

Immunisation Coverage Issues

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May 2006



Coverage Surveys:

National 1991/2, North Health 1995/6, National 2005

Fully Immunised at aged 2 years:

	All children	Maori	Pacific
1991	56%	Not stat sig. 70% as likely as European	
1995/6	72%	47%	53%
2005	77.5%	69%	82%

National Immunisation Coverage Survey 2005

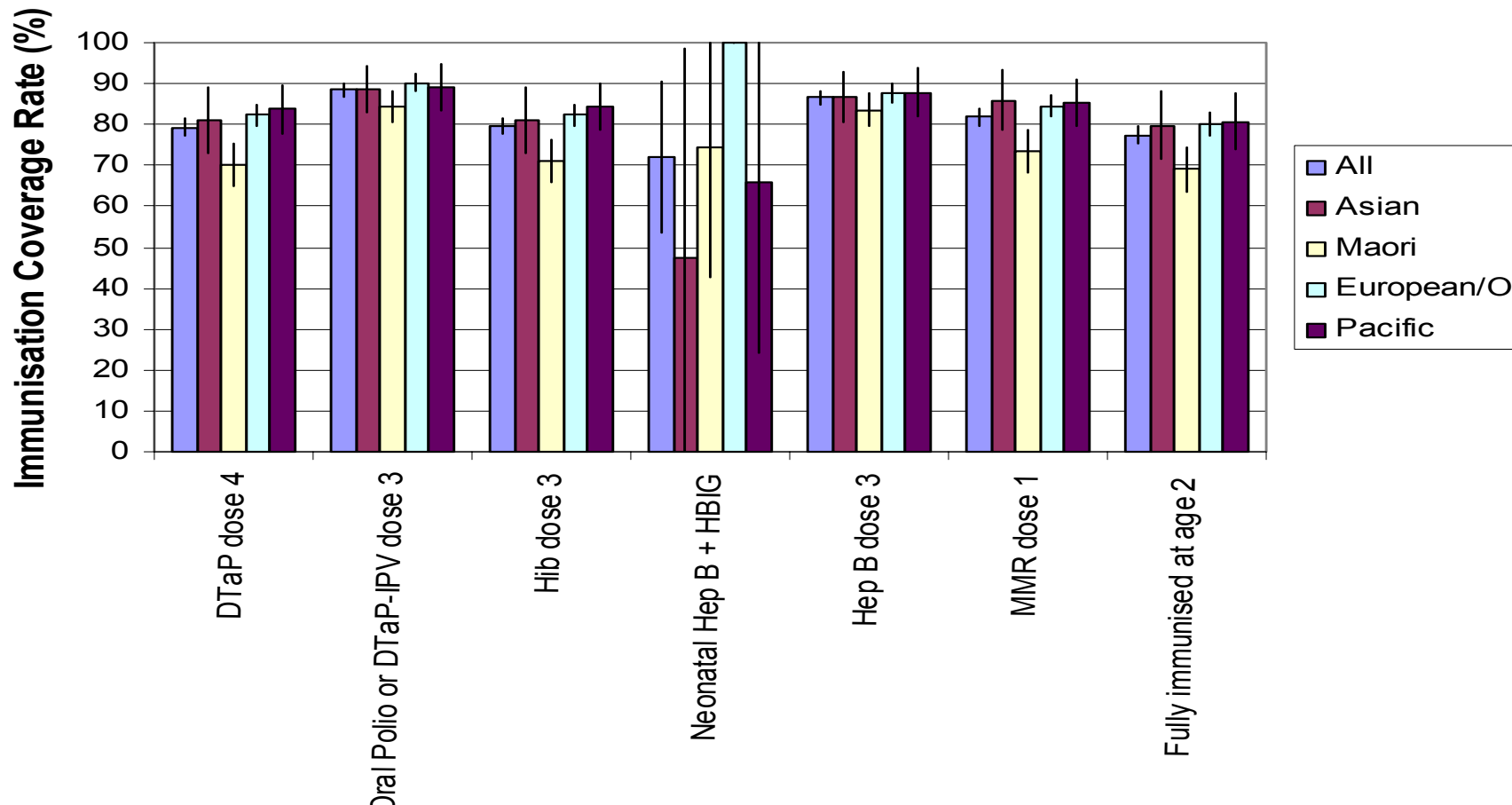
- In 1991 less than 60% of 2-3 year old children were fully immunised by age 2 years
- Method similar to 1991
- Sample of 1563 children age 2-3 years
- Sample weighted to provide coverage of Maori and Pacific children

Results

	Fully immunised at 2 yrs	Fully immunised at 2 - 3	Catch up
Maori			
Pacific			
Asian			
Other			

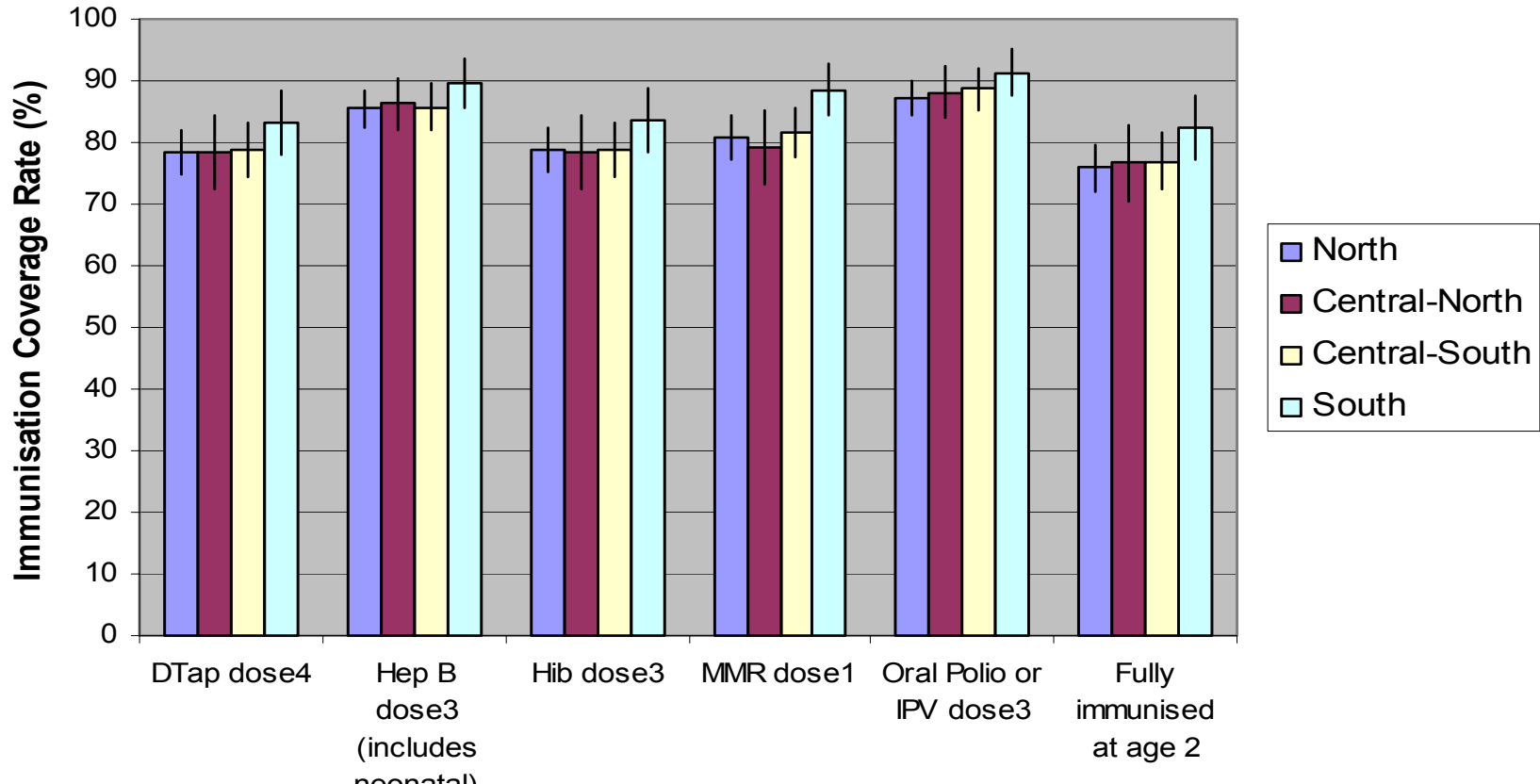
National Immunisation Coverage Survey 2005

**Immunisation Coverage at Age 2 Years by Ethnicity.
National Childhood Immunisation Survey 2005.**



National Immunisation Coverage Survey 2005

Immunisation Coverage at Age, by Health Area. National Childhood Immunisation Survey 2005.



Current Background

Low coverage, though improving

- Pacific coverage improving well
- Local areas with high coverage
- PHOs with high coverage
- **Significant inequities for Tamariki Maori remain**

Disease epidemics

- pertussis
- Meningococcal
- Highest burden Maori and Pacific children

Factors influencing childhood immunisation coverage

Policy

Legislation

Physical environment

Social environment

- home
- work

Health Professionals

- oAttitude
- oKnowledge
- oBehaviour
- oNeeds

Parents/Caregivers

- oAttitude
- oKnowledge
- oBehaviour
- oNeeds

Access and relationship

Mass communications

Anti immunisation lobbies

COVERAGE

THE ENVIRONMENT

Assumptions: All factors in this model have an influence on both health professionals and caregivers to some degree and it is the behaviour of both health professionals and caregivers that determines immunisation coverage. All factors are modifiable.

Functional Issues

- mobility, multiple providers, unknown records
- no personal relationship with provider
- language, transport, cultural barriers
- lack of flexibility of services - opening hours, convenience...
- low priority for preventative health
- provider apathy, disinterest, financial disincentives

Key underlying issue
Poverty

Functional Issues

The 'rule of thumb' 60/30 /5/5

- 60% of children vaccinated effectively with present GP services
- 30% of children could be vaccinated with improved primary care mechanisms
 - identification/coordination/databases and recall
 - supported by strong positive multilevel ongoing communication strategies
- 5% of children very hard to track
 - need expensive tracking and outreach services
- 5% anti-immunisation

NB the numbers shift for Maori, with higher rates in the harder to access groups

Functional Issues:

Most solutions are structural

- **Find** the children and offer them appropriate timely services
 - Compulsory enrolment at birth with an accountable provider
- NB many PHOs have high coverage, but many children, particularly in large urban areas, not enrolled
- Support to providers - decent remuneration and recognition of commitment, recall/outreach efforts
 - Use of NIR and local integrated solutions - outreach to the 'lost' children

Communication Issues

- always underestimated!

*'there's no need for immunisation if
your child is healthy'*

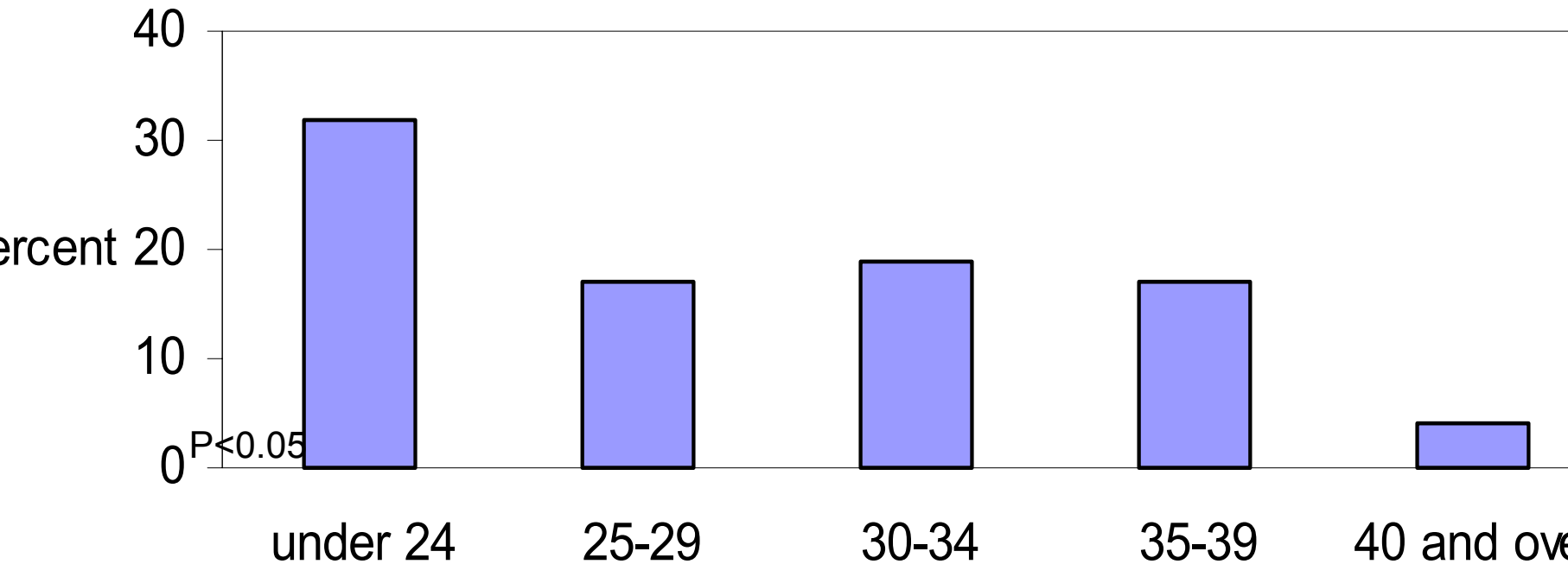
1992: 2- 8% agree, depending on region

1996: 7.5% agree (North Health)

2000: similar question 19% agree

Over 30% of younger mothers believe healthy living will prevent catching vaccine-preventable diseases

Agree - "If you keep children clean, well fed and otherwise healthy they will not catch these diseases"



Mass communication - effects

The major barrier identified by health professionals was parental 'fear', particularly of vaccine reactions

“these vaccinations are quite dangerous in regards to them being brain damaged and just the certain type of effects that the kids get...”

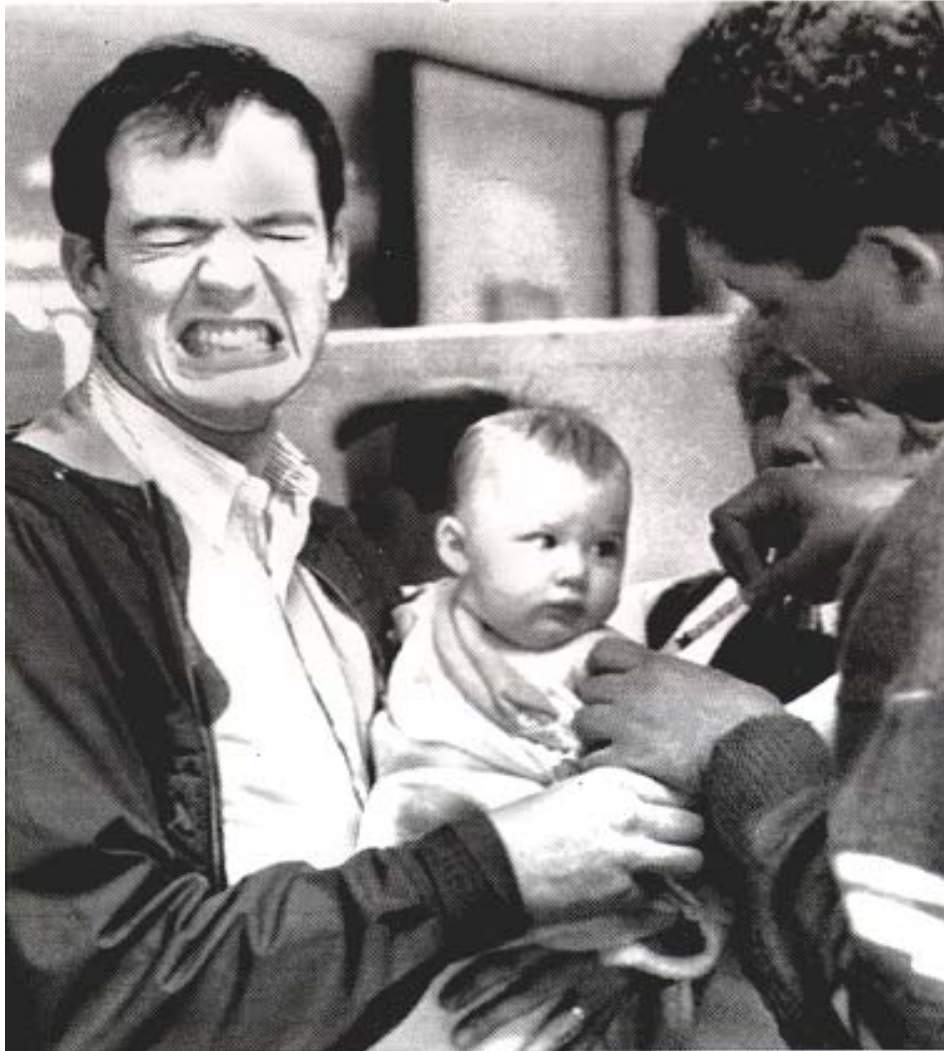
Petousis-Harris H, Goodyear-Smith F, Godinet S, Turner N. Barriers to childhood immunisation among New Zealand mothers. New Zealand Family Physician 2002;29(6):396-401.

Petousis-Harris H, Goodyear-Smith F, Soe B, Turner N. Family practice nurses perspectives on barriers to childhood immunisation. Vaccine Submitted.

Petousis-Harris H, Goodyear-Smith F, Turner N, Soe B. Family physician perspectives on barriers to childhood immunisation. Vaccine 2004;22(17-18):2340-2344.

Petousis-Harris H, Turner N, Kerse N. New Zealand mothers' knowledge of and attitudes towards immunisation. New Zealand Family Physician 2002;29(4):240-246.

The fear factor



Dispute over vaccine risks goes on

HEALTH: Lobby groups report adverse reactions from meningococcal B jabs

by Martin Johnston
health reporter

Central Auckland's 25,000 preschoolers will today start being vaccinated against meningococcal B disease, as questions are raised over the safety of the injections.

The Health Ministry says the vaccine targeting the main New Zealand strain of the disease is safe.

But the Immunisation Awareness Society and the Vaccination Alternatives Society are questioning the safety of the MeNZB vaccine.

In a \$200 million project, the Government aims to vaccinate 90 per cent of New Zealand's 1.1 million people under the age of 20. Those in Counties Manukau and Auckland City suburbs at higher risk of the disease were the first to receive the vaccine, starting in July.

The programme reached North Shore preschoolers last Monday and comes to central Auckland today.

Children aged between 6 months and 5 years can receive the jabs from their GP. The vaccine is not yet approved for younger babies.

Northland preschoolers will start on November 22. School-based vacci-

nation of school-aged children in central Auckland and on the North Shore will start in March.

The Alternatives Society has held three public meetings since the vaccination campaign began, each attended by 70 to 250 people.

The Awareness Society's principal researcher, Sue Claridge, said she had been told of several cases of bad reactions to the vaccine, including a school child taken by ambulance to hospital after suffering a seizure and a 20-month-old with a high temperature, unable to walk and screaming in pain when his leg was moved.

"This vaccine is highly reactive. We know that a lot of those reactions were not reported."

She said doctors and vaccinators were fobbing off parents who wanted to record adverse reactions. But the ministry said parents could report reactions and at least one had.

The Health Research Council's independent safety monitoring board said it found no issues of concern during the first two months, when more than 140,000 doses of the vaccine were injected.

Two cases of the blood disorder thrombocytopenia were recorded in

people who had been vaccinated, but the vaccine was not necessarily the cause. Three people had fever-related seizures within four days of vaccination, but they all also had a respiratory or ear infection.

Otago University's Centre for Adverse Reactions Monitoring received 88 reports of adverse events to September 24, none of which were life-threatening.

Clinical trials on the vaccine found a range of possible side-effects, including that about 10 per cent of children will suffer vomiting or diarrhoea and a quarter of all patients will develop a headache.

But University of Auckland paediatrician Professor Diana Lennon said most of the vomiting and diarrhoea was probably caused by things other than the vaccine.

Severe allergic reactions, nerve damage and chronic fatigue syndrome were reported by some adults or adolescents given the Norwegian vaccine which is the "parent" of the New Zealand vaccine. But these side-effects were rare, occurring in no more than one in 10,000 patients.

Social environment

Where do parents get their information from?

- The relationship with the providers:

Of parents who saw a GP antenatally 81% recalled immunisation being discussed, 61% with midwives and 20% with specialists

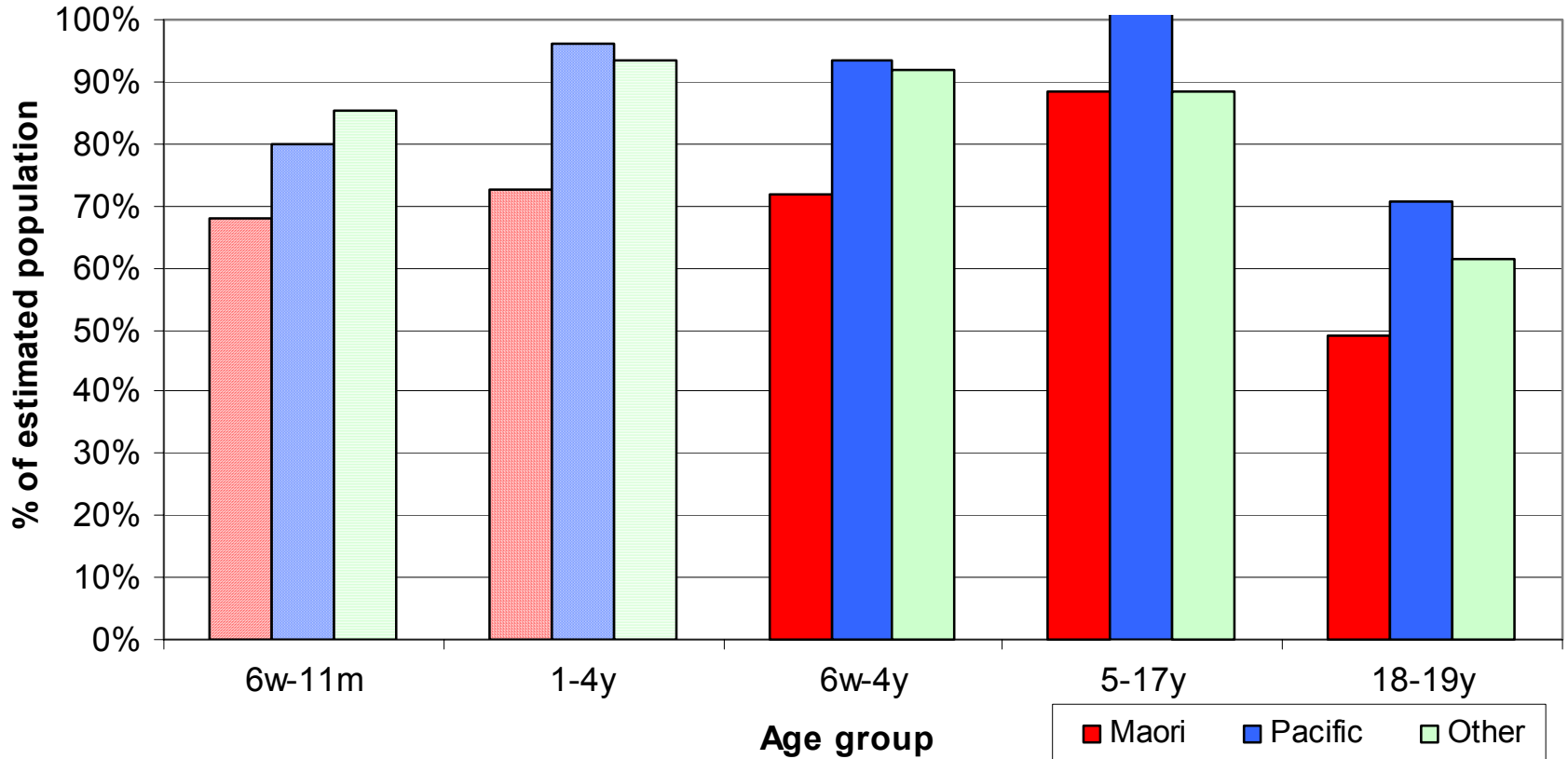
“they make you feel like, belittled, is that the right word?...”

- 12% stated they obtained information from antenatal group, family, friends and coffee groups
- For Maori parents there is a strong influence with the broader whanau, and particularly grandparents

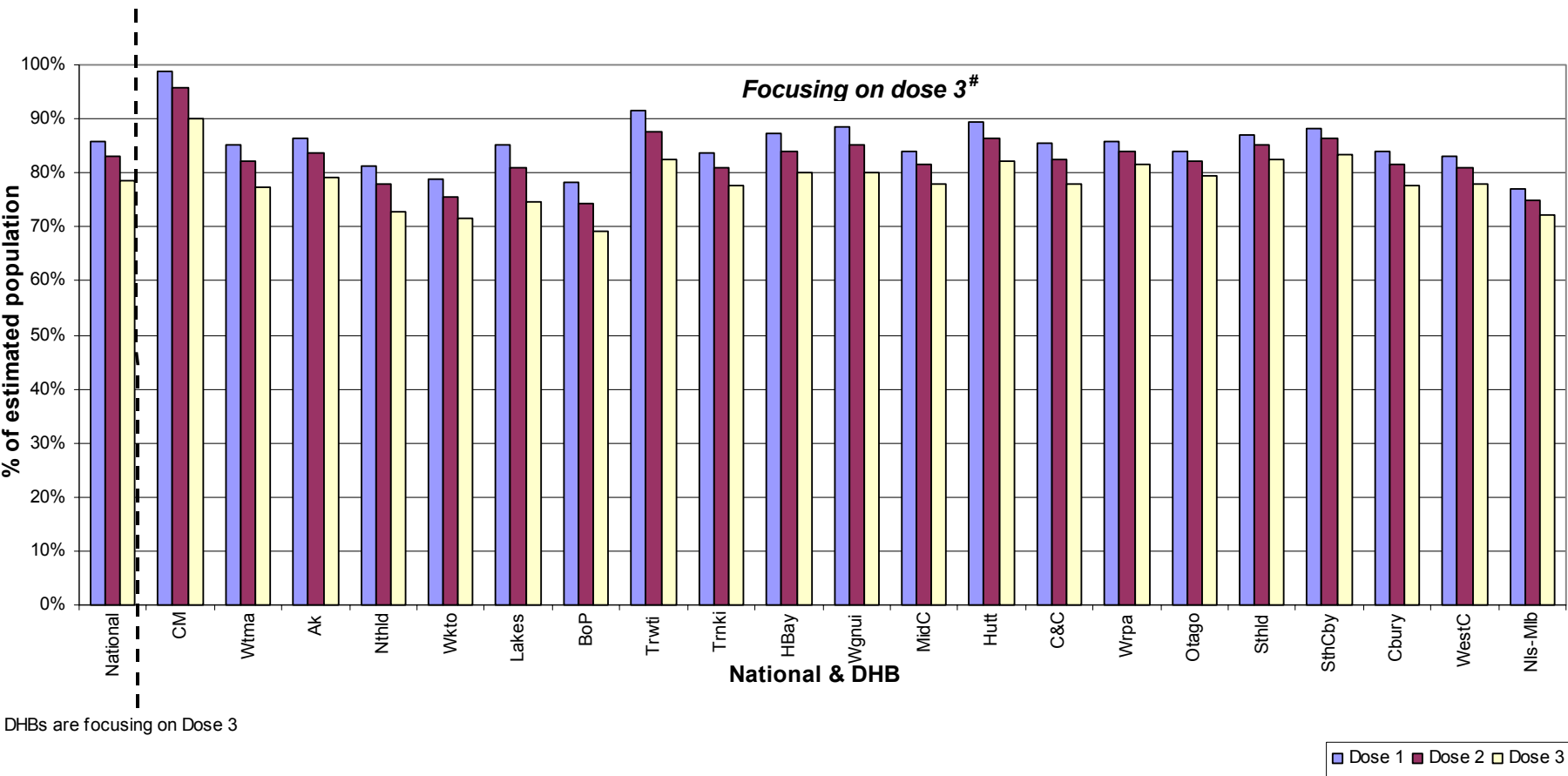
Meningococcal B Campaign

- Overall successful:
 - Very successful for highest risk group
 - young Pacific children
- Inequity gap for Maori remains in primary care delivery, not in school-based delivery
- Lower uptake for under 6 months of age
- Communications: anti-science/anti-establishment sentiment was underestimated, local level confusion and mixed messages also common
- Importance of listening to communities, collaborative networks – vital and at times invisible to funders
- Importance of working closely with media

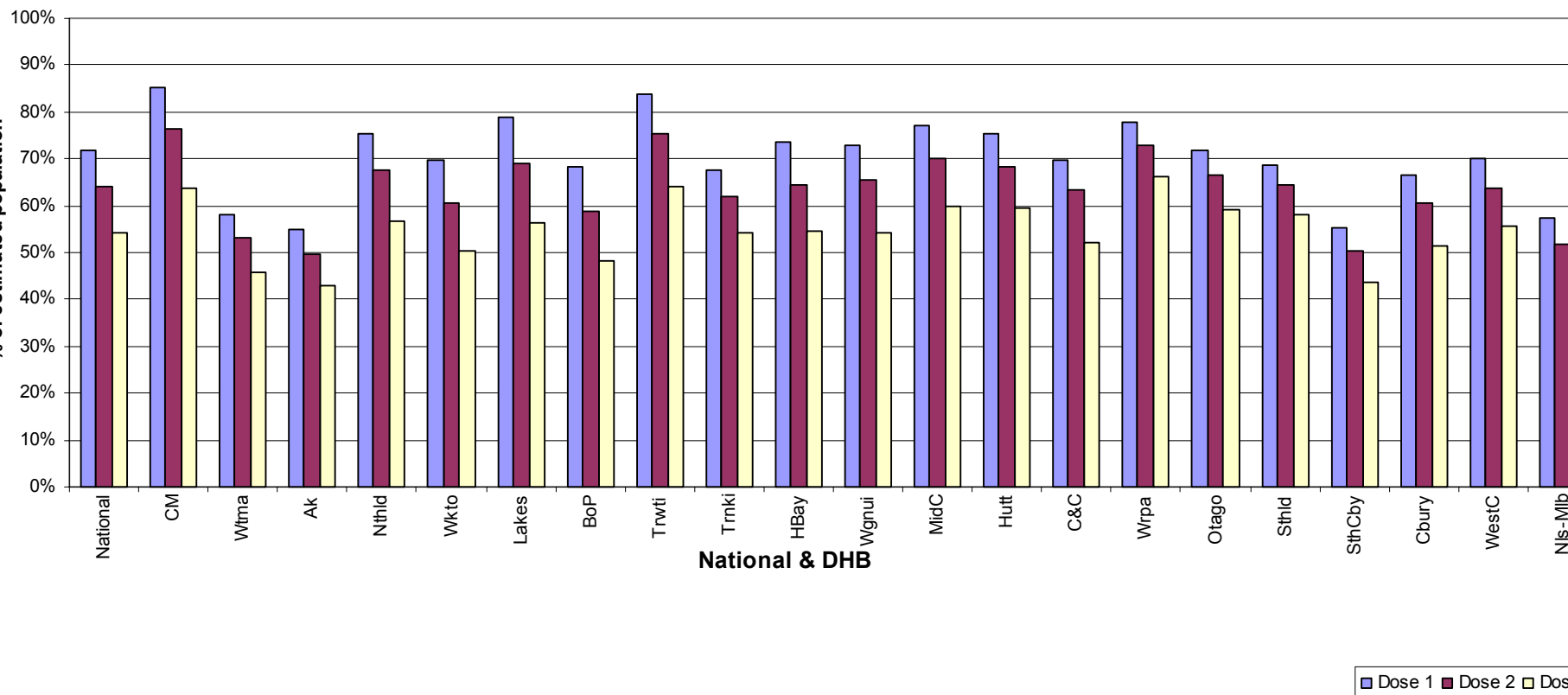
**MeNZB™ Coverage estimates for Dose 1 , Ethnicity, Current age
(indicates number of individuals who have started their vaccinations)
National Campaign at week 92, ending 23 April 2006**



MeNZB™ Coverage estimates of total vaccinations given, currently aged 6w-19y
National & DHB,
National Campaign at week 92, ending 23 April 2006



**MeNZB™ Coverage estimates for Maori, currently aged 6w-4y,
National & DHB
National Campaign at week 92, ending 23 April 2006**



Legend: ■ Dose 1 ■ Dose 2 ■ Dose 3

Learning from MeNZB campaign and national Immunisation programme

- Maori and Pacific are very different communities!
- Maori communities
 - More dispersed, particularly in large urban areas
 - Poverty, mobility
 - High rates of unenrolled children
 - Slower to come for vaccination, longer 'tail'
 - Higher gains from opportunistic approaches
 - More effective in areas where the families are known
 - Affected by mainstream anti-immunisation sentiment: 'fear' combines with access issues
 - More complex communication strategies needed, diverse, collaborative

Learning from MeNZB campaign and national Immunisation programme

Pacific communities

- Pacific primary care providers strong and appear effective
 - less dispersed population
- Good effect with Pacific media
- To date appear less affected by mainstream anti-immunisation sentiment
- Not a single community – important to differential different Pacific communities

Key Concerns

- Environment/access
 - particularly an issue of poverty
 - accentuated with 'fear' and 'unease'
- Primary health care providers not adequately supported
 - Provider knowledge and systems need strengthening
 - Integrate providers, and community more effectively
- Community/ Parental Issues - Communication:
 - 'Listen to the people!
 - Not all communities are the same
 - Multiple messages, in many media to multiple health professional and community levels needed
 - Collaborative relationships vital
 - Need rapid feedback loops

IMAC experience

- **Communication**

- genuinely believing and supporting the importance of communities – eg primary health professionals, parents, Maori, media
- Listening and adapting to their voices
- Recognizing the limitations of old paradigms
- It is hard, takes a long time, we make mistakes but we evolve with the communities' needs
- Vital to develop collaborative relationships
- Education sits within communication, not the other way round – ie when the community is ready for it

“The difficulty does not lie with our audience. Rather, we have failed to understand our audience. We repeat what they know and neglect what they don't. Our job is to figure out what has the greatest value to our audience and relay it clearly.”

Baruch Fishoff
Carnegie Mellon University

Collaboration

Kia Mataara Well Health

IMAC

Maori SIDS

Well Child/Tamariki Ora Promotion

NZCYES -Paediatric Epidemiology



Immunisation Advisory Centre

ĀRAINGA MATE

UNIVERSITY OF AUCKLAND