

No single flu vax strategy optimal

No single influenza A vaccination strategy was the most cost effective across different scenarios in three European countries*, according to Dutch-based researchers of a study published in the *BMJ*.

They used a deterministic, age-structured epidemic model to compare the cost effectiveness (in 2008 values) of four vaccination strategies:

- no vaccination
- vaccination of the entire population
- vaccination of elderly patients (aged ≥ 65 years)
- vaccination of high transmitters (patients aged 5–19 years).

They compared the cost effectiveness of the vaccination strategies across scenarios where the vaccine became available either early or at the peak of the endemic, and when all patients were initially susceptible (no immunity) or when some older patients were protected against infection (pre-existing immunity).

All three of the vaccination strategies had incremental costs per QALY gained below commonly accepted thresholds for cost effectiveness versus no vaccination. However, the most cost-effective vaccination strategy differed across countries and pandemic scenarios. In the scenario where there was no pre-existing immunity and the vaccine was available early in the pandemic, vaccination of the elderly was the most cost-effective strategy in Germany (€940 per QALY gained); whereas, in the UK and The Netherlands vaccination of high transmitters was the preferred strategy (costs per QALY gained of £163 and €525, respectively).

The researchers say that vaccination of the entire population was a "suboptimal strategy" and in the majority of scenarios, vaccination of high transmitters was the most cost-effective strategy.

* Germany, the UK and The Netherlands