



## New Hampshire Immunization Update Data Brief - August, 2009

This data brief summarizes the findings of the 2008 *New Hampshire Behavioral Risk Factor Surveillance System* (NH BRFSS) related to influenza and pneumococcal vaccination among adult New Hampshire residents.

### Influenza Vaccine Use Among New Hampshire Adults

Influenza, also known as the “flu,” is a contagious respiratory illness that causes mild to severe illness, and at times can lead to death. The best way to prevent the flu is by getting a flu vaccination each year.<sup>1</sup>

An influenza vaccination coverage level of 90% for persons aged 65 years and older is a 2010 National Health Objective.<sup>2</sup> Increasing vaccination coverage among persons who are less than 65 years of age and who have high-risk conditions is another national priority.

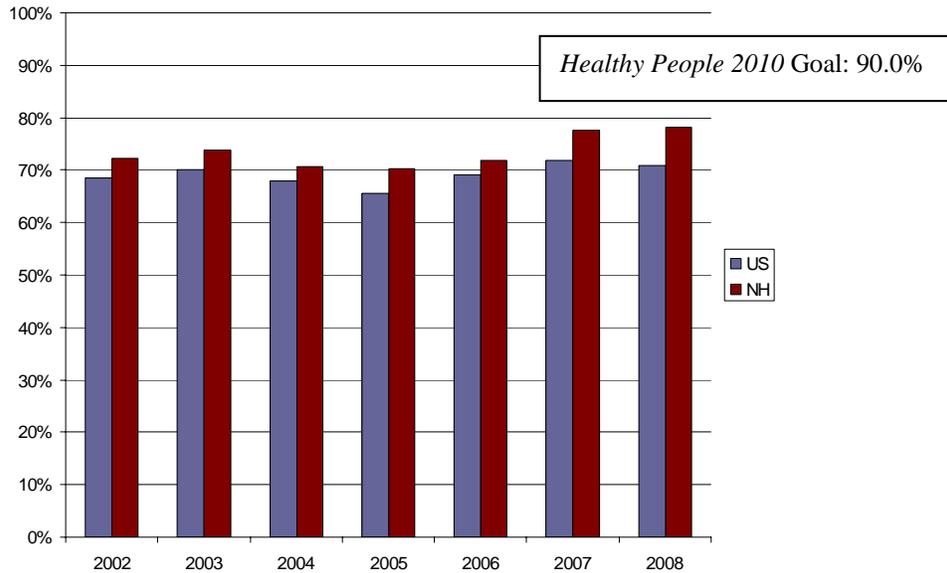
The NH BRFSS is a population-based, random-digit dialed telephone survey of civilian, non-institutionalized New Hampshire residents aged 18 years and older. In 2008, approximately 42.6% (95%CI: 41.0-44.2) of New Hampshire adults had reported receiving a flu shot during the past 12 months. Additionally, 0.4% (95%CI: 0.2-0.6) reported receiving a flu mist, which is sprayed into the nasal cavity and is not a shot.

#### Adults 18 years and older who have received a flu shot within the past year, New Hampshire, 2008, BRFSS

	%	95% CI
<b>Total</b>	42.6	41.0-44.2
<b>Male</b>	38.8	36.4-41.2
<b>Female</b>	46.2	44.2-48.2
<b>Age</b>		
18-24	23.6	16.3-30.9
25-34	24.1	20.2-28.0
35-44	33.7	30.4-37.0
45-54	37.8	34.9-40.7
55-64	54.4	51.3-57.5
65+	<b>78.1</b>	<b>75.9-80.3</b>
<b>Income</b>		
<15,000	39.6	33.3-45.9
15,000-24,999	45.3	40.0-50.6
25,000-34,999	41.6	36.7-46.5
35,000-49,999	43.3	39.2-47.4
50,000-74,999	41.3	37.6-45.0
75,000+	41.1	38.4-43.8
<b>Education</b>		
< 12 year	41.6	34.5-48.7
12 years	38.5	35.6-41.4
12-16 years	40.2	37.1-43.3
> 16 years	46.6	44.2-49.0

Among adults 65 years and older, 78.1% (95% CI: 75.9-80.3) of adults reported a flu shot during the previous 12 months.

**Adults 65 years and older who have received a flu shot within the past year, New Hampshire and United States, 2002-2008, BRFSS<sup>3</sup>**

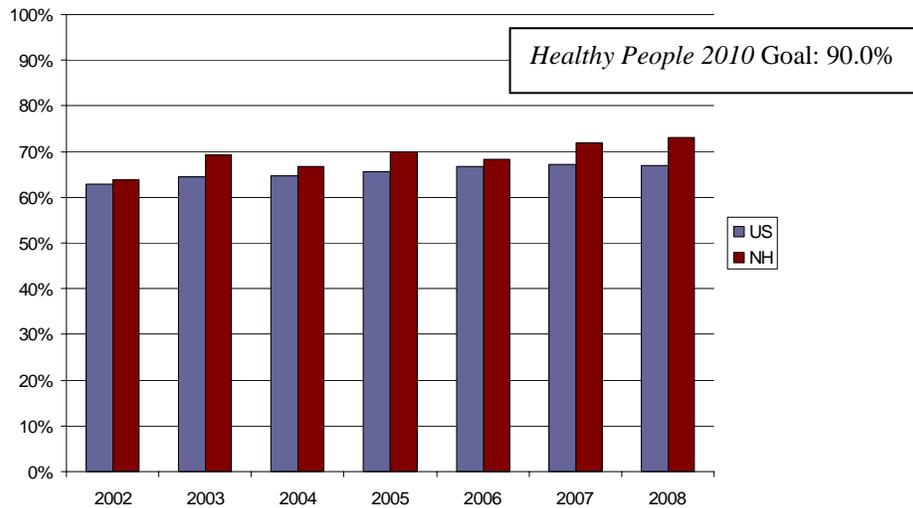


High-risk adults who received an influenza vaccine in the previous 12 months include: 74.8% (95% CI: 69.8-79.7) with diabetes, 52.1% (95% CI: 47.0-57.3) with current asthma, 76.9% (95% CI: 70.1-83.6) with the history of a coronary heart disease, 69.9% (95% CI: 62.3-77.5) with the history of a heart attack, and 73.4% (95% CI: 65.4-81.5) with the history of a stroke.

### **Pneumococcal Vaccine Use Among New Hampshire Adults**

Disease caused by *Streptococcus pneumoniae* (pneumococcus) is a notable cause of illness and death, especially among the very young, the elderly, and persons with certain high-risk conditions. The pneumococcal vaccine is recommended for individuals with certain chronic conditions and anyone 65 years old and older.<sup>1</sup> The goal of the *Healthy People 2010* initiative is to increase the proportion of adults age 65 years and older who were ever vaccinated against pneumococcal disease to 90%.<sup>2</sup> Among 65 years and older the rate was 73.0% (95% CI: 70.6-75.4).

**Adults 65 years and older who have ever had a pneumonia vaccination,  
New Hampshire and United States, 2002-2008, BRFSS<sup>3</sup>**



High-risk adults who ever received pneumococcal vaccine include: 65.6% (95% CI: 60.8-70.4) with diabetes, 39.6% (95% CI: 34.7-44.5) with current asthma, 71.6% (95% CI: 65.7-77.4) with the history of a coronary heart disease, 68.0% (95% CI: 61.5-74.4) with the history of a heart attack, and 56.4% (95% CI: 46.6-66.2) with the history of a stroke.

Based on the 2008 BRFSS findings, there are minor differences between NH counties in regard to those receiving flu and pneumonia vaccines. Adults in Grafton County were more likely to report influenza vaccination during the previous 12 months; and adults residing in Strafford County were less likely to report influenza vaccination when compared with the NH average. Pneumococcal vaccination was more likely reported by adults in Belknap County than by NH adults in general.

Region	NH Adults 18 years and older	
	Influenza Vaccination	Pneumococcal Vaccination
Belknap	42.1 (35.4-48.8)	<b>38.7 (31.1-46.2)</b>
Carroll	44.7 (37.7-51.7)	32.2 (25.2-39.1)
Cheshire	42.1 (36.5-47.7)	27.7 (23.5-31.8)
Coos	44.1 (39.4-48.8)	28.7 (24.6-32.8)
Grafton	<b>51.1 (46.5-55.6)</b>	24.0 (21.4-26.5)
Hillsborough	41.5 (38.4-44.6)	25.7 (22.5-29.0)
Merrimack	44.8 (39.9-49.7)	24.3 (20.2-28.3)
Rockingham	42.7 (39.1-46.4)	25.7 (22.5-29.0)
Strafford	<b>34.5 (30.0-39.0)</b>	26.2 (21.9-30.5)
Sullivan	46.0 (39.4-52.6)	31.4 (25.4-37.5)
New Hampshire	42.6 (41.0-44.2)	26.4 (25.0-27.8)

**References**

- 1) National Immunization Program, available at: <http://www.cdc.gov/vaccines/>, accessed on 08/21/2008
- 2) *Healthy people 2010*, available at: <http://www.healthypeople.gov/Data/midcourse/comments/faobjective.asp?id=14&subid=22>, accessed on 09/07/2006
- 3) Behavioral risk factor surveillance system, available at: <http://apps.nccd.cdc.gov/brfss/>  
Data provided by: Office of Health Statistics and Data Management (HSDM), New Hampshire Behavioral Risk Factor Surveillance System Data. New Hampshire Department of Health and Human Services, Division of Public Health Services, 2008