

# More potent pertussis prevention is necessary



*A fourth vaccination would reduce the risk of older children passing pertussis on to babies*

CECILY McNEILL

A change in the schedule for pertussis vaccine is soon likely, because **the current programme is making little impact on the disease.**

Epidemics of pertussis have occurred about every four years for the past 20 years, and **hospital discharges show that in that period the vaccination programme has failed to arrest the number of serious cases or deaths from the disease.**

In the 22 years to 1992 there were nine deaths in hospital—all but one, in infants under one year old.

The average number of hospitalisations for each year in that period was 1103 which, on 1991 costs, amounted to more than \$600,000 dollars each year.

Public Health Commission's Communicable Disease Control Advisory Committee member Stewart Reid said the rate of death from pertussis may, in fact, be higher than is reported. Studies of pertussis

epidemics in Britain show that the disease is markedly under-reported.

In one British study, only one of every 10 deaths caused by pertussis was actually attributed to the infection.

Public Health officials have been weighing up a number of options including a fourth booster dose of the vaccine to be administered in the second year of life.

At present, infants are vaccinated at six weeks, three, and five months as part of the four in the DTPH vaccine.

Dr Reid said a fourth dose would reduce the disease in two- to five-year-olds and thereby prevent them from passing it on to younger members of the family.

## Passed on from elder siblings

"We think that the majority of pertussis in New Zealand is transmitted to infants by their elder siblings.

"There's some evidence that protective efficacy increases by about 5 per cent for each dose over three. So if the efficacy is about 85 per

cent for three doses, it's about 90 per cent for four, and about 95 per cent for five doses.

"It's even possible that we may need a fifth dose at some stage, as is currently given in the US, if we don't achieve a significant disease reduction by taking this step," said Dr Reid.

However, according to Dr Reid, until the disease is made notifiable, it will continue to be difficult to get a true picture of its occurrence in the community.

He believes all vaccine preventable diseases should be notifiable.

At the moment, the PHC is encouraging GPs to report cases to public health units with the patient's consent.

PHC spokesperson Ossi Mansoor, "This not only helps surveillance of the disease, but is also important for managing contacts."

Based on a four year cycle of peaks of infection, the next epidemic is expected between this spring and the spring of next year.

Classical cases of pertussis are usually easily recognised, said Dr Reid.

"There is an initial catarrhal stage with an irritating cough

which gradually becomes paroxysmal. The cough may last one to two months or longer.

"Paroxysms consist of a series of repeated violent coughs without intervening inhalation and may be followed by a characteristic inspiratory whoop."

However, some patients, particularly children under six months, may present with choking, apnoea, or cyanosis without the cough.

Young adults tend to have

symptoms ranging from classical pertussis to mild, virtually asymptomatic disease.

Dr Reid said that nasopharyngeal swabs are particularly helpful in confirming the disease in the very young and in older patients.

Recommendations for more effective control of the disease will be publicised and open for consultation with the PHC later this year. Announcements on schedule changes are also expected within the next few months.

## Dentists clamp down on cheap treatment

BY OUR SOUTHLAND CORRESPONDENT

The Southern Regional Health Authority has done a quick about-face on its proposal to have dental nurses provide treatment for low income adults.

The proposal has been put on hold until the authority considers the "wider issues". Dental health manager Peter Burton said the proposed pilot had upset dentists and the authority had been forced to take another look.

Rural Southland was chosen for the pilot because of the number of requests school dental therapists received from adults in the area to check their teeth.

Dentists argued dental therapists did not have the skills to treat adult teeth and

also felt current provisions for low income earners to receive emergency treatment were adequate.

Mr Burton said the authority had not given up entirely on its plans to help low income adult rural Southlanders but the idea might have been naive.

Southland Dental Association president Philip Sanford said the original proposal by the authority would never have worked.

Dentists had come up with an alternative scheme for low income earners but he doubted if the authority could afford to run it.

The association did not support dental therapists working alone on adult teeth but would accept them doing so under a dentist's supervision. More meetings on the issue are planned.