Global Influenza Initiative

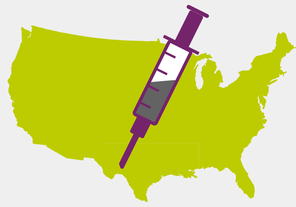
Evaluating potential impacts of a preferential vaccine recommendation for adults 65 years of age and older on US influenza burden

Higher-dose (HD) or adjuvanted vaccines may be more effective in preventing influenza-like illness, hospitalizations and deaths than standard-dose unadjuvanted inactivated vaccines

The US Advisory Committee on Immunization Practices has therefore recommended the preferential use of these vaccines over standard vaccines in adults ≥65 years of age

STUDY AIM:

To evaluate the potential impact of a recommendation for preferential use of HD or adjuvanted vaccines in adults ≥65 years of age on the influenza burden in the US



METHODS:

- The study used a mathematical model of influenza transmission and disease progression
- The model assumes that HD or adjuvanted vaccines are more effective than standard vaccines (relative vaccine effectiveness of 15%) and that a recommendation would increase uptake of the preferentially recommended vaccines
- The potential impact of a range of scenarios was explored including delays in HD/adjuvanted vaccine administration and potential reductions in vaccine coverage if individuals offered SD vaccine decide to go without it

KEY FINDINGS

Effect of a preferential vaccine recommendation*

Best-case scenario
- No delay in vaccination
- No reduction in overall vaccine coverage

In the best-case scenario

Decrease in hospitalizations and deaths in adults ≥65 years by

0–4%

Intermediate scenario
- 3 wk delay in vaccination
- 10 percentage point reduction in overall vaccine coverage

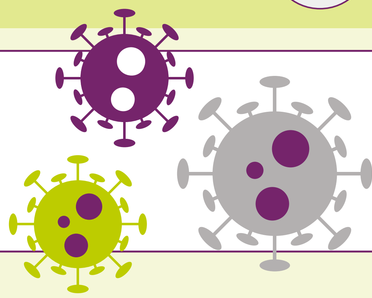
Worst-case scenario
- 6 wk delay in vaccination
- 20 percentage point reduction in overall vaccine coverage

In intermediate and worse-case scenarios which assumed large decreases in vaccine coverage

Most projections resulted in an increase in hospitalizations and deaths

The parameters that had the greatest influence on influenza burden were:

1. Potential reduction in overall vaccine coverage
2. Delay in HD/adjuvanted vaccine uptake
3. Relative vaccine effectiveness



*compared with current uptake

> Higher-dose or adjuvanted vaccines can decrease influenza burden in adults ≥65 years of age if there is timely and adequate access to these vaccines, and if standard vaccines are used when they are unavailable.

To download a copy of this infographic visit the Nivel FluCov website:

FluCov: Influenza-COVID-19, understanding and communicating the impact of COVID-19 on influenza activity | Nivel

HD, higher dose; wk, week.

Reference: Morris SE, et al. Evaluating potential impacts of a preferential vaccine recommendation for adults 65 years of age and older on US influenza burden. Epidemiology 2023;34(3):345-352.