



Issue 26

March 2009

## Research Theme

### Providing Evidence to Meet Health Goals

#### In this issue

1. The HRC and the NZ Health Strategy: Providing Evidence to Meet Health Goals
2. Reducing Smoking
3. Nutrition
4. Reducing Obesity
5. Increasing the Level of Physical Activity
6. Reducing the Rates of Suicides and Suicide Attempts
7. Minimising Harm Caused by Alcohol and Illicit and Other Drug Use to Individuals and the Community
8. Reducing the Incidence and Impact of Cancer
9. Reducing the Incidence of Cardiovascular Disease
10. Reducing the Incidence and Impact of Diabetes
11. Improving Oral Health
12. Reducing Violence in Interpersonal Relationships, Families, Schools and Communities
13. Improving the Health Status of People with Severe Mental Illness
14. Ensuring Access to Appropriate Child-Health-Care Services, Including Well Child, Family-Health Care and Immunisation
15. Next DHBRF e-newsletter
16. About DHBRF e-newsletter
17. Subscribe/unsubscribe
18. Contact us

---

### 1. The HRC and the NZ Health Strategy: Providing Evidence to Meet Health Goals

The HRC produces an annual report on research of relevance to the Ministry of Health's priority population health objectives outlined in the New Zealand Health Strategy. The latest report, **launched on the HRC website this month**, covers research conducted in New Zealand that has been published during the reporting period (31 May 2007 – 1 June 2008), or was funded and/or administered by the HRC during that time.

This year, the report has been revised, with information grouped and summarised in a user-friendly format to be of greater utility to the Ministry of Health and other stakeholders, such as DHBs, health providers, researchers and policy-makers.

This report provides:

- A high-level overview of New Zealand research published in the previous year relevant to each of the priority health objectives of the New Zealand Health Strategy, including expert comments;
- A full bibliography of research published in the last year for each section, with contact details of the corresponding author or the principal investigator for the research;
- A breakdown and summary of published research abstracts by discipline and topic, and
- Details of all relevant, current research contracts funded and/or administered by the HRC.

It is anticipated that this will be a valuable resource for health stakeholders wishing to keep up-to-date on recent developments in these priority areas.

This report is restricted to abstracts published in internationally indexed journals that received HRC funding. The purpose is to provide an update on recent research developments in New Zealand, and can be seen as a 'snapshot' of the best known New Zealand findings.

To download the report, or specific chapters relevant to your field, visit the [HRC downloads page](#), and select appropriate PDFs. If you would like a copy of the report on CD, or for further information please contact [Catherine Ramzan](#).

---

## 2. Reducing Smoking

Dr Hayden McRobbie, Senior Lecturer in Public Health and Psychosocial Studies at Auckland University of Technology comments that "Reducing smoking initiation remains a key priority and strategies to achieve this goal are being investigated by a number of prominent New Zealand tobacco control researchers". Additionally, "Policy and treatment interventions need to continue to be implemented if we are to see an ongoing decline in smoking prevalence".

Publications by HRC funded researchers on the theme of Reducing Smoking have primarily been categorised as public health research. The largest number of publications concerned health impacts from smoking. Reflecting the need to evaluate the impact of the New Zealand 2003 Smoke-free Environments Amendment Act, 18% were in the area of 'regulatory environment'. Sub-topics summarised include:

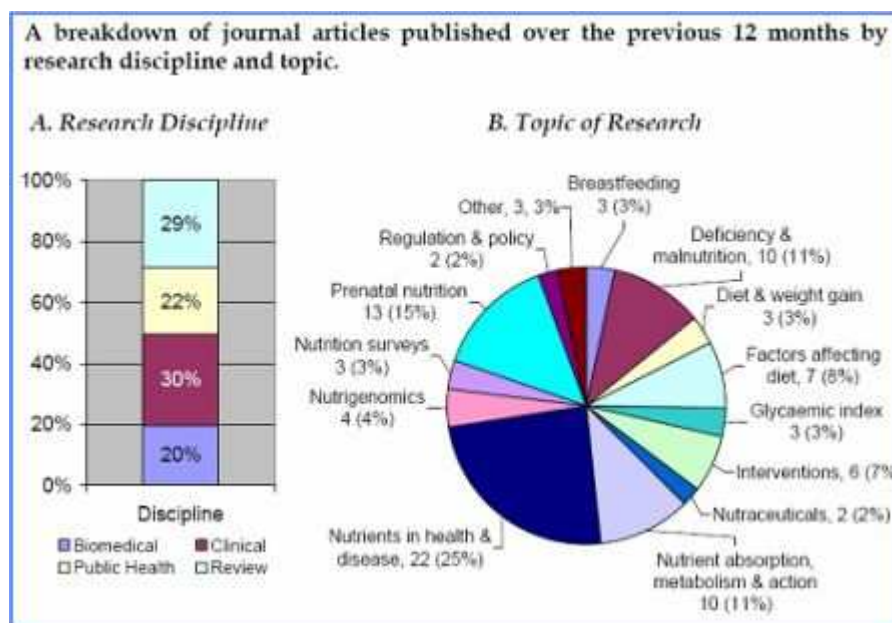
- Addiction
- Health Impact (Allergy, Cardiovascular Disease, Lung Function, Mental Health and Oral Health)
- Regulatory Environment (Smoke-free law, Policy-makers' Attitudes to the Tobacco Industry, Future Legislation)
- Smoking Cessation

- Smoking Initiation
- Smoking Prevalence
- Tobacco Industry Funding
- Verifying Smoking Status

Download the [Reducing Smoking](#) chapter.

### 3. Nutrition

The vision of the Healthy Eating – Healthy Action Strategy is an environment and society where individuals, families and whanau, and communities are supported to eat well, live physically active lives and attain and maintain a healthy body weight. Good nutrition is a priority for a person's overall health and wellbeing. A major theme in New Zealand nutrition research is obesity, in particular contributing factors and prevention. Publications identified as relevant to the nutrition objective were well spread across research disciplines and covered a wide range of topics, with a quarter being focused on nutrient metabolism in health and disease. Expert comment is included from Associate Professor Winsome Parnell from the Department of Human Nutrition, University of Otago.



Download the [Nutrition](#) chapter.

### 4. Reducing Obesity

The Reducing Obesity theme includes expert comment from Dr Rachael Taylor, who highlights the significance of the obesity issue in New Zealand, with more than 60% of adults being heavier than is desired for their health. She does however point out that New Zealand researchers are making impressive contributions to combating this international problem. See Rachael's comment here.

Two thirds of publications identified as having obesity reduction as a major

#### Expert Comment:

*Dr Rachael Taylor (PhD), Karltime Senior Research Fellow in Early Childhood Obesity, Department of Human Nutrition, University of Otago*

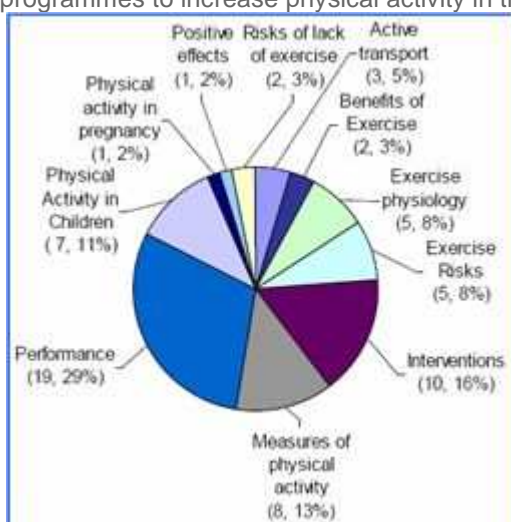
“ Although the latest Health Survey figures offer promise in the battle against obesity, they also highlight that we still have a lot

focus of the research were clinical or public health in nature, with a sizable contribution from clinical nutrition research. The greatest number of publications focused on risk factors for obesity, of which half were concerned with the prenatal environment and developmental programming - the focus of much of the biomedical research published during the time period.

Download the [Reducing Obesity](#) chapter.

## 5. Increasing the Level of Physical Activity

There is no denying that New Zealanders are passionate about sport, but this does not always translate into active movement by the general population. Important areas of research include measurement of just how active our population is, including sub-populations such as children, and the implementation and appropriate evaluation of programmes to increase physical activity in those with



low levels.

This is described in an expert comment from Grant Schofield, Professor of Public Health and Director of the Centre for Physical Activity and Nutrition Research, AUT University.

A significant amount of research also focuses upon performance, sports physiology and exercise-induced changes in endurance athletes. The 'Providing Evidence to Meet Health Goals' report focuses more on improving physical activity in those not normally active. No biomedical publications of relevance to the NZ Health Strategy were identified for this health objective.

Download the [Increasing the Level of Physical Activity](#) chapter.

## 6. Reducing the Rates of Suicides and Suicide Attempts

In an expert comment, Dr Shyamala Nada-Raja, Senior Research Fellow at the University of Otago Injury Prevention Research Unit notes that "New Zealand research initiatives on suicide and suicidal behaviours are recognised internationally as being at the forefront of research in these areas."

This includes important studies such as the Canterbury Suicide Project and the Dunedin and Christchurch longitudinal studies.

Dr Nada-Raja also comments that "While much New Zealand research to date has focused on identifying risk factors for suicide, suicidal behaviours and self-harm, research on developing and evaluating suitable interventions has received little attention. However, it is encouraging to note emerging and promising intervention research being undertaken in collaboration with Maori and community samples, to rigorously evaluate credible interventions such as cognitive behaviour therapy, delivered via traditional and innovative media to target major risk factors for suicidal behaviours."

The majority of publications in this area are defined as public health research, with half focusing on risk factors for suicide and self-harm. Other publications looked at prevention, suicide statistics and measures and indicators.

Download the [Reducing the Rates of Suicides and Suicide Attempts](#) chapter.

---

## 7. Minimising Harm Caused by Alcohol and Illicit and Other Drug Use to Individuals and the Community

Professor Sally Casswell, the Director of SHORE (Centre for Social and Health Outcomes Research and Evaluation) at Massey University highlights the contrast between illicit drug use and alcohol consumption. Evidence suggests that illicit drug use is stabilizing internationally, while there appears to be increases in heavier use of alcohol over time. Determining reasons behind the stabilization phenomenon and ways to maintain or reduce this level of use are key to illicit drug research. A priority for alcohol research should be the identification and development of cost-effective New Zealand-focused interventions to reduce alcohol-related harm.



The majority of publications identified as directly relevant to this objective were classified as public health research, with just under a third focusing on the health impacts of illicit drugs and alcohol. Other sub-topics summarised include:

- Abuse liability (N-benzylpiperazine (BZP))
- Education and Prevention
- Health Impact (Alcohol Abuse, Drug Abuse: Cannabis)
- Population Trends
- Risk Factors (Alcohol, Drugs)
- Screening and Outcome Measures
- Treatment and Recovery (Drugs)

Download the [Minimising Harm Caused by Alcohol and Illicit and Other Drug Use to Individuals and the Community](#) chapter.

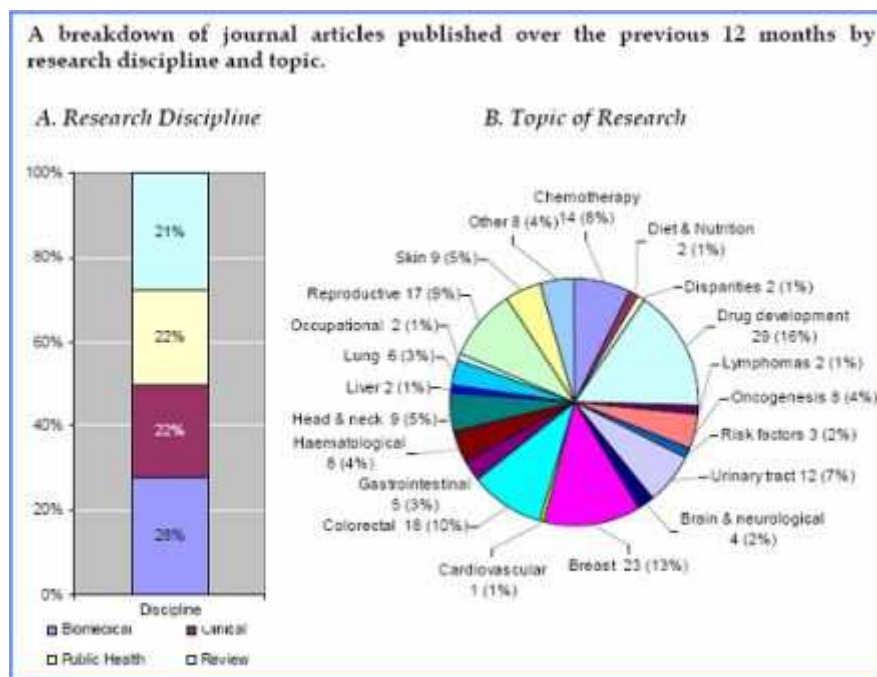
---

## 8. Reducing the Incidence and Impact of Cancer

This is one research area in which there is a great deal of research underway, across all disciplines, with fundamental themes of cancer control and drug development. Dr Bridget Robinson, a Medical Oncologist at Canterbury DHB and Associate Professor of Medicine, University of Otago, provides comment regarding research into cancer control in New Zealand. She highlights the important focus on addressing disparities, with studies on detection, presentation, characteristics and management of cancer in our variety of ethnic and socioeconomic settings. Studies are also addressing lifestyle factors such as nutrition, obesity and physical activity, as well as internationally recognized investigations underway into the genetics and molecular biology of cancer.

Professor William Denny, Director of the Auckland Cancer Society Research Centre and Principal Investigator at the Maurice Wilkins Centre for Molecular Biodiscovery provides comments specifically related to Cancer Drug Development. He highlights that in addition to continued research into cytotoxic drugs that disrupt DNA function, significant research

has focused on “targeted” therapies aimed at variant components of signal transduction pathways. New research also focuses on tumour-selective prodrugs, which includes drugs that exploit physiological differences between the tumour and normal body cells or exploit antibody functions to selectively deliver/release attached toxins to a tumour. Furthermore, research is developing into noninvasive diagnostic methods.



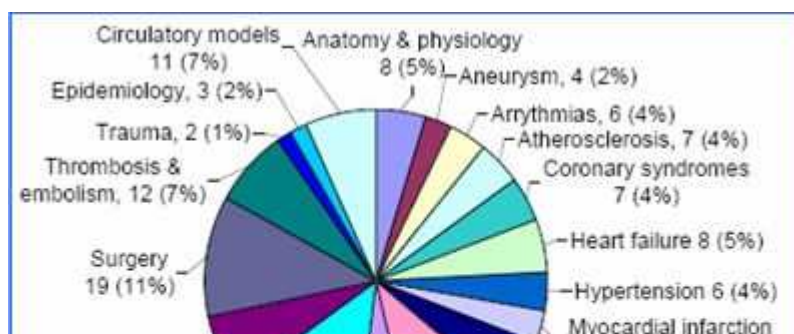
A total of 184 New Zealand research publications from the last 12 months were identified in a literature search and deemed to be directly relevant to the Reducing the Incidence and Impact of Cancer objective. The literature covered a wide range of topics, although half the publications focused on drug development, breast, colorectal or reproductive cancers. There is a strong body of research on drug development, with a number of promising new agents being identified and new approaches taken to targeting existing cytotoxic drugs exclusively at cancer cells.

Download the [Reducing the Incidence and Impact of Cancer](#) chapter.

## 9. Reducing the Incidence of Cardiovascular Disease

A large number of publications identified were considered directly relevant to this objective of Reducing the Incidence of Cardiovascular Disease. The majority of the publications focused on clinical research, although all the disciplines were well represented. The publications covered a wide range of topics in 28 categories, with a third covering risk factors, surgery or stroke.

While primary preventative measures and improvements in treatment have contributed to decreases in cardiovascular disease mortality rates, this still remains the main



cause of death in New Zealand. Professor Norman Sharpe, Medical Director of the National Heart Foundation of New Zealand points out that many of these deaths are premature and preventable. There is an alarming trend for relatively young people to be affected by coronary ill-health, commonly influenced by lifestyle factors. Professor Sharpe makes the important observation that six of the thirteen priority objectives in the New Zealand Health Strategy are directly relevant to cardiovascular disease prevention and management. "The Strategy principles emphasise the importance of a lifespan approach to health, focusing on the disadvantaged, equitable access and systems performance. Present and future research investment should be viewed in this context to meet New Zealand's particular needs. Biomedical, population health and clinical research can be referenced to the lifespan approach across the heart-health continuum, and with an imperative to demonstrate relevance through linkage and translation into practice".

Download the [Reducing the Incidence of Cardiovascular Disease](#) chapter.

## 10. Reducing the Incidence and Impact of Diabetes

The publications identified as directly relevant to the objective of Reducing the Incidence and Impact of Diabetes reflected all the research disciplines, with the greatest number being in the area of clinical research. The greatest number of publications were in the areas of risk factors and diabetic complications.

Professor Jim Mann is the recipient of HRC funding for a programme of research on lifestyle and nutritional approaches to reduce obesity, type 2 diabetes and its complications and is Director of the Edgar National Centre for Diabetes Research, University of Otago. His expert comment summarises key contributions by New Zealand researchers to the field of diabetes research, such as the finding that lifestyle modifications can reduce the risk of progression of impaired glucose tolerance to type two diabetes. There are three different major community-based programmes exploring methods of diabetes risk reduction. See Professor Mann's expert comment here.

Download the [Reducing the Incidence and Impact of Diabetes](#) chapter.

44 Type 2 diabetes is generally accepted as having reached epidemic proportions worldwide, the highest rates being reported amongst indigenous populations that have been exposed to rapid acculturation. Classical, randomised, controlled trials have demonstrated the potential of lifestyle modification to reduce the risk of progression of impaired glucose tolerance to type 2 diabetes. Three major programmes in New Zealand are investigating different community-based approaches to diabetes-risk reduction. Their evaluations will be of national and international interest. The demonstration in a well powered, randomised, controlled trial in women with gestational diabetes that metformin (alone or with supplemental insulin) is not associated with increased perinatal complications when compared with insulin treatment will profoundly influence the management of this group of prediabetic women.

Other studies of different treatments which have attracted international interest, or are likely to do so, are those that seek to examine different nutritional approaches in the management of type 2 diabetes, novel approaches for achieving optimal glycaemic control in critically ill patients and a wide range of experimental studies aimed at further understanding the causes and complications of diabetes and its management. Several studies are examining practical issues relating to the delivery of diabetes care and, quite appropriately, there is particular interest in issues relating to those of Māori and Pacific ethnicities - since they have especially high rates. While studies have also demonstrated escalating rates of type 1 diabetes, and high morbidity and mortality despite improved approaches to management, issues surrounding type 1 diabetes have been relatively poorly researched in New Zealand and warrant much greater attention.

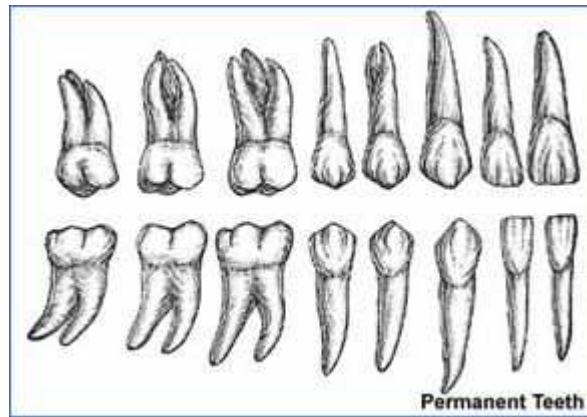
45

## 11. Improving Oral Health

There was a broad range of research studies published that fell under the category of Improving Oral Health, from fundamental biomedical research through to applied public

health projects. The majority of publications focused on dental health services or anatomy and physiology. Subtopics include:

- Anatomy and Physiology
- Consequences of Periodontal Diseases
- Dental Caries
- Dental Health Services (Older Adults, Workforce Stress, Satisfaction and Retention, Cost of Services)
- Oral Health and Quality of Life
- Pain Relief
- Risk Factors for Periodontal Diseases
- Trauma
- Treatment

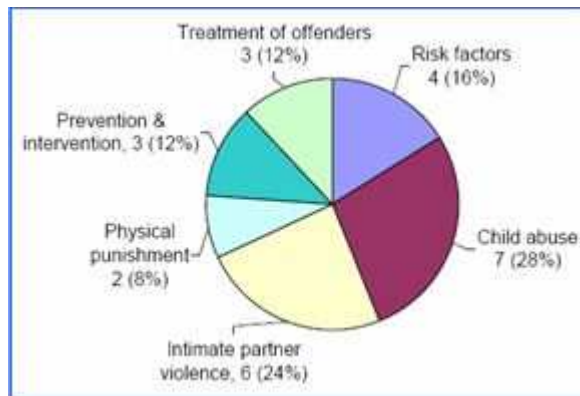


Expert comment is provided by Professor WM Thomson, Professor of Dental Epidemiology and Public Health at the University of Otago. He raises the issue that oral disorders can result in substantial dysfunction, pain and disability for individuals, and considerable social and economic burdens at the population level.

Download the [Improving Oral Health](#) chapter.

## 12. Reducing Violence in Interpersonal Relationships, Families, Schools and Communities

The Ministry of Health DHB Toolkit on Interpersonal Violence highlights the need for the health and disability sector to address this topic because it is associated with a significant burden of disease both in the short and long term, directly and indirectly, with victims of abuse seeking health care at greater rates not only for assault-related injuries but also for other health effects. By addressing interpersonal violence it may be possible to:



- Influence young families, children and youth to develop personal skills that help to reduce violence
- Build supportive environments and strengthen community action in ways which help to reduce violence
- Intervene early thus preventing reoccurrence or serious harm. The health and disability sector, with its regular interface with the general population, is uniquely placed to intervene early
- Improve the way society responds to violence by better co-ordination with other agencies over individual cases and over development and funding of policies and programmes.

A search on violence, physical abuse, sexual abuse, and smacking returned 25 publications considered to be directly relevant to this objective. The majority of

publications were classified as public health research and no original biomedical research was identified for the time period. Over half the publications were focused on child abuse or intimate partner violence.

In an expert comment Professor Jane Koziol-McLain from the Interdisciplinary Trauma Research Unit at the Auckland University of Technology identifies several large population-based studies in New Zealand that have investigated violence prevalence and recognise risk and protective factors associated with violence perpetration, victimisation and health burden. Professor Koziol-McLain has HRC funding for research on healthcare site-based partner violence screening and intervention efficacy.

Download the [Reducing Violence in Interpersonal Relationships, Families, Schools and Communities](#) chapter.

---

### 13. Improving the Health Status of People with Severe Mental Illness

Ian Evans, Professor of Psychology at Massey University Wellington, notes that the publications identified here reveal an impressive breadth and depth of research into mental health in New Zealand. He identifies the need for prevention, early intervention, and primary services as themes throughout this research portfolio. However, Professor Evans notes that “there remains a wide gulf between basic biomedical research and studies that illuminate psychosocial and cultural influences...how does hope, or family dysfunction, or economic disadvantage, or occupational stress really interface with brain chemistry?”



In his expert comment, it is acknowledged that “bridging this gulf is not easy because fundamentally different ideas about the very nature of mental health problems can be seen in the work being planned. Yet such integration is an urgent need if individuals are going to be able to access, before problems escalate, responsive and effective professional support, or benefit from enlightened social policies”.

This is a clear example of where multidisciplinary and translational discourse could be undertaken across disciplines.

A total of 71 New Zealand research publications from the last 12 months were deemed to be relevant to this objective. There was a large body of research on mental illness and psychological well-being, but abstracts have only been included if they relate to severe mental illness or factors that relate to improving outcomes for psychiatric patients in general. Over half of the research fell under the public health categorisation, while the largest portion of publications addressed depression and anxiety.

Download the [Improving the Health Status of People with Severe Mental Illness](#) chapter.

---

### 14. Ensuring Access to Appropriate Child-Health-Care Services, Including Well Child, Family-Health Care and Immunisation

A number of projects are funded that address this theme. The Access to Services project, funded through the



DHBRF and led by Dr Barry Gribben, is investigating improving access to services to reduce inequalities for vulnerable populations, including children, with particular emphasis on primary care, medications and diagnostic services.

The Immunisation Research Strategy is a partnership between the HRC and the Ministry of Health within the HRC Partnership Programme, with the purpose of developing an evidence base for immunisation policy, planning and service provision towards a reduction in vaccine-preventable disease rates across all population groups. The most recent Request for Proposals (RFP) focused on the impact of some of the barriers to and enablers of immunisation. It is anticipated that research outcomes will assist in identifying ways that immunisation services can be improved and how existing strengths can be built on, and will lead to strategies for increasing coverage rates and reducing immunisation disparities. Four research providers have been funded through this RFP. There are a number of additional projects funded through the main HRC funding round that are relevant to this objective.

The majority of original research publications considered to be directly relevant to this objective were public health in nature, and over half of the total focused on immunisation, with no more than two publications on each of the other topics. Research that focused on childhood illnesses, but did not relate to services or immunisation was excluded from the review. Sub-topics included:

- Detecting Abuse
- Policy and Guidelines
- Hearing and speech
- Immunisation (Group B Meningococcal Vaccine, "MeNZB" (Chiron Vaccines), Immunisation Coverage Rates, Immunisation in the Media
- Mental Health Services
- Pain control
- Well-child services

Download the [Ensuring Access to Appropriate Child-Health-Care Services, Including Well Child, Family-Health Care and Immunisation](#) chapter.

---

## 15 . Next DHBRF e-newsletter:

The next DHBRF enews will demonstrate how DHBs are addressing their own research needs to inform health decision making, in line with national priorities.

We are always happy to receive contributions of relevance to our readership. If you have a proposed newsletter item please email [mdowie@hrc.govt.nz](mailto:mdowie@hrc.govt.nz)

---

## 16 . About the purpose of the DHBRF e-newsletter:

- Provide DHBs with information relevant to DHB core business i.e. funding and planning activities
- Identify research that could inform planning for public health services
- Identify less relevant research which may have more of a biomedical focus
- Monthly communications focus on one of the priority population health goals as outlined in the New Zealand Health Strategy
- Information is taken from an annual HRC report identifying publications produced by New Zealand research teams or funded by the HRC between May 2005 – June 2006

Information included represents highlights of findings of high-quality research, readily available at the time of writing

---

### 17 . Subscribe/unsubscribe

To subscribe or unsubscribe, send an e-mail containing your title, name, job title, organisation, mailing address, phone and fax number, with the subject line "Subscribe DHB eNewsletter" or "Unsubscribe DHB eNewsletter" to [jlawson@hrc.govt.nz](mailto:jlawson@hrc.govt.nz).

---

### 18 . Contact Us:

To contact us telephone Aroha Haggie at the HRC on (09) 303 5207 or email: [ahaggie@hrc.govt.nz](mailto:ahaggie@hrc.govt.nz)

---



Check out the HRC's website on [www.hrc.govt.nz](http://www.hrc.govt.nz)