

Sharp and to the Point

Quarterly newsletter produced by the Immunisation Section, SA Health

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This newsletter is produced quarterly by the Immunisation Section. If you have any feedback or comments on what you would like to see in future editions; or would like to receive further copies or have your name removed from our mailing list, please contact Sara Almond on phone (08) 8226 7177, fax (08) 8226 7197 or email sara.almond@health.sa.gov.au.

Whooping cough (pertussis) – Time to Immunise

Whooping cough is a highly contagious disease caused by infection of the respiratory tract and is spread easily from person to person by coughing and sneezing.

In children less than two years of age, whooping cough is a serious disease that will often result in hospitalisation. Studies show that in more than 50% of infants diagnosed with whooping cough family members, particularly parents, are the source of infection. In most other cases, family members are also presumed to be the source of infection.

Serious complications of whooping cough include pneumonia, bleeding into the nose, eyes or brain caused by the coughing episodes. Each year about 250,000 children die from whooping cough world wide.

In Australia outbreaks of whooping cough occur every three to four years. The Department of Health in South Australia is currently receiving higher than usual whooping cough notifications i.e. between 1 January 2010 and 15 June 2010, a total of 2,277 cases were reported. This is compared to 1,493 cases reported in 2009 for the same period.

Vaccination remains the most effective approach to reduce the amount of whooping cough in the community.

The whooping cough vaccine is recommend by the NHMRC for:

- babies at 6-8 weeks, 4 and 6 months of age
- children at 3½ to 4 years of age
- adolescents (ie Year 9 high school students as part of the School Immunisation Program in South Australia)
- carers of young children such as grandparents, older siblings and any other adults living in the same house
- adults planning a pregnancy (both parents) OR as soon as possible after the birth of their baby
- adults working with young children (eg child care and health care workers, and teachers)
- all adults at 50 years of age (combined with the tetanus and diphtheria vaccine booster)
- any other adult wishing to protect themselves



New Resource

Whooping cough (pertussis) – Who should be vaccinated?

This brochure was developed to assist immunisers in providing up to date information on the risks of whooping cough in the community. This brochure emphasises why it is important that infants are immunised from the recommended age of 6–8 weeks, so that those most vulnerable from complications are protected as early as possible.

Dose number	Age
1	6 - 8 weeks
2	4 months
3	6 months
4 (Booster 1)	3½ - 4 years
5 (Booster 2)	Year 9 in school



The brochure is available online:
www.health.sa.gov.au/pehs/immunisation-index.htm

In response to a high number of pertussis notifications in South Australia, providers are encouraged to offer vaccinations to babies from 6 to 8 weeks of age, 4 and 6 months of age. Children from 3 ½ years of age can also be offered their 4 year old immunisations.

Immunisations given at these slightly adjusted ages will be accepted as being valid by the ACIR (ensuring minimal intervals have been observed).

Febrile Convulsions – how common are they?

Dr David Johnson, Medical Registrar, CDCB

A febrile convulsion is a convulsion or seizure that occurs when a child has a fever. They occur in young children at a time in their development when their seizure threshold is low, when they are more susceptible to frequent childhood infections and when they respond with comparably higher temperatures to older children and adults.

The cause of the fever is usually a simple upper respiratory tract viral infection, but can also occur from another source of infection such as an otitis media, or can be as a result of vaccination in some children. The onset of the convulsion may be sudden with little evidence of preceding illness.

Febrile convulsions occur in approximately 2% to 5% of children aged between 6 months and 6 years and they tend to run in families, although a genetic basis has not been fully elucidated. The convulsion is almost always very brief (less than two minutes) and does not result in permanent brain damage. Approximately 25-30% of children will experience further febrile convulsions. Their occurrence, however, does not significantly increase the risk of developing epilepsy later in life although some children with epilepsy may have convulsions when they develop a fever.

More information including advice for parents can be found at the following sites:

<http://www.cyh.com/HealthTopics/HealthTopicDetails.aspx?p=114&np=304&id=1843>

http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Fever_febrile_convulsions?open

Immunisation Section Education Portfolio

The demand for the Immunisation Section to provide immunisation education is rapidly increasing, and requests are received on a daily basis. Since the beginning of the year the Immunisation Section has delivered a total of 45 presentations to health care professionals and community members.

Whilst the Immunisation Section is willing to provide immunisation education to interested groups, the additional demand on staff resources means that all requests need to be booked 4 to 6 weeks in advance. This will allow sufficient time for staff to prepare a quality presentation.

In March 2010, staff from the Immunisation Section travelled to Coober Pedy and delivered presentations to health care workers at Coober Pedy Hospital, Umoona Tjutagku Aboriginal Health Service and Umoona Residential Aged Care Facility on the Expanded Influenza Program, the HCW Immunisation Program and an "Immunisation the Basics" workshop.

For all immunisation education requests or queries please contact Angela Newbound on (08) 8226 7177 or e-mail angela.newbound@health.sa.gov.au

Resource Reminder: Vaccine Safety Information pamphlet

The "Vaccine safety information" pamphlet is produced by the Immunisation Section and should be given to clients, parents and caregivers to provide information on possible reactions and adverse events that can occur following immunisation.

How to use this pamphlet:

Immunisation providers are encouraged to complete the back of the pamphlet with the vaccination date and then indicate clearly which vaccine/s were given.

The pamphlet contains contact details for the Child Youth Health (CYH) Parent Helpline. This helpline is a 24 hour service for parents/caregivers who have questions or concerns about their child's immunisations or would like further advice on any adverse events following immunisation (AEFI).

For all other individuals who have questions or concerns about their immunisations or would like further advice on any AEFIs they may contact the Immunisation Section Monday to Friday 9.00am – 4.30pm on (08) 8226 7177.

Outside of these hours if the parent/caregiver or individual is concerned about a possible AEFI, they should seek medical advice from a registered medical practitioner.

"Vaccine safety information" pamphlets can be ordered directly from the Immunisation Section (08) 8226 7177 or www.health.sa.gov.au/pehs/immunisation-index.htm

Vaccine safety information

Vaccines, like any medication or natural therapy, can have side effects. This leaflet will explain what common reactions can be anticipated after receiving a vaccine and what to do if you are concerned.

Common reactions
Most vaccines can cause mild reactions; these will have been explained to you by your Immunisation Provider. These are usually short lasting, and do not require special treatment (see over page). If the reaction seems severe or persists and you are concerned, seek further advice from your GP, Immunisation Provider or the Immunisation Section - Department of Health.

Rare reactions
As with any medication, very rarely an individual may experience a severe allergic reaction such as anaphylaxis. Your immunisation provider is trained to recognise and manage any immediate severe reactions. A severe anaphylactic reaction will generally occur within the first 15 minutes after receiving a vaccine.

It is important for you to wait for 15 minutes after receiving a vaccine so you may be observed for any reactions. It is also recommended that you do not drive for 30 minutes after having received a vaccine.

How to report a reaction
The vaccine safety program in South Australia monitors all reports received to ensure an ongoing robust safety mechanism exists to detect any unexpected complications of vaccination. All serious or unexpected reactions should be reported to the Immunisation Section who can provide you with information and advice on future vaccinations and discuss any concerns you may have.

The Immunisation Section can be contacted Monday to Friday 9am – 4.30pm on 8226 7177. Outside of these hours you can contact the Child and Youth Health 24 hour Parent Helpline on 1300 364 264. Alternatively you can report the reaction to your immunisation provider.

All vaccines used in Australia have been extensively tested for safety
Before a vaccine or any medication can be used in Australia it must be licensed by the Therapeutic Goods Administration (TGA). The TGA extensively assess each vaccine for safety and effectiveness, this assessment is based on scientific evidence (clinical trials).

Information about immunisation and reactions can be confusing, if you would like further information go to 'Immunisation Myths and Realities, 4th Edition' at www.immunise.health.gov.au or the National Centre for Immunisation Research and Surveillance (NCIRS) www.ncirs.usyd.edu.au

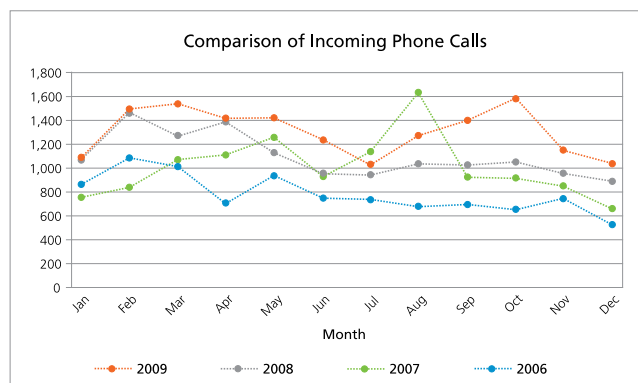
Expert phone advise

The Immunisation Section offers phone support to immunisation providers and members of the public. 3 Immunisation Nurses Consultants are available to receive calls Monday to Friday between 9.00am and 4.30pm.

Phone enquiries can range from:

- Vaccine information and advice
- Immunisation catch-ups for refugees or where vaccines have been missed
- Flu program
- Cold chain advice following fridge malfunctions and power outages
- Education requests for practice nurses, child care staff, midwives, GP's, university and TAFE nursing students
- Resource requests
- School program advice from parents, schools and providers
- AEFI

The data below demonstrates an increase in the total number of phone calls addressed by the Immunisation Section from 2006 to 2009.



Year	Yearly total calls	Average monthly calls
2009	15,705	1,308
2008	13,189	1,099
2007	12,184	1,015
2006	9,449	787

Recently the phones have been particularly busy, with 1,838 incoming calls recorded in April 2010, with more than 600 calls related to influenza queries. This was largely due to the expanded seasonal influenza program and community concerns following the reported reactions following influenza vaccinations in children.

We take this opportunity to thank all providers for their patience especially during the busy periods.

Providers are encouraged to leave a phone message with contact details rather than remaining "on hold" and Immunisation Section staff will return all phone calls as soon as possible.

Focus on...

Influenza

Paediatric Influenza Vaccination Program Suspension

In April 2010 the Commonwealth Chief Medical Officer announced the suspension of the Seasonal Influenza Vaccination Program for children aged 5 years and under. This precautionary measure was in response to a reported increase in the numbers of young children experiencing high fever and febrile convulsions following receipt of the seasonal influenza immunisation. The majority of these reports originated in Western Australia.

The suspension is to enable analysis of further scientific, clinical and epidemiological data to determine the significance of the received reports. Batch testing carried out by the TGA and other experts has since demonstrated that the vaccine had no bacterial or toxin contamination.

Children tend to have more exaggerated reactions to the influenza vaccine than adults. Due to a smaller body and surface area, children (especially those under 5 years of age) can develop higher temperatures than adults and this can result in febrile convulsions.

It is essential that parents are informed of potential side effects of vaccines and also what course of action to take if they think their child is experiencing an adverse event following immunisation.

In South Australia, adverse events following immunisation can be reported by health care professionals, parents and carers to the Immunisation Section.

Seasonal Influenza Adverse Event Reports

The Immunisation Section received a notable increase in adverse event reports following immunisation (AEFI) in young children following the expansion of the seasonal influenza vaccination program this year. This increase is evident in the number of reports notified to the Immunisation Section, between the date of the release of the seasonal flu vaccine in South Australia (22 February) and the date of its suspension (23 April), relative to previous years.

During this 8 week period, 153 reports of adverse events following seasonal influenza vaccinations were received for all age groups: 83/153 (54%) were reports for children under 6 years of age (average age 3 years).

The table below shows the total number of AEFI reports received over the past 5 years for seasonal influenza vaccine for all age groups and for children < 6 years of age (22 February – 23 April).

Year		2006	2007	2008	2009	2010*
Number of AEFI reports for Seasonal Influenza Vaccine	< 6 years	0	0	2	0	83
	all ages	30 (average age 48)	22 (average age 52)	37 (average age 50)	38 (average age 44)	153 (average age 4.6)

* Introduction of Expanded Influenza Program

In children < 6 years, the following symptoms were reported:

Symptom	Number
Fever < 40	33 (40%)
Fever > 40	8 (10%)
Fever unrecorded	27 (33%)
Headache	18 (22%)
Vomiting	61 (73%)
Convulsions	3 (4%)
Rigors	13 (16%)

*Other symptoms reported = irritability, lethargy, nausea.

Symptoms occurred 6-8 hours post vaccination and the duration of symptoms averaged 24 hours with a full recovery reported. All reports were submitted directly to the TGA.

Improving Influenza vaccination rates of Health Care Workers in South Australia

Influenza is a serious infection, the severity of which is underestimated not only by the general public but also by HCWs. The term "flu" is often used to describe a common cold.

In South Australia the uptake of the influenza vaccine in HCWs remains sub-optimal, even in organisations that provide the vaccine at no cost to staff. In 2009 the overall seasonal influenza vaccination coverage rates for South Australian public hospital staff was 61%. Although this coverage has increased from 58% in 2008, the influenza vaccine coverage rate for organisations needs to be as high as 80% for it to reduce the risk of transmission to vulnerable individuals in their care.

The Facts:

- HCWs are often exposed to the flu virus during the course of their work where they not only transmit the virus to vulnerable persons in their care but also to members of their own family.
- HCWs are more likely to become infected with the flu than other members of the general population. Studies show that HCW influenza infection ranges from 23% in a mild season through to 47% during outbreaks.
- HCWs have a tendency to continue to work even when they feel unwell. Some may remain asymptomatic, not demonstrating influenza like symptoms but are still capable of shedding the flu virus for up to 5 to 10 days before they are diagnosed.
- The influenza virus has the ability to spread quickly. Small droplets from a sneeze of an infected HCW can remain suspended in the air for some time and will continue to remain active on surfaces for a number of hours.
- Effective hand hygiene practices can reduce the likelihood of influenza transmission but the most effective way to prevent disease transmission is to be vaccinated each year against influenza.

A US study found that the most common reason given by HCWs (31.8% of respondents) for not being vaccinated against influenza was that they did not believe they needed the vaccine. The perceptions and reasons for believing they were not at risk were:

- Influenza is not a serious disease and recovery is quick
- I am fit and healthy and will not get the disease
- My boss does not get the vaccine so why should I?

Negative attitudes and misconceptions about influenza and the influenza vaccination is one of the greatest obstacles in achieving high vaccination rates. (Reference: "Improving rates of influenza vaccination among healthcare workers: education; motivate; mandate?" Infection Control Hosp Epidemiol. 2008 Feb 29(2):107-10)

Numerous studies indicate that influenza vaccination has the potential to substantially reduce staff absenteeism, decrease healthcare expenditure, improve patient and employee safety and prevent workplace disruption.

www.influenzaspecialistgroup.org.au

What can we do to improve the uptake of the influenza vaccine in HCWs?

Education:

Continued improvements by way of educating HCWs about the benefits of influenza vaccination and ensuring staff have easy access to vaccination programs all help contribute to the numbers of staff who opt for a seasonal influenza vaccination.

Mandatory declination forms:

Some experts believe that the introduction of mandatory declination forms for staff that decline influenza vaccination may have an impact on staff vaccination rates.

In 2006, a large US health conglomerate, BJC Health comprising 25,980 employees achieved a 54% voluntary uptake of influenza vaccination by staff. In 2007 they introduced *mandatory declination forms* where employees were required to sign and submit these forms if declining vaccination. The introduction of *mandatory declination forms* resulted in a voluntary staff vaccination rate of 71%; an increase of 17% in one year.

The use of *mandatory declination forms* provides staff with an opportunity to be educated about the risks and benefits of influenza vaccination (including duty of care). It also enables effective vaccination record keeping for employees and information as to why vaccination may be refused by the HCW.

Organisations in the United States who have instigated the use of mandatory declination policies have seen an increase in its employee immunisation rates of up to 97%.

Mandatory vaccination of all direct care staff within critical high-risk areas

The Influenza Specialist Group (ISG) suggests that all direct care staff working within particular high-risk areas must be vaccinated against influenza. This includes all intensive care units and other high risk settings (eg cancer, transplant and neonatal wards) where there is greatest risk of:

- Patients not being vaccinated (eg neonatal ward); or may have a sub-optimal vaccine response if they have been vaccinated (eg immuno-suppressed)
- Patients suffering significant consequences from an influenza infection.

The ISG recommends that all direct care staff within these high-risk areas that decline influenza vaccination are transferred to lower-risk wards or duties and it is the healthcare facilities responsibility to keep accurate records on the vaccination status of all relevant staff.

References:

Influenza Specialist Group – Discussion Paper

Influenza Vaccination among Healthcare Workers

www.influenzaspecialistgroup.org.au/resources/discussion-papers

Medical News Today – 5 February 2010

Flu Vaccination Rate at BJC Health Care Rises Dramatically Due to Mandatory Policy

2010 HCW Influenza Vaccination Program Training Workshops

The Immunisation Section provides annual updates to HCWs who are responsible for coordinating and delivering workplace influenza vaccination programs. HCWs in 2010 were invited to attend either a full day or half day workshop.

Four days of training were offered to HCWs in February and March and a total of 131 HCW attended. A debate on 'Mandatory HCWs Influenza Vaccination' was included in the workshop. Evaluations indicated that the debate was instrumental in consolidating the vaccination myths HCWs are faced with in delivering a coordinated influenza program in a health setting.

Did You know?

A recent study of 6,500 HCWs in the US has determined that vaccinated HCWs have more interactions with co-workers compared to those unvaccinated staff that are more isolated and have fewer co-workers who are vaccinated. Researchers propose Influenza campaigns for HCW should focus on personnel with a history of non-vaccination.

Reference: *NCIRS Newsbrief, 18 March 2010*

Innovation and Best Practice in Immunisation

Congratulations to Gwen Paull, Infection Control Clinical Practice Consultant, St Margaret's Hospital.

Gwen recognised the importance of HCWs being immunised against whooping cough. With the support of her CEO/DON, Gwen arranged for all hospital staff to receive education on pertussis and the dTpa vaccine followed by an onsite vaccination clinic (funded by the hospital) which were administered by immunisation nurses from the Charles Sturt Council. On vaccination day nearly 40% of staff opted to be immunised.

Gwen is to be congratulated for her innovation in promoting pertussis vaccination for the benefit of both the HCWs and the patients in their care.

The Immunisation Section sends a gift hamper to providers who can demonstrate innovation and best practice in immunisation. All nominations to Sara Almond at the Immunisation Section on (08) 8226 7177 or email Sara.Almond@health.sa.gov.au



New on the website:
Upcoming Events
To help providers keep up to date with immunisation information, education sessions and seminars that may be of interest!

Did You Know?

"The Lancet" Medical Journal has retracted the 1998 research paper by Dr Andrew Wakefield which linked MMR with autism. The retraction occurred following the UK's General Medical Council's claims that Dr Wakefield acted dishonestly and irresponsibly, and breached his professional duties by making false claims. As of Monday 24 May 2010 Dr Wakefield has been barred from practicing medicine in his native Britain after the country's top medical group found he conducted his research unethically.

Important Notice: Confirmation of faxed vaccine order

The Vaccine Distribution Centre is currently experiencing an extremely high volume of calls, many of which are to confirm receipt of faxed vaccine orders.

Providers can assist by activating the 'fax confirmation' function on their fax machine. This will automatically send a confirmation receipt to the sender indicating that the fax has been successfully transmitted. If an error message is received then orders will need to be faxed again.

The final order received prior to 'cut-off' is the one that will be processed.

New Resource

Seasonal influenza vaccination for pregnant women

This brochure outlines the risk of influenza infection for expectant mothers and why the flu vaccine is recommended for this group.



The brochure is available online:
www.health.sa.gov.au/pehs/immunisation-index.htm

Public Health Association of Australia 12th International Immunisation Conference

Adelaide Convention Centre, Adelaide
17–19 August 2010

Evidence and strategies for a new decade

The 2010 PHAA Immunisation Conference will encompass the most important aspects of where we have come from and where we are going with regard to immunisation in Australia.

Those attending will hear about the new National Immunisation Strategy and the latest evidence on adverse events following immunisations.

For further details visit the website at www.phaa.net.au

Questions and Answers

Q If a parent has a 'medical at risk' condition and is eligible for the free seasonal influenza vaccine, can their children also receive the influenza vaccine free as these children are a potential risk to their parents if they remain unvaccinated?

A *Only children identified as 'medically at risk' are entitled to receive a free influenza vaccine. For all other children, the parents will need to get a prescription or the children can be offered a free Panvax vaccine if the parents do not wish to pay for a seasonal influenza vaccine. The parents will be protected from the 3 circulating strains of flu from the vaccine.*

Q Why are babies and children of different weight/age given the same vaccine when most other medications for children are based on the weight/age of the child?

A *Vaccines are designed to stimulate the immune system and to produce antibodies that will reduce the likelihood of disease. To achieve this, minimal amounts of antigen is required to provoke an immune response. Most medications require therapeutic levels to combat infection or disease and the weight of the child is considered. A vaccine is considered preventative therapy and not a medication and so the dose does not need to be weight related.*

(Reference "Epidemiology and Prevention of Vaccine Preventable Disease" 9th Edition January 2008)

Acronyms

AEFI – Adverse Event Following Immunisation

dTpa – diphtheria, tetanus and acellular pertussis

HCW – Health Care Worker

CEO – Chief Executive Officer

DON – Director of Nursing

TGA – Therapeutic Goods Administration

ACIR – Australian Childhood Immunisation Register

NHMRC – National Health Medical Research Council

For more information please contact Immunisation Section on (08) 8226 7177 or by emailing Sara.Almond@health.sa.gov.au www.health.sa.gov.au/pehs/immunisation-index.htm

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