GGNHSB PHPU NEWSLETTER

www.show.scot.nhs.uk/ggnhsb (TEL: 0141 201 4917/FAX:0141 201 4950)

Volume 1, Issue 6 **May 2002**

INSIDE THIS ISSUE

Parvovirus B19 infection

This virus is a common cause of childhood illness. A manifestation of parvovirus B19 infection is erythema infectiosum (Fifth disease), which is a mild, usually non-febrile illness, characterised by an erythematous rash on the cheeks – hence the common term, 'slapped cheek syndrome'.

B19 infection in children is generally mild or asymptomatic. The incubation period is between 13 and 18 days. It is infectious 7 days *before* the appearance of rash, and probably not thereafter. A child who has been clinically diagnosed as having B19 infection can return to school or nursery when they have clinically recovered. In adults, the rash may be polymorphic and women in particular can suffer a debilitating acute arthropathy (usually with full recovery).

Severe complications of B19 infection are unusual, however, 3 groups of people are considered to be at high risk if infected:

- **Pregnant women (first 20 weeks).**

Approximately 40% of women in this category are susceptible to infection with B19 (60% have antibodies)

The attack rate within the home, where a child is a case is approximately 30%; in a hospital, school or nursery, the rate is probably below 10%.

Foetal loss for an infected woman in the first 20 weeks of pregnancy is less than 10% and foetal hydrops occurs in 3%. There is no evidence of developmental abnormalities associated with B19 infection.

For women perceived to be at-risk, they should consult their GP in the first instance. Their doctor may arrange serology testing and should give reassurance about the comparatively low risk of infection.

- **People with haemoglobinopathies**

B19 infection can cause transient aplastic crisis (TAC) in non-immune patients and those with chronic haemolytic anaemias e.g., sickle cell disease.

- **Immunocompromised people**

Red cell aplasia and chronic anaemia have been reported in patients due to persistent viral replication following infection with parvovirus B19.

Strict hand-washing should be reinforced in the instance of a recognised outbreak

Infection Control Environmental Audit

Following the issue of Clinical Standards Board for Scotland, Standards for Healthcare Associated Infection (HAI) Infection Control (December 2001), the Infection Control Team has been developing an environmental audit- tool in conjunction with the Greater Glasgow Primary Care NHS Trust Clinical Audit Department.

It is envisaged that self-assessment will be undertaken at a local level alongside the Infection Control Team's annual audit programme. For further information or a copy of the audit-tool please contact a member of the Greater Glasgow Primary Care NHS Trust Prevention and Control of Infection Team on 211 3568.

Pertussis vaccine: whole cell or acellular?

We continue to get enquiries from colleagues on whether to use the whole cell or the acellular pertussis vaccine in various clinical scenarios.

In general terms, the currently available acellular vaccines appear to be slightly less efficacious than the whole cell pertussis vaccine. On the other hand, the whole cell vaccine causes slightly more local reactions following vaccination than the acellular type, especially in older children. Therefore, as a guide, the recommendation is that infants and children up to the age of 3.5 years should be given the whole cell vaccine whereas those between the ages of 3.5 and 7 years should be given the acellular type (see table overleaf).

However, from time to time, due to vaccine supply problems, the community pharmacy at Leverndale Hospital may recommend that the acellular type be used in children under the age of 3.5 years instead of the whole cell vaccine. This is perfectly acceptable as these vaccines are interchangeable, i.e. a course started with one type can be completed with the other.

Readers of this newsletter will also be aware that single acellular pertussis vaccine is no longer manufactured and guidance on immunisation against pertussis in the absence of a single antigen pertussis vaccine is given in the table overleaf.

If you have any comments about this newsletter then please contact Dr Marie Laurie on 0141 201 4933

Guidance for immunisation against pertussis in the absence of single antigen pertussis vaccine (assuming no contraindication – see Green Book)			
Age group	**Scenario**		**Advice** DTaP = diphtheria, tetanus, acellular pertussis vaccine (Infanrix) DTwP = diphtheria, tetanus, wholecell pertussis vaccine
	DT immunisation history (DTaP, DTwP or DT)	**P immunisation history (DTaP, DTwP or aP)**	
Infants and children to 3.5 years	3 of 3 doses of DT primary course	No immunisation against pertussis	• DTwP [#] at around 1st birthday or at least 6 months after the third dose of DT • DTaP as a pre-school booster, at least 1 year after the 3rd dose of DT
	3 of 3 doses of DT primary course	One dose of pertussis vaccine	
	3 of 3 doses of DT primary course	2 doses of pertussis vaccine	
	2 of 3 doses of DT primary course	No immunisation against pertussis	• DTwP[#] ≥ one month after previous dose of DT • And DTwP[#] at around 1st birthday or at least 6 months after the previous dose of DTP • DTaP as a pre-school booster, at least 1 year after the 3rd dose of DT
	2 of 3 doses of DT primary course	One dose of pertussis vaccine	• DTwP[#] ≥ one month after previous dose of DT/P • And DTwP[#] at around 1st birthday or at least 6 months after the previous dose of DTP • DTaP as a pre-school booster, at least 1 year after the 3rd dose of DT
	1 of 3 doses of DT primary course	No immunisation against pertussis	• 2 doses of DTwP[#] one month apart and ≥ one month after last dose of DT • And DTwP[#] at around 1st birthday or at least 6 months after the previous dose of DTP • DTaP as a pre-school booster, at least 1 year after the 3rd dose of DT
Children 3.5-7 years	Child has had no primary doses of DT or P		• Give 3 doses of DTaP one month apart and a 4th dose of DTaP as a pre-school booster at least 1 year after the 3rd dose of DTP
	Child has not completed DT or P primary courses and presents for pre-school booster		• Give DTaP as a pre-school booster and one further dose of DTaP, one year later, to complete 4 doses of P where possible and five doses of DT
	Child has completed DT primary course (3 doses) and presents for pre-school booster with no or incomplete pertussis immunisation		• Give DTaP as a pre-school booster and one further dose of DTaP, one year later, to complete 4 doses of P where possible and five doses of DT
Children > 7 years *	Child presents with no or incomplete pertussis immunisation		• **There is currently no pertussis containing vaccine available for immunisation of this group. Immunisation with DT or Td should be completed according to the age of the child.**

*Infanrix is licensed for use in children up to and including 6 years of age

[#]DTaP should be used as appropriate when a severe reaction to DTwP has occurred (see Green Book)

Note: This is general guidance, in special circumstances further advice should be sought from the Public Health Protection Unit (201 4917)
After two doses of pertussis vaccine a child is likely to be protected against serious disease. No more than 5 doses of DT/DTP should be given.

Source: Department of Health