

TABLE 1. Percentage of persons aged ≥18 years who reported receiving influenza or pneumococcal vaccine* or tetanus toxoid, by age and selected characteristics – National Health Interview Survey, United States, 1998†

Characteristic	Received influenza vaccine during previous 12 mos			Ever received pneumococcal vaccine			Received tetanus toxoid during previous 10 yrs		
	High-risk persons		All persons Aged ≥65 yrs (n=6,257)	High-risk persons		All persons Aged ≥65 yrs (n=6,121)	All persons		
	Aged 18-49 yrs (n=2,758)	Aged 50-64 yrs (n=1,826)		Aged 18-49 yrs (n=2,319)	Aged 50-64 yrs (n=1,736)		Aged 18-49 yrs (n=18,404)	Aged 50-64 yrs (n=5,823)	Aged ≥65 yrs (n=5,795)
	% (95% CI) [†]	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	
Sex									
Male	21.0 (±2.7)	39.1 (±3.9)	63.7 (±2.2)	11.2 (±2.6)	19.7 (±3.5)	45.8 (±2.3)	67.3 (±1.1)	57.0 (±2.1)	47.0 (±2.3)
Female	23.8 (±2.4)	47.0 (±3.5)	63.0 (±1.8)	9.4 (±1.7)	24.3 (±3.0)	46.1 (±1.9)	56.9 (±1.1)	49.0 (±1.9)	35.8 (±1.9)
Race/ethnicity[§]									
Non-Hispanic white	22.8 (±2.2)	44.8 (±3.0)	65.6 (±1.5)	9.6 (±1.6)	23.4 (±2.7)	49.5 (±1.6)	65.5 (±1.0)	54.6 (±2.3)	41.9 (±2.2)
Non-Hispanic black	22.1 (±4.8)	35.4 (±7.4)	45.8 (±4.4)	12.0 (±4.7)	18.7 (±6.1)	26.1 (±3.7)	57.3 (±2.5)	47.0 (±6.2)	32.0 (±6.1)
Hispanic	22.1 (±5.1)	38.3 (±8.0)	50.3 (±5.0)	11.5 (±4.2)	12.5 (±4.8)	22.8 (±4.6)	51.1 (±1.9)	45.1 (±6.2)	29.3 (±7.1)
American Indian/ Alaskan Native	¶	¶	¶	¶	¶	¶	65.1 (±9.6)	¶	¶
Asian/Pacific Islander	¶	46.1 (±18.5)**	67.1 (±10.6)	¶	¶	36.6 (±12.5)	46.4 (±4.4)	39.3 (±8.8)	46.1 (±12.7)
Poverty status^{††}									
At or above poverty level	23.8 (±2.2)	44.0 (±3.3)	65.6 (±1.7)	9.9 (±1.7)	22.5 (±2.7)	48.6 (±1.9)	64.3 (±1.0)	55.2 (±1.8)	41.6 (±1.9)
Below poverty level	18.8 (±4.1)	44.4 (±6.9)	53.7 (±3.9)	13.3 (±4.1)	27.8 (±6.5)	33.9 (±3.8)	57.5 (±2.5)	45.4 (±4.7)	33.9 (±4.3)
Education level									
Less than high school	16.9 (±3.9)	37.0 (±5.4)	58.2 (±2.4)	8.6 (±3.2)	22.9 (±4.5)	40.1 (±2.4)	57.3 (±2.2)	43.9 (±3.3)	35.1 (±2.6)
High school	21.2 (±3.4)	43.7 (±4.9)	65.0 (±2.4)	10.0 (±2.9)	21.6 (±4.1)	46.9 (±2.6)	60.8 (±1.6)	50.9 (±2.9)	38.1 (±2.6)
More than high school	25.2 (±2.4)	46.3 (±3.8)	66.9 (±2.4)	10.6 (±1.9)	22.0 (±3.2)	51.5 (±2.5)	64.1 (±1.1)	57.3 (±1.9)	49.2 (±2.7)
Insurance status									
Have medical insurance									
No medical insurance	24.4 (±2.2)	45.6 (±2.7)	63.5 (±1.4)	10.4 (±1.5)	23.1 (±2.5)	46.2 (±1.5)	63.6 (±1.0)	54.5 (±1.6)	40.6 (±1.5)
insurance	15.1 (±3.9)	25.1 (±6.7)	¶	8.9 (±3.3)	14.2 (±5.2)	¶	55.7 (±1.9)	39.1 (±3.8)	35.8 (±18.0)**
No. physician contacts during previous 12 mos									
None	9.5 (±3.8)	11.1 (±7.4)	31.0 (±4.9)	4.5 (±3.7)	12.1 (±7.6)	18.1 (±3.6)	53.0 (±1.9)	37.3 (±3.6)	24.4 (±4.2)
1	12.4 (±3.7)	32.0 (±8.8)	54.0 (±4.2)	4.5 (±2.6)	11.2 (±6.2)	38.8 (±4.3)	62.3 (±1.9)	52.2 (±3.8)	38.3 (±4.1)
2-3	19.8 (±3.9)	38.8 (±5.3)	64.5 (±2.7)	8.6 (±3.0)	15.0 (±3.9)	42.3 (±2.9)	64.2 (±1.6)	54.4 (±2.7)	39.8 (±3.1)
4-9	27.7 (±3.7)	50.3 (±4.5)	68.6 (±2.2)	11.0 (±2.6)	23.9 (±4.1)	52.4 (±2.4)	67.4 (±1.7)	57.4 (±2.9)	42.6 (±2.5)
≥10	30.2 (±4.1)	47.0 (±4.8)	70.0 (±2.8)	14.7 (±3.1)	29.5 (±4.7)	53.5 (±3.2)	66.5 (±3.9)	57.6 (±3.9)	45.2 (±3.0)
Total	22.7 (±1.8)	43.3 (±2.6)	63.3 (±1.4)	10.1 (±1.5)	22.2 (±2.3)	45.9 (±1.5)	62.1 (±0.9)	52.7 (±1.5)	39.6 (±1.5)

*The prevalences of influenza and pneumococcal vaccination were estimated only for persons at high risk for complications caused by these infections (i.e., 18-49-year-olds and 50-64-year-olds with high risk medical conditions and all persons aged ≥65 years). Persons categorized as "high risk" for influenza-related complications self-reported one or more of the following: Ever being told by a physician they had diabetes, emphysema, coronary heart disease, angina, heart attack or other heart condition; being diagnosed with cancer in the past 12 months (excluding non-melanoma skin cancer) or

ever being told by a physician they have lymphoma, leukemia or blood cancer; in the past 12 months being told by a physician they have chronic bronchitis or weak or failing kidneys; or reporting an asthma episode or attack in the past 12 months. Persons categorized as "high risk" for pneumococcal-related complications met the above criteria, excluding asthma, or reported liver disease during the past 12 months.

n=32,440. Sample sizes might not total 32,440 because persons with unknown vaccination status were excluded from analysis.

[†]Confidence interval. 95% CIs were calculated by multiplying the standard error by ± 1.96 .

[§]Persons of Hispanic origin can be of any race; however, the race groups non-Hispanic white, non-Hispanic black, American Indian/Alaskan Native, and Asian/Pacific Islander do not include persons of Hispanic origin.

^{*}The standard of reliability is $RSE < 0.3$ (where $RSE = \frac{\text{standard error}}{\text{prevalence}}$). This estimate did not meet that standard, or the denominator was < 30 .

^{**}Meets the standard of reliability; however, < 50 respondents were in the denominator.

^{††}Poverty status is based on family size, number of children aged < 18 years, and family income. Published 1997 poverty thresholds from the Census Bureau are used in these calculation. Persons for whom poverty level was not determined were excluded from this analysis.