

Vaccine effectiveness of live attenuated and trivalent inactivated influenza vaccination in 2010/11 to 2015/16: the SIVE II record linkage study

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Plain English summary

The SIVE II record linkage study

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Plain English summary

In Scotland, a new type of influenza vaccine (live attenuated influenza vaccine), administered via the nose, was introduced in 2014/15 for all children aged between 2 and 11 years. It can be difficult to evaluate any changes in health as a result of new immunisation programmes, given that randomised controlled trials of vaccines are impractical and can also be seen as unethical. These changes are therefore typically not evaluated, making it difficult to inform future policy in this field. Observational studies can be used to assess the effects of health-care interventions without influencing the care that is provided or affecting the people who receive it. An evaluation (effectiveness and safety) of this change in the immunisation programme was conducted. The vaccine programme, an inactivated vaccine administered as an injection, for other groups for whom the evidence available is limited was also evaluated [i.e. for people aged ≥ 65 years and people aged < 65 years who have a medical condition (e.g. asthma) that puts them at risk of severe illness from influenza].

The findings support the view that the intranasal vaccine is effective and safe in preventing influenza in children. The injectable vaccine in people aged < 65 years who are more at risk of complications from flu was safe and effective. Lower effectiveness was found in people aged ≥ 65 years. Both the injectable vaccine and the intranasal vaccine have high levels of uptake in the population offered vaccination. When considering these results, the important limitation of bias in observational study designs should be noted [for instance, residual confounding, whereby it is not possible to measure a characteristic of those people receiving the vaccine (e.g. being healthier)], and this is accounted for in this analysis.

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This report

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