

NCIRS Newsletter

www.ncirs.usyd.edu.au

December 2002

Contents

Welcome from the Director	1	NCIRS Fact Sheets	2
NCIRS Website	1	Hot Topics	
About NCIRS	2	Varicella Vaccines in the USA:	
Recent Journal Club Topics	2	visit by Jane Seward	3
Recent Publications	2	Calendar of Events	3

Welcome



Over the past five years, NCIRS has grown from a small group of mainly public health physicians and research nurses to a bustling organisation comprising epidemiologists, scientists, social researchers, a statistician, librarian, editor, communications officer and a group of very enthusiastic postgraduate students.

Much of the information the Centre generates, and its research results, have been published.

We recognise that it is often difficult for those of you who are interested in the latest immunisation "news" to find the time to access it. This has prompted us to design a quarterly electronic bulletin that summarises the latest briefs from abroad, NCIRS reports and activities.

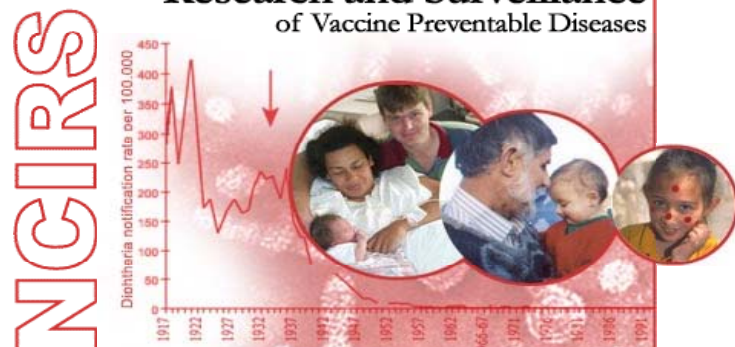
The bulletin will be circulated to public health practitioners, general practitioners, immunisation providers, health departments, hospitals, libraries and academic and other interested professional groups. We hope you enjoy it, and welcome your suggestions about its content and format.

In the meantime, may I leave you with a thought about research from Louis Pasteur — *Chance favours the prepared mind.*

Margaret Burgess

NCIRS Website

National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases



about ncirs · staff · research · the facts · publications
immunisation coverage · links · site search



<http://www.ncirs.usyd.edu.au>

The NCIRS website includes information about

- ◆ NCIRS staff
- ◆ research projects
- ◆ fact sheets
- ◆ publications
- ◆ links with other relevant immunisation websites

The Children's Hospital at Westmead
Cnr Hawkesbury Rd & Hainsworth St Westmead
Locked Bag 4001, Westmead NSW 2145

Telephone +61 2 9845 0520
Facsimile +61 2 9845 3082

About NCIRS

NCIRS was established by the Commonwealth Department of Health and Ageing in August 1997 to provide a national perspective on social and other issues related to immunisation, including research relevant to the Australian immunisation program, to provide independent expert advice about vaccine preventable diseases (VPDs), and to evaluate and report on immunisation coverage.

The Centre collaborates with the Commonwealth, State and Territory Health Departments, and has Memoranda of Understanding with both the Australian Institute of Health and Welfare and the Cooperative Research Centre for Vaccine Technology, Queensland.

NCIRS is currently involved in:

- ◆ The development of the 8th Edition of *The Australian Immunisation Handbook*
- ◆ Analysis of data collected by the ACIR
- ◆ Adverse events surveillance
- ◆ The development of reporting on Aboriginal and Torres Strait Islander data
- ◆ Technical and scientific support to ATAGI
- ◆ Specific studies in vaccine preventable diseases
- ◆ Modelling and economic evaluations
- ◆ Sociodemographic research
- ◆ National serosurveys

Recent Journal Club Topics

- ◆ Economic analyses of rubella & rubella vaccines
- ◆ Poliovirus-specific immunoglobulin A (IgA) "*the end game*"
- ◆ Implications for mass vaccination against chickenpox
- ◆ Aluminium in vaccines

NCIRS Journal Club meets each Monday at 12-1pm in the Clinical Sciences conference room, at the Children's Hospital at Westmead.

If you would like to be included in the journal club email list, or want more information, contact Nicholas Wood at NCIRS: nicholw3@chw.edu.au

Recent publications

- ◆ Leask J, Williams A. Risks and benefits of immunisation—the flip side of the coin. *In Touch*: newsletter of the Public Health Association of Australia Inc. 2002; 19(3): 3.
- ◆ Kelly H, Riddell MA, Gidding H, et al. A random cluster survey and a convenience sample give comparable estimates of immunity to vaccine preventable diseases in children of school age in Victoria, Australia. *Vaccine* 2002;20:3130-6.

NCIRS Fact Sheets can be found at:

www.ncirs.usyd.edu.au/facts/facts.html

Topics include:

- ◆ Thiomersal
- ◆ Diabetes and vaccines
- ◆ Measles, mumps, rubella vaccine, inflammatory bowel disease & autism
- ◆ Hepatitis B vaccine & multiple sclerosis

- ◆ McIntyre P, Gidding H, Gilmour R, et al. Vaccine preventable diseases and vaccination coverage in Australia, 1999-2000. *Commun Dis Intell* 2002;26 (May) Suppl:1-111. http://www.health.gov.au/pubhlth/cdi/pubs/pdf/vpd99_00.pdf
- ◆ Leask J. Vaccination and risk communication: summary of a workshop, Arlington Virginia, USA, 5-6 October 2000. *J Paediatr Child Health* 2002;38:124-128.
- ◆ Lin M, Roche P, Spencer J, et al. Australia's notifiable disease status, 2000. *Commun Dis Intell* 2002;26:118-203.
- ◆ Hull B, Lawrence G, MacIntyre CR, McIntyre P. Immunisation coverage: Australia 2001. Canberra: Commonwealth Department of Health and Ageing; May, 2002. <http://www.health.gov.au/pubhlth/immunise/report.pdf>

Hot Topics

Varicella vaccines in the USA:

Dr Jane Seward, Acting Chief of the Child Vaccine Preventable Disease Branch of CDC's National Immunization Program, visited NCIRS on 31 July 2002.

Jane gave an update of the childhood varicella (chickenpox) vaccination program in the USA. Since the vaccine was licensed in 1995, the proportion of vaccinated children has risen to a national average of 76%, and cases of hospitalisations due to varicella have fallen. More than half the States in the USA now require varicella vaccination before entry to childcare or school.

The vaccine is also recommended for susceptible adults who have close contact with people at high risk of serious complications (health-care workers and family contacts of immunosuppressed people). Given within 3-5 days of exposure, it can prevent infection, and is useful in the control of outbreaks. It should be considered for HIV-infected children, provided their CD4 cell count is >25%.

Surveillance in a limited number of geographic regions has shown a dramatic decline in disease and its complications, in all age groups (using active and passive surveillance systems and special surveillance and epidemiological studies) and a decline in mortality. There has been no change in the age-specific incidence of herpes zoster since the program started.

A registry of women inadvertently vaccinated when pregnant has been established: currently it contains 110 women who were susceptible and pregnant when vaccinated. To date, no adverse events have been reported in their babies, but the numbers are small.

Trials have shown a 1% primary vaccine failure rate. CDC is studying possible causes of vaccine failure, such as concurrent use of steroid medication for asthma, or giving MMR and varicella vaccines within 30 days of each other. Adverse events are few (serious events, 2.9/100 000 doses; non-serious events 64/100 000 doses), and the vaccine virus is rarely passed on to others.

CDC is studying the effectiveness of varicella vaccination in a number of communities.

The relationship between varicella vaccination and the later development of herpes zoster (shingles) is being studied in a double-blind placebo-controlled trial in people aged 55 years and over who have a history of varicella. Subjects are given live varicella vaccine and then followed up to see if they develop shingles. The age-specific incidence of shingles has not changed since the vaccination program started.

The molecular biology of different strains of wild and vaccine-derived varicella-zoster viruses is also being studied. There are 3 major genetic clades: European (Europe, Australia, USA), Japanese and a mosaic or mixed clade.

Varicella policy issues in the USA include antenatal screening, postpartum vaccination, and a future 2-dose schedule.

Future plans include expansion of herpes zoster surveillance to a larger population group, and monitoring of the incidence of herpes zoster by age and vaccination status.

Smallpox

Following 11 September 2001, Jane has been closely involved in the development of a diagnostic algorithm for the evaluation of suspected cases of smallpox. A colourful poster is available at <http://www.cdc.gov/nip/smallpox/Providers.htm#Poster>. This contains diagnostic information about smallpox, a step-wise method of managing a suspected case according to the grade or risk (high, moderate or low), graphic clinical photos illustrating differences between chickenpox and smallpox, and a table of other common conditions that might be confused with smallpox.

If you are interested in a copy of Jane Seward's power point presentation, please contact us by telephoning 02 9845 0520.

Calendar of Events

March 2003: Communicable Disease Control Conference, Canberra (CDNA).

Contact diseases@consec.com.au

For further information about this *Newsletter*, please contact Karyn Phillips at karynp@chw.edu.au.