Immunisation policy

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Immunisation Policy

National Immunisation Program

– Program of vaccines delivered at no cost to the population
– Extends from birth to old age
– Collaborative agreement between Cwlth and states/territories

Role of NHMRC

– Publish recommended immunisation schedule and handbook (on advice from Australian Technical Advisory Group on Immunisation (ATAGI))
– Changes according to new vaccines, new combinations, changing epidemiology of disease, cost effectiveness assessment
Immunisation Policy

Role of ATAGI

Determine whether vaccine is suitable for NIP, PBS etc based on efficacy, epidemiology of disease, whether population based immunisation will lead to additional positive outcomes for the community, eg herd immunity effect
Write handbook for endorsement by NHMRC

Role of PBAC

Take ATAGI recommendation and perform cost-benefit analysis
Make recommendation to Australian government as to whether fits cost-benefit criteria for NIP or PBS.
Immunisation Policy

National Immunisation Committee

Australian Government
States and Territories
Local government
RACGP
ADGP

Role is to implement the NIP
Australian Government

Policy development

central co-ordination and secretariat services to NIC
courage research
report to the Health Minister and AHMAC

Funding

Vaccines
Some service delivery
Part ACIR notification payment

Parent and GP incentive payments
Australian Government

Immunisation Hotline 1800 671 811


Education and Research

National Centre for Immunisation Research & Surveillance of Vaccine preventable diseases

www.ncirs.usyd.edu.au
National Immunisation Program (NIP) 1 July 2011

- birth: hepatitis B
- 2 months: DTPa/IPV/Hib/hep B, 13vPCV, ORV
- 4 months: DTPa/IPV/Hib/hep B, 13vPCV, ORV
- 6 months: DTPa/IPV/Hib/hep B, 13vPCV, ORV
- 12 months: MMR, Hib, MenC
- 18 months: varicella
- 4 years: DTPa/IPV, MMR
• 10-13 years (only) hepatitis B, varicella, HPV (girls only)
• 15-17 years dTpa
• 50 years ADT
• adults 65+ influenza (every year) pneumococcal
States and Territories

- implement the National Immunisation Program
- allocate funds for free vaccine in efficient and effective manner
- ensure services equitable, acceptable and appropriate to the population
- Provide funding to local government to conduct immunisation – both fee for service and incentive payments
- appropriate management systems
States and Territories (cont.)

• purchase and provide vaccines to all immunisation providers

• establish vaccine distribution system which maintains cold chain standards

• surveillance of
  – immunisation coverage (ACIR, school coverage)
  – incidence of VPD’s (including outbreak investigation)
States and Territories (cont.)

- surveillance of vaccine wastage levels
- adverse events following immunisation
  - liaise with the Australian Government through the NIC
  - develop regional targets for immunisation coverage
Immunisation in Victoria

- **Immunisation is provided by:**
  
  local government (pre-school) 45%
  - Community sessions
  - small number M&CH nurses
  - School based 90%

  general practitioners 50% under school age
  others eg. hospitals, Aboriginal Health Services 5%

  General practitioners vast majority of vaccines in older adults
Immunisation in local government

• Legislative framework

*Public Health and Wellbeing Act 2008*

non-delegable statutory obligation on Victorian councils

• “The function of every council under this Act is to seek to prevent diseases......through organised programs....by co-ordinating and providing immunisation services to children living or being educated within the municipal district”

• All local governments provide immunisation services for under school age children, and school based programs in secondary schools.
School entry certificate

- school entry immunisation status certificate is required to be produced on entry to primary school
- Can be issued by local government, medical practitioner or any immunisation provider
- ACIR Child History statement is accepted as an immunisation status certificate
- enrolment via Medicare, children 0-6 years
- data on child, vaccine/s, provider
- payment $6 per completed immunisation encounter
- cost shared between Australian Government/States
Australian Childhood Immunisation Register (ACIR)

- immunisation program evaluation
- measure coverage in terms of national goals and targets
- assist with opportunistic immunisation
- child history statements

5 year old statement acts as the SEIC in Victoria
Immunisation coverage Victoria

12 months  91.6% (rank 3)
2 years    93.4% (rank 2)
5 years    91.1% (rank 1)

Source ACIR (30 June 2011)
Immunisation coverage 1999 - 2010

ACIR coverage data Victoria 1999 to 2010

Percentage coverage

Year

12-<15 months
24-<27 months
72-<75 months
60-<63 months
Immunisation coverage - indigenous

12 months  84.1% (rank 5)
2 years    93.0% (rank 3)
5 years    86.5% (rank 5)

Source ACIR (30 June 2011)
Improving Victoria’s program

New immunisation strategy 2009-2012

Key action areas

Whole of life immunisation
  – Advocate for WoL register
  – Improve data and coverage for key groups, eg older adults

Immunisation of high risk groups
  – Occupational groups, eg HCWs, carers of elderly
  – ATSI people, chronic medical conditions, juvenile justice/prisoners
  – Address inequalities and gaps

Service quality
  – Cold chain
  – Right vaccine at right time
Immunisation strategy

- **Public communication and participation**
  
  Public communication campaigns, including culturally relevant
  Support consumer involvement and advocacy

- **Partnerships**
  
  Encourage regional partnerships between providers, eg local
government, GPs, AMS
  Stakeholder conference & recognition

- **Research and development**
  
  Local research priorities, especially best practice service
delivery
Surveillance of Adverse Events Following Vaccination In the Community (SAEFVIC)

Rationale:

Promote community confidence in immunisation
Rapidly detect & research vaccine safety concerns
Monitor & feedback adverse events local/nationally
Broad referral service
  – Infants and children
  – Adolescents and adults
Timely follow up and feedback for the reporter and the public
SAEFVIC

Enhanced passive reporting system

RCH lead agency for SAEFVIC

Referral service to:

• Royal Children’s Hospital – child AEFI

• VIDS - Royal Melbourne Hospital – adult AEFI

• Monash Medical service – child/adult AEFI
You are the newly appointed immunisation co-ordinator for your local shire council.

How would you go about setting up and monitoring the immunisation program?
Some ideas

- Current immunisation coverage?
- Current incidence of VPDs?
- Immunisation providers – your council immunisation nurses, MCH nurses, GPs, local hospital?
- Geographic accessibility of sessions?
- Community “feel” of sessions?
- Equipment for vaccine storage, administration, consent, recording, reporting to ACIR
- Adverse events management and reporting
Some ideas

Evaluation of sessions – consumer feedback

Evaluation of sessions – coverage achieved

Process for following up overdue children?

School immunisation certificates – process to check?

School immunisation – relationship with schools
Invasive Meningococcal Disease
Meningococcal C vaccine

- Meningococcal C conjugate vaccine
- Given as single dose at 12 months
- Phase 1 commenced 1 January 2003

Children 1 to 5 years
Adolescents 15 to 19 years
- Phase 2 commenced 1 July 2003

Children 6 to 14 years
Meningococcal disease

Confirmed and probable invasive meningococcal disease notifications by serogroup, Victoria, 1995 to 2011

- Unknown
- 29E
- Group Y
- Group W135
- Group C
- Group B
- Group A

MenCCV for 1-5 & 15-19 years (Jan 2003)
MenCCV for 6-14 years

Number of notified cases

Year of notification

Department of Health
Pneumococcal disease

Meningitis

Septicaemia

Pneumonia

Otitis media
Invasive pneumococcal disease

Notified cases of confirmed invasive pneumococcal disease by age, 1
January 2002 to present

NIP 01/05: 7vPCV for children born 2003 onwards
Pertussis

• Bacterial respiratory illness caused by *Bordetella pertussis*

Infants less than 6 months of age are at highest risk of severe illness

50% of infants under 6 months hospitalised and some require ICU admission

Protection not adequate until after 3 doses at 6 months of age

Combat increased incidence with “cocoon” strategy

Boostrix (adult DTPa vaccine) offered free to all parents of infants born since 15 June 2009

Program currently running until June 2012
Notified cases of pertussis by month and age group, Victoria, 1 January 1997 to present

Jan 04: dTpa for Year 10s
Newer programs - HPV

• virus with over 100 different types

40 to 50 types affect the genital area
Classified as low-risk and high-risk types
  – Low-risk types cause genital warts and/or changes to cervical cells
  – High-risk types (~15) are linked to cervical cancer

• The virus can lie dormant in the body for a long time without causing a problem; often no noticeable symptoms

• 70-80% of cervical cancer cases in Australia are linked to HPV virus types 16 & 18

• Gardasil® protects against types 16 & 18 as well as types 6 & 8 (genital warts)
Newer programs - Rotavirus

- Characterised by sudden onset of fever, vomiting and watery diarrhoea
- Highly contagious
- Generally transmitted by oral-faecal route
- Infects and replicates in cells of small intestine
- Average disease duration 6 days (3 - 8 days)
- Multiple infections in first few years of life
- Most Australian families will experience rotavirus infection before their child turns five

Newer programs - Rotavirus

• **Rotateq**
  Direct, serotype-specific protection against all five common serotypes
  • 98% efficacy against severe RGE
  • 96% efficacy against hospitalisations
  • 3 doses given at 2, 4 and 6 months of age
  • Time limits for doses – all doses by 32 weeks; no catch up
  • TGA approved for all infants aged 6-32 weeks, including pre-term

Reference: RotaTeq PI, May 2006