

## CHAPTER 18: IMMUNIZATION

**No Flu Immunization: Adults aged 65 and older who did not have a flu shot in past 12 months.**

**No Pneumonia Immunization: Adults aged 65 and older who have never had a pneumonia shot (pneumococcal vaccine).**

<b>State Prevalence</b>	<p><i>No Flu:</i> <b>30.9%</b> (95% CI: 27.5-34.4); 21<sup>st</sup> among 54 BRFSS participants. National prevalence: 30.8% (95% CI: 30.1-31.5).</p> <p><i>No Pneumonia:</i> <b>36.2%</b> (95% CI: 32.5-39.8); 24<sup>th</sup> among 54 BRFSS participants. National prevalence: 36.2% (95% CI: 35.5-37.0).</p>
<b>Time Trends</b>	<p>The percentage of elderly adults who were not immunized decreased significantly between 1993 and 2003. The prevalence of no flu shot declined from 50.2% in 1993 to 30.9% in 2003, while the percentage of elderly adults who had never received a pneumonia shot decreased from 71.2% to 36.2%.</p>
<b>Gender</b>	<p><i>No Flu:</i> <b>Men 29.3%</b> (95% CI: 23.5-35.2); <b>Women 32.1%</b> (95% CI: 27.7-36.4).</p> <p><i>No Pneumonia:</i> <b>Men 33.7%</b> (95% CI: 27.7-39.8); <b>Women 37.9%</b> (95% CI: 33.4-42.4).</p> <p>Women had slightly higher rates of no flu and pneumonia immunization than men (although the differences were not statistically significant).</p>
<b>Age</b>	<p>Adults aged 65 to 74 were significantly more likely to have not received a flu shot (36.1% versus 25.7%) and a pneumonia shot (44.3% versus 28.0%) than those aged 75 and older.</p>
<b>Education</b>	<p>The risk of no immunization did not significantly differ by educational attainment. Adults with a high school diploma/GED were most likely to have not received a flu shot (33.9%) and a pneumonia shot (39.9%).</p>
<b>Household Income</b>	<p>The prevalence of no flu immunization decreased as income increased, until household income reached \$50,000. Adults in the poorest households had a significantly higher rate of no flu immunization than those with an annual income between \$35,000 and \$49,999. The prevalence of pneumonia vaccination did not significantly differ by household income.</p>

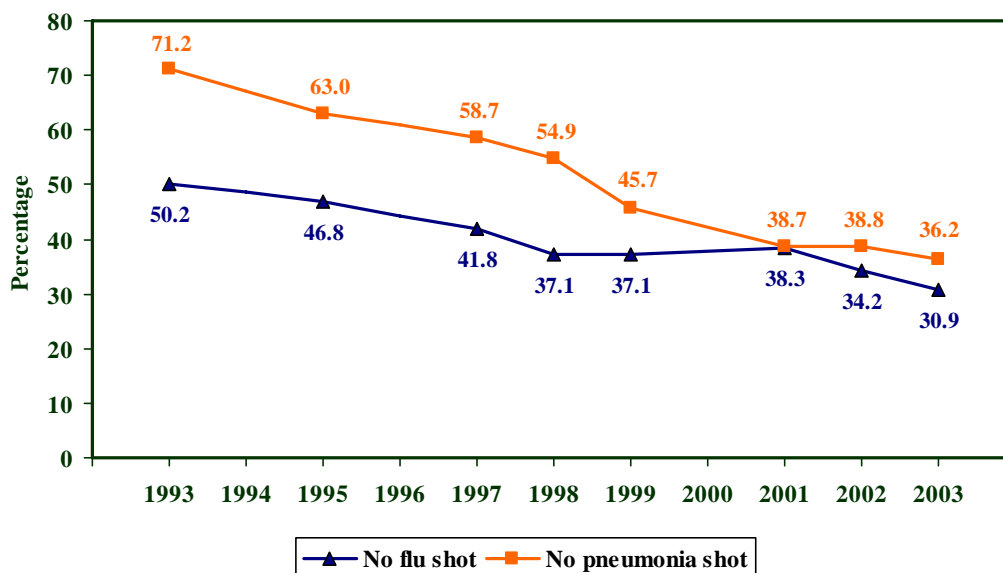
### West Virginia Healthy People 2010 Objectives

<b>Objective 14.13a</b>	<p>Increase the proportion of non-institutionalized adults 65+ years who are vaccinated for:</p> <p>14.13a.1 Influenza to 90%. (Baseline: 58% in 1997; Current: 69.1% in 2003)</p> <p>14.13a.2 Pneumococcal disease to 90%. (Baseline: 41% in 1997; Current: 63.8% in 2003)</p>
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**Table 18.1: No immunizations among adults aged 65 and older: WVBRFSS, 2003**

Characteristic	No flu shot in past 12 months			No pneumonia shot in lifetime		
	# Resp.	%	95% CI	# Resp.	%	95% CI
<b>TOTAL</b>	801	<b>30.9</b>	(27.5-34.4)	785	<b>36.2</b>	(32.5-39.8)
<b>Sex</b>						
Males	274	<b>29.3</b>	(23.5-35.2)	270	<b>33.7</b>	(27.7-39.8)
Females	527	<b>32.1</b>	(27.7-36.4)	515	<b>37.9</b>	(33.4-42.4)
<b>Age</b>						
65-74	437	<b>36.1</b>	(31.1-41.1)	427	<b>44.3</b>	(39.2-49.4)
75+	364	<b>25.7</b>	(20.9-30.5)	358	<b>28.0</b>	(22.9-33.0)
<b>Education</b>						
Less than H.S.	275	<b>33.7</b>	(27.6-39.9)	269	<b>36.7</b>	(30.4-42.9)
H.S. or G.E.D.	296	<b>33.9</b>	(28.1-39.7)	291	<b>39.9</b>	(33.8-46.0)
Some Post-H.S.	141	<b>25.7</b>	(17.4-33.9)	138	<b>29.6</b>	(21.6-37.7)
College Graduate	87	<b>19.8</b>	(11.3-28.4)	85	<b>31.7</b>	(21.0-42.3)
<b>Income</b>						
Less than \$15,000	179	<b>39.2</b>	(31.1-47.3)	177	<b>38.1</b>	(30.1-46.2)
\$15,000- 24,999	228	<b>30.7</b>	(24.3-37.1)	225	<b>35.7</b>	(29.0-42.4)
\$25,000- 34,999	111	<b>27.7</b>	(19.0-36.4)	111	<b>34.1</b>	(24.8-43.4)
\$35,000- 49,999	67	<b>18.1</b>	(8.9-27.2)	65	<b>33.6</b>	(21.7-45.5)
\$50,000+	44	<b>31.2<sup>a</sup></b>	(17.1-45.2)	43 <sup>a</sup>	<b>46.0</b>	(30.3-61.7)

a. Use caution in interpreting percentages with N<50.

**Figure 18.1: No flu shot (in past 12 months) and no pneumonia shot (in lifetime) among adults aged 65 and older by year: WVBRFSS, 1993-2003**

----- Trend Line

NOTE: Data not available for the years 1994, 1996, and 2000.