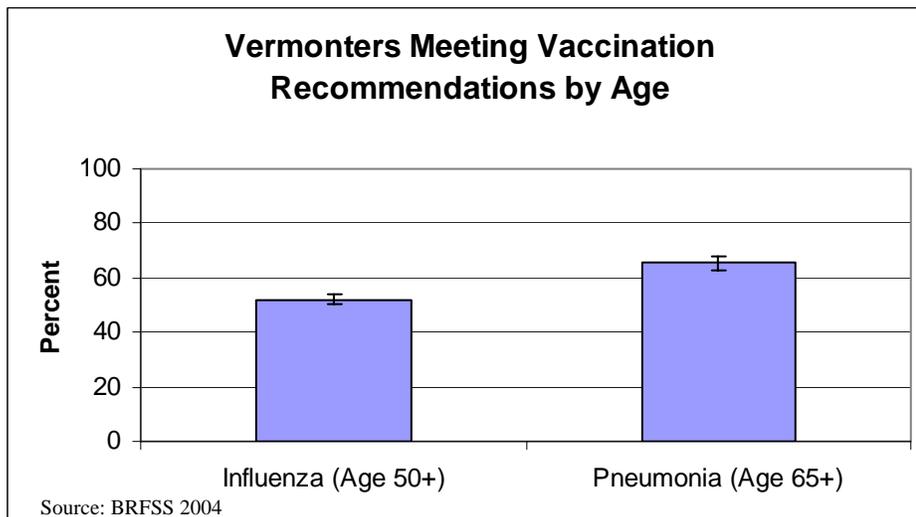


Chronic Disease in Vermont: Adherence to Adult Immunization Recommendations and Implications for Cardiovascular Disease

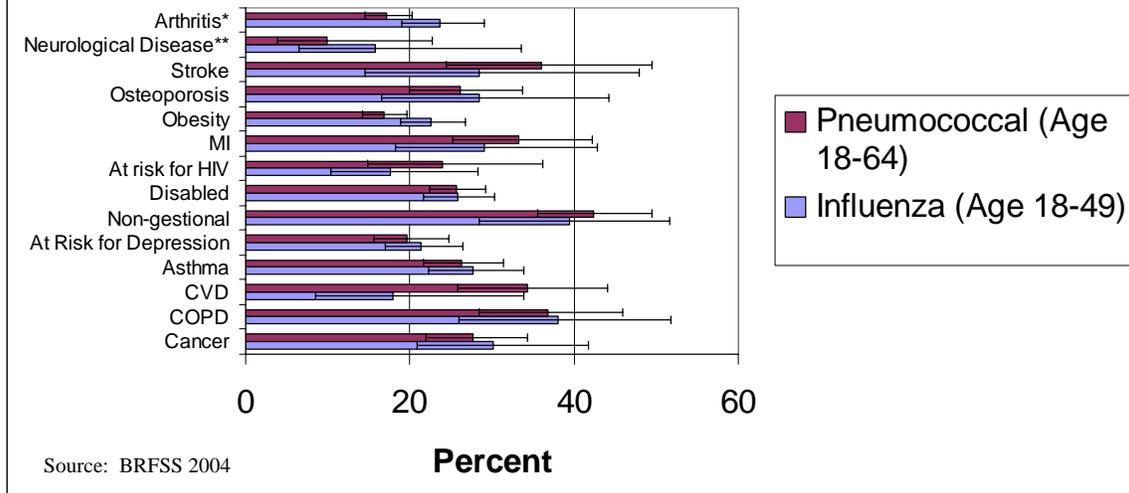
Current vaccination recommendations state that Vermonters over the age of 65 should receive one dose of pneumococcal polysaccharide vaccination to prevent pneumonia (1) and that Vermonters over the age of 50 should be vaccinated against influenza yearly.(2)

In 2004, 66% of Vermonters over the age of 65 were vaccinated for pneumonia.(3) In the same year, 52% of Vermonters over the age of 50 years of age received a yearly influenza vaccination.(3) The Healthy Vermonters 2010 goals related to adult immunization are that 90% of Vermonters over the age of 65 receive yearly influenza vaccinations and that 90% of this group have also been properly vaccinated against pneumonia.(4) In 2004, 67% of Vermonters over the age of 65 received an influenza immunization in the last 12 months.(3)



In addition to these age-specific recommendations, there are vaccination recommendations for adults diagnosed with chronic diseases. Anyone with health problems such as heart disease, asthma, diabetes, HIV or cancer should receive yearly influenza vaccinations, regardless of age.(2)

Vermonters with Chronic Disease Meeting Vaccination Recommendations



Notes for graph:

* Arthritis data from 2003. This data is not available for 2004.

** Neurological disease includes Parkinson's Disease and Multiple Sclerosis.

Influenza vaccinations have an impact on the occurrence of myocardial infarctions (MI) and stroke. (5, 6) They may prevent cardiovascular and respiratory complications that can arise from influenza infection. Increased cardiovascular mortality has a seasonal pattern coinciding with influenza epidemics. (7)

In Vermont, 65% of adults over 50 who have been diagnosed with coronary heart disease received a flu shot in the past year, but only 18% of 18 to 49 year olds diagnosed with coronary heart disease received a flu shot in 2004.(3) Among adults over 50 who have had a previous MI 67% were vaccinated against influenza in the past year; only 29% of 18 to 49 year olds with a previous MI were vaccinated.(3) Among Vermont adults over 50 who had a previous stroke 69%; only 28% of adults under age 50 with a previous stroke were vaccinated against influenza.(3)

Strategies must be in place to increase influenza vaccination rates among those diagnosed with cardiovascular disease, particularly among adults younger than 50 years of age.

References:

(1) CDC. Prevention of pneumococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1997;46(RR08):1-24.
Study citations

(2) CDC. Prevention and control of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2005;54(RR08):1-40.

(3) Vermont Dept of Health and Centers for Disease Control and Prevention Behavioral Risk Factor Surveillance System Survey Data, 2004.

(4) Healthy Vermonters 2010.

<http://www.healthyvermonters.info/admin/pubs/hv2010/hv2010.shtml>

(5) Grau AJ, Fischer B, Barth C. Influenza vaccination is associated with a reduced risk of stroke. Stroke. 2005;36:1501-1506.

(6) Gurfinkel EP, de la Fuente RL, Mendiz O, et al. Influenza vaccine pilot study in acute coronary syndromes and planned percutaneous coronary interventions: the FLU Vaccination Acute Coronary Syndromes (FLUVACS) Study. Circulation. 2002;105(18):2143-7.

(7) Siscovick DS, Raghunathan TE, Lin D, et al. Influenza vaccination and the risk of primary cardiac arrest. Am J Epidemiol. 2000;152(7):674-7.