

Immunisation Audience Research

Prepared for
Ministry of Health
Manatū Hauora

1 February 2011

Contents

1.	Executive Summary	1
2.	Introduction	4
3.	Research Approach	5
4.	Attitudes and Beliefs	8
5.	Knowledge and Understanding	12
6.	Skills and Confidence	14
7.	Role of Providers/Others	17
8.	Environmental Factors	20
9.	Message and Concept Testing	22
10.	Typologies	29
11.	Conclusions	35
	Appendices	36

1. Executive Summary

1.1 Introduction

- Immunisation is one of the Government's six Health Targets. The Ministry of Health (the Ministry), District Health Boards (DHBs) and the health sector are committed to reaching a goal of having 95% of all New Zealand two year olds fully immunised by 2012.
- Immunisation is one of the most cost-effective of all health interventions and is an essential component of both Well Child and adult preventive health services. New Zealand's child immunisation rate is low by international standards, and stands at 88%¹. Māori rates of immunisation are particularly low.
- The Ministry engaged Litmus Ltd to undertake qualitative audience research amongst parents/caregivers who have not fully immunised one or more of their children aged 0–5 years. The aim was to explore in detail their attitudes and beliefs, decision-making processes and barriers to immunisation. The findings will be used to develop cost-effective strategies that will make a difference to New Zealand immunisation rates and the health of New Zealand children and communities.

1.2 Key findings

Attitudes and beliefs:

- Parents/caregivers who have not fully immunised their children aged 0–5 years hold a variety of attitudes and beliefs about immunisation. These can be grouped into attitudes and beliefs about the relevance and importance of immunisation and concerns about immunisation and its effects. For Pākehā and some Māori participants, their concerns outweigh the relevance and importance of immunisation, which has contributed to or resulted in decisions and/or behaviour not to fully immunise their children.
 - There is a general perception that immunisation is less relevant to children in New Zealand today, which is driven by low incidence of vaccine preventable diseases in 2010.
 - There is concern amongst Pākehā over possible negative long-term health impacts from immunisation (e.g. link with autism) and concern amongst Māori over potential adverse reactions to immunisation leading to serious complications.
 - There is concern amongst Pākehā, and to a lesser extent Māori, over the standard course of immunisation (e.g. immunisation starts too early in a child's life, too many vaccines in the schedule, too many vaccines in the one syringe).
 - Māori, and to a lesser extent, Pākehā lack confidence in the effectiveness of immunisation.

¹ Immunisation coverage at 24 months for the period 1 October 2010 to 1 January 2011.

- Pacific people however consider their children more at risk of disease and hold more positive attitudes and beliefs about immunisation.

Knowledge and understanding:

- Parents/caregivers who have not fully immunised their children have varying degrees of knowledge and understanding of immunisation. Pākehā participants overwhelmingly mention there is a lack of balanced information on immunisation, with most information being either ‘pro’ immunisation or ‘anti’ immunisation. Pākehā are heavy users of the Internet to gain knowledge and understanding of immunisation.
- Māori knowledge of the immunisation process (such as the make-up of the vaccines and the immunisation schedule) is very low.
- Māori tend to be far less likely to have considered the benefits and risks of immunisation. Knowledge and understanding that they have attained tends to be through engagement with whānau and midwives.

Skills and confidence:

- In most cases, parents/caregivers who do not fully immunise their children have not actively opted not to immunise. Some are not aware that they have a choice, some do not feel confident or empowered to make a choice, and some are sitting on the fence by delaying decisions around immunisation. Some also find the immunisation experience completely overwhelming and distressing. Many Māori participants seem to lack confidence in navigating the immunisation system.

Role of others:

- The attitude and encouragement of providers, the services they provide and the advice they give are key drivers to parent/caregiver behaviour and decisions on child immunisation. Family/whānau, and to a lesser extent partners and peers, play important roles in providing knowledge and shaping views.

Environmental factors:

- Environmental factors (i.e. location, availability and cost of accessing immunisation services, experience with different schedules and the media) appear to be less of a factor in immunisation behaviour and decisions, although some Māori identify transport costs and availability as barriers to accessing health services in a timely way.
- There is significant stigma associated with non-immunisation, meaning participants still don’t like talking about their decisions or circumstances publically.

Message and concept testing:

- A number of ideas for facilitating access to uptake of immunisation services were presented and ‘tested’ amongst participants. Messages and concepts that speak directly to parents/caregivers and family/whānau have greater relevance than those that speak at a societal level. Of the messages and concepts tested, financial incentives are more likely to encourage immunisation uptake amongst parents/caregivers who do not fully immunise their children. Māori prefer an in-home setting and Pacific people prefer a clinical services setting.

Typologies:

- Five key typologies are apparent for parents/caregivers who do not fully immunise their children: 'Nurturers', 'Fearfuls', 'Vulnerables', 'Unwell' and 'Rejecters'. Each of these typologies has different characteristics and there are different mechanisms for change to facilitate immunisation decisions.
 - '*Rejecters*' – opposed to most or all child immunisation.
 - '*Nurturers*' – not opposed to immunisation, but believe their children are at low risk of disease.
 - '*Fearfuls*' – find the immunisation experience emotionally distressing for both themselves and their children.
 - '*Vulnerables*' – not opposed to immunisation, but face barriers to accessing child immunisation.
 - '*Unwell*' – open to immunisation, but don't due to their child's poor health.
- Pākehā aligned more with the 'Rejecters', 'Nurturers' and 'Fearfuls' typologies, Māori typically aligned with the 'Vulnerables', 'Unwell' and 'Fearfuls' typologies and Pacific tend to align with the 'Unwell' typology.

1.3 Conclusions

- The immunisation audience research has confirmed that in most cases, parents/caregivers who do not fully immunise their children have not actively opted not to immunise.
- Of the five typologies of parents/caregivers who have not fully immunised their child, providing services to:
 - The 'Unwell' typology may present an opportunity for achieving better immunisation outcomes in relation to the resources that would need to be invested. This group is already 'open' to immunisation and they are reasonably frequent users of the health system.
 - The 'Vulnerable' typology may also present an opportunity for achieving better outcomes, as this group is not opposed to immunisation and have made past unsuccessful attempts to engage. Innovative services that target the concerns/issues faced by this group are likely to result in increased immunisation rates.

2. Introduction

2.1 Background

Immunisation is one of the Government's six Health Targets. The Ministry of Health (the Ministry), District Health Boards (DHBs) and the health sector are committed to reaching a goal of having 95% of all New Zealand two year olds fully immunised by 2012.

Immunisation is one of the most cost-effective of all health interventions (Ministry of Health 2003) and is an essential component of both Well Child and adult preventive health services. Immunisation not only protects individuals but benefits the whole community through the effect of 'herd immunity' (with the exception of tetanus). However, immunisation programmes must sustain rates of between 85% and 95%² if epidemics are to be prevented.

New Zealand's childhood immunisation rate is low by international standards. UNICEF lists New Zealand's rate³ as 23rd out of 25 OECD countries (UNICEF 2007).

Immunisation rates vary across the country but, nationally, currently stand at 88%⁴. The Ministry estimates that approximately 5% of parents are opposed to immunisation. This means the remaining parents/caregivers for a range of reasons have not immunised their child.

Māori rates of immunisation are particularly low. DHBs reporting particularly low rates of immunisation coverage among Māori children aged 2 years include Bay of Plenty (73%), Northland (77%), Auckland (79%) and Counties Manukau (80%).

The Ministry engaged Litmus Ltd to undertake audience research amongst parents/caregivers who have not fully immunised one or more of their children aged 0–5 years, to explore in detail their attitudes and beliefs, decision-making processes and barriers to immunisation. The findings will be used to develop cost-effective strategies that will make a difference to New Zealand immunisation rates and the health of New Zealand children and communities.

2.2 Research objectives

The objectives of the research were to explore amongst parents/caregivers who have not fully immunised one or more of their children aged 0–5 years:

- attitudes and beliefs towards immunisation
- knowledge and understanding of immunisation
- skills and confidence in relation to immunisation
- role of providers and others in immunisation decisions
- role of environmental factors in immunisation decisions
- messages and interventions that would encourage or enable immunisation uptake.

² 'Immunisation rate' refers to the percentage of New Zealand two year olds who are fully immunised.

³ The percentage of children aged 13–23 months immunised against measles, polio, diphtheria, pertussis and tetanus (UNICEF 2007).

⁴ Immunisation coverage at 24 months for the period 1 October 2010 to 1 January 2011.

3. Research Approach

3.1 Research approach

A two-phase qualitative research approach was adopted:

- Phase 1 explored attitudes and beliefs, knowledge and understanding, skills and confidence, the role of others and environmental factors in the immunisation behaviour of parents/caregivers.
- Phase 2 tested potential messages and strategies designed to encourage immunisation uptake.

Fieldwork was conducted between July and November 2010. In both research phases:

- Discussion guides, a recruitment script and a research information sheet were developed in consultation with the Ministry of Health⁵.
- Participants were recruited using a range of methods:
 - networking and snowballing through early childhood centres, churches and other community groups/networks
 - recruitment panels
 - advertising on www.trademe.co.nz.
- Fieldwork was undertaken by Litmus senior qualitative researchers and Kaipuke Consultants Ltd. Māori and Pākehā researchers conducted fieldwork with Māori and Pākehā participants respectively. Pākehā researchers and Pacific researchers/ community connectors undertook research with Pacific participants.
- Participants completed and signed a form⁶ consenting to participate in the research. Interviews and group discussions were audio recorded with participants' permission.
- Group discussions were conducted in community meeting rooms, education centres, churches, etc. In-depth interviews were mainly conducted in participants' homes.
- Participants were welcome to bring a support person along to the discussion.
- Group discussions and interviews lasted on average 2.5 hours and 1 hour, respectively.
- Focus groups comprised five to six participants and mini groups comprised three to four participants.
- Participants each received a \$60 koha in recognition of their time and contribution to the research.

⁵ Refer Appendices 1,3 and 4.

⁶ Refer Appendix 2.

3.2 Sample

Litmus employed a purposive sampling framework for the research structured by DHB region and ethnicity. Our population of interest was parents/caregivers who have not fully immunised one or more of their children aged 0–6 years⁷. A total of 84 parents/caregivers participated: 78 women and six men; 28 Māori, 27 Pākehā and 29 Pacific. Participants mainly had a low/moderate household income⁸, recognising that deprivation is a factor in overall participation.

Phase 1: Exploratory research

Phase 1 fieldwork was conducted in DHB regions with some of the lowest immunisation coverage rates, particularly for Māori.

Ethnicity	Counties Manukau DHB	Auckland DHB	Northland DHB	Bay of Plenty DHB	Waikato DHB	Total
Māori	2 focus groups	4 interviews	1 focus group			3 focus groups 4 interviews
Pākehā	1 interview	1 focus group 3 interviews	3 interviews	1 focus group 2 interviews		2 focus groups 9 interviews
Pacific	1 focus group 3 mini groups				1 focus group 3 interviews	2 focus groups 3 mini groups 3 interviews
Total	3 focus groups 3 mini groups 1 interview	1 focus group 7 interviews	1 focus group 3 interviews	1 focus group 2 interviews	1 focus group 3 interviews	7 focus groups 3 mini groups 16 interviews

Phase 2: Concept testing

The research was conducted with parents/caregivers living in the Capital and Coast DHB⁹ area. The sample excluded conscientious objectors (those who object to immunising their children on moral, ethical or religious grounds), given the unlikelihood of this segment changing their views on immunisation.

Ethnicity	Capital and Coast DHB
Māori	1 focus group
Pākehā	1 focus group
Pacific	1 focus group
Total	3 focus groups

⁷ Parents/caregivers – defined as individuals who regularly look after one or more children aged 0–6 years for significant amounts of time and make decisions about childhood immunisation. This may include parents, grandparents and wider whānau. Parents/caregivers of 0–6 year olds were recruited to include vaccinations at five years.

⁸ Defined as less than \$70,000 per annum before tax.

⁹ Capital and Coast DHB was chosen as a research location due to its proximity to the research team. No differences in attitudes and beliefs or decision making were uncovered between participants living in Capital and Coast and other DHB areas.

3.3 Analysis

A series of analysis workshops were conducted by the research team. The qualitative data was analysed to find patterns and themes relating to the research objectives and wider contextual issues. This involved:

- reviewing a selection of transcripts/field notes to identify common patterns in vocabulary, meanings, feelings, sayings, cultural codes and nuances
- reviewing remaining transcripts/field notes to find data that related to the classified patterns
- combining related patterns and themes
- building an argument for selecting the themes and their relative weighting
- selecting supporting evidence to be included in this report.

3.4 Limitations

The information contained in this report represents the views of 84 parents/caregivers who have not fully immunised their children interviewed in Northland, Auckland, Waikato, Bay of Plenty and Wellington. Given its qualitative nature, the findings of this report cannot be generalised to the wider population of parents/caregivers who have not fully immunised their children.

4. Attitudes and Beliefs

Parents/caregivers who have not fully immunised their children aged 0–5 years hold a variety of attitudes and beliefs about immunisation. These can be grouped into attitudes and beliefs about the relevance and importance of immunisation and concerns about immunisation and its effects. For Pākehā and some Māori participants, their concerns outweigh the relevance and importance of immunisation, which has contributed to or resulted in decisions and/or behaviour not to fully immunise their children.

4.1 Relevance of immunisation

Immunisation is less relevant to children in New Zealand today

In the main, the recommended standard course of immunisations for children aged 0–5 years¹⁰ is perceived to be less relevant to children in New Zealand today.

- Most Pākehā participants note that the diseases children are being immunised for were more of a concern for previous generations (e.g. their parents' and grandparents' generations). While some Māori and Pacific participants know of family/whānau and other people in their lifetimes who have experienced these diseases (e.g. meningitis and tuberculosis¹¹), Pākehā have few first-hand experiences of these diseases and none of these experiences are in immediate families.
- Most Pākehā and Pacific participants also believe that immunising their children against these diseases would be more relevant if they lived in or were to travel to developing countries (particularly Pacific, Asia and Africa) where these diseases are considered to be more prevalent, and therefore the risk of their children contracting them is greater. There is however an acknowledgment that some diseases are re-emerging (e.g. tuberculosis) and a few participants feel that there should be greater boarder protection to ensure immigrants and visitors to the country are effectively screened for disease.
- Pākehā and Pacific participants in particular consider that, compared with most other countries, New Zealand is a healthy and safe place to bring up children with good living standards, including food security, housing, water and sanitation and a comprehensive publicly funded health system in the event of disease.

Most Pākehā participants consider that their children are less at risk of diseases than children of other ethnic groups, because of the locations where they live and their lower household numbers. Some participants have made their decision not to fully immunise their children based on this perception, and adopt some or all of the following strategies in the belief that they are protecting their children from disease:

- breastfeeding to pass on immunity to their children
- ensuring their homes are kept warm, and surfaces where babies crawl are kept clean and sanitised

¹⁰ Refer Appendix 6 for copy of National Immunisation Schedule updated in June 2008.

¹¹ Tuberculosis is not part of the national immunisation schedule and is only offered to high risk new-borns. Reference to 'Meningitis' is most likely to be Meningococcal B disease and MenNZB vaccine ceased to be routinely offered to pre-schoolers in June 2008.

- ensuring children get a ‘balanced diet’ (i.e. eating plenty of fresh fruit and vegetables) and lots of exercise and rest
- minimising or avoiding situations where their children are in regular and sustained contact with other children, e.g. early childhood centres
- keeping children at home if there is a disease outbreak in their local area
- being proactive about taking children to their general practitioner (GP) if they become sick.

‘If I lived in a crowded house in South Auckland I would vaccinate. We live a healthy lifestyle and I breastfed so passed on my immunities to her.’ (Pākehā, Auckland)

While Pacific participants also consider immunisation to be less relevant to New Zealand children today, they perceive their children to be more at risk of contracting disease than Pākehā and Māori children because:

- They have more contact with people from Pacific Islands Countries and Territories (PICTs) than other ethnic groups, through either having family members stay in their homes or visiting them in their villages.
- Pacific people are more at risk of communicable disease through the way they live, socialise and connect with one another, e.g. larger/extended families living in one house and attending frequent church and other large gatherings.
- Pacific people may have less natural immunity to disease, as their parents and grandparents living in PICTs were largely not immunised and therefore would not have ‘passed on’ any immunity to their children and grandchildren.
- They regularly receive messages via government agency social marketing campaigns that Pacific people are an at-risk group for most of the country’s health and other social issues, and therefore assume that Pacific children are also more at risk of disease. They are surprised to learn through the research that Pacific children aged 0–5 have relatively high immunisation rates.

Pacific people also hold more favourable views in general about immunisation. They generally believe it is a positive action that parents/caregivers can do to keep their children well now and into the future.

4.2 Concerns over immunisation

Concerns over the safety of immunisation

Most Pākehā and a few Māori participants are concerned about the potential risks associated with immunisation.

Pākehā are more concerned with the medium- to long-term implications between immunisation and their child’s health. They cite the perceived link between the measles, mumps and rubella (MMR) vaccine and autism. They also believe that the ‘jury is out’ about the long-term effects of immunisation, and there is not enough evidence available to confirm that immunisation is safe.

‘We don’t know what will happen to them in their 40s and 50s. Are they going to have immune problems or more cancers if they get immunised?’ (Pākehā, Northland)

Māori are more concerned with potential adverse reactions to immunisation (e.g. fever, rash and swelling) leading to more serious complications – scarring, disfigurement and even impaired mobility.

'I went in and changed him when he was asleep, it was like a bruise and it was swollen and welted, his whole thigh was infected, you couldn't touch him.'
(Māori, Northland)

'It was a massive reaction to the immunisation, it went from a pimple to a lump to needing two operations, and now she can't run without difficulty.'
(Māori, Counties Manukau)

For both Pākehā and Māori participants, safety concerns are heightened if their child has a chronic or acute illness, requires surgery or is post-surgery. For Pākehā participants, safety concerns are also heightened if they had experienced difficulty conceiving, had a difficult birth or had adverse reactions to immunisations when they were children.

'Knowing that a blood relative had a reaction and given the odds I had with having children... For me it wasn't worth the risk if there was going to be a reaction.'
(Pākehā, Northland)

Concerns over the recommended standard course of immunisations

Some Pākehā participants are concerned with the recommended standard course of immunisations, in that they start too early, there are too many vaccines and there is a lack of flexibility in the delivery of the vaccines. They believe:

- Immunisation starts too soon in a child's life (six weeks) when their bodies are fragile and have not had a chance to develop their natural immunity.
- There are too many vaccines in the standard course of immunisations for children, and most children do not need to be immunised against all diseases.
- There are often too many vaccines in the one immunisation, resulting in a child's body being 'bombarded with antigens. A few participants comment that it would be ideal if immunisations were split to enable parents and caregivers to select the most appropriate immunisations for their children.

'I feel really uncomfortable vaccinating six week old babies while their immune system is still developing. They are only tiny little babies; the immune system needs a chance to develop without injecting it with eight different diseases.' (Pākehā, Auckland)

'They come pre-loaded. You can't decide what goes in them and what is best for your child.' (Pākehā, Northland)

Lack of confidence over the effectiveness of immunisation

Some Māori and a few Pākehā participants lack confidence in the effectiveness of immunisation. Māori report cases where children who have been immunised for diseases have contracted these diseases. Pākehā also note that there is no guarantee that children will be protected from the diseases they are immunised for. They give examples of adults coming down with the 'flu' after an influenza vaccine as proof that immunisations don't always work.

'My nephew got meningitis, yeah but he was fully immunised.' (Māori, Counties Manukau)

'At three months she went into hospital. They thought she had whooping cough even though she had been immunised. She still got sick.' (Māori, Northland)

'Just because you are immunised it doesn't mean that they have protection against the disease. We are all different and unique and our bodies take up things differently. Just because we have a piece of paper in a book ticked, it doesn't mean you are immune.' (Pākehā, Northland)

Deep-seated concerns over immunisation

Some Pākehā and a few Māori participants hold deep-seated attitudes and beliefs about immunisation. For these participants, the relevance of immunisation for children aged 0–5 years is very low and the associated risks are very high. These participants:

- strongly believe there is not enough evidence to confirm that immunisation is safe
- believe New Zealand children are being used as guinea pigs
- strongly believe in the importance of building their child's natural immunity to disease (they are also likely to be strong advocates of alternative therapies or natural remedies and low users of traditional treatment, e.g. antibiotics or paracetamol)
- have concerns over the content of the vaccines, which they believe are toxic or harmful to their child (e.g. the addition of mercury, lead and chicken foetus is commonly mentioned)
- have concerns over the negative impact of immunisation on children's liver, kidneys, brain and other organs
- have limited trust and confidence in the pharmaceutical companies who market and produce the vaccines and the New Zealand health system in managing and delivering the schedule. They believe that DHBs and GPs are motivated by financial targets rather than what is in the best interest of parents and children.

'We go to a natural healer who gives herbal drops to get the natural immunity fighting fit. They are oils from native forests and infused in alcohol. I put a couple of drops each day on the kids' tongues.' (Pākehā, Northland)

'The UK pulled the MMR one off the market because not enough research had been done on it yet New Zealand was still injecting it.' (Pākehā, Auckland)

'I do not want tadpole embryos or virus grown in chicken eggs to contaminate my child.' (Māori, Auckland)

5. Knowledge and Understanding

Parents/caregivers who have not fully immunised their children aged 0–5 years have varying degrees of knowledge and understanding of immunisation.

Pākehā participants overwhelmingly mention there is a lack of balanced information on immunisation, with most information being either ‘pro’ immunisation or ‘anti’ immunisation. They are heavy users of the Internet to gain knowledge and understanding of immunisation.

Māori knowledge of immunisation (including the make-up of the vaccines and the immunisation schedule/process) is very low. Māori are far less likely to have considered the benefits and risks of immunisation. Knowledge and understanding attained tends to through engagement with whānau and midwives (discussed in section 7).

5.1 Timing

While some first-time parents/caregivers became aware of immunisation during pregnancy, most became aware of it or thought about it more seriously after their child was born. Most Pākehā say they started to think about immunisation during pregnancy for subsequent children.

‘During pregnancy you are thinking about the birth, not about what happens afterwards.’ (Pākehā, Auckland)

Only a handful of participants say they became aware of and made any decisions about immunisation before they were pregnant.

5.2 Level of knowledge and understanding

Most Pākehā and Pacific participants know there is a standard course of immunisations for children aged 0–5 years, and the approximate ages when their children are due for immunisations. They are also generally aware that immunisations are free and where to go for immunisations. Most can also name some of the immunisations in the schedule (e.g. tetanus, measles, mumps and rubella), and have some understanding of how to contract these diseases (e.g. getting tetanus by standing on a rusty nail) and the seriousness of these diseases (e.g. amputations and death from meningitis). By contrast, there is little or no knowledge of diseases such as diphtheria or acellular pertussis (many didn’t know the latter is referring to whooping cough).

Most Māori participants have limited knowledge and understanding of immunisation (including the make-up of the vaccines and the immunisation schedule/process). As a result of low levels of knowledge, Māori tend to be far less likely to have considered the benefits and risks of immunisation. Knowledge and understanding that they have attained tend to be due to engagement with key others such as whānau and midwives, rather than written information sources.

‘I don’t know what they’re for, that’s what’s making me think, we have the flu injection at work and I won’t have it.’ (Māori, Auckland)

'I don't know [what injections are for] To keep sickness away? To stop children getting sick?' (Māori, Auckland)

Some Pākehā and a few higher income and educated Māori participants consider they have a good understanding of immunisation – what it is for, how it works and potential risks of vaccines. These participants tend to hold more negative views of immunisation and consider themselves more informed than most parents/caregivers and health providers.

A few Pacific parents have relatively limited knowledge and understanding of immunisation, other than it is a good thing for parents and caregivers to do to keep children healthy and well.

5.3 Information sources

Most participants mention the Well Child/Tamariki Ora Healthbook as a useful tool for telling parents and caregivers when their children's immunisations are due and what the immunisations are for, and for recording when immunisations have occurred. Pacific participants in particular speak very favourably about this Handbook as an information source.

While many Māori participants identify information sources such as Plunket books and pamphlets, few are able to recall the information that they contained about immunisation. This suggests that the current range of information sources on immunisation are not working effectively for some "hard to reach" Māori. Literacy levels are identified as a barrier to the effectiveness of some forms of communication such as pamphlets for Māori.

'Plunket book gave information but I didn't know if the advice was good or not.'
(Māori, Counties Manukau)

'Didn't understand what the brochures said. They need to write it in lay language so everyone knows what it means.' *(Māori, Capital and Coast)*

Most Pākehā and a few younger Māori participants have used the Internet to inform their decisions on immunisation. Participants tend to look for general information and 'for and against arguments' on child immunisation, using search engines and participating in online chat rooms. Few can remember specific websites visited and there is no recall of visiting the Immunisation Advisory Centre (IMAC) website (www.immune.co.nz).

A few Pākehā participants also mention calling 0800 Immune in relation to a specific query or where they were concerned about their child following immunisation. Participants generally found the call centre staff friendly, helpful, supportive and affirming.

A few Pākehā also mention reading magazine articles, journal articles and books on immunisation, and attending public meetings on immunisation. These resources and forums overwhelmingly portray the risks of immunisation and the importance of parental choice.

6. Skills and Confidence

In most cases, parents/caregivers who do not fully immunise their children have not actively opted not to immunise. Some are not aware that they have a choice, some do not feel confident or empowered to make a choice, and some are sitting on the fence by delaying decisions around immunisation. Others find the immunisation experience completely overwhelming and distressing.

6.1 Uninformed compliance

For participants who are not aware or are not confident to make an informed choice, immunisation behaviour tends to be 'patchy', i.e. most children are immunised against some diseases and there appears to be little knowledge or clear rationale on what diseases are immunised for.

Māori and a few Pākehā participants who know they have a choice on whether or not to immunise their children do not feel confident to exercise their rights to choose, and mainly 'go along with' what their GP or Practice Nurse advises. Many Māori participants who have immunised older children, report that they were "complying" with the direction of health providers rather than making an informed choice about the potential benefits and risks associated with immunisations.

'Health professionals told me it was the right thing to do.' (Māori, Northland)

'It's a fait du compli. You just have to do it. You are made to feel it is not a choice.' (Māori, Auckland)

Most Pacific participants have a strong desire to fully immunise their children. Some are unsure whether they are up-to-date with their children's immunisations, and others who know they are behind intend to catch up.

A few participants across ethnic groups say they forgot about their children's immunisation appointments or haven't found the time to make an appointment. They generally intend to catch up.

Most Pacific and some Māori participants believe immunisation is compulsory for children aged 0–5 years and that parents/caregivers do not have a choice over whether or not their children are immunised.

'You feel threatened if they're not immunised and the school won't take them.' (Māori, Counties Manukau)

6.2 Exercising informed choice to delay or not immunise

Some Pākehā and a few Māori participants have not immunised their children by choice from weighing up the risks of immunising against the risks of not immunising. For these participants, immunisation behaviour tends to be more consistent, i.e. all children in the family are not immunised, the younger children are not immunised or decisions have been made to immunise against some diseases only.

Where there is a history of immunisation in a family, participants say that they never felt comfortable with the older children being immunised, but didn't at the time have the confidence to 'stand up and say no' to immunisation.

'You are recovering in those first few weeks and can't think straight. And when I took him to get immunised it just didn't sit straight, and then I took him again and the same feeling happened and I thought this is not going to happen again.'
(Pākehā, Northland)

In most of these cases, participants have said that the decision not to immunise their children was undertaken following significant thought and exploration and their decision was not made lightly. Some have some concern for the decisions they have made, and whether they were in the best interests of their children. In most cases these concerns tend to dissipate over time as their children get older and remain free of disease, thus validating their reasons for not immunising their children in the first place. In a few cases, participants are on alert for outbreaks in their local areas and have not completely 'closed the door' to immunising their children, if circumstances change.

'I am worried whether I have done the right thing by him by choosing not to immunise him, especially when there is an outbreak. But I know I would have worried even more if I had chosen to immunise him.' (Pākehā, Northland)

Some Pākehā participants who are concerned about starting immunisation at six weeks or where there has been disagreement within their couple relationship about immunisation have decided to delay decisions around immunisation until their children are older (refer to the next section). In most cases they say they will revisit their decision when their children turn two or before they reach school and come into more contact with other children.

Only a handful of mainly Pākehā participants feel very comfortable with their decisions not to immunise.

6.3 Engaging with the health system

Because many Māori were not familiar with the necessary information about immunisation, they weren't equipped with the skills or knowledge to make an informed decision. Few have the confidence to question the merits or otherwise of immunisation and a number experienced difficulty and frustration with engaging with health professionals. .

'You're intimidated by their attitude.' (Māori, Counties Manukau)

'I don't want to sound like a dumb mother asking as to why she should be immunised.' (Māori, Counties Manukau)

In addition, a number of participants identify their failure to immunise is in part attributed to the lack of responsiveness of health service delivery.

'Usually you have more than one child waiting with you to see the doctor and if you're breastfeeding, it's the feeding in public thing, you just get hoha.' (Māori, Counties Manukau)

'If you want to see the doctor and they send you to the nurse, you could lose your place in the queue waiting for the doctor again and that is hoha.' (Māori, Counties Manukau)

'But when the nurse rolls her eyes at you or they're rough, like when they're born they are gentle enough, but as they get older they get rougher and they just want to get you out the door.' (Māori, Counties Manukau)

6.4 Immunisation experience for parents/children

Some Pākehā and Māori participants find the immunisation experience distressing for both themselves and their children. Participants 'hate seeing needles being stuck into their children' and the pain and distress it causes. They also worry about possible reactions to immunisation (e.g. fever, redness, swelling and irritability) and their confidence to cope. These participants often have a patchy history of immunising their children, with periods of motivation and determination and periods of complacency and despondency. A few have also given up and would prefer if another trusted adult could take their children for their immunisation appointments, or if the immunisations could be undertaken at school. These participants often have little or no family/whānau support.

'The tears and screaming at the top of their lungs, the hurt look in their eyes that says you lied and you wouldn't hurt me. Then you take them for the next injection and they play up and refuse to see the doctor.' (Māori, Counties Manukau)

'I think it's about being nervous, I'm holding my baby in position and because my eldest was so tiny, I didn't cope well.' (Māori, Auckland)

7. Role of Providers/Others

The attitude and encouragement of providers, the services they provide and the advice they give are key drivers to parent/caregiver behaviour and decisions on child immunisation. Family/whānau, and to a lesser extent partners and peers, play important roles in providing knowledge and shaping views.

7.1 Role of providers

Attitude/encouragement of providers

Midwives, Plunket Nurses, GPs and Practice Nurses play a critical role in informing participants about immunisation. While Plunket Nurses, GPs, Practice Nurses and most midwives are considered to be very 'pro' immunisation, there is mention of some midwives being 'anti' immunisation or having a neutral stance. In some cases, providers through their pro stance are considered to have prevented parents/caregivers from further discussing immunisation. In other cases, participants feel that GPs and Practice Nurses with whom they have good relationships are able to maintain their clinical views while respecting their clients' views. The latter contributed in a few cases to participants entering into verbal contracts with their GPs to revisit immunisation choices in 6 to 12 months when their children are older, thus keeping the 'door open'.

Most Māori participants are not favourably connected with the health system and feel frustrated with the services they receive and the negative attitudes towards them by health providers.

'We are made to feel guilty for not immunising our kids.' (Māori, Auckland)

Follow-up and outreach services

Pacific and Pākehā participants in particular comment on their Practice Nurse follow-up reminding them that their children are due for their vaccines. Some Māori participants also spoke positively about having their children's immunisations undertaken in their home.

'Yesterday my son got his immunisation and they came to me. They came to my home. They rang me 5 times. My kids got sick and they won't do it if your kids are sick. They are all close in age to have their shots done. You can have a coffee. The nurse waits with you for that period. It's more convenient. It makes a huge difference.' (Māori Capital and Coast)

However, proactive reminders and follow-up is not always well received, with one Pākehā participant being 'outraged' that she was visited at home by her Practice Nurse to say her child's vaccines are not up to date. This participant considered this strategy an invasion of her family's privacy, has not made a follow-up appointment and is considering switching providers.

Uncertainty when to immunise an unwell child

Some Māori and Pacific and a few Pākehā participants say that, while they would have liked to immunise their children, they were advised from doing so by their GP, Practice

Nurse, paediatrician or surgeon, due to their child's chronic or acute condition or because their child was awaiting or recovering from surgery. Other participants had made an appointment and turned up at their practice to be told it was not a good time to immunise their children as they had a cough, cold or other mild illness. Participants are generally unsure when it is considered safe to immunise their children following an illness. While most intend to immunise their children when they are well, few have made appointments to immunise their children, due to this uncertainty.

'I was told by the doctor that they would rather he was breathing than being immunised.' (Māori, Counties Manukau)

7.2 Role of others

Family/whānau

Family/whānau play an important role in forming and shaping immunisation attitudes, beliefs, knowledge and behaviours across all ethnic groups.

Most participants have been immunised as children and had no adverse reactions or long-term health issues associated with immunisation. A few participants who had adverse reactions as children and may have been prevented by their parents from having further immunisations hold more negative views.

Most Pākehā mention that they have sought information and/or discussed immunisation with members of their immediate families. These discussions have been in the form of confided conversations between sisters or sisters-in-law, rather than intergenerational discussions. Pākehā consider that older generations (i.e. parents) are likely to be less open and disapprove of any decisions not to immunise their children.

'I have one sister who immunises and one who doesn't and is part of a newsletter group. I spoke to both of them about their views on immunisation before deciding not to immunise.' (Pākehā, Northland)

For nearly all Māori, whānau (particularly mothers/"nannies") have a key role in influencing parenting behaviour in relation to the healthcare of their children, including whether or not to immunise their children. In some cases whānau make the appointments for their mokopuna and take them for their immunisations.

'Whatever Mum (grandmother of child) says goes, sort of thing. You know Mum knows best for her moko.' (Māori, Northland)

'My daughter hasn't immunised any of her kids. But I am thinking of doing their immunisations since my moko are now in my care.' (Māori, Counties Manukau)

Pacific participants say their families and the wider Pacific community are very positive about immunisation, which reinforces to participants that immunisation is a good thing to do for their children. Pacific participants also mention that family members also help with transporting them to and from immunisation appointments.

Partners

Around half of all Pākehā and Māori women who were interviewed are sole parents or had 'on and off again' relationships with their children's fathers. Pacific women however tend to have fairly stable partner relationships.

Men appear to play a lesser role in forming their partners' attitudes and beliefs about immunisation and decisions on immunisation than wider family/whānau. They do however play a role in endorsing or delaying decisions and facilitating access to immunisation.

Pākehā women with partners say they generally try to discuss and involve their partners as much as possible in decisions around immunisation. They comment that most often their partners say 'you feel more strongly about this than I do, so you can decide'. However, in other cases discussions and decisions on immunisation have caused conflict within a partner relationship if the partner is more 'pro' immunisation than ambivalent. In these cases couples may put off or delay decisions around immunisation until the children are older.

'Once she turns two, I feel her body will be able to handle the jabs, if her father feels strongly about doing it. When she was young this caused real tension.'
(Pākehā, Northland)

Māori and Pacific women also tend to play a greater role in making the appointments, being with their children during the immunisations and nursing them after the immunisations. Their partners play more of a support role, by driving them to appointments and sitting in the waiting room or in the car.

Peers

For most, peers play a minimal role in forming attitudes and beliefs on immunisation and decision-making.

While Pākehā participants tend to socialise with other mothers through 'coffee mornings' and 'play groups', most don't feel comfortable talking about immunisation, due to the stigma associated with non-immunisation. Māori and Pacific participants on the other hand have low participation in these informal peer networks.

'I tried a coffee group once at McDonalds once... I didn't go again.' (Māori, Auckland)

A few Pākehā participants who hold more negative views about immunisation gain knowledge and support from other parents/caregivers who don't immunise through support groups and chat rooms. They may also consider themselves confidants to other parents/caregivers wishing to explore non-immunisation for their children.

Alternative and complementary providers

Some Pākehā participants use naturopaths, homeopaths, osteopaths, chiropractors or natural healers. A few are also studying towards qualifications in these approaches. Participants say that these providers had a large influence in their decisions not to immunise. A few participants also mention being advised on how to build up their children's immunity through more natural means (e.g. by taking probiotics or natural immunity drops).

8. Environmental Factors

Environmental factors (i.e. location, availability and cost of accessing immunisation services, experience with different schedules and the media) appear to be less of a factor in immunisation behaviour and decisions. There is still stigma associated with non-immunisation, which drives positive compliance.

8.1 Stigma associated with non-immunisation

Immunisation is an emotive topic and most participants do not feel comfortable discussing or disclosing information about their children's immunisation status. Pākehā believe that most health providers and parents/caregivers consider their motives and actions selfish and Māori believe that health providers perceive them to be 'bad mothers' for not immunising their children.

Some participants also consider their children may be discriminated against for not being immunised:

- Pākehā participants fear, if their child's immunisation status is known, other parents and caregivers may not welcome their child into play groups or educational settings, for fear that their child may harbour diseases.
- Māori and Pacific participants believe that their child will be prevented from enrolling in early childhood education and school.

There is however a general feeling amongst a few Pākehā participants that deciding not to immunise is becoming more acceptable, as more parents and caregivers feel confident and skilled to make decisions around immunisation.

8.2 Availability and cost of immunisation

The cost of petrol and bus fares and availability of transport to get to immunisation appointments have been identified by a few Māori participants as a barrier to immunising their children. Sometimes these factors make them late or miss their children's appointments, and this often means health providers treat parents and caregivers unkindly or make them feel bad.

'The kids are sick, petrol costs, nurses "rolling their eyes", no transport, long waiting times.' (Māori, Counties Manukau)

A few Māori participants mention that their perception of free immunisation means that the service is somehow substandard or poor.

The cost of going to a GP or Practice Nurse for low-income Pākehā living in low deprivation areas may have contributed to a few Pākehā participants not getting their children immunised. However, these participants have low confidence and little family or partner support, which are likely to be greater barriers to access.

Some Pacific participants mention that it is often hard getting to their GP or Practice Nurse for their children's immunisation appointments when both parents are working and where there is no other family member available to take children for their appointments.

8.3 Experience of different schedules

A few Pākehā and Pacific participants have experience with immunising older children in other countries (United Kingdom, Australia and Samoa), and found it difficult adjusting to New Zealand's schedule. These participants comment that providers often assume that parents/caregivers who have immunised in different countries have experience in immunisation and don't need the same service as new parents coming to grips with immunisation decisions for the first time.

8.4 The media

There is mention amongst Pākehā of the media helping shape their decisions. Some mention viewing a '60 minutes' episode linking the MMR vaccine with autism. Viewing this episode tended to strengthen or confirm already held attitudes on the risks of immunisation.

9. Message and Concept Testing

A number of ideas for facilitating access to uptake of immunisation services were presented and 'tested' amongst participants¹². Messages and concepts that speak directly to parents/caregivers and family/whānau have greater relevance than those that speak at a societal level. Of the messages and concepts tested, financial incentives and immunisation in the home and before discharge from hospital appear more likely to encourage immunisation uptake amongst parents/caregivers who do not fully immunise their children.

9.1 Messages and concepts presented

1. Financial incentives for child immunisation

Concept: *In Australia parents receive a financial payment if their child is fully immunised. Parents receive a payment of A\$123 if their child is fully immunised at two years and another A\$123 if their child is fully immunised at five years. Conscientious objectors who make a formal declaration declining immunisation and those with medical reasons for not immunising also receive payments. Another option is to link immunisation uptake to free childcare.*

Reaction to concept:

- Key message – parents/caregivers get paid for each child immunised
- Relevance – mainly speaks to Pacific and Māori parents/caregivers on benefits or low income, also speaks to Pākehā sitting on the fence
- Tone – fair, as it incentivises all parents and caregivers, regardless of whether they immunise or choose not to immunise or where there is an underlying health issue preventing immunisation. Strong reaction amongst some Māori that this amounted to bribery or coercion.
- Persuasion – likely to encourage uptake amongst parents/caregivers who are undecided to unmotivated. Some concern that parents would respond out of financial circumstance but would be no better informed as a result of this intervention. Responses suggest that cash incentives are more likely to drive uptake than free childcare option, as incentive more immediate. For Pacific participants, children tend to be looked after at home or by other family members.

'I think a lot more people would be willing to immunise their child... When the Government is giving away money who wouldn't take it? I know I would!'
(Pacific, Capital and Coast)

'In a way it forces you to make a decision and to take responsibility, rather than sitting on the fence.' (Pākehā, Capital and Coast)

¹² Refer Appendix 5.

2. Immunise your child at home

Concept: *Some parents/caregivers find it challenging getting to their doctor or nurse to immunise their children, prefer not to visit their local clinic or don't have a local doctor. One idea to help these parents/caregivers exercise their choice to immunise their 0–5 year olds is for a nurse to visit the family home to do the immunisation. There would be no charge for this service.*

Reaction to concept:

- Key message – children can be immunised in a supportive home environment.
- Relevance – speaks mainly to Māori parents/caregivers who are not opposed to immunisation, but don't feel comfortable visiting their GP or face transport barriers. Offers an opportunity for manaaki (*'to have a cup of tea and get to know the nurses'*). Some “hard to reach” participants have experienced this approach and consider it to be a positive and empowering intervention.
- While Pākehā and Pacific participants comment that it could mean the child is more settled as they are in a comfortable environment, some Pacific participants are concerned about having a stranger in their home for a reasonably long time and not being in a clinical environment, in the event of adverse reactions.
- Tone – supportive and empowering for parents/caregivers.
- Persuasion – likely to enhance uptake.

'I've had them come to my own home. Because I put it off too long. Two nurses came. I think it was to distract me while the other was doing my baby. I asked this woman how old she was. She looked pretty old, 25 years experience she had. This one was very thorough. They had to ring me.' (Māori, Capital and Coast)

3. Child immunisations are safer

Concept: *Vaccines are much safer than they were in the past. Vaccines undergo stringent clinical trials before 0–5 year olds are vaccinated. Where possible, vaccines are combined into a single injection. The immune system is designed to be able to deal with a very large number of different antigens. Early vaccines contained up to 3000 antigens – today's vaccines contain just a handful. All children come into contact with many viruses, bacteria and other agents which the immune system responds to every day. There is no proven link between certain vaccinations and serious disease and illness (e.g. autism).*

Reaction to concept:

- Understanding – vaccines are safer than in the past; vaccines undergo stringent clinical trials; children are able to deal with antigens.
- Relevance – speaks to parents/caregivers who are concerned about the ability of a child's body to deal with antigens, doesn't speak to parents/caregivers who are worried about adverse reactions or long-term effects of vaccines.
- Tone – factual and informative.

- Persuasion – likely to reassure some parents/caregivers with some concerns about vaccines.

'Liked it, gives parents peace of mind regarding what their children were getting.'
(Pākehā, Capital and Coast)

4. Immunise your child before leaving hospital

Concept: Some 0–5 year olds experience poor health (e.g. asthma, respiratory illness, allergies or other illnesses). Often their doctors, paediatricians and/or surgeons suggest to their parents/caregivers to postpone immunisation while the child is unwell. For some parents/caregivers this is confusing, as they are unsure when it is OK to start or continue immunisations. Some DHBs are actively encouraging immunisation by offering immunisation before children leave hospital. These DHBs believe if an infant or young child is well enough to be discharged from hospital they should be well enough to be immunised.

Reaction to concept:

- Key message – hospitals are a safe and convenient place to vaccinate children (rather than 'children when discharged are well enough to be vaccinated').
- Relevance – speaks mainly to parents/caregivers who have children who have acute or chronic conditions and spent time in hospitals. Has particularly strong resonance amongst Pacific participants.
- Tone – relatively neutral.
- Persuasion – mixed, as may tip some parents/caregivers to immunise as they believe environment is safer to deal with any adverse reactions, while others may defer until children are well or just want to get home as quickly as possible.

'I'd still wait. Your child has already been through a lot.' (Māori, Capital and Coast)

'I'm kind of like well if anything goes wrong, you are in the right place.'
(Māori, Capital and Coast)

5. 'Super-nan' on hand to support

Concept: Having experienced non-clinical people (super-nans) on hand to support parents/caregivers when they immunise their children. Super-nans could answer non-clinical questions, be with the parent/caregiver and child when the child is immunised, and help take care of other children. Super-nans may be parents or grandparents themselves, but importantly will have a lot of parenting experience.

Reaction to concept:

- Key message – parents/caregivers don't have to immunise children on their own.
- Relevance – speaks to parents/caregivers who are open to immunisation and are sole parents, and/or with limited family/whānau support, and/or who find the immunisation process distressing. Super-nans would need to be mature in outlook, sensitive and supportive.

- Tone – friendly, warm and supportive.
- Persuasion – may not go far enough for some parents/caregivers who do not want to be present when the child is vaccinated.

'I think the parents need more support than the children. It would depend on their personality and their character. It wouldn't work if they were not very sensitive to mothers and babies.' (Māori, Capital and Coast)

'An older supportive person who could help me out would be great. Sometimes parents put their fear onto the kids. It would be great if someone could go in with the kids.' (Pākehā, Capital and Coast)

6. It's never too late to immunise your child

Concept: *Some parents/caregivers decide not to immunise their infants, or prefer to wait until their children are older or soon starting school before immunising. The decision to delay could be for a variety of reasons. Vaccine-preventable diseases are serious diseases and occur in New Zealand every day. It is never too late to vaccinate children to protect them from disease.*

Reaction to concept:

- Key message – better late than never.
- Relevance – speaks mainly to parents/caregivers who have delayed decisions around immunisation or haven't got around to it, and to Pacific and Māori participants who had low awareness that it is possible to catch up with vaccines.
- Tone – empowering; gives parents/caregivers ownership for decisions.
- Persuasion – low, as doesn't say act now.

'It's a good message and allows for parents to change their minds. It shows they understand, although it does let us off the hook as well.' (Pākehā, Capital and Coast)

7. Other outreach services

Concept: *Some parents/caregivers find it difficult making an appointment with their GP or Practice Nurse to immunise their children during the day, as they are working or don't have transport. One idea is to have after-hours immunisation walk-in clinics at local health centres in evenings or weekends. Another idea is to have nurses available in local shopping malls or at sports or community events to provide immunisations. Appointments wouldn't be necessary.*

Reaction to concept:

- Key message – immunisation is quick, convenient and hassle-free. Some concern that nurses will not know child's medical history, and for Pacific participants over the non-clinical setting (e.g. clean, sterile)

- Relevance – would speak mainly to working parents who can't make GP appointments during working hours (most participants are stay-at-home mums and therefore it doesn't speak to them).
- Tone – mainly neutral.
- Persuasion – low, may appeal to opportunistic working parents/caregivers. Pacific participants in particular would find it embarrassing if children cry and it could ruin the family day out. However, Pacific participants did consider shopping malls and community events to be an ideal place to learn about immunisation (pamphlets and booths).

'I think it's a good idea for working mothers, if they can't get down to the doctor during the day... It wouldn't convince me to immunise.' (Māori, Capital and Coast)

8. Children are at-risk of preventable disease

Concept: *Vaccine-preventable diseases are serious diseases, particularly in infants. Vaccine-preventable diseases occur in New Zealand every day, regardless of ethnicity, income or family background. Good diet, breastfeeding and hygiene, while good for 0–5 year olds, are insufficient to fully protect them against diseases. It is better to immunise than not to immunise so you can rest knowing your children are protected.*

Reaction to concept:

- Key message – children not vaccinated catch diseases regardless of protective actions (but highly disputed).
- Relevance – speaks to past communities, not today's parents/caregivers.
- Tone – paternalistic, scaremongering.
- Persuasion – low.

'Where is the proof and the stats that diet and breastfeeding is insufficient?... Highly emotive.' (Pākehā, Capital and Coast)

'Very 50s statements appealing to a community level, not a 21st century statement which is all about individualism.' (Pākehā, Capital and Coast)

9. Immunisation is a positive choice

Concept: *Deciding to immunise your child aged 0–5 years is a positive thing to do. Like breastfeeding, good diet, warm houses and good hygiene, immunisation is good for infants and children.*

Reaction to concept:

- Key message – immunisation is a good thing to do (but lacks rationale and considered unrealistic for many Māori who can't afford warm homes, etc). The message is confusing and generally not understood.

- Relevance – speaks more to parents/caregivers who breastfeed, have warm homes and feed their children good diets.
- Tone – mainly neutral.
- Persuasion – low.

'Immunisation is not always positive. In my opinion they are dressing it up by putting it up there with breastfeeding and warm houses.' (Māori, Capital and Coast)

'Seems a really good idea, and a good way to fully protect children... I would still like more information and statistics.' (Pacific, Capital and Coast)

10. Herd immunity protects everyone

Concept: *Immunisation is one of the most cost-effective of all interventions. Immunisation not only protects 0–5 year olds but benefits the whole community through 'herd immunity'. When a high proportion of the population is immunised, the herd immunity situation comes into effect but immunisation programmes must sustain rates of between 85% and 95% if epidemics are to be prevented. Currently immunisation rates are low in a lot of areas around New Zealand so there is no herd immunity.*

Reaction to concept:

- Understanding – informs parents/caregivers that immunisation rates are low in a lot of areas around New Zealand, and therefore children may not be as well protected as they think. No prior awareness of 'herd immunity'.
- Relevance – speaks to communities about social responsibility and has little relevance at the family/whānau level.
- Tone – seen as scaremongering; cost-effective angle is jarring.
- Persuasion – low.

'With knowledge that herd immunity may be low makes the chance of your child catching a disease more likely. Being cost effective is not my concern.' (Pākehā, Capital and Coast)

9.2 Ideas raised by participants

The following ideas have been raised by participants as ways to enhance immunisation uptake amongst parents/caregivers:

- One of the Māori focus groups in Counties Manukau mentioned having a supportive face-to-face forum with parents/caregivers to share and discuss immunisation and other parenting health issues.
- The Pacific focus group in Capital and Coast suggested being able to collect stamps each time they get their child immunised, and when they reach a certain level, being able to redeem a gift in exchange for stamps (e.g. a voucher for a meal at a Denny's restaurant).

- A few Pākehā participants suggest having other people take their children for vaccinations or having the vaccines performed at school, so they don't have to experience the pain and distress.
- A few Pākehā participants mention being able to request that vaccines combined in a single injection are split at no charge to them.

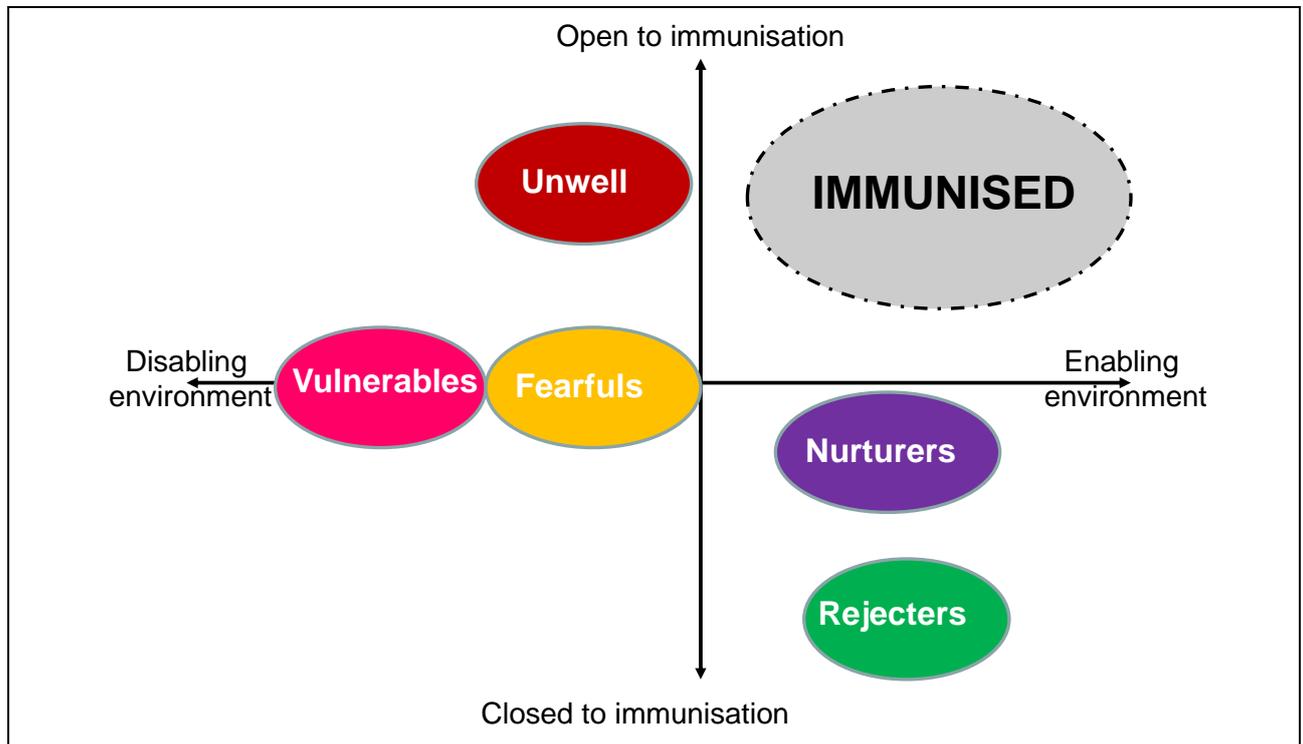
'This discussion is good, this small group of mothers, if the information could be given to me in this kind of forum.' (Māori, Counties Manukau)

10. Typologies

When all factors are analysed holistically and in combination, for each individual parent and caregiver, five typologies are evident. These typologies are useful for categorising parents and caregivers who do not fully immunise their children according to a set of criteria and characteristics. All participants fall into one main typology. The matrix below provides a summary of the differences between the typologies, along two key dimensions:

1. parent/caregiver's openness to immunisation
2. the nature of the parent/caregiver's environment – i.e. whether they have an enabling environment or a disabling environment.

Figure 1: Typology matrix



The following discusses each of these typologies.

10.1 'Rejecters'

Summary of typology

Parents/caregivers choose not to immunise their children aged 0–5 years against all or most diseases. They consider themselves well informed about immunisation, are confident with their decisions and are unlikely to change their minds. Pākehā mostly align with this typology. The two Māori who shared similar views and experiences have high levels of education and literacy.

'I chose not to immunise any of my kids. There are too many in the one syringe, a lot goes in the blood stream and it all adds up. It is not how we naturally come across bugs in the environment. Adults can cope with this assault on their immune system while babies' brains and bodies are still developing.' (Pākehā, Auckland)

Demographics of parents/caregivers	Characteristics	Mechanism for change
<ul style="list-style-type: none"> ▪ Aged 20–40 years ▪ Mainly Pākehā and very small number of Māori ▪ Low–high income 	<p>Attitudes & beliefs:</p> <ul style="list-style-type: none"> ▪ Vaccines are toxic, contain lead/mercury ▪ Too many vaccines in the schedule and in the one syringe ▪ Negative impact on child's immune system and organs ▪ Insufficient research confirming vaccines are safe ▪ MMR link with autism ▪ Distrust motives of pharmaceutical companies ▪ DHBs/GPs motivated by targets <p>Knowledge & understanding:</p> <ul style="list-style-type: none"> ▪ Views formed before/during pregnancy ▪ Consider themselves well informed ▪ Closed to different viewpoints ▪ High Internet users (chat rooms) <p>Skills & confidence:</p> <ul style="list-style-type: none"> ▪ Made an informed decision ▪ Opted off register <p>Role of others:</p> <ul style="list-style-type: none"> ▪ Discuss immunisation with: <ul style="list-style-type: none"> - other parents/caregivers who choose not to immunise their children - providers of alternative or complementary health <p>Environmental factors:</p> <ul style="list-style-type: none"> ▪ None evident 	<p>Opportunities for engagement:</p> <ul style="list-style-type: none"> ▪ Starting early childhood education/school ▪ Family going overseas ▪ Disease outbreaks ▪ Child receives injury <p>Potential messages:</p> <ul style="list-style-type: none"> ▪ Children not immunised are at risk ▪ Vaccines are well researched and safer <p>Systems:</p> <ul style="list-style-type: none"> ▪ Provider keeps door open <p>Incentives:</p> <ul style="list-style-type: none"> ▪ None

10.2 ‘Nurturers’

Summary of typology

This typology of parents/caregivers (who are mainly Pākehā) supports immunisation, but due to where they live and the way they parent believe their children are at low risk of disease. They gain comfort knowing that the wider population is immunised. They also adopt a range of protective factors. Mechanisms for change would include messages that convey the risk of not immunising.

‘I believe in the intelligence of immunisation but don’t think we fit into the criteria. If we went to a third world country or were dropped into South Auckland, I would feel very nervous about not immunising. We will look at immunisation when he goes to school... My kids don’t eat processed or packet foods – we don’t eat ‘butter chicken tonight’. When the kids are sick we go to the doctors and don’t let things drag. We do it to make up for the fact we haven’t immunised.’ (Pākehā, Northland)

Demographics of parents/caregivers	Characteristics	Mechanisms for change
<ul style="list-style-type: none"> ▪ Aged 30–40 years ▪ Mainly Pākehā ▪ Stable partner relationships ▪ Stay-at-home mums/partner working ▪ Low–middle income 	<p>Attitudes & beliefs:</p> <ul style="list-style-type: none"> ▪ Support immunisation and gain comfort that wider population is immunised (but personally closed) ▪ Children are not at risk as live in low/moderate deprivation areas ▪ Engage protective factors: breastfeeding, proactive about GP visits, low contact with other children, good diet, warm/clean homes to further minimise risk <p>Knowledge & understanding:</p> <ul style="list-style-type: none"> ▪ Start thinking about immunisation during pregnancy ▪ Consider themselves reasonably well informed ▪ Open to different viewpoints ▪ High Internet users <p>Skills & confidence:</p> <ul style="list-style-type: none"> ▪ Made an informed choice not to fully immunise, or to delay ▪ Worry whether done the right thing <p>Role of others:</p> <ul style="list-style-type: none"> ▪ Seek advice from family/whānau ▪ Seek advice from ‘Rejecters’ ▪ Partner may not support decision <p>Environmental factors:</p> <ul style="list-style-type: none"> ▪ None evident 	<p>Opportunities for engagement:</p> <ul style="list-style-type: none"> ▪ Starting early childhood education/school ▪ Family going overseas ▪ Disease outbreaks ▪ Child receives injury <p>Potential messages:</p> <ul style="list-style-type: none"> ▪ Children not immunised are at risk ▪ Vaccines are well researched and safer <p>Systems:</p> <ul style="list-style-type: none"> ▪ Provider keeps door open <p>Incentives:</p> <ul style="list-style-type: none"> ▪ Financial (but may be viewed as a bribe)

10.3 ‘Fearfuls’

Summary of typology

This typology is made up of parents/caregivers who find the immunisation experience emotionally distressing. The experience of a number of Pākehā and Māori align with this typology.

‘She is just too little, and it puts so much stress on a child. I just want to be able to hold and protect her when they are jabbing her with everything. At six weeks they are so tiny and vulnerable. I would never forgive myself if something happened to her after she was vaccinated. (Pākehā, Auckland)

Demographics of parents/caregivers	Characteristics	Mechanism for change
<ul style="list-style-type: none"> ▪ Aged 20–40 years ▪ Mainly Pākehā and Māori ▪ Low income/beneficiaries ▪ Mainly sole parents 	<p>Attitudes & beliefs:</p> <ul style="list-style-type: none"> ▪ Babies are too fragile to be immunised ▪ Don’t like ‘sticking needles’ into little babies ▪ Don’t like babies/children crying and screaming ▪ Worry over side-effects (fever, rash) and parents’ ability to cope <p>Knowledge & understanding:</p> <ul style="list-style-type: none"> ▪ Started thinking about immunisation after baby born ▪ Low knowledge & understanding ▪ Low use of information sources <p>Skills & confidence:</p> <ul style="list-style-type: none"> ▪ Start thinking about immunisation when baby born ▪ ‘Bury head in sand’ ▪ ‘Patchy’ immunisation patterns ▪ Behind in schedule <p>Role of others:</p> <ul style="list-style-type: none"> ▪ Low/no advice or support from family/whānau or partners <p>Environmental factors:</p> <ul style="list-style-type: none"> ▪ None evident 	<p>Opportunities for engagement:</p> <ul style="list-style-type: none"> ▪ Discharge from hospital ▪ Post natal ▪ GP visits ▪ Starting early childhood education/school <p>Potential messages:</p> <ul style="list-style-type: none"> ▪ Immunisation protects children from disease ▪ Better late than never <p>Systems:</p> <ul style="list-style-type: none"> ▪ Provider deals with mother <u>and</u> child ▪ Support person welcome ▪ Alternative vaccines available (e.g. oral) ▪ Catch-up immunisation in school <p>Incentives:</p> <ul style="list-style-type: none"> ▪ Financial

10.4 'Unwell'

Summary of typology

This typology is made up of parents/caregivers (mainly Māori and Pacific) with children who have chronic or acute underlying health conditions, or are frequently unwell. They are open to immunisation, but are unsure when it is safe to immunise their children, as they don't want to compromise their children's health further. Mechanisms for change include immunisation before being discharged from hospital and reassurance about side-effects.

'She ended up in hospital and they said wait and she has been off and on since then so I haven't done it. The doctors, nurses and paediatrician said not to immunise until after the surgery (for cleft palate). I got first daughter done because she was normal.' (Māori, Counties Manukau)

Demographics of parents/caregivers	Characteristics	Mechanism for change
<ul style="list-style-type: none"> ▪ Aged 20–40 years ▪ Mainly Māori and Pacific ▪ Low/moderate household income 	<p>Attitudes & beliefs:</p> <ul style="list-style-type: none"> ▪ Open to immunisation ▪ Vaccines may make unwell child's health worse ▪ Vaccines cause adverse reactions (including serious injury/death) <p>Knowledge & understanding:</p> <ul style="list-style-type: none"> ▪ Low/some knowledge & understanding of immunisation <p>Skills & confidence:</p> <ul style="list-style-type: none"> ▪ Low/some skills & confidence in decision making <p>Role of others:</p> <ul style="list-style-type: none"> ▪ Support from partners/ family/whānau <p>Environmental factors:</p> <ul style="list-style-type: none"> ▪ Providers advise to delay 	<p>Opportunities for engagement:</p> <ul style="list-style-type: none"> ▪ Discharge from hospital ▪ Post natal ▪ GP visits ▪ Starting early childhood education/school <p>Potential messages:</p> <ul style="list-style-type: none"> ▪ If a child is well enough to leave hospital they are well enough to be immunised ▪ Hospitals are safe and convenient places to vaccinate ▪ Immunisations are safe/have few side-effects ▪ Immunisation protects children from disease <p>Systems:</p> <ul style="list-style-type: none"> ▪ Immunisation before discharge from hospital ▪ Continuum of care ▪ Proactive provider follow-up <p>Incentives:</p> <ul style="list-style-type: none"> ▪ Financial

10.5 ‘Vulnerables’

Summary of typology

This typology encapsulates mainly the Māori parents/caregivers who are not opposed to immunisation, but lack the required skills and confidence to engage in immunisation services, and face significant environmental barriers to access. They also receive low support from family/whānau and partners. Mechanisms for change include promoting messages about the effectiveness and safety of immunisation, outreach services and financial incentives.

‘It is transport. I say yeah I’m going to walk (1.5kms) and then it rains. I am always 2–4 weeks late. The nurse doesn’t help and say “why are you late” and I say “why don’t you pick me up?” Stereotypes of Māori are really negative and so I say “see you later, I’m out of here”.’ (Māori, Counties Manukau)

Demographics of parents/caregivers	Characteristics	Mechanism for change
<ul style="list-style-type: none"> ▪ Aged 20–30 years ▪ Mainly Māori ▪ Low household income/beneficiaries ▪ Large families (4+ children) 	<p>Attitudes & beliefs:</p> <ul style="list-style-type: none"> ▪ Not closed to immunisation ▪ Vaccines don’t work ▪ Vaccines are unsafe <p>Knowledge & understanding:</p> <ul style="list-style-type: none"> ▪ Started thinking about immunisation when baby born ▪ Low knowledge & understanding of immunisation <p>Skills & confidence:</p> <ul style="list-style-type: none"> ▪ Consider immunisation compulsory or lack skills & confidence to make informed choice ▪ Compliant (do as told)/ vaccinate so people don’t think they are ‘bad mothers’ ▪ Made attempts to immunise (missed appointments) ▪ Behind in schedule <p>Role of others:</p> <ul style="list-style-type: none"> ▪ Some support from family/whānau <p>Environmental factors:</p> <ul style="list-style-type: none"> ▪ Disengaged from health system (frustrated with services, negative attitudes of providers) ▪ Availability and cost of transport/visits 	<p>Opportunities for engagement:</p> <ul style="list-style-type: none"> ▪ Post natal ▪ GP visits ▪ Starting early childhood education/school <p>Potential messages:</p> <ul style="list-style-type: none"> ▪ Vaccines do work ▪ Immunisations are safe/have few side-effects ▪ Immunisation protects children from disease <p>Systems:</p> <ul style="list-style-type: none"> ▪ Outreach services, e.g. Whānau Ora ▪ Responsive health services ▪ Active recruitment/ follow-up <p>Incentives:</p> <ul style="list-style-type: none"> ▪ Financial

11. Conclusions

The immunisation audience research has confirmed that in most cases, parents/caregivers who do not fully immunise their children have not actively opted not to immunise. Rather, for a variety of circumstances or reasons they have not fully immunised their child.

Of the five typologies of parents/caregivers who have not fully immunised their child, providing services to the 'Unwell' typology (who tend to be Māori and Pacific) may present an opportunity for achieving better immunisation outcomes in relation to the resources that would need to be invested. This group is already 'open' to immunisation and they are reasonably frequent users of the health system.

Strategies currently being implemented by DHBs, such as immunising children before leaving hospital, are positive initiatives, and resonated with research participants. Related strategies could include providing immunisation during out-patient services.

The 'Vulnerable' typology is not closed to immunisation and has often made unsuccessful attempts to immunise. Innovative services that target the concerns/issues faced by this group are likely to result in increased immunisation rates, e.g. outreach services in people's homes.

Financial incentives are likely to encourage immunisation uptake from parents/caregivers across all ethnic groups who are unmotivated or undecided. However, this is a significant policy shift and requires more thorough investigation than was in the terms of reference for this research.

Appendices

1. INFORMATION SHEET

Thank you for agreeing to take part in this project. This research will help the Ministry of Health develop information about keeping our children healthy.

What is the purpose of the project?

The purpose of the research is to find out what people think and understand about child health.

What will I be asked to do?

If you agree to participate in the research, you will be asked to take part in an interview lasting up to two and a half hours. This may be either as a group or individual interview.

What types of questions will you ask me?

We will be asking you questions about:

- Your understanding about child health
- Your opinions about how to keep children healthy.

You do not have to answer any questions that you feel uncomfortable with.

Why have I been asked to take part?

We are interviewing a range of parents and caregivers of children under the age of 6.

What are the potential benefits of participation for me?

Your involvement with this research will help the Ministry of Health develop information about keeping our children healthy. You will be given koha as a thank you for your time and contribution.

How will the researchers ensure that my personal information is kept confidential?

To assist with analysing what comes out of the research, the interview will be audio recorded and some notes will be taken. Your name and address and any other identifying information will not appear in any report.

The data collected will be securely stored in a way that only the researchers will be able to gain access to it. At the end of the project any personal information will be destroyed, except any raw data on which the results of the project depend. This data may be retained in secure storage for three years, after which it will be destroyed.

Can I change my mind and withdraw from the project?

You may withdraw from participation in the interview at any time. You can also withdraw your information from the project at any time up until the analysis begins. Please note that you do not need to give a reason to withdraw and there will be no disadvantage to you of any kind.

Who will be doing the research?

The research is being conducted by Litmus, a research and evaluation company (www.litmus.co.nz), which has been contracted by the Ministry of Health for this project.

What if I have any questions?

If you have any questions about this project, please contact:

Sally Duckworth, Litmus
(04) 473-3883, sally@litmus.co.nz

2. CONSENT FORM

I (insert name)
of (insert address)agree to take part in the
above research, as outlined in the information provided to me by Litmus.

I understand that:

- I do not have to take part in the research
- I can withdraw from the research at any time up until reporting
- If I withdraw, I can ask for any information collected from me to be returned or destroyed
- Research notes or reports written by Litmus will not identify me
- Information collected by Litmus during the research will be held securely at Litmus' office
- This signed agreement will be held securely at Litmus' office.

I have read this consent form, and have been given the opportunity to ask questions. I give my consent to participate in this research.

Participant's signature: _____

Date: _____

3. DISCUSSION GUIDE: PHASE ONE

This interview guide is indicative of the relevant subject matter to be covered. It is designed to allow freedom of any additional relevant topics, which may arise during the focus groups. Note: Times are indicative only to illustrate emphasis through group.

Introductions (10 minutes)

- Thanks for coming, up to 2.5 hours
- Purpose: Exploring child health and wellbeing for under 6's
- Toilets, fire exits, food, etc
- Confidentiality/informed consent
- Group work and individual exercises, no wrong answers
- Ground rules – give it ago, respect each other, everyone contributes
- Introductions.

Immunisation in the context of child health and wellbeing – stickies (30 minutes)

Let's come up with a list of things that are important to keep our children under 6 years of age healthy and well. When you come up with an idea, write it on a stickie and stick it on the wall. One idea per stickie. No wrong answers.

Now, let's sort the stickies into those that are most important to keeping our under 6's healthy and well to those that are least important.

- (If immunisation mentioned) why did we put immunisation there? What makes it more or less important than x,y,z?
- (If immunisation not mentioned). Is immunisation important to keep our under 6's healthy and well? Why? Why not? Where would we place it? Why did we place it there?

Reaction to immunisation – bubble exercise (15 minutes)

Imagine we are talking to a friend or family member about immunising our children at six weeks. In the bubbles jot down what we are saying, what we are thinking and what we are feeling?

Let's do the same thing again, but let's imagine we are talking to a friend or family member about immunising our children at four years old. Again in the bubbles jot down what we are saying, what we are thinking and what we are feeling.

Probe:

- Thoughts, feelings and emotions for each child's range and key differences

Immunisation imagery – collage (20 minutes)

Working together let's make a collage about immunisation for under 6's. Using these magazines rip out pictures, words, images, anything that reminds us of immunisation. Once we have got an image stick it up.

- Looking at the collage, what does it say about immunisation for under 6's? What else?
- Probe positive imagery
- Probe negative imagery

Immunisation journey – personal stories (60 minutes)

We are now going to each tell our story about immunisation for children under 6. Before we tell our stories, please jot down some thoughts to the following four questions on this sheet of paper (hand out form A):

Once participants complete form then invite each participant to share their story

Knowledge, understanding, information channels

- What do we know about immunisation for under 6's?
- When is it recommended that we immunise our under 6's?
- What diseases and illnesses are we immunising them against?
- How do we know this information? Where did we learn it from – family/whanau, GP, Plunket, hospital, others?
- What information would have been useful to have?
- When did we first know about immunisation for under 6's?

Motivations, barriers and behaviour

- What are the reasons for immunising under 6's?
- What worries or concerns do we/did we have about immunising under 6's?
- What makes it/made it difficult, challenging or got in the way of immunising under 6's (explore knowledge, cost, transport, GP relationship, etc)?
- Have we immunised any of our children under 6? Why? Why not?
- Did we start immunising and not complete the immunisation cycle? Why? Why not?

Experiences of those who have partially immunised, or immunised other children

- What has been our experience of immunisation?
- What was good about it? Why?
- What was poor about it? Why?
- What could have been improved?
- Has our experience made us think differently about immunising our children? How?

Future communications - Campaign team (15 minutes)

Imagine that it is our job to encourage as many parents and caregivers of children under 6 as possible to fully immunise their children (i.e. start and complete the immunisation cycle). What would we say to parents and caregivers? How would we say it?

Probe:

- Target audience
- Main message and other messages
- Tone

Acknowledge contribution, koha and close

4. DISCUSSION GUIDE: PHASE TWO

This discussion guide is indicative of the relevant subject matter to be covered. It is designed to allow freedom of any additional relevant topics that may arise during the discussion.

1. Introductions and warm up (10 minutes)

Objective: To explain process of focus group, participant introductions, build participant rapport

- Thanks for coming, group to last approximately 2 hours.
- Confidentiality/informed consent, audio-recording, observers.
- Explain why we are here:
 - All have children, or care for children, aged between 0-5 years.
 - Research is being undertaken for a government organisation to gain parents/caregivers' feedback on messages, ideas, and services to encourage or help parents/caregivers in their decisions to immunise their children aged 0-5 years.
- Explain process - group work and individual exercises, no wrong answers.
- Ground rules - give it a go, respect each other, everyone contributes.
- Toilets, fire exits, food, etc.
- Participant to introduce themselves (e.g. first name, age, where they live, who they live with, age/gender of children aged 0-5). (Moderator to model introduction themselves)
- Icebreakers (Moderator to use as appropriate, as time permits, and lead with own example)
 - What would you be doing today/this evening if you weren't here right now?
 - If you could invite a famous person home to dinner, who would you invite, and why?
 - Describe the last time you laughed out loud. What made you laugh?

2. Immunisation decision making (30 minutes)

Objective: To understand the context for parents/caregivers not immunising their children aged 0-5 years to determine which typology participants fall into for concept testing.

Note: this information was explored in Phase 1 in-depth – so light touch only

Before we begin to look at some ideas for encouraging or helping parents/caregivers with their decisions around immunisation, it would be good to first get a sense of which of our children aged 0-5 years, if any, are immunised and what were our decisions (if any) for not immunising our children.

Probe:

- Key barriers and any enablers
- Whether some or all children are not immunised
- Whether children are fully non immunised or partially immunised
- Key influencers.

3. Concept testing (1 hour)

Objective: To test messages, ideas and services to enhance immunisation for 0-5 year olds

For Pākehā test in-depth concepts A, B, C, D, E and light test remaining concepts
For Māori test in-depth concepts E, F, G, H, I, J, K, L and light test remaining concepts
For Pacific test in-depth concepts D, E, F, G, I, J, K, L and light test remaining concepts
(Moderator to note need for flexibility in concepts to be tested, based on typologies participants fall into)

We are now going to share some messages, ideas and services that parents/caregivers of 0-5 year olds, the Ministry of Health, District Health Boards have raised to encourage and help parents/caregivers in their decisions to immunise their children. Some of these services are also

happening in New Zealand and overseas. We are going to consider each message, idea and service individually and then share our thoughts with the group. Is everyone clear? **(i.e. no comments from moderator, or from group participants. Participants individually complete forms and then open up for discussion.)**

Knowledge/attitude based concepts:

- How do we feel about this message?
- What are the main things it is saying? Is there anything that doesn't make sense?
- Who is this message aimed at? (family type, ethnicity, new/experienced parents/caregivers)
- How would we describe the overall tone of this message?
- Is it thought provoking? Does it make us think differently?
- Do we believe the message? What don't we believe?
- Who or what organisation would be bringing us this message?
- What effect will this message have on parents/caregivers of 0-5 year olds? Would it make them more or less likely to immunise their 0-5 year olds? What effect would it have on us?

Policy concepts:

- How do we feel about this idea?
- What are the main things it is saying/doing? Is there anything that doesn't make sense?
- Who is this idea aimed at? (family type, ethnicity, new/experienced parents/caregivers)
- How would we describe the overall tone of this idea?
- Does it make sense? What doesn't make sense? Should New Zealand consider introducing it?
- Who or what organisation would be behind this idea?
- What effect will this idea have on parents/caregivers of 0-5 year olds? Would it make them more or less likely to immunise their 0-5 year olds? What effect would it have on us?

Service interface concepts:

- How do we feel about this service/programme?
- What are the main things it is saying/doing? Is there anything that doesn't make sense?
- Who is this service/programme aimed at? (family type, ethnicity, new/experienced parents/caregivers)
- How would we describe the overall tone of this service/programme?
- Does it make sense? What doesn't make sense? Could it work?
- Who or what organisation would be behind this service/programme?
- What effect will this have on parents/caregivers of 0-5 year olds? Would it make them more or less likely to immunise their 0-5 year olds? Would we use it?

Ranking:

- Which of these messages, ideas, services/programmes would most encourage or help parents/caregivers with their decisions to immunise their children?
- Which of these would have the least or no effect?

4. Surfacing other enablers (20 minutes)

Objective: To test other enablers to enhance immunisation for 0-5 year olds not surfaced previously

We would like to spend the remaining time together exploring whether there are any other ideas we have to increase New Zealand's child immunisation rates. Let's imagine it is our job to develop messages or a programme to help or encourage parents/caregivers to immunise their children. Let's work in pairs to come up with ideas and then discuss with the wider group. **(Moderator provides some context on NZ's child immunisation rates, different immunisation rates for different DHBs and ethnic groups etc, to start discussion).**

For each idea, probe:

- Who is this idea aimed at?
- Would it make them more or less likely to immunise their 0-5 year olds?

Ranking:

- Thinking about our earlier ranking, where do our new ideas fit? Are they more or less likely to encourage or help parents/caregivers with their decisions to immunise their children?

THANKS AND CLOSE

5. CONCEPTS TESTED IN PHASE TWO

A: Children are at risk of preventable disease

Vaccine preventable diseases are serious diseases, particularly in infants. Vaccine preventable diseases occur in New Zealand every day, regardless of ethnicity, income or family background. Good diet, breastfeeding and hygiene, while good for 0-5 year olds, are insufficient to fully protect them against diseases. It is better to immunise than not to immunise so you can rest knowing your children are protected.

B: Child immunisations are safer

Vaccines are much safer than they were in the past. Vaccines undergo stringent clinical trials before 0-5 year olds are vaccinated. Where possible, vaccines are combined into a single injection. The immune system is designed to be able to deal with a very large number of different antigens (substances that cause the immune system to produce antibodies against it). Early vaccines contained up to 3000 antigens – today's vaccines contain just a handful. All children come into contact with many viruses, bacteria and other agents which the immune system responds to every day. There is no proven link between certain vaccinations and serious disease and illness (eg, autism).

C: Herd immunity

Immunisation is one of the most cost-effective of all health interventions. Immunisation not only protects 0-5 year olds but **benefits the whole community through something called 'herd immunity'**. When a high proportion of the population is immunised, the herd immunity situation comes into effect but immunisation programmes must sustain rates of between 85-95% if epidemics are to be prevented. Currently immunisation rates are low in a lot of areas around New Zealand so there is no herd immunity.

D: It's never too late to immunise children

Some parents/caregivers decide not to immunise their infants, or prefer to wait until their children are older or before starting school before immunising. The decision to delay could be for a variety of reasons. Vaccine preventable diseases are serious diseases and occur in New Zealand every day. **It is never too late to vaccinate children to protect them from these diseases.**

E: Immunisation is a positive choice

Deciding to immunise your child aged 0-5 years is a positive thing to do. Like breastfeeding, good diet, warm houses, and good hygiene, **immunisation is good for infants and young children.**

F: Financial incentive

In Australia, parents receive a financial payment if their child is fully immunised. Parents receive A\$123 if their child is fully immunised at 2 years old and another A\$123 if they are fully immunised at 5 years old. Conscientious objectors who make a formal declaration declining immunisation and those with medical reasons for not immunising also receive payments. One option is to have something similar in New Zealand.

G: Link to free childcare

Another option is to have **free 20 hours of Early Childhood Education funding available to people if their child is fully immunised.** This would also be available to those who register as a conscientious objector and those with medical exemptions.

H: “Super nan” on hand to support parents/caregivers during immunisation

One idea being considered is to have experienced **non-clinical people or “super nans” situated in health clinics** to be on hand to support parents/caregivers when they immunise their infants and young children. This is because some parents find it distressing or worrying immunising their young children. “Super nans” could answer non-clinical questions, be with the parent/caregiver and child when the child receives their immunisation, and help take care of older children. These super nans may be parents or grandparents themselves, but more importantly will have a lot of parenting experience.

I: Walk-in immunisation clinics

Some parents/caregivers find it difficult making an appointment with their doctor or nurse to immunise their children during the day, as they are working, or don't have transport. One idea is to hold **after hours immunisation walk-in clinics** at the local health centre in the evenings and/or weekends.

J: Immunisation at events

Another idea is to have the **local health nurses available in local shopping malls or at sports or community events who would provide immunisations.** Families could turn up

without making an appointment. The parent/caregiver and child would be seen by the nurse in a private area. Other family members could entertain themselves at the shopping mall or be playing sport, while the parent/caregiver takes their child for their immunisation.

K: Immunisation in the home

Some parents/caregivers find it challenging getting to their doctor or nurse to immunise their children, prefer not to visit their local clinic, or don't have a local doctor. Another idea being considered to help these parents/caregivers exercise their choice to immunise their 0-5s is for a **nurse to visit the family home to do the immunisation**. There would be no charge for this service.

L: More information about when to immunise an unwell child

Some 0-5 year olds experience poor health (eg, asthma, respiratory illness, allergies, or other illnesses). Often their doctors, paediatricians and/or surgeons suggest to their parents/caregivers to postpone immunisation while the infant or young child is unwell. For some parents/caregivers this is confusing, as they are unsure when it is OK to start or continue with immunisation.

Some District Health Boards are actively encouraging immunisation by **offering immunisation to the parents of 0-5 year olds before they are discharged from hospital**. These DHBs believe if an infant or young child is well enough to be discharged from hospital, they should be well enough to be immunised.

6. National Immunisation Schedule

The National Immunisation Schedule*	
Age	Diseases covered and Vaccines
6 weeks	Diphtheria/Tetanus/Whooping cough/Polio/ Hepatitis B/ <i>Haemophilus influenzae</i> type b 1 injection (INFANRIX® -hexa) Pneumococcal 1 injection (Prevenar®)
3 months	Diphtheria/Tetanus/Whooping cough/Polio/ Hepatitis B/ <i>Haemophilus influenzae</i> type b 1 injection (INFANRIX® -hexa) Pneumococcal 1 injection (Prevenar®)
5 months	Diphtheria/Tetanus/Whooping cough/Polio/ Hepatitis B/ <i>Haemophilus influenzae</i> type b 1 injection (INFANRIX® -hexa) Pneumococcal 1 injection (Prevenar®)
15 months	<i>Haemophilus influenzae</i> type b 1 injection (Hiberix™) Measles/Mumps/Rubella 1 injection (M-M-R® II) Pneumococcal 1 injection (Prevenar®)
4 years	Diphtheria/Tetanus/Whooping cough/Polio 1 injection (INFANRIX™-IPV) Measles/Mumps/Rubella 1 injection (M-M-R® II)
11 years	Diphtheria/Tetanus/Whooping cough 1 injection (BOOSTRIX™)
12 years girls only	Human papillomavirus** 3 doses given over 6 months (GARDASIL™)

* from June 2008 ** from 2009