Department of Health

Richmond House
79 Whitehall
London
SW1A 2NS

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Dear Colleague

Planned changes to the routine Childhood Immunisation Programme

This letter provides advance notice of the Department of Health's plans to introduce important changes to the childhood immunisation programme that will start later this year. These changes will ensure that young children in this country are offered the best protection against serious 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 Chief Medical Officer/Chief Nursing Officer/ Chief Pharmaceutical Officer letter, with supporting documentation, will follow as soon as possible.

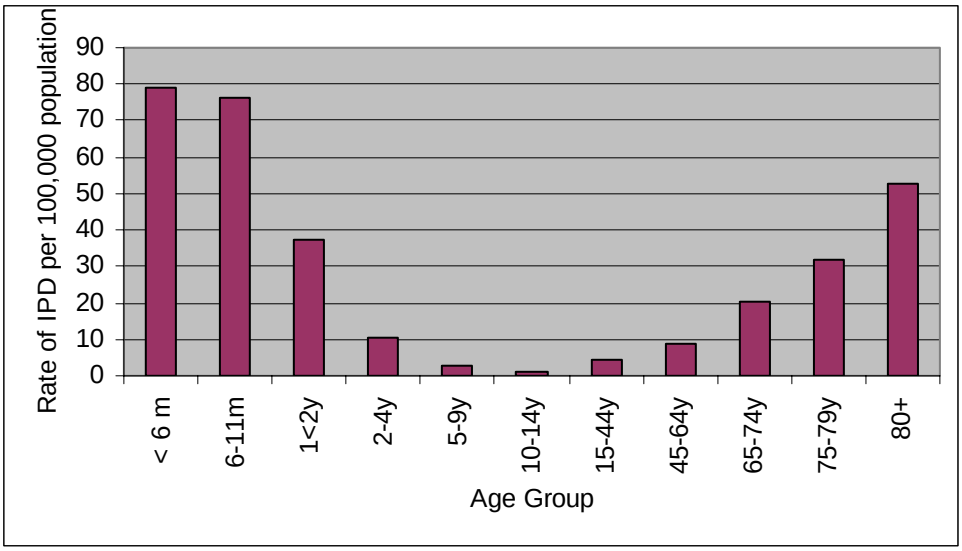
The proposed changes, recommended by the Joint Committee on Vaccination and Immunisation (JCVI), are:

- the introduction of a new vaccine to protect against pneumococcal infection;
- a pneumococcal vaccination catch-up programme;
- amending the MenC 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

Pneumococcal infection is most common in babies, young children and the elderly (see Fig 1). 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 meningitis[1]. 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).



Source: Health Protection Agency, Centre for Infections

Figure 1 Invasive pneumococcal disease (IPD) rates by age per 100,000 population per year

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 in England and Wales. The vaccine is licensed for use in children from two months of age.

Prevnar®[2] has been used in the USA since 2000. Since its introduction, the incidence of IPD caused by the seven serotypes in the vaccine has fallen by 94% in children under five years of age and 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.

When it is introduced in England, Prevenar® will be offered routinely to children at two, four and 13 months of age.

Pneumococcal vaccination catch-up programme

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 the vaccine.

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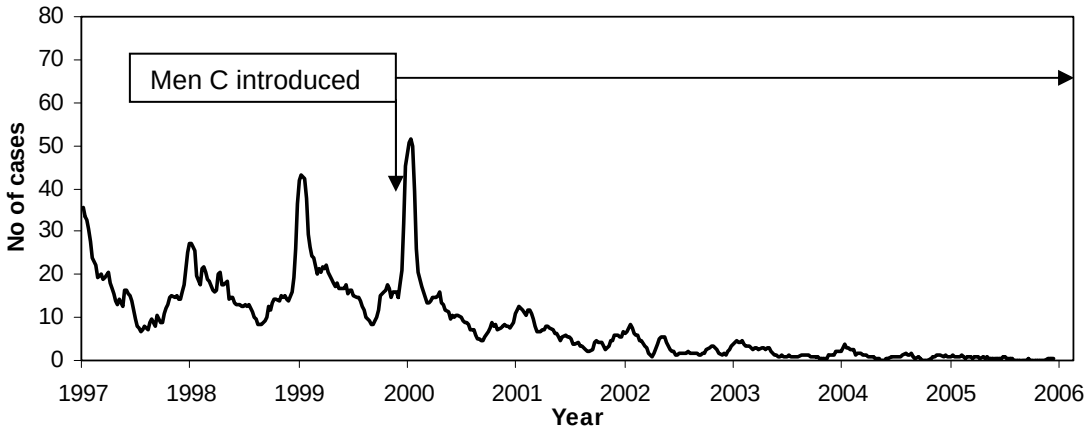
[1] These figures are based on national surveillance data for England and Wales and published regional studies. It is not possible to provide exact figures for invasive pneumococcal disease because not all cases of pneumococcal infection are reported as such.

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

MenC vaccination schedule

The MenC vaccination programme has been a major public health success. Before 2000, meningococcal C infection was a significant cause of morbidity and mortality in children and young adults. Figure 2 illustrates the impact of the vaccination programme, with reductions of over 90% of cases in all age groups.



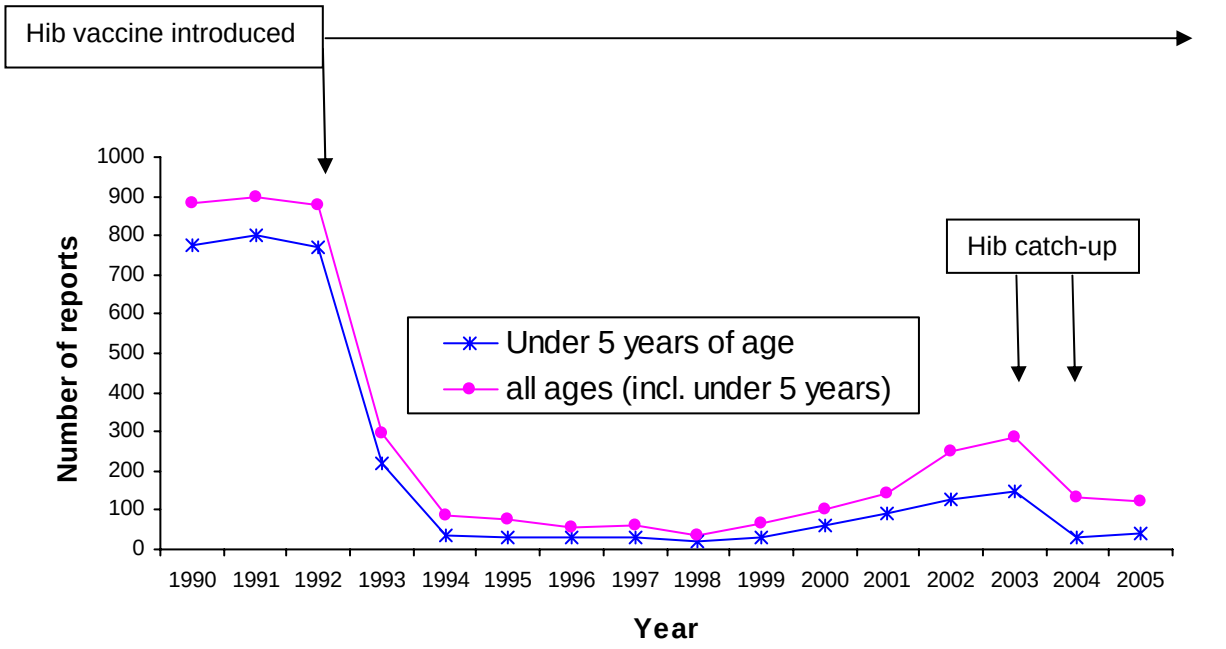
Source: Health Protection Agency North West, Manchester Laboratory

Figure 2 Laboratory reports of meningococcal C disease in England and Wales 1997- 2006.

When the programme changes are introduced, two doses of MenC vaccine will 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. This will extend protection against this serious disease through the early childhood years. The booster dose will be given as part of a combined Hib/MenC vaccine.

Addition of a Hib booster vaccine

The Hib vaccination programme has been another public health success. The introduction of the vaccine in 1992 resulted in a marked reduction in Hib disease in children, particularly in cases and deaths from Hib meningitis (see Figure 3).



Source: England and Wales, HPA Centre for Infections

Figure 3 Laboratory reports of Hib disease in England and Wales 1990-2005

From 1998, a gradual rise in Hib disease was detected and was successfully reversed through the Hib catch-up programme (see Fig 3). Rates of the disease are now back to extremely low levels. The Hib catch-up programme also reduced the incidence of Hib disease that had occurred in older children and adults.

To ensure that protection against Hib disease is maintained throughout early childhood, and to reduce the risk of a further resurgence of the disease in future, a routine Hib booster dose is being introduced in the second year of life. This booster dose will be given as part of a combined Hib/MenC vaccine.

Further information about these recommendations is available at http://www.advisorybodies.doh.gov.uk/jcvi/minutes.htm.

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

The changes to the existing schedule will accommodate these improvements to the immunisation programme. The changes are essential in order to maximise the protection children are offered against vaccine-preventable diseases.

We will work with the BMA General Practitioners Committee (GPC) and NHS Employers around the complete immunisation schedule and the in-year changes required to support the introduction of the new vaccines. We have also alerted child health computing systems of the proposed changes.

The schedule outlined above protects babies as early as possible against serious diseases. There are no additional adverse effects from having three injections at the same time. There is no scientific or medical evidence to suggest that multiple immunisation overloads the immune system of infants (Offit *et al*., 2002, and Department of Health, 2004). This schedule has been tested in the UK, in addition to the experience from the US where Prevnar® has been given since 2000 at the same time as DTaP, IPV, Hib, Hepatitis B and MMR vaccines.

Actions required now

- Primary Care Organisations (PCOs) should start to plan how current immunisation services can be modified to accommodate an additional vaccination visit at 12 months in the routine programme.

- PCOs should make preparations for implementing a pneumococcal vaccination catch-up programme later this year.

Our vaccination programme continues to deliver significant public health benefit in this country, and ensures our children are able to have the best start in life. The role played by GPs, practice nurses, health visitors and others in implementing the programme is essential, and we are grateful for your continuing efforts and support in delivering the programme.

Yours sincerely

Professor Sir Liam Donaldson CMO
Christine Beasley CNO
Jeannette Howe CPHO (Acting)

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