

UPDATE ON INFLUENZA VACCINATION FOR HEALTH CARE PERSONNEL: RECENT COVERAGE, RECOMMENDATIONS, REPORTING, AND RESOURCES

**Clinician Outreach and
Communication Activity (COCA)
Conference Call
November 15, 2011**

Office of Public Health Preparedness and Response

Division of Emergency Operations



Objectives

At the conclusion of this session, the participant will be able to accomplish the following:

- ❑ **Discuss the importance of influenza vaccination in health care personnel**
- ❑ **State the influenza vaccination recommendations for health care personnel**
- ❑ **Identify the three groups of health care personnel covered by the new standardized influenza vaccination quality measure, and categorize vaccination status according to measure specifications**
- ❑ **Locate educational and promotional resources available for the 2011-2012 influenza season**

Continuing Education Disclaimer

In compliance with continuing education requirements, all presenters must disclose any financial or other associations with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters as well as any use of unlabeled product or products under investigational use. CDC, our planners, and the presenters for this presentation do not have financial or other associations with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. This presentation does not involve the unlabeled use of a product or products under investigational use. There was no commercial support for this activity

Accrediting Statements

CME: The Centers for Disease Control and Prevention is accredited by the Accreditation Council for Continuing Medical Education (ACCME®) to provide continuing medical education for physicians. The Centers for Disease Control and Prevention designates this electronic conference/web-on-demand educational activity for a maximum of 1 *AMA PRA Category 1 Credit™*. Physicians should only claim credit commensurate with the extent of their participation in the activity. Non-physicians will receive a certificate of participation.

CNE: The Centers for Disease Control and Prevention is accredited as a provider of Continuing Nursing Education by the American Nurses Credentialing Center's Commission on Accreditation. This activity provides 1 contact hour.

CEU: The CDC has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 1760 Old Meadow Road, Suite 500, McLean, VA 22102. The CDC is authorized by IACET to offer 1 ANSI/IACET CEU for this program.

CECH: Sponsored by the *Centers for Disease Control and Prevention*, a designated provider of continuing education contact hours (CECH) in health education by the National Commission for Health Education Credentialing, Inc. This program is designed for Certified Health Education Specialists (CHES) to receive up to 1 Category I CECH in health education. CDC provider number GA0082.

CPE: The Centers for Disease Control and Prevention is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education. This program is a designated event for pharmacists to receive 1 Contact Hour in pharmacy education. The Universal Activity Number is 0387-0000-11-100-L04-P and enduring 0387-0000-11-100-H01-P. Course Category: This activity has been designated as knowledge based.

TODAY'S PRESENTER



Anne McIntyre, PhD, MPH

Epidemiologist

National Center for Immunization and Respiratory Diseases

CDC

TODAY'S PRESENTER



Andrew Kroger, MD, MPH

Medical Officer

National Center for Immunization and Respiratory Diseases

CDC

TODAY'S PRESENTER



Megan Lindley, MPH

Epidemiologist

National Center for Immunization and Respiratory Diseases

CDC

TODAY'S PRESENTER



Austyn W. Dukes, BA

Health Communication Specialist

National Center for Immunization and Respiratory Diseases

CDC

Influenza Vaccination Coverage Among Health Care Personnel—United States

2010-11 Influenza Season

Anne McIntyre, MPH, PhD

Assessment Branch

Immunization Services Division

National Centers for Immunization and Respiratory Diseases (NCIRD)

Centers for Disease Control and Prevention

National Center for Immunization & Respiratory Diseases

Immunization Services Division



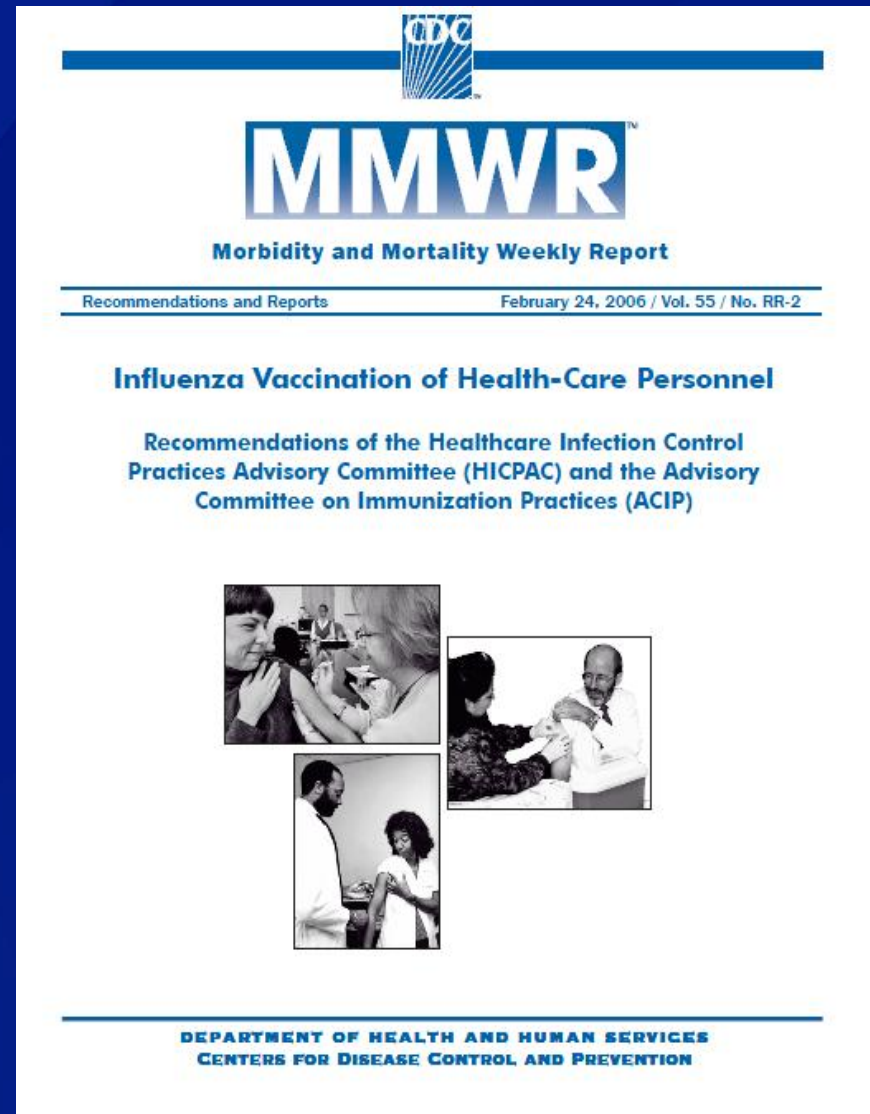


Influenza Vaccination Coverage Among Health Care Personnel

BACKGROUND

Influenza Vaccination of Health Care Personnel (HCP)

- ❑ HICPAC and ACIP recommend that all HCP be vaccinated annually against influenza
- ❑ Facilities that employ HCP are strongly encouraged to provide vaccinations to staff
- ❑ Recommendations apply to HCP in
 - Acute care hospitals
 - Nursing homes
 - Skilled nursing facilities
 - Physician's offices
 - Urgent care centers
 - Outpatient clinics
 - Dialysis centers
- ❑ ...and to persons who provide
 - Home health care
 - Emergency medical services



Health Care Personnel (HCP)

- **Physicians / Dentists**
- **Nurse Practitioners / Physician Assistants**
- **Nurses**
- **Allied Health Professionals**
 - Pharmacists
 - Dieticians
 - Physical, Occupational
Respiratory Therapists
 - Dental Hygienists
- **Technicians**
 - Radiology
 - Clinical
 - Laboratory
- **Assistants / Aides**
 - Nurses' aides
 - Home health aides
 - Orderlies
 - Attendants
- **Administrative**
 - Admin support
 - Billing staff
 - Managers
- **Nonclinical Support**
 - Food service
 - Maintenance
 - Housekeeping
 - Janitors
- **Other**

Influenza Vaccination Coverage Among Health Care Personnel (HCP)

- ❑ Influenza vaccination coverage among HCP has increased slowly over past decade
 - *Healthy People 2020* target for HCP: 90%
 - Below 50% coverage before 2009-10 season
 - Approximately 62% during 2009-10 season
- ❑ **Study Objective: Internet panel survey to estimate**
 - Influenza vaccination coverage for 2010-11 season
 - Knowledge, attitudes, behaviors regarding influenza vaccination

Influenza Vaccination Coverage Among Health-Care Personnel — United States, 2010–11 Influenza Season

The Advisory Committee on Immunization Practices (ACIP) and the Healthcare Infection Control Practices Advisory Committee recommend that all U.S. health-care personnel (HCP) be vaccinated annually against influenza (1). Nonetheless, influenza vaccination coverage among HCP in the United States has increased slowly over the past decade (2,3); during the 2009–10 influenza season, 61.9% of HCP received seasonal influenza vaccination (4). To update data with estimates from the 2010–11 influenza season, CDC conducted an Internet-based survey of 1,931 HCP who participated in three online survey panels. This report summarizes the results of that survey, which indicated that overall influenza vaccination coverage among HCP was 63.5% during the 2010–11 influenza season, similar to coverage for the 2009–10 season. Among HCP who reported working at a facility where vaccination was required by their employer, 98.1% were vaccinated. Among HCP without such an employer requirement but who were offered vaccination onsite, greater coverage was associated with a personal reminder from the employer to get vaccinated (69.9%), vaccination availability at no cost (67.9%), and vaccination availability for >1 day (68.8%). Influenza vaccination of HCP is needed to protect patients from HCP-transmitted disease. Maximizing influenza vaccination for all HCP is an important part of any comprehensive infection-control program.

To monitor 2010–11 influenza vaccination coverage among HCP during April 1–27, 2011, CDC conducted a web-based survey of eligible HCP participating in three online survey panels. A total of 1,150 self-identified HCP were recruited from an online research panel operated by Knowledge Networks, Inc.; an additional 534 persons were sampled from a specialized research panel composed primarily of physician specialists recruited through sources such as the American Medical Association master file, and 247 self-identified HCP

were sampled from a marketing research panel composed of persons recruited through web advertising who agreed to participate in exchange for small amounts of financial compensation (i.e., \$10 or less per survey). The total sample of 1,931 from all three sources was weighted to be nationally representative of demographic and geographic characteristics of the U.S. population of HCP as reflected in the most recent Current Population Survey.¹ Statistical significance of weighted differences was determined by Wald chi-square tests ($p < 0.05$). Factors associated with increased vaccination coverage were assessed in a multivariable logistic regression model. The survey measured self-reported influenza vaccination from August 2010 through approximately mid-April 2011.

Among the HCP, 63.5% reported receiving a 2010–11 influenza vaccination (Table 1).⁵ Vaccination coverage was higher among HCP working in hospitals (71.1%), compared with those working in ambulatory or outpatient centers (61.5%), patient homes (53.6%), and "other" health-care settings (46.7%). Vaccination coverage among physicians and dentists (84.2%) was similar to coverage among nurse practitioners and physician assistants (82.6%) and was significantly higher than for those working in all other occupational groups (Table 1).

¹ Available at <http://www.census.gov/ipeds>.

⁵ Responded "yes" to the question "Have you received an influenza vaccination this past influenza season (August 2010 through April 2011)?"

INSIDE

- 1078 Influenza Vaccination Coverage Among Pregnant Women — United States, 2010–11 Influenza Season
- 1083 Legionellosis — United States, 2000–2009
- 1087 Notes from the Field: Transplant-Transmitted Hepatitis B Virus — United States, 2010
- 1088 Notice to Readers: Final 2010 Reports of Nationally Notifiable Infectious Diseases

*Additional information available at <http://www.knowledgenetworks.com/jemp/docs/knowledgepanels/ci-design-summary-description.pdf>.



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

Influenza Vaccination Coverage Among Health Care Personnel

METHODS

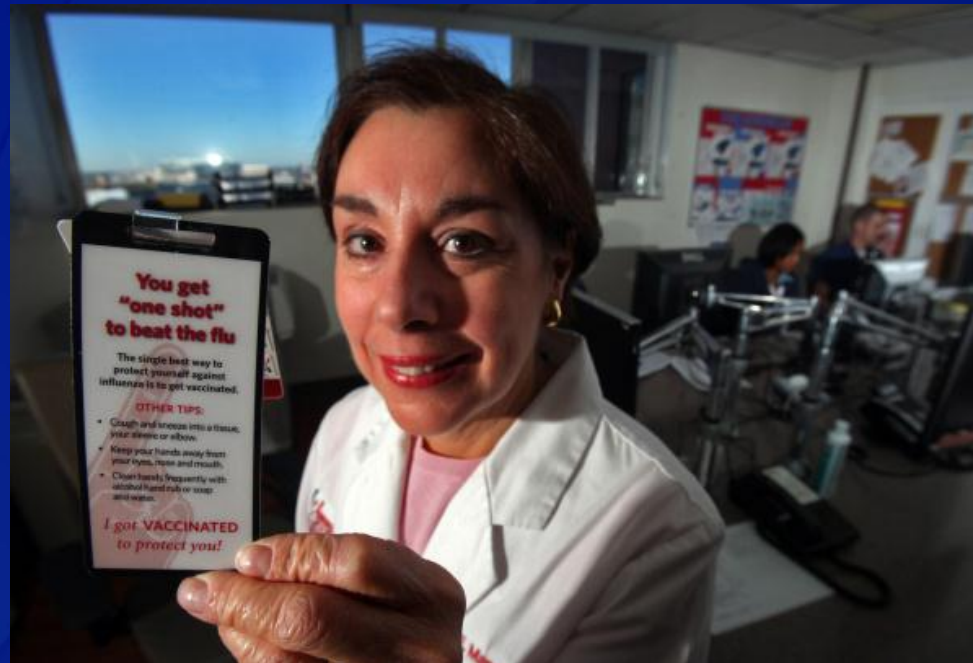
Methods

- ❑ **Survey measured self-reported uptake of influenza vaccination from August 2010 through mid-April 2011**
- ❑ **Web-based questionnaire, April 1-27, 2011**
- ❑ **Sample of 1,931 eligible HCP members of three online survey panels**
- ❑ **Estimates approximate the cumulative proportion of HCP vaccinated during 2010-11 influenza season**
- ❑ **Statistical significance of weighted differences determined by Wald chi-square tests ($p < 0.05$)**
- ❑ **Factors associated with increased vaccination coverage assessed in a multivariable logistic regression model**

Health Care Personnel Internet Panel Survey

- **Three online research panels**
 - **Combined**
 - **Weighted to be geographically and demographically representative of US HCP population**

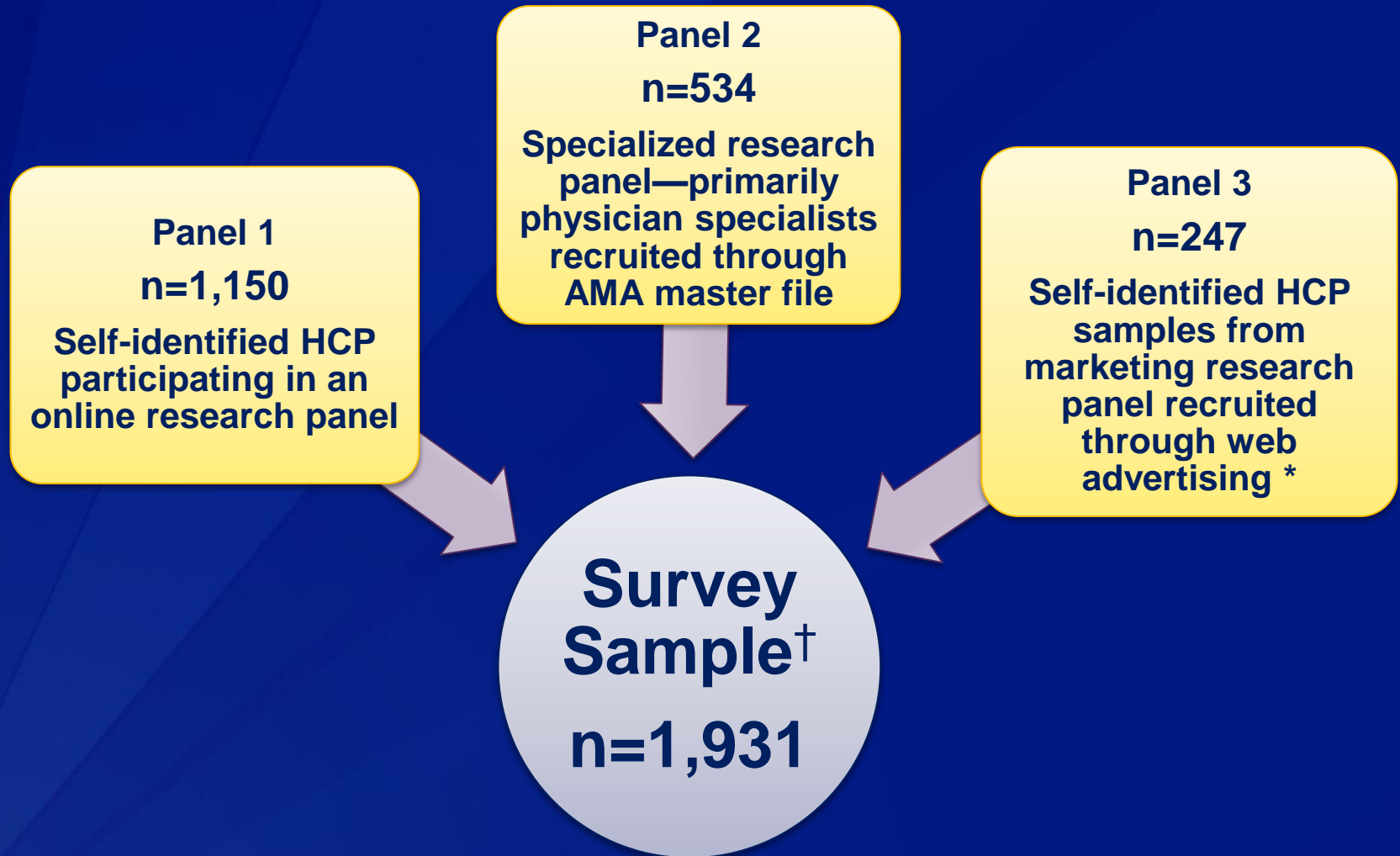
- **Eligible respondents**
 - **Hospital, ambulatory care, nursing or residential care facility, home health, or other health-related setting**
 - **Hands-on care of patients (e.g., firefighters or other first responders)**



Influenza Vaccination Coverage Among Health Care Personnel

RESULTS

Survey Sample



* Small amounts of financial compensation (eg, \$10 or less per survey)

† Survey sample weighted to be nationally representative of demographic and geographic characteristics of the US population of HCP as reflected in the most recent Current Population Survey. <http://www.census.gov/cps>

Survey Sample Characteristics

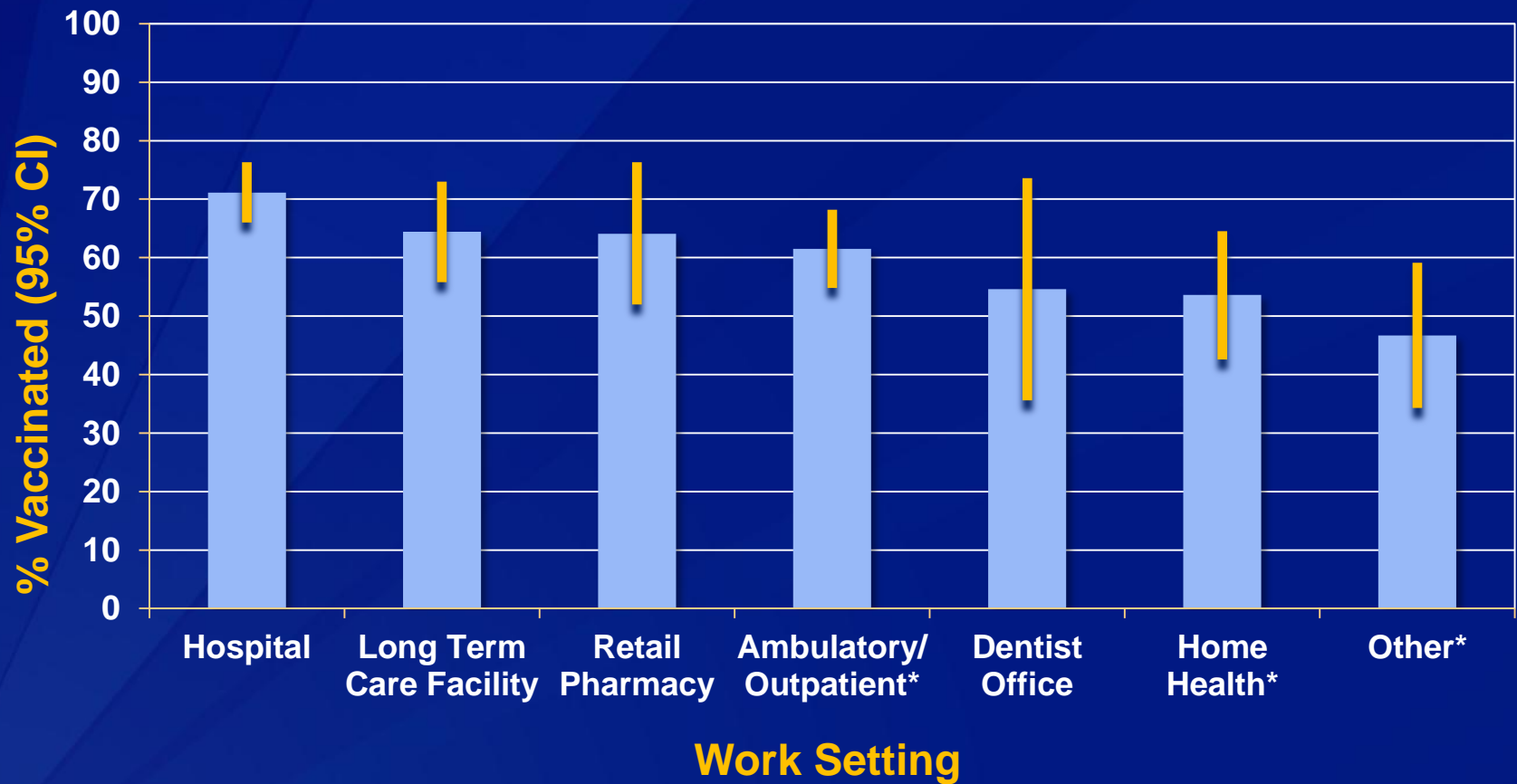
	Unweighted no. in sample	% Vaccinated*	95% CI
Overall	1,931	63.5	60.2 – 66.8
Age Group (years)			
18-29†	276	56.4	48.2 – 64.6
30-44†	564	57.8	51.7 – 64.0
45-59	844	69.0	64.0 – 73.9
≥60	246	74.2	66.3 – 82.1
Race/Ethnicity			
White, non-Hispanic	1,252	66.6	63.0 – 70.1
Black, non-Hispanic	257	61.1	51.0 – 71.2
Hispanic	289	57.6	45.3 – 69.9
Mixed race, non-Hispanic	37	38.9	17.9 – 60.0
Other, non-Hispanic	96	54.8	38.8 – 70.8

CI = confidence interval.

* Weighted estimate.

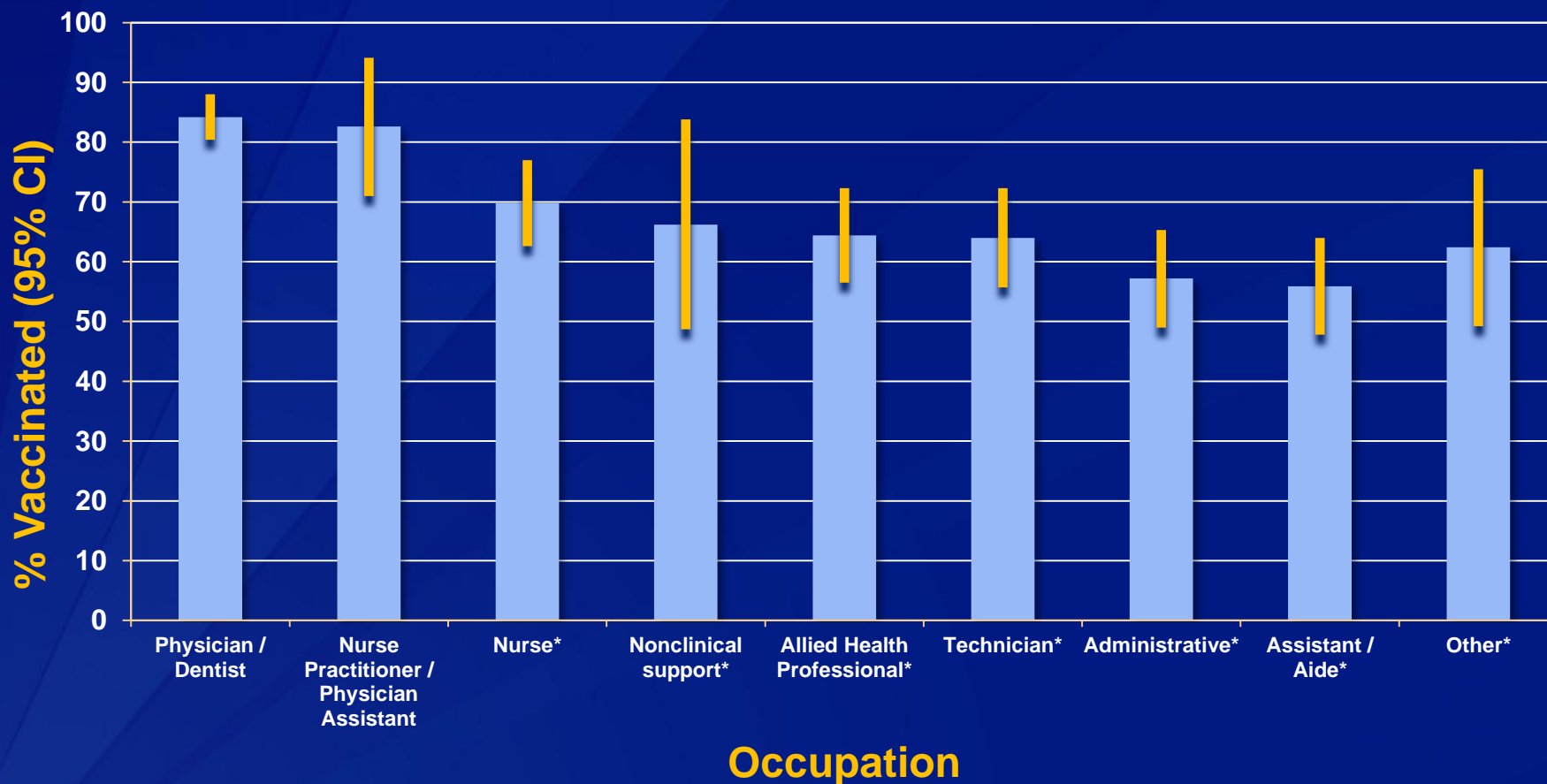
† Significantly different from those aged ≥60 years (p<0.05).

Influenza vaccination coverage among health care personnel by work setting—United States, 2010-11



* Significantly different from those in hospital settings ($p < 0.05$).

Influenza vaccination coverage among health care personnel by occupation—United States, 2010-11



* Significantly different from physicians or dentists ($p < 0.05$).

Influenza vaccination coverage among health care personnel by reported employer requirement United States, 2010-11

- Approximately 13% of HCP reported being required by their employers to be vaccinated for influenza
- Coverage among those subject to an employer requirement for vaccination was significantly different than among those without an employer requirement ($p < 0.05$)



Beliefs regarding influenza vaccination among health care personnel by influenza vaccination status—United States, 2010-11

■ Vaccinated ■ Not Vaccinated

Beliefs



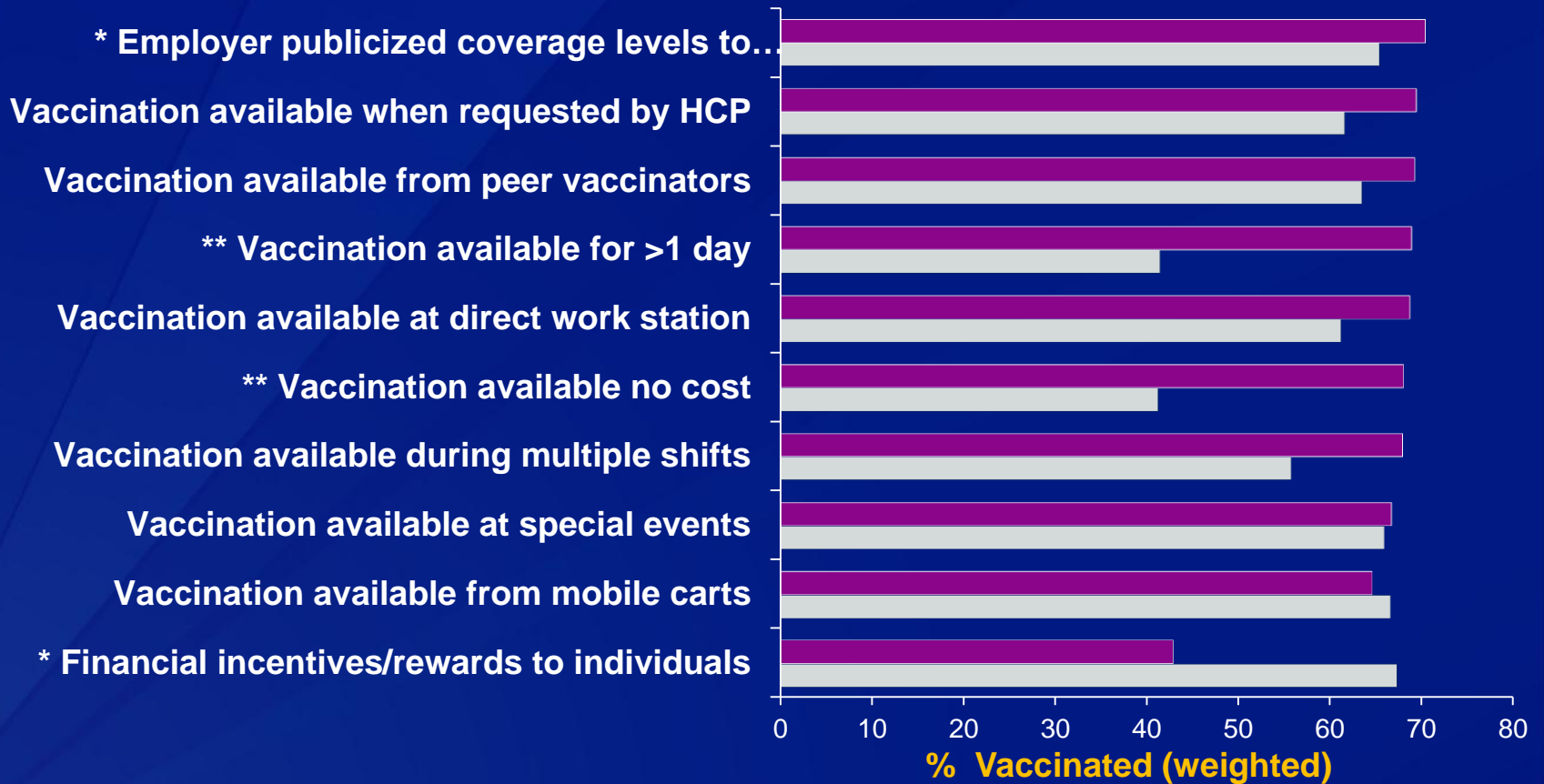
All estimates for those not vaccinated were significantly different from the estimates for those vaccinated ($p < 0.05$).

Employer incentives for influenza vaccination among health care personnel—United States, 2010-11

Employer offered onsite vaccination

■ With employer incentive ■ Without employer incentive

Employer Incentives



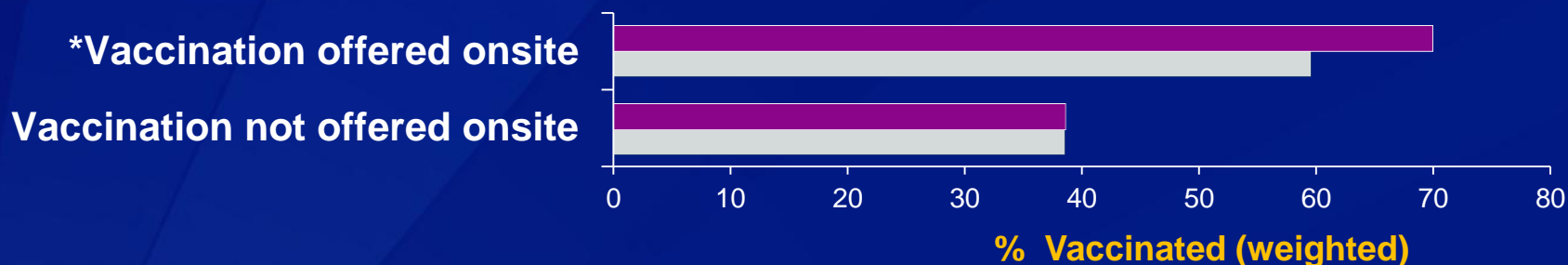
* A small number (<10) of respondents whose employers did not offer onsite vaccination also reported these employer practices.

**Significantly different when compared with employees with applicable employer incentive (p<0.05).

Employer incentives for influenza vaccination among health care personnel—United States, 2010-11

Personally reminded by employer to get vaccinated

■ Employer reminder to get vaccinated ■ No employer reminder to get vaccinated



Employer publicized risks and benefits of vaccination

■ Employer publicized risks/benefits ■ Employer did not publicize risks/benefits



* Employees without applicable employer incentive were significantly different than those with employer incentive ($p < 0.05$).

Factors associated with increased influenza vaccination coverage among HCP

- ❑ **Employer incentives associated with being vaccinated**
 - Personal reminder to be vaccinated: OR 1.6 (95% CI 1.1 - 2.3)
 - Vaccine availability at no cost and for >1 day (composite variable): OR 2.8 (95% CI 1.7 - 4.5)
- ❑ **Model limited to HCP with no employer requirement, but offered onsite vaccination**
- ❑ **Controlled for**
 - Demographic characteristics
 - Other employer incentives

HCP: Health Care Personnel; OR: Odds Ratio; CI: Confidence Interval
Other employer incentives were not associated with being vaccinated in the model.



Health care workers need
a flu vaccine too.

Influenza Vaccination Coverage Among Health Care Personnel

CONCLUSIONS

Summary

- ❑ **Influenza vaccination coverage among HCP for 2010-11 season: 63.5%**
- ❑ **Highest influenza vaccination coverage**
 - **Physicians, dentists, nurse practitioners, physician assistants**
 - **HCP in hospital settings**
 - **Older HCP**
- ❑ **Employment requirement for HCP vaccination**
 - **Where employment requirement, HCP coverage: 98.1%**
 - **Only 13% of US HCP subject to such requirement**
 - **Where no employment requirement, increased coverage associated with vaccination offered at work, free of charge for more than one day**

Limitations

- ❑ Sample not necessarily representative of all HCP**
- ❑ Results are self-report**
- ❑ Selection bias if participation in survey correlated with receipt of vaccination or certain beliefs**
- ❑ Definition of HCP might vary from definitions used in other surveys of vaccination coverage**
- ❑ Based on how the questions were asked, results might reflect select sample of HCP who reported they work in a facility with mandates**

Conclusions

- ❑ **Efforts to educate HCP should continue**
 - **Safety of the vaccine**
 - **Importance of vaccination to prevent influenza for themselves, their friends, families, patients**
 - **HCP working in non-hospital settings and occupations with lower coverage may be particularly important**
- ❑ **Offering vaccination to HCP at workplaces may increase vaccination coverage among this population**
- ❑ **Health-care facilities should develop a comprehensive influenza vaccination strategy that uses a combination of approaches demonstrated to be effective in increasing vaccination coverage, such as education and accessible vaccination at no cost to HCP**

Acknowledgements

- ❑ **CDC Immunization Services Division**
 - Carla Black, PhD
 - Gary Euler, DrPH
 - James Singleton, MS
 - Megan Lindley, MPH

- ❑ **CDC Division of Healthcare Quality Promotion**
 - Taranisia MacCannell, PhD

- ❑ **RAND Corp / Knowledge Networks (Survey contractors)**
 - Katherine Harris, PhD
 - Lori Uscher-Pines, PhD

- ❑ **Survey respondents**

Further Information

Influenza Vaccination:

<http://www.cdc.gov/flu/professionals/vaccination/>

Information for Health Care Workers:

<http://www.cdc.gov/flu/HealthcareWorkers.htm>

FluVaxView: Influenza Vaccination Coverage

<http://www.cdc.gov/flu/professionals/vaccination/vaccinecoverage.htm>

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

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Immunization & Respiratory Diseases

Immunization Services Division





Influenza Vaccine Recommendations for Health-care Personnel



Andrew Kroger M.D., M.P.H.
Education Information and Partnership Branch
National Center for Immunization and Respiratory
Diseases
CDC

SAFER • HEALTHIER • PEOPLE™



Disclosures

The presenter is a federal government employee with no financial interest or conflict with the manufacturer of any product named in this presentation

The presenter will not discuss the off-label use of any vaccine

The presenter will not discuss a vaccine not currently licensed by the FDA

SAFER • HEALTHIER • PEOPLE™



Overview



- Influenza vaccine recommendations
- Vaccine formulations
- Perceptions of influenza vaccine

SAFER • HEALTHIER • PEOPLE™



SAFER • HEALTHIER • PEOPLE™



Influenza Vaccination Recommendation



Annual influenza vaccination is now recommended for every person in the United States 6 months of age and older

MMWR 2010;59(RR-8)

SAFER • HEALTHIER • PEOPLE™



Why a Yearly Influenza Vaccination



- Influenza vaccine (inactivated) expires June 30 each year
- Surface antigens drift
- Antibodies wane during the year

SAFER • HEALTHIER • PEOPLE™



Duration of Immunity Following Influenza Vaccination



There is no clear evidence that immunity declines more rapidly in the elderly

Additional vaccine doses during the same season do not increase the antibody response

The frequency of breakthrough infections has not been shown to be higher among persons vaccinated early in the season

Skowronski et al. *J Infect Dis* 2008;197:490-502

SAFER • HEALTHIER • PEOPLE™



Influenza Vaccine Presentations 2011-2012



Vaccine	Doseform	Age
Fluzone TIV (sanofi pasteur)	SDS, SDV, MDV	6 months and older
Fluzone ID	SDS	18-64 years
Fluzone High-Dose TIV	SDS	65 years and older
Fluarix TIV	SDS	3 years and older
FluLaval TIV (GSK)	MDV	18 years and older
Fluvirin TIV	SDS, MDV	4 years and older
Agriflu TIV (Novartis)	SDS	18 years and older
Afluria TIV (CSL)	SDS	9 years and older
Flumist LAIV (MedImmune)	Nasal spray	2-49 years (healthy, nonpregnant)

SDS=single dose syringe; SDV=single dose vial; MDV=multidose vial

SAFER • HEALTHIER • PEOPLE™



Influenza Vaccine Supply



By October 31, 2011

124.9 million doses
distributed

~ 50 million doses more
to be distributed

SAFER • HEALTHIER • PEOPLE™



Pregnant Health-care Workers



- Receive TIV only
- High risk – recommended for influenza vaccination
- Risk of hospitalization 4 times higher than nonpregnant women
- Risk of complications comparable to nonpregnant women with high risk medical conditions
- Vaccination recommended regardless of trimester

SAFER • HEALTHIER • PEOPLE™



Effectiveness of Influenza Vaccination of Pregnant Women in Reducing Hospitalization of Infants



	Cases	Controls
Mother vaccinated	2 (2%)	31 (20%)
Mother unvaccinated	89 (98%)	21 (80%)
Vaccine Effectiveness	92%	

Cases were children younger than 6 months of age hospitalized with culture-confirmed influenza.

Clin Infect Dis 2010;51:1355-61

SAFER • HEALTHIER • PEOPLE™



Reasons HCP Do Not Receive Influenza Vaccine



- Concern about vaccine adverse events
- Perception of a low personal risk of influenza virus infection
- Perceived ineffectiveness of the influenza vaccine
- Insufficient time or inconvenience
- Avoidance of all medications
- Fear of needles

SAFER • HEALTHIER • PEOPLE™



Strategies to Improve HCP Influenza Vaccination Levels



- Education
- Role models
- Reduction of financial and time barriers
- Monitor and report influenza vaccination levels in the facility
- Signed vaccination declination*
- Legislation and regulation

*available from the Immunization Action Coalition www.immunize.org

SAFER • HEALTHIER • PEOPLE™



Influenza Vaccination of Health-care Personnel



- Reduces absenteeism of hospital staff by 22-52%
- Reduces mortality of long-term care facility patients by 42-44%

MMWR 55(RR2), 2006

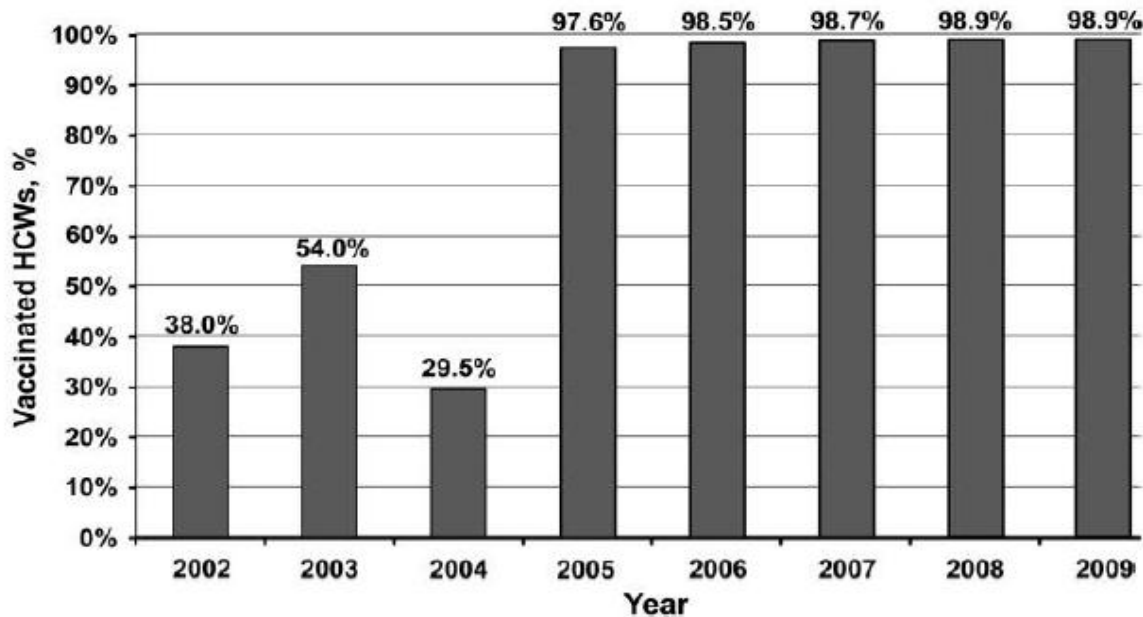
SAFER • HEALTHIER • PEOPLE™



Impact of HCP Influenza Vaccination Requirement – Virginia Mason Medical Center



Workplace vaccination requirement



Rakiita RM et al. *Infect Cont Hosp Epi* 2010;31:881-9

SAFER • HEALTHIER • PEOPLE™

Reporting Healthcare Personnel Influenza Vaccination: Pilot Study and CMS Final Rule

Megan C. Lindley, MPH
**National Center for Immunization &
Respiratory Diseases**

The findings and conclusions in this presentation have not been formally disseminated by CDC and should not be construed to represent any agency determination or policy

Background

- A 2006 study showed a substantial lack of uniformity in the way U.S. hospitals measure HCP vaccination rates
- Since 2007, Joint Commission accreditation requires hospitals and long-term care organizations to annually measure influenza vaccination rates for staff & licensed independent practitioners
- The National Quality Forum recently issued a time-limited endorsement to a CDC-sponsored standardized measure ('NQF measure') for reporting HCP influenza vaccination rates

Pilot Objectives

- **In collaboration with four states/localities:**
 - Determine, for reporting HCP influenza vaccination in a variety of healthcare institutions, the feasibility of implementing the NQF measure
 - Identify barriers to and facilitators of measure implementation

Methods: Data Collection

- Using web-based surveys, collect:
 - Characteristics of institution and its influenza vaccination program
 - Processes for collecting vaccination data
 - Perceived barriers to reporting HCP vaccination data using NQF measure
 - Aggregate vaccination data (numerator) and number of HCP working at institution (denominator)

Methods: Denominator

- All paid and unpaid HCP, working full- or part-time for at least one day between October 1, 2010 and March 31, 2011
- Reported in 3 mutually exclusive groups:
 - Employees
 - Credentialed non-employees
 - Other non-employees

Methods: Numerator

- Four mutually exclusive categories:
 - HCP who received influenza vaccination offered by institution
 - HCP who received influenza vaccination elsewhere
 - HCP determined to have a medical contraindication to influenza vaccination
 - HCP who declined influenza vaccination for non-medical reasons*

*Only vaccination status for which documentation was required per protocol. Undocumented declinations were categorized as vaccination status unknown and not reported.

Data Collection Tool

Denominator Information

Total number of persons who . . .	Employees	Non-employees, Credentialed	Non-employees, Other
Worked at this healthcare institution at least one day between October 1, 2010 and March 31, 2011	<input type="text"/>	<input type="text"/>	<input type="text"/>

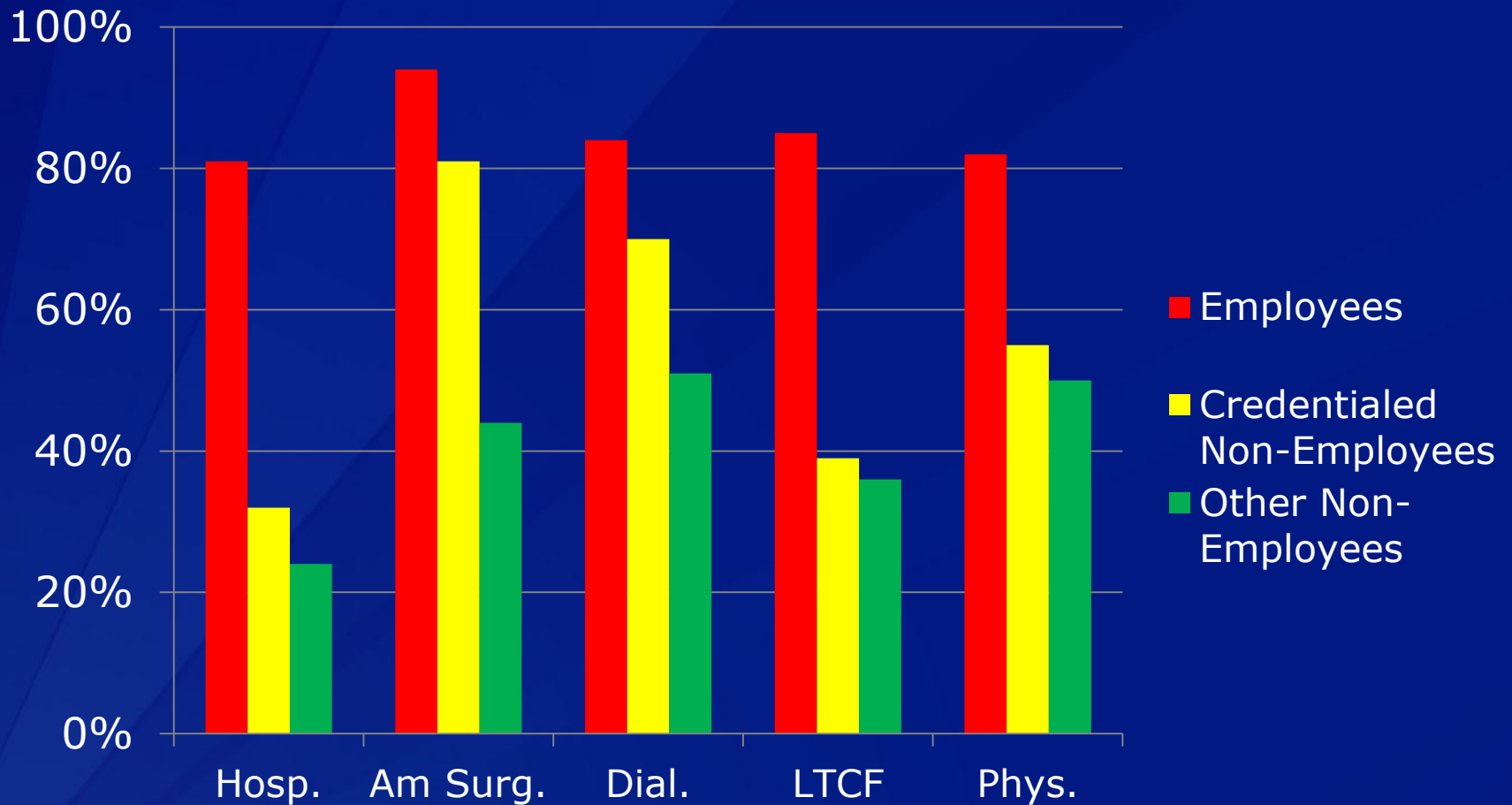
Numerator Information

Total number of persons who . . .	Employees	Non-employees, Credentialed	Non-employees, Other
Received an influenza vaccine at this healthcare institution since August 2010	<input type="text"/>	<input type="text"/>	<input type="text"/>
Received an influenza vaccine elsewhere	<input type="text"/>	<input type="text"/>	<input type="text"/>
Have a medical contraindication for the influenza vaccine	<input type="text"/>	<input type="text"/>	<input type="text"/>
Declined to receive the influenza vaccine for non-medical reasons	<input type="text"/>	<input type="text"/>	<input type="text"/>

Results

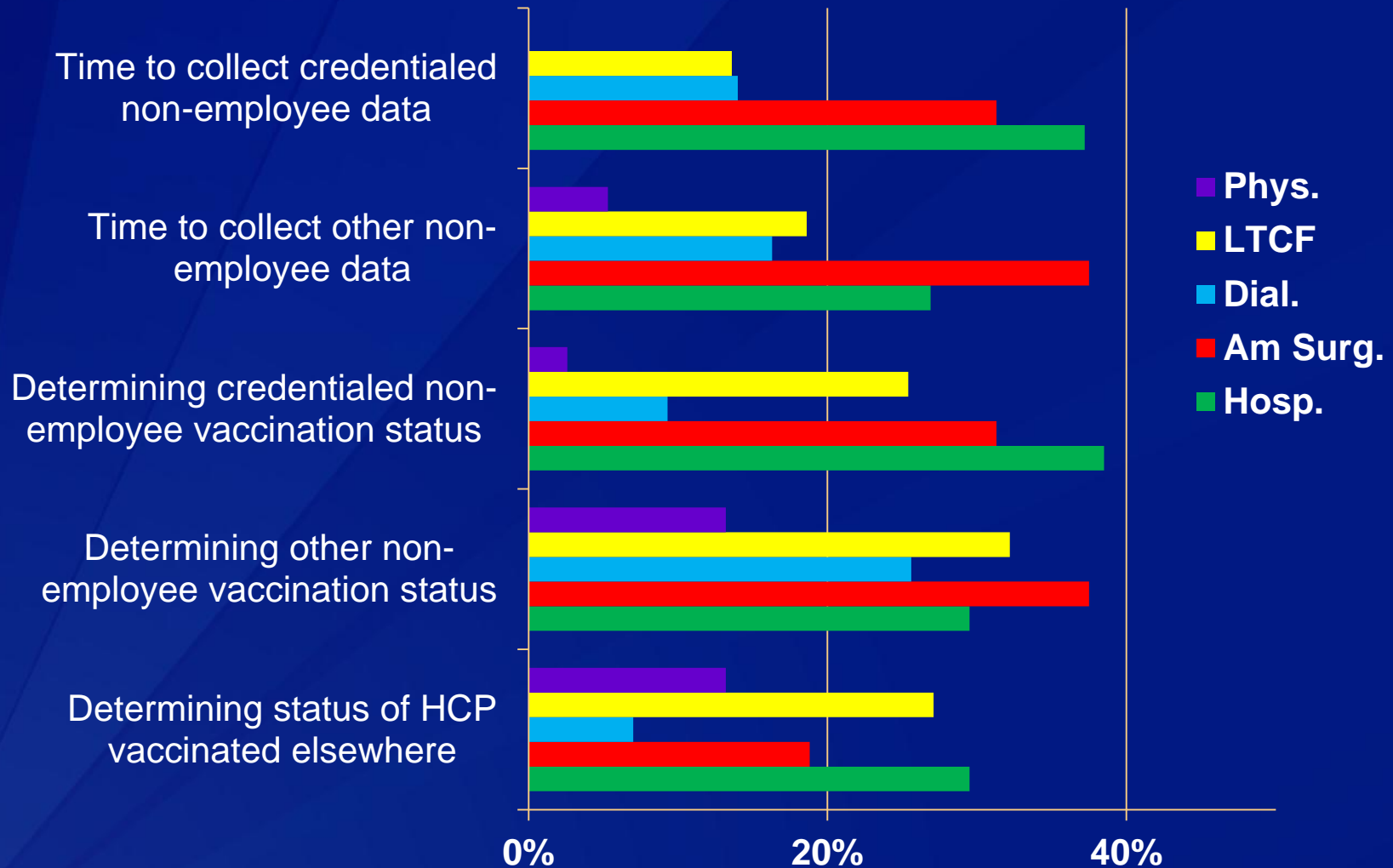
- Of 318 institutions recruited, 234 completed all three surveys (cumulative response rate: 74%)
 - 78 acute care hospitals
 - 16 ambulatory surgery centers
 - 43 dialysis clinics
 - 59 long-term care facilities (LTCFs)
 - 38 physician practices

Results: Ability to Count HCP



*Bars represent proportion reporting "easy" or "very easy" to count HCP

Results: Barriers to Reporting



Results: Difficulty Reporting Denominator

	Hosp.	Am Surg.	Dial.	LTCF	Phys.
% unable to report employees	0%	0%	0%	0%	0%
% unable to report credentialed non-employees	13%	6%	0%	5%	0%
% unable to report other non-employees	13%	6%	5%	3%	3%

Results: Difficulty Reporting Numerator

	Hosp.	Am Surg.	Dial.	LTCF	Phys.
% unable to report HCP vaccinated at institution	0%-12%	0%-19%	0%-14%	0%-10%	0%-5%
% unable to report HCP vaccinated elsewhere	15%- 39%	6%- 38%	0%-16%	9%- 31%	0%-5%
% unable to report contraindicated HCP	21%- 44%	6%- 38%	0%-19%	19%- 37%	3%-5%
% unable to report non-medical declinations	15%- 37%	6%- 38%	0%-16%	14%- 37%	0%-5%

Changes to Proposed Measure

- Balance need for a comprehensive measure with feasibility concerns
- Denominator: restriction of non-employee groups to specific types of HCP:
 - Credentialed: non-employee physicians, advanced practice nurses, & physician assistants
 - Other: students/trainees and volunteers
- Numerator: added “unknown” category
- Timeframe: Worked ≥ 30 days vs. ≥ 1 day
- Documentation not required for declination

Revised Measure Proposed to NQF

- Numerator: 5 mutually exclusive categories:
 - HCP vaccinated by institution
 - HCP vaccinated elsewhere
 - HCP with medical contraindication to vaccination
 - HCP who declined vaccination (non-medical)
 - HCP with unknown vaccination status
- Denominator: HCP working full- or part-time for ≥30 days between October 1-March 31
 - Employees
 - Licensed independent practitioners
 - Students/trainees and volunteers

Impact of Measure

- Revised measure submitted to NQF in July 2011 to request full endorsement
- Availability of a standardized, feasibility-tested measure for HCP vaccination
 - Voluntary reporting initiatives
 - Institutional/state reporting requirements
- CDC's National Healthcare Safety Network (NHSN) reporting system will use endorsed measure in new module for reporting aggregate HCP influenza vaccination

Impact of Measure (2)

- The Centers for Medicare & Medicaid Services' (CMS) Hospital Inpatient Quality Reporting Program requires acute care hospitals to report a set of quality measures or receive decreased annual payment update
 - CMS published a final rule in August 2011 that includes HCP influenza vaccination as calculated by this measure in the Hospital IQR program
 - Reporting will be done through NHSN and will begin in January 2013

Flu Resources for Health Care Personnel

Austyn Dukes

National Center for Immunization & Respiratory Diseases
Health Communication Science Office



Outreach & Resources for Health Care Personnel

- Distribution of CDC Key Points
- U.S. and International Surveillance Report
- 2011-2012 Master Key Messages Document
- Partner calls
- Education and Training (i.e. webinars and netconferences)

<http://www.cdc.gov/flu/professionals/>

- Interactive Coverage Data Reports
- Streaming Videos
- Matte articles

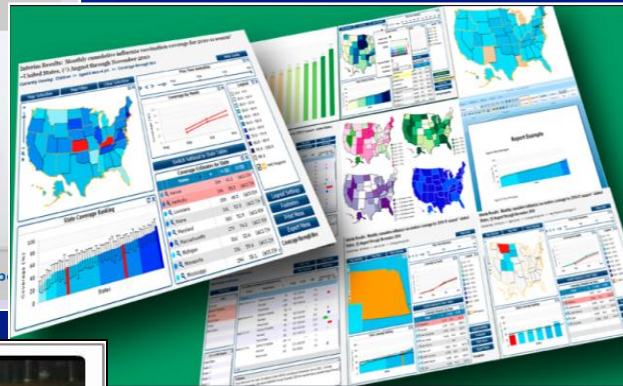


Outreach & Resources for Health Care Personnel

- Customizable print materials
- Medscape commentaries
- iPad Application
- Influenza Round Tables
- Twitter, Facebook, ecards, and other social media tools
- <http://www.cdc.gov/vaccines/hcp.htm>



Samples: Health Care Personnel Resources



NEWS REFERENCE EDUCATION A Wilder (Log Out) Connect My Account

Medscape EDUCATION Education Search Medscape SEARCH

From Medscape Education Infectious Diseases

Real Talk About Influenza Vaccine Safety -- Be Informed and Be Prepared CME/CE

William L. Atkinson, MD, MPH; Karen R. Broder, MD; Timothy M. Uyeki, MD, MPH, MPP

Authors and Disclosures

CME/CE Released: 11/30/2010; Valid for credit through 11/30/2011

Supported by a contract from the Centers for Disease Control and Prevention, Immunization Safety Office

Samples: Patient Education

www.cdc.gov/flu/freeresources

Mr. Mrs. Ms. _____

you are at high risk for flu complications

(this means if you get the flu, you are more likely to be seriously ill) **because you have ...**

- Asthma
- Diabetes
- Heart disease
- Other chronic medical condition(s)
- Or are 65 years or older

As your doctor, I recommend that you:

- Get a flu vaccine every year, as soon as vaccine is available. While everyone 6 months of age and older should get an annual flu vaccine, it's especially important for people at high risk of serious flu complications. High risk patients are recommended to receive the flu shot, not the nasal spray flu vaccine.
- Ask family and caregivers to get a flu vaccine to protect you.
- If you're 65 years or older, you should get either a regular flu shot or a high-dose flu shot designed for your age group. You should not get the new intradermal shot or nasal spray flu vaccine.

Find information about the different flu vaccines and who they are approved for at <http://www.cdc.gov/flu/protect/keyfacts.htm>

Find a clinic near you at www.cdc.gov/whereyoulive.

- There are some people who should not get a flu vaccine, for instance, people who have had a severe reaction to a flu vaccine or any of its components in the past. For more information about who should and who should not get vaccinated, visit <http://www.cdc.gov/flu/p12strd/whoshouldvax.htm>.

Doctor's signature or office stamp



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

CS226327-A

To learn more, visit www.cdc.gov/flu
THE FLU ENDS WITH U
Get the flu vaccine, **not** the flu.

flu shot reminder

As part of your prenatal care, your doctor recommends getting a flu shot anytime during your pregnancy.

Getting a flu shot is a safe way to prevent possible flu-related complications.

Millions of pregnant women have safely received flu shots for many years.

Pregnant women should not get the nasal spray vaccine.

A flu shot during pregnancy protects both mom and baby (up to 6 months of age) from flu.

Doctor's signature or office stamp

To learn more, visit www.cdc.gov/flu
THE FLU ENDS WITH U
Get the flu vaccine, **not** the flu.

CS226324-A

INACTIVATED INFLUENZA VACCINE

WHAT YOU NEED TO KNOW 2011-12

Many Vaccine Information Statements are available in Spanish and other languages. See www.innovax.com.
Reglas de información sobre vacunas están disponibles en español y en muchos otros idiomas. Visite www.innovax.com.

1 Why get vaccinated?

Influenza ("flu") is a contagious disease.

It is caused by the influenza virus, which can be spread by coughing, sneezing, or nasal secretions.

Anyone can get influenza, but rates of infection are highest among children. For most people, symptoms last only a few days. They include:

- fever/chills
- sore throat
- muscle aches
- fatigue
- cough
- headache
- runny or stuffy nose

Other illnesses can have the same symptoms and are often mistaken for influenza.

Young children, people 65 and older, pregnant women, and people with certain health conditions – such as heart, lung or kidney disease, or a weakened immune system – can get much sicker. Flu can cause high fever and pneumonia, and make existing medical conditions worse. It can cause diarrhea and seizures in children. Each year thousands of people die from influenza and even more require hospitalization.

By getting flu vaccine you can protect yourself from influenza and may also avoid spreading influenza to others.

2 Inactivated influenza vaccine

There are two types of influenza vaccine:

1. **Inactivated** (killed) vaccine, the "flu shot," is given by injection with a needle.
2. **Live, attenuated** (weakened) influenza vaccine is sprayed into the nostrils. This vaccine is described in a separate Vaccine Information Statement.

A "high-dose" inactivated influenza vaccine is available for people 65 years of age and older. Ask your doctor for more information.

Influenza viruses are always changing, so annual vaccination is recommended. Each year scientists try to match the viruses in the vaccine to those most likely to cause flu that year. Flu vaccine will not prevent disease from other viruses, including flu viruses not contained in the vaccine.

It takes up to 2 weeks for protection to develop after the shot. Protection lasts about a year.

3 Who should get inactivated influenza vaccine and when?

WHO

All people **6 months of age and older** should get flu vaccine.

Vaccination is especially important for people at higher risk of severe influenza and their close contacts, including healthcare personnel and close contacts of children younger than 6 months.

WHEN

Get the vaccine as soon as it is available. This should provide protection if the flu season comes early. You can get the vaccine as long as illness is occurring in your community.

Influenza can occur at any time, but most influenza occurs from October through May. In recent seasons, most infections have occurred in January and February. Getting vaccinated in December, or even later, will still be beneficial in most years.

Adults and older children need one dose of influenza vaccine each year. But some children younger than 9 years of age need two doses to be protected. Ask your doctor.

Influenza vaccine may be given at the same time as other vaccines, including pneumococcal vaccine.

4 Some people should not get inactivated influenza vaccine or should wait

• Tell your doctor if you have any severe (life-threatening) allergies, including a severe allergy to eggs. A severe allergy to any vaccine component may be a reason not to get the vaccine. Allergic reactions to influenza vaccine are rare.

• Tell your doctor if you ever had a severe reaction after a dose of influenza vaccine.

• Tell your doctor if you ever had Guillain-Barre

fluinbox@cdc.gov

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

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

National Center for Immunization & Respiratory Diseases





Centers for Disease Control and Prevention Atlanta, Georgia

Continuing Education Credit/Contact Hours for COCA Conference Calls

Continuing Education guidelines require that the attendance of all who participate in COCA Conference Calls be properly documented. All Continuing Education credits/contact hours (CME, CNE, CEU, CECH, and ACPE) for COCA Conference Calls are issued online through the CDC Training & Continuing Education Online system
<http://www2a.cdc.gov/TCEOnline/>.

Those who participate in the COCA Conference Calls and who wish to receive CE credit/contact hours and will complete the online evaluation by **Dec 16, 2011** will use the course code **EC1648**. Those who wish to receive CE credits/contact hours and will complete the online evaluation between **Dec 17, 2011** and **Nov 16, 2012** will use course code **WD1648**. CE certificates can be printed immediately upon completion of your online evaluation. A cumulative transcript of all CDC/ATSDR CE's obtained through the CDC Training & Continuing Education Online System will be maintained for each user.

Thank you for joining!

Please email us questions at coca@cdc.gov

Emergency Preparedness and Response

Emergency Preparedness & Response

Specific Hazards

Preparedness for All Hazards

What CDC Is Doing


What You Can Do

Blog: Public Health Matters

What's New

A - Z Index

Update on Influenza Vaccination for Health Care Personnel: Recent Coverage, Recommendations, Reporting, and Resources

 = Continuing Education Credits

Date: Tuesday, November 15, 2011

Time: 2:00 - 3:00 pm (Eastern Time)

Participate by Phone: 888-324-7813

Passcode: 5531691

[Join this Webinar](#)

Presenter(s):



Anne McIntyre, PhD, MPH

Epidemiologist

National Center for Immunization and Respiratory Diseases
CDC




Andrew Kroger, MD, MPH

Medical Officer

National Center for Immunization and Respiratory Diseases


Text size: [S](#) [M](#) [L](#) [XL](#)

 [Email page](#)

 [Print page](#)


 [Bookmark and share](#)


 [Subscribe to RSS](#)

 [Get email updates](#)

[Sign up](#) for COCA email updates.

Contact Us:

 Centers for Disease Control and Prevention
1600 Clifton Rd
Atlanta, GA 30333

 800-CDC-INFO
(800-232-4636)
TTY: (888) 232-6348
24 Hours/Every Day

 cdcinfo@cdc.gov

[REPORT AN EMERGENCY](#)

<http://emergency.cdc.gov/coca>

Join Us on Facebook

CDC Facebook page for Health Partners! “Like” our page today to receive COCA updates, guidance, and situational awareness about preparing for and responding to public health emergencies.



The screenshot shows the Facebook profile for CDC Health Partners Outreach. The page header includes the Facebook logo, a login field, and a password field. Below the header, there is a "Sign Up" button and the text "Facebook helps you connect and share with the people in your life." The profile picture is a group of people, and the cover photo shows a group of people in a meeting. The page is categorized as a "Government Organization" in "Atlanta, Georgia". The "Wall" section shows a post from CDC Health Partners Outreach dated Monday at 7:08am, which is a "Crisis and Emergency Risk Communication - Radiation Webinar" event. The post includes the CDC logo and the text: "CDC is partnering with NPHIC to host a webinar July 21 (3:00pm ET) on Crisis and Emergency Risk Communication - Radiation. A subject matter expert from the Oak Ridge Institute for Science and Education (ORISE) will address key elements of communicating during a radiation disaster, share CDC research on messaging, and provide lessons learned from Japan's recent nuclear emergency. Register for this FREE webinar today!". Below the post, there are 2 check-ins and 1,187 likes. The "Likes" section shows three users: CDC Emergency Preparedness and Response, CDC, and another CDC profile. The "About" section on the left provides more information about the team and their mission.

<http://www.facebook.com/CDCHealthPartnersOutreach>