

TABLE: Self-reported influenza vaccination coverage trends 1989 - 2008 among adults by age group, risk group, race/ethnicity, health-care worker status, and pregnancy status, United States, National Health Interview Survey (NHIS)

Characteristics	Survey Year																
	1989	1991	1993	1994	1995	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Age Group																	
18-49	3.4±0.2 (54664)	6.1±0.4 (26900)	10.2±0.6 (12954)	12.1±0.7 (11993)	13.1±0.7 (10757)	14.3±0.5 (22328)	15.5±0.6 (19546)	16.4±0.7 (18232)	17.1±0.7 (19409)	15.1±0.6 (20031)	16.3±0.7 (18427)	16.8±0.7 (18033)	17.9±0.7 (18039)	10.4±0.5 (17653)	15.5±0.8 (13861)	17.7±0.8 (13030)	20.0±0.9 (11856)
50-64	10.6±0.6 (15655)	15.0±1.0 (7618)	23.0±1.6 (3620)	25.6±1.6 (3443)	27.0±1.8 (3000)	31.9±1.4 (6513)	33.1±1.4 (6194)	34.1±1.3 (6110)	34.6±1.5 (6403)	32.1±1.3 (6804)	34.0±1.3 (6424)	36.8±1.4 (6666)	35.9±1.4 (6933)	22.9±1.1 (7251)	33.1±1.5 (5471)	36.2±1.7 (5408)	39.5±1.6 (5185)
≥65	30.4±1.1 (14244)	41.7±1.6 (8453)	52.0±1.6 (4198)	55.3±1.8 (3971)	58.2±1.8 (3442)	63.2±1.4 (6878)	63.3±1.4 (6257)	65.7±1.5 (5887)	64.3±1.4 (6091)	63.0±1.4 (6046)	65.6±1.5 (5757)	65.5±1.4 (5662)	64.6±1.4 (5922)	59.6±1.5 (5940)	64.1±1.8 (4573)	66.4±1.6 (4474)	67.0±1.8 (4358)
Age by Risk Status																	
18-49																	
High Risk	N/A	N/A	N/A	N/A	N/A	20.7±1.6 (3263)	22.7±1.8 (2758)	22.6±1.9 (2505)	24.7±2.0 (2676)	20.9±1.7 (3099)	23.1±2.0 (2482)	24.2±2.1 (2341)	26.0±2.1 (2555)	18.1±1.7 (2589)	24.5±2.5 (1872)	27.2±2.7 (1670)	29.8±2.6 (1713)
Not High Risk	N/A	N/A	N/A	N/A	N/A	16.1±0.6 (23292)	14.4±0.6 (16673)	15.4±0.8 (15649)	16.0±0.7 (16627)	14.0±0.6 (16814)	15.3±0.7 (15891)	15.8±0.7 (15654)	16.6±0.7 (15442)	9.1±0.5 (15031)	14.1±0.8 (11954)	16.3±0.8 (11338)	18.4±1.0 (10125)
50-64																	
High Risk	N/A	N/A	N/A	N/A	N/A	40.5±2.6 (2003)	43.4±2.6 (1826)	45.0±2.7 (1775)	43.9±2.5 (1920)	40.9±2.3 (2147)	43.6±2.4 (1969)	46.3±2.6 (2006)	45.5±2.5 (2104)	33.9±2.2 (2352)	44.4±3.1 (1705)	46.0±3.1 (1641)	49.6±3.1 (1629)
Not High Risk	N/A	N/A	N/A	N/A	N/A	28.2±1.6 (4416)	28.9±1.6 (4289)	29.7±1.5 (4274)	30.6±1.7 (4421)	28.2±1.6 (4568)	29.8±1.5 (4431)	32.7±1.6 (4637)	32.1±1.6 (4807)	17.8±1.2 (4888)	28.2±1.6 (3745)	32.3±1.9 (3749)	35.2±1.9 (3538)
Age by Race/Ethnicity																	
18-49																	
White Not Hispanic	3.3±0.2 (40196)	5.6±0.5 (19655)	10.0±0.7 (9525)	12.4±0.8 (8715)	12.9±0.9 (6962)	15.1±0.7 (13831)	16.1±0.8 (12162)	17.1±0.9 (11249)	18.1±0.9 (11739)	15.5±0.8 (12100)	16.9±0.8 (11032)	18.0±0.9 (10725)	19.8±0.9 (10533)	11.1±0.6 (10306)	16.6±1.0 (7312)	19.0±1.1 (6905)	21.6±1.2 (6455)
Black Not Hispanic	3.9±0.5 (7523)	8.1±1.2 (3726)	10.8±1.7 (1720)	10.0±1.9 (1551)	15.6±2.4 (1394)	13.2±1.3 (3313)	13.1±1.6 (2735)	15.5±1.8 (2688)	14.0±1.3 (2902)	15.0±1.8 (2882)	15.7±1.7 (2691)	16.9±1.6 (2582)	14.3±1.8 (2594)	9.8±1.4 (2594)	14.8±1.9 (2468)	14.6±1.9 (2182)	17.4±2.2 (1923)
Hispanic	3.9±0.6 (4653)	6.8±1.2 (2472)	9.1±2.2 (1068)	10.8±2.2 (1123)	11.1±1.7 (1900)	10.3±1.1 (4294)	13.1±1.3 (3884)	12.9±1.6 (3583)	13.4±1.4 (3970)	11.9±1.2 (4161)	12.4±1.2 (3898)	11.8±1.3 (3960)	11.6±1.2 (4015)	7.8±1.0 (4005)	11.0±1.3 (3108)	13.9±1.6 (3004)	14.9±1.7 (2559)
API	2.8±1.1 (1392)	7.5±2.2 (695)	11.3±2.8 (417)	14.9±3.0 (369)	14.8±4.7 (312)	14.4±3.5 (713)	17.5±3.4 (594)	17.7±4.1 (517)	21.1±3.5 (607)	17.4±2.9 (675)	19.7±3.4 (633)	18.1±3.9 (370)	21.5±4.9 (370)	9.0±3.1 (380)	20.2±4.1 (574)	20.5±4.3 (505)	23.8±5.1 (534)
50-64																	
White Not Hispanic	11.1±0.7 (12252)	15.4±1.1 (6031)	23.8±1.8 (2892)	26.8±1.8 (2696)	28.4±2.1 (2208)	33.8±1.7 (4612)	35.0±1.6 (4511)	35.8±1.5 (4412)	37.0±1.7 (4539)	34.6±1.6 (4825)	35.8±1.5 (4654)	38.8±1.6 (4758)	38.3±1.6 (4848)	24.5±1.3 (5105)	34.8±1.7 (3754)	38.2±2.1 (3661)	41.5±1.9 (3490)
Black Not Hispanic	8.5±1.5 (2060)	11.4±2.6 (1012)	15.0±3.2 (458)	17.5±4.0 (445)	19.8±4.4 (349)	22.5±3.1 (899)	24.7±3.6 (811)	27.3±3.8 (766)	23.8±3.0 (878)	23.2±3.9 (966)	28.0±3.5 (785)	28.4±3.3 (876)	26.0±3.4 (931)	19.9±3.0 (997)	28.2±3.9 (818)	29.1±3.6 (827)	35.8±4.1 (808)
Hispanic	7.7±2.6 (856)	14.3±3.4 (362)	19.1±7.3 (178)	22.7±7.6 (194)	23.8±5.2 (348)	22.8±3.4 (809)	24.1±4.2 (693)	26.0±3.4 (774)	22.3±3.5 (783)	22.1±3.4 (821)	25.7±3.8 (790)	27.3±3.7 (847)	27.7±3.6 (916)	15.4±2.7 (891)	25.0±3.8 (647)	27.0±4.2 (659)	29.4±4.2 (617)
API	*	16.1±8.8 (142)	33.6±10.2 (54)	22.3±11.6 (58)	27.0±15.9 (54)	33.6±8.5 (140)	31.2±8.3 (132)	28.2±8.3 (115)	35.5±9.6 (148)	20.6±7.8 (134)	31.0±8.5 (151)	31.7±10.7 (78)	33.7±9.7 (113)	12.7±6.6 (121)	27.7±9.4 (130)	31.4±10.5 (127)	33.0±9.5 (128)
≥65																	
White Not Hispanic	32.1±1.2 (11871)	43.4±1.7 (7144)	54.0±1.7 (3585)	58.1±1.9 (3333)	60.7±2.0 (2761)	65.8±1.5 (5481)	65.6±1.5 (4934)	67.9±1.6 (4581)	66.6±1.6 (4744)	65.4±1.5 (4691)	68.6±1.6 (4485)	68.7±1.4 (4401)	67.3±1.5 (4562)	63.2±1.6 (4609)	67.2±2.1 (3267)	69.0±1.9 (3227)	69.8±2.0 (3113)
Black Not Hispanic	17.8±2.3 (1606)	27.5±4.1 (904)	32.6±4.9 (423)	39.0±5.9 (414)	39.9±5.6 (361)	44.8±4.4 (774)	45.8±4.4 (667)	49.7±4.4 (642)	48.0±4.5 (678)	48.1±4.5 (662)	49.6±4.5 (626)	48.0±4.6 (609)	45.4±4.4 (647)	39.7±4.2 (669)	46.5±4.5 (661)	55.4±4.6 (594)	50.6±4.7 (583)
Hispanic	23.8±4.8 (464)	34.0±8.6 (259)	47.3±12.8 (121)	37.9±8.1 (145)	49.9±7.8 (245)	52.7±5.9 (520)	50.3±5.1 (532)	55.1±5.1 (543)	55.7±5.0 (566)	51.9±5.2 (567)	48.5±5.0 (527)	45.4±5.2 (528)	54.6±5.2 (584)	41.7±5.0 (511)	44.8±5.9 (410)	52.1±5.9 (449)	54.5±5.6 (438)
API	19.4±8.5 (123)	30.1±9.2 (74)	54.7±18.1 (30)	43.1±22.1 (35)	50.9±15.8 (50)	51.2±11.2 (80)	67.1±10.6 (93)	71.7±9.4 (87)	60.1±11.0 (82)	57.5±11.6 (89)	57.8±11.1 (96)	63.6±15.5 (58)	52.7±16.8 (54)	56.1±14.1 (68)	61.4±11.2 (106)	62.7±11.3 (103)	58.8±12.1 (101)

18-49 High Risk by Race/Ethnicity																		
White Not Hispanic	N/A	N/A	N/A	N/A	N/A	22.3±1.9 (2153)	22.8±2.2 (1812)	22.4±2.3 (1640)	25.2±2.5 (1759)	21.0±2.0 (2013)	23.0±2.4 (1591)	24.9±2.5 (1466)	26.6±2.6 (1584)	18.4±2.2 (1633)	24.8±3.1 (1078)	29.0±3.5 (956)	30.4±3.2 (1058)	
Black Not Hispanic	N/A	N/A	N/A	N/A	N/A	17.3±3.5 (519)	22.1±4.8 (452)	20.4±5.2 (401)	22.6±4.3 (426)	20.0±4.0 (496)	23.9±5.2 (410)	24.3±5.4 (378)	22.8±4.8 (424)	15.9±3.8 (427)	23.6±5.5 (370)	19.6±5.5 (302)	29.8±6.7 (304)	
Hispanic	N/A	N/A	N/A	N/A	N/A	12.6±3.2 (498)	22.1±5.0 (434)	24.2±5.2 (396)	22.7±4.3 (410)	19.2±3.8 (493)	21.2±4.8 (394)	20.0±4.8 (433)	21.2±4.9 (468)	19.4±4.4 (452)	20.6±5.0 (332)	24.6±5.7 (327)	23.7±5.9 (281)	
API	N/A	N/A	N/A	N/A	N/A	*	*	*	*	25.5±14.2 (56)	29.5±15.5 (48)	*	44.7±20.2 (30)	*	39.5±17.3 (47)	*	32.4±18.6 (34)	
50-64 High Risk by Race/Ethnicity																		
White Not Hispanic	N/A	N/A	N/A	N/A	N/A	41.8±3.1 (1359)	44.8±3.0 (1294)	47.1±3.1 (1234)	46.1±3.0 (1282)	43.8±2.8 (1478)	45.2±2.7 (1382)	47.9±3.0 (1406)	47.9±3.0 (1421)	35.4±2.6 (1649)	45.2±3.7 (1137)	46.7±3.7 (1044)	49.1±3.8 (1048)	
Black Not Hispanic	N/A	N/A	N/A	N/A	N/A	34.4±5.8 (332)	35.3±7.4 (271)	34.1±7.2 (243)	35.5±6.0 (344)	30.4±5.4 (359)	38.1±7.5 (281)	39.7±6.6 (285)	33.9±6.4 (329)	32.2±6.1 (350)	43.5±6.3 (298)	44.6±6.6 (310)	48.7±7.4 (288)	
Hispanic	N/A	N/A	N/A	N/A	N/A	33.1±6.5 (253)	38.3±8.0 (211)	38.1±7.0 (248)	34.5±8.0 (242)	28.0±7.1 (258)	34.6±8.2 (244)	39.7±7.2 (270)	38.5±6.6 (274)	24.5±5.6 (290)	42.3±8.6 (207)	38.6±7.4 (216)	47.7±9.3 (214)	
API	N/A	N/A	N/A	N/A	N/A	45.1±21.1 (30)	46.1±18.5 (33)	*	*	*	46.6±18.7 (41)	*	38.8±17.0 (34)	*	*	*	57.0±21.2 (31)	
Age by Diabetes Status																		
18-49																		
With Diabetes	N/A	N/A	N/A	N/A	N/A	25.1±4.7 (472)	31.2±5.2 (434)	32.7±5.5 (419)	32.5±5.3 (483)	28.6±4.3 (542)	31.9±5.3 (486)	36.4±5.6 (461)	34.0±4.6 (553)	29.5±4.7 (571)	35.0±5.4 (470)	30.0±5.4 (406)	37.0±6.0 (388)	
Without Diabetes	N/A	N/A	N/A	N/A	N/A	14.1±0.5 (21627)	15.1±0.6 (18981)	16.0±0.7 (17724)	16.8±0.7 (18803)	14.7±0.6 (19374)	15.9±0.7 (17925)	16.4±0.7 (17567)	17.4±0.7 (17477)	9.8±0.5 (17073)	14.9±0.8 (13381)	17.4±0.8 (12619)	19.5±0.9 (11465)	
50-64																		
With Diabetes	N/A	N/A	N/A	N/A	N/A	43.2±4.6 (671)	47.4±4.8 (604)	50.9±4.6 (621)	46.6±4.2 (678)	47.7±4.2 (765)	46.8±4.4 (744)	51.6±4.0 (770)	48.9±3.7 (835)	40.3±3.5 (936)	51.0±5.0 (716)	45.4±4.7 (717)	53.7±4.6 (737)	
Without Diabetes	N/A	N/A	N/A	N/A	N/A	30.8±1.4 (5731)	31.5±1.4 (5494)	32.1±1.3 (5410)	33.1±1.6 (5647)	30.1±1.4 (5938)	32.4±1.3 (5670)	35.0±1.5 (5891)	34.3±1.5 (6090)	20.5±1.1 (6313)	30.6±1.5 (4746)	34.9±1.8 (4687)	37.3±1.7 (4443)	
Age by Asthma Status																		
18-49																		
With Asthma	N/A	N/A	N/A	N/A	N/A	23.2±3.1 (901)	21.5±3.5 (762)	23.3±3.7 (703)	28.1±3.9 (734)	26.6±3.3 (880)	23.9±3.2 (763)	28.9±4.3 (675)	28.4±4.0 (667)	21.5±3.4 (728)	24.6±4.4 (534)	30.4±5.3 (528)	30.7±4.9 (468)	
Without Asthma	N/A	N/A	N/A	N/A	N/A	13.9±0.5 (21414)	15.2±0.6 (18759)	16.1±0.7 (17516)	16.7±0.7 (18661)	14.6±0.6 (19131)	14.6±0.6 (19131)	16.4±0.7 (17345)	17.5±0.7 (17357)	9.9±0.5 (16911)	15.2±0.8 (13314)	17.2±0.8 (12504)	19.6±0.9 (11378)	
50-64																		
With Asthma	N/A	N/A	N/A	N/A	N/A	46.0±6.7 (250)	55.2±6.7 (257)	50.3±7.8 (226)	55.1±7.3 (247)	41.9±6.6 (279)	51.0±6.7 (263)	47.9±7.0 (275)	52.4±6.4 (292)	40.2±6.3 (310)	46.8±7.8 (258)	57.9±7.6 (228)	50.8±8.1 (231)	
Without Asthma	N/A	N/A	N/A	N/A	N/A	31.3±1.5 (6248)	32.2±1.4 (5919)	33.5±1.3 (5875)	33.8±1.6 (6145)	31.8±1.3 (6514)	31.8±1.3 (6514)	36.3±1.4 (6376)	35.3±1.4 (6624)	22.2±1.1 (6931)	32.5±1.5 (5205)	35.4±1.8 (5173)	39.1±1.6 (4950)	
HCW Status																		
Health-Care Workers	10.0±0.9 (4849)	16.7±1.7 (2646)	25.7±2.5 (1387)	31.4±2.0 (1292)	29.5±2.0 (1153)	34.0±2.1 (2387)	37.0±2.5 (2129)	36.4±2.6 (2013)	37.6±2.4 (2165)	36.1±2.5 (2270)	38.4±2.5 (2066)	40.1±3.5 (2146)	41.9±2.5 (2031)	32.9±2.1 (2143)	41.7±3.2 (1586)	45.3±3.0 (1643)	48.0±2.9 (1608)	
Other Workers	4.6±0.2 (49545)	7.7±0.4 (23526)	12.3±0.7 (11319)	13.8±0.8 (10535)	14.9±0.8 (9571)	17.3±0.6 (19715)	18.0±0.7 (17769)	19.1±0.7 (16821)	20.3±0.7 (17879)	18.1±0.6 (18826)	27.2±0.6 (18826)	20.9±0.8 (16500)	19.4±0.8 (16216)	10.2±0.5 (16181)	17.2±0.8 (12636)	19.8±0.9 (11910)	22.2±1.0 (10798)	
Pregnancy Status																		
Pregnant	N/A	N/A	N/A	N/A	N/A	11.1±4.6 (372)	8.4±3.2 (335)	7.6±3.3 (332)	10.0±3.4 (337)	10.4±3.6 (294)	12.4±3.9 (319)	12.8±4.4 (315)	12.9±5.0 (263)	15.6±5.0 (303)	13.8±4.9 (240)	15.3±4.9 (254)	19.1±7.1 (187)	
Not Pregnant	N/A	N/A	N/A	N/A	N/A	11.9±0.8 (8515)	14.3±0.9 (7239)	14.4±1.0 (6992)	15.3±1.0 (7406)	13.5±0.9 (7391)	15.2±1.1 (6956)	15.8±1.1 (6775)	17.6±1.2 (6657)	10.5±0.9 (6521)	15.5±1.2 (5189)	17.1±1.3 (4874)	20.0±1.4 (4379)	

Table cell entries are % reporting influenza vaccination in the past 12 months, ± the 95% confidence interval half-width (SE), with the unweighted sample size (n).

An asterisk (*) indicates the estimate was unreliable due to the n being less than 30 or the SE relative to the estimate was greater than 0.3 (n<30 or RSE>0.3).

N/A (not available) indicates the years when the characteristic was not included in the survey. Nasal spray was included starting with 2006.