



Influenza vaccine effectiveness in adults and children in primary care in the UK: provisional end-of-season results 2015-16

In 2015/16, the influenza season in the UK was characterised by influenza A(H1N1)pdm09 and then influenza B circulation with impact mainly in young adults and children¹. The UK has a long-standing selective influenza vaccination programme targeting inactivated influenza vaccine at groups at higher risk of severe disease. Following recommendations from the Joint Committee of Vaccination and Immunisation in 2012, the UK is now in the third season of introducing a paediatric influenza vaccination programme with a quadrivalent live attenuated influenza vaccine (LAIV) targeted at healthy children in 2015/16.

In 2015-16, influenza vaccine effectiveness (VE) was measured against medically-attended laboratory confirmed influenza using a test-negative design as described previously through five primary care influenza sentinel swabbing surveillance schemes from England (two schemes), Scotland, Wales and Northern Ireland². We present below the 2015-16 provisional end-of-season estimates in children and adults against circulating influenza (A and B). Estimated VE against laboratory confirmed influenza was >50% in young adults and children – consistent with previous estimates of flu VE². The estimates in children are for live attenuated influenza vaccine only. Final estimates will be published later in summer 2016.

Table: Influenza vaccine effectiveness against medically-attended laboratory confirmed influenza (A&B), by age group. UK multicentre case control study, provisional end of season results influenza season 2015-16 (1 October 2015 to 1 May 2016)

Population	N	Cases: unvac; vaccinated	Controls: unvac; vaccinated	Adjusted VE by scheme, age, month, gender (CI**)
All ages	3841	990; 165	1959; 727	52.4% (41, 61.6)
2-17 years*	729	212; 26	402; 89	57.6% (25.1, 76)
18-44 years	1551	486; 43	862; 160	55.3% (34.2, 69.6)
45-64 years	908	223; 49	432; 204	55.4% (34.6, 69.5)
65+ years	409	24; 39	105; 241	29.1% (-31.4, 61.8)

* LAIV Live attenuated influenza vaccine only

** CI 95% Confidence Interval

References

1. Surveillance of influenza and other respiratory viruses in the UK: Winter 2015 to 2016
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/526405/Flu_Annual_Report_2015_2016.pdf
2. Effectiveness of seasonal influenza vaccine in preventing laboratory-confirmed influenza in primary care in the United Kingdom: 2015/16 mid-season results. Euro Surveill. 2016 Mar 31;21(13). Published: June 2016. PHE Publications Gateway number: 2016121