

IMMUNISATION PROGRAM NEWSLETTER

JUNE 2002

Immunisation in the Media:

The months of May and June have been busy in the media with various articles on immunisation. They have included the MMR and autism debate, the dangers of meningococcal disease, the shortage of meningococcal vaccine, thiomersal (mercury) in vaccines and influenza outbreaks.

The Immunisation Program has endeavoured to inform all immunisation providers with the latest information to assist in discussion with clients. An excellent source of information is the National Centre for Immunisation Research and Surveillance of vaccine preventable diseases (NCIRS). The latest fact sheets on MMR and inflammatory bowel disease and autism and Thiomersal, can be accessed from www.ncirs.usyd.edu.au/facts/facts.html.

The May 2002 issue of Health of Victorians – The Chief Health Officer's Bulletin has an excellent article describing Meningococcal disease in Victoria, 1990 – 2001. It describes the overall increase in meningococcal disease, nationally as well as in Victoria, and also the recent rise in serogroup C strains that has occurred since 1999. This informative Bulletin, along with the article can be found online at www.health.vic.gov.au/chiefhealthofficer/chobulletin/index.htm

Influenza on the increase in Victoria:

There has been increased reporting of influenza cases through sentinel GP surveillance and a number of influenza outbreaks this year in Victorian aged-care facilities and schools. Please be alert for influenza and influenza-like illness in your patients, and do the following:

1. Advise patients

- to stay at home whenever possible; cases from schools and child care centers should be excluded until well.
- to practice respiratory hygiene (such as covering mouth while coughing or sneezing, washing hands frequently).
- to avoid contact with high risk groups until symptoms have cleared.

2. **Test** patients with suspected influenza in high risk or outbreak settings such as aged care facilities. Nasopharyngeal swabs should be broken off into a vial of viral transport media and transported to the laboratory for viral PCR as soon as possible. The diagnosis can also be confirmed by seroconversion from paired sera.

3. **Ensure** your high risk patients are immunised against influenza (and pneumococcal disease). High influenza vaccination rates are still the most important protection against influenza transmission in the community.

4. **Be familiar** with the use of specific antiviral medication against influenza, some of which are approved for contact prophylaxis. As the vaccine may not fully protect all people against all influenza strains, contact prophylaxis should also be considered to increase the protection of patients, especially if at high risk of complications.

Please take a moment to review the attached advice on influenza and pneumococcal vaccination, and review how coverage can be increased in your workplace including your staff.

Influenza and Pneumococcal Vaccine Recommendations:

Free Influenza Vaccine

Free vaccine is available and recommended EVERY YEAR for:

- **All people aged 65 years and older.**
- **Aboriginal and Torres Strait Islanders aged 50 years and older, and those aged 15-49 years** who are at high risk for the complications of influenza - that is, people with chronic diseases such as: diabetes; heart disease; lung disease (for example chronic airways limitation or troublesome asthma); kidney or liver disease; or with decreased immunity, such as those receiving immunosuppressive therapy; and people in chronic care facilities
- **Inpatients and outpatients in public hospitals** aged 65 and older, and those aged under 65 years with high risk factors such as: diabetes; heart disease; lung disease (for example chronic airways limitation or troublesome asthma); kidney or liver disease; or with decreased immunity.
- **Public hospital staff** including physicians, nurses and other personnel in both outpatient and ward settings who provide direct care to patients.

Free Pneumococcal Vaccine

Free vaccine is available and recommended EVERY 5 YEARS for:

- **All people aged 65 years and older.**
- **Aboriginals and Torres Strait Islanders aged 50 years and older and those aged 15-49 years** with high risk factors such as: diabetes; heart disease; lung disease (for example chronic airways limitation or troublesome asthma); kidney or liver disease; or with decreased immunity; asplenic patients (either functional or anatomical); patients with a CSF leaks; or with alcohol-related problems.
- **Inpatients and outpatients in public hospitals** aged 65 and older, and those aged under 65 years with high risk factors (as above).

Other Groups

Influenza and pneumococcal vaccination is also recommended for other groups considered to be at high risk of complications from these diseases. This includes:

- **Residents** of nursing homes, hostels and chronic care facilities under 65 years of age;
- **People aged under 65 years** who are not public hospital patients but are at high risk.

Although these people are not eligible to receive vaccine free of charge they should be encouraged to be vaccinated.

Staff working in private hospitals, nursing homes and other chronic care facilities should also be vaccinated against influenza to protect themselves and their patients.

Influenza Vaccine redistribution:

Thank you for your enthusiasm in embracing the Influenza and Pneumococcal Pneumonia Immunisation Program, where the uptake of both influenza and pneumococcal vaccine has again

been extremely high. Coverage with the influenza vaccine has increased from 75% in 2000 to 81% in 2001. Pneumococcal pneumonia vaccine, administered once every five years, reached an accumulated 57% in 2000 to over 65% coverage rate in 2001. Vaccine ordering continued to increase this year so further improvement in coverage levels should continue.

We have ascertained that there are quantities of influenza vaccines within practice fridges that have almost finished their influenza program for this year. As such, we will enter a phase in the program, as has been done in previous years, where redistribution of vaccines from clinics with excess stocks will occur to those still requiring vaccines.

If you have an excess stock of influenza vaccine, please contact us on (03)9637 4142.

Measles Alert:

The Department of Human Services Communicable Disease's Section continues to be notified of cases of measles. In the last two months there have been three reports in young people between 19 and 28 years of age.

All immunisation providers are encouraged to actively target the 18 – 34 age group for MMR vaccine. The vaccine is freely available through the Immunisation Vaccine Order form.

Measles is a notifiable disease. Please contact the Communicable Diseases Department on 9637 4126 for more information.

Priorix vaccine:

The Priorix vaccine for measles, mumps and rubella vaccination is available for people who have a religious objection to pork products i.e. the Muslim and Jewish community. Priorix does not contain pig gelatin, therefore is recommended for these communities. The Pre-immunisation Checklist pad, (100 tear-off pages per pad) has included the question of a religious reason for not having pork products. The pad can be ordered from the vaccine resource list.

Oral Polio Vaccine:

If oral polio vaccine (OPV) is regurgitated within ten minutes of administration, the dose should be repeated (7th Edition Immunisation Handbook pg.191).

Paediatric Hepatitis B Vaccine:

If the monovalent dose of hepatitis B vaccine is not given within 7 days of birth, vaccination against hepatitis B should be continued with a multivalent vaccine, following the routine schedule commencing at 2 months of age.

Year 7 Hepatitis B Vaccine:

CSL has introduced the Adult Hepatitis B vaccine in a Thiomersal free form in packs of ten. This vaccine will now be supplied for the Year 7 Hepatitis B vaccine program (age 11 to 15 years). The two doses are administered four to six months apart for this group.

Vaccine shortage:

There is a shortage of **Ipol** vaccine until the end of August 2002.

Stocks of **BCG** vaccine are now available.

Meningitec vaccine, not a routine scheduled vaccine, will be intermittently available until the end of the year according to Wyeth vaccine manufacturer.

Information for Pharmacists:

The following information was sent to the Pharmacy Guild of Australia and the Society of Hospital Pharmacists of Australia for inclusion in their next newsletter/bulletin.

Meningococcal Vaccines – avoid confusion

In February 2002 a new vaccine protecting against C Group meningococcal diseaseⁱ was licensed for use in Australia. In recent years there has been a rise in the incidence of serogroup C meningococcal disease in Victoria. The vaccine is produced by Wyeth Australia and is called **Meningitec**®.

There are two types of vaccine that protect against Meningococcal group C; polysaccharide and conjugated vaccine that are different in several significant ways that are very important to understand.

The ‘polysaccharide’ vaccines are called **Mencevax ACWY** (GSK) and **Menomune** (CSL/Pasteur Merieux), these cover several groups (A, C, W135 & Y).

These vaccines are used as ‘travel’ vaccines for travellers to places such as Africa, Asia and pilgrims to the Hajjⁱⁱ. Serogroup A and W135 strains are more prevalent in these countries.

There are however several disadvantages of this vaccineⁱⁱⁱ:

- It produces a diminished response in young children and for that reason is not licensed for use in children under the age of two years
- It does not provide long-term protection. At best immunity lasts for five years and at worst this might be as little as one year particularly in younger children
- Response to this vaccine is diminished after the second or third dose. Hyporesponsiveness is a real concern in vaccines being used for public health protection

The other type of vaccine is the ‘conjugated’ **Meningitec** vaccine. This vaccine overcomes the main problems with the polysaccharide vaccine^{iv,v}.

- It can be given to all age groups including babies over six weeks of age
- At this point in time research provides evidence that the vaccine provides long lasting immunity (at least 15 years)

These two types of vaccines are not interchangeable and are used for separate purposes.

However a previous dose of either a polysaccharide^{vi} or conjugate^{vii} meningococcal vaccine does not prevent a person from being vaccinated with the other type of vaccine.

Cold Chain – Are vaccines effective?

It is important that the vaccines are kept at a temperature of 2° to 8° celsius to ensure vaccine effectiveness. Maintenance of the ‘cold-chain’ system requires that processes be in place to ensure a potent vaccine is given to the recipient^{viii}. If Pharmacy ‘cold- chain’ protocol is not followed, the customer will drop the vaccine package into their handbag or pocket or put it in the glove box or

onto the dashboard. It may be some hours, if at all before the vaccine reaches a refrigerator or the vaccine is administered^{ix}.

When dispensing vaccines, remember that they should be placed into an appropriate storage container for 'cold-chain' maintenance and an explanation given to the customer about the vaccine administration being required as soon as possible. Pharmacists are in an excellent position to educate the public and assist in the control of vaccine preventable diseases in our community by supplying effective and safe vaccines.

ⁱ Richmond, P., Borrow, R., Goldblatt, D., Findlow, J., Martin, S., Morris, R., Cartwright, K., and Miller, E. Ability of 3 different meningococcal C conjugate vaccines to induce immunologic memory after a single dose in UK toddlers. *Journal.of.Infectious.Diseases.* 183:160-163, 2001.

ⁱⁱ Meningococcal Infections. In: The Australian Immunisation Handbook 7th Edition; section 3.13; 164-169. NHMRC, 2000.

ⁱⁱⁱ Frasch, C.E. Meningococcal Vaccines: Past, Present and Future. In: *Meningococcal Disease.* edited by Cartwright, K.Chichester, U.K.John Wiley & Sons; 245-284,1995.

^{iv} Richmond, P., Borrow, R., Millar, E., Clark, S., Sadler, F., Fox, A., Begg, N., Morris, R., and Cartwright, K. Meningococcal serogroup C conjugate vaccine is immunogenic in infancy and primes for memory. *Journal.of.Infectious.Diseases.* 179:1569-1572, 1999.

^v Richmond, P., Kaczmarek, E., Borrow, R., Findlow, J., Clark, S., McCann, R., Hill, J., Barker, M., and Millar, E. Meningococcal C polysaccharide vaccine induces immunologic hyporesponsiveness in adults that is overcome by meningococcal C conjugate vaccine. *Journal.of.Infectious.Diseases.* 181:761-764, 2000.

^{vi} Richmond, P., Kaczmarek, E., Borrow, R., Findlow, J., Clark, S., McCann, R., Hill, J., Barker, M., and Millar, E. Meningococcal C polysaccharide vaccine induces immunologic hyporesponsiveness in adults that is overcome by meningococcal C conjugate vaccine. *Journal.of.Infectious.Diseases.* 181:761-764, 2000.

^{vii} Richmond, P., Borrow, R., Millar, E., Clark, S., Sadler, F., Fox, A., Begg, N., Morris, R., and Cartwright, K. Meningococcal serogroup C conjugate vaccine is immunogenic in infancy and primes for memory. *Journal.of.Infectious.Diseases.* 179:1569-1572, 1999.

^{viii} Transport and storage of vaccines. In: The Australian Immunisation Handbook 7th Edition; section 1.12; 54-67. NHMRC, 2000.

^{ix} Personal Communication: Frequent telephone calls to Public Health staff are about this topic.

Immunisation Coverage: Australia 2001:

The Commonwealth Department of Health and Ageing contracted the National Centre for Immunisation Research and Surveillance to undertake a study of immunisation coverage in Australia on its behalf in 2001.

The study looked at:

- The difference in immunisation rates reported by parents compared to that documented by the Australian Childhood Immunisation Register (ACIR) at 12 and 24 months of age and the level of under-reporting to the ACIR;
- The validity of using the third dose assumption in calculating immunisation coverage;
- The coverage of the second dose of Measles, Mumps and Rubella vaccine;
- The impact of the Maternity Immunisation Allowance and Child Care Benefit on immunisation rates; and
- The reasons why immunisation coverage estimates are consistently lower in inner urban areas of capital cities in Australia.

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The report is available online at www.health.gov.au/pubhlth/immunise/publications.htm

For further information on the Immunisation Program:

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