Quick Links

- [Vaccination Trends](#)
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National Influenza Vaccination Week (NIVW)

Browser: <http://www.cdc.gov/flu/nivw/>

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Seasonal Influenza (Flu)

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National Influenza Vaccination Week

National Influenza Vaccination Week (NIVW) is a national observance that was established to highlight the importance of continuing influenza vaccination.

NIVW is **December 8-14, 2013**.

NIVW 2013 resources will be posted as they become available.

2012 NIVW Activity Entries »
Take & Share the Flu Pledge! »

Activities and Materials

- Information for Flu Prevention Partners
Includes partner events, CDC updates, & helpful tools for partners...
- National Influenza Vaccination Week: Calendar of Events
National, regional, & state & territorial calendar of events...
- National Influenza Vaccination Week: Materials
Posters, brochures, fact sheets, etc. for use during NIVW...
- National Influenza Vaccination Week: Media Toolkit
Information on how to develop key messages, press materials, train spokespersons, etc...
- National Influenza Vaccination Week: Free NIVW Web Tools
Podcasts, ecards, buttons, banners, & badges for download...
- National Influenza Vaccination Week: Resources for Health Professionals & Partners
Media toolkits, print materials, PSAs, & audio/video tools for download...
- 2013-2014 Influenza Campaign Matte Articles
Ready-to-use influenza articles for placement in local newspapers, magazines, or other publications...
- Resources for Faith-Based and Community Organizations

Fact:
Unlike the common cold, it is possible to vaccinate against the flu virus. Do you know your flu facts?
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TTY: (888) 232-6348
[Contact CDC-INFO](http://www.cdc.gov/flu)

Health Insurance Marketplace
Marketplace plans cover free flu vaccines.

12:48 PM 10/21/2013

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Thank You

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