Addressing inequalities and increasing uptake

National Immunisation conference 2016

The 12th National Immunisation network meeting took place on the 26th -27th April 2016 to coincide with the WHO European Immunisation week (EIW) and World Immunisation Week. Thank you to those who came along, the event was a great success and we look forward to welcoming even more of you to next year’s event, dates for your diary will be announced shortly.

One the key themes for EIW was MMR uptake and this formed the basis of our social media awareness raising activity during this week, highlighting the amount of young people who have missed their MMR vaccination (see MMR section in this month’s update).

Key themes emerged from the two days including communication of new programme information, provision of vaccines and access to training and supporting resources. We heard from speakers from the screening and immunisation teams from across the country who shared their experiences and strategies for increasing uptake, addressing inequalities, implementing the extension to the childhood flu programme and delivering training.

We would like to take this opportunity to recognise the mammoth amount of work that has been completed during this year throughout England and to everyone who worked tirelessly to meet the challenging demands involved.

The shingles programme presents its own set of challenges here in England. How we improve uptake and increase opportunistic vaccination in that cohort is a subject that many of us seek to address so it was very interesting to hear from Javier Diez-Domingo, Director of the Vaccine Research Unit, Centre for Public Health Research, FISABIO, who introduced us to work that had been completed on the shingles programme in Spain.

It was excellent to see so many screening and immunisation team members engaged on the first day during the debate between Andrew Riordan and Anthony Scott (picture above with Adam Finn). Whether to offer routine varicella vaccination to children was the question. The topic provoked contentious lively discussion, and the audience were quick to respond to each strand of their well-presented arguments. Drawing the event to a close was our keynote speaker Robb Butler, programme manager from the WHO European office. His presentation was on effective communication for vaccine acceptance, sharing his experience from across Europe and beyond on dispelling myths regarding vaccine refusal and informing us about the ways in which different European programmes seek to overcome obstacles to vaccine acceptance.
We would like to congratulate all of you who submitted posters for the conference’s first poster display. Posters were displayed alongside new infographics celebrating the success of the new meningococcal vaccination programmes. We look forward to extending this part of the conference next year with a competition and prize for presenting the most well received poster.

Immunisation news

Reminder on administration sites for the four injectable vaccines at the 12 month routine visit

From this month, infants born on or after 1 May 2015 will be attending general practice for their routine 12 month appointments where, for the first time, immunisers will be administering four vaccine injections at the one visit as these infants become eligible for the MenB booster.

The schedule of routine childhood immunisations (from summer 2015), see web link 5, sets out the preferred sites for these four injections, i.e. upper arm or thigh for Hib/MenC, PCV and MMR; and left thigh for the MenB booster*. Injections should ideally be given in different limbs, or where this is not possible, injections in the same limb should be spaced 2.5cm apart. For more details see chapters 4 and 11 of the Green Book. All injectable vaccines are given intramuscularly unless otherwise stated.

*It is recommended that Bexsero® be given in the left thigh, ideally on its own, so that any local reactions can be monitored more accurately. If another vaccine needs to be administered in the same limb, then it must be given at least 2.5cm apart.

Some advice on reassuring parents on the administration of multiple injections to infants in one session was published in the March edition of VU (see web link 6).

Flu Vaccine Uptake Reports


Childhood flu vaccination programme

Following the start of the roll-out of the paediatric influenza vaccination programme in 2013-14 in the UK, the 2015 to 2016 winter season saw the successful roll out of the programme to children of school years 1 and 2 age across the United Kingdom. From September 2015, in addition to children two to four years of age vaccinated at GP practice, all healthy children of school years 1 and 2 age in England were offered influenza vaccination with LAIV.

For the majority of children this was offered via a school-based programme, although in a few areas vaccinations were delivered through alternative schemes such as pharmacies and GP practices. An estimated 716,928 children of school years 1 and
2 age (aged 5 & 6 years) in England received at least one dose of influenza vaccine during the period 1 September 2015 to 31 January 2016.

With an estimated total target population of 1,336,603, this resulted in an overall uptake of 53.6%. Total uptake in children of school years 1 and 2 age was 54.4% and 52.9% respectively. Uptake by region ranged from 59.1% to 41.6% with the highest uptake reported in the Midlands and East and lowest uptake reported in London. England uptake was highest in areas vaccinating children through schools at 55.6% uptake followed by GP and pharmacy delivery, at 32.9% and 16.1% uptake respectively. After this very successful national extension to primary school age children, the programme will be extended to all children of school year 3 in 2016-17.

**GP collection**

Although overall uptake has decreased in all cohorts; a broadly similar picture has been seen in the devolved administrations of Scotland, Wales and Northern Ireland. The reasons for the apparent decrease are likely to be multifactorial.

Vaccine uptake in those aged six months to under 65 years in one or more clinical risk group was 45.1% compared to 50.3% in 2014 to 2015, and ranged from 18.6 % in the six months to under two years age category to 48.1 % in the two to under five years age category. Patients with diabetes remained the highest uptake rate amongst the clinical at-risk groups.

Vaccine uptake in pregnant women decreased from 44.1% in 2014 to 2015 to 42.3% in 2015 to 2016, although the number of vaccinations in pregnant women has increased since last season, reflecting the large increase in denominator and highlighting the importance of ensuring patient records are kept up to date. Vaccine uptake in those aged 65 and over was 71.0% compared to 72.7% in 2014 to 2015, with less elderly persons reportedly vaccinated in 2015-16 compared to 2014-15. The reasons for this apparent decline remain unclear.

Finally ethnicity collected in 2015 to 2016 was published by PHE this year. 23% of GP registered patients had an active ethnicity code corresponding to the NHS standard of 2001 ONS Census categories. The highest uptake was in White-British and White-Irish with 27.8%. The lowest vaccine uptake was in Chinese with 8.4%. Such data is intended to help inform local vaccine programme planning.

Pharmacy vaccinations have recently been nationally commissioned. The development of improved data transfer will be important to ensure accurate and timely data is fed back into the GP record and to reduce the administrative burden on GP practices.

**HCWs Vaccine uptake 2015 to 2016**

The 2015 to 2016 influenza season recorded a seasonal influenza vaccine uptake of 50.6% (504,830 / 996,977) amongst HCWs in England. The overall response rate remained consistent with previous seasons at 100% (263/263).

The highest vaccine uptake reported by a trust was 83.5%, with 6.8% of all trusts achieving uptake rates of 75% or more. Whereas vaccine uptake aggregated by Area Teams ranged from 40.7% to 71.1%.
The vaccine uptake by trust type showed that the highest uptake rate was by Area Teams (from GP Practices and ISHCPs) (52.2%) and the lowest was by Ambulance NHS Trust (42.9%).

By staff group, the highest seasonal vaccine uptake was seen in GP practice nurses (65.2%) and the lowest uptake was amongst qualified nurses (excluding GP practice nurses) (44.9%). Similar uptake was seen by staff group in previous season 2014 to 2015, where GP practice nurses had the highest seasonal vaccine uptake.

Further work is required through groups such as Flu fighters to address these differences.

**Early estimates of MenB vaccine coverage are high**

Routine meningococcal B (MenB) immunisation for infants was introduced on 1 September 2015 for eligible infants born on or after 1st July 2015. The vaccine is offered alongside other routine immunisations at two and four months of age, with a booster dose at 12-13 months. A limited one-off catch-up programme was also delivered targeting infants born in May and June 2015. Preliminary estimates of MenB vaccine coverage for the first cohorts of children offered the vaccine when evaluated at six months indicate that this new vaccine is well accepted. High and increasing coverage has been achieved particularly for those offered the vaccine routinely, between January and April 2016 for both the first and second doses, as shown in Figure 1. The latest coverage in April 2016 were 95.5% for one dose and 87.9% for two doses.

**Figure 1. Monthly Meningococcal B vaccine coverage at 26 weeks of age for one dose and two doses, and the percentage of GP practices represented in data extraction: England, November 2015 to April 2016**

![Figure 1](image-url)

*Data from November 2015 represent the first catch-up cohort (born between 03/05/2015 – 01/06/2015), offered one dose of vaccine. Data from December 2015 represent the second catch-up cohort (born between 03/05/2015 – 01/06/2015), offered two doses of vaccine.

The full coverage report can be found at web link 1 and further immunisation information can be found in the "Immunisation against infectious disease" book (the green book – see web link 2), chapter 22.
Updated vaccine coverage estimate for 18-19 year olds offered MenACWY

Cumulative vaccine coverage estimates for the GP-delivered MenACWY vaccine for the first priority catch-up cohort, (currently aged 18-19 years, born between 01/09/1996 and 31/08/1997) was 35.2% at the end of March 2016. Unvaccinated individuals in this age group can still be protected against meningococcal W, as they continue to be eligible for vaccination until they reach age 25. From April 2016, the those aged 17 and 18 years olds (born between 01/09/1997-31/08/1998) who are leaving school in summer 2016 became eligible and will be invited by their GP for vaccination.

The full coverage report can be found at web link 3. Coverage estimates for the school-based routine and catch-up MenACWY programmes delivered in the 2015/16 academic year will be captured in an annual survey in September 2016 and are expected to be published in late 2016.

Shingles vaccination coverage

Following the successful introduction of shingles vaccination (Zostavax) in September 2013 in England, there has been a year on year decline in coverage in both the routine (70 year old) and catch-up (78 year old) cohorts. Shingles vaccination coverage is monitored monthly throughout the year and the latest provisional cumulative coverage estimates (September 2015 – February 2016) show 46.0% coverage in both the routine and catch-up cohorts. Compared with February 2015, coverage was lower by 2.7% for the routine cohort and by 2.1% for the catch-up cohort and compared with February 2014, coverage in the routine cohort is 4.5% lower (no equivalent catch-up cohort) (figures 2 and 3). See web link 4 for the full coverage report.

<table>
<thead>
<tr>
<th></th>
<th>Year 1 (2013/14)</th>
<th>Year 2 (2014/15)</th>
<th>Year 3 (2015/16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine (70y)</td>
<td>50.5%</td>
<td>48.7%</td>
<td>46.0%</td>
</tr>
<tr>
<td>Catch-up (78y)</td>
<td>N/A*</td>
<td>48.1%</td>
<td>46.0%</td>
</tr>
</tbody>
</table>

Table 1: Cumulative shingles vaccine coverage data, England, (September to February): 2013/14 to 2015/16.

*Coverage for the 2013/14 catch-up cohort are not shown as they were a different age cohort (79 years of age)

Shingles vaccination is commonly co-administered with the influenza vaccination during the influenza season (September – December) although, unlike flu vaccine, shingles vaccine can be offered all year round to eligible individuals. Coverage has plateaued after the influenza season in all years of the programme (figures 1 and 2 below). To curb this, in the final four months of the 2015/16 programme, it is important that general practices continue to offer the shingles vaccine to eligible patients in order to reduce the significant burden of disease associated with shingles among older adults in England.
Figure 1. Monthly cumulative shingles coverage in England for the routine (70 year old) cohort, September 2015 to February 2016, (year 3), with annual cumulative data for years 1 and 2 for comparison.

Figure 2. Monthly cumulative shingles coverage in England for the catch-up (78 year old) cohort, September 2015 to February 2016, (year 3), with annual cumulative data for year 2 for comparison.
**Who’s eligible for the shingles vaccine in 2015/16 and beyond?**

The chart below summarises the dates of birth and ages of those who are eligible for the shingles vaccination from 1 September 2015. Basically, all those aged 70 and 78 on this date are eligible, as are all those who were eligible in the previous two years but missed out on their vaccinations.

This tabulation is based on a chart available as a poster for those who would like to print it out (see Resources section. NB the new chart for 2016-2017 will be published in June).

<table>
<thead>
<tr>
<th>Date of birth †</th>
<th>Current age</th>
<th>First became or will become eligible</th>
<th>Eligible in 2015/16 Age in May 2016 to appear under Eligible in 2015/16</th>
</tr>
</thead>
<tbody>
<tr>
<td>On or after 1 September 1946</td>
<td>69 or under</td>
<td>2016/17 onwards</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1944 to 1 September 1945</td>
<td>70/71</td>
<td>2015/16</td>
<td>Yes</td>
</tr>
<tr>
<td>2 September 1943 to 1 September 1944</td>
<td>71/72</td>
<td>2014/15</td>
<td>Yes</td>
</tr>
<tr>
<td>2 September 1942 to 1 September 1943</td>
<td>72/73</td>
<td>2013/14</td>
<td>Yes</td>
</tr>
<tr>
<td>2 September 1941 to 1 September 1942</td>
<td>73/74</td>
<td>2020/21*</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1940 to 1 September 1941</td>
<td>74/75</td>
<td>2019/20*</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1939 to 1 September 1940</td>
<td>75/76</td>
<td>2018/19*</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1938 to 1 September 1939</td>
<td>76/77</td>
<td>2017/18*</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1937 to 1 September 1938</td>
<td>77/78</td>
<td>2016/17*</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1936 to 1 September 1937</td>
<td>78/79</td>
<td>2015/16</td>
<td>Yes</td>
</tr>
<tr>
<td>2 September 1935 to 1 September 1936</td>
<td>79/80</td>
<td>2014/15</td>
<td>Yes (but only up to 80th birthday)</td>
</tr>
<tr>
<td>2 September 1934 to 1 September 1935</td>
<td>80/81</td>
<td>2014/15</td>
<td>No</td>
</tr>
<tr>
<td>2 September 1933 to 1 September 1934</td>
<td>81/82</td>
<td>2013/14</td>
<td>No</td>
</tr>
<tr>
<td>On or before 1 September 1933</td>
<td>82 and over</td>
<td>Never have been eligible</td>
<td>No</td>
</tr>
</tbody>
</table>

* These are anticipated dates that will be confirmed nearer the time because they are dependent on vaccine supply and contractual negotiations
† inclusive
Resources

Protecting your baby against meningitis and septicaemia

Meningococcal C (MenC) vaccination programme

Information about changes

From 1st July 2016, the vaccination schedule for meningococcal C (MenC) is changing.

Meningococcal C (MenC) disease

Meningococcal C disease is a serious illness caused by the C strain of meningococcal bacteria. The success of the MenC vaccination programme means that there are almost no cases of MenC disease in infants and young children in the UK.

Vaccine programmes are regularly monitored and adapted to ensure they give your baby the best protection, when they need it most.

The infant dose of MenC that is normally given to your baby at three months old will now be removed from the schedule. All children will continue to be offered a combined Hib/MenC vaccine when they reach one year of age. This, along with the adolescent MenACWY vaccination, will help to provide protection across all age groups including infants and children.

REMINDER – changes to the meningococcal C (MenC) vaccination schedule from 1 July 2016

The infant dose of MenC that is normally given at three months of age will be removed from the childhood immunisation schedule from 1 July 2016. All children will continue to be offered a combined Hib/MenC vaccine when they reach one year of age. This, along with the adolescent MenACWY vaccination, will help to provide protection across all age groups including infants and children.

Further information can be found in the April edition of Vaccine Update (web link), and in the official guidance for professionals (web link).

A leaflet for parents will be available to order from the DH Orderline (web link) from 1 June, and available to download from the immunisation website (web link) from 26 May.

MMR leaflets and posters

We have developed a new range of MMR leaflets and posters and these will be available to order.

To subscribe to Vaccine Update: Click here
To order immunisation publications: Click here
For vaccine ordering and supply enquiries, email: vaccinesupply@phe.gov.uk
Call Ahead poster: A poster to alert young people to the need to call ahead if they suspect that they have measles (web link 18). This will help GP’s and clinics to determine if they need to be seen in surgery at a time when the immunocompromised and pregnant women are not likely to be exposed to the disease.

Think Measles poster: A poster to alert healthcare workers in a variety of settings including accident and emergency departments to the possibility of a young person presenting with symptoms that could be evidence of measles and the need to isolate them from immunocompromised patients and pregnant women (web link 19).

MMR young people leaflet: An MMR leaflet aimed at young people who for a variety of reasons may not have had their MMR vaccinations and explain the signs, symptoms and the need to have the vaccination (web link 20).

In addition we are developing a new general MMR leaflet and this will be available shortly. This will be a comprehensive guide to the MMR and will encompass all ages with key sections informing and reassuring parents about the efficacy and safety of the MMR vaccination.

Annual flu letter and flu plan
The following documents are being published today by the Department of Health (DH), NHS England, and Public Health England (PHE):

- The annual flu letter giving information about the annual flu immunisation programme for 2016/17. The only change this year is the addition of the offer of the live attenuated influenza vaccine to children of appropriate age for school year 3.
- The Flu plan for winter 2016/17 which sets out a coordinated and evidence-based approach to planning for and responding to the demands of flu across England.

Both the documents can be found at web link 7.

Resources to support the national flu immunisation programme
The following resources are being updated ahead of the flu season and will be available to order shortly:

- The flu vaccination winter 2016/17: who should have it and why
- To help you stop getting flu: information for people with learning disability

The leaflet ‘Flu, your pregnancy and you: what you need to know and do to protect yourself and your baby’ has been discontinued. The leaflet ‘Pregnant? There are many ways to help protect you and your baby’ should be ordered instead as it includes information about all immunisations in pregnancy including against flu, pertussis and rubella.

Resources to support extension of flu immunisation to children
Immunising primary school children against flu – briefing for head teachers and other school staff
Last year’s guidance for head teachers and other school staff has been updated.
It answers the most frequently-asked questions regarding the nasal spray flu vaccination being offered to all children in school years 1, 2 and 3, and in some parts of the country, all primary school aged children.

It’s available in pdf format for local downloading at web link 12.

Protecting your child against flu
This information leaflet for parents, which gives details about flu and the vaccination programme, has been updated for 2016/17. Hard copies are available for local areas to order from web link 13.

5 reasons to vaccinate your child against flu
An updated version of this poster, setting out the reasons for vaccinating children, is available for local areas to order from web link 14.

Flu immunisation consent form
Last year’s template form has been updated and is available for local areas to download and, if need be, modified to use locally at web link 15.

Letter templates to invite school-aged children for flu vaccination
Template letters for providers delivering flu vaccination for school-aged children are available to download from web link 16.

This year we have reduced the amount of information in the letters, based on insights from behavioural research which suggests that this will produce a better response.

European Immunisation Week 2016: Infographics
As part of WHO European Immunisation Week on 24-30 April 2016 a number of infographics were designed by the Immunisation department to highlight the impact of vaccines in England over the last century and to illustrate key facts about meningococcal disease and vaccines that have been introduced over the last year (see web link 17).

The two public health interventions that have had the greatest impact on the world’s health are clean water and vaccines.

World Health Organization

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Pre-vaccine</th>
<th>Post-vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>1942</td>
<td>50,804 notified cases in 1941</td>
</tr>
<tr>
<td>Pertussis</td>
<td>1957</td>
<td>92,407 notified cases in 1956</td>
</tr>
<tr>
<td>Measles</td>
<td>1968</td>
<td>460,407 notified cases in 1967</td>
</tr>
<tr>
<td>Hib</td>
<td>1992</td>
<td>862 notified cases in 1991</td>
</tr>
<tr>
<td>MenC</td>
<td>1999</td>
<td>883 notified cases in 1998/99</td>
</tr>
</tbody>
</table>

1. MenB
2. HbB/MenC
3. MenACWY

The battle against meningococcal disease

1. Meningococcal disease occurs as a result of an infection caused by meningococci bacteria
2. The bacteria cause two major illnesses:
   - Meningitis: inflammation of the membranes that surround and protect the brain and spinal cord
   - Septicaemia: blood poisoning
3. Vaccines work
   - Since the MenC vaccine was introduced in 1999, MenC disease has been virtually eliminated.

#EIW2016
Web links

web link 1  https://www.gov.uk/government/publications/meningococcal-b-immunisation-programme-vaccine-coverage-estimates
web link 3  https://www.gov.uk/government/publications/meningococcal-acwy-immunisation-programme-vaccine-coverage-estimates
web link 5  https://www.gov.uk/government/publications/routine-childhood-immunisation-schedule
web link 7  www.gov.uk/government/collections/annual-flu-programme
web link 8  https://www.gov.uk/government/publications/vaccine-update
web link 10  https://www.orderline.dh.gov.uk/ecom_dh/public/home.jsf
web link 13  https://www.gov.uk/government/publications/protecting-your-child-against-flu
web link 14  https://www.gov.uk/government/publications/five-reasons-to-vaccinate-your-child-against-flu
web link 17  https://www.gov.uk/government/collections/immunisation#infographics

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