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Influenza Vaccine Use by Adults in the U.S.

Detailed Survey Data Tables for the 2008–2009 Vaccination Season

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In March 2009, the RAND Corporation conducted a survey of a nationally representative sample of adults age 18 and over (n=5,203) to collect data on the receipt of the influenza vaccine in the United States. The results of this survey will inform public health officials and other stakeholders about the vaccination status of key subgroups shortly following the end of the 2008–2009 vaccination season.

The Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) specifically recommends annual influenza vaccination for adults with one or more of the following indications: age 50 or older; having a high-risk health condition; being a health care worker; or having contact with or caring for young children, the elderly, or high-risk individuals.¹ Survey results suggest individuals with indications comprise roughly seven in ten U.S. adults. The ACIP also recommends annual vaccination against influenza for any adult who wants to reduce the risk of becoming ill with influenza or of transmitting it to others.

The following tables present detailed findings from the survey.

Table 1: Receipt of Influenza Vaccine for Adults Age 18 and Older, 2008–2009

Indication	Unweighted Sample Size	Vaccinated	
		Weighted %	95% Confidence Interval (%)
All adults	5,203	38.3	35.7–40.9
No indication	767	22.4	18.5–26.4
Any indication	4,436	46.5	43.5–49.5

Table 2: Receipt of Influenza Vaccine for Adults Age 18 and Older by Indication, 2008–2009

Indication	Unweighted Sample Size	Vaccinated	
		Weighted %	95% Confidence Interval (%)
Age 18–49 w/ a high-risk health condition	372	36.9	28.0–45.7
Age 50–64	2,224	47.4	43.5–51.3
Age 65 and older	1,225	67.8	63.5–72.0
Health care worker	1,654	52.5	47.1–57.9
Personal contact with a high-risk individual	1,673	38.1	32.7–43.4

Table 3: Receipt of Influenza Vaccine for Adults Age 18 and Older by Selected High-Risk Health Condition, 2008–2009

Indication	Unweighted Sample Size	Vaccinated	
		Weighted %	95% Confidence Interval (%)
Asthma	642	44.6	36.7–52.5
Chronic lung disease	172	71.6	60.0–83.3
Diabetes	725	65.9	59.1–72.8
Heart disease	470	70.3	62.4–78.3

Table 4: Receipt of Influenza Vaccine for Adults Age 18 and Older by Region, 2008–2009

Region	Unweighted Sample Size	Vaccinated	
		Weighted %	95% Confidence Interval (%)
Northeast	943	42.1	35.7–48.4
Midwest	1,231	39.7	34.0–45.4
South	1,832	37.3	33.1–41.4
West	1,197	35.4	30.1–40.7

¹ Fiore, A.E., et al., Prevention and control of influenza: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2008. MMWR Recomm Rep, 2008. 57(RR-7): pp. 1–60. High-risk health conditions include diabetes, heart disease, chronic lung disease, asthma, immune system problems, kidney disease, sickle cell disease, and hemophilia.

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Table 5: Receipt of Influenza Vaccine for Adults Age 18 and Older by Race/Ethnicity, 2008–2009

Race/Ethnicity	Unweighted Sample Size	Vaccinated	
		Weighted %	95% Confidence Interval (%)
White	2,691	41.8	38.4–45.2
Black	1,192	34.7	29.5–39.9
Hispanic	665	27.5	20.7–34.2
Other	655	30.2	23.2–37.2

Table 6: Main Reason Why Adults Were Not Vaccinated, 2008–09 Vaccination Season

Main Reason	Weighted %	95% Confidence Interval (%)
Don't need it	24.5	21.1–27.9
I didn't get around to it	16.3	13.5–19.1
Don't believe in flu vaccines	15.4	12.8–18.0
Might get sick/ side effects	14.5	12.0–17.1
Others need it more	7.3	5.1–9.5
Dislike needles	4.7	2.9–6.4
Costs too much	4.2	2.4–6.0
A doctor did not recommend	2.4	1.4–3.4
No vaccine was available	1.3	0.6–2.0
Other	9.3	7.3–11.4

Table 7: Survey Completion Rates by Race/Ethnicity

Race/Ethnicity	Number Fielded	Completes	Completion Rate
White	1,848	1,360	73.6%
Black	2,021	1,142	56.5%
Hispanic/Other	1,792	1,202	67.1%
Total	5,661	3,704	65.4%

NOTES: Excludes oversample of health care workers who were sampled in a separate strata; 79.3 percent of health care workers in the panel responded to the survey.

Table 8: Final Completes

Age	Race/Ethnicity				Total
	White	Black	Hispanic	Other	
18–49	1,018	341	230	165	1,754
50–64	1,058	601	301	264	2,224
65+	615	250	134	226	1,225
Total	2,691	1,192	665	655	5,203

This occasional paper presents data from a nationally representative survey of adults age 18 and older (n=5,203) conducted for RAND by Knowledge Networks, Inc., a nationally representative online research panel consisting of roughly 40,000 households. Reported percentages have been weighted to reflect the demographic composition of U.S. adults using data from the Current Population Survey. Panelists are initially recruited with known probabilities using random-digit dialing. Household members agree to respond to surveys in exchange for small financial incentives or free Internet access. Studies using the Knowledge Networks panel have been published in peer-reviewed literature.

For additional information about the survey and sampling methodology, see “Knowledge Networks Methodology,” available at <http://www.knowledgenetworks.com/ganp/docs/Knowledge%20Networks%20Methodology.pdf>

The survey was administered to a general sample of 5,661 adult panelists and an oversample of 1,897 health care workers between March 7 and April 7, 2009. Health care workers in the panel were identified based on self-reported work in a health care profession, including the professions of medical doctor, nurse, nursing aide, pharmacist, or paramedic. Sixty-five percent of panelists in the general adult sample and seventy-nine percent of health care workers responded to the survey. The survey questionnaire is available at <http://www.knowledgenetworks.com/vaccine/>

This survey was conducted with the funding and support of GlaxoSmithKline (GSK). The findings have been subject to RAND’s quality assurance and peer review process, and RAND alone is responsible for the content. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.

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