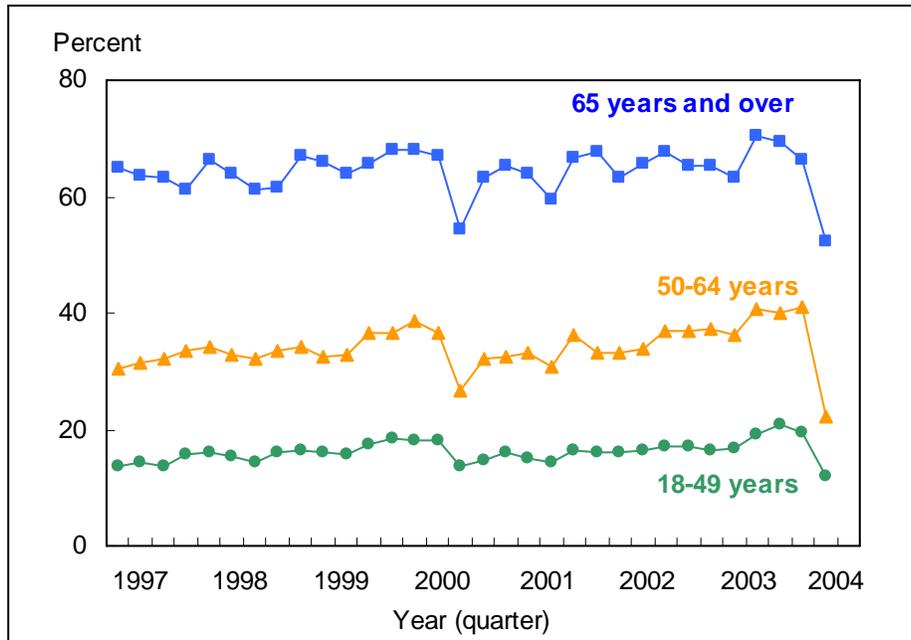


Figure 4.1. Percent of adults aged 18 years and over who had received an influenza shot during the past 12 months, by age group and quarter: United States, 1997–2004



NOTES: Respondents were asked if they had received a flu shot during the past 12 months. Responses to this question cannot be used to determine when during the preceding 12 months the subject received the flu shot. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu shot is seasonal. According to the recommendations of the Advisory Committee on Immunization Practices, all adults aged 65 years and over should receive influenza vaccination. In the 2000-01 flu season (but not implemented until the 2001-02 flu season), these recommendations for influenza vaccination were expanded to include persons 50 to 64 years of age, a group formerly recommended influenza vaccination only if they had existing high-risk conditions (7). Adults aged 18-49 years are recommended to receive influenza vaccination only if they have existing high-risk conditions. The analyses excluded those with unknown flu shot status (about 1% of respondents each year). Beginning with the 2003 data, the National Health Interview Survey transitioned to weights derived from the 2000 census. In this Early Release, estimates for 2000-02 were recalculated using weights derived from the 2000 census. See "About This Release" and table III in the Appendix for more details. Beginning in September 2003, respondents were asked about influenza vaccination by nasal spray (sometimes called by the brand name FluMist™) in addition to the question regarding the flu shot. Estimates of nasal spray flu vaccination are not presented in this Early Release.

DATA SOURCE: Sample Adult Core component of the 1997-2004 National Health Interview Surveys.

■ In the fourth quarter of 2004, the percentage of adults who had received an influenza shot during the past year was 52.4% for persons aged 65 years and over, 22.3% for persons aged 50-64 years, and 12.0% for persons aged 18-49 years.

■ For all three age groups, the fourth quarter estimates in 2004 were considerably lower than the fourth quarter estimates in 2003. An influenza vaccination shortage occurred during the 2004-05 flu season (6). Previous delays in availability of the flu shots occurred in the fall of 2000 and, to a lesser extent, in the fall of 2001) (7,8).

Table 4.1. Annual percent of adults aged 50 years and over who had received an influenza shot during the past 12 months, by age group and sex: United States, 1997-2004

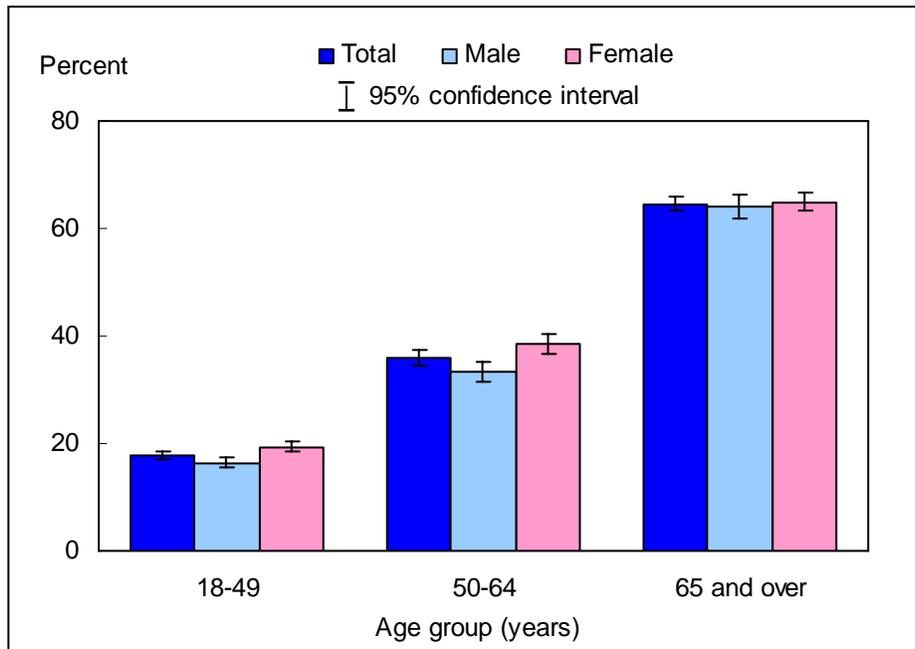
Year	50-64 years			65 years and over			
	Total	Men	Women	Total		Men	Women
				Crude	Age-adjusted		
1997	31.9 (30.5-33.3)	28.0 (26.1-29.9)	35.5 (33.6-37.4)	63.2 (61.9-64.6)	63.1 (61.7-64.4)	64.8 (62.5-67.1)	62.1 (60.5-63.7)
1998	33.1 (31.7-34.5)	29.0 (27.0-31.0)	37.0 (35.1-38.9)	63.3 (61.9-64.7)	63.3 (61.9-64.6)	63.7 (61.5-65.9)	63.0 (61.2-64.8)
1999	34.1 (32.8-35.4)	30.5 (28.6-32.4)	37.4 (35.5-39.3)	65.7 (64.3-67.2)	65.1 (63.6-66.5)	67.2 (65.0-69.4)	64.6 (62.7-66.5)
2000	34.6 (33.1-36.1)	31.9 (29.9-33.9)	37.2 (35.2-39.1)	64.4 (63.0-65.9)	64.6 (63.2-66.0)	66.0 (63.8-68.3)	63.3 (61.6-65.0)
2001	32.2 (30.9-33.5)	30.3 (28.3-32.2)	34.0 (32.2-35.8)	63.1 (61.7-64.5)	63.2 (61.8-64.6)	64.8 (62.5-67.1)	61.8 (60.1-63.5)
2002	34.0 (32.7-35.3)	30.7 (28.8-32.5)	37.2 (35.4-38.9)	65.7 (64.3-67.2)	65.9 (64.5-67.3)	67.1 (64.7-69.5)	64.7 (62.8-66.6)
2003	36.8 (35.4-38.2)	34.5 (32.6-36.3)	38.9 (37.0-40.9)	65.5 (64.1-66.9)	65.6 (64.2-66.9)	66.0 (63.9-68.1)	65.1 (63.2-67.0)
2004	35.9 (34.6-37.3)	33.3 (31.3-35.3)	38.5 (36.7-40.3)	64.6 (63.2-66.1)	64.7 (63.2-66.1)	64.1 (61.9-66.3)	65.0 (63.3-66.7)

NOTES: Respondents were asked if they had received a flu shot during the past 12 months. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu shot is seasonal. According to the recommendations of the Advisory Committee on Immunization Practices, all adults aged 65 years and over should receive influenza vaccination. In the 2000-01 flu season (but not implemented until the 2001-02 flu season), these recommendations for influenza vaccination were expanded to include persons 50 to 64 years of age, a group formerly recommended influenza vaccination only if they had existing high-risk conditions (7). Adults aged 18-49 years are recommended to receive influenza vaccination only if they have existing high-risk conditions. The analyses excluded those with unknown flu shot status (about 1% of respondents each year). Age-adjusted estimates for persons aged 65 years and over for this Healthy People 2010 Leading Health Indicator are based on the 2000 projected U.S. standard population using two age groups: 65-74 years and 75 years and over. Beginning with the 2003 data, the National Health Interview Survey transitioned to weights derived from the 2000 census. In this Early Release, estimates for 2000-02 were recalculated using weights derived from the 2000 census. See "About This Release" and table III in the Appendix for more details. Beginning in September 2003, respondents were asked about influenza vaccination by nasal spray (sometimes called by the brand name FluMist™) in addition to the question regarding the flu shot. Estimates of nasal spray flu vaccination are not presented in this Early Release.

DATA SOURCE: Sample Adult Core component of the 1997-2004 National Health Interview Surveys.

- For adults aged 50-64 years, the annual percentage of persons who received a flu shot during the past 12 months was 35.9% in 2004. The estimate in 2004 was lower than, but not significantly different from, that in 2003. This pattern was seen in men and women.
- For adults aged 65 years and over, the annual percentage of persons who received a flu shot was 64.6% in 2004. The estimate in 2004 was lower than, but not significantly different from, that in 2003. This pattern was seen in men and women.

Figure 4.2. Percent of adults aged 18 years and over who had received an influenza shot during the past 12 months, by age group and sex: United States, 2004

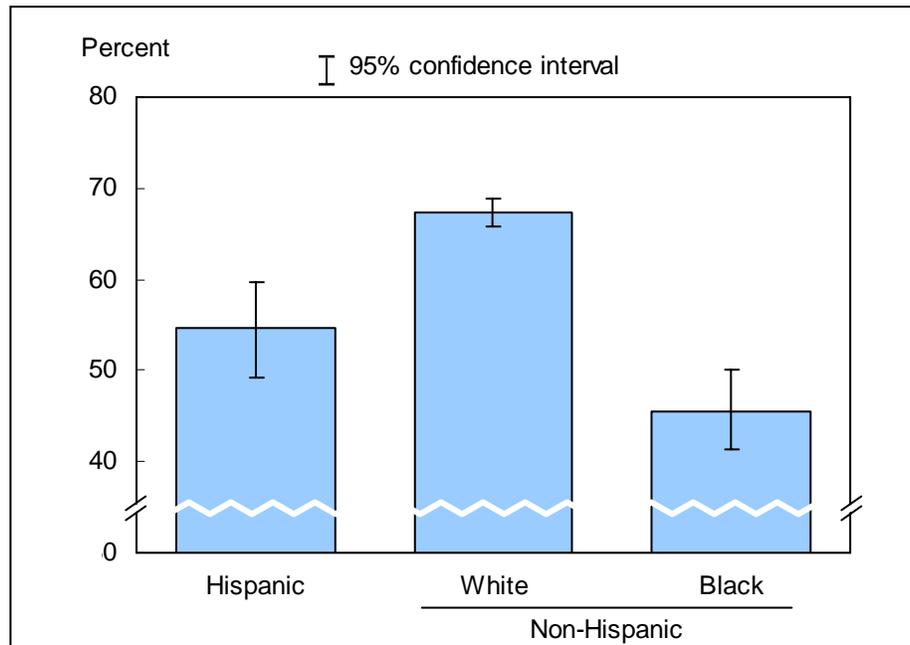


NOTES: Respondents were asked if they had received a flu shot during the past 12 months. Responses to this question cannot be used to determine when during the preceding 12 months the subject received the flu shot. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu shot is seasonal. According to the recommendations of the Advisory Committee on Immunization Practices, all adults aged 65 years and over should receive influenza vaccination. In the 2000-01 flu season (but not implemented until the 2001-02 flu season), these recommendations for influenza vaccination were expanded to include persons 50 to 64 years of age, a group formerly recommended influenza vaccination only if they had existing high-risk conditions (7). Adults aged 18-49 years are recommended to receive influenza vaccination only if they have existing high-risk conditions. The analyses excluded 432 adults (1.4%) with unknown flu shot status. Beginning in September 2003, respondents were asked about influenza vaccination by nasal spray (sometimes called by the brand name FluMist™) in addition to the question regarding the flu shot. Estimates of nasal spray flu vaccination are not presented in this Early Release.

DATA SOURCE: Sample Adult Core component of the 2004 National Health Interview Survey.

- For both sexes combined, the percentage of adults who had a flu shot during the past 12 months was highest among adults aged 65 years and over (64.6%), followed by adults aged 50-64 years (35.9%) and 18-49 years (17.9%).
- For age groups 18-49 years and 50-64 years, women were more likely than men to have received a flu shot during the past 12 months.

Figure 4.3. Percent of adults aged 65 years and over who had received an influenza shot during the past 12 months, by race/ethnicity: United States, 2004



NOTES: Respondents were asked if they had received a flu shot during the past 12 months. Responses to this question cannot be used to determine when during the preceding 12 months the subject received the flu shot. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu shot is seasonal. The analyses excluded 97 adults (1.6%) aged 65 years and over with unknown flu shot status. Beginning in September 2003, respondents were asked about influenza vaccination by nasal spray (sometimes called by the brand name FluMist™) in addition to the question regarding the flu shot. Estimates of nasal spray flu vaccination are not presented in this Early Release.

DATA SOURCE: Sample Adult Core component of the 2004 National Health Interview Survey.

- For adults aged 65 years and over, the percentage of persons receiving a flu shot during the past 12 months was 54.6% for Hispanic persons, 67.3% for non-Hispanic white persons, and 45.6% for non-Hispanic black persons.
- Hispanic persons and non-Hispanic black persons were less likely than non-Hispanic white persons to have received a flu shot during the past 12 months.

Data tables for figures 4.1-4.3:

Data table for figure 4.1. Percent of adults aged 18 years and over who had received an influenza shot during the past 12 months, by age group and quarter: United States, 1997-2004

Year and quarter	Percent (95% confidence interval)		
	18-49 years	50-64 years	65 years and over
1997			
Quarter 1	13.6 (12.5-14.6)	30.5 (27.8-33.2)	65.0 (62.3-67.6)
Quarter 2	14.5 (13.4-15.5)	31.3 (28.7-34.0)	63.7 (61.1-66.2)
Quarter 3	13.6 (12.6-14.6)	32.0 (29.3-34.6)	63.1 (60.3-65.9)
Quarter 4	15.6 (14.5-16.7)	33.6 (31.1-36.2)	61.2 (58.7-63.8)
1998			
Quarter 1	16.1 (14.8-17.3)	34.2 (31.3-37.1)	66.3 (63.2-69.4)
Quarter 2	15.3 (14.1-16.5)	32.8 (30.1-35.5)	64.0 (61.3-66.8)
Quarter 3	14.5 (13.3-15.6)	32.0 (29.3-34.6)	61.3 (58.5-64.0)
Quarter 4	16.0 (14.8-17.2)	33.5 (30.8-36.1)	61.6 (58.7-64.5)
1999			
Quarter 1	16.3 (14.8-17.7)	34.2 (31.1-37.3)	67.0 (64.0-70.1)
Quarter 2	16.0 (14.7-17.3)	32.6 (29.8-35.4)	66.1 (63.4-68.8)
Quarter 3	15.8 (14.5-17.1)	32.8 (30.1-35.5)	64.1 (61.2-67.0)
Quarter 4	17.6 (16.2-18.9)	36.7 (34.2-39.2)	65.7 (62.7-68.6)
2000			
Quarter 1	18.6 (17.2-19.9)	36.6 (33.7-39.4)	68.2 (65.3-71.0)
Quarter 2	18.0 (16.7-19.4)	38.5 (35.7-41.4)	68.1 (65.6-70.7)
Quarter 3	18.2 (16.9-19.4)	36.6 (33.7-39.5)	67.1 (64.4-69.8)
Quarter 4	13.6 (12.4-14.8)	26.6 (24.2-29.0)	54.3 (51.6-57.1)
2001			
Quarter 1	14.7 (13.4-16.0)	32.3 (29.6-35.0)	63.3 (60.2-66.3)
Quarter 2	15.9 (14.7-17.1)	32.6 (30.1-35.1)	65.4 (62.8-68.0)
Quarter 3	14.9 (13.9-15.9)	33.3 (30.7-35.8)	64.0 (61.1-66.8)
Quarter 4	14.5 (13.6-15.9)	30.6 (28.0-33.1)	59.6 (56.7-62.4)
2002			
Quarter 1	16.4 (15.2-17.7)	36.3 (33.6-38.9)	66.6 (63.8-69.4)
Quarter 2	16.0 (14.8-17.2)	33.0 (30.5-35.5)	67.8 (65.3-70.3)
Quarter 3	16.2 (14.9-17.5)	33.1 (30.6-35.6)	63.1 (60.5-65.8)
Quarter 4	16.4 (15.1-17.8)	33.8 (31.0-36.6)	65.5 (62.4-68.6)
2003			
Quarter 1	17.1 (15.7-18.4)	36.8 (34.2-39.4)	67.8 (65.0-70.6)
Quarter 2	17.2 (15.8-18.6)	36.8 (33.9-39.7)	65.4 (62.6-68.3)
Quarter 3	16.4 (15.2-17.6)	37.4 (34.9-39.9)	65.4 (62.8-67.9)
Quarter 4	16.7 (15.2-18.1)	36.1 (33.3-39.0)	63.3 (60.1-66.5)
2004			
Quarter 1	19.3 (17.9-20.8)	40.6 (38.0-43.3)	70.3 (67.5-73.0)
Quarter 2	20.9 (19.1-22.6)	40.0 (37.1-43.0)	69.5 (66.7-72.3)
Quarter 3	19.4 (18.2-20.7)	41.0 (38.4-43.6)	66.4 (63.6-69.2)
Quarter 4	12.0 (10.9-13.1)	22.3 (20.2-24.5)	52.4 (49.5-55.4)

Data table for figure 4.2. Percent of adults aged 18 years and over who had received an influenza shot during the past 12 months, by age group and sex: United States, 2004

Age and sex	Percent	95% confidence interval
18-49 years		
Total	17.9	17.2-18.6
Male	16.4	15.4-17.4
Female	19.4	18.4-20.4
50-64 years		
Total	35.9	34.6-37.3
Male	33.3	31.3-35.3
Female	38.5	36.7-40.3
65 years and over		
Total	64.6	63.2-66.1
Male	64.1	61.9-66.3
Female	65.0	63.3-66.7
18 years and over: crude¹		
Total	29.4	28.8-30.1
Male	27.0	26.0-27.9
Female	31.7	30.9-32.6
65 years and over: age-adjusted²		
Total	64.7	63.2-66.1
Male	64.7	62.6-66.9
Female	64.9	63.1-66.6

¹Crude estimates are presented in the figure.

²Estimates for this Healthy People 2010 Leading Health Indicator are age-adjusted to the 2000 projected U.S. standard population using two age groups: 65-74 years and 75 years and over.

Data table for figure 4.3. Percent of adults aged 65 years and over who had received an influenza shot during the past 12 months, by race/ethnicity: United States, 2004

Race/ethnicity	Percent (95% confidence interval)	
	Crude ¹	Age-adjusted ²
Hispanic or Latino	54.6 (49.3-59.7)	54.6 (49.2-60.0)
Not Hispanic or Latino:		
White, single race	67.3 (65.7-68.9)	67.2 (65.6-68.8)
Black, single race	45.6 (41.3-50.1)	46.2 (41.9-50.6)

¹Crude estimates are presented in the figure.

²Estimates for this Healthy People 2010 Leading Health Indicator are age-adjusted to the 2000 projected U.S. standard population using two age groups: 65-74 years and 75 years and over.