

## Vaccines have modest impact on influenza in healthy adults

Clinical Question	How effective are vaccines against influenza in healthy adults?
Bottom Line	Healthy adults who received inactivated parenteral influenza vaccine rather than no vaccine probably had 1% lower risk of experiencing influenza over a single influenza season (2.3% versus 1%, moderate- certainty evidence) and probably had a 3.4% lower risk of experiencing influenza-like illness (ILI) (21.5% versus 18.1%, moderate-certainty evidence). The numbers needed to vaccinate (NNVs) for influenza and ILI were 71 and 29, respectively, reflecting high rates of ILI in the control groups for many of the trials. The NNV of 29 conceals variation in the absolute reduction in ILI for low- and high-risk groups, and the degree of benefit may vary at least in part due to inconsistent symptom classification.
Caveat	Extrapolating these effects to settings other than those of the studies is challenging due to uncertain methods for confirming influenza and variation in the absolute reductions in ILI following vaccination. The effects of inactivated vaccines on working days lost or serious complications of influenza were uncertain.
Context	Viral respiratory disease imposes a heavy burden on society. The majority of viral respiratory disease (ILI) is caused by many different agents that are not clinically distinguishable from one another. A variable proportion of ILI (7% to 15% on average) is caused by influenza viruses and is known as influenza <sup>1</sup> .
Cochrane Systematic Review	Demicheli V et al. Vaccines for preventing influenza in healthy adults. Cochrane Reviews, 2018, Issue 2. Art. No.: CD001269.DOI: 10.1002/14651858. CD001269.pub6. This review contains 52 studies involving over 80,000 participants.

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Cochrane systematic review:

https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001269.pub6 /full