



Department of  
Health

## ANSWERING MYTHS ABOUT INFLUENZA VACCINE

**Myth:** The flu vaccine can give people the flu.

**Reality:** Influenza vaccine is an inactivated virus vaccine, which means that the virus particles are killed during the manufacturing process. Because the virus has been inactivated, **the vaccine is not capable of causing an influenza infection.**

Possible explanations for this myth include:

- Less than 2% of recipients of influenza vaccine will experience flu-like symptoms 24 to 48 hours after their dose. These side effects of the vaccine reflect an individual's unique immune response to the vaccine rather than a case of influenza. The side effects are short-lived and are not known to be associated with any decrease in overall protection. In the case of high-risk individuals, the benefits of the vaccine (protection from influenza, complications and death) continue to outweigh the risks.
- It is possible that recipients of the vaccine had been exposed to the influenza, or another virus that causes influenza-like illness, just prior to or just after receiving the vaccine. Protection from the vaccine is not immediate. It may take an individual 10 B 14 days to develop a complete, protective response.

**Myth:** Flu vaccine doesn't work (i.e. I got vaccinated last year and still got the flu)

**Reality:** When there is a good match between the circulating influenza strain and the strains in the vaccine, influenza vaccine is 90% effective in preventing influenza in healthy young adults. For those who do get influenza despite being vaccinated their illness is usually much less severe.  
In the elderly, the vaccine is not as effective in preventing influenza but is very effective in preventing hospitalization and death.

Possible explanations for getting influenza-like illness despite being vaccinated include:

- The individual was not fully protected by the vaccine and developed true influenza. This is expected in a minority of people but without vaccination their illness would probably have been much more severe.
- Many other infectious organisms cause flu-like symptoms. Influenza vaccine does not protect against these other illnesses; it only protects against true influenza. It is most likely that the flu-like symptoms are due to another virus that causes similar symptoms.

**Myth:** The side effects are worse than the flu.

**Reality:** Not so, especially for the high-risk group who is at greatest risk of extensive morbidity and mortality. **Most people experience little or no side effects.** A recent study concluded that influenza vaccine produces no increase in systemic side effects or disability in the elderly. Symptoms attributed by patients to a recent influenza vaccine are likely secondary to coincidental illness coupled with heightened somatic awareness following vaccination.<sup>1</sup>

Prophylactic acetaminophen may decrease the frequency of local side effects (redness, pain, swelling at injection site).

If an individual does experience the rare flu-like side effects of vaccination they can be comforted by the knowledge that the duration is short (usually no longer than 24-48 hours) whereas influenza can hang on for 10 days or more and may leave a person debilitated for a longer time. Moreover, a true case of influenza always leaves open the possibility of chronic complications (such as pneumonia) and even death.

**Myth:** If I needed the vaccine my doctor would have told me to get it.

**Reality:** In Nova Scotia, only about 55% of the population 65 years of age and over receive flu vaccine. The numbers are much lower for those who are at high risk under 65. Doctors are often under time pressures in a busy practice and although they may be supportive of vaccination, many forget to offer it. According to one author, in spite of all their apparent understanding of the importance of influenza vaccine, physicians fail to translate their knowledge into clinical practice.<sup>2</sup>

<sup>1</sup> Margolis, K., Nichol, K., Poland, G. & Pluhar, R. (1990). Frequency of Adverse Reactions To Influenza Vaccine In the Elderly. A Randomized, Placebo-Controlled Trial. *JAMA*, 264(9): 1139-41.

<sup>2</sup> Fedson, D. (1987). Influenza Prevention and Control: Past Practices and Future Prospects. *Am. J. Med.*,82:42-47