Immunisation of Indigenous people: Achievements and challenges

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Additional vaccines for Indigenous people

- BCG
  - High prevalence areas
- Hib OMP
  - NT (all infants)
- Hepatitis A
  - NT, Qld, SA, WA
- Influenza 15+ years
- Pneumococcal 50+ years and 15-49 with risk factors
  - 15+ in NT
Presentation outline

VPD

- Children
  - Pertussis
  - Hep A
  - Men C

- Adolescents
  - HPV

- Adults
  - Influenza

Vaccination

- Timeliness
- Coverage

- Data scarcity
- Coverage
Children
DTP coverage, 2007

Source: Australian Childhood Immunisation Register
Vaccination delay, DTP3, born 2005

Source: Australian Childhood Immunisation Register
Indigenous children fully vaccinated, 12 months of age, 2007

Source: Australian Childhood Immunisation Register
Coverage for Indigenous-only vaccines

- Hep A (indigenous) 2 doses at 30 mo
- 23vPPV (indigenous) at 36 mo
Pertussis hospitalisations, 2003-06

Hospitalisations per 100,000 population

Age Group (years)

- Indigenous
- Other
Meningococcal hospitalisations by year, all ages

![Graph showing hospitalisations per 100,000 population over years, with separate lines for Indigenous and Other populations.](image-url)
Meningococcal serogroup distribution
2003-06

- Indigenous
  - B 89%
  - C 9%
  - Other 2%

- Non-Indigenous
  - B 71%
  - C 22%
  - Other 7%
Hepatitis A notifications, Indigenous children <5 years

Rate per 100,000 persons

- Region funded from 2005
- Regions not funded
Adolescents
HPV and adolescent vaccination

- Pre-vaccination
  - Infection rates similar in Indigenous and non-Indigenous
  - Cervical cancer rates 2-fold higher
  - Cervical cancer mortality 5-10 times higher
- No data on coverage in Indigenous adolescents
- No information on school-based vaccination programs for Indigenous adolescents
Adults
Influenza vaccination coverage

- Indigenous: 23%, 29%, 27%
- Non-Indigenous: 52%, 84%, 73%

Source: Australian Bureau of Statistics National Aboriginal and Torres Strait Islander Health Survey, 2004-05
Hospitalisation for influenza or pneumonia, 2003-06

Hospitalisations per 100,000 population

Age Group (years)

- Indigenous
- Other
All-cause pneumonia hospitalisations:
- Indigenous adults: Qld, NT, SA, WA
Achievements

- Polio, diphtheria, tetanus, measles, rubella
- Meningococcal C
- Hepatitis A
- Hepatitis B
- Hib
- Vaccine-type IPD
- Rotavirus?

- Coverage at 24 months
Challenges

- Timely vaccination at 2, 4, 6 months
  - Pertussis
  - IPD, pneumonia?

- Coverage for targeted vaccines
- Coverage in younger adults
- Pneumonia and IPD in younger adults
- Information about adolescent vaccination
- Conditions not covered by vaccines
  - Meningococcal B
  - Non-vaccine type IPD
  - Ear disease
  - Pneumonia
Vaccine Preventable Diseases and Vaccination Coverage in Aboriginal and Torres Strait Islander People, Australia, 2003 to 2006

National Centre for Immunisation Research and Surveillance of Vaccine Preventable Diseases

Acknowledgements

- Sumalathaa Krishnamoorthy
- Han Wang
- Brynley Hull
- Andrew Jardine
- AIHW
- CDNA
- ABS
- Medicare Australia
Model attribution of causes of acute respiratory hospitalisation

Background | RSV | Flu | IPD

Month of Admission

| Jan-01 | Apr-01 | Jul-01 | Oct-01 | Jan-02 | Apr-02 | Jul-02 | Oct-02 | Jan-03 | Apr-03 | Jul-03 | Oct-03 | Jan-04 | Apr-04 | Jul-04 | Oct-04 | Jan-05 | Apr-05 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0      | 100    | 200    | 300    | 400    | 500    | 600    | 700    | 800    | 900    | 1000   | 1100   | 1200   | 1300   | 1400   | 1500   | 1600   | 1700   | 1800   | 1900   | 2000   | 2100   | 2200   |
| 200    | 300    | 400    | 500    | 600    | 700    | 800    | 900    | 1000   | 1100   | 1200   | 1300   | 1400   | 1500   | 1600   | 1700   | 1800   | 1900   | 2000   | 2100   | 2200   | 2300   | 2400   |
| 400    | 500    | 600    | 700    | 800    | 900    | 1000   | 1100   | 1200   | 1300   | 1400   | 1500   | 1600   | 1700   | 1800   | 1900   | 2000   | 2100   | 2200   | 2300   | 2400   | 2500   | 2600   |
| 600    | 700    | 800    | 900    | 1000   | 1100   | 1200   | 1300   | 1400   | 1500   | 1600   | 1700   | 1800   | 1900   | 2000   | 2100   | 2200   | 2300   | 2400   | 2500   | 2600   | 2700   | 2800   |
| 800    | 900    | 1000   | 1100   | 1200   | 1300   | 1400   | 1500   | 1600   | 1700   | 1800   | 1900   | 2000   | 2100   | 2200   | 2300   | 2400   | 2500   | 2600   | 2700   | 2800   | 2900   | 3000   |
Pertussis by year

Hospitalisations per 100,000 population

Year of Separation

- •••• Indigenous
- --- Other