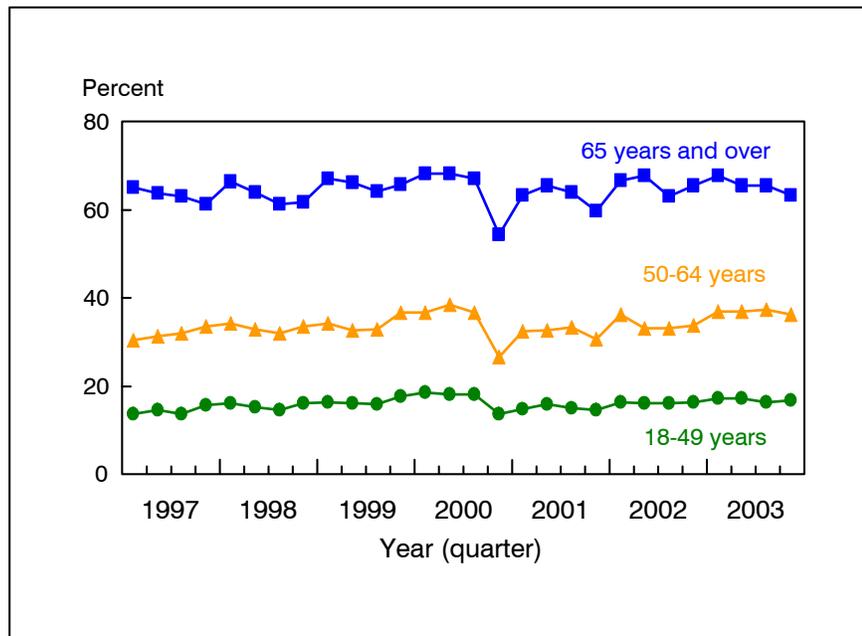


**Figure 4.1. Percent of adults aged 18 years and over who had received an influenza shot during the past 12 months, by age group and quarter: United States, 1997–2003**



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 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 appendix tables in this release 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 1997-2003 National Health Interview Surveys.

■ In the fourth quarter of 2003, the percent of adults who had received an influenza shot during the past year was 63.3% for persons aged 65 years and over, 36.1% for persons aged 50-64 years, and 16.7% for persons aged 18-49 years.

■ For persons aged 65 years and over, the fourth quarter estimate in 2003 was still slightly lower than the fourth quarter estimate in 2002 (63.3% vs. 65.5%), but the difference was not statistically significant (delays in availability of the flu shots occurred in the fall of 2000, and to a lesser extent, in the fall of 2001) (6,7).

**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, 1997-2003**

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

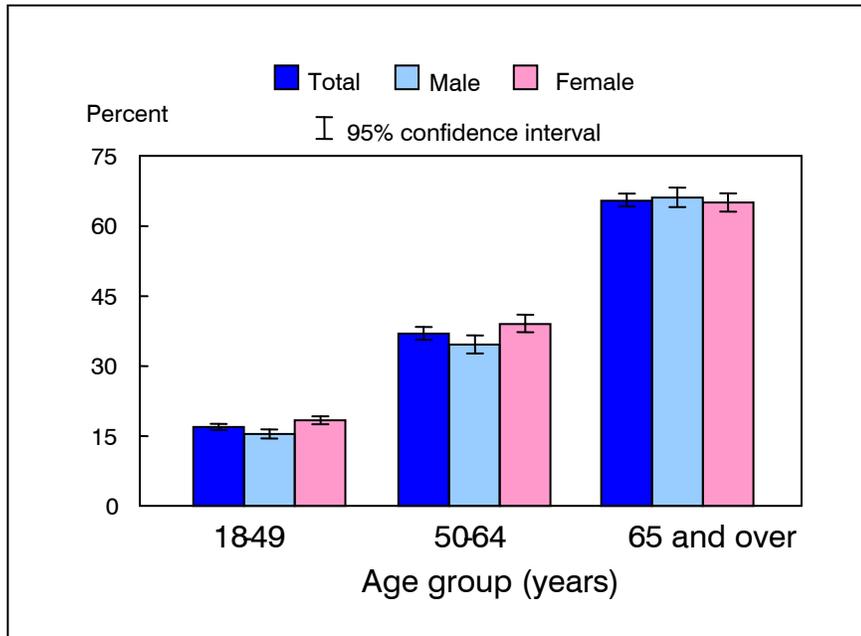
NOTES: Respondents were asked if they had received a flu shot during the past 12 months. Responses to this question cannot be used to determine when during the preceding 12 months the subject received the flu shot. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu shot is seasonal. The analyses excluded 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 appendix tables in this release 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 1997-2003 National Health Interview Surveys.

■ For adults aged 50-64 years, the annual percent of persons who received a flu shot during the past 12 months increased from 34.0% in 2002 to 36.8% in 2003. The increase was seen mainly among men.

■ For adults aged 65 years and over, the annual percent of persons who received a flu shot was 65.5% in 2003. The estimate in 2003 was similar to the estimates in 2002 and 1999 (delays in the availability of influenza shots occurred in the fall of 2000, and to a lesser extent, in the fall of 2001) (6,7).

**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, 2003**

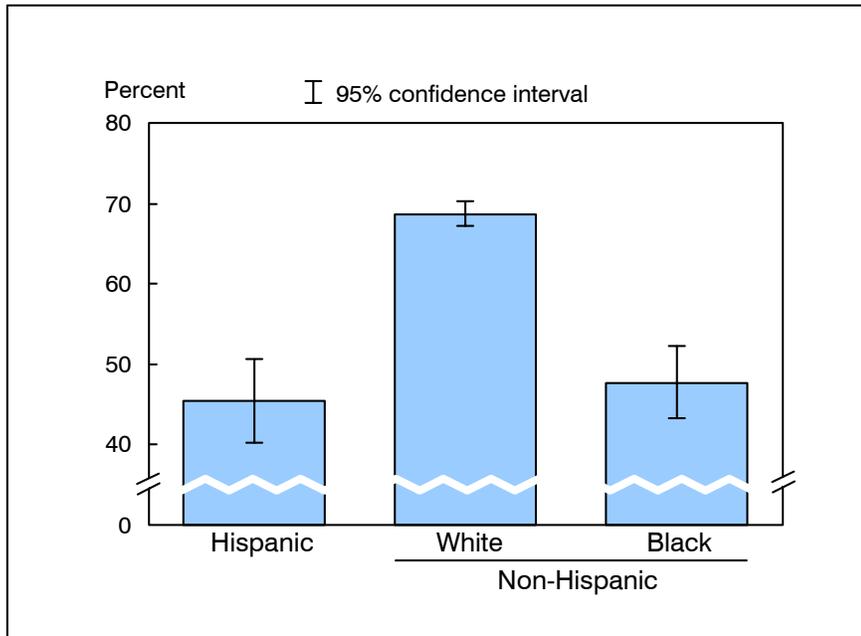


NOTES: Respondents were asked if they had received a flu shot during the past 12 months. Responses to this question cannot be used to determine when during the preceding 12 months the subject received the flu shot. In addition, estimates are subject to recall error, which will vary depending on when the question is asked because the receipt of a flu shot is seasonal. The analyses excluded 491 adults (1.6%) 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 2003 National Health Interview Survey.

- For both sexes combined, the percent of adults who had a flu shot during the past 12 months was highest among adults aged 65 years and over (65.5%), followed by adults aged 50-64 years (36.8%) and 18-49 years (16.8%).
- 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, 2003**



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 (1.7%) 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 2003 National Health Interview Survey.

- For adults aged 65 years and over, the percent of persons receiving a flu shot during the past 12 months was 45.4% for Hispanic persons, 68.6% for non-Hispanic white persons, and 47.7% 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, 1997-2003**

| Year/quarter | Percent (95% confidence interval) |                  |                   |
|--------------|-----------------------------------|------------------|-------------------|
|              | 18-49 years                       | 50-64 years      | 65 years and over |
| <b>1997</b>  |                                   |                  |                   |
| 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)  |
| <b>1998</b>  |                                   |                  |                   |
| 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)  |
| <b>1999</b>  |                                   |                  |                   |
| 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)  |
| <b>2000</b>  |                                   |                  |                   |
| 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)  |
| <b>2001</b>  |                                   |                  |                   |
| 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)  |
| <b>2002</b>  |                                   |                  |                   |
| 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)  |
| <b>2003</b>  |                                   |                  |                   |
| 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)  |

**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, 2003**

| <b>Age and sex</b>                                 | <b>Percent</b> | <b>95% confidence interval</b> |
|--|----------------|--------------------------------|
| <b>18-49 years</b>                                 |                |                                |
| Total  | 16.8           | 16.2-17.5                      |
| Men  | 15.4           | 14.4-16.3                      |
| Women  | 18.3           | 17.4-19.2                      |
| <b>50-64 years</b>                                 |                |                                |
| Total  | 36.8           | 35.4-38.2                      |
| Men  | 34.5           | 32.6-36.3                      |
| Women  | 38.9           | 37.0-40.9                      |
| <b>65 years and over</b>                           |                |                                |
| Total  | 65.5           | 64.1-66.9                      |
| Men  | 66.0           | 63.9-68.1                      |
| Women  | 65.1           | 63.2-67.0                      |
| <b>65 years and over: Age-adjusted<sup>1</sup></b> |                |                                |
| Total  | 65.6           | 64.2-66.9                      |
| Men  | 66.5           | 64.5-68.6                      |
| Women  | 64.9           | 63.0-66.8                      |

<sup>1</sup>Crude estimates are presented in the graph. Estimates 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, 2003**

| <b>Race/ethnicity</b>         | <b>Percent (95% confidence interval)</b> |                                 |
|-------------------------------|--|---------------------------------|
|                               | <b>Crude<sup>1</sup></b>                 | <b>Age-adjusted<sup>2</sup></b> |
| <b>Hispanic or Latino</b>     | 45.4 (40.2-50.6)                         | 46.6 (40.8-52.4)                |
| <b>Not Hispanic or Latino</b> |  |                                 |
| <b>White, single race</b>     | 68.6 (67.1-70.2)                         | 68.6 (67.0-70.1)                |
| <b>Black, single race</b>     | 47.7 (43.2-52.2)                         | 48.2 (43.7-52.8)                |

<sup>1</sup>Crude estimates are presented in the graph.

<sup>2</sup>Estimates 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.