The Meningococcal B Immunisation Programme
A Response to an Epidemic
National Implementation Strategy

Ko koe ki tēnā kō au ki tēnei kiwe i ō te kete
*Kia tūhauora ki tua ō rangi*

Working for a healthy future
Contents

Executive Summary v

1. Introduction 1

2. Addressing Meningococcal Disease in Māori 2

3. Background Information 3
   3.1 Meningococcal disease 3
   3.2 Reducing inequalities 4

4. Goal and Objectives of the Meningococcal Vaccine Strategy 6
   4.1 Overall meningococcal vaccine strategy 6
   4.2 Meningococcal B immunisation programme 6

5. Planning and Development 8
   5.1 Underpinning principles 8
   5.2 The vaccine 9
   5.3 Clinical trials design and progress 9
   5.4 Safety monitoring 9
   5.5 The National Immunisation Register (NIR) 10

6. Implementation 13
   6.1 First stage of the immunisation programme roll out 14
   6.2 Nationwide immunisation programme roll out 14
   6.3 Service delivery models 15
   6.4 District Health Board roles 22
   6.5 Communications 23
   6.6 Vaccine supply and allocation 25
   6.7 Workforce 25
   6.8 Education and training 26
   6.9 Evaluation 28

Appendix: Key Contacts 30
Ministry of Health Meningococcal Vaccine Strategy Team 30

Glossary 31

References 32
List of Tables
Table 1:  Number of cases of meningococcal disease prevented for different coverage rates 5
Table 2:  Safety monitoring methods 10
Table 3:  Planned timelines for roll out 14
Table 4:  Roles and responsibilities for programme delivery 20
Table 5:  Management of programme services 22
Table 6:  Roles and responsibilities for the communications campaign 23
Table 7:  Number of planned information sessions and public health nurse updates and vaccinator training courses 28

List of Figures
Figure 1:  Estimated meningococcal cases prevented in children under five years at different coverage levels 5
Figure 2:  National service delivery strategy flowchart 21
Executive Summary

The following points highlight key aspects of the meningococcal B immunisation programme. Note that for the purposes of simplicity and readability this document refers to the programme as if there has been confirmation that it will proceed. However, the programme is still subject to the outcome of clinical trials and obtaining regulatory approvals.

- The goal of the Meningococcal Vaccine Strategy is to plan and implement a mass immunisation programme for the New Zealand epidemic strain of group B meningococcal disease to reduce inequalities for Māori, Pacific peoples and those living in more deprived areas, and achieve 90 percent coverage in those aged 0–19 years.

- The disease disproportionately affects Māori and Pacific populations and people living in more deprived areas. Specific delivery and communication strategies that meet the needs of these communities are being developed nationally, but will need to be implemented locally to maximise immunisation rates. Effective delivery to these populations will be essential for the meningococcal B immunisation programme to be successful.

- Clinical trials are progressing well in the Auckland area, with a focus on Counties Manukau. Initial reports show good results for both immunogenicity and safety of the vaccine.

- Pending regulatory approval of MeNZB™, the first stage of the nationwide immunisation programme will be in Counties Manukau District Health Board (DHB) and the eastern corridor of Auckland DHB. The Ministry is working closely with a project team co-ordinated by Counties Manukau DHB to plan this first stage, which is likely to begin in mid-2004.

- The programme will then roll out to other areas. Given the limited vaccine supply, the programme will be delivered DHB by DHB from greater Auckland and Northland through to Wellington in the North Island, then from Southland through to Nelson–Marlborough in the South Island. The roll out generally targets districts with the highest disease rates first. It will take about a year for all DHBs to start the programme.

- The programme targets all those aged 0–19 years, but delivery to any age group is dependent on regulatory approval. DHBs will be kept informed of developments.

- Primary health care providers will vaccinate children under five years and children outside the school system. Public health nurses will vaccinate school students in a school-based programme. A variety of health providers will vaccinate young people who no longer attend school.

- There will be an extensive communication campaign, including media, advertising and a range of resources to promote the immunisation programme. National and district communication plans will dovetail to maximise their effectiveness.

- This programme will be New Zealand’s largest-ever immunisation programme. The course of three doses given at six-week intervals and the number of people eligible to receive the vaccine will have a considerable impact on DHBs’ ability to deliver on this and any other contracted obligations.
• The Ministry of Health is aiming to develop a delivery framework that is nationally consistent but allows flexibility for districts to manage local requirements.

• It is possible that interruptions in programme delivery may occur as a result of factors such as variations in vaccine supply, workforce shortages, safety requirements, delivery complications or other health issues. The Ministry of Health will endeavour to keep DHBs well informed and advise of any foreseeable alterations to the schedule as soon as possible.

• The National Immunisation Register will be a key tool for recording the immunisation event data during the programme.

• The Ministry has sought feedback on the implications of the models in this document so that it can ensure the results of further planning are workable and acceptable to the sector.

Advice and recommendations from the National Advisory Group will add significant value to the programme, and discussion will continue with representatives from across the health sector.
1. Introduction

New Zealand has adopted several strategies to control meningococcal disease over the past 11 years. As part of this, a national prevention and control plan for meningococcal disease has been in place with several components:

- intensified epidemiological surveillance
- promoting public awareness to encourage early medical intervention
- promoting professional awareness to encourage early diagnosis and treatment
- prevention of secondary cases by notification, contact tracing and offering prophylactic antibiotics
- a three-year case control study to identify modifiable risk factors
- a vaccine strategy.

The proposed Meningococcal Vaccine Strategy (MVS) aims to control the specific strain of group B meningococcal disease that has reached epidemic proportions in New Zealand by implementing a mass immunisation programme. The target is a 70 percent reduction of cases of the New Zealand epidemic strain in children and young people aged 0–19 years. The immunisation programme aims to achieve this goal by vaccinating 90 percent of this age group. Given the disproportionate rates of disease suffered by Māori and Pacific children, and children who are socially and economically disadvantaged, it is crucial that this programme prioritises delivery to these communities.

A multiple-dose immunisation programme of this size has never before been undertaken in this country. Planning, co-ordinating and delivering the many strands of the proposed programme is a challenging but exciting project for the Ministry of Health, DHBs, Māori and Pacific organisations and the health sector. Given the changing structure of primary health services and the existing workloads of DHBs and Primary Health Organisations, this additional workload will undoubtedly create pressure for the health sector. The Ministry of Health will provide additional funding to help to alleviate this pressure. There will also be a big impact on schools. However, with a clear definition of roles between the parties involved, a climate of collegiality, honesty and openness and lots of hard work, the programme will be successful.

Vaccine production and clinical trials are progressing well and it is now time to put logistics and service delivery planning in place. DHBs, health professionals and Māori and Pacific community networks need to be involved in this planning. Previous information sharing, discussion and feedback from the health sector and Māori and Pacific stakeholders have helped guide the programme to this point. Regulatory approval is needed before the immunisation programme starts, but the planning already under way ensures we are ready to start the programme as soon as possible.

This document contains the background information on the epidemic, the rationale for the programme, and an overview of the clinical trials, vaccine production and safety monitoring. We also present a set of programme objectives, the planned roll out timeframes and schedules, guidelines for service delivery, and a discussion of vaccine supply, workforce requirements and communication models.
2. Addressing Meningococcal Disease in Māori

Everybody in New Zealand is at high risk of contracting meningococcal disease, but there is a disproportionately high level of disease amongst Māori. On average Māori contract meningococcal disease at double the rate of Europeans. One in every 117 Māori children will contract meningococcal disease by the time they reach five years of age. Children of European descent under the age of five years have a one in 438 chance of contracting meningococcal disease.

In order to recognise and respect the principles of the Treaty of Waitangi, and with a view to improving health outcomes for Māori, the New Zealand Public Health and Disability Act 2000, Part 3, provides mechanisms to enable Māori to contribute to decision-making on, and to participate in the delivery of, health and disability services. In relation to the meningococcal B immunisation programme, these principles are:

- **participation** – involving Māori at all levels of the sector in decision-making, planning and development of the meningococcal B immunisation programme
- **partnership** – working together with iwi, hapū, whānau and Māori communities to develop strategies for the meningococcal B immunisation programme to improve Māori health
- **protection** – working to ensure Māori have at least the same level of health as non-Māori and safeguarding Māori cultural concepts, values and practices.

In delivering to Māori, the approach is articulated in He Korowai Oranga (2002).
3. Background Information

3.1 Meningococcal disease

Invasive meningococcal disease is at epidemic proportions in our population. The World Health Organization usually accredits epidemic status when the disease surpasses 3 cases per 100,000 population per year, and the incidence of meningococcal disease for most developed countries is less than this. In contrast, provisional figures for New Zealand in 2003 show there were 14.4 cases per 100,000, resulting in 540 cases and 13 deaths. Between 1991 and (January) 2004 over 5300 cases of meningococcal disease were reported, including 215 deaths. There is no evidence that the epidemic is abating.

The bulk of the disease burden is caused by a single strain of group B meningococcal disease bacteria (serogroup B Neisseria meningitidis with the P1.7b,4 PorA protein). About 80 percent of all meningococcal disease cases are caused by this epidemic strain. The case fatality rate is around 4 percent, with up to another 20 percent left with some degree of serious disability such as deafness, skin, digit or limb loss, and developmental delay.

Meningococcal disease disproportionately affects children and young people, with more than 80 percent of cases occurring in those aged 0–19 years, and our youngest are at the greatest risk. New Zealand children have a one in 330 risk of contracting this disease by the age of five years. Māori and Pacific children, and those living in deprived areas, bear a disproportionately high share of the meningococcal disease burden. In 2003 the provisional age-standardised disease rate for Māori infants (aged under one year) was 4.7 times the rate seen in European infants, while the rate for Pacific infants was 11.5 times that of European infants. Although the age-standardised disease rate for the European population is lower than for Māori and Pacific peoples, it is still high by international standards. Areas consistently worst hit are in Northland, Auckland and the Bay of Plenty, although all health districts in 2002 had rates greater than 3 per 100,000 for the 0–19-years age group.
A few facts about risk factors for meningococcal disease

Data from 1998–2002
- Māori and Pacific children make up 65–69 percent of all meningococcal cases in the group aged 0–4 years. These young children make up a third of all cases in those aged 0–19 years.

Data from 2002
- Children aged under five years living in New Zealand’s most deprived areas (NZDep Index 9 or 10) account for 47 percent of all meningococcal cases in this age group.
- Children and young people aged 0–19 years who live in NZDep areas 9 and 10 account for approximately 38 percent of all cases in this age group.
- Children aged under five years who are Māori, Pacific or living in areas classified NZDep areas 9 or 10 account for approximately 72 percent of all meningococcal cases in this age group. These young children make up approximately 40 percent of all cases in those aged 0–19 years.
- Children and young people who are Māori or Pacific or who live in NZDep areas 9 and 10 account for approximately 62 percent of all cases in the group aged 0–19 years.

3.2 Reducing inequalities

New Zealand’s past coverage rates suggest that current immunisation services best serve those parents and caregivers who are well motivated, understand the need for immunisation and require little or no prompting to take their children for immunisation (National Health Committee 1999; Ministry of Health 2001).

Achieving high coverage within groups that have been historically less likely to be immunised, especially in children aged under five years, will be critical to achieving epidemic control.

Assuming 90 percent coverage, 80 percent of meningococcal cases being of the vaccine-preventable strain and 80 percent vaccine efficacy:
- vaccinating 90 percent of Māori and Pacific children aged under five years would prevent 38–40 percent of all cases in the group aged 0–4 years
- vaccinating 90 percent of children aged under five years that are Māori, Pacific or classified NZDep 9 or 10 would prevent approximately 42 percent of all meningococcal cases in the group aged 0–4 years.

The danger of relying on mainstream initiatives to improve general immunisation coverage rather than specifically targeting the most affected groups is that this strategy can lead to increased inequalities in coverage (Marsh and Channing 1988). The following table highlights the importance of achieving significant improvements in immunisation rates within historically under-immunised groups of children aged under five years.

**Table 1:** Number of cases of meningococcal disease prevented for different coverage rates

<table>
<thead>
<tr>
<th>Age group</th>
<th>Coverage achieved</th>
<th>Cases prevented per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–4 years</td>
<td>All at 90 percent</td>
<td>132</td>
</tr>
<tr>
<td>0–4 years</td>
<td>Māori, Pacific and NZDep 9 or 10 at 50 percent Others at 90 percent</td>
<td>90</td>
</tr>
<tr>
<td>0–19 years</td>
<td>All at 90 percent</td>
<td>241</td>
</tr>
<tr>
<td>0–19 years</td>
<td>Māori, Pacific and NZDep 9 or 10 at 50 percent Others at 90 percent</td>
<td>175</td>
</tr>
</tbody>
</table>

The graph below shows the consequences for young children of achieving only 50 percent immunisation coverage in Māori, Pacific and children living in NZDep 9 or 10 areas while achieving coverage of 90 percent in other population groups. There is a likely difference of nearly 50 cases prevented in a year.

**Figure 1:** Estimated meningococcal cases prevented in children under five years at different coverage levels*

* Based on 2002 numbers.
4. Goal and Objectives of the Meningococcal Vaccine Strategy

Meningococcal disease is New Zealand’s most serious communicable disease problem, as measured by the size and impact of the epidemic. In response to this serious public health issue, Cabinet has committed to funding the MVS, targeting all those aged 0–19 years.

The strategy and programme goals, objectives and targets are as follows.

4.1 Overall meningococcal vaccine strategy

Goal
To plan and implement a mass immunisation programme that will attain rapid control of the group B meningococcal disease epidemic in New Zealand.

Target
Over 70 percent reduction of cases of *Neisseria meningitidis* B:4:P1.7b,4 in those aged 0–19 years.

4.2 Meningococcal B immunisation programme

Rationale
While all New Zealanders are at risk of developing meningococcal disease, those most at risk are tamariki Māori, Pacific children and children living in deprived areas. These are also the children who have historically been least likely to be reached by immunisation programmes.

The meningococcal B immunisation programme aims to reduce past disparities in immunisation coverage and achieve an equal level of protection and coverage for all. The goals and objectives for the programme are designed to ensure this is achieved by focusing attention, effort and resources on reaching those most at risk.

Goal
To implement an effective national immunisation programme for the New Zealand epidemic strain of group B meningococcal disease that reduces inequalities for Māori and Pacific peoples and achieves 90 percent coverage in those aged 0–19 years.

Primary objectives
The primary objectives are to provide coverage of:
- Māori aged 0–19 years
- Pacific people aged 0–19 years
• children aged under five years
• those aged 0–19 years living in NZDep 9 and 10 areas.

Secondary objective
The secondary objective is to provide coverage of non-Māori and non-Pacific aged 0–19 years.

Targets
The targets are 90 percent of:
• Māori aged under five years fully vaccinated
• Māori at school fully vaccinated
• Māori out of school fully vaccinated
• Pacific aged under five years fully vaccinated
• Pacific at school fully vaccinated
• Pacific out of school fully vaccinated
• children aged under five years fully vaccinated
• those aged 0–19 years living in NZDep 9 and 10 areas fully vaccinated
• non-Māori and non-Pacific at school fully vaccinated
• non-Māori and non-Pacific out of school fully vaccinated.
5. Planning and Development

In 2001 the Government committed up to $200 million to implement the MVS. The Ministry leads the strategy, working in partnership with Auckland University (undertaking vaccine trials), Chiron Corporation (the vaccine developer and supplier) and the Institute of Environmental Science and Research Limited (surveillance and laboratory services).

5.1 Underpinning principles

For the MVS

The development of a ‘tailor-made’ vaccine has been supported internationally and nationally as the best approach for stopping the New Zealand epidemic. Cabinet considered a number of criteria in order to decide whether to invest in a national immunisation programme, and on the best option for such a programme. Cabinet supported the current MVS based not only on a cost–benefit analysis, but also after taking into consideration aspects such as equity, contribution to reducing health inequalities, obligation to Māori under the Treaty of Waitangi, and public acceptability.

For the implementation model of the programme

Reviews of New Zealand immunisation programmes have identified important lessons that have guided the way the programme will be implemented (Lennon, Gellin et al 1992; Lennon, Gellin et al 1993; O’Hallahan and Roseveare 1995; Tobias 1995; HFA 1998; Turner, Baker et al 2000; Ministry of Health 2001; Ministry of Health 2002b).

The planning of the programme has also been informed by the experience of recent meningococcal disease mass immunisation programmes in England and Canada (Miller, Salisbury et al 2001; National Audit Office 2001; Salisbury 2001; Balmer, Borrow et al 2002; Middlesex-London Health Unit 2002). Lessons include:

- the value of school-based / institution-based mass immunisation programmes in achieving high coverage rates (Lennon, Gellin et al 1993; Salisbury 2001; Regional Public Health 2002)
- the critical importance of encouraging primary health care providers to actively promote a meningococcal immunisation programme (US Department of Health and Human Services 1988; Rhew 1999)
- the fact that innovative outreach services and other ways of reducing access barriers to immunisation are required if high coverage is to be achieved – New Zealand’s coverage rates suggest immunisation services best serve parents and caregivers who are well motivated, understand the need for immunisation and require little or no prompting to take their children for immunisation (National Health Committee 1999; Ministry of Health 2001)
- the need to ensure that strategies that improve overall immunisation do not increase inequalities (Marsh and Channing 1988; Reading, Colver et al 1994; Reid, Robson et al 2002).
Strategies that evidence suggests are not likely to be effective include:

- funding a broad range of providers without ensuring mechanisms for co-operation and collaboration (National Health Committee 1999)
- funding services that encourage or promote awareness of immunisation but do not link these to immunisation (C Bullen, Director Northern Hepatitis B Screening Programme, personal communication, 2003)
- one-off mass vaccination days, unless these are extremely well planned and co-ordinated (Mansoor undated).

5.2 The vaccine

The New Zealand meningococcal B vaccine, MeNZB™, is being manufactured using the same processes as, but with a different strain to, the meningococcal B vaccine developed by the Norwegian Institute of Public Health.

The vaccine is strain-specific to New Zealand, and is being manufactured for immediate use. It is not a live vaccine and does not contain the group B meningococcal bacterium so it cannot cause meningococcal disease. The vaccine contains aluminium hydroxide to assist the body’s protective response, a stabiliser (histidine) and normal saline. It does not contain any blood products or the preservative thiomersal.

5.3 Clinical trials design and progress

Clinical trials are being carried out in New Zealand to provide sufficient immunogenicity (an immune response) and reactogenicity (safety) data for the group aged 0–19 years. Adults, children aged 8–12 years, toddlers aged 16–24 months and infants aged 6–8 months have participated in clinical trials. Trials involving infants aged 6–10 weeks started in mid-January 2004.

Medsafe will recommend to the Minister of Health whether the immunisation programme should proceed and any limitations surrounding it. The Director-General of Health, acting on delegated ministerial authority, will then make the decision on whether to proceed with the programme.

The decision on whether the MeNZB™ vaccine will be included with the routine immunisation schedule will be made by the Ministry as the programme is evaluated.

5.4 Safety monitoring

The following monitoring methods will operate in Counties-Manukau and Auckland DHBs during the first stage of the immunisation programme roll out where approximately 150,000 children and young adults will be immunised. This comprehensive monitoring system has been put in place because it is the first time the MeNZB™ vaccine has been used. It is unlikely that Medsafe would be able to grant the licence if the safety monitoring is not in place.
Table 2: Safety monitoring methods

<table>
<thead>
<tr>
<th>Activity</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhanced health professional reporting to the NZPhvC</td>
<td>The Pharmacovigilance Centre (NZPhvC) at Otago University will implement enhanced health professional reporting of any adverse events following MeNZB™ vaccination during the Counties Manukau roll out. This enhancement is to ensure all possible adverse events are immediately reported.</td>
</tr>
<tr>
<td>Intensive monitoring of children aged 6 weeks to 18 months</td>
<td>The NZPhvC will implement intensive surveillance at a number of sentinel general practices throughout New Zealand. For a pre-selected cohort aged 6 weeks to 18 months, the practices will electronically report all vaccinations administered and all health consultations within six weeks of vaccination to the NZPhvC.</td>
</tr>
<tr>
<td>Hospital-based surveillance for serious events</td>
<td>On a daily basis, nurse monitors at selected hospitals will systematically monitor hospital admissions and emergency department consultations in those aged 0–19 years to identify pre-selected serious conditions. A case report form will be completed for each case and checks made to see if each case has has been vaccinated with MeNZB™ within the preceding days, weeks, or months. A clinical review committee will supervise the nurse monitors and ensure consistency of reporting and investigation of cases of interest.</td>
</tr>
<tr>
<td>Hospital-based surveillance of all events</td>
<td>On a weekly basis, admission and emergency department consultations at selected hospitals will be reviewed to identify any event that has occurred within one week of MeNZB™ vaccination. This surveillance is to improve the possibility of detecting a new unexpected adverse reaction to the vaccine, and to ensure that all serious events have been detected.</td>
</tr>
<tr>
<td>Review of hospital discharge data</td>
<td>Analysis of routinely collected hospital discharge data to monitor the incidence of specified events before and after the introduction of MeNZB™ vaccine.</td>
</tr>
</tbody>
</table>

An Independent Safety Monitoring Board (ISMB) will be established to review the information collected.

During the nationwide roll out, NZPhvC will continue the routine monitoring of health professional adverse event reports. Intensive monitoring of the pre-selected cohort of children aged 6 weeks to 18 months through sentinel GP practices will also continue.

The hospital-based surveillance established at the Auckland and Counties-Manukau DHB hospitals will continue during the wider Auckland region roll out to monitor vaccinees aged under five years. The review of routinely collected hospital discharge data will be undertaken in all New Zealand regions.

5.5 The National Immunisation Register (NIR)

The NIR is a computerised information system that is being developed to hold the immunisation details of New Zealand children. The NIR will record all immunisations given as part of the meningococcal B immunisation programme, from both primary health care and school-based programmes. This will enable safety and coverage monitoring of the new vaccine. If an individual (or their parent or guardian) consents to being given the MeNZB™ vaccine, that immunisation information will be transferred
automatically to the NIR. In situations where there is no immediate electronic access to the NIR, equivalent manual data input processes will be in place.

Individuals (or their parents/guardians) will be able to access their child’s immunisation information, or request for that information to be corrected, through their health care provider. The NIR will also enable authorised health care providers to quickly and easily find out what vaccines or doses a child has been given (this will include children whose family has shifted to another area or changed health care providers).

In summary, the NIR will offer:

- quick access to a child’s immunisation status, helping to ensure they receive the appropriate immunisations
- the ability for health care providers to recall individuals overdue for their immunisations, locate children of highly mobile families, check their immunisation history and offer vaccination (this will also help to ensure that children are linked back to primary health care services)
- provision of local, regional and national immunisation coverage data, which will help support the meningococcal B immunisation programme planning and evaluation
- improved monitoring of MeNZB™ vaccine safety and effectiveness.

In the longer term it will help to improve access to immunisation services, increase coverage rates and reduce immunisation disparities among different socioeconomic and ethnic groups.

The NIR relies on three feeder systems to relay the information into the database. Most of the electronic practice management systems (PMS) at primary health care providers can be upgraded to pass data to the NIR automatically. For those primary health care providers that do not have a PMS (or where the PMS is too old or unsuitable to upgrade), a manual data input system will be developed using paper forms.

For immunisations that take place at schools, the public health nurses will use the school-based vaccination system (SBVS) to record data and then upload that data in batches to the NIR. There will be one SBVS per public health unit. While the SBVS may be able to be used for other school immunisation programmes in the future, such as Year 7, the focus at this stage is on the implementation for the meningococcal B immunisation programme. School roll information, along with consent form returns and National Health Index numbers, will be able to be loaded into the SBVS prior to the immunisations taking place.

Initially (during roll-out in Counties Manukau, Auckland, Waitemata and Northland DHBs) there will be a requirement to get the vaccination event data onto the NIR (via any of the feeder systems) within 24 hours, to meet licensure conditions.

The NIR project team is working with DHBs throughout the country to implement the NIR and SBVS applications, and to assist uptake of PMS in primary health care, in time for the meningococcal B immunisation programme. The NIR roll-out will occur on a staggered basis, similar to that outlined for the meningococcal B immunisation
programme. Each DHB has (or is in the process of negotiating) a contract with the Ministry for NIR implementation, each has a NIR project sponsor, and several DHBs have recruited NIR staff and prepared implementation plans.
6. Implementation

The roll out of the immunisation programme will be staggered in parallel with vaccine production, the requirement for intensified safety monitoring in the early stages of the roll out, and the operation of the NIR. The roll out will progress from north to south in the North Island and from south to north in the South Island. This takes into account the geographical burden of disease and reaches the majority of Māori and Pacific children in the early part of the programme.

The design of the roll out has taken into account a number of critical issues, including the following.

i. **Risk and burden of disease** – the design takes into account the need to prioritise the highest risk group (those aged under five years) and the need to go to areas with high numbers of cases first.

ii. **Inequalities** – given the disproportionate rates of disease among Māori and Pacific children, it is vital that these children receive the vaccine early. The proposed roll out prioritises the Northland to Waikato areas. In the last five years over 50 percent of the meningococcal cases in Māori children and young people, and 85 percent of the cases in Pacific children, have occurred in these areas.

iii. **Workforce utilisation** – with the separation of the primary health care and school-based programmes, there is the potential for sharing a scarce immunisation workforce. The regional approach gives the potential for neighbouring DHBs to work collaboratively.

iv. **The implementation of the NIR** – the implementation of the NIR will be staggered and implemented in phases throughout the DHBs. It is essential for safety surveillance, data recording and coverage monitoring that this occurs prior to the roll out of the meningococcal B immunisation programme.

v. **Communications** – the design of the roll out needs to be simple enough to be effectively communicated to the public.

vi. **Effectiveness** – an age-staggered approach allows for the vaccine’s effectiveness to be assessed.

vii. **Evaluation** – the roll out model takes into account the importance of ensuring the findings of the evaluation undertaken in the first stage of the programme can be provided to other DHBs to assist in the management of the nationwide programme.
6.1 First stage of the immunisation programme roll out

Subject to regulatory approval, the first stage of the roll out will begin from May 2004 in Counties Manukau DHB and the eastern corridor of Auckland DHB. The Ministry anticipates that at this time the vaccine will be licensed for children aged above six months.

From May 2004 a school-based programme will commence. From July 2004 children aged between six months and four years and young people who are no longer at school will become eligible to receive vaccine. These timeframes are subject to licensure and will be confirmed closer to the time.

South Auckland has been selected for the first stage of the nationwide programme because of the high rates and numbers of meningococcal disease cases.

6.2 Nationwide immunisation programme roll out

It is expected that there will be sufficient vaccine stock available to begin the national roll out from November 2004. Timelines tabled below are based on the assumption that the vaccine would be licensed for children aged 6 weeks to 19 years inclusive.

It is understood that DHBs will want some level of certainty around these timelines to enable adequate planning. However, the regulatory process, for which Medsafe is responsible, is independent and the Ministry cannot influence it.

Approximate launch dates for the nationwide programme are presented in a table below. The following points must be noted.

- There are no guarantees around licensure and approval dates.
- These timelines are still for approval in April 2004 (or possibly later) and there is no confirmation possible prior to then.
- This roll out plan assumes age group licence and there are no guarantees of that yet.
- It is possible that the roll out to children aged six weeks to five months may be further delayed or that licensure is only given for school-aged children.
- These timelines should be seen as an indication only and confirmation will be given nearer the time.

These timelines will be negotiated further with all DHBs at a national meeting planned for late April 2004.

Table 3: Planned timelines for roll out

<table>
<thead>
<tr>
<th>DHB</th>
<th>Primary health care</th>
<th>School based</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6 weeks – 5 months</td>
<td>6 months – 4 years</td>
</tr>
<tr>
<td></td>
<td>Children attending school (approx 5–17 years)</td>
<td></td>
</tr>
</tbody>
</table>
6.3 Service delivery models

The Ministry has developed the framework to ensure national consistency in the immunisation programme, but it is expected (and important) that delivery strategies vary between regions. Crucial to the success of the programme will be the development of local initiatives that encourage Māori and Pacific and families living in more deprived areas to access immunisation services. Public health organisations (PHOs), local community services and health providers will be expected to work collaboratively, through PHO networks where possible, to ensure the programme reaches all target groups. Strategies should include building on existing outreach services with a track record of good service delivery and the ability to take immunisation services to families in a range of settings, including homes, mobile units and community facilities.

The immunisation programme will contribute to the pathways outlined in He Korowai Oranga (Ministry of Health 2002c) in terms of increasing the participation of Māori in the health sector and improving service delivery to Māori. Improving rates of immunisation among Māori and achieving better health gains for Māori are key goals in Achieving Health for All People (Ministry of Health 2002a).

DHBs will be required to work with Māori and Pacific health providers and community health workers to develop strategies that are culturally appropriate, inclusive and supportive. Community involvement – incorporating local networks, iwi, hapū and extended families – is crucial for engaging Māori and Pacific participation and support for the programme.

The following strategies are recommended to achieve this.
• Involve Māori and Pacific representatives in the development of local strategies and action plans. This should include Māori and Pacific DHB managers, Māori co-funding organisations (MAPOs), Māori development organisations (MDOs), regional iwi health service providers and the community in planning, and leadership in delivering and communicating the programme.

• Monitor coverage of Māori and Pacific immunisation uptake, and provide feedback to providers on progress and performance. The NIR will assist with monitoring.

• Build on existing services, particularly existing outreach services, where there is effective collaboration between general practice, Māori and Pacific providers and Well Child providers. Support providers are needed who have a record of providing services to Māori and Pacific peoples and the ability to take immunisation services to families in a range of settings, including homes, mobile units and community facilities.

• Facilitate kanohi ki te kanohi (face-to-face) hui organised by Māori community health workers working in partnership with authorised vaccinators.

• Involve local Pacific health providers and community elders and leaders in the development of local strategies and plans.

DHBs will be asked to prioritise delivery to those at highest risk (see section 3.2 ‘Reducing inequalities’).

Primary health care programme for children under five years

Primary health care providers (eg, general practices; after-hours facilities; Māori, Pacific and community providers) will vaccinate children aged under five years. DHBs will be responsible for co-ordinating primary health providers to ensure there is easy access to vaccine for families and caregivers. The Ministry is developing a process, in consultation with DHBs, for incentive payments to be made to PHOs for this age group. It is proposed that these payments will be based on Māori and Pacific populations and on NZDep 2001 indicators.

DHBs will need to work closely with primary health providers to:

• engage the support of the full range of providers, including general practitioners, practice nurses, Māori and Pacific providers and Well Child providers

• prioritise delivery to Māori and Pacific children and those most at risk of the disease

• make access to the vaccine as easy as possible

• actively promote the vaccine

• connect awareness-raising activities with immunisation programmes.

Previous evaluations of other immunisation programmes stress the importance of co-ordinating awareness-raising and immunisation activities. It is important that primary health care providers build on information and awareness-raising campaigns and activities by proactively offering the vaccine. Public awareness and understanding of the immunisation programme is critical, but in itself is not enough to assure vaccination (Ministry of Health 2002b).
PHOs, Māori and Pacific providers, outreach immunisation providers, Well Child providers and community health workers will be key to ensuring all children under five years receive vaccination services that are culturally and socially acceptable to their families. These services may include mobile or community-based clinics. The promotion of services based on existing relationships with providers should be encouraged, but opportunistic vaccination will also help with coverage rates. There may also be opportunities for some after-hours and emergency clinics to assist with the programme.

If a child does not access or does not return to their usual health provider for vaccination, follow-up will be required through recall and individual contact. If there is still no success, they will need to be referred to an outreach service. The process for this referral system must be developed in conjunction with outreach immunisation providers and the locally developed plan.

**School-based programme**

School-based immunisation programmes will be the delivery models for all children attending primary, intermediate and secondary schools. These will be run by public health nursing services on a similar basis to the existing Year 7 immunisation programmes. Follow-up clinics or ‘mop-ups’ run by the public health nursing services will be required for children who have missed immunisation days.

Parents who need to have a child attending school vaccinated by a primary health care provider will have to discuss this with the public health nurses. The process must be managed in this way because of the:

- limited supply of vaccine
- need to allocate and monitor vaccine supplies carefully
- need to maintain clarity of processes given the three-dose course
- wide age range of those eligible for this programme, compared to the narrower age groups eligible for other immunisation programmes
- need to avoid double vaccinations by the public health nursing service and primary health providers.

Delivery should be prioritised according to need. Schools in areas with a high meningococcal disease rate or with a high proportion of Māori and/or Pacific children or a low school decile rating should commence the programme first.

**Programme for young people and children out of school**

These groups will be the most challenging to reach. Young people no longer at school will be in a variety of situations, including employment, tertiary education and training. Communication will be crucial to reaching this audience. Existing distribution services should be used whenever possible, such as bulletin boards and local newsletters. The Ministry will provide specific funding to assist with programme promotion and awareness-raising among young people no longer attending school or tertiary institutes.
Primary health providers have a key role in the delivery of this programme. It is expected that a variety of health services will be involved in providing immunisation services to this group, including general practices, Māori, Pacific and outreach health providers, workplace and occupational health providers, and student health services at universities, polytechnics and other training organisations. Emergency centres and after-hours’ clinics may also be able to offer vaccinations to this group.

Children who are home schooled or receiving their education through correspondence programmes will access either primary health care services or the school-based immunisation programme, as appropriate, depending on the location.

Local-level discussion between DHBs and key focus groups such as Māori and Pacific organisations, youth groups, church groups and sports’ associations will offer further opportunities and insight into the range of health services that will appeal to this group. The Ministry will provide specific funding for this.

**Outreach services**

Effective outreach services will be crucial to the programme’s success. As in the current model of outreach immunisation services developed by the National Immunisation Programme, outreach services must be involved in both the promotion of the MeNZB\(^\text{TM}\) vaccine and in providing vaccination services to children who are not successfully reached by traditional primary health care immunisation programmes.

In the context of the meningococcal B immunisation programme, the aim is for these services to:

- support and collaborate effectively with the primary health care strategies in order to achieve the 90 percent coverage target for all populations
- focus on reaching those whom services have traditionally failed to reach, or those regarded by health services as hard to reach (ie, children identified in coverage surveys and reports as less likely to be fully immunised)
- actively promote immunisation, facilitate access to services and immunise children and young people at risk, as well as ensure there is timely response to recall and follow-up of these people
- provide immunisation services in the community, where appropriate
- provide both cultural and clinical safety for families
- build on current community structures and partnerships rather than starting new services
- encourage children and their families back into primary health care for ongoing immunisation and other health care
- use national guidelines to create effective local solutions for local situations
- monitor and evaluate their own performance, based on timely feedback, and if necessary, be able to adjust their approach to achieve a 90 percent coverage rate.
DHBs will be expected to scope the available resources and capacity, engage the key players and local networks, and develop strategies appropriate for the district. Specific payment arrangements for these services are currently being developed.

**Innovative local solutions**

Existing health providers will be the main vaccinators involved in this programme. However, innovative local strategies will be needed to reach those outside the school system. This will depend on the local population and demographic profile for each district, and should be based on the feedback of local health providers, community services and Māori and Pacific representatives. PHO infrastructures will also be useful for providing advice and recommendations in these areas.

The Ministry expects that the focus of ‘innovative delivery’ solutions will be on existing primary health providers and outreach providers that offer clinics in various venues. The best delivery solution is one that builds on existing links with primary health providers. ‘Off the street’ first vaccinations carry the risk that the immunisation course will not be completed (Ministry of Health 2002b). Once is not enough for this programme. One dose of the MeNZB™ vaccine offers little protection by itself. Any plans for innovative delivery, such as mobile caravans, should be supported by follow-up services to ensure the vaccine course is completed.

Examples of alternative delivery options and venues include community-based clinics held at day-care centres, kohanga reo, Plunket, marae or other local facilities. There may also be opportunities to provide services via mobile clinics, in after-hours or emergency facilities, and in local community rooms such as sports venues and church halls, but such service delivery should be organised in collaboration with local primary health care providers.

Where various strategies or solutions are being considered, DHBs must gauge the potential benefit of such solutions (coverage) against vaccine control and cold chain management, clinical safety standards and the information requirements of the NIR.

| Once is not enough for this programme.  
One dose of the MeNZB™ vaccine offers little protection by itself. |
### Table 4: Roles and responsibilities for programme delivery

<table>
<thead>
<tr>
<th>Ministry of Health</th>
<th>District Health Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ensure strategies are in place to offer vaccine to the eligible population and reach coverage targets according to the programme objectives.</td>
<td><strong>Primary health care programmes</strong></td>
</tr>
<tr>
<td>• Provide a national framework to ensure consistency of delivery throughout the country.</td>
<td>• Work with primary health care providers and the local community networks to deliver the programme.</td>
</tr>
<tr>
<td>• Establish a national rollout timetable for programme delivery and vaccine eligibility.</td>
<td>• Ensure immunisation services provided are accessible to Māori, Pacific and low-income families.</td>
</tr>
<tr>
<td>• Monitor nationally to ensure that the populations most at risk of meningococcal disease (Māori, Pacific and children from low-income families) are immunised as early as possible.</td>
<td>• Offer vaccine to the eligible population and reach coverage targets.</td>
</tr>
<tr>
<td>• Fund the development and provision of outreach immunisation services</td>
<td>• Actively promote meningococcal B immunisation.</td>
</tr>
<tr>
<td>• Develop and deliver a national communications strategy and operational resources.</td>
<td>• Link awareness-raising activities to immunisation.</td>
</tr>
<tr>
<td>• Fund initiatives to promote the programme to and raise awareness among young people not attending school or tertiary institutes</td>
<td>• Oversee referral processes between outreach services and other health providers.</td>
</tr>
<tr>
<td>• Fund information sessions for health professionals (vaccinators and information sharers) and vaccinator training courses and updates for public health nursing services.</td>
<td>• Involve district immunisation facilitators and local co-ordinators.</td>
</tr>
<tr>
<td>• Organise and fund vaccine supply and delivery to providers premises within DHB regions.</td>
<td>• Monitor programme uptake locally.</td>
</tr>
<tr>
<td>• Provide the IT system (NIR) to monitor progress of the programme within each DHB.</td>
<td>• Promote connection to the NIR to primary health care providers.</td>
</tr>
<tr>
<td>• Provide computer software to aid in the recording of large volumes of vaccination details in schools (SBVS)</td>
<td><strong>School-based programme</strong></td>
</tr>
<tr>
<td>• Develop a process to get vaccination data from primary health care providers onto the NIR where NIR-compatible PMS software is not in place.</td>
<td>• Ensure efficient delivery of the school-based immunisation programme.</td>
</tr>
<tr>
<td>• Monitor and advise on national progress of the programme.</td>
<td>• Initiate follow-up programmes for children who have missed a vaccination.</td>
</tr>
<tr>
<td></td>
<td>• Ensure schools in areas of highest risk or with significant numbers of Māori or Pacific students receive the vaccine first.</td>
</tr>
<tr>
<td></td>
<td>• Monitor programme uptake locally.</td>
</tr>
<tr>
<td></td>
<td>• Liaise with the local NIR project manager to ensure successful installation and operation of the SBVS has occurred.</td>
</tr>
</tbody>
</table>
Ministry of Health District Health Board

**Outreach**

- Identify the location of the high-risk population to be reached by the immunisation programme.
- Scope the existing available resources and key players including current outreach immunisation providers, Māori and Pacific providers, district immunisation facilitators and local co-ordinators and Plunket.
- Develop strategies for effective outreach service delivery based on existing local services and networks.
- Obtain agreement on the planned outreach delivery models from the DHB general managers of Māori and Pacific health.
- Oversee the outreach referral processes and service delivery.
- Monitor and report on outreach services implementation

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**Figure 2:** National service delivery strategy flowchart

Note that inherent in all the service delivery models is the need to provide both planned and opportunistic vaccination.
6.4 District Health Board roles

The Ministry has met and talked with different representative groups in the health sector to guide its development of purchasing strategies to assist the sector to deliver the programme. Draft frameworks are nearing completion and the Ministry is in the process of discussing these with representative groups. The frameworks include:

- DHB project management of the district programme
- Public health nurse delivery of vaccine to school students
- Primary health provider payment for immunisation services
- Outreach service delivery
- Vaccinator training and information sessions
- Communications and programme awareness raising.

The Ministry proposes that the existing infrastructure for immunisation service payment be retained, with variations made to existing contracts.

Table 5: Management of programme services

<table>
<thead>
<tr>
<th>Services to be managed at a national level</th>
<th>Services to be devolved to DHBs to manage</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MVS policy and governance.</td>
<td>• Planning, preparation and project management of the roll out in the DHB regions, including the establishment of a steering group and the provision of an implementation strategy.</td>
</tr>
<tr>
<td>• National co-ordination of the first stage and the national programme roll out.</td>
<td>• Development of strategies that will reach the target populations.</td>
</tr>
<tr>
<td>• Variation of Section 88 / PHO agreements and DHB contractual arrangements undertaken in conjunction with DHBs.</td>
<td>• Co-ordination of the programme roll out in each DHB, including the primary health care and school-based programmes.</td>
</tr>
<tr>
<td>• Purchase and development of the vaccine.</td>
<td>• Development and management of a local communications campaign.</td>
</tr>
<tr>
<td>• Management of the clinical trial and Medsafe licensure process.</td>
<td>• Development and delivery of outreach immunisation services.</td>
</tr>
<tr>
<td>• National logistics related to ordering, shipping, storage and nationwide delivery of the vaccine.</td>
<td>• Planning and facilitation of education and training for public health nursing service vaccinators.</td>
</tr>
<tr>
<td>• Development of a national communication campaign.</td>
<td>• Planning and facilitation of the information sessions for other health professionals (vaccinators and information sharers).</td>
</tr>
<tr>
<td>• Funding primary health care, school-based and outreach programme delivery.</td>
<td>• Working with the Ministry to manage and control vaccine allocation to providers.</td>
</tr>
<tr>
<td>• Funding vaccinator training and education sessions.</td>
<td></td>
</tr>
<tr>
<td>• Funding initiatives for the programme promotion and awareness-raising among young people not attending school or tertiary institutes.</td>
<td></td>
</tr>
</tbody>
</table>
6.5 Communications

The communications campaign for the immunisation programme is comprehensive and will use a variety of channels and tools to raise awareness about the risk of meningococcal disease, provide information about the immunisation programme and motivate the community to participate.

Engaging and meeting the needs of such a diverse and large target population are the main challenges. A multi-layered campaign that uses a range of channels and delivers simple, consistent and clear messages will raise public awareness and create momentum within the community to encourage people to become involved in the immunisation programme.

The communications campaign will reflect the programme’s goal of reducing inequalities for Māori and Pacific peoples and for those living in more deprived areas. All communication and messages will focus on reaching these communities, but will be particularly visible in advertising, health promotion activities, written resources and media statements. Engaging with Māori and Pacific stakeholders will be a key task of both Ministry and DHB project teams.

Planning and delivery of the communications strategy will require partnership between the Ministry, at a national level, and DHBs, at a local level. Information delivered from national and local perspectives must be complementary, co-ordinated and consistent.

Some communication tools will be managed nationally to give information that is consistent throughout the country. As an example, the website bearing the nationwide campaign identity will have a section for each DHB. The content of that section will be provided by each DHB with guidance from the Ministry and might include upcoming local activities and the launch date of the local immunisation programme.

In addition, each DHB has the flexibility to co-ordinate communications and activities that would be appropriate for their community.

Table 6: Roles and responsibilities for the communications campaign

<table>
<thead>
<tr>
<th>Task</th>
<th>Ministry of Health role</th>
<th>DHB role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>• Contract advertising agencies and manage the overall campaign.</td>
<td>• Input into the district advertising plan and scheduling of advertisement placement.</td>
</tr>
<tr>
<td></td>
<td>• Develop a campaign identity.</td>
<td>• Co-ordinate activities with advertising.</td>
</tr>
<tr>
<td></td>
<td>• Oversee district advertising plans.</td>
<td></td>
</tr>
<tr>
<td>Stakeholder communication</td>
<td>• Inform and update national stakeholders.</td>
<td>• Inform and update district stakeholders.</td>
</tr>
<tr>
<td></td>
<td>• Make presentations at key stakeholder conferences and national meetings.</td>
<td>• Liaise with key local stakeholders to rally support for the programme.</td>
</tr>
<tr>
<td>Task</td>
<td>Ministry of Health role</td>
<td>DHB role</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Website         | • Create a website that primarily meets the needs of the public, but also provides information for health professionals, the education sector and the media.  
• Maintain website. | • Provide information for posting to the website.                                       |
| 0800 telephone line | • Establish an 0800 service.  
• Update information. | • Provide local information as appropriate.                                         |
| Media           | • Develop a national strategy.  
• Raise national awareness about meningococcal disease and the immunisation programme.  
• Make spokespeople available to the media for comment.  
• Provide regular updates for journalists on the progress of the immunisation programme.  
• Monitor media interest and advise DHBs.  
• Respond to media queries and assist DHBs, as appropriate. | • Develop a local strategy.  
• Raise local awareness about meningococcal disease and the immunisation programme.  
• Make spokespeople available to the media for comment.  
• Inform the Ministry of local media activity and queries.  
• Respond to media queries with support from the Ministry, as appropriate. |
| Written resources | • Prepare information kits for vaccinators.  
• Produce written resources for the public to inform them about the programme, including posters, a leaflet, and booklet.  
• Produce resources for implementation, including an informed consent form, information sheet, post-vaccination sheet, Well Child book sticker.  
• Produce a teachers’ pack to assist teachers in discussing the programme with students.  
• Produce appropriate material translation English translated into Samoan, Cook Island Māori, Tokelauan, Fijian, Tuvaluan, Tongan, Niuean, Korean, Vietnamese, simplified Chinese, Traditional Chinese, Arabic, Hindi. | • Distribute written resources to the target population. |
| Research        | • Commission research to determine the level of public understanding about meningococcal disease. |                                                                           |
6.6 Vaccine supply and allocation

The vaccine will be allocated to each DHB based on the known population groups that are to be immunised. The Ministry will distribute vaccine through a national distribution contractor. There will be a vaccine allocation and real-time inventory system to ensure providers have sufficient vaccine for their known or identified population, while ensuring minimum wastage. DHBs should endeavour to ensure that providers administer vaccine to their target group only (eg, primary health providers immunise children under five years, and public health nurses vaccinate children at school). In addition, DHBs will need to work with the Ministry to manage provider vaccine allocation.

Given that the vaccine is freeze-sensitive, storage and cold chain requirements are critical. Immunisation providers will be required to ensure that the MeNZB™ vaccine is stored, monitored and transported in accordance with the National Cold Chain Standards (IMAC 2002) and the Immunisation Handbook 2002 (Ministry of Health 2002). This will include working with district immunisation facilitators and local immunisation co-ordinators to assist with cold chain monitoring, etc.

Because the vaccine will not be able to be returned to the distributor for reallocation once it has been delivered to providers, the Ministry has developed a number of strategies and will distribute a range of resources to highlight and address the key issues regarding storage and transportation of the vaccine. These include:

- frequent ordering and delivery of MeNZB™ vaccine – current entitlement funding is two orders per practice (not individual GPs within a practice) per month, irrespective of practice size, but the Ministry is funding increased, but not unlimited, deliveries with variance for practice size (ie, larger practices will be entitled to more deliveries than smaller practices)
- minimum and maximum order quantities
- clear thermostability guidelines.

The supply of consumables such as needles, syringes and sharps containers will be the responsibility of the immunisation providers, as is the current practice with the National Immunisation Schedule. The Ministry will inform the major medical suppliers to alert them to the increased demand.

6.7 Workforce

Vaccines are a prescription medicine and must be administered by a medical practitioner, a registered nurse working under the direction and supervision of a medical practitioner, an authorised independent vaccinator (authorised under the Medicines Regulations 1984, clause 44A [2]) or a registered nurse working under Standing Orders (Medicines [Standing Order] Regulations 2002).

Vaccinators will include registered nurses working in primary health care, public health, occupational health and tertiary education institutes, along with those working within prisons and with, or as, Māori and Pacific providers.
The additional workload associated with the meningococcal B immunisation programme (three doses of vaccine six weeks apart and the high volumes of eligible vaccinees) will have an impact on both the public health and primary health nurse workforce. The level of impact will be influenced by the national roll out model and whether the DHB chooses to immunise the eligible population in stages or altogether.

However, all immunisation providers will need sufficient vaccinators and support staff to ensure they have the capacity to deliver the second and third vaccine doses to their eligible population. Public health nursing services, in particular, will require additional vaccinators and support staff. Workforce sharing may be necessary where numbers in one health professional group are low.

6.8 Education and training

The Ministry has a capped education and training budget for the meningococcal B immunisation programme, so priority has been given to:

- ensuring there are sufficient information sessions (location and timing) to maximise opportunity for attendance by both vaccinators (including medical practitioners and nurses) and information sharers
- providing vaccinator training courses for public health nursing services.

While the Ministry has ascertained the existing (available) primary health care and public health nurse workforce (New Zealand Nursing Council Active Registered Nurses and Midwives by TLA, Worktype and Employer Category) and projected the number of additional vaccinators likely to be required, DHBs will need to undertake a more detailed assessment of the available workforce and strategies for recruiting new and ex-vaccinators within their area.

Given that DHBs will be co-ordinating the immunisation programme roll out in their geographical area, meningococcal B education and training will be managed and delivered using the ‘train the trainer’ concept through DHBs and in conjunction with the Ministry. These methods have been used successfully for education and training related to previous immunisation programmes and will enable the effective use of existing resources and mechanisms. This arrangement also allows for the utilisation of local expertise and the provision of support for providers within the DHB.

Meningococcal B information sessions

Because MeNZB™ is a new vaccine (rather than a new combination of existing antigens or vaccines), medical practitioners, primary health care and public health nurses as well as other vaccinators such as occupational and sexual health nurses should be given the opportunity to attend an information session prior to the commencement of the immunisation programme in their area. Information sharers such as Well Child nurses, midwives and community health workers must also be invited to attend these sessions before the programme begins.
The meningococcal B information sessions will be approximately two hours long and delivered at the most appropriate time and venue to suit localities and providers within each DHB. Attendance will be free.

**Vaccinator training courses**

While completion of a vaccinator training course (VTC) is preferable, registered nurses working within a primary health care practice, under the supervision of a medical practitioner, do not have to be a trained vaccinator to administer vaccines. Priority for VTCs funded by the Ministry has gone to public health nursing services, outreach providers (ie, those who will be vaccinating without a medical practitioner on site), and Māori and Pacific providers who provide primary health care (GP) services.

The National Immunisation Programme is funding additional VTCs for the Auckland/Northland region (Well Women’s Nursing Service) and for the South Island (delivered by the Immunisation Advisory Centre (IMAC) in the 2003/04 financial year. The MVS is funding a total of eight additional VTCs to be delivered by IMAC in the 2004/05 financial year, four of which will be for Māori, Pacific or outreach providers and four for primary health care nurses. Their location will be as agreed by the MVS in conjunction with the National Immunisation Programme.

Primary health care nurses should access the National Immunisation Programme-funded IMAC and Well Women’s Nursing Service courses. Vaccinator training courses for public health nurses will be managed and co-ordinated by DHBs and/or public health nursing services.

**Timing of the information sessions and vaccinator training courses**

Wherever possible the information sessions should take place not more than two months prior to the immunisation programme commencing in the DHB. The public health nursing service VTCs for the meningococcal immunisation programme should be run not more than four months prior to commencement in the DHB. In some instances this won’t be possible (eg, where a regional approach to training has been suggested, or due to the impact of the summer holiday period between 2004 and 2005).
Table 7: Number of planned information sessions and public health nurse updates and vaccinator training courses

<table>
<thead>
<tr>
<th>DHB</th>
<th>Vaccinator / information sharer information sessions</th>
<th>Public health nurse authorised vaccinator updates</th>
<th>Public health nurse VTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counties Manukau</td>
<td>10</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Auckland</td>
<td>10</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Waitemata</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Northland</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Waikato</td>
<td>7</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Lakes</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Bay of Plenty</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Tairawhiti</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Hawke’s Bay</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Taranaki</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Whanganui</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>MidCentral</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hutt</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wairarapa</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital and Coast</td>
<td>8</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Southland</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Otago</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>South Canterbury</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Canterbury</td>
<td>14</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>West Coast</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Nelson–Marlborough</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>110</strong></td>
<td><strong>24</strong></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Note: Those public health nursing services with a low number of public health nurses have been combined with a neighbouring DHB public health nursing service for vaccinator training course and update requirements (e.g., Wairarapa together with Hutt Valley).

6.9 Evaluation

An evaluation strategy for the meningococcal B immunisation programme has been developed to:

- ensure the programme has a good foundation
- provide information for ongoing improvement
- assess the success of the programme.

The strategy includes formative, process and impact evaluation as well as ongoing programme monitoring.
Evaluation activities are already in place to ensure the programme has a good foundation. These include project management methodologies, literature reviews, pre-testing of materials, and research into the public perception of meningococcal disease and attitudes to immunisation.

There will be an external evaluation of the first six months of the programme, which will:
- assess the vaccination coverage achieved – particularly in the most at-risk groups – and whether the programme is reducing inequalities for Māori and Pacific peoples
- identify lessons learned from the programme implementation, especially in regard to improving access or service delivery to Māori and Pacific peoples, children under five years and children from low-income families.

The Ministry will work with DHBs to identify effective ways to use this information to improve the programme.

A key evaluation tool for the outcome of the immunisation programme is the NIR (see 5.2 above), which will measure progress towards the goal to vaccinate 90 percent of the eligible population. An evaluation of the national roll out is also being planned.

The above strategies focus on programme delivery and immunisation rates, but the ultimate success of the MVS strategy will be measured by its effect on meningococcal disease. The content of the final programme to assess this is still being confirmed, but at this stage is likely to include:
- modelling, to provide an estimate of the vaccine programme effectiveness in reducing disease
- a case control study, to obtain an estimate of vaccine effectiveness (an approximation of post-licensure vaccine efficacy)
- screening studies, which will compare disease rates among those vaccinated and those unvaccinated.

At all stages of monitoring and evaluation, key questions will be the extent to which the programme is reaching those most at risk and contributing to reducing inequalities in health status.
Appendix: Key Contacts

Ministry of Health Meningococcal Vaccine Strategy Team

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</tbody>
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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>DHB</td>
<td>District Health Board</td>
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<tr>
<td>GP</td>
<td>general practitioner</td>
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<tr>
<td>IMAC</td>
<td>Immunisation Advisory Centre</td>
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<tr>
<td>ISMB</td>
<td>Independent Safety Monitoring Board</td>
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<tr>
<td>PHO</td>
<td>primary health organisation</td>
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<tr>
<td>the Ministry</td>
<td>the Ministry of Health</td>
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<tr>
<td>Meningococcal B</td>
<td>the epidemic strain of group B meningococcal disease</td>
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<tr>
<td>MeNZB™</td>
<td>the trade name of the vaccine developed to control New Zealand’s group B meningococcal disease epidemic</td>
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<tr>
<td>MVS</td>
<td>Meningococcal Vaccine Strategy</td>
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<tr>
<td>NIR</td>
<td>National Immunisation Register – a computerised information system to record the immunisation details of New Zealand children and young people</td>
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<td>NZDep</td>
<td>New Zealand Deprivation Index</td>
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<td>NZPhvC</td>
<td>the Pharmacovigilance Centre</td>
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<tr>
<td>OIS</td>
<td>outreach immunisation service – vaccination promotion and service delivered in a non-primary health provider setting by a nurse/vaccinator and a community health worker</td>
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<tr>
<td>PMS</td>
<td>patient management system – a computerised information system used by primary health providers</td>
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<tr>
<td>SBVS</td>
<td>school-based vaccination systems</td>
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<tr>
<td>VTC</td>
<td>vaccinator training course</td>
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References


