

From the Acting Chief Medical Officer
Dr Ian Carson



Department of
**Health, Social Services
and Public Safety**

An Roinn

**Sláinte, Seirbhísí Sóisialta
agus Sábháilteachta Poiblí**

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HSS(MD)2/2006

To:

Chief Executives, HSS Boards and Trusts
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Director of Nursing, HSS Boards
Directors of Pharmaceutical Services, HSS Boards/Trusts/ CSA
GP Medical Advisers, HSS Boards
Consultants in Communicable Disease Control, HSS Boards
All Community Pharmacists
Medical Directors, HSS Trusts (*for onward distribution to all Consultants*)
Nursing Directors, HSS Trusts (*for onward distribution to all Community Nurses*)
All General Practitioners (*for onward distribution to practice staff including practice nurses*)
Regional Epidemiologist, CDSC (NI)
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Your Ref:

Our Ref: HSS(MD)2/2006

Date: 8th February 2006

Dear Colleague

CHANGES TO THE CHILDHOOD IMMUNISATION PROGRAMME

The purpose of this letter is to give you advance notice of DHSSPS plans to introduce important changes to the routine childhood immunisation programme later this year. These changes will ensure that children in Northern Ireland have the best possible protection against vaccine preventable diseases. We propose to introduce these changes in the summer and a firm date will be announced as soon as vaccine supply and other issues have been finalised. A further more detailed letter, with supporting documentation, will follow nearer the time of the changes.

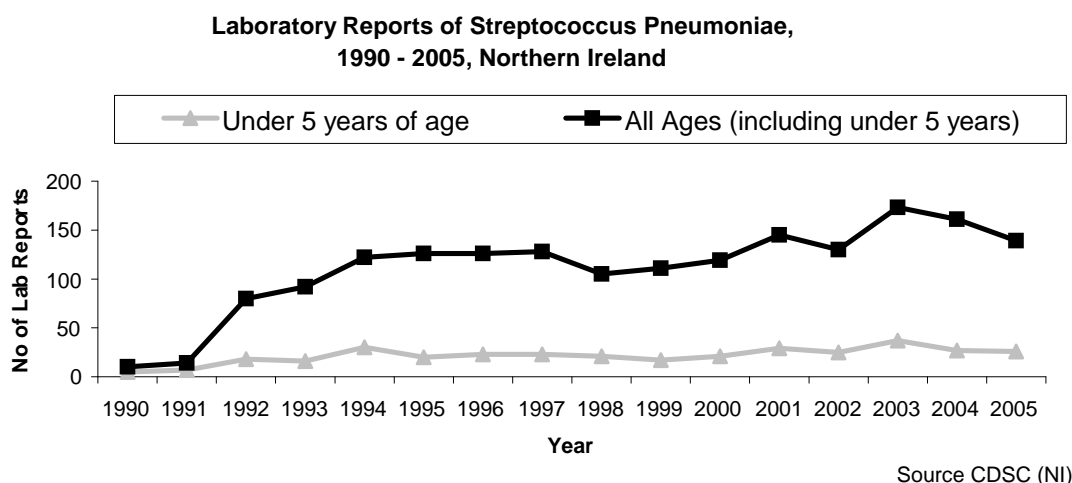
The proposed changes, recommended by the Joint Committee on Vaccination and Immunisation, are as follows:

- the introduction of a new vaccine to protect against pneumococcal infection;
- a pneumococcal vaccination catch-up programme;
- amending the Meningitis C vaccination schedule to give two doses of vaccine in the first year of life, and a booster dose in the second year;
- the addition of a booster dose of Hib vaccine in the second year of life.

Vaccination against pneumococcal infection

1. Pneumococcal infection is most common in babies, young children and the elderly. There are around 5000 cases of invasive pneumococcal disease in England and Wales each year, around 530 of these in children under 2 years. Around one third are cases of pneumococcal meningitis. Estimates vary but around 50 children under two years of age will die from invasive pneumococcal disease each year (Ispahani P *et al.* 2004, www.hpa.org.uk/infections/topics_az/pneumococcal/menu/htm). Two thirds of these deaths are from pneumococcal meningitis¹. In addition, up to 50% who survive pneumococcal meningitis will be left with permanent disabilities including deafness, cerebral palsy or blindness (Bedford *et al.*, 2001). Data on the numbers of invasive pneumococcal infections in Northern Ireland are shown in Figure 1. While these figures are low they represent the most severe cases only. Pneumococcal infection is also responsible for ear, throat and chest infections in young children.

Figure 1



2. A pneumococcal conjugate vaccine (Prevenar^{®2} ▼) will be introduced into the routine immunisation programme. The vaccine protects against seven common strains of pneumococcal bacteria that are responsible for around 82% of IPD in young children. The vaccine is licensed for use in children from two months of age. Prevenar^{®2} has been used in the USA since 2000. Since its introduction in the USA, the incidence of IPD caused by the seven serotypes in the vaccine fell by 94% in children under five years of age in the first four years of the programme, and also by 62% in individuals aged five and over (CDC, 2005). The significant decline in IPD in individuals who have not been vaccinated, points to a more widespread population effect, similar to the UK experience after the introduction of meningococcal C vaccination.

Prevenar will be offered routinely to children at two, four and 13 months of age.

¹ These figures are based on national surveillance data for England and Wales and published regional studies. It is not possible to provide exact figures for invasive pneumococcal disease because not all cases of pneumococcal infection are reported as such.

² Prevenar[®] and Prevnar[®] are the trade names for pneumococcal vaccine in the UK and the USA respectively.

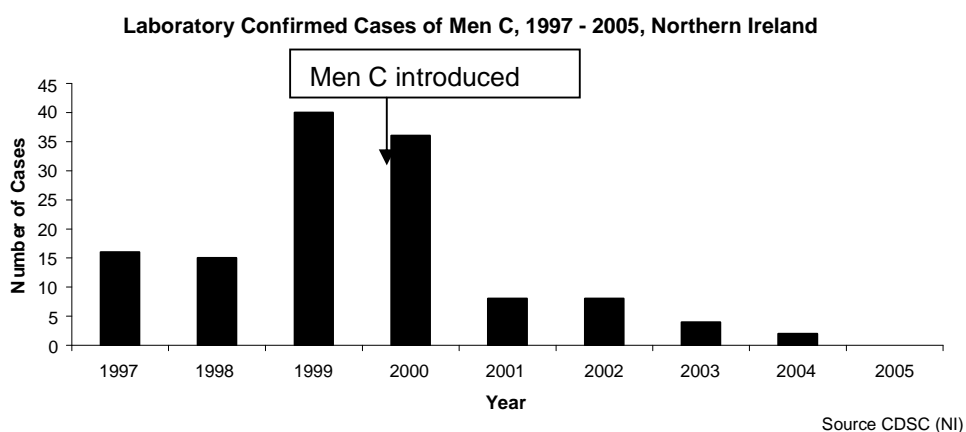
Proposals for a Pneumococcal Vaccination Catch-Up Programme

3. A catch-up programme will be introduced to ensure that children up to two years of age, who are at most risk from pneumococcal infection, will also be offered vaccination.

Meningococcal C (Men C) Vaccination

4. The Men C vaccination schedule will be amended to include a dose of Men C vaccine in the second year of life. The Men C vaccine programme has been a major public health success. Meningococcal C infection used to be a significant cause of morbidity and mortality in children. Figure 2 illustrates the impact that Men C vaccination has had in Northern Ireland with reductions of over 90% since 2000. Two doses of MenC vaccine will now be given in the routine immunisation schedule in the first year of life. Research has shown that two doses of MenC vaccine provide the same level of protection as three doses in the first year of life (Southern J *et al.*, 2006). A MenC booster dose will now be offered in the second year of life in order to extend protection against this serious disease through the early childhood years. The booster dose will be given as a combined Hib/MenC vaccine.

Figure 2

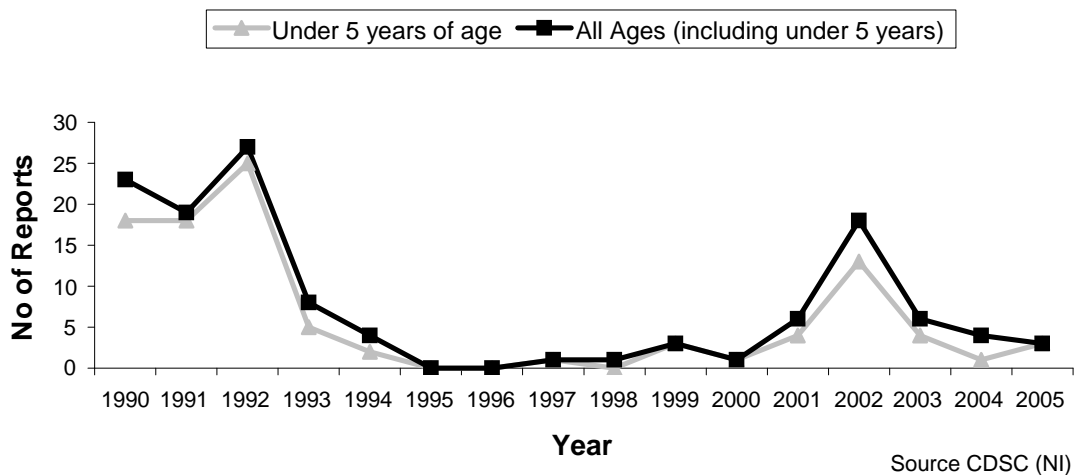


Addition of a Hib Booster Vaccine

5. The introduction of Hib vaccination in 1992 resulted in a huge reduction in Hib disease in children, in cases of Hib Meningitis and in deaths. This vaccination programme is another public health success story. The impact on the epidemiology of Hib disease in Northern Ireland is shown in Figure 3. In 2000 we began to see small increases in the levels of Hib disease which were successfully reversed through a Hib catch-up programme implemented in 2003 and rates of this disease are now back to low levels (See Figure 3). Importantly the Hib catch-up programme also reduced the incidence of Hib disease in older children. In order to ensure protection against Hib disease is maintained throughout early childhood and hence reduce the risk of a resurgence of the disease in future a Hib booster is being introduced in the 2nd year of life. The booster dose will be given as a combined Hib/Men C vaccine.

Figure 3

**Laboratory Reports of Haemophilus Influenzae Type B
1990 - 2005, Northern Ireland**



Why Are These Changes Being Made?

- The changes to the immunisation schedule are being made following the recommendations of the Joint Committee on Vaccination and Immunisation (JCVI). Further information on the evidence base for these recommendations is available at www.advisorybodies.doh.gov.uk/jcvi/minutes.htm. The new vaccine schedule is outlined below:

Proposed New Vaccination Schedule

The new routine vaccination schedule will be:

Age at vaccination	Vaccine
2 months	DTaP/IPV/Hib + pneumococcal vaccine
3 months	DTaP/IPV/Hib + MenC vaccine
4 months	DTaP/IPV/Hib + MenC + pneumococcal vaccine
12 months	Hib/MenC
13 months	MMR + pneumococcal vaccine

This new schedule is significantly different from the current schedule because of the need to accommodate these improvements to the immunisation programme. The changes are essential in order to maximise the protection children are offered against vaccine-preventable diseases.

- Questions may be raised about the administration of three injections at the four-month visit. It is important to ensure that babies are protected as early as possible against serious disease. The above schedule achieves this aim and has been tested with parents.

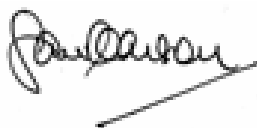
It is important to stress that there is no scientific or medical evidence to suggest that multiple immunisation overloads the immune system of infants. This schedule has been tested in the UK, in addition to the experience from the US where Prevnar® has been given at the same time as DTaP, IPV, Hib, Hepatitis B and MMR vaccines. Further information on the ability of the infant immune system to respond to multiple vaccines can be found in Offit *et al.*, 2002, and Immunisation Information Factsheets (Department of Health, 2004)

8. The date for these changes to the programme is yet to be finalised but we hope to introduce the changes in Summer 2006 once we have resolved issues around vaccine supply. The planning work for these changes is now being initiated and we will be working closely with all relevant committees and health professionals on this work programme over the coming months.

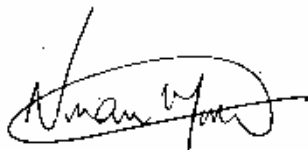
Actions Required Now

9.
 - **Boards, Trusts and Primary Care Practices** should begin to consider how local services can be modified to accommodate an additional vaccination visit at 12 months in the routine programme.
 - **Boards, Trusts and Primary Care** should begin to make plans for implementing a pneumococcal vaccination catch up programme later this year.
- 10 The Childhood Immunisation Programme in Northern Ireland continues to deliver significant public health benefit in this country and is one of the most successful immunisation programmes in the world. It ensures our children are able to have the best start in life. The role played by GPs, Practice Nurses and Health Visitors in implementing these immunisation programmes and sustaining high uptake rates is essential and we are grateful for your efforts and support in delivering these programmes.

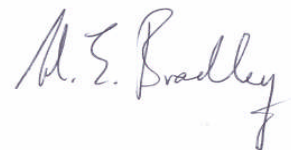
Yours sincerely



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Chief Medical Officer (Acting)



Dr N Morrow
Chief Pharmaceutical Officer



Mr M Bradley
Chief Nursing Officer

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Dr J Mairs, Regional Procurement Pharmacist
Local Health & Social Care Groups – Chairs/Managers
Dr B Dunn, Chair, GPC, BMA
Dr B Gaffney, Chief Executive, HPA NI
Mr P Maguire, Information Office, DHSSPS
Ms C Baxter, Information Office, DHSSPS
Members of the RACDC Regional Immunisation Committee

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This letter is available at www.dhsspsni.gov.uk and also on the DHSSPS Extranet which can be accessed directly at <http://extranet.dhsspsni.gov.uk> or by going through the HPSS Web at <http://www.n-i.nhs.uk> and clicking on DHSSPS.