



Welcome to the first issue of 2014 and a happy new year to you all. We start with an apology to all those practice nurses we inadvertently left out from the long list of health professionals we thanked for their efforts in delivering a record-breaking number of vaccine introductions last year. We have responded individually by e-mail and tweet to those who wrote in but to all practice nurses we offer our sincere apologies.

We fully recognise the central role that practice nurses play in delivering successful immunisation programmes and despite the challenges presented by the reorganisation of the NHS, the immunisation programme in England has been able to deliver four new programmes and achieve very good coverage, with evidence of impact on disease already being shown.

These results are only possible because of the hard work of all those working in the field, in particular the high quality primary care staff. Needless to say, we will endeavour to ensure that all the important groups, including practice nurses, are fully acknowledged in future communications.

## Immunisation news

### No need for pregnant women to be perturbed by pertussis vaccination

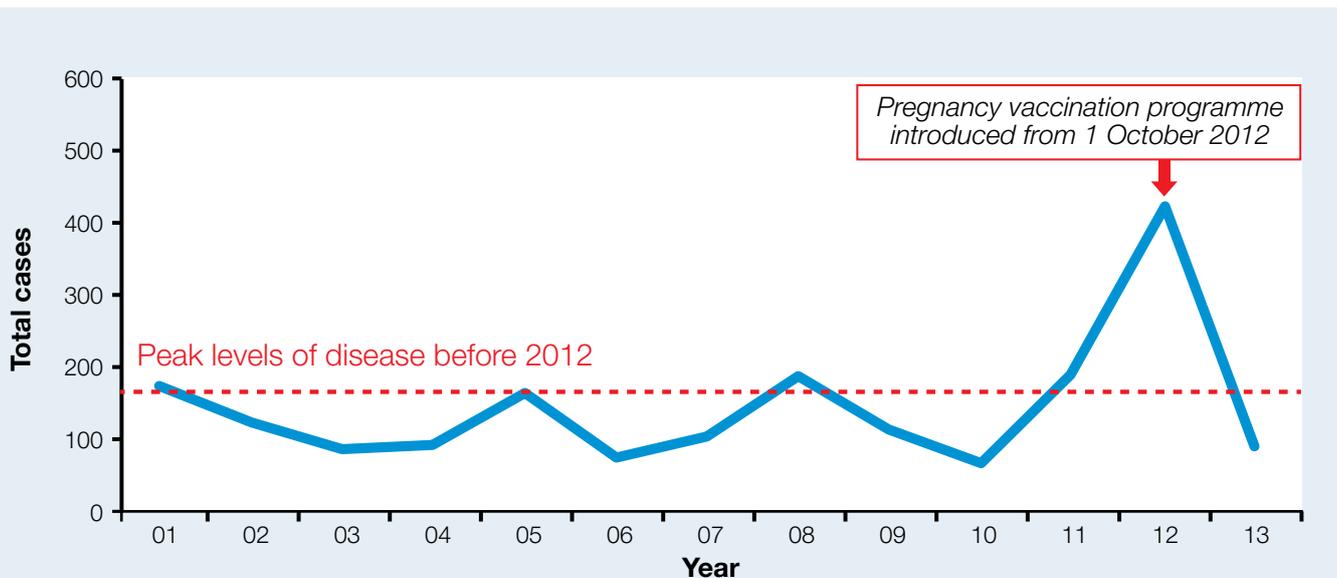
Stories have been circulating in social media from some women who are concerned about having the pertussis vaccination during their pregnancy. The pertussis vaccine in pregnancy programme offers women a safe way to protect their baby against this serious disease. It is therefore very important that immunisers provide information and reassurance to pregnant women by discussing the following points:

- the pregnancy programme has been in place since 1 October 2012 and has been shown to be very effective in protecting babies until they can have their first vaccine at two months of age (see graph, next page)
- whooping cough levels are still high in older age groups so it's important that babies continue to be protected (see [web link 1](#))
- during 2012, 14 babies died from whooping cough before they could be protected by the vaccination programme, but there were only two infant deaths from whooping cough in 2013 in babies whose mothers had not been vaccinated (see [web link 2](#))
- a study of 20 000 vaccinated women by the Medicines and Healthcare Products Regulatory Agency found no evidence of risks to pregnancy

- over half of all pregnant women in England were vaccinated last year (see [web link 3](#))
- the vaccine is routinely offered during pregnancy in the United States and New Zealand

## Background information

Pertussis (whooping cough) is a serious infection of the lungs, especially in young babies in whom complications from pertussis can lead to death. See [web link 4](#) for a short video on what whooping cough can be like in a young baby.



### Laboratory confirmed cases of pertussis in infants under three months of age in England and Wales

This graph shows the impact of the vaccination in pregnancy programme, with the number of cases of whooping cough in young babies dropping dramatically since its introduction. However, the disease continues to circulate in older age groups so it's important that pregnant women get vaccinated at the recommended time at the earliest opportunity. The graph also nicely shows the cyclical nature of the disease.

Pertussis is a cyclical disease with waves of increased activity every three or four years. Although the reasons for this are not clear, we experienced an unusually high peak of infections in 2012 with increased activity in all age groups including young babies. High levels of pertussis in teenagers and adults continued into 2013.

To protect babies from birth it is therefore recommended that women are vaccinated against pertussis between weeks 28 and 32 of pregnancy, although the vaccine can be given up to week 38. This is to generate high levels of antibodies against pertussis in the mother which then cross the placenta to passively protect the baby when it is born. Vaccinating the baby at birth would not offer immediate protection as he or she responds to the vaccine over a number of days and high levels of protection are only achieved after two or more doses have been given.

The vaccination also protects the mother who cannot then infect her baby.

For more general information on the programme, see [web link 5](#).

On the advice of the Joint Committee on Vaccination and Immunisation, this programme will continue into 2014 and like all vaccination programmes will be kept under review until further notice, see [web link 6](#).

## Flu vaccine uptake in December

The data covering GP patients and frontline healthcare workers (HCWs) are available at [web link 7](#). The improved performance for HCWs is very encouraging but is still a long way off what's desirable. The figures for two- and three-year-olds are also encouraging given that this is the first year all of them have been offered the vaccine.

So far this year, the incidence of influenza-like illnesses in the UK is relatively low, while in America and Europe they have much higher rates – see [web link 8](#) and [web link 9](#) respectively. Could this be because we're now immunising a larger proportion of our population overall and in a more organised way? But there's no room for complacency - flu continues to circulate here and is starting to increase as we go to press - so everyone who is eligible and hasn't been vaccinated should be encouraged to make an appointment as soon as possible.

## NHS Employers show how to increase vaccine uptake in HCWs

NHS Employers has issued a list of top tips for trusts aiming to increase their staff flu vaccination figures which is now available to view on at [web link 10](#). They also plan to publish a series of case studies in March showcasing trusts that have achieved high uptake or improved dramatically from previous years. These case studies will complement a series of workshops run by NHS Employers in March and April, evaluating the 2013/14 season and planning for the 2014/15 season. For further information please contact a member of the team at [flufighter@nhsemployers.org](mailto:flufighter@nhsemployers.org)

## Children flu pilots take off

The enthusiasm, commitment and sheer hard work displayed by the staff of seven pilot studies in trialling the administration of the nasal flu vaccine to school children aged four to ten have provided encouraging results as we move to extend the reach of the programme.

The pilots that ran in Leicester City, East Leicestershire and Rutland; London Borough of Newham; South East Essex; London Borough of Havering; Bury; Cumbria, and Gateshead, were set up to assess workload, uptake and logistics of delivery in a variety of settings to inform planning of the programme roll-out. They are all working on their final reports and the information provided and lessons learned will be collated into a PHE publication which will be made available via the website. Further details will be provided in the next edition of Vaccine Update.

Pilots were also carried out in Scotland, Wales and Northern Ireland.

## Why are we vaccinating student freshers against meningitis C this year?

The following ten points explain the rationale behind this programme that will run from 2014 to 2018.

- In 1999 and 2000, the MenC vaccination programme was introduced for babies, with a catch-up campaign for those aged up to 18 years.
- The catch-up campaign was later extended to include those aged up to 25 years.
- Follow-up of those vaccinated showed that protection was initially very good.
- The vaccine has continued to work well in those vaccinated at an older age (i.e. those born before 1995 and therefore over five years of age when the campaign started), and it also reduced carriage of MenC in the nose and throat.
- Because of this, numbers of cases declined to very low levels and have remained low since.
- However, more recent follow-up has shown that protection declines more quickly in those vaccinated at a younger age (i.e. those born after 1995 and therefore under five years of age when the campaign started), which means they may have become susceptible to infection.
- These children are now teenagers – aged 15 to 18 years - and many of them are about to enter university from this year and up until 2018.
- The freshers' vaccination is therefore aimed at offering protection to these students because the meningococcal C infection spreads quickly where young adults are living closely together in halls of residence for the first time.
- Children and younger teenagers (i.e. those who were first vaccinated as babies after 1999/2000) will also need protection. A MenC booster vaccination is therefore being introduced for teenagers aged 13 to 14 years. This means that by 2019 all those whose immunity has decreased will get a booster before they start university and so won't need a freshers' vaccination.
- Vaccinating this age group should also ensure that carriage does not increase and therefore that the risk of catching MenC remains very low for all children and adults.

## Porcine gelatine in vaccines

Following on from parental concerns about porcine-derived products in the children's flu vaccine (see [web link 13](#)), some health professionals are now reporting that a number of parents are asking about the routine primary immunisations for their babies. None of the vaccines given to babies at two, three and four months of age contains porcine gelatine nor those given between 12 and 13 months, except the MMR vaccine, MMRVaxPro, which the Summary of Product Characteristics (SPC) states contains hydrolysed gelatine. The SPC for the other MMR vaccine, Priorix, currently available from Public Health England, indicates that it does not contain gelatine. Both vaccines are safe and effective and have an excellent record in preventing measles, mumps and rubella. Parents requiring further information on this topic should be directed to [web link 13](#).

## Date for your diary at the Kia Oval, London

### Diseases in pregnancy

On 20 February, the Infectious diseases in pregnancy screening programme is holding a one-day multidisciplinary event called Achievements and aspirations.

Delegates will be discussing screening and immunisation strategies in particular around measuring outcomes from the hepatitis B vaccination of exposed infants and a planned approach to reducing susceptibility to rubella in pregnancy. For more information and/or to book a place as a delegate see [web link 11](#).

### MenC adolescent dose read codes

Many areas are already giving the MenC adolescent dose. There have been a number of queries relating to the 'read code' to be used when giving and recording this vaccine for this cohort. Read codes facilitate modern electronic communication, support patient records and public health activity reporting. Public Health England advises that the existing MenC read codes can be used and the data will be extracted on the basis of one of these codes being used after the recipient is aged 10 years or over.

## Monthly myth buster

We often hear of stories that are circulating in the general population and even among health professionals that are simply just wrong. So we are introducing this regular item where the myth is busted. If you hear of any, we'd be pleased to report them to put the record straight.

This month's is that the flu vaccine causes flu – it doesn't because it can't. The viruses in the vaccine have been inactivated (except the nasal vaccine, which is live but the viruses in it have been weakened or attenuated to prevent them causing flu). The vaccine may be associated with transient, mild, flu-like symptoms but these are nothing compared with a serious bout of flu. So everyone who is eligible, including health professionals, should have the flu vaccine to protect them against flu so that they don't pass it onto their relatives, friends, colleagues or patients.

## Vaccine wastage

This month's tip is to rotate your vaccine stocks so that the oldest stocks, i.e. those with the 'youngest' or 'nearest' use-by date, are always at the front of the fridge. This means that as new stock arrives it should be put towards the back of the fridge and brought forward as the older stock is used. This will help prevent disposal of vaccines that should be used before going past their use-by date. Any stock which has expired should be disposed of (please see section on Fluenz below).

## Vaccine supply

### Fluenz no longer available to order

Fluenz for the 2013/14 children's flu programme for two- and three-year-olds is no longer available to order through ImmForm. The Fluenz supplied for the programme has expiry dates of 18, 23 and 24 December 2013, the 13, 14, 15 and 16 January 2014 and 5 February 2014. Please ensure you check the vaccine is within its expiry date before using it. If you need to give a second dose of Fluenz four weeks after the first dose (for example, for children in clinical risk groups aged two to under nine years who have not received influenza vaccine before) but your vaccine expires before that date, then it is safe and effective to give inactivated vaccine as a second dose.

Expired Fluenz should be disposed of in line with local policies. Please report any disposal through ImmForm's stock incident capture using the reason: Fluenz vaccine expired before it could be used, to help us evaluate the amount of unused vaccine (see [web link 12](#))

### Infanrix IPV not available

Infanrix is currently unavailable to order through ImmForm. Repevax remains available and can be used for both the infant programme and pregnant women programme.

### Typhoid vaccines

Sanofi Pasteur MSD continues to have limited stock of their typhoid vaccine, Typhim Vi. Alternative vaccines Typherix and Hepatyrix (combined hepatitis A and typhoid vaccine) manufactured by GlaxoSmithKline (GSK) continue to remain unavailable until Q4 2014.

Vivotif is currently available to order from Janssen-Cilag Ltd. Orders can be placed on 0844 800 3907.

## Viper anti-venom Lot No. 188, expiring at the end April

European viper venom antiserum from Lot No. 188, will expire on 30 April 2014; this stock is currently still being issued. This antiserum can be used up until the expiry date and stocks are available to replace any antiserum that needs to be disposed of in May.

## Varicella vaccine

GSK has experienced a delay in the production of their varicella vaccine, Varilrix. It is anticipated that Varilrix will be available to order again from mid-April onwards. GSK will provide an update as soon as further information is available.

## Havrix and Twinrix hepatitis vaccines shortages

We have been informed by GSK that due to unusually high market demand during the winter season, Havrix Adult Single pre filled syringe (PFS) and Twinrix Adult (x10 PFS) will be in short supply until late January 2014 and early March 2014 respectively.

Havrix Adult in a presentation of x10 PFS remains available. Twinrix Adult Single PFS is also available, but the number of doses per customer is being restricted until further notice. Supplies of other hepatitis A and B containing vaccines are also available in the UK from alternative manufacturers.

## Web links

- web link 1** <https://www.gov.uk/government/speeches/renewing-the-fight-against-whooping-cough>
- web link 2** [https://www.cas.dh.gov.uk/ViewAndAcknowledgment/viewAttachment.aspx?Attachment\\_id=101555](https://www.cas.dh.gov.uk/ViewAndAcknowledgment/viewAttachment.aspx?Attachment_id=101555)
- web link 3** <https://www.gov.uk/government/publications/pertussis-vaccine-uptake-in-pregnant-women-october-2012-to-september-2013>
- web link 4** <http://www.youtube.com/watch?v=X8yUSV4oqoU>
- web link 5** <http://www.ovg.ox.ac.uk/pertussis-whooping-cough>
- web link 6** [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/197839/130510\\_Pertussis\\_continuation\\_letter\\_FINAL.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/197839/130510_Pertussis_continuation_letter_FINAL.pdf)
- web link 7** <https://www.gov.uk/government/collections/vaccine-uptake>
- web link 8** <http://www.cdc.gov/flu/weekly/index.htm#OISmap>
- web link 9** [http://www.ecdc.europa.eu/en/publications/\\_layouts/forms/Publication\\_DispForm.aspx?List=4f55ad51%2D4aed%2D4d32%2Db960%2Daf70113dbb90&ID=1005&RootFolder=%2Fen%2Fpublications%2FPublications&Web=270275b7%2D419a%2D4352%2Da8fb%2Df0c757d92e66](http://www.ecdc.europa.eu/en/publications/_layouts/forms/Publication_DispForm.aspx?List=4f55ad51%2D4aed%2D4d32%2Db960%2Daf70113dbb90&ID=1005&RootFolder=%2Fen%2Fpublications%2FPublications&Web=270275b7%2D419a%2D4352%2Da8fb%2Df0c757d92e66)
- web link 10** [http://www.nhsemployers.org/HealthyWorkplaces/StaffFluVaccination/Latest-news/Pages/top\\_tips\\_from\\_high\\_performing\\_trusts.aspx](http://www.nhsemployers.org/HealthyWorkplaces/StaffFluVaccination/Latest-news/Pages/top_tips_from_high_performing_trusts.aspx)
- web link 11** [www.phe-events.org.uk/idps](http://www.phe-events.org.uk/idps)
- web link 12** <https://vaccinesupply.immform.dh.gov.uk/Incident/StockIncident.aspx>
- web link 13** <https://www.gov.uk/government/news/vaccines-and-gelatine-phe-response>