

# Oxford AHSN and the children's flu vaccination programme





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# What is the Oxford AHSN?

Oxford Academic Health Science Network is a partnership of NHS providers, commissioners, universities and life science companies to improve health and prosperity in Bedfordshire, Berkshire, Buckinghamshire, Milton Keynes and Oxfordshire. Success comes from collaborative working by the partners and stakeholders across the region.



3 Million People



## Our 7 programmes and themes facilitate shared work across all partners:

- Best Care Clinical Networks
- Clinical Innovation Adoption
- Research and Development
- Wealth Creation
- Patient and Public Involvement, Engagement and Experience
- Informatics
- Patient Safety

## Benefits of collaboration across the whole system:

- Leverage clinical and management best practice and expertise to improve outcomes
- Share clinical evidence and benchmarking
- Scale innovation adoption
- Learn from each other – clinical standards, models of care, commercial models
- Enable data sharing, operational, patient and research to improve outcomes
- Share evaluation knowledge
- Share clinical and management resources
- Improve region's attractiveness for commercial research
- Make region more attractive for inward investment and product development
- Make the region healthier

Accelerating health and economic gains by working together

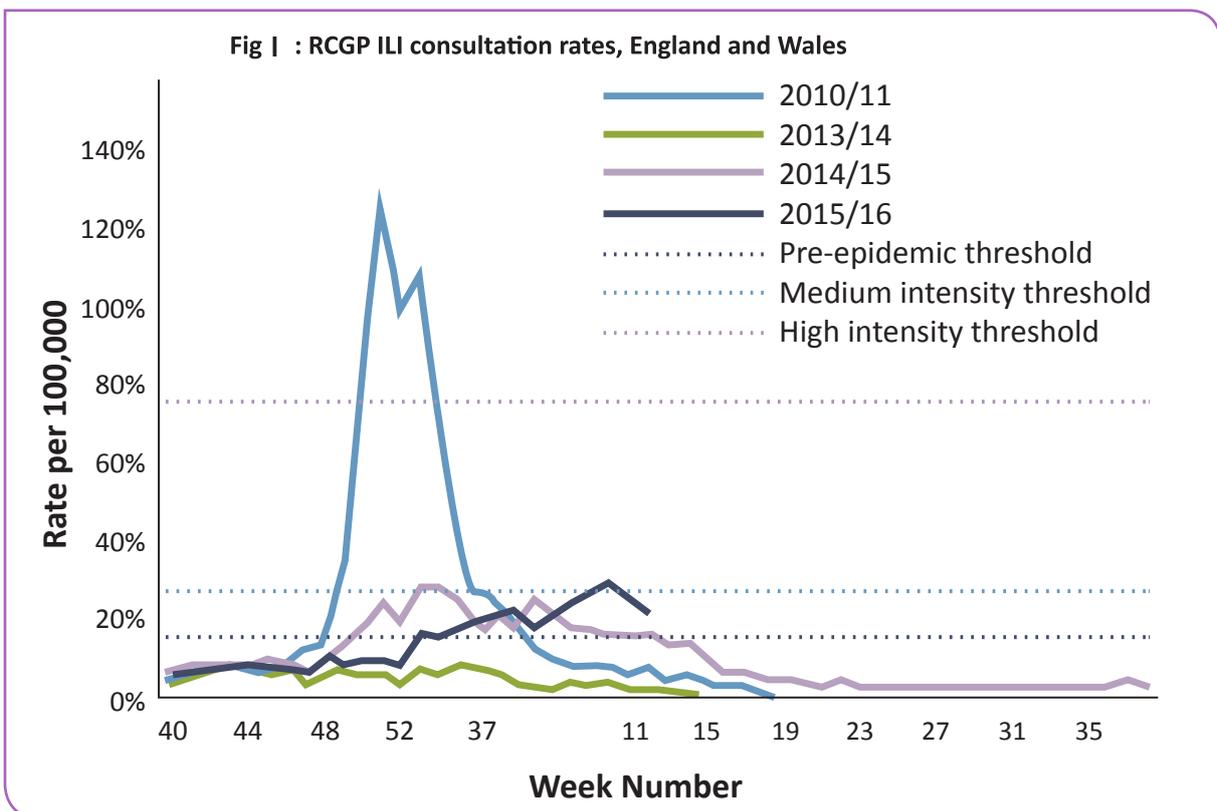


## Why is flu a problem?

Flu is a viral infection and a potentially serious disease. It affects the lungs and airways. Symptoms appear quickly and can include headache, fever, cough, sore throat and aching muscles and joints. In children vomiting, diarrhoea and abdominal pain may also occur. Complications include bronchitis and bacterial pneumonia, and can be life threatening especially in older people and those with certain underlying health conditions.

Flu occurs every year, starting around the end of November and continuing throughout the winter months. In the week ending 21st January 2016, the overall weekly influenza-like illness (ILI) GP consultation rate had increased and was above the baseline threshold in England (17.4 per 100,000). Flu continues to circulate as late as April. For example, in the week ending 3rd April 2016, there were 125 new admissions to ICU/HDU with confirmed influenza and 134 new hospitalised confirmed influenza cases were reported<sup>1</sup>. Even in April 2016 the weekly (ILI) consultation rate with GPs is 21.8 per 100,000. This remains above the baseline threshold (15.4 per 100,000). By age group, the highest rates were seen in 15-44 year olds (25.5 per 100,000) and 45-64 year olds (21.0 per 100,000).

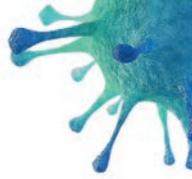
This graph shows GP ILI consultation rates in England and Wales through four flu seasons:



*Crown Copyright Public Health England*

Seasonal influenza affects all age groups and causes considerable morbidity and mortality. One study found that in one year in England & Wales, as a result of flu-like symptoms, there were an estimated 779,000 – 1,164,000 GP consultations, 19,000 – 31,200 hospital admissions and between 18,500 – 24,800 deaths<sup>2</sup>.

Flu symptoms and complications from flu are a major contributor to NHS winter pressures: flu not only leads to increased expenditure on healthcare resources, including hospitalisations, but also to absence from work (including parents who may have to stay at home to look after their children) leading to lost income<sup>3</sup>.

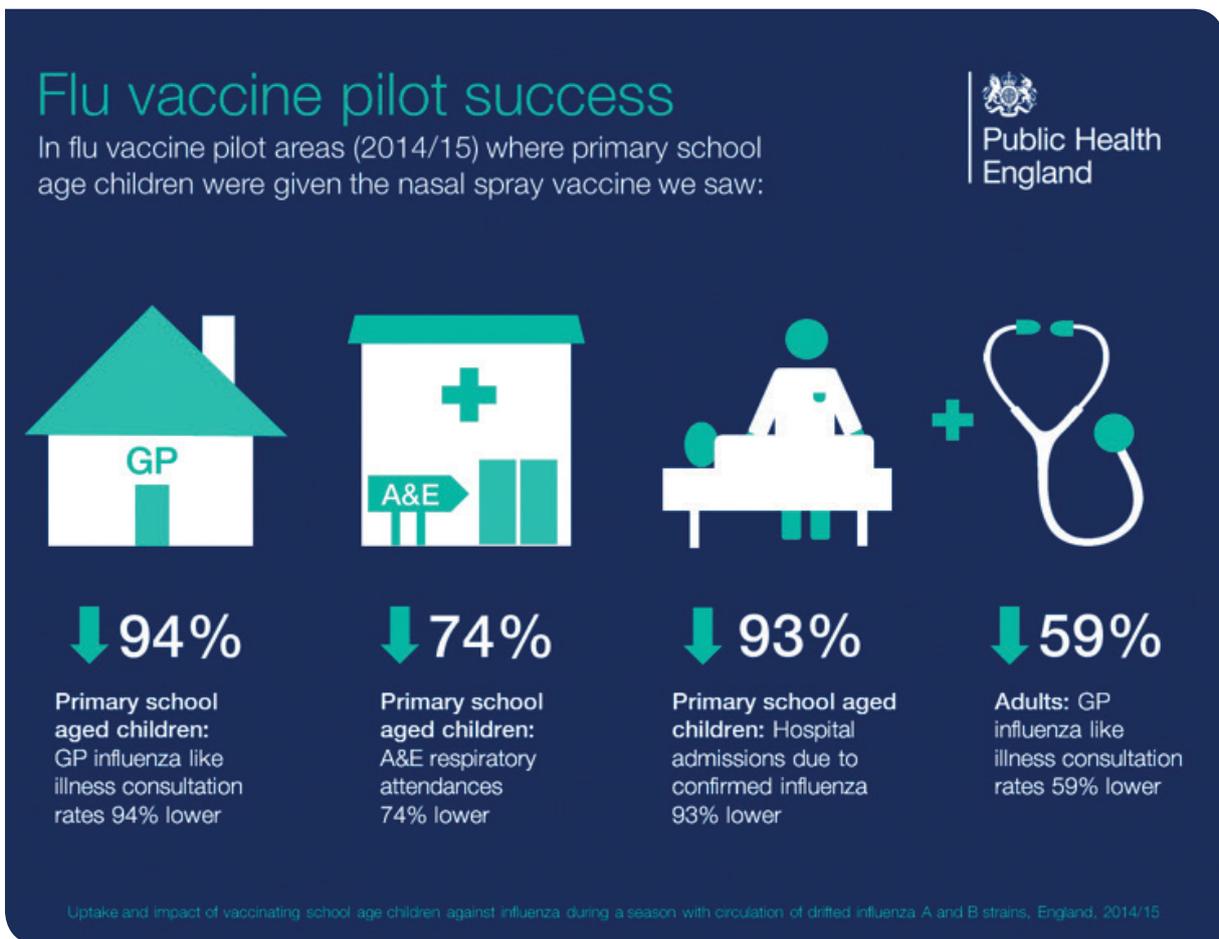


## Why vaccinate children?

Healthy under-5s are more likely to be admitted to hospital with flu than any other age group – and five times more likely than those age 65.

Young children are more likely to spread flu amongst themselves, parents and the wider community because they tend to have greater contact with others, and may not cover their mouths when coughing and sneezing or wash their hands enough<sup>4</sup>.

In pilot programmes, vaccinating all primary school children had a dramatic effect on the local health economy providing compelling evidence of the value of a comprehensive child flu immunisation programme.



*Crown Copyright Public Health England*

## The children’s flu vaccination programme

A children’s flu vaccination programme started in the 2013/2014 season. Since its launch, the age groups of children vaccinated has extended so that in 2015/16 all children aged 2 – 4 and in school years 1 & 2 are included.

For children, the vaccine is delivered by a simple nasal spray, it offers a high level of protection and the side effects are minimal. It has been used in the USA for over 10 years and has an excellent safety profile.



## Children's flu vaccine programme in the Oxford AHSN region

In the Oxford AHSN region, the children's flu vaccine was administered in both GP practices and schools, depending on the age of the child and the county, although in Oxfordshire only GP practices offered the vaccine. Uptake in Oxfordshire for Years 1 & 2 was lower than other areas in the AHSN geography (See Fig 2 on page 7).

Area/County	Provider for age 2, 3 and 4 years	Provider for year 1 and 2 in Primary school	Grade and type of staff in school based programme
Milton Keynes	General Practice - mainly administered by practice nurse	Vaccination UK Ltd. Private provider	Band 6 and 7 nurses administering vaccine
Oxfordshire		General Practice - mainly administered by practice nurse	N/A
Buckinghamshire		SHN immunisation team – distinct from SHN core team.	Band 5 nurse consenters and band 4 HCAs administering vaccine
Berkshire		SHN immunisation team – distinct from SHN core team.	Band 5 nurses administering vaccine

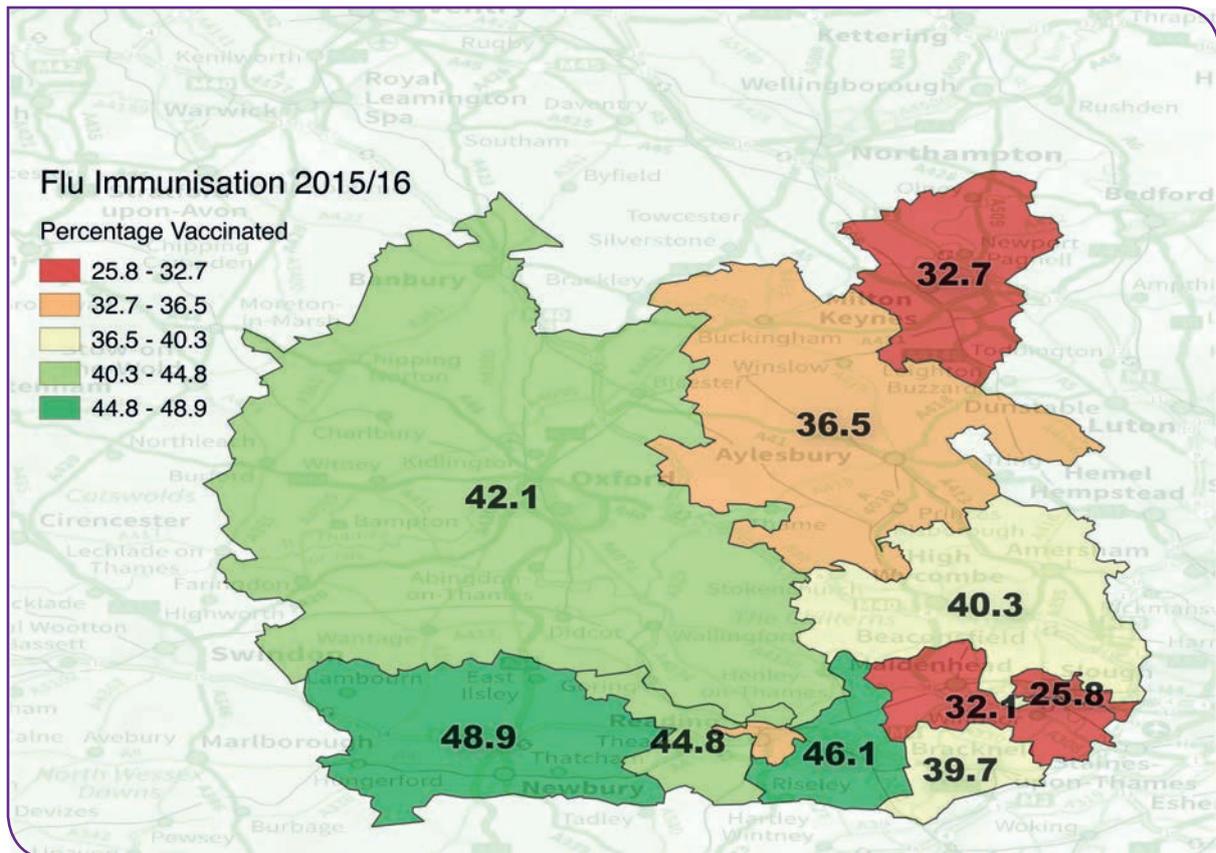
SHN – School Health Nurse HCA – Health Care Assistant



## How many children were vaccinated in the Oxford AHSN region?

The total numbers of children offered the flu vaccine in the Oxford AHSN geography increased ~ 45.5% in 2015/16 to ~ 161,034 from ~ 87,625 in 2014/15. These figures take into account the additional age range of children eligible for vaccination and the addition of Milton Keynes in to our project in 2015.

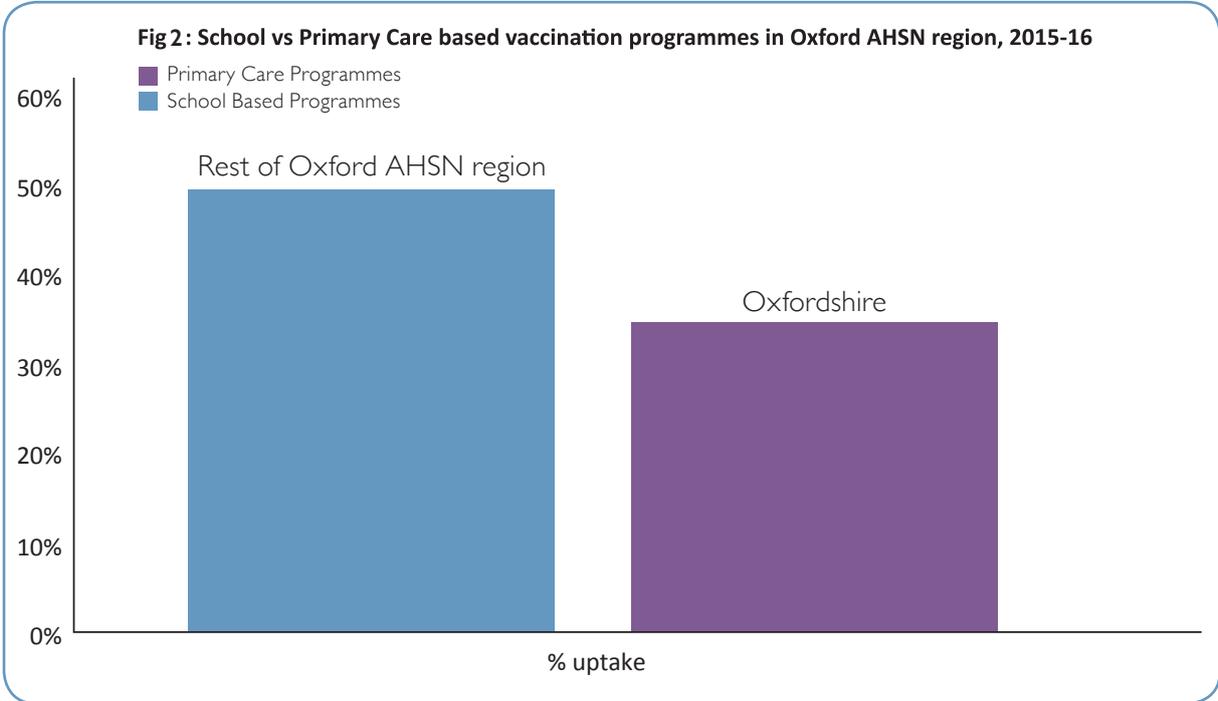
The breakdown of uptake by CCG for children aged 2, 3 and 4 is shown below. The variation in uptake ranged from 25.8% in Slough CCG to 48.9% in Newbury & District CCG.



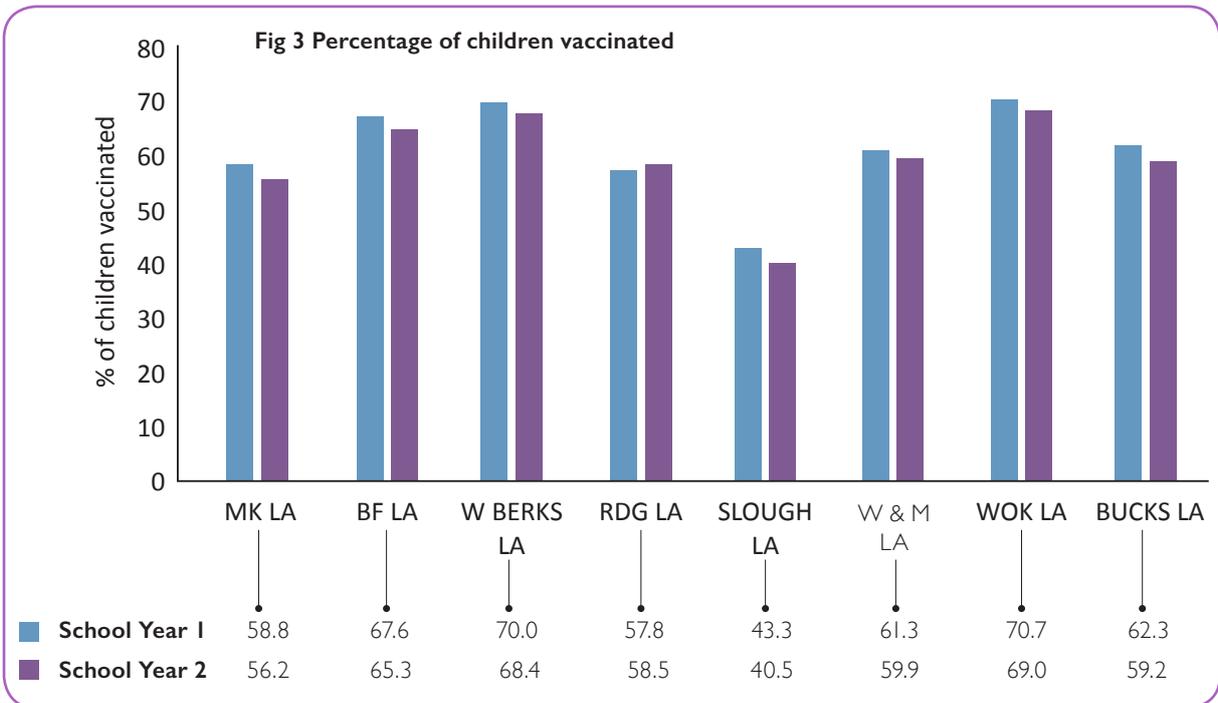


## The school-based immunisation programme

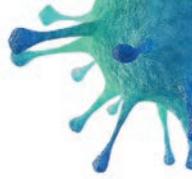
It is clear that, in common with other school-based immunisations, there is a greater uptake in that setting than if the vaccination is given by the GP practice. Percentage uptake of School vs Primary Care based vaccination programmes in the Oxford AHSN region, 2015-16 can be seen below:



The uptake in schools varied by local authority from about 42% in Slough to about 70% in Wokingham. The percentage of school children vaccinated by local authority is shown in figure 3, excluding Oxfordshire which was done in primary care.



MK: Milton Keynes, BF: Bracknell Forest, W Berks: West Berkshire, RDG: Reading, W & M: Windsor & Maidenhead, WOK: Wokingham, Bucks: Buckinghamshire local authorities.



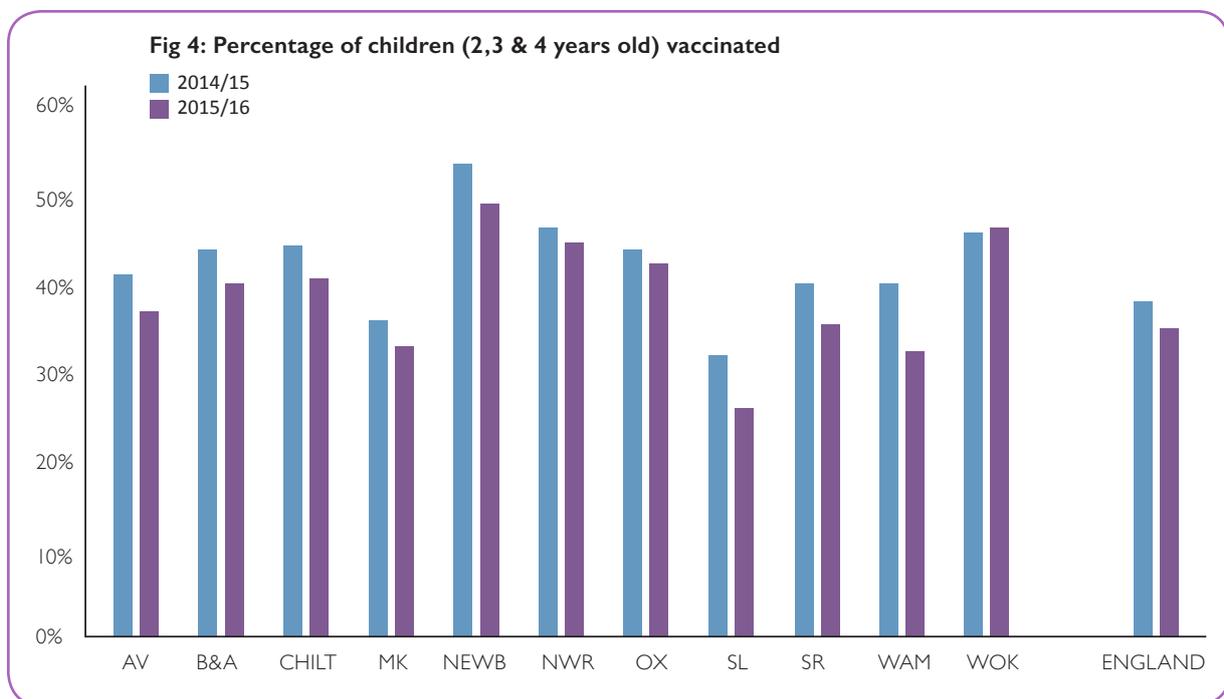
In line with the findings of the pilot studies<sup>5</sup>, if Oxfordshire has a school based programme for school children in 2016/17 this should further increase total numbers vaccinated.

## Vaccine uptake in children aged 2 – 4

Both nationally and locally, the percentage of children 2, 3 and 4 years old vaccinated has gone down for yet unknown reasons.

National research currently underway should help to provide answers for this decrease. However, the majority of CCGs in the Oxford AHSN geography are above the national average which is 37.5 % for 2014/15 and 34.4% for 2015/16 as shown in the last column in figure 4 (below).

Figure 4 shows the percentage variation in uptake from 2014/15 to 2015/16 for children aged 2, 3 and 4 years old in each CCG.



AV: Aylesbury Vale, B&A: Bracknell & Ascot, CHILT: Chiltern, MK: Milton Keynes, NEWB: Newbury, OX: Oxfordshire, SL: Slough, SR: South Reading, WAM: Windsor, Ascot & Maidenhead, WOK: Wokingham.



## Oxford AHSN – supporting the children’s flu vaccine

This is the second year the Oxford AHSN has supported the children’s flu vaccine, through its Children’s Network. Our aim is to reduce the incidence of flu in children and the wider community by improving uptake of the children’s flu vaccine.

We know this offers high rates of protection not just to children but also to the wider community, resulting in a decrease in GP consultations, A&E attendances and admissions to hospital.

### **This year the focus of our work has been to support flu stakeholders by:**

- Delivering education sessions for all those in contact with the eligible age groups
- Creating flu webpages on our website for easy access to the information and promotional material
- Holding a poster competition in schools to raise awareness of flu and the vaccine
- Collating best practice from high achieving general practices and tips from primary school vaccination sessions which were shared locally and also put forward for inclusion in national work by the children’s flu taskforce team (e.g. NICE guidance, national research).

**Full feedback on our work can be found on the Oxford AHSN Children’s Network flu web pages:**

<http://bit.ly/flu vaccine info>

## Plans for 2016/17

**To help support the Oxford AHSN region’s flu stakeholders in 2016/17 our plans are to:**

- Following positive feedback, maintain, update and publicise the flu web pages as a ‘one stop shop’ for resources and information about the children’s flu vaccination programme
- Continue to offer education and promotion sessions to a diverse range of stakeholders across the region but in particular to the areas of lowest uptake.



## Footnotes

<sup>1</sup><https://www.gov.uk/government/statistics/weekly-national-flu-reports>

<sup>2</sup>Pitman RJ, Melegaro A, Gelb D, Siddiqui MR, Gay NJ and Edmunds WJ. Assessing the burden of influenza and other respiratory infections in England and Wales. *The Journal of Infection*. 2007;54: 530-538

<sup>3</sup>Szucs T. The socio-economic burden of influenza. *J Antimicrob Chemother*. 1999; 44: Topic B 11–15.

<sup>4</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/316007/FluImmunisationLetter2014\\_accessible.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/316007/FluImmunisationLetter2014_accessible.pdf)

<sup>5</sup>[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/418428/Annual\\_flu\\_letter\\_24\\_03\\_15\\_\\_FINALv3\\_para9.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/418428/Annual_flu_letter_24_03_15__FINALv3_para9.pdf)



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