

**JCVI statement on the use of nasal spray flu vaccine for the childhood influenza immunisation programme****August 2016****Summary**

In August 2016, JCVI was asked to review updated data from the 2015/16 season in the UK and other countries, in light of emerging evidence of low effectiveness of the nasal spray vaccine, lower than inactivated vaccine, reported in the United States (US). After reviewing evidence from across the UK, Finland, Canada and the United States following the 2015/16 influenza season, much of which demonstrates good overall effectiveness, JCVI continues to recommend using the live attenuated influenza vaccine (LAIV, the nasal spray vaccine) for preventing flu in children and strongly supports the continuation of the UK childhood influenza immunisation programme.

**Background**

In June 2016 JCVI undertook its annual review of the childhood flu immunisation programme and reviewed preliminary data on the effectiveness and impact of the children's nasal spray influenza vaccine in the 2015/16 influenza season in the UK. The Committee noted the positive impact of the vaccination programme consistent with the protection afforded by the vaccine in the previous season's analysis (2014/15).

In August 2016, JCVI was asked to review updated data from the 2015/16 season in the UK and other countries, in light of emerging evidence of low effectiveness of the nasal spray vaccine, lower than inactivated vaccine, reported in the United States (US). Studies on influenza vaccine effectiveness for 2015/16 conducted by the Centers for Disease Control and Prevention (CDC), together with data from 2013/14 and 2014/15, led to the recent interim advice by the Advisory Committee on Immunization Practices (ACIP) not to recommend the use of the nasal spray vaccine for the 2016/17 influenza season in the US, but to recommend inactivated vaccine.

JCVI carefully considered the evidence available from the US with the help of experts from CDC and the UK. JCVI also examined the results from the UK, Finland and Canada in close detail, which, in contrast to the US data, showed evidence of good overall effectiveness of the nasal spray influenza vaccine in the 2015/16 season. The committee noted that it is currently unknown why there is a discrepancy between the US CDC findings and the positive impact seen in the UK, other US studies, Finland and Canada with the same vaccine. The Committee discussed possible explanations for the findings and considered the importance of further research and investigation into stability of the vaccine viruses, interference between the viruses in the vaccine, vaccine handling and cold chain integrity, vaccine batch control, study methodology, and the effect of prior vaccine-induced immunity on protection.

**Findings**

JCVI is strongly of the view that the evidence from the UK, provided by Public Health England and the health protection agencies of Scotland, Wales and Northern Ireland, provide confidence in the current NHS childhood flu immunisation programme. Research following the 2015/16 influenza season demonstrates effectiveness and impact of childhood influenza vaccination across the UK during 2015/16 season, and

*The advice of JCVI is made with reference to the UK immunisation programme and may not necessarily transfer to other epidemiological circumstances*

a reduction in cases of influenza both in those vaccinated, and in the population more widely.

Monitoring of the vaccination programme over the last few seasons across the UK continues to show that the childhood programme has had a positive impact on influenza consultations. The latest findings from Scotland provide evidence of the direct impact of the nasal influenza vaccine in reducing the risk of hospitalization in vaccinated children. In England, there is again evidence, as for the 2014/15 season, of an indirect impact of vaccinating children of primary school age with reductions for a range of influenza indicators for both targeted and non-targeted age-groups in 2015/16.

#### Conclusion

Given the strong evidence that the NHS childhood flu immunisation programme continues to protect the health of both children and the wider population, JCVI agreed to continue to recommend the use of the children's nasal spray flu vaccine for preventing flu in children, and more widely in our communities.

JCVI endorsed and advised a number of research initiatives to provide further insight into the virology, immunology and effectiveness of the nasal spray flu vaccine. JCVI will continue to keep the childhood influenza programme under close review. The Committee will consider any relevant new evidence and developments on the impact of the nasal spray flu vaccine as it emerges but strongly supports the continuation of this important public health programme in the UK.