Seasonal Influenza Vaccine Use by U.S. Adults During the 2009-2010 Vaccination Season

Katherine Harris
Jurgen Maurer
Lori Uscher-Pines

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Objectives of the Rapid Survey Project

• Provide timely data on influenza vaccine uptake
• Identify and track trends in uptake
• Identify key subgroups in need of targeted interventions
Project Overview

• Two nationally representative surveys of adults during annual influenza vaccination season
  – September through mid-November
  – September through February

• Results available in just over one month
  – Uptake for key subgroups
  – Policy relevant context

• Data from prior years provides a baseline to measure impact of pandemic response on seasonal uptake

RAND Surveys Members of an Internet-Based Research Panel

• Surveys administered to Knowledge Networks panelists
  – 50,000 households recruited with known probability
  – Includes non-computer users and cell-phone only households

• Studies using Knowledge Networks are published in high-quality health journals, e.g., Health Services Research, JAMA, and Health Affairs

• Uptake estimates compare favorably to NHIS
  See Harris et al., Vaccine 2009
2009-2010 End-of-Season Survey

• 36-item questionnaire fielded March 4-24, 2010

• 74% of sampled panelists responded yielding final sample of n = 4,040

• n = 2,619 also completed end-of-season survey last year

• Adults specifically recommended for vaccination by Advisory Committee on Immunization Practices identified through questions about
  – Age
  – High-risk health conditions (e.g., diabetes, asthma)
  – Personal contacts with high-risk individuals
  – Being a healthcare professional

• All estimates weighted to be representative of U.S. adults age 18 and older based on Census data

Today’s Talk Covers Three Topics

• Uptake of seasonal vaccine among specifically recommended adults

• Patterns of seasonal vaccination this year compared to last year

• Relationships between seasonal and H1N1 pandemic vaccination
Less Than Half of Recommended Adults Were Vaccinated During the 2009-10 Season

Uptake Among Adults Age 65+ Exceeded That for Other Recommended Groups in 2009-10

*Includes healthcare workers, informal caregivers, and personal contacts
**Uptake in 2009-10 Varied Across Adults with Selected Chronic Conditions**

- **Asthma**: 47%
- **Chronic lung disease**: 76%
- **Diabetes**: 62%
- **Heart disease**: 65%

- Over Half of Unvaccinated Adults Visited a Healthcare Provider During the Fall of 2009

- **Unvaccinated**:
  - No fall visit: 53%
  - Fall visit: 47%

- **Vaccinated**:
  - No fall visit: 26%
  - Fall visit: 74%

*NOTE: Includes only adults specifically recommended for seasonal vaccine.*
Unvaccinated Adults Who Visit Healthcare Providers Receive Fewer Recommendations to Be Vaccinated

NOTE: Includes only adults specifically recommended for seasonal vaccine.

Today’s Talk Covers Three Topics

• Uptake of seasonal vaccine among specifically recommended adults

• Patterns of seasonal vaccination this year compared to last year

• Relationships between seasonal and H1N1 pandemic vaccination
Uptake of Seasonal Vaccine Remained Unchanged from Last Season

Note: Year-to-year differences not statistically significant.

More Adults Were Vaccinated in September Compared to Last Year

Note: Year-to-year difference in distribution of vaccination months statistically significant at p<0.05 level.
Uptake Increased Among Younger Adults and Declined Among Older Adults

Vaccination in Doctor’s Offices Declined and Increased in Other Locations
Today’s Talk Covers Three Topics

- Show uptake of seasonal vaccine among specifically recommended adults
- Compare patterns of seasonal vaccination this year to last year
- Show relationship between seasonal and H1N1 pandemic vaccination

Uptake of H1N1 Pandemic Vaccine Was Strongly Associated with Seasonal Uptake

NOTE: Includes adults specifically recommended for both vaccines.
Racial Disparities in Uptake Were Less Apparent for H1N1 Pandemic Vaccination

NOTE: Seasonal uptake among white adults significantly higher (p<0.05) compared to that among other racial/ethnic groups; H1N1 pandemic uptake among white adults not significantly (p>0.05) different.

Key Findings and Implications

• Overall uptake of seasonal vaccine changed little from last year

• Yet, changed patterns of uptake by month, age, and location may reflect
  – Increased awareness
  – Encouragement to be vaccinated early
  – Differences in seasonal and pandemic recommendations

• Findings beg the question: Will changed patterns of uptake be sustained after the pandemic?

• Findings suggest a link between seasonal vaccination and acceptance of pandemic vaccine
For more information visit

http://www.rand.org/health/projects/flu_survey