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The NCIRS-AIP is an interactive discussion forum and a source of reliable information for professionals working in the area of immunisation. **Subscribers to the NCIRS-AIP receive the NCIRS “Weekly Jab” newsletter** – a weekly dose of immunisation news. For more information and to subscribe to the NCIRS-AIP [click here](#).

New logos

Our new logos were launched at the 16th National Immunisation Conference 2018 held on 5–7 June 2018. The logos represent our values of expertise, collaboration, respect, effective communication, integrity, innovation and support. We celebrated our 20 Year anniversary last year and are now excited to roll out a new brand family to take us into the future to reflect our growing organisation and better highlight our initiatives such as AusVaxSafety and PAEDS. The roll-out will be done over time, with updated websites planned for the second half of this year.

NCIRS Reports April – June 2018

[Report on the review of infection control practices in residential aged care services October 2017 to January 2018](#)

This report was prepared by NCIRS on behalf of the Australian Aged Care Quality Agency, with the support of the Office of Health Protection.

Updated factsheets April – June 2018

The following fact sheets were updated between 1 April and 30 June 2018:

- *Haemophilus influenzae* type b (Hib) vaccines for Australian children - June 2018
- Human papillomavirus (HPV) vaccines for Australians - April 2018
- HPV vaccines – frequently asked questions - April 2018
- Influenza vaccines for Australians - May 2018
- Influenza vaccines – frequently asked questions - May 2018
- Pneumococcal vaccines for Australians - June 2018
- Vaccinations during pregnancy – June 2018
- Zoster vaccine – frequently asked questions - April 2018

These and other NCIRS fact sheets are available on the [NCIRS factsheets webpage](#).

NCIRS Seminars/ Webinars April – June 2018

[Active surveillance for immunisation programs: It's the future - 23 April 2018](#)

This seminar focused on the world-leading active surveillance systems in place in Canada and Australia, giving insights into how these data complement traditional passive surveillance, inform decision making for immunisation programs and assist in both countries meeting international commitments for vaccine safety monitoring and disease reporting. [View the slides and audio from the webinar here](#)

[Maternal vaccination: The knowns and unknowns - 31 May 2018](#)

This seminar reviewed the rationale and evidence for existing vaccines currently recommended for pregnant women in many countries, provided an overview of new vaccines being developed for future implementation in the obstetrical population, discussed uptake and determinants of immunisation during pregnancy, highlighted safety monitoring issues and discussed considerations for high-risk pregnant women. [View the slides and audio from the webinar here](#).



Active surveillance confirms 2018 influenza vaccines safety

New data released by AusVaxSafety show the 2018 Australian influenza vaccines are safe, with over 140,000 adults and children who have been vaccinated and participated in surveillance this year experiencing no unexpected or unusual reactions

In 2018, two high-immunogenicity trivalent influenza vaccines (Fluzone High-Dose and Fluad) are available free of charge via the National Immunisation Program for people aged ≥ 65 years, in addition to the quadrivalent influenza vaccines available for other age groups. Injection site reactions, such as swelling, redness and pain, are slightly more common after vaccination with these higher-immunogenicity vaccines; however, clinical studies show that the majority of reactions are mild or moderate. This has also been confirmed by many Australians who have contributed to AusVaxSafety data this year. Influenza vaccine active surveillance results, as well as vaccine safety results for other vaccines, are available on the [AusVaxSafety website](#).

[Read more...](#)



PAEDS Research Focus - Parechovirus (HPEV): an important emerging infection in young infants

Epidemics of human parechovirus (HPEV) causing disease in young children have occurred every 2 years in Australia since 2013.

[Research published in the Medical Journal of Australia](#) reported that since August 2017, [PAEDS](#) has been tracking an increased frequency of HPEV cases and between July and December 2017, more than 200 cases of hospitalised HPEV infection were reported in young infants.

Severe disease can manifest as meningoencephalitis, seizures or sepsis-like presentations (including septic shock), or less common presentations including signs of surgical abdomen.

This research shows that testing for HPEV by specific molecular tests is indicated in children younger than 6 months of age with characteristic presentations without another confirmed diagnosis including febrile illnesses with other suggestive features (e.g., rash, seizures), sepsis syndromes (including shock), and suspected meningoencephalitis (which may be detected by magnetic resonance imaging only).

There are no effective antiviral therapies. Treatment is primarily supportive, including management of complications. Some infants with severe HPEV infection may have adverse neurodevelopment. Follow-up by a paediatrician is recommended.



Dr Meru Sheel (Left) and Julia Maguire (Right)

World Health Organisation Deployment

In April 2018, Dr Meru Sheel and Julia Maguire were deployed through the Global Outbreak Alert and Response Network (GOARN) and the Australian Response MAE (ARM) network to respond to the [Rohingya Crisis in Cox's Bazar, Bangladesh](#). They worked as epidemiologists performing surveillance and outbreak response for epidemic-prone conditions.

Dr Meru Sheel is an epidemiologist at NCIRS and a senior lecturer at the University of Sydney. Julia Maguire is a Master of Philosophy in Applied Epidemiology scholar at the Australian National University and is based at NCIRS.

The PHN Immunisation Support Program is a service funded by the Australian Government Department of Health that focusses on building a community of practice primarily by the provision of an online platform with the latest news, useful resources, and enabling shared knowledge between PHNs and other key stakeholders. [NPS MedicineWise](#) and the [National Centre for Immunisation Research and Surveillance \(NCIRS\)](#) are partners leading the development and implementation of this program.

The latest addition to the website is an online discussion forum which is further enabling interaction between PHNs and other key stakeholders.

Recent events include a face-to-face workshop held in Adelaide prior to the National Immunisation Conference and a newly launched webinar series designed specifically to provide the latest immunisation updates for PHNs.

Staff working at PHNs, state and territory health departments, public health units and other key stakeholders are encouraged to [register for access](#) to the online community, which allows them to share information and resources with their colleagues across Australia, and hear about relevant news and upcoming events.

PhD Congratulations

Congratulations to the following NCIRS staff who have successfully satisfied the requirements for award of their PhD.



THE UNIVERSITY OF
SYDNEY



Jean Li-Kim-Moy MBBS (Hons), DipPaed, FRACP
Clinical Research Fellow

Influenza in Australian children: burden of disease, advances in diagnosis, management and prevention through vaccination

This thesis looks at influenza in children and establishes the extent of the local burden of disease. It shows that in Australia, young children, including many who are healthy, share a disproportionate burden of influenza which was not being met with the previous vaccination recommendations and lack of national influenza vaccine funding, coupled with low vaccination uptake. The thesis supports wider vaccine recommendations and national funding to substantially improve vaccination uptake in children to combat the residual burden identified. It

helps to show that vaccination is safe and effective, and suggests that further work is needed to help identify factors which affect influenza vaccine immunogenicity in children.



Catherine King BA, GradDip (IM - Librarianship), MAppSci (LIM), GCertEBP (Med), AALIA
Information Manager

Influenza and influenza vaccination: examining parental perspectives and practices to inform vaccination policy and programs

This thesis examines preventive health beliefs, knowledge, attitudes and practices of parents, both generally and in relation to influenza and influenza vaccination of children, and explores which information sources parents value, trust and use. Methods include a systematic review, qualitative interviews and a quantitative survey. The timing of two influenza-related health scares – the 2009 influenza A H1N1 pandemic and the 2010 suspension of influenza vaccination for children under 5 due to high numbers of adverse events – allowed examination

of the impact of health scares on parents' views and information needs. The findings revealed that parental beliefs about health and illness, and decision-making about vaccination risk, are complex, incorporating both scientific and 'folk' beliefs and interacting with contextual variables. Parents trust healthcare workers as information sources, and are positively influenced by vaccination recommendations from them. Pre-existing beliefs about influenza and influenza vaccine influence parents' interpretations of influenza-related health scares. Health scares affect parents' trust and information needs. The thesis provides practical recommendations for public health practitioners and policymakers to assist in developing appropriate influenza vaccination campaigns and information materials that meet the needs of parents.

PHAA National Immunisation Conference - 5 to 7 June 2018



Katrina Clark giving her plenary presentation 'Access to immunisations for Aboriginal and Torres Strait Islander people'

The 16th National Immunisation Conference 2018 was held from 5 to 7 June in Adelaide. Many NCIRS staff gave oral presentations, showcasing the work, outputs and initiatives of NCIRS such as immunisation coverage and VPD surveillance, program evaluations, policy work, social and Indigenous research, the AusVaxSafety active vaccine safety surveillance system, the Paediatric Active Enhanced Disease Surveillance (PAEDS) network, and the newly launched PHN immunisation support program

On display at the NCIRS exhibition were our resources for immunisation professionals such as factsheets and FAQs as well as information about our work. We also received feedback on the Sharing Knowledge about Immunisation website featuring a vaccination communication package for primary care.

Where presenters have given permission, their presentations have been uploaded to the [conference website](#). The plenary sessions are now also available to [view as videos](#).

ASID Adult Immunisation Satellite Workshop - 9 May 2018

This workshop, organised by the AusVaxSafety group at NCIRS, in partnership with Surveillance of Adverse Events Following Vaccination In the Community (SAEFVIC), was held prior to the ASID Annual Scientific Meeting.

National experts presented the latest updated information on adult vaccination - specifically, zoster and influenza vaccines, as well as tips on vaccinating immunosuppressed individuals and managing adverse events.

Presentations from this workshop are now available [on the MVEC page](#).

Road trip to present Q fever study results

Over the past 5 years NCIRS researchers Nick Wood and Heather Gidding have been collaborating with Dr Helen Faddy at the Australian Red Cross Blood Service to conduct a study on disease burden and risk factors for Q fever exposure among blood donors. This serosurvey of over 2700 donors is the largest in Australia and the first purposely designed to determine independent risk factors for exposure. The study was conducted in blood donor centres and mobile donor units in regions known to have high Q fever notification rates (Hunter New England district of NSW and Toowoomba in QLD) as well as in metropolitan Sydney and Brisbane.

With the analysis completed, Heather and Helen embarked on a road trip to thank the donor centres for participating and to share their findings with them. Over a 3-month period from March to May 2018, they visited Armidale, Tamworth, Sydney Town Hall, Brisbane's Chermside donor centres (with a bit of time for sightseeing along the way - see picture) and also the Hunter New England mobile donor unit, which at the time was in Scone. They also gave a presentation to the Australian Red Cross Blood Service Research team in Brisbane, which had played an important role in the coordination of the study.

The donor centre staff were very appreciative of our visit and keen to hear our results.



Heather Gidding at the Big Golden Guitar

World Immunization Week, 24 – 30 April 2018

World Immunization Week is celebrated in the last week of April and aims to highlight the collective action needed to ensure that every person is protected from vaccine-preventable diseases. This year's theme was "Protected Together, #VaccinesWork".

NCIRS once again held an immunisation awareness stall at The Children's Hospital at Westmead to celebrate World Immunization Week with cakes for sale, information about vaccine preventable diseases and a chance for parents to ask questions from our immunisation experts.

The NCIRS NSW Immunisation Specialist Service Clinic was open on the day and was providing free flu vaccinations for all children and at a small cost for parents.



NCIRS staff at the immunisation awareness stall in the gallery at The Children's Hospital at Westmead



Associate Professor Julie Leask (outgoing COSSI committee Chair) presenting at the workshop

Collaboration on Social Science & Immunisation (COSSI) Workshop

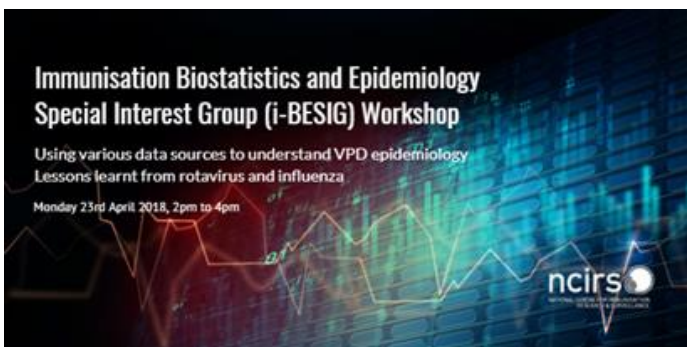
The Collaboration on Social Science and Immunisation (COSSI) hosted its inaugural full-day workshop in Adelaide before the National Immunisation Conference. The workshop attracted a diverse group of 63 attendees from across Australia and New Zealand.

The workshop was held for members and others interested in the social science of immunisation, which includes aiming to better understand community concerns, attitudes, barriers to accessing immunisation services, and experiences of obtaining immunisation care and support. It is hoped that by listening to issues and needs, improved resources for parents, health care providers and others in the community can be developed and effectively disseminated. Inequities can also be highlighted for action.

The workshop was well received, with 97% of evaluation respondents affirming that it was informative and useful. A keynote presentation by Catherine Hughes (Light for Riley) was highly rated, while a landscape analysis and Table top sessions were also part of the program and generated lots of questions and discussion.

NCIRS sponsored the COSSI event and supported 5 members through travel scholarships.

[More information about COSSI...](#)



i-BESIG Workshop - Using various data sources to understand VPD epidemiology

This workshop, organised by the Immunisation Biostatistics Epidemiology Special Interest Group (i-BESIG) and held on Monday, 23 April 2018 consisted of a series of short presentations and discussions on use of data collected from routine administration databases as well as active surveillance systems. Associate Professor Julie Bettinger provided insights from the Canadian Immunization Monitoring Program ACTive ([IMPACT](#)) and Canadian National Vaccine Safety Network ([CANVAS](#)).

NCIRS staff attendance at national and international conferences/meetings April – June 2018

[11th International Symposium on Pneumococci and Pneumococcal Diseases \(ISPPD 2018\), Melbourne, Australia, from 15–19 April, 2018](#)

Several staff from NCIRS attended this international meeting in Melbourne devoted to the exchange, advancement and dissemination of the latest discoveries on the basic science, microbiology, epidemiology, treatment and prevention of pneumococci and pneumococcal disease. There was much discussion about and reference to [work by Jayasinghe et al](#) regarding Australia's 3+0 PCV schedule and evidence supporting a change to 2+1. Congratulations to Dr Sanjay Jayasinghe, Research fellow NCIRS, and the team at NCIRS for their important work looking at the effectiveness of the pneumococcal vaccine in infants.

[Viruses in May, Katoomba, Australia, 17–19 May, 2018](#)

Viruses in May is a clinical meeting aimed at senior and less experienced scientists, pathologists, registrars, infectious diseases clinicians, and clinicians from other disciplines interested in viral diseases. Professor Kristine Macartney, Director NCIRS, presented at the meeting on [Vaccine prevention for existing and emerging viral threats](#). All authorised speaker presentations from the meeting are [available on the RCPA website](#).

[European Society for Paediatric Infectious Diseases \(ESPID\) 2018, Malmö, Sweden, 28 May–2 June, 2018](#)

ESPID brings together the most prominent researchers in the field of paediatric infectious diseases, immunology and epidemiology. Dr Lucy Deng, NCIRS Staff Specialist and The University of Sydney PhD candidate presented an ePoster at the meeting titled 'Post vaccination febrile seizures: clinical severity and long-term developmental outcome data'.

[27th Meeting of the Technical Advisory Group on Immunization and Vaccine-preventable Diseases in the Western Pacific Region, Manila, Philippines, 19–22 June 2018](#)

The 26th Meeting of the Technical Advisory Group (TAG) on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region was attended by six TAG members, four temporary advisers, 30 participants from 15 countries and areas, and 34 representatives from partner organisations, including NCIRS Director Professor Kristine Macartney, and WHO staff from headquarters, the Regional Office for the Western Pacific and representative country offices.

The participants discussed lessons learnt and the status of the poliomyelitis (polio) endgame strategies as well as the new regional plans of action for measles and rubella elimination and triple elimination of HIV, hepatitis B and syphilis. Discussion also covered regional plans for hepatitis B control goals and the global supply of inactivated polio vaccine and its implication for this region. [Read More...](#)

NCIRS In the Media April – June 2018

[Thinking about getting your child the flu vaccine? Here's what you need to know](#) - Professor Kristine Macartney

[Parechovirus epidemic affecting infants needs action: experts](#) – PAEDS

[How GPs can tackle anti-scientific thought](#) – Sharing Knowledge About Immunisation

[Australian Academy of Science Video](#): Professor Robert Booy discusses why you need a flu shot every year

[2018 flu season media briefing: Laureate Professor Peter Doherty, Professor Robert Booy and Associate Professor Julie Leask](#)

[PHN immunisation online community launches with calls for further collaboration](#) – PHN Immunisation Support Program

[Reactions to flu vaccinations being tracked by Australian health researchers](#) – Professor Kristine Macartney

[5 things you need to know about the flu](#) - Professor Kristine Macartney

[Vaccination rates: one gap closes](#)

[MJA Podcasts 2018 Episode 49: Aboriginal immunisation coverage rates, with Dr Frank Beard of NCIRS](#)

NCIRS Publications April – June 2018

1. Edirisuriya C, Beard FH, Hendry AJ, Dey A, Gidding HF, Hueston L, Dwyer DE, Wood JG, Macartney KK, McIntyre PB. Australian rubella serosurvey 2012–2013: on track for elimination? *Vaccine* 2018;36:2794-8. [Abstract](#)
2. Thomas S, Cashman P, Islam F, Baker L, Clark K, Leask J, Butler R, Durrheim DN. Tailoring immunisation service delivery in a disadvantaged community in Australia: views of health providers and parents. *Vaccine* 2018;36:2596-603. [Abstract](#)
3. Britton PN, Jones CA, Macartney K, Cheng AC. Parechovirus: an important emerging infection in young infants. *Medical Journal of Australia* 2018;208:365-9. [Abstract](#)
4. Whittaker E, Goldblatt D, McIntyre P, Levy O. Neonatal immunization: rationale, current state, and future prospects. *Frontiers of Immunology* 2018;9:532. [Abstract](#)
5. Costa-Pinto JC, Willaby HW, Leask J, Hoq M, Schuster T, Ghazarian A, O'Keefe J, Danchin MH. Parental Immunisation Needs and Attitudes Survey in paediatric hospital clinics and community maternal and child health centres in Melbourne, Australia. *Journal of Paediatrics and Child Health* 2018;54:522-9. [Abstract](#)
6. Lee VY, Booy R, Skinner R, Edwards KM. The effect of exercise on vaccine-related pain, anxiety and fear during HPV vaccinations in adolescents. *Vaccine* 2018;36:3254-9. [Abstract](#)
7. Macartney K, Gershon AA. Shingles vaccine after auto-HSCT decreases risk [comment]. *The Lancet*. 2018;391:2082-4. [Abstract](#)
8. Cheah BC, Davies J, Singh GR, Wood N, Jackson K, Littlejohn M, Davison B, McIntyre P, Locarnini S, Davis JS, Tong SY. Sub-optimal protection against past hepatitis B virus infection where subtype mismatch exists between vaccine and circulating viral genotype in northern Australia. *Vaccine* 2018;36:3533-40. [Abstract](#)
9. Moore HC, Fathima P, Gidding HF, de Klerk N, Liu B, Sheppard V, Effler PV, Snelling TL, McIntyre P, Blyth CC. Assessment of on-time vaccination coverage in population subgroups: a record linkage cohort study. *Vaccine* 2018;36:4062-9. [Abstract](#)
10. Sellens E, Norris JM, Dhand NK, Heller J, Hayes L, Gidding HF, Willaby H, Wood N, Bosward KL. Willingness of veterinarians in Australia to recommend Q fever vaccination in veterinary personnel: implications for workplace health and safety compliance. *PLOS ONE* 2018;13:e0198421. [Abstract](#)
11. Hendry AJ, Beard FH, Dey A, Meijer D, Campbell-Lloyd S, Clark KK, Hull BP, Sheppard V. Closing the vaccination coverage gap in New South Wales: the Aboriginal Immunisation Healthcare Worker Program. *Medical Journal of Australia* 2018;209:24-8. [Abstract](#)
12. Collins J, Biaukula V, Faktaufon D, Flint J, Fullman S, Jalava K, Kailawadoko J, Merianos A, Nilles E, Roper K, Sheel M, Kamae M. An outbreak investigation of paediatric severe acute respiratory infections requiring admission to intensive care units – Fiji, May 2016. *Western Pacific Surveillance and Response Journal: WPSAR* 2018;9(2):4-8. [Abstract](#)
13. King CL, Chow MYK, Wiley KE, Leask J. Much ado about flu: a mixed methods study of parental perceptions, trust and information seeking in a pandemic. *Influenza and Other Respiratory Viruses* 2018;12:514-21. [Abstract](#)
14. Dyda A, McIntyre P, Karki S, MacIntyre CR, Newall AT, Banks E, Kaldor J, Liu B. Pertussis vaccination in a cohort of older Australian adults following a cocooning vaccination program. *Vaccine* 2018;36:4157-60. [Abstract](#)
15. Whitford K, Liu B, Micallef J, Yin KJ, Macartney K, Van Damme P, Kaldor JM. Long-term impact of infant immunization on hepatitis B prevalence: a systematic review and meta-analysis. *Bulletin of the World Health Organization*. 2018;96:484-97. [Abstract](#)
16. Alexander KE, Tong PL, Macartney K, Beresford R, Sheppard V, Gupta M. Live zoster vaccination in an immunocompromised patient leading to death secondary to disseminated varicella vaccination. *Vaccine*. 2018;36:3890-93. [Abstract](#)
17. Phillips A, Patel C, Brotherton J, Pillsbury A, Macartney K. Safety of human papillomavirus vaccines: an updated review. *Drug Safety* 2018;41:329-46. [Abstract](#)
18. Phillips A, Beard F, Macartney K, Chan J, Gilmour R, Saravanos G, McIntyre P. Vaccine-preventable child deaths in New South Wales from 2005 to 2014: how much is preventable? *Journal of Paediatric and Child Health* 2018;54:356-64. [Abstract](#)
19. Macartney K, Phillips A, Patel C, Brotherton J, Pillsbury A. Author's reply: safety of human papillomavirus vaccines [letter]. *Drug Safety* 2018;41:541-43doi:10.1007/s40264-018-0655-1. [Abstract](#)
20. Gidding HF, McCallum L, Fathima P, Moore HC, Snelling TL, Blyth CC, Jayasinghe S, Giele C, de Klerk N, Andrews RM, McIntyre PB. Effectiveness of a 3 + 0 pneumococcal conjugate vaccine schedule against invasive pneumococcal disease among a birth cohort of 1.4 million children in Australia. *Vaccine* 2018;36:2650-6. [Abstract](#)
21. Kaufman J, Ryan R, Walsh L, Horey D, Leask J, Robinson P, Hill S. Face-to-face interventions for informing or educating parents about early childhood vaccination. *Cochrane Database of Systematic Reviews* 2018;(5):CD010038. [Abstract](#)