The Royal Australasian
College of Physicians

Immunisation

Position Statement

The Royal Australasian College of Physicians
Paediatrics & Child Health Division

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1 Purpose

Immunisation against infectious diseases has been more effective in preventing disease and death than any other medical intervention. The Royal Australasian College of Physicians (RACP) supports the immunisation policies and programs of the Australian and New Zealand governments for both routine immunisation and for specific immunisation of at-risk groups.

This policy statement has the following objectives:

1. To outline the responsibilities of paediatricians and other consultant physicians in regard to immunisation.

2. To identify the current status and emerging challenges of immunisation.

3. To suggest practical approaches for optimising immunisation.

4. To provide links to especially useful information resources, both for health professionals and for the community at large.

2 Executive Summary

In the Australian and New Zealand context, primary care providers (general practitioners, practice nurses and community nurses) deliver almost all childhood immunisations and are the cornerstone of successful immunisation programs. Their roles and responsibilities are delineated and supported by regional and national governments and by their own professional organisations.

Consultant paediatricians and other physicians are usually not involved in delivering routine immunisations. They are often asked for advice or to assess possible adverse effects of vaccines and thus need extensive knowledge and have substantial responsibilities in immunisation related to their specific areas of expertise.(1) While this policy is most relevant to paediatricians, much of it applies to adult consultant physicians, who have increasing involvement in specific areas of immunisation, for example in relation to health care workers, travellers and other adults at increased risk of vaccine-preventable infections.

- Paediatricians and other physicians should maintain a working knowledge of current vaccine-preventable diseases affecting their patient population, and immunisation recommendations, both for vaccines recommended and funded through the National Immunisation Program and for those recommended but not currently funded. This includes keeping up to date with current recommendations and alerts. It also includes keeping up to date on the information resources available for other professionals and for parents (see Section 5).

- Paediatricians and other physicians may be asked to manage adverse events following immunisation (AEFI), including assessing causality and advising on subsequent immunisations. They should, therefore, be especially well-informed in this area (see Section 4).

- Paediatricians and other physicians involved in the care of patients who have conditions with specific vaccination recommendations should be aware of these and include them in their care plans (see Section 4).

- Paediatricians and other physicians should avoid letting their individual beliefs interfere with their role in recommending appropriate immunisations and in advising patients and/or parents regarding standard recommendations (see Section 4).

- Immunisation status should be ascertained and recorded and, wherever appropriate, “catch-up” immunisation arranged (see Section 4).

- Paediatricians have special responsibilities and opportunities to advocate for good immunisation education and practice. They are often seen as reliable authorities and guides,

and can have valuable influence within individual families, in communities, with medical students and with doctors in training (see Section 4).

- Paediatricians and other physicians should ensure that they are appropriately immunised and should encourage their staff similarly (see Section 4).

- Public health physicians, infectious diseases physicians, occupational health physicians, geriatricians and some other consultant physicians will require special knowledge and skills in particular areas of immunisation, related to the nature of their practice. Discussion of these is beyond the scope of this statement, which focuses on mainstream immunisation which is primarily carried out during childhood.

3 Current status and emerging challenges

Childhood immunisation rates in Australia and New Zealand have risen over the last decade to levels comparable to almost any other Western country. Polio has been eliminated from the Western Pacific region since 2000 and measles is approaching elimination.(2-4) Diphtheria has become rare.(5) However, if vaccination rates drop before diseases are eliminated they will return. For example, recent measles outbreaks have occurred in Australia, New Zealand and other countries in under-vaccinated populations. Some vaccine-preventable diseases (e.g. tetanus and diphtheria) are not eradicable.

Currently more than 90% of Australian and New Zealand children aged two years are recorded as being fully immunised.(6, 7) This level is considered an acceptable target level nationally, in practical terms as well as for maintaining herd immunity for most vaccine-preventable diseases. It demonstrates that current vaccine delivery programs are effective, but is not grounds for complacency nor is it fully informative, as broad general statistics conceal regions and groups with sub-optimal coverage.(6) They include children experiencing socioeconomic disadvantage, Aboriginal and Torres Strait Islander children, Māori children, some children born overseas and those whose families actively reject some or all vaccines.(6, 8)

The current environment presents evolving challenges, including:

- Routine schedules are becoming more complex and change frequently, increasing concern among some parents and health providers and the risk of incomplete vaccination.(9)

- As vaccine-preventable diseases become more and more uncommon in the community, the perceived risk-benefit ratio of vaccination lessens for the individual, and real and perceived adverse events receive greater public attention (see Section 4).(10, 11)

- Organised opposition to vaccination and potential adverse events following immunisation have the potential to be amplified by the traditional media, the internet and social media (see Section 4).(12)

- Various appropriate ways of obtaining parental consent for immunisation are currently in use. New means of giving information and gaining valid consent need exploring as standards and expectations continue to evolve.(13)

- Changes in disease patterns, e.g. the influenza pandemic, the resurgence of measles and ongoing pertussis activity demand continuing high-level surveillance and active and specific responses.

4 Practical approaches for optimising immunisation

This section adds to and extends the responsibilities of paediatricians in childhood vaccination; many of these principles also apply to other health professionals.

4.1 Communicate better

Communication is especially important, as trust in health professionals is a major factor in maintaining public confidence in vaccines and high vaccination rates.(9) Good communication is a two-way process involving listening, responsiveness and information transfer. It requires sensitivity to vaccine issues in dealing with families. It may involve accessing or developing information resources to suit differing needs. There are a range of materials already available (Section 5) and doctors should remain abreast of program changes, alerts over diseases and vaccine side-effects.

4.2 Comprehensively manage AEFIs

Established systems exist to support the monitoring and safety of vaccines. However vaccines do carry a risk of side effects. Most are minor, rarely serious. Serious adverse events following immunisation require appropriate reporting (according to individual state/territory or country requirements) and management. Adverse events following immunisation may be vaccine-related or coincidental; paediatricians and other physicians may be involved in making the distinction. Good communication is particularly important at this stage and parents' concerns should not be dismissed. Future immunisations may need to be carried out under close supervision; clinics exist for this purpose. Expert advice can also be sought in major capital cities (see Section 5).

4.3 Attend to special risk groups

Sub-specialty paediatricians and physicians need to keep abreast of any special requirements of their patients and assure adherence to them. Many patients with risk factors for severe illness will have particular vaccine requirements, including those with chronic medical conditions and immunosuppression.(1) In general, children with allergy can receive vaccines (e.g. the measles, mumps and rubella vaccine, or MMR). Refer to guidelines for specific advice (see Section 4)

4.4 Encourage full immunisation

Children may be under-vaccinated because of socioeconomic disadvantage, logistical barriers, or unresolved fears and doubts about the value and safety of vaccines. Only about 2-3% of all children overall are not vaccinated due to active parental refusal of some or all vaccines, but these families often live in localities where up to a third of children receive no vaccines.(6) This results in sporadic outbreaks of vaccine-preventable diseases.

The national immunisation schedules now cover up to 16 diseases. Many parents and some doctors consider this too many, often based on unfounded concerns about "immune system overload".(14, 15) The prevalence of this opinion may be a factor influencing immunisation uptake.

A combination of old and new strategies is necessary to maintain and improve immunisation standards(16):

a. Remove barriers, provide reminders and provide "catch-up" immunisations. Immunisation status should be known for every child. Paediatricians have a special responsibility in this regard for children who are hospitalised.

b. Recognise that parents who are absolutely opposed to any vaccines are unlikely to change their minds.(17, 18) Some vaccine-refusing parents may still be susceptible to negotiation about selective vaccination e.g. diphtheria-tetanus and vaccines to prevent meningitis. A positive experience with even limited vaccines may increase the chances of further immunisation. Enforcement of immunisation is unlikely to be seen as a child protection matter unless there is imminent danger or a high likelihood of subsequent serious disease, such as post-exposure rabies prophylaxis or hepatitis B vaccine for a baby born to a carrier mother.

   It is inappropriate to refuse to treat unvaccinated children, firstly because it represents unethical coercion and secondly because the children will be further disadvantaged. Maintaining contact with such families can be of benefit to care generally, whether or not any immunisation is achieved.(19)

c. **For parents who accept immunisation:** maintain trust, rapport and provide information tailored to their needs and details of common side effects and rare but serious ones.

d. **For parents who are hesitant or selective with vaccines:** provide appropriate print and online information, share decision-making and accept the need for time and patience. For a few cases high-level supervision for vaccination will be needed (e.g. using an AEFI clinic – see Section 4). Accept selective vaccination if there is no alternative but only after emphasizing the risks of severe disease.

4.5 Advocacy

Paediatricians have an important role in advocating the benefits of vaccination – both proactive and at times reactive – in countering anti-immunisation activism (see also below). Their role can involve informing local communities or wider audiences, providing support for local primary care providers, and teaching trainees and qualified health professionals. In areas outside capital cities especially, paediatricians may be called upon to be media spokespersons. Some may use social media. Use of mainstream media is often best done in collaboration with local public health authorities.

Anti-immunisation activists have for years attracted followers.(20) Alarmist rumour and misinformation is now disseminated more quickly via the media, including internet and social media.(12) Exposure to vivid narratives about children allegedly injured by vaccines has the potential to put parents off vaccination.(21) Balance in response to this activism is required – the worst misinformation needs to be countered should it have the potential for broad dissemination, while generally it may be most effective to advocate positively and avoid confrontations.

Advocacy for no-fault vaccine damage compensation for Australia

Since immunisation benefits the population as well as the individual, it is entirely just and reasonable that society as a whole accepts vaccine damage compensation for affected individuals and their families. This has long been the case in New Zealand; it is yet to be accepted in Australia. The RACP strongly supports introduction of an Australian no fault vaccine compensation scheme, either as part of a national disability scheme or injury insurance scheme, or separately.

Advocacy for an "all-of-life" immunisation registry

The Australian Childhood Immunisation Register has been a key component of the success of the Australian childhood immunisation program. However, it does not record immunisations after seven years of age, omitting adolescent and adult immunisations. With the extension of many routine and "special risk" immunisations well past the age of seven, developing a register that captures these immunisations is recommended by the RACP.

4.6 Setting an example

Paediatricians and other physicians have a responsibility to ensure that they and their staff are appropriately vaccinated: to reduce occupational exposure, to reduce the risk of infecting patients, and to provide an example to patients and to the broader community.

5 Current information resources

National immunisation recommendations

www.immunise.health.gov.au and www.moh.govt.nz/immunisation (for Australia and New Zealand, respectively) supply high quality, comprehensive information for health professionals and for the general public, including:

- National Immunisation Program Schedules
    - Australia http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/nip

- New Zealand http://www.health.govt.nz/our-work/preventative-health-wellness/immunisation/new-zealand-immunisation-schedule

- Immunisation Handbooks for each country and updates where needed

  - Australia http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook-home

  - New Zealand http://www.health.govt.nz/publication/immunisation-handbook-2011

Information tailored to parents, for example:

- Australia

  - Understanding Childhood Immunisation http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/IMM52-cnt

  - The National Centre for Immunisation Research and Surveillance has a variety of resources for both health professionals and the general public. Information includes an MMR Decision Aid for parents, fact sheets for providers on vaccines and vaccine preventable diseases and vaccine safety, as well as a number of other resources, at: www.ncirs.edu.au

- New Zealand

  - Diseases and vaccines http://www.health.govt.nz/publication/immunisation-making-choice-your-children
  - The Immunisation Advisory Centre based at the University of Auckland in New Zealand provides a wide range of resources for both health professionals and the general public including fact sheets and other resources.: www.immune.org.nz

There are also national telephone information lines:

- Australia: 1800 671 811

- New Zealand: 0800 466863 (0800 IMMUNE)

A framework for communicating with parents about vaccination has been developed:

Leask J, Kinnersley P, Jackson C, Cheater F, Bedford H, Rowles G. Communicating with parents about vaccination. A framework for health professionals. *BMC Pediatrics* 2012,12:154 http://www.biomedcentral.com/1471-2431/12/154/abstract

State and Territory Health websites

In Australia, the State and Territory Government health departments are responsible for implementing the National Immunisation Program, and also have resources and information available on their websites.

- Australian Capital Territory – http://health.act.gov.au/health-services/canberra-hospital/our-services/division-of-women-youth-and-children/children-and-parenting/child-immunisation/child-immunisation

- New South Wales – http://www.health.nsw.gov.au/PublicHealth/Immunisation/index.asp

- Northern Territory – http://www.health.nt.gov.au/Centre_for_Disease_Control/Immunisation/index.aspx
- Queensland – http://www.health.qld.gov.au/ph/cdb/cdqhip.asp
- South Australia – http://www.dh.sa.gov.au/pehs/immunisation-index.htm
- Tasmania – http://www.dhhs.tas.gov.au/service_information/services_files/immunisation
- Victoria – http://www.health.vic.gov.au/immunisation/
- Western Australia – http://www.public.health.wa.gov.au/1/51/2/immunisation.pm

Adverse events following immunisation - special clinics

Physicians should contact the state or territory health provider about the clinic in their locality.

Immunisation and allergy

Refer to Immunisation Handbooks for each country listed above.

Australian Society of Clinical Immunology and Allergy (ASCIA) http://www.allergy.org.au/

ASCIA Guidelines for medical practitioners: Influenza vaccination of the egg-allergic individual http://www.allergy.org.au/health-professionals/papers/influenza-vaccination-of-the-egg-allergic-individual

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