



# Sharp and to the point

Quarterly newsletter produced by the SA Immunisation Coordination Unit

## Paediatric Trials Unit - Women's and Children's Hospital

**T**HE PAEDIATRIC TRIALS UNIT (PTU) was established in 1997 to conduct clinical trials in new vaccines to benefit children. The unit has a team of eleven doctors, nurses and scientists, trained in the ethical conduct of Phase I-III clinical vaccine trials in children. The PTU is headed by Dr Helen Marshall, who has completed a Master in Public Health Degree and the Advanced Vaccinology Course at the Pastuer Merieux Institute in France.

The PTU has expanded to include Phase I trials in adults for vaccines that have potential to provide protection for children if shown to be safe and immunogenic in adults. An example of this is an adult study with an investigational meningococcal B vaccine to prevent meningococcal B infection with the progression to a study administering the same vaccine to adolescents and toddlers.

The PTU has conducted a total of 30 studies including new vaccines such as HPV (human papillomavirus) vaccine, a combination HibMenCY (Haemophilus influenzae and meningococcal C and Y) vaccine, MMRV (measles, mumps, rubella and varicella) vaccine and a combination RSV/PIV3 (respiratory syncytial virus and parainfluenza 3 virus) vaccine.

Studies in vaccine safety including clinical trials to examine extensive swelling reactions after 4th and 5th doses of DTPa have also been of interest to the unit. The PTU has conducted studies to determine community attitudes to the introduction of new vaccines including varicella and HPV vaccines and is one of five paediatric vaccine trials units in Australia, including Melbourne, Sydney, Brisbane and Perth. Many studies conducted are multicentre, international trials and the vaccine centres often work collaboratively.

To receive the PTU quarterly newsletter (advising of current trials, study results and a summary of recent journal publications from studies conducted by PTU) email [diana.weber@adelaide.edu.au](mailto:diana.weber@adelaide.edu.au) or phone 8161 6328.

## What's in this issue?

**O**UR FEATURE ARTICLE is an overview of immunisation research undertaken through the Paediatric Trials Unit at the Women's and Children's Hospital. This issue discusses Influenza vaccination for children and the Hepatitis A vaccine for Indigenous children in SA. Mary-Ann Humphris has an update of the Health Care Worker Influenza project, SAICU acknowledges the staff at Kersbrook Medical Clinic with the best practice and innovation award and included are the usual useful snippets for providers.

This newsletter is produced quarterly by the South Australian Immunisation Coordination Unit. If you have any questions, interests or concerns let us know. Editor: Cathy McInnes. Telephone: (08) 8226-7177, Fax: (08) 8226-7187, e-mail: [cathlyn.mcinnnes@health.sa.gov.au](mailto:cathlyn.mcinnnes@health.sa.gov.au)

## Influenza vaccination for children

**I**NFLUENZA VACCINE should be administered to any person who wishes to reduce the likelihood of becoming ill with influenza. Infants, the very elderly and patients with impaired immunity may develop lower post-vaccination antibody titres. Under these circumstances, influenza vaccine may be more effective in preventing lower respiratory tract involvement or other complications of influenza than in preventing influenza infection.

Influenza vaccine can be administered to children as young as 6 months of age; however there is an increased risk of minor adverse events in children under 5 years of age. Fever, malaise and myalgia occur commonly (1-10%). In children under the age of 5 years these adverse events may be more pronounced.

### How many doses of influenza vaccine should be given to children?

Two doses at least one month apart are recommended for children aged **under 9 years of age** who are receiving influenza vaccine for the **first** time. The vaccine dosage may vary depending on the child's age ie. 6 months -2 years, 2-6 years and 6-under 9 years (Ref:table 3.11.1 for dosage p 170). The same vial should not be reused for the 2 doses. Children over 9 years of age, adolescents and adults require only the one dose (Ref: p.170-174).

Influenza vaccine is not funded for children and can be purchased by prescription.

**Contraindications:** Individuals with anaphylactic hypersensitivity to eggs or any of the vaccine components should not be given influenza vaccine. Individuals with an acute febrile illness (>38.5° C) should not be vaccinated until their symptoms have abated. Patients with a history of Guillain-Barre Syndrome (GBS) with an onset related in time to influenza vaccination may be at increased risk of again developing GBS if given Influenza vaccination.

Reference: Australian Immunisation Handbook 8th Edition p166-175

## Hepatitis A vaccine for Indigenous children under 5 years of age

**H**EPATITIS A is usually a relatively mild disease in children but has a very high incidence in the Indigenous population. The virus is transmitted by the faecal-oral route, survives for several hours on hands, longer on room temperature food and is resistant to heat and freezing.

In recent years there had been 6 reported deaths in Indigenous children in Nth QLD and Western Australia. A hepatitis A vaccination program in North Queensland in 1999 led to a very rapid and profound decline in notifications of the disease in the region. This decline not only occurred in the vaccinated children, but in adults as well.

The funded vaccine has been added to the National Immunisation Program schedule for Indigenous children living in QLD, NT, WA and SA with a **catch up program** funded for Indigenous children up to 5 years of age and will run until the end of 2007.

In SA the Hepatitis A vaccine is called VAQTA. Two doses are recommended 6 months apart. In SA it is scheduled for indigenous children born since 1st May 2004 at 18 months of age with the Varicella vaccine, and at 2 years of age (with the Pneumovax booster for Indigenous children).

### Contraindications to the vaccine

The Hepatitis A vaccine should not be administered to anyone with a previous history of anaphylactic reaction to any of the vaccine components or any previous dose of Hep A vaccine.

### Adverse events

The most common adverse events are mild local events of short duration. Up to 20% of children who received VAQTA experienced soreness at the injection site. In both children and adults, systemic adverse events such as headache and fever are much less common than localised reactions.

## Best practice in Immunisation

### Vaccine administration

- Almost all vaccines are given either by intramuscular (IM) or by deep subcutaneous (SC) injection (Varicella vaccine).
- The major exceptions are oral Rotavirus vaccines, oral typhoid and cholera vaccines, which are given orally, and BCG, which is given intradermally.

### Recommended sites for administering vaccines

- The **antero-lateral** thigh
- The **deltoid** region of the arm.

Two injections can be given in the same limb as long as the injection sites are 2.5 cm apart.

(Refer p10-13, the Australian Immunisation Handbook (8th Edition 2003))

## SAIN Meeting Whyalla

**T**he South Australian Immunisation Network conducted their annual country meeting in Whyalla this year. This annual event is an excellent opportunity for immunisation providers to get together and network about immunisation issues. The meeting was attended by providers from several sectors including General Practice, Community Health, Local Government, Public Hospital (Infection Control) Indigenous Health and Aged Care.

Topics such as Rotavirus, and Pandemic Planning were discussed and SAICU staff provided updates on the School Based Immunisation Program and the birth dose Hep B.

## Innovation and best practice in immunisation



PHOTO: Kersbrook Medical Clinic staff, Monica Mander (left) and Heather Elieff.

## Congratulations Kersbrook Medical Clinic!

**K**ERSBROOK is located 36 kms from Adelaide. The Kersbrook Medical Clinic caters to approximately 2400 patients and 180 are < 7 years of age.

In 1990 the GP identified poor rates of vaccination in the community, due to poor access to immunisation services and isolation. The immunisation coverage rate was 50%. The clinic ran special immunisation sessions and has maintained impetus since, with the doctor and staff attending regular immunisation training and update sessions.

Support from their LIC (Julia Waddington-Powell) included training staff to: register on-line ACIR encounter forms, advise on 'catch-ups', support parent education programs and access resources to be handed out to patients prior to immunisation.

Staff have conscientiously contacted overdue children. A recent purchase of a dedicated vaccine fridge will reduce the risk of cold chain incidents and vaccine failure.

The immunisation coverage rates for the Kersbrook community have risen from 50% in 1990 to 97.6% in August 2006. The coverage rate for the Adelaide Hills is 86.1% and the nearest city region 89.8%, The Kersbrook staff are excited by their 97.6% and determined to maintain it!

Each quarter SAICU will send a 'David Jones' quality produce pack to the provider who best fits the values of innovation and best practice in immunisation. Please send nominations to your Local Immunisation Coordinator or . . .

Cathy McInnes at SAICU—ph 8226 7177 or email [cathlyn.mcinnnes@health.sa.gov.au](mailto:cathlyn.mcinnnes@health.sa.gov.au)

## On the WWW

- For information on vaccine schedules for other countries if you are dealing with children who have been vaccinated overseas, go to the WHO site:

[www.who.int/immunization\\_monitoring/en/globalsummary/countryprofileselect.cfm](http://www.who.int/immunization_monitoring/en/globalsummary/countryprofileselect.cfm)

- Adverse Events Following Immunisation website - People who have experienced a serious adverse event following vaccination can be referred to State and Territory health services set up to manage serious adverse events:

[www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/provider-reactions](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/provider-reactions)

- Commonwealth site on HPV disease information:

[www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/cv-hpv/\\$File/hpv.pdf](http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/cv-hpv/$File/hpv.pdf)

- Commonwealth site on HPV vaccine:

[www.ncirs.usyd.edu.au/facts/hpv\\_0ct\\_2006.pdf](http://www.ncirs.usyd.edu.au/facts/hpv_0ct_2006.pdf)

## From the Vaccine Distribution Centre . . .

If there are any problems with the vaccine delivery such as cold chain or vaccine ordering, please contact VDC **IMMEDIATELY** – this will enable VDC staff to fix it as soon as possible.

The vaccine order form now includes a question requesting information about recent cold chain failures. The question will read:

“Have you had a vaccine cold chain failure since your last delivery?”

A response is required each time a vaccine order form is completed.

## Health Care Workers Annual Influenza Vaccination

*SA Public Sector Health Care Facility Employee Influenza Vaccination Program*

**D**URING 2006, a collaborative pilot project between Children, Youth & Women’s Health Service and the SA Immunisation Coordination Unit focused on addressing the common barriers to achieving high influenza vaccine coverage levels across SA Health Care facilities.

A model of service delivery, education resources and supporting documents has been developed from the project and will be released on 6 February 2007.

The 2006 project data was collated and analysed to give an accurate picture of vaccine distribution, uptake amongst health care workers and vaccine wastage at organisation, regional and state level.

A state wide survey of Health Care Worker Annual Influenza Vaccination program coordinators, confirmed the need for ongoing

support and education to encourage acceptance of the program as an important infection control and public health strategy.

For further information contact Project Officer, Mary Ann Humphris, SAICU 8226 7177, email: [humphris.mary-ann@saugov.sa.gov.au](mailto:humphris.mary-ann@saugov.sa.gov.au).

**PHOTO:** Jordana Cirjak, Administration Officer (left) and Mary-Ann Humphris, Project Officer, Health Care Worker Program.



## Did You Know??

- **Meningococcal C program** is continuing in SA until June 2007. Those born from 1/1/1984 eligible.
- **Information about Paracetamol administration** prior to immunisation – “Although routine use of Panadol at the time of vaccination is no longer necessary, it may be required if, for example, an infant or child has a high fever following vaccination. The dose of paracetamol is 15mg/kg of paracetamol liquid, up to a maximum daily dose of 90mg/kg/day.” The prolonged use of paracetamol without medical supervision could be harmful (ref. p27 Australian Immunisation Handbook (8th Edition))
- **Model Documents 2007** – SA School Based Immunisation Program (SBIP) providers. Please replace your 2006 covers, spines and title pages in the folders for the new ones marked 2007. If you require a set, or a new model documents folder, please contact: Jaclyn Thiele, Administration Officer, SAICU - Ph: 8226 7177
- **New Funded Vaccines** – The Commonwealth will be funding the Human Papilloma Virus (HPV) vaccine as part of the National Immunisation Program Schedule. The HPV vaccine will be an ongoing immunisation program. In SA it will be offered as part of the Year 8 School Based Immunisation Program. There will also be a catch up program offered for females 14 to 26 years of age over a 2 year period in 2007/2008. Rollout dates for HPV vaccine at time of going to print have not been set. SAICU is currently developing resources about HPV for the public and providers and will notify providers of education sessions.
- **Minimum/Maximum Temperature Charts** have been sent to all providers. If more are required please contact your LIC or SAICU on 8226 7177.

## ALERTS

- ▶ Vaccines must go into the vaccine fridge on arrival at provider sites. Check the cold chain heat/cold sensitive cards for changes and check the condition of the cold packs supplied with the vaccine delivery. If you have any concerns with your vaccine delivery, isolate the new stock in your vaccine fridge and contact SAICU on ph: 8226 7177 for advice.
- ▶ Varicella vaccine is a live attenuated vaccine presenting as a pre-filled syringe of diluent **and** a vial of vaccine powder. The **powder needs to be reconstituted** with the **supplied diluent** just prior to administration. The packaging of these vaccines can be multipacks of pre-filled syringes of diluent in sealed trays with a smaller box of vaccine powder altogether in one larger box. **Always** keep these together, **do not remove** the box of powder from the box with the diluent trays.
- ▶ **Please check** your fridges for Pedvax- (Hib), Infanrix, Infanrix-Hep B and OPV. If you still have these vaccines in your fridges please discard. These vaccines are no longer used on the NIPS since 1 November 2005 and could now be expired stock.
- ▶ **Any Influenza Vaccine remaining from 2006 needs to be discarded NOW. Please document the number of vaccines discarded on your next Vaccine Order Form.**

### Vaccination For Our Mob

A REPORT on vaccine preventable diseases and vaccination coverage of Aboriginal and Torres Strait Islander (ATSI) peoples has been developed by the Department of Health and Ageing and National Centre of Immunisation Research and Surveillance (NCIRS).

The report aims to better inform indigenous communities, indigenous health care workers and planners of immunisation services of the current status and future needs for vaccine prevention in indigenous people.

SAICU has some copies of this report, if you would like a copy please contact us on ph: 8226 7177 or view this document on the web at: [www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/atsi-mob-report](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/atsi-mob-report)



### Staff movements

SAICU welcomes four new staff members (pictured L to R) Karel Gilligan, Deirdre Doe, Julia Waddington Powell and Jaclyn Thiele.

Deirdre has come from disease surveillance unit at CDCB. Julia has come from the Hills Division of General Practice as a LIC. Jaclyn is the new administration officer with the Schools Program and Karel comes to us from Mt Barker Council.

### Remember!

The Immunisation Calculator—  
it's as easy as 1, 2, 3!  
[www.healthsa.sa.gov.au/immunisationcalculator/](http://www.healthsa.sa.gov.au/immunisationcalculator/)

### Pandemic Influenza Mass Vaccination Planning Project

SAICU is currently planning for mass vaccination against Pandemic Influenza. This project is taking a two-fold approach:

1. **To increase the uptake of annual influenza and pneumococcal vaccine.** This primary strategy reduces influenza associated morbidity and mortality and the burden of the disease during annual epidemics. Additionally, existing infrastructure will be strengthened; systems for service provision are refined – improving provider and distributor ability to effectively participate in a mass vaccination program.
2. **To use existing infrastructure to coordinate and provide mass immunisation in the community.** In the event of a pandemic occurring, it will be vital to take advantage of local community knowledge in the implementation and coordination of mass community vaccination programs. Best practice standards for mass vaccination clinics and relevant protocols and policies are being developed to support the plan. The mass vaccination plan will become a part of the State Pandemic Plan and will contribute to plans being developed regionally.

Enquiries to Julia Waddington-Powell, Pandemic Project Officer, SAICU Ph 8226 7177

## Immunisation Questions & Answers

**Q** A child of 14 months (DOB-Oct.2005) presents for immunisation and has not had the pneumococcal conjugate vaccine 7vPCV (Prevenar). Is the child eligible for funded vaccine and how many doses are needed?

**A** The child was born after 1 January 2005 when the pneumococcal vaccine became part of the funded schedule of vaccines for all Australian children up to 2 years of age. The child would be able to have the recommended catch-up schedule of 2 doses (as they are 14 months of age) – one now and one in 2 months.

**Q** A pregnant mother is seronegative for varicella. She has an 18 month old child. Can the child be vaccinated with live attenuated varicella vaccine?

**A** Varicella vaccine should not be given during pregnancy and a woman should not become pregnant for one month after vaccination. A non-immune pregnant household contact is not a contraindication to vaccination of another healthy child or adult in the same household, as the risk of transmission and infection of the fetus is extremely low (at present there have been no documented cases of transmission of vaccine strain virus to the fetus). (Ref p286-287 Australian Immunisation Handbook 8th Ed 2003)