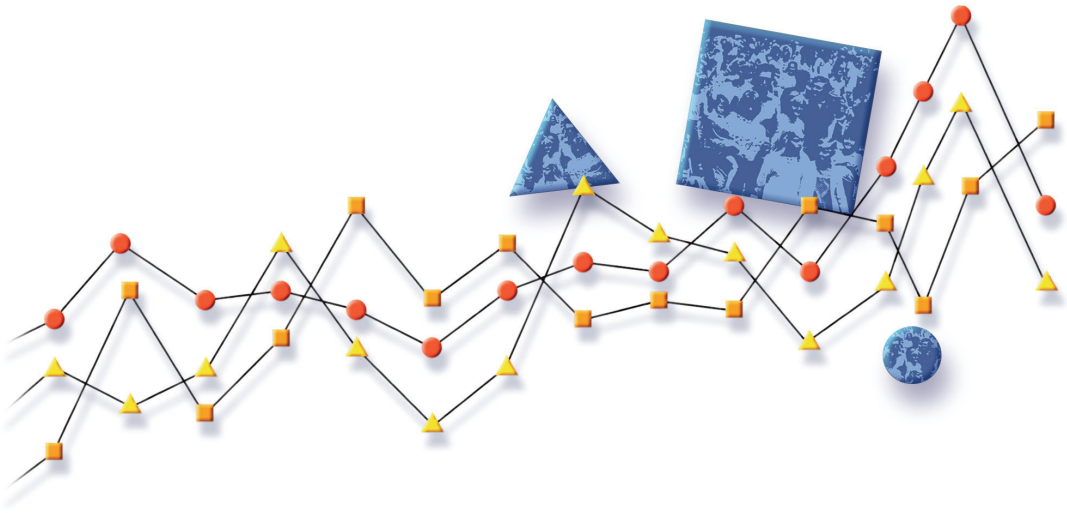
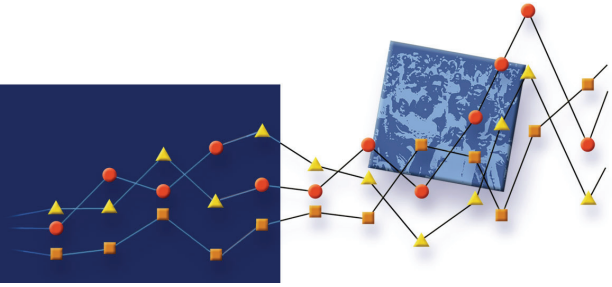
Centre for Public Health Research

Annual Report 2010



MASSEY UNIVERSITY
WELLINGTON

Contact us



Centre for Public Health Research
Massey University – Wellington Campus
PO Box 756
Wellington 6140
New Zealand

Phone: 64-4-380-0602
Fax: 64-4-380-0600
Email: cphr@massey.ac.nz

Courier Address:
1st floor
102 Adelaide Road
Newtown
Wellington 6021
New Zealand

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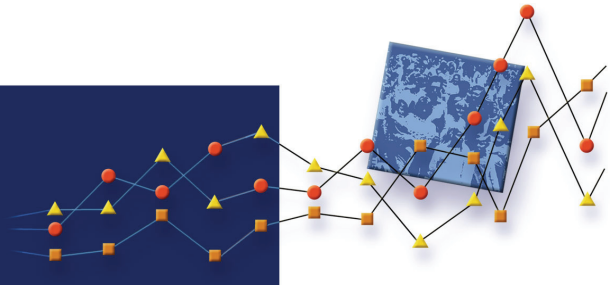
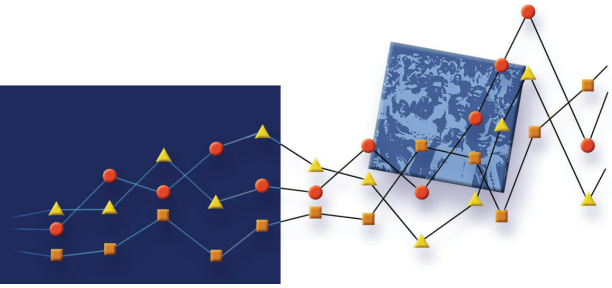


Centre for Public Health Research

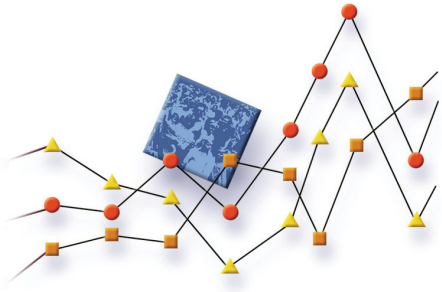


Directors
Neil Pearce – Professor and Director
Jeroen Douwes – Professor and Director

Support Staff
Clare Scott – Administration Assistant
Hilary Nuttall – PA/Administrator
Maria Ruhnayat - Administrator
Mathangi Shanthakumar – Biostatistician
Soo Cheng – Biostatistician

Professorial Research Fellows
Allan Smith – Professor
Barry Borman – Associate Professor
Bill Glass – Professor
Cindy Kiro – Associate Professor and Head of School of Public Health
Don Matheson – Professor
John Potter - Professor

Research Fellows
Amanda Eng – Doctoral Research Fellow
Andrea ‘t Mannetje – Senior Research Fellow
Anna Matheson – Research Fellow and MPH/PGDipPH course coordinator
Bradley Prezant – Research Fellow
Christine van Dalen – Senior Research Fellow
Collin Brooks – Doctoral Research Fellow
David McLean – Senior Research Fellow
Fiona McKenzie – Doctoral Research Fellow
Lis Ellison-Loschmann – Māori Health Research Fellow
Marine Corbin – Doctoral Research Fellow
Mark Wagstaffe – Research Fellow
Naomi Brewer – Doctoral Research Fellow
Ridvan Firestone – Pacific Health Research Fellow and MPH biosecurity course developer
Sunia Foliaki – HRC Postdoctoral Pacific Research Fellow
Tania Slater – Doctoral Māori Health Research Fellow



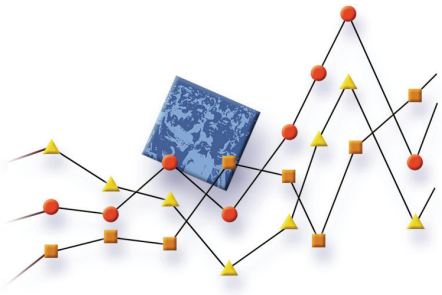
MPH (Biosecurity)
Christine Roseveare – Paper developer and tutor
Jackie Fawcett – Paper developer and tutor
David Sinclair – Paper developer and tutor

Research Assistants
Bianca Claas – Research Assistant
Helene Marsters – Research Assistant
Jonathan Coackley – Research Assistant
Katharine Haddock – Research Assistant and assistant MPH/PGDipPH course coordinator
Kerry Cheung – Research Assistant and MPH biosecurity tutor
Michelle Gray – Māori Health and MPH biosecurity tutor
Sam Keer – Research Assistant and MPH biosecurity online course developer
Tracey Whaanga – Māori Health Research Assistant
Vicki Maguire – Māori Health Research Assistant

Research Nurses
Angela Thurston
Anne O'Dowd
Elizabeth Harding
Heather Duckett
Leigh Emmerton
Shirley-Belle Brogan

Casual Research Assistants and Field Workers

Aimee Crothall	Alex Whitteker
Annabel Gormack	Brenda Chilvers
Caitlin van Dalen Tromop	Caroline Fyfe
Dianne Marshall	Frances Watt
Hanaheva Rose	Helen Campbell
Jeanette Scurr	Joel Cosgrove
Joy Stubbs	Kelly Gray
Lucy Shum-Pearce	Marika Pratley
Megan Virtue	Melissa Harvey
Melissa Vernall	Pae Reti-Rickit
Rachel Powell	Naing Koko
Nicky Curran	Pam Miley-Terry
Phoebe Taptiklis	Susan Cook
Tanya Hill	Zoe Harding



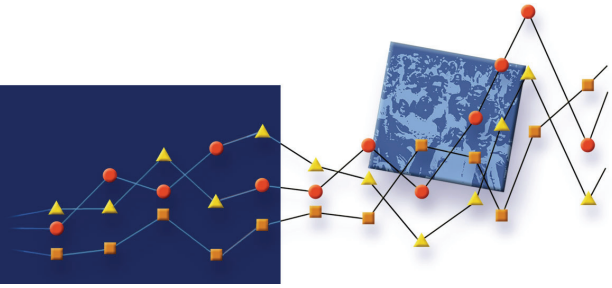
Honorary Research Fellows

Ate Moala – Pacific Health
Chris Walls – Occupational Health
Deborah Read – Public Health
Diana Best – Cancer Control
Evan Dryson – Occupational Health
James McGlothlin – Occupational Health
Nancy Krieger - Epidemiology
Paul White – Public Health
Phil Shoemack – Public Health
Wendyl D'Souza – Neuroepidemiology

SPH Support Staff

Xiang Ting Chen (Jo) – IT Consultant

Introduction



The Centre for Public Health Research (CPHR) is a multi- disciplinary team of researchers based on the Massey University Wellington campus. It is part of the Massey University School of Public Health, together with the Research Centre for Māori Health & Development, the Sleep/Wake Research Centre, the Social and Health Outcomes Research and Evaluation (SHORE) Centre and Te Ropu Whariki.

CPHR was established in 2000. Our research programme covers all aspects of public health research, but with a focus on:

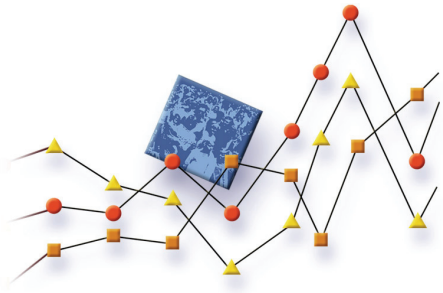
- Non-communicable disease (respiratory disease, cancer, dermatitis, diabetes, neurological conditions, congenital malformations)
- Occupational health
- Environmental health
- Māori health
- Pacific health
- Socioeconomic determinants of health
- Public health surveillance

CPHR recognises the importance of the Treaty of Waitangi and its relevance to our work. We have a long history of involvement with Māori research and policy development including the Māori Asthma Review, the Wairarapa Māori Asthma Project, and the Hauora Tamariki project. Much of our Māori health research is done in collaboration with the Research Centre for Māori Health & Development. We are also committed to employing and training Māori health researchers.

The Centre is based in the College of Humanities and Social Sciences, but we also work with researchers at other Massey Colleges and campuses, including the Veterinary Epicentre, and the Institute of Food, Nutrition and Human Health (IFNHH).

We also work with researchers at a number of other institutions, including:

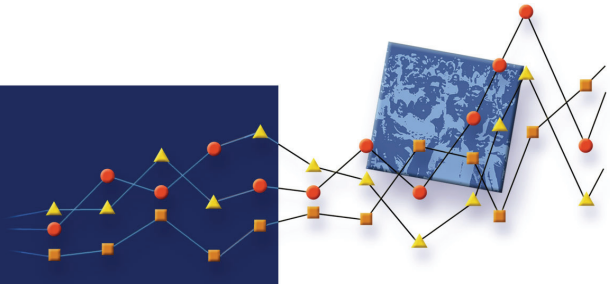
- Malaghan Institute for Medical Research (MIMR)
- Department of Paediatrics, Auckland Medical School
- Department of Public Health, Wellington School of Medicine
- Health & Disability Intelligence (Ministry of Health)
- Airway Research Centre (John Hunter Hospital, Newcastle, Australia)
- Institute for Risk Assessment Sciences (IRAS), University of Utrecht (The Netherlands)
- US National Cancer Institute (NCI)
- Centre de Recerca en Epidemiologia Ambiental (CREAL) (Barcelona, Spain)
- Department of Biomedical Sciences and Human Oncology, University of Turin (Italy)



- Department of Epidemiology and Preventive Medicine, Monash University (Melbourne)
- Department of Social Medicine, University of Bristol (United Kingdom)
- London School of Hygiene and Tropical Medicine (United Kingdom)
- International Agency for Research on Cancer (Lyon, France)
- School of Occupational and Environmental Health, University of British Columbia (Canada)
- University of Groningen (The Netherlands)
- University of Kentucky (USA)
- Vrije Universiteit (The Netherlands)
- Aarhus University (Denmark)
- Occupational and Environmental Health Sciences, Purdue University (Indiana, USA)

Although our main activity is research, we also work with organisations such as the Ministry of Health (MoH), Department of Labour (DoL), the Accident Compensation Corporation (ACC) and various non-governmental organisations, unions and companies to ensure that the findings of research are relevant to, and applied in, public health policy. In particular, we have served on a number of advisory committees for the Health Research Council, the MoH, the Minister of Health, ACC, the Minister for ACC, the DoL and the Minister of Labour.

The Year in Review

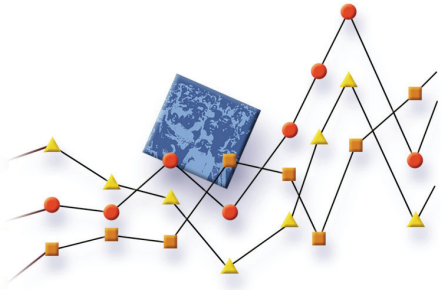


The last year has seen major developments in the work of the Centre for Public Health Research (CPHR). We celebrated our tenth anniversary in September, and at that time Jeroen Douwes assumed the role of Director. At the end of the year, Neil Pearce moved to a Chair in Epidemiology and Biostatistics at the London School of Hygiene and Tropical Medicine. However, he is an Honorary Professorial Research Fellow at CPHR and is continuing to be involved with CPHR teaching and research projects.

CPHR has had considerable success in obtaining new research funding in the past year, despite the current severe shortage of health research funding. We obtained $3.6 million of new funding, including two new HRC project grants for occupational health research, and two major grants and two smaller grants from the Ministry of Health for environmental health projects. These grants represent a major expansion of our research programmes in occupational and environmental health, in addition to our ongoing programmes of research in respiratory disease, cancer and other areas of public health, Māori health, and Pacific health research. These programmes are described in more detail in the following pages.

We wish to thank all research collaborators involved in our various projects who have played an important role in ensuring a productive year, the agencies who have funded this programme of research, and all those who have participated in our studies. We also wish to thank Massey University and its staff for its excellent support for our research programme.

Respiratory Disease



During 2010 we continued work on our major HRC-funded study of factors in farming that protect against asthma in farmers' children and their parents. We are now conducting Phase III of the study which is examining the immune status of babies born on farms and a group of control babies.

We are examining the hypothesis that endotoxin exposure later in life may reverse pre-existing allergies and allergic diseases in an HRC-funded prospective cohort of previously unexposed allergic adults who are starting a work career in industries with moderate to high endotoxin exposures.

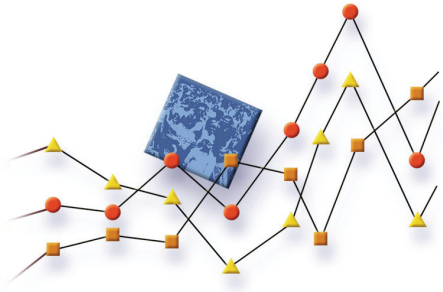
Our HRC Programme Grant for Building Research in Occupational Health and Safety in New Zealand (BROHNZ) also includes funding for a major study of occupational asthma in sawmill workers. We are also conducting a study of exposure to airborne hazardous substances in the wood conversion sector with funding from the HRC/Department of Labour (DoL).

We are also continuing to work on the International Study of Asthma and Allergies in Childhood (ISAAC). Neil Pearce is a member of the ISAAC Executive and the ISAAC Steering Committee. Sunia Foliaki is Regional Coordinator for Oceania and a member of the Steering Committee.

During 2010 Christine van Dalen also continued work on a study of the role of the lung macrophage in asthma pathology, and commenced a study of the role of the neutrophil in airways inflammation, funded by the Asthma and Respiratory Foundation of New Zealand (ARFNZ).

In 2010, Collin Brooks continued his PhD research on the role of innate immunity in asthma. The work is being conducted in collaboration with the Malaghan Institute for Medical Research, with funding support from the ARFNZ.

Cancer



Our cancer research programme includes ongoing studies of occupational cancer, and a case-control study of breast cancer (with funding from Lotteries Health Research, the Cancer Society of New Zealand, and the Health Research Council).

We are conducting four major HRC-funded cancer research projects:

(i) inequalities in breast cancer survival (Lis Ellison-Loschmann, Fiona McKenzie);
(ii) a case-control study of risk factors for stomach cancer in Māori (Lis Ellison-Loschmann);
(iii) inequalities in cervical cancer survival (Naomi Brewer's PhD research programme); and
(iv) the role of primary care for Māori with cancer (Tania Slater's PhD research programme).

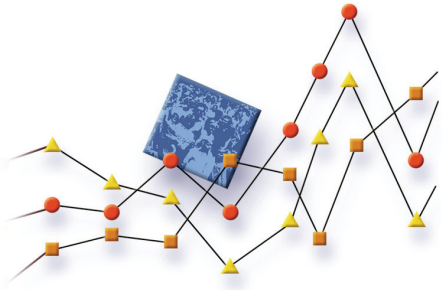
In addition, we have been conducting a number of other analyses of cancer survival including Fiona McKenzie's PhD research on disparities in breast cancer survival, and Ridvan Firestone's research on ethnic differences in disease presentation for uterine cancer in New Zealand.

A study of human papilloma virus (HPV) prevalence in Fiji (conducted by Sunia Foliaki and Naomi Brewer) was completed in 2010, and Sunia Foliaki is conducting research on cancer registration and incidence in Tonga, Fiji Islands, Cook Islands and Niue (with Diana Best and Neil Pearce).

Andrea 't Mannetje is conducting an HRC/DoL funded study on workplace exposures to carcinogens in New Zealand.

Andrea 't Mannetje also has a US National Institutes of Health (NIH) grant for a study of occupational risk factors for Non-Hodgkin's Lymphoma (NHL), and David McLean has an NIH grant for a study of occupational exposure to electromagnetic fields (EMFs) and risk of glioma and meningioma.

Occupational and Environmental Health



Our programme for Building Research in Occupational Health in New Zealand (BROHNZ) is funded by a Programme Grant from the Health Research Council. It includes five major studies on:

(i) the effects of exposures on new-onset allergies and asthma, and on lung function, in newly-recruited wood industry workers (David McLean);
(ii) prevalence and risk factors of work-related dermatitis in cleaners (Jeroen Douwes);
(iii) modifiable risk factors for congenital malformations (Andrea 't Mannetje);
(iv) occupational exposures and occupational health in Māori (Lis Ellison-Loschmann); and
(v) workplace exposures to carcinogens in New Zealand (Andrea 't Mannetje).

During 2010 we also received funding for two new Project Grants ($1.2 million each) from the HRC for studies of neurotoxic effects of solvent exposure (Jeroen Douwes/Neil Pearce), and cancer in meat workers (David McLean/Jeroen Douwes).

We are also continuing to conduct an HRC/DoL-funded study of dust exposure in the wood conversion sector (Jeroen Douwes), and we completed a DoL-funded study of asbestos exposure levels in demolition sites (Brad Prezant).

Andrea 't Mannetje and David McLean are continuing the development of a Job-Exposure-Matrix (NZJEM) which will be used to assess occupational exposures on the basis of work histories.

Andrea 't Mannetje also has a US National Institutes of Health (NIH) grant for a study of occupational risk factors for Non-Hodgkin's Lymphoma (NHL), and David McLean has an NIH grant for a study of occupational exposure to electromagnetic fields (EMFs) and risk of glioma and meningioma.

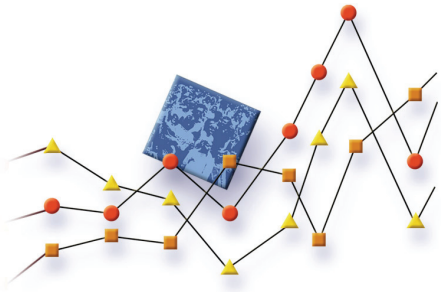
Andrea 't Mannetje is also conducting an HRC-funded study of dioxin exposures and health effects in former phenoxy herbicide production workers, and a similar study in fire fighters.

In 2010 Andrea 't Mannetje completed a survey of environmental persistent organic pollutants (POPs) in breast milk, with funding from the Ministry of Health, and obtained $1.15 million of funding for a national serum survey of POPs.

Barry Borman is conducting an HRC/DoL funded study to develop a concept-driven occupational disease surveillance system based on existing data sets to describe the trends and prevalence of occupational disease in New Zealand.

Barry Borman is also leading a Ministry of Health funded project developing a monitoring programme for environmental health indicators.

Māori Health



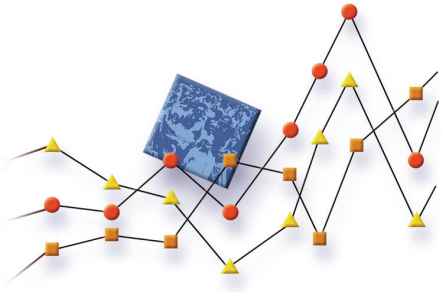
Lis Ellison-Loschmann is conducting a case-control study of breast cancer in Māori, and she is leading our programme of four major HRC-funded cancer research projects:

(i) inequalities in breast cancer survival (Lis Ellison-Loschmann, Fiona McKenzie);
(ii) a case-control study of risk factors for stomach cancer in Māori (Lis Ellison-Loschmann);
(iii) inequalities in cervical cancer survival (Naomi Brewer's PhD research programme); and
(iv) the role of primary care for Māori with cancer (Tania Slater's PhD research programme).

In 2009 Cindy Kiro returned from spending six years as the Children's Commissioner, and has re-established her research programme in Māori health. This has included a review paper for the Ministry of Health on obesity in Māori, and a study of Māori households and family wellbeing, funded by Nga Pae o te Māramatanga (University of Auckland).

In addition, Barry Borman has been contracted by the Ministry of Health to provide epidemiological services and advice for the Māori Health Directorate.

Pacific Health



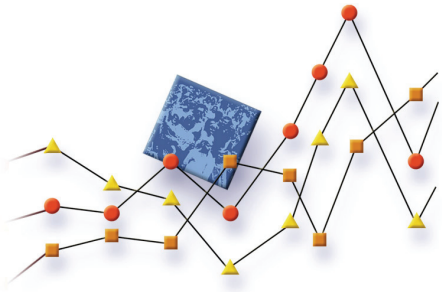
Sunia Foliaki is co-ordinating the ISAAC Phase III study in the Pacific. Further studies include an asthma self-management trial in Tonga funded by the Wellcome Trust.

Sunia was awarded an HRC Pacific Health Postdoctoral Fellowship for studies of cancer in Pacific populations, for research to be conducted during 2007-2010. This includes an HRC-funded study of cancer in Tonga, Samoa, Niue, and Fiji.

He is also conducting (with Naomi Brewer) a survey of Human Papilloma Virus (HPV) prevalence in Fiji.

In 2009 Ridvan Firestone completed an HRC-funded Postdoctoral Fellowship in Pacific Health research. Her work included the establishment of the New Zealand internet-based birth cohort study (www.elfs.org.nz), and the conduct of the Pacific arm of our case-control study of early life factors and breast cancer risk. She is now continuing her work with the Centre including the development of a study of risk and protective factors for female reproductive cancers.

Other Non-communicable Disease



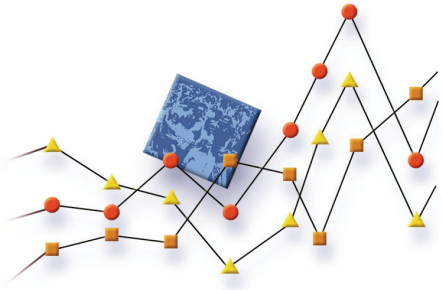
Other non-communicable disease research has included a series of analyses of mortality and morbidity in patients with diabetes.

We have also conducted a series of analyses in collaboration with the New Zealand Hepatitis Foundation to examine mortality, cancer incidence, and diabetes incidence in patients screened for diabetes using the HbA_{1c} test.

The Early Life Factors Study of Childhood Diseases (www.elfs.org.nz) is now well-established and recruitment is continuing. This study will assess associations between a wide range of early life exposures, events, and lifestyle factors, and a broad range of health outcomes later in life.

Barry Borman is the Director of The New Zealand Birth Defects Monitoring (NZBDMP). The programme began in 1975 and has been a member of the International Clearinghouse for Birth Defects Surveillance and Research (ICBDSR) since 1979 (www.icbdsr.org). The NZBDMP monitors the occurrence of all live births delivered or treated in a publicly-funded hospital. Data on stillbirths and terminations of pregnancy with birth defects are also added to the database. The data has been used for a variety of epidemiological studies and is contributed to the annual reports of the ICBDSR.

Other public health research



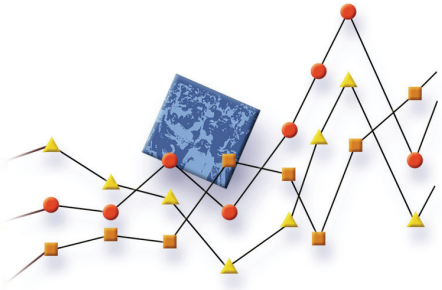
Our more general programme of public health research has been enhanced by the development of public health surveillance projects by Barry Borman, and the arrival of Don Matheson (former Deputy Director-General for Public Health at the Ministry of Health).

Public health surveillance, lead by Barry Borman is a major new area of activity for CPHR. Barry has research contracts from the Ministry of Health to evaluate the various public health surveillance systems, including a major new grant ($0.9 million) to establish a system for monitoring environmental health indicators. He also has a grant from the Alcohol Advisory Council (ALAC) to scope a surveillance system for alcohol consumption and health-related harm.

Don Matheson has been granted funding from the World Health Organisation (WHO) for a project on enhancing food security in the Pacific region. The Food Secure Pacific project, initiated by the Pacific Health Ministers, is a long-term, multi-sectoral approach to improving food security throughout the Pacific by building awareness of food security issues among health, trade, environmental, agricultural and food industry sectors, and forging a shared consensus and coherent policy direction across agencies and Ministries related to food. In 2010, Pacific leaders have come together to discuss a Pacific Declaration on Food Security and an accompanying Action Plan.

Don (with Anna Matheson) has also received a grant from the Rockefeller Foundation for a study of global experiences, inside and outside of the health system, on overcoming barriers to universal health.

Teaching



The Massey University School of Public Health Master of Public Health (MPH) Programme includes a Postgraduate Diploma in Public Health (PGDipPH) which commenced in 2005. It involves the equivalent of one year fulltime study (a total of 120 points with two 30 point papers being compulsory – the core paper, and a research project). The programme involves an applied approach to public health education and training that is different from existing public health qualifications, integrating public policy more strongly with public health, and also providing the opportunity for a greater emphasis on Māori health, Pacific health, and other areas such as occupational and environmental health.

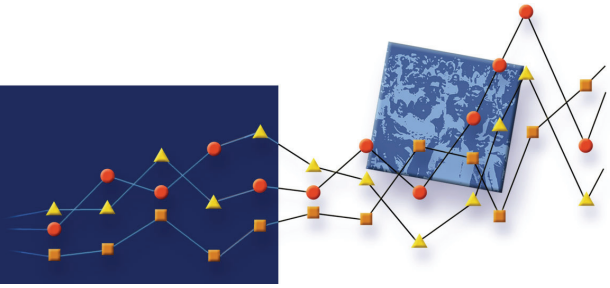
An MPH-by-thesis option has been available since 2004 for candidates who have already completed an equivalent of the PGDipPH.

In 2010, we commenced the teaching of the new MPH (Biosecurity) course which is offered by distance learning for medical doctors from the Asia-Pacific region; this will be taught jointly with the new MVM (Biosecurity) course which is offered to veterinarians from the same region. About half of the content for each programme is taught jointly, with doctors and veterinarians training together.

In 2008, Neil Pearce commenced a three-year term as President of the International Epidemiological Association. One of his priorities is training of epidemiologists in developing countries and he has developed (with assistance from Naomi Brewer and Hilary Nuttall) the Annual IEA International Course in Epidemiological Methods. The first course was held in Jaipur (India) in April 2009, the second course was held in Riyadh (Saudi Arabia) in April 2010. The 2011 course will be held in Blantyre (Malawi).

Current Research Projects

Projects completed during 2010



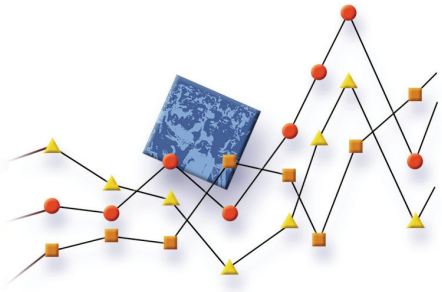
1. Māori households and family wellbeing

AIMS:

1. To describe key changes in Māori household composition over a 25-year period using census data for a range of different household structures and characteristics.
2. To assess changes in the levels of wellbeing of Māori households over the period 1981 to 2006.
3. To assess current state of knowledge through comprehensive literature review of Māori families and households and their whānau ora.
4. To provide an evidence base that is of relevance to policy makers to inform future policies for strengthening Māori families.
5. To provide a foundation for a baseline against which future policies for strengthening Māori families may be assessed.

FUNDING:	Nga Pae o te Māramatanga, University of Auckland
RESEARCHERS:	Cindy Kiro, Andrew Sporle
COLLABORATOR:	Dr Martin von Randow (University of Auckland)
KEY WORDS:	Māori Health, Whanau Ora

2. Exposure to airborne hazardous substances in the wood conversion sector

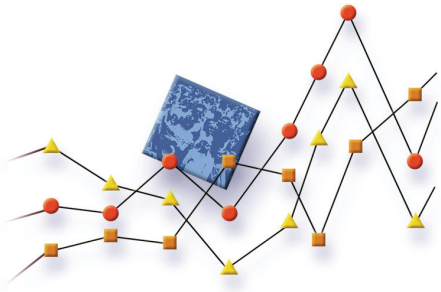


AIMS:

1. To conduct a comprehensive review of the literature that will provide an overview of the key airborne exposures associated with elevated risks of cancer, respiratory morbidity and mortality, and other work-related illnesses in the New Zealand wood conversion sector.
2. To compare exposure levels reported in the literature with national and international limits.
3. To assess the prevalence of these exposures in the New Zealand wood conversion sector.
4. To assess which strategies have been most effective in reducing exposure in other countries.
5. To conduct an exposure survey in the New Zealand joinery and furniture industry involving measurements of airborne substances including wood dust and formaldehyde.
6. To estimate the risks to health of such exposures in New Zealand joinery and furniture workers.

FUNDING:	Accident Compensation Corporation (ACC)
RESEARCHERS:	Jeroen Douwes, Kerry Cheung, David McLean, Andrea ‘t Mannetje, Neil Pearce
KEY WORDS:	Occupational Health, Respiratory Disease, Cancer, Wood Industry, Epidemiology

3. Investigation of breast milk for persistent organic pollutants

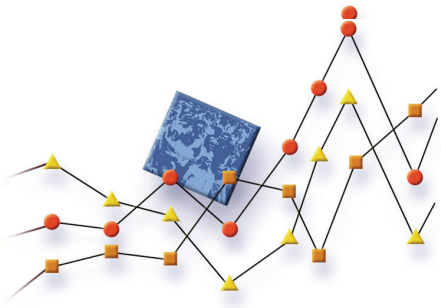


AIMS:

1. To obtain data on current levels of persistent organic pollutants (POPs) in human breast milk in New Zealand.
2. To compare these levels with previous levels and detect trends in POPs exposure.
3. To measure for the first time polybrominated diphenylethers (PBDE) in breast milk in New Zealand.
4. To use the collected New Zealand breast milk samples for inclusion in the fourth round of the WHO-coordinated study of human milk for POPs, thus providing an international comparison for levels of POPs.
5. To study the determinants of elevated levels of POPs in breast milk in New Zealand.
6. To provide recommendations for prioritising POPs for remedial action in New Zealand.

FUNDING:	Ministry of Health
RESEARCHERS:	Andrea ‘t Mannetje, Jeroen Douwes, Shirley-Belle Brogan, Heather Duckett, Leigh Emmerton, Elizabeth Harding,Collin Brooks, Jonathan Coakley, Lis Ellison-Loschmann, Allan Smith, Neil Pearce
COLLABORATOR:	Dr Stuart Harrad (University of Birmingham)
KEY WORDS:	Breast Milk, POPs (Persistent Organic Pollutants), Dioxins, Polychlorinated Biphenyls (PCBs), Organochlorine Pesticides, Polybrominated Diphenylethers (PBDE)

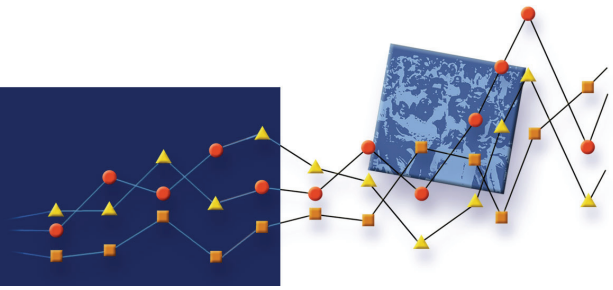
4. Asbestos exposure levels in demolition sites



AIMS:

1. To measure asbestos exposure levels in eight demolition sites.
2. To assess the effectiveness, including the appropriateness and quality of use, of Personal Protective Equipment (PPE) used during asbestos demolition and removal activities.

FUNDING:	Department of Labour (DoL)
RESEARCHERS:	Bradley Prezant, Jeroen Douwes, David McLean, Bill Glass, Neil Pearce
KEY WORDS:	Asbestos, Occupational Exposures, Exposure Assessment



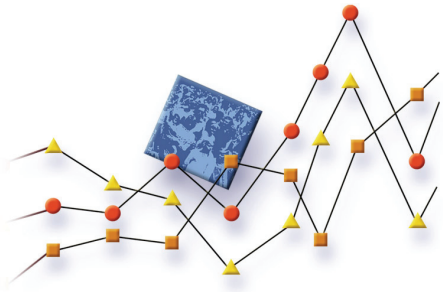
5. Neurotoxic effects of occupational solvent exposure

AIMS:

1. To conduct a cross-sectional survey of solvent exposures and neurological symptoms in 400 vehicle spray painters, and in a comparison group of 200 other blue-collar workers with little or no exposure.
2. To determine if there is a dose-dependent relationship between solvent exposure and neurological symptoms.
3. To carry out a nested case-control study in the vehicle spray painters (75 with symptoms and 75 without symptoms) involving more detailed exposure measurements and neurobehavioural testing.
4. For this nested subset, to assess whether the observed symptoms are consistent with acute effects and/or chronic effects of solvents.
5. To assess whether acute and/or chronic effects are associated with peak or average exposure levels.
6. To compare the results from the questionnaire and the neurobehavioural test battery to determine if they give consistent findings for the same neurologic function.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Jeroen Douwes, Bill Glass, David McLean, Bradley Prezant, Wendyl D'Souza, Tania Slater, Katherine Haddock, Neil Pearce, Andrea 't Mannetje
COLLABORATORS:	Professor Diana Echeverria (University of Washington) Professor James McGlothlin (Purdue University, IN, USA) Dr Duncan Babbage (Massey University)
KEY WORDS:	Occupational Health, Neurotoxicity, Epidemiology, Solvents

6. Cancer in meat workers: identifying the causal exposures

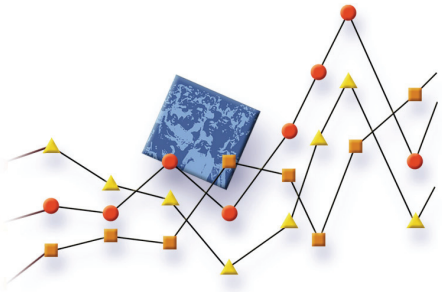


AIMS:

1. To assess exposure to proteins as a marker of antigenic stimulation in a representative sample of New Zealand meat workers.
2. To assess exposure to specific markers of urine, blood and faecal matter in the same group of meat workers.
3. To assess exposures to specific pathogens with known carcinogenic properties in meat workers.
4. To assess serum antibody titres against specific pathogens as a long term measure of exposure to these pathogens in meat workers.
5. To assess the presence of specific pathogens in the airways of meat workers as a biomarker of exposure in one of the target organs (i.e. the lungs).
6. To assess the mutagenicity of whole bioaerosol samples collected in the work place to identify novel exposures not previously suggested as being involved in cancer development in meat workers.
7. To determine average exposure levels and differences in exposure between different groups of meat workers in order to develop reliable exposure models for the agents measured.
8. To update and reanalyse the existing New Zealand meat workers cohort using these refined exposure estimates with the ultimate aim of identifying one or more of the specific causal exposures underlying the excess risk of cancer observed in meat workers.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	David McLean, Jeroen Douwes, Collin Brooks, Andrea 't Mannetje, Tania Slater, Sunia Foliaki, Neil Pearce
COLLABORATORS:	Dr Richard Hall, Dr Christopher Pope (Institute of Environmental Science and Research) Jackie Benschop (Epicentre) Dr John Kerr Occupational Medicine Specialist) Dr Rob Weinkove (Malaghan Institute of Medical Research)
KEY WORDS:	Meat Workers, Occupational Cancer, Bioaerosols, Environmental Monitoring, Serological Testing, Sputum Induction, Mutagenicity, Epidemiology

7. Serum levels of persistent organic pollutants (POPs) in the New Zealand population



AIMS:

1. To obtain data on current serum levels of persistent organic pollutants (POPs) in the adult New Zealand population.
2. To compare these levels with previous levels and evaluate temporal trends of POPs in serum in the New Zealand population.
3. To measure for the first time additional POPs (as recommended by the Stockholm Convention on Persistent Organic pollutants) in serum, such as polybrominated diphenylethers (PBDE) and perfluorinated compounds, in addition to the dioxins, furans, PCBs and organochlorine pesticides.
4. To study sex, age, geographic region and ethnicity in relation to the levels of POPs in the New Zealand population.
5. To support the Population Health Protection Group deliver its environmental & border health protection work programme in relation to hazardous substances.
6. To assist with implementing New Zealand's obligations under the Stockholm Convention on Persistent Organic pollutants.
7. To provide recommendations for prioritising POPs for remedial action in New Zealand.
8. To work with MoH and MfE to develop a framework for ongoing surveying of POPs levels in the New Zealand population.

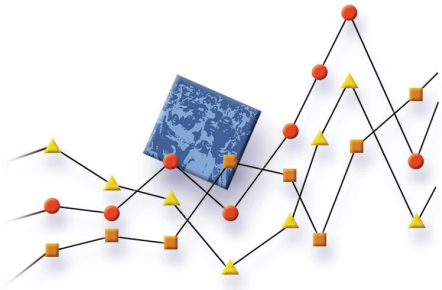
FUNDING: Ministry of Health

RESEARCHERS: Andrea 't Mannetje, Jonathan Coakley, Barry Borman, Jeroen Douwes, Neil Pearce

COLLABORATORS: Adjunct Professor Michael Bates (University of California, Berkeley, US)
Professor Jochen Mueller (University of Queensland, Australia)
Dr Leisa-Maree Toms (University of Queensland, Australia)
Dr Fiona Harden (Queensland University of Technology, Australia)
Mr Howard Ellis (Ministry for the Environment)

KEY WORDS: Persistent Organic Pollutants, Serum, Dioxins, PCBs, Brominated Flame Retardants, Organochlorine Pesticides, New Zealand Population

8. Indicators for surveillance of occupational disease



AIMS:

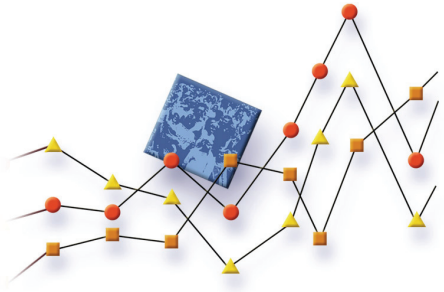
1. Review of the literature on occupational health surveillance.
2. Development of a robust set of indicators feasible and valid for the monitoring of occupational disease in New Zealand.
3. Development of a concept-driven occupational disease surveillance system based on existing data sets to describe the trends and prevalence of occupational disease in New Zealand.
4. Testing of the surveillance system with one long latency disease (cancer) and two shorter latency diseases (asthma and dermatitis).

FUNDING: Department of Labour (DoL), Health Research Council of New Zealand (HRC)

RESEARCHERS: Barry Borman, Mark Wagstaffe, Neil Pearce Jeroen Douwes, David Mclean, Andrea ‘t Mannetje, Amanda Eng, Bradley Prezant, Chris Walls

KEY WORDS: Occupational Disease, Indicators, Surveillance

9. Development of Environmental Health Indicators including Hazardous Substance Surveillance

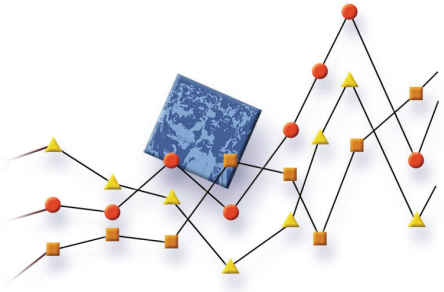


AIMS:

1. To provide New Zealand with a comprehensive hazardous substance surveillance system (HSSS) this is concept-driven and based on best practice surveillance principles.
2. To develop a fit for purpose, dynamic and robust system for the evaluation, development, monitoring, and reporting of environmental health indicators in New Zealand.
3. To explore potential synergies between the Environmental Health Indicators produced by this project and the Ministry for the Environment's monitoring the state of the New Zealand's environment project.

FUNDING:	Ministry of Health
RESEARCHERS:	Barry Borman, Neil Pearce, Jeroen Douwes, Andrea 't Mannetje, Deborah Read, David McLean, Helene Marsters, Samuel Keer, Mathangi Shanthakumar
COLLABORATORS:	Simon Kingham (University of Canterbury) David Briggs (Imperial College, London) Justine Daw (Ministry for the Environment) Sekove Tinalevu (ERMA) Mark Stevenson (Massey University) Professor Chris Cunningham (Research Centre for Māori Health and Development) Andy Sturman, Femke Reitsma, Greg Breetzke, (University of Canterbury)
KEY WORDS:	Environmental Health Indicators, Hazardous Substances, Surveillance

10. Workplace interventions to reduce wood dust exposures in the joinery and furniture making industry



AIMS:

1. To conduct a literature review on workplace interventions intended to reduce airborne dust exposures.
2. To conduct exposure measurements in joinery and furniture factories to *identify* peak inhalable dust exposures during specific work tasks using real time video exposure monitoring.
3. To conduct exposure measurements in joinery and furniture factories to *evaluate* the efficacy of particular interventions on peak inhalable dust exposures.
4. To conduct an occupational hygiene assessment to assess control measures currently in place and their efficacy.
5. To develop, implement and evaluate a full intervention strategy for joinery and furniture factories based on the findings of the sub-studies described above.

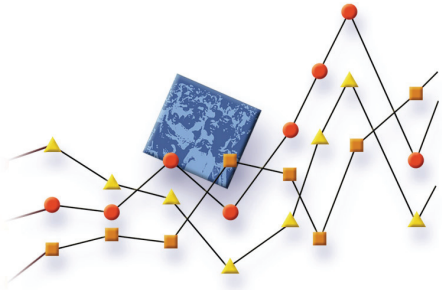
FUNDING: Department of Labour (DoL),
Health Research Council of New Zealand (HRC)

RESEARCHERS: Jeroen Douwes, David McLean, Bradley Prezant, Kerry Cheung, Andrea ‘t Mannetje, Neil Pearce

COLLABORATORS: Professor Vivi Schlünssen, Professor Torben Sigsgaard (Aarhus University, Denmark)
Professor Hans Kromhout (Utrecht University, The Netherlands)
Professor James McGlothlin (Purdue University, IN, USA)
Associate Professor Anthony LaMontagne (University of Melbourne)

KEY WORDS: Wood Dust, Control Measures, Joinery Workers, Furniture Makers, Interventions, Exposure Assessment

11. Examining the role of the airway neutrophil in the pathogenesis of asthma



AIMS:

To investigate the role of the neutrophil in the immunopathology of asthma, and in particular, in non-eosinophilic asthma, by:

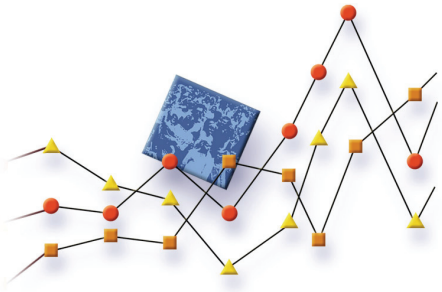
a. Assessing the level of activation in airway inflammatory cells by analysing cell surface activation marker expression and functional activity using flow cytometry before and after cell stimulation;
b. Measuring indicators of cell activity in sputum supernatant samples;
c. comparing neutrophil and eosinophil activation before and after stimulation between asthma inflammatory phenotypes (eosinophilic and non-eosinophilic) and non-asthmatics.

FUNDING: Asthma and Respiratory Foundation of New Zealand (ARFNZ)

RESEARCHERS: Christine van Dalen, Collin Brooks, Jeroen Douwes

KEY WORDS: Asthma, Neutrophil, Sputum, Flow Cytometry

12. Workplace exposure to carcinogens in New Zealand

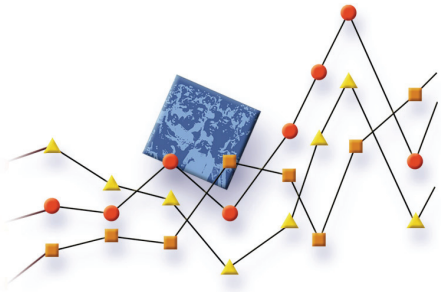


AIMS:

1. To conduct a review of the occupational causes of cancer and the known solutions for reducing and/or preventing exposures.
2. To construct a New Zealand specific Information System on Occupational Exposure to Carcinogens (NZ-CAREX).
3. To construct a New Zealand specific Agricultural Chemicals Exposure Matrix (NZ-ACEM).
4. To identify key industries and key carcinogens for which intervention would result in marked reductions in occupational cancer.
5. To evaluate practice, knowledge and attitudes of employers, employees and health and safety personnel about workplace carcinogens and intervention strategies, in key New Zealand industries.
6. To engage industry and other relevant stakeholders in this.
7. To build research capacity and partnerships in the field of workplace exposure to carcinogens.

FUNDING:	Department of Labour (DoL), Health Research Council of New Zealand (HRC)
RESEARCHERS:	Andrea ‘t Mannetje, Neil Pearce, David McLean, Jeroen Douwes, Evan Dryson, Chris Walls, Lis Ellison-Loschmann, Sunia Foliaki, Tania Slater, Kerry Cheung, Bradley Prezant, Bill Glass
COLLABORATORS:	Dr Aaron Blair (US National Cancer Institute), Professor Hans Kromhout (IRAS, University of Utrecht) Dr Paolo Boffetta (International Agency for Research on Cancer)
KEY WORDS:	Occupational Health, Cancer, Epidemiology, Exposure Assessment

13. Occupational asthma in New Zealand sawmill workers

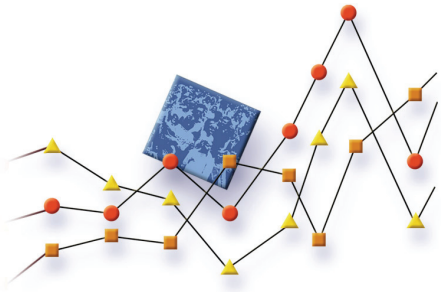


AIMS:

1. To assess the incidence of occupational asthma in previously unexposed newly or recently recruited sawmill workers.
2. To assess the incidence of decline in lung function in previously unexposed newly or recently recruited sawmill workers.
3. To assess whether dust exposures in the sawmill work environment are associated with these effects.
4. To assess which specific work-related factors increase the probability of a favourable prognosis after the diagnosis of occupational asthma.
5. To assess which preventive programmes are likely to be most effective.

FUNDING:	Department of Labour (DoL), Health Research Council of New Zealand (HRC)
RESEARCHERS:	David McLean, Jeroen Douwes, Neil Pearce, Chris Walls, Evan Dryson, Ridvan Firestone, Elizabeth Harding, Tania Slater, Kerry Cheung
COLLABORATORS:	Professor Chris Cunningham (Research Centre for Māori Health and Development) Professor Paul Demers (University of British Columbia)
KEY WORDS:	Occupational Health, Epidemiology, Respiratory Disease, Asthma, Sawmill Workers

14. Occupational dermatitis in New Zealand cleaners



AIMS:

1. To assess the prevalence of work-related dermatitis in New Zealand cleaners and compare it with a non-exposed reference group.
2. To assess what proportion of work-related dermatitis is new onset or incident dermatitis (as opposed to exacerbation of pre-existing dermatitis).
3. To assess the severity of work-related dermatitis based on symptom history and expert opinion.
4. To assess the cleaners' exposure to cleaning agents and the frequency and duration of "wet work".
5. To assess the associations between cleaning exposures and wet work, and work-related dermatitis.
6. To assess which factors increase the probability of a favourable prognosis after the diagnosis of occupational dermatitis.
7. To assess which preventive programmes are likely to be most effective.

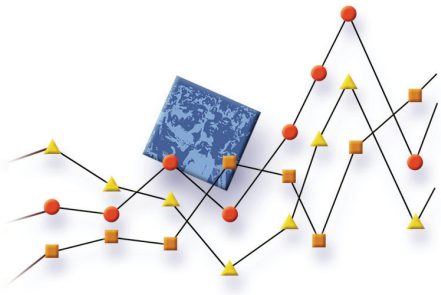
FUNDING: Department of Labour (DoL), Health Research Council of New Zealand (HRC)

RESEARCHERS: Jeroen Douwes, David McLean, Neil Pearce, Ridvan Firestone, Chris Walls, Evan Dryson, Sunia Foliaki, Elizabeth Harding, Leigh Emmerton, Heather Duckett, Anne O'Dowd, Shirley-Belle Brogan, Tania Slater, Kerry Cheung, Anna Shum-Pearce, Samuel Keer, Mathangi Shanthakumar

COLLABORATORS: Dr Lissa Judd (Anwyl Specialist Medical Centre)
Professor Pieter Jan Coenraads (University of Groningen)
Jan-Paul Zock (CREAL, Barcelona)

KEY WORDS: Occupational Health, Epidemiology, Skin Disease, Dermatitis, Cleaners

15. Case-control study of modifiable risk factors for congenital malformations (CM)

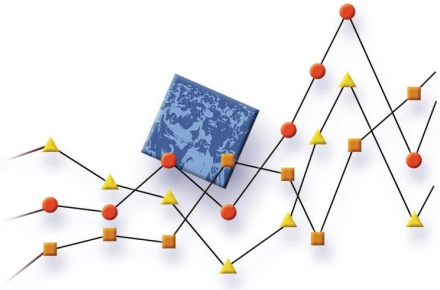


AIMS:

1. To investigate the associations between maternal and paternal occupational exposures and congenital malformations (CM) in New Zealand.
2. To evaluate the contribution of non-occupational modifiable risk factors for CM including obesity, diabetes, alcohol consumption and folic acid supplementation.
3. To assess the contributions of (i) acute exposures during the critical period around conception and (ii) chronic lifetime exposures to the risk of CM.
4. To investigate the risk factors for specific CM subtypes.
5. To estimate the fraction of CM cases that can be potentially prevented.

FUNDING:	Health Research Council of New Zealand (HRC), Massey University
RESEARCHERS:	Andrea 't Mannetje, Amanda Eng, Lis Ellison-Loschmann, Barry Borman, Allan Smith, Shirley-Belle Brogan, Neil Pearce
COLLABORATORS:	Dr Joanne Dixon (Wellington Hospital) Professor Innes Asher (Auckland Medical School)
KEY WORDS:	Congenital Malformations, Pesticides, Occupational Exposures, Alcohol and Drugs, Epidemiology

16. Occupational exposures and occupational health in Māori

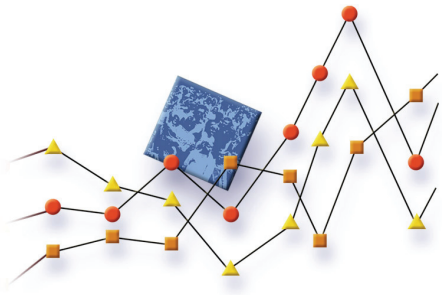


AIMS:

1. To assess current and historical occupational exposures and work practices in a random sample of Māori workers.
2. To assess current morbidity from work-related disease in the same workers and its associations with current and historical occupational exposures.
3. To assess the overall burden of work-related disease in Māori and its relative importance for overall Māori mortality and morbidity.
4. To establish a prospective cohort of Māori workers in order to monitor future morbidity and mortality patterns in occupational health and workplace exposure.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Lis Ellison-Loschmann, Katharine Haddock, Tania Slater, Michelle Gray, Andrea ‘t Mannetje, Neil Pearce
COLLABORATORS:	Professor Chris Cunningham (Research Centre for Māori Health and Development) Professor Hans Kromhout (University of Utrecht)
KEY WORDS:	Occupational Exposures, Māori Health, Epidemiology

17. Stomach cancer in Māori

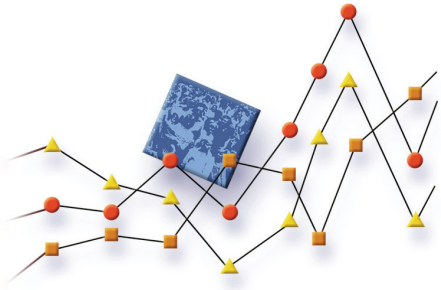


AIMS:

1. To investigate the importance of known risk factors for stomach cancer in Māori including socioeconomic factors, *Helicobacter pylori*, obesity, diet, smoking, and alcohol consumption.
2. To investigate the role of genetic factors and gene-environment interactions (particularly alcohol consumption and specific genetic polymorphisms) on the risk of stomach cancer in Māori.
3. To explore potential risk factors for subtypes of stomach cancer in Māori, including diffuse gastric cancer.
4. To record the care and treatment received by patients and examine factors that affect stomach cancer survival in Māori.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Lis Ellison-Loschmann, Michelle Gray, Tracey Whaanga, Andrew Sporle, Neil Pearce
COLLABORATORS:	Associate Professor Jonathan Koea (University of Auckland) Pauline Harawira (Kimihauora Trust) Associate Professor Parry Guildford (Dunedin School of Medicine)
KEY WORDS:	Gastric Cancer, Epidemiology, Risk Factors, Genetic Factors

18. Understanding the determinants of inequalities in breast cancer survival

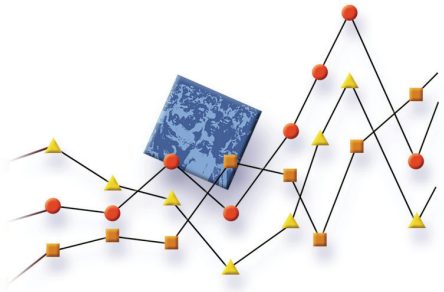


AIMS:

1. To explore possible differences between ethnic, socioeconomic and urban/rural groups of women with breast cancer in their access to primary care.
2. To explore potential barriers/facilitators to diagnosis and optimum treatment.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Lis Ellison-Loschmann, Fiona McKenzie, Ridvan Firestone, Christine van Dalen, Neil Pearce
COLLABORATORS:	Andrew Sporle, Dr Michelle Trumpelmann (Apollo Centre) Trish Clark (Southland District Health Board) Dr Belinda Scott (Breast Associates, Auckland) Dr Ben Gray (Wellington School of Medicine)
KEY WORDS:	Breast Cancer, Cancer Control, Cancer Survival, Health Inequalities, Ethnicity, Socio-economic Factors, Rurality

19. Inequalities in cervical cancer survival in New Zealand



AIMS:

1. To assess differences in cervical cancer survival in New Zealand according to socioeconomic status or urban/rural status. We have previously observed differences in cervical cancer survival in New Zealand according to ethnicity; are there similar differences by socioeconomic status or urban/rural status?
2. To assess whether these differences (if possible) are explained by differences in stage at presentation.
3. To assess what other factors (e.g. co-morbidities, screening history, distance from clinic) may explain the observed demographic differences in survival.

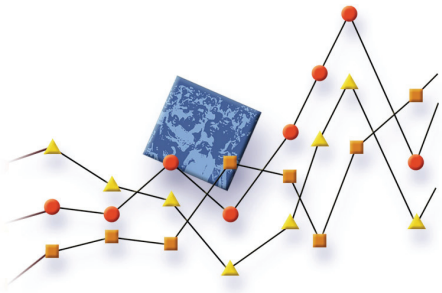
FUNDING: Health Research Council, Lotteries Health Research

RESEARCHERS: Naomi Brewer, Lis Ellison-Loschmann, Sunia Foliaki, Diana Best, Christine van Dalen, Barry Borman, Neil Pearce

COLLABORATORS: Dr Andrew Sporle (University of Auckland)
Associate Professor Steven Fleming (University of Kentucky)
Dr Jeanie McDonald (Apollo Centre)
Teresea Olsen (Kokiri Marae)
Dr Diana Sarfati (Wellington School of Medicine)
Dr Lois Eva (National Women's Hospital)

KEY WORDS: Cervical Cancer, Epidemiology, Survival

20. Survey of cervical abnormalities in Fiji

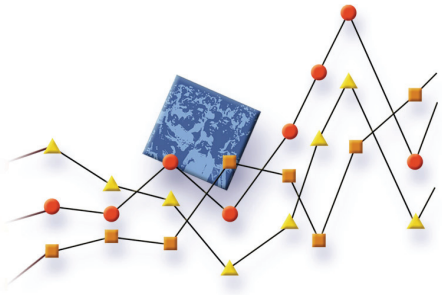


AIMS:

1. To investigate the age-specific prevalence of cervical abnormalities and HPV infection in women living in Suva, Fiji.
2. To assess risk factors for cervical cancer in Suva, Fiji.
3. To generate data to inform cervical cancer prevention programmes in Fiji.

FUNDING:	International Agency for Research on Cancer (IARC)
RESEARCHERS:	Sunia Foliaki, Naomi Brewer, Neil Pearce
COLLABORATORS:	Dr Lepani Waqatakirewa, Dr. James Fong, Dr. Eka Buadromo (Ministry of Health, Fiji) Mrs. Mere Turagabeci (Oxfam Clinic, Fiji) Dr Silvia Franceschi, Dr Gary Clifford (International Agency for Research on Cancer) Dr Peter Snijders, Professor Chris Meijer (Vrije Universiteit, Amsterdam)
KEY WORDS:	Cervical Cancer, Epidemiology, Risk Factors, Human Papilloma Virus (HPV)

21. Providing Epidemiological Services to the Māori Health Directorate

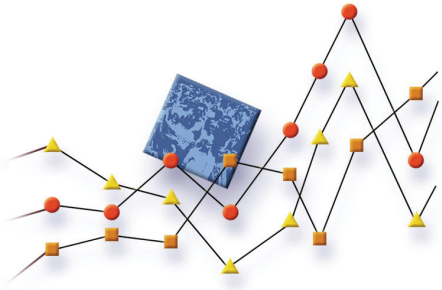


AIMS:

To provide the Māori Health Directorate, Ministry of Health with epidemiological services and analysis to support their policy and strategy development and implementation.

FUNDING:	Ministry of Health
RESEARCHERS:	Barry Borman, Lis Ellison-Loschmann, Neil Pearce, Helene Marsters, Mathangi Shanthakumar
KEY WORDS:	Māori Health, Epidemiology, Surveillance

22. The role of the innate immune system in childhood asthma development

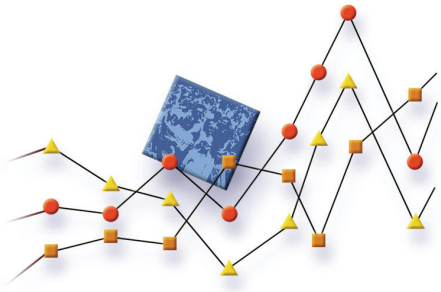


AIMS:

1. To analyse gene expression of Toll-like receptors TLR2 and TLR4, and of CD14 in blood samples collected from 250 farmers infants and 250 control infants.
2. To analyse cell surface expression of TLR2, TLR4 and CD14 in blood samples from the same population using flow cytometry.
3. To assess whether expression of these receptors is associated with farm and/or endotoxin exposure.
4. To assess which particular cell populations in blood show modulation of TLR2, TLR4 and CD14 due to farm/endotoxin exposure.
5. To assess whether expression of these receptors is associated with TH2 activity, allergies and symptoms of asthma.

FUNDING:	Asthma and Respiratory Foundation of New Zealand (ARFNZ), Health Research Council of New Zealand (HRC)
RESEARCHERS:	Collin Brooks, Christine van Dalen, Neil Pearce, Jeroen Douwes
COLLABORATORS:	Dr Ian Hermans, Professor Graham Le Gros (Malaghan Institute of Medical Research)
KEY WORDS:	Childhood Asthma, Allergy, Innate Immunity, Birth Cohort

23. Occupational risk factors for Non-Hodgkin's Lymphoma (NHL) and NHL subtypes

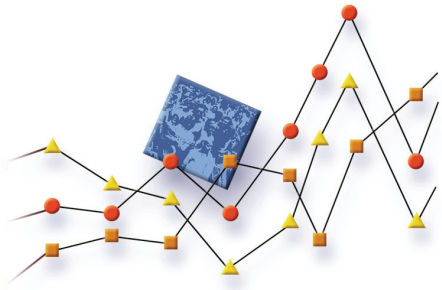


AIMS:

1. To conduct a pooled analysis of 9 NHL case-control studies from North America, Europe, and Australia, to study the association between occupational risk factors and NHL, in different populations.
2. To investigate occupational risk factors previously found to be associated with NHL, using uniformly defined indicators for occupational exposure.
3. To evaluate risk by NHL subtype, using a standard NHL classification based upon histologically confirmed diagnoses.

FUNDING:	US National Institutes of Health (NIH)
RESEARCHER:	Andrea 't Mannetje
COLLABORATORS:	Dr Paolo Boffetta (International Agency for Research on Cancer, France) Professor Pierluigi Cocco (University of Cagliari, Italy) Professor Anneclaire De Roos (Fred Hutchinson Cancer Research Center, US) Dr Silvia De Sanjose (Catalan Institute of Oncology, Spain) Dr Geza Benke (University of Melbourne, Australia) Dr Aaron Blair (National Cancer Institute, US) Dr Paul Brennan (International Agency for Research on Cancer, France) Professor Brian Chiu (Northwestern University, US) Dr Patricia Hartge (National Cancer Institute, US) Professor Elizabeth Holly (University of California) Professor Eve Roman (University of York, UK) Dr Adele Seniori Costantini (Centre for Oncologic Prevention, Italy) Dr John Spinelli (BC Cancer Research Center, Canada) Professor Tongzhang Zheng (Yale University, US)
KEY WORDS:	Non-Hodgkin's Lymphoma, Pooled Analysis, Occupational Risk Factors

24. Asthma causation, mechanisms and prevention

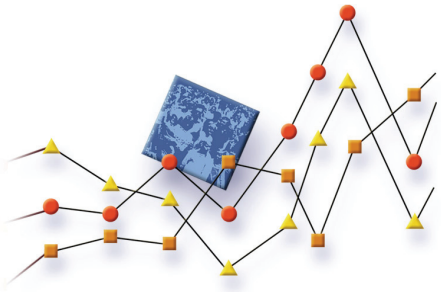


AIMS:

1. To assess whether atopic sensitisation can be reversed over time in a working adult population newly exposed to moderate to high levels of endotoxin.
2. To assess whether there is a dose-response between endotoxin exposure and change in atopic status.
3. To assess the time period in which the reduction in atopy takes place.
4. To assess the association between endotoxin exposure and lung function and respiratory symptoms.
5. To assess whether a change in atopic status is associated with a change in lung function and respiratory symptoms.
6. To assess the level of exposure at which the protective effect on atopy is most effective and the adverse effects on the airways (induced by non-atopic mechanisms) are minimal.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Jeroen Douwes, David McLean, Neil Pearce, Elizabeth Harding, Shirley-Belle Brogan, Heather Duckett, Lis Ellison-Loschmann, Amanda Eng, Haidee MacKenzie, Collin Brooks
COLLABORATORS:	Professor Graham Le Gros, Dr Jacquie Harper (Malaghan Institute of Medical Research)
KEY WORDS:	Asthma, Respiratory Disease, Occupational Health

25. ISAAC (International Study of Asthma and Allergies in Children). Phase III



AIMS:

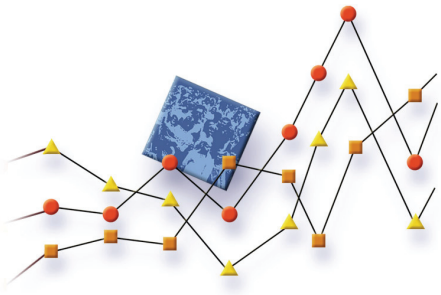
1. To describe the prevalence and severity of asthma, rhinitis and eczema in children living in different centres and to make comparisons within and between countries.
2. To conduct ecologic analyses of the association of asthma prevalence with factors such as diet, infections, immunisation, air pollution and allergen levels.
3. To examine trends in asthma prevalence over time.
4. To provide a framework for further aetiological research into genetic, lifestyle, environmental and medical care factors affecting these diseases.

The International Study of Asthma and Allergies in Childhood (ISAAC) was developed and organised together with colleagues in Auckland, London and Münster. This study now includes more than 1,000,000 children in more than 280 centres in 100 countries. Our involvement includes:

- Sunia Foliaki is Regional Coordinator for Oceania and a member of the ISAAC Steering Committee.
- We are participating in the New Zealand ISAAC Phase III survey, and have conducted the survey in Wellington.
- Neil Pearce is a member of the ISAAC Executive and ISAAC Steering Committee, and is the ISAAC Publications Coordinator.

FUNDING:	Health Research Council of New Zealand (HRC), Wellcome Trust
RESEARCHERS:	Neil Pearce, Lis Ellison-Loschmann, Sunia Foliaki, Soo Cheng
COLLABORATORS:	Professor Innes Asher (Auckland Medical School) Professor Bengt Björkstén (Karolinska Institute, Stockholm) Professor David Strachan (St George's Hospital Medical School, London) Professor Luis Garcia Marcos (University of Madrid, Spain) and many other colleagues in more than 280 centres in 100 countries
KEY WORDS:	ISAAC, Asthma, Respiratory Disease, Child Health

26. Chronic inflammation in asthma



AIMS:

1. To assess whether chronic inflammation in asthma is due to impairment in the ability of pulmonary macrophages to phagocytose apoptotic neutrophils and eosinophils.
2. To assess whether differences in the cell profile of asthma inflammatory phenotypes are due to differences in pulmonary macrophage phagocytic ability.

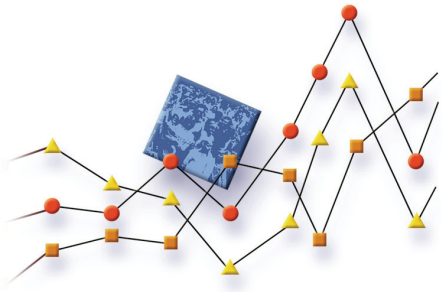
FUNDING: Marsden Fund

RESEARCHERS: Dr Christine van Dalen, Elizabeth Harding

COLLABORATOR: Dr Mark Hampton (Free Radical Research Group, Christchurch School of Medicine, Christchurch)

KEY WORDS: Asthma, Inflammation, Macrophage, Eosinophil, Neutrophil

27. Early life factors and breast cancer risk

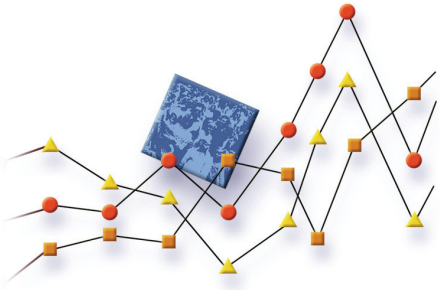


AIMS:

1. To assess adolescent exposures which may be pertinent to breast cancer risk.
2. To investigate the relationship between the potential risk factors and breast cancer risk in the New Zealand population.
3. To investigate whether these relationships differ between ethnic groups.
4. To follow the cases to assess which factors affect cancer survival.

FUNDING:	Health Research Council of New Zealand (HRC), Cancer Society of New Zealand
RESEARCHERS:	Lis Ellison-Loschmann, Fiona McKenzie, Ridvan Firestone, Michelle Gray, Sunia Foliaki, Neil Pearce
COLLABORATORS:	Dr Mona Jeffreys (University of Bristol) Dr Peter Dady (Cancer Society of New Zealand) Professor George Davey Smith (University of Bristol, UK)
KEY WORDS:	Breast Cancer, Early Life Factors, Life-course Epidemiology

28. Cancer in Pacific populations

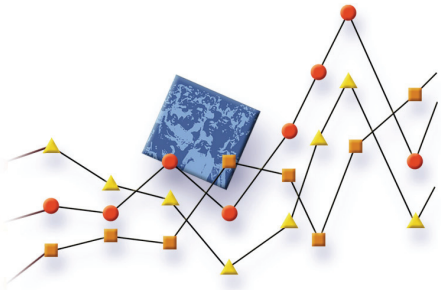


AIMS:

1. To conduct descriptive analyses of cancer incidence and mortality in four Pacific countries (Tonga, Samoa, Fiji and Niue) and in Pacific people in New Zealand.
2. To conduct a case-control study of breast cancer in women which will be conducted in the same four Pacific countries in parallel with a similar study of Pacific women in New Zealand.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Sunia Foliaki, Lis Ellison-Loschmann, Diana Best, Neil Pearce
COLLABORATORS:	Dr Lepani Waqatakirewa (Ministry of Health, Fiji) Dr Siale 'Akau'ola (Ministry of Health, Tonga) Dr Semisi Aiono (Ministry of Health, Samoa) Dr Hale Paka (Department of Health, Niue) Dr Paolo Boffetta (International Agency for Research on Cancer, Lyon, France) Dr Marc Goodman (University of Hawaii) Dr Mona Jeffreys, Professor George Davey Smith (University of Bristol, UK)
KEY WORDS:	Cancer, Breast Cancer, Pacific

29. Asthma and atopy in farmers' children and their parents

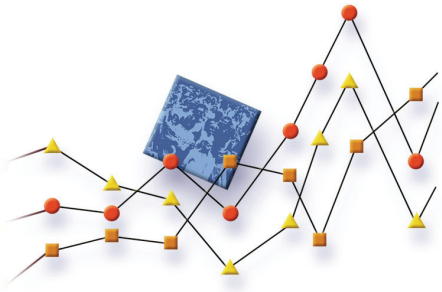


AIMS:

1. To measure the prevalence of respiratory symptoms (with the focus on asthma) in farmers' children and their parents, and in a comparison group from a non-farming population (Phase I).
2. To compare the prevalence of respiratory symptoms in children and parents in various types of farming (dairy, sheep & beef, and crop farming) (Phase I).
3. To measure the prevalence of atopy in a sample of children and their parents (farming and non-farming) in order to ascertain whether any protective effect of farming involves atopic mechanisms (Phase II).
4. To measure relevant environmental exposures in a sample of households (farming and non-farming) including house dust allergen and endotoxin, and to examine their association with the occurrence of atopy and asthma, while adjusting for other risk factors for asthma (Phase II).
5. To study through the conduct of an infant cohort study the immune status of babies born on farms, and control babies (Phase III).

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Jeroen Douwes, Christine van Dalen Neil Pearce, Soo Cheng, Collin Brooks, Elizabeth Harding, Heather Duckett, Shirley-Belle Brogan, Leigh Emmerton, Anne O'Dowd, Michelle Gray, Haidee MacKenzie
COLLABORATORS:	Dr Joanna McKenzie (Massey University Veterinary Epicentre) Professor Graham Le Gros (Malaghan Institute of Medical Research) Professor Erika Von Mutius (University Children's Hospital, Munich, Germany) Professor Chris Cunningham (Research Centre for Māori Health & Development)
KEY WORDS:	Asthma, Respiratory Disease, Child Health, Occupation

30. Dioxin exposure levels and health effects in former phenoxy herbicide production workers

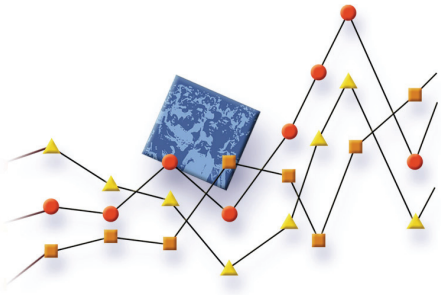


AIMS:

1. To examine the long term effects on mortality and cancer incidence in production workers and pesticide sprayers exposed to phenoxy herbicides, chlorophenols and dioxin contaminants.
2. To measure the dioxin levels and related biomarkers of dioxin toxic effects in the blood of former phenoxy herbicide production workers.
3. To determine whether dioxin levels are associated with higher cancer mortality and incidence in this population.
4. To determine whether dioxin levels are associated with chronic health problems and adverse reproductive outcomes in this population.
5. To determine whether dioxin levels are associated with biomarkers of dioxin toxic effects including effects on AhR-regulated biological functions.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Andrea 't Mannetje, David McLean, Tania Slater, Amanda Eng, Shirley-Belle Brogan, Collin Brooks, Elizabeth Harding, Evan Dryson, Chris Walls, Barry Borman, Neil Pearce, Mathangi Shanthakumar, Jeroen Douwes
COLLABORATORS:	Professor Manolis Kogevinas (Centre de Recerca en Epidemiologia Ambiental (CREAL), Barcelona) Professor Pier Bertazzi (University of Milan) Dr Rod Lea (Environmental Sciences and Research) Dr Patrick O'Connor (MidCentral Health)
KEY WORDS:	Cancer, Occupation, Pesticides, Dioxin

31. Dioxin exposure levels in New Plymouth firefighters

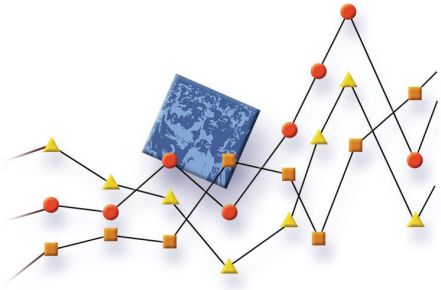


AIMS:

1. To measure the individual serum dioxin levels of 40 firefighters previously stationed at New Plymouth.
2. To assess their health status through clinical examination.
3. To compare their dioxin levels with the dioxin levels of 20 firefighters never stationed in New Plymouth.
4. To determine whether dioxin levels are associated with chronic health problems and adverse reproductive outcomes of this population.

FUNDING:	The New Zealand Fire Service
RESEARCHERS:	Andrea ‘t Mannetje, Amanda Eng, Elizabeth Harding, Shirley-Belle Brogan, Tania Slater, Collin Brooks, Neil Pearce
KEY WORDS:	Dioxin, Firefighters, Serum Levels, Phenoxy Herbicides

32. The Early Life Factors Study of Childhood Diseases (www.elfs.org.nz)

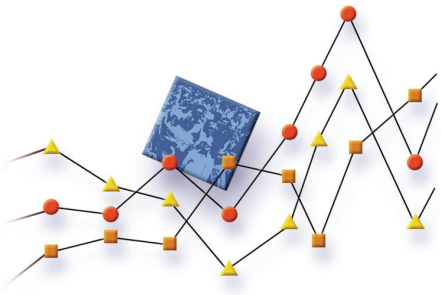


AIMS:

1. To establish a large dynamic cohort of infants who will be followed until adulthood.
2. To assess associations between a wide range of early life exposures/events/lifestyle factors and a broad range of health outcomes in early childhood including those listed below.
3. To assess the associations between maternal diet and congenital malformations, infant deaths, low birth weight, growth patterns up to age 18 months, hospital admissions in infancy, childhood obesity, and allergies and asthma symptoms.
4. To assess the associations between parental occupational exposures and congenital malformations, infant deaths, and low birth weight.
5. To assess the associations between domestic exposures to common cleaning agents during pregnancy and in the first few months after birth, and asthma symptoms in infants.
6. To assess the associations between indoor dampness and fungal exposure, and allergies and asthma symptoms in infants.
7. To assess the associations between ethnicity and/or low socioeconomic status and low birth weight, an increased risk of hospital admissions in infants, growth patterns up to 18 months, and obesity after two years of age.
8. To assess the associations between infant diet and allergy and asthma symptoms, and obesity after two years of age.
9. To provide a sampling frame for more detailed clinical studies on specific diseases by selecting subjects from the larger data base.

FUNDING:	Health Research Council of New Zealand (HRC)
RESEARCHERS:	Ridvan Firestone, Andrea ‘t Mannetje, Lis Ellison-Loschmann, Barry Borman, Soo Cheng, Xian Chen (Jo), Neil Pearce, Jeroen Douwes
COLLABORATORS:	Dr Lorenzo Richiardi, Professor Franco Merletti (Epidemiology Unit, Department of Biomedical Sciences, Turin, Italy) Dr Mona Jeffreys (University of Bristol)
KEY WORDS:	Birth Cohort, Congenital Malformations, Infant Deaths, Obesity, Respiratory Disease, Lifestyle Factors, Socioeconomic Status, Environmental Exposures

33. Occupational exposure to electromagnetic fields (EMFs) and risk of glioma and meningioma

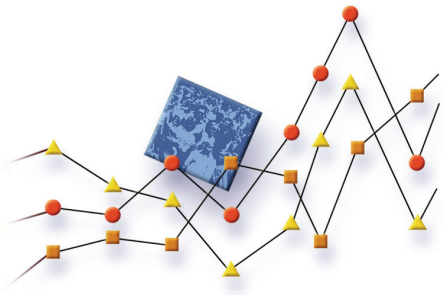


AIMS:

1. To evaluate the possible association between the occupational exposure to electromagnetic fields (EMFs) and tumours of the brain and central nervous system (specifically, glioma and meningioma).
2. To evaluate the possible association between selected occupational chemical exposures and tumours of the brain and central nervous system (specifically, glioma and meningioma).
3. To investigate the possibility of synergism and/or confounding between chemical and EMF exposures on the risk of brain cancers.

FUNDING:	US National Institutes of Health (NIH)
RESEARCHER:	David McLean
COLLABORATORS:	Dr Elisabeth Cardis (CREAL) Dr Geza Benke (Monash University) Dr Joe Bowman, Dr Dave Conover (NIOSH), Professor Maria Feychting, Professor Nils Plato (Karolinska Institute) Professor Martine Hours (Université Claude Bernard) Professor Daniel Krewski (George Washington University) Dr Susanna Lagorio (Istituto Superiore di Sanita) Professor Patricia McKinney (University of Leeds) Dr Marie-Elise Parent (INRS-Institut Armand Frappier) Dr Siegal Sadetzki (Tel Hashomer), Dr Birgitte Schlehofer (DKFZ German Cancer Research Center) Professor Jack Siemiatycki (Université de Montréal) Dr Martie Van Tongeren (Institute of Occupational Medicine, Edinburgh) Dr Timo Kauppinen (Finnish Institute of Occupational Health) Professor Franco Merletti (University of Turin).
KEY WORDS:	Cancer, Electromagnetic Fields

34. A linkage study of asthma and cancer

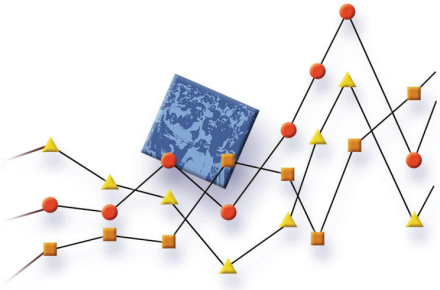


AIMS:

1. To link data on hospital discharges and pharmaceutical prescriptions to investigate the relationship asthma and specific malignancies, such as lymphoid and colorectal cancers.
2. To generate hypotheses regarding the mechanisms that may underlie any associations that are found.

FUNDING:	Massey University Research Fund (MURF)
RESEARCHERS:	Barry Borman, Jeroen Douwes, Mathangi Shanthakuma
COLLABORATOR:	Associate Professor Steven Fleming (University of Kentucky)
KEY WORDS:	Asthma, Cancer

35. Veterinary health study (VHS)

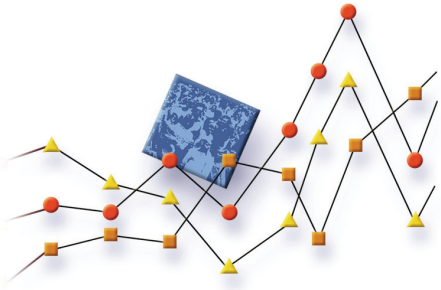


AIMS:

1. To assess prevalences of respiratory symptoms, allergies and zoonoses in veterinary students.
2. To assess whether prevalences of respiratory symptoms, allergies and zoonoses in veterinary students increase during the course of their study.
3. To assess modifiable risk factors and the role of timing and duration of exposure.
4. To assess the association between zoonotic diseases and allergies and asthma (i.e. some infectious diseases have been shown to protect against allergies).
5. To establish the basis for a longitudinal study to assess disease incidence and causal (modifiable) risk factors.

FUNDING:	Massey University Research Fund (MURF)
RESEARCHERS:	Jeroen Douwes, Heather Duckett Anne O'Dowd
COLLABORATORS:	Dr Deborah Prattley, Professor Nigel French (Institute of Veterinary, Animal and Biochemical Science, Massey University)
KEY WORDS:	Asthma, Allergy, Animal Exposure, Zoonoses

36. Brominated flame retardants in the indoor environment

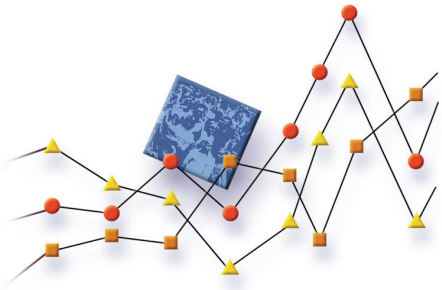


AIMS:

1. To investigate the association between polybrominated diphenyl ethers (PBDE) levels in house dust and breast milk.
2. To elucidate whether house dust is an important route of human exposure to PBDEs in New Zealand.

FUNDING:	Massey University Research Fund (MURF)
RESEARCHERS:	Andrea ‘t Mannetje, Jonathan Coakley, Jeroen Douwes
COLLABORATOR:	Dr Stuart Harrad (University of Birmingham)
KEY WORDS:	House Dust, Breast Milk, POPs (Persistent Organic Pollutants), Polybrominated Diphenyl Ethers (PBDE), Human Exposure

37. Lung function in Pacific Children

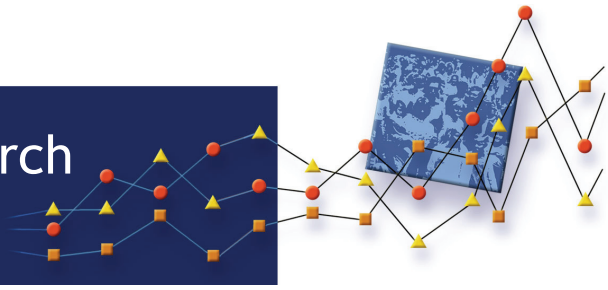


AIMS:

1. To derive standard reference equations for spirometric lung function tests in Pacific children in Aotearoa.
2. To compare ethnic specific spirometric reference equations with those of recent North American and European reference values (which are currently commonly used in New Zealand).
3. To provide physicians and researchers with valid spirometric reference equations to better diagnose and monitor respiratory diseases among Pacific children.

FUNDING:	Massey University Research Fund (MURF)
RESEARCHERS:	Ridvan Firestone, Jeroen Douwes, Neil Pearce, Elizabeth Harding, Shirley-Belle Brogan, Leigh Emmerton, Sunia Foliaki
KEY WORDS:	Pacific Health, Respiratory Disease, Lung Function, Children

Projects Based in Other Research Groups and Institutions



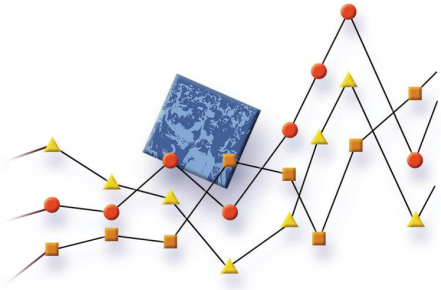
1. Health effects of mobile (cellular) phones

AIMS:

1. To investigate whether mobile phone use causes brain cancer.
2. To investigate occupational causes of brain cancer.

COLLABORATORS:	Professor Alistair Woodward (University of Auckland) Dr Angus Cook, Professor Tony Blakely (Wellington School of Medicine) Dr Elizabeth Cardis (International Agency for Research on Cancer)
CPHR RESEARCHER:	Neil Pearce
KEY WORDS:	Cancer, Environmental Health

2. Estimating the long-term health outcomes of people with epilepsy

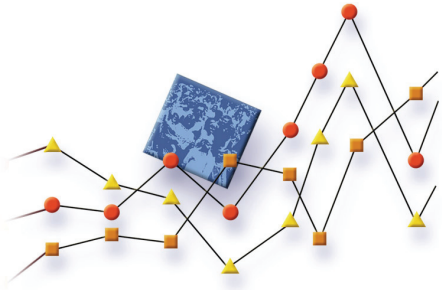


AIMS:

1. To establish an epilepsy register in Tasmania.
2. To undertake a cross-sectional study of this community sample of people with epilepsy to investigate the prevalence of epilepsy syndromes, and their severity, epilepsy-related injuries and health service utilisation.
3. To establish a community cohort of people with epilepsy which can be followed prospectively to monitor health outcomes, measure risk factors contributing to these outcomes if indicated (with second stage case-control studies), and perform intervention trials if considered appropriate.

COLLABORATORS:	Dr Wendyl D'Souza, Dr Mark Cook, Dr Terry O'Brien (St Vincent's Hospital, Melbourne) Dr Bruce Taylor (Hobart Hospital, Tasmania) Professor Terry Dwyer (Menzies Centre, Hobart, Tasmania)
CPHR RESEARCHER:	Neil Pearce
KEY WORD:	Epilepsy

3. Centre for Māori Health Research and Development (HRC Programme Grant)

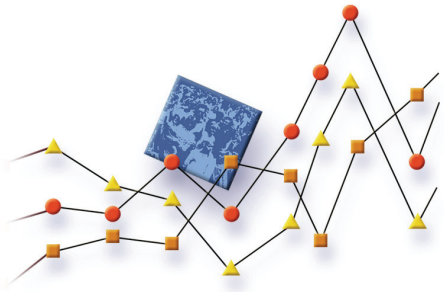


AIM:

Programme of research in Māori health, including studies of child health, mental health and the health of older Māori (Research Centre for Māori Health & Development, HRC Programme Grant).

COLLABORATORS:	Professor Mason Durie, Professor Chris Cunningham, Dr Maureen Holdaway, Dr Stephanie Palmer, Dr Te Kani Kingi, John Waldon, Dr Amohia Boulton, Sharon Taite (Research Centre for Māori Health & Development)
CPHR RESEARCHER:	Neil Pearce
KEY WORDS:	Māori Health

4. IARC multicentre case-control study of occupation, environment and lung cancer in Central and Eastern Europe



AIMS:

1. Investigate the role of occupational risk factors in the aetiology of lung cancer in Central and Eastern Europe.
2. Investigate other factors including tobacco consumption, air pollution and genetic susceptibility.
3. Conduct this analysis after combining the datasets of individual centres.

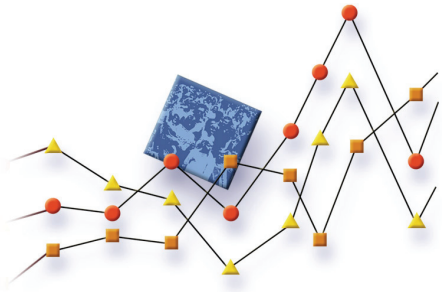
COLLABORATORS:

Dr Paolo Boffetta (International Agency for Research on Cancer, Lyon, France)
Dr Tony Fletcher (London School of Hygiene and Tropical Medicine, London, UK)
Dr Joelle Fevotte (Institut Universitaire de Médecine du Travail, UCB, France)
Dr Dana Mates (Institute of Hygiene, Public Health, Health Services and Management, Bucharest, Romania)
Dr Peter Rudnai (National Institute of Environmental Health, Budapest, Hungary)
Dr David Zaridze (Institute of Carcinogenesis, Cancer Research Centre, Moscow, Russia)
Dr Eleonóra Fabiánová (Specialized State Health Institute, Banská Bystrica, Slovakia)
Dr Witold Zatonski (Maria Sklodowska Institute of Oncology, Warsaw, Poland)
Dr Neonila Szeszenia-Dabrowska (Department of Epidemiology, Lodz, Poland)
Dr Vladimir Janout (Department of Preventive Medicine, Palacky University of Medicine, Olomouc, Czech Republic)
Dr Vladimir Bencko (Charles University of Prague, First Faculty of Medicine, Praha, Czech Republic)
Dr Lenka Foretova (Department of Cancer Epidemiology, Masaryk Cancer Institute, Brno, Czech Republic)
Dr Judith Youngson (Roy Castle International Centre for Lung Cancer Research, Liverpool, UK)

CPHR RESEARCHER: Andrea ‘t Mannetje

KEY WORDS: Lung Cancer, Occupation, Tobacco

5. International study of environment, viruses and cancer of the oral cavity and the larynx



AIMS:

1. To assess the role of known (i.e., occupation, smoking, alcohol drinking, fruit and vegetable intake) or putative (i.e., human papilloma virus (HPV) infection) risk factors for cancer of the oral cavity and the larynx in the study populations.
2. To investigate the presence and pattern of P53 mutations and to assess whether they differ according to exposure to risk factors.
3. To assess the role of genetic susceptibility mediated through genetic polymorphisms of enzymes potentially implicated in the metabolism of carcinogens.

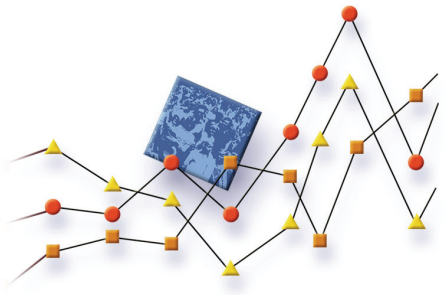
COLLABORATORS:

Dr Paul Brennan, Dr Paolo Boffetta (International Agency for Research on Cancer, Lyon, France)
Dr Maria Paula Curado (Registro de Câncer de Goiânia, Associação de Combate ao Câncer em Goiás, Brazil)
Dr Alexander Daudt (Cancer Prevention and Control Section, Hospital de Clínicas de Porto Alegre, Brazil)
Dr Sergio Koifman (Escola Nacional de Saúde Pública, Fundação Oswaldo Cruz, Brazil)
Dr Ana Menezes (Departamento de Clinica Médica, Faculdade de Medicina, Universidade Federal de Pelotas, Brazil)
Dr Victor Wünsch-Filho (Departamento de Epidemiologia, Faculdade de Saúde Pública, Universidade de São Paulo, Brazil)
Dr Elena Matos (Depto. de Carcinogenesis Quimica y Ambiental, Instituto de Oncologia Angel H. Roffo, Universidad de Buenos Aires, Argentina)
Dr Leticia Fernandez (Institute of Oncology and Radiobiology, Havana, Cuba)
Dr Jan Walboomers, Dr Peter Snijders (Department of Pathology, Free University Hospital, Amsterdam, The Netherlands)
Dr Joelle Fevotte (Institut Universitaire de Médecine du Travail, UCB, Lyon, France)

CPHR RESEARCHER: Andrea ‘t Mannetje

KEY WORDS: Oral Cancer, Laryngeal Cancer, Lifestyle Factors, Occupation

6. Environmental exposures and lymphoid neoplasms



AIMS:

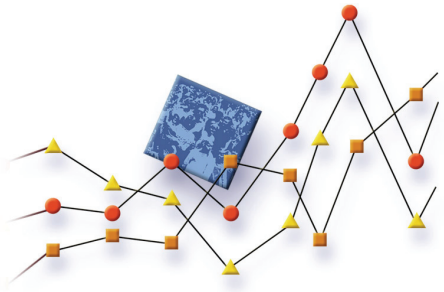
1. To identify the contribution of Epstein-Barr virus, Human Immunodeficiency virus, Hepatitis C virus and Herpes virus 8 to the occurrence of lymphoid neoplasms.
2. To explore the potential associations of other infectious agents (Chlamydia, other related herpes virus, papovavirae virus) to the occurrence of lymphoid neoplasms.
3. To identify the contribution of specific occupational exposures (inorganic pesticides, organic pesticides, animal viruses, organic dust, organic solvents and radiation) to the occurrence of lymphoid neoplasms.
4. To explore the possible interactions between occupational/environmental factors and infectious agents.
5. To explore the possible contribution of exposure to ultraviolet radiation to the occurrence of lymphoid neoplasms.

COLLABORATORS: Dr Paul Brennan, Dr Paolo Boffetta (International Agency for Research on Cancer, Lyon, France)
Dr Silvia de Sanjosé (Oncology Institute, Barcelona, Spain)
Dr Marc Maynadie (Hôpital du Bocage, Dijon, France)
Dr Nikolaus Becker (German Cancer Research Centre, Heidelberg, Germany)
Dr Anthony Staines (Department of Public Health, University College, Dublin, Ireland)
Dr Jose Iscovich (International Fertility Institute, Raanana, Israel)
Dr Lenka Foretova (Department of Cancer Epidemiology, Masaryk Cancer Institute, Brno, Czech Republic)
Dr Martine Vornanen (Department of Clinical Pathology, Kuopio University Hospital, Kuopio, Finland)
Dr Pier Luigi Cocco (Institute of Occupational Health, Cagliari, Italy)

CPHR RESEARCHERS: Andrea ‘t Mannetje, Lis Ellison-Loschmann

KEY WORDS: Lymphoid Neoplasms, Environmental Exposures, Infectious Agents, Occupational Exposures

7. Arsenic and childhood respiratory health in Bangladesh

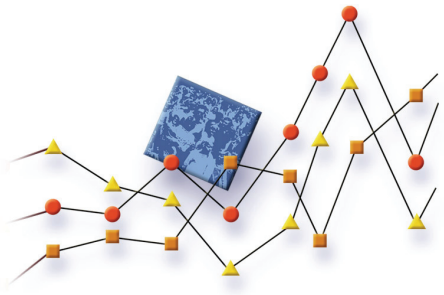


AIMS:

1. To investigate the impact of exposure to arsenic in drinking water on lung function and respiratory symptoms and diseases in children.
2. To assess possible synergy between ingested arsenic and inhaled indoor air pollutants from biomass burning and second-hand smoke on lung function and respiratory outcomes in children.
3. To investigate nutritional susceptibility to arsenic-related respiratory effects in children.
4. To assess whether or not methylation of arsenic to MMA3 and MMA5 as measured in urine affects the risks of arsenic-related respiratory system effects in children and to store remaining urine samples for other testing including proteomics.
5. To identify whether children with reduced height-for-age, weight-for-height, or weight-for-age are at increased risk of developing arsenic-related respiratory symptoms and impaired lung function, while considering modifying factors, particularly nutrition.
6. To start a cohort for long-term follow-up into late adolescence and young adulthood to investigate the relation of childhood arsenic exposure and lung function and respiratory effects later in life.

COLLABORATORS:	Professor Allan Smith, Dr Ondine von Ehrenstein (University of California, Berkeley, USA)
CPHR RESEARCHERS:	Neil Pearce, Jeroen Douwes
KEY WORDS:	Arsenic, Asthma, Respiratory Disease, Child Health

8. Risk factors for asthma prevalence in Italian children

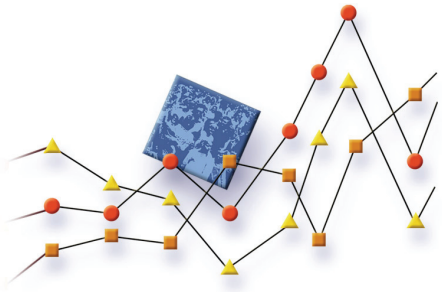


AIMS:

1. To examine the associations of exposure to traffic fumes with childhood asthma and other respiratory symptoms.
2. To examine the effects of immigration to Italy on the prevalence of childhood asthma and other respiratory symptoms.
3. To examine the associations of maternal complications and procedures in pregnancy and at birth with the prevalence of childhood asthma and other respiratory symptoms.

COLLABORATORS:	Dr Claudia Galassi, Professor Franco Merletti (University of Turin, Italy) Professor Francesco Forastiere (Local Health Authority, Rome, Italy)
CPHR RESEARCHER:	Neil Pearce
KEY WORDS:	Asthma, Child Health, Risk and Protective Factors, ISAAC, SIDRIA

9. Cancer and mortality in lead-exposed workers: The Lead Workers Study

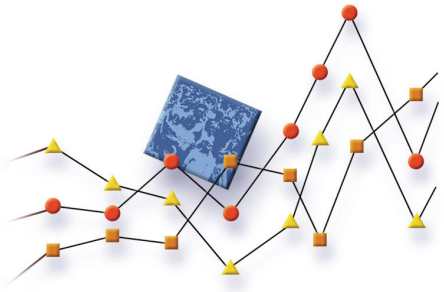


AIMS:

1. Establish a cohort of lead-exposed workers in scheduled lead occupations in the 1970s and 1980s in Victoria, New South Wales and South Australia.
2. Measure the cancer incidence and mortality in this cohort, in particular for cancers of the kidney, central nervous system, stomach and lung.
3. Investigate dose-response relationships in this cohort of occupational lead exposure for those cancer subtypes where sufficient numbers exist.

COLLABORATORS:	Associate Professor Malcolm Sim, Dr Geza Benke, Ewan MacFarlane (Monash University Centre for Occupational and Environmental Health, Australia) Associate Professor Lin Fritschi (Western Australian Institute for Medical Research, Australia) Dr Dino Pisaniello (University of Adelaide, Australia)
CPHR RESEARCHER:	David McLean
KEY WORDS:	Cancer, Occupational Health, Lead

10. Socioeconomic status, asthma and chronic bronchitis in a large community-based study

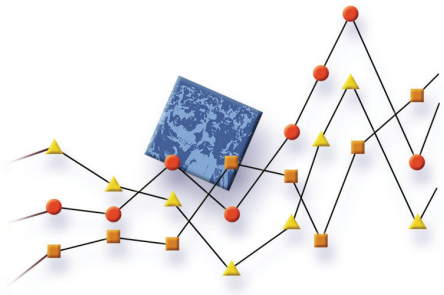


AIMS:

1. To investigate the relationship between socioeconomic status and the prevalence and incidence of asthma and chronic bronchitis using data from Phase II of the European Community Respiratory Health Survey (ECRHS II).
2. To investigate changes in these associations over time (between ECRHS I and ECRHS II).

COLLABORATORS:	Professor Jordi Sunyer, Dr Jan-Paul Zock, Professor Josep Maria Antó, Professor Manolis Kogevinas (CREAL, Barcelona, Spain) Dr Deborah Jarvis (Royal Imperial College, London, UK) Dr Christer Jansen (Uppsala University, Uppsala, Sweden)
CPHR RESEARCHERS:	Lis Ellison-Loschmann, Neil Pearce
KEY WORDS:	Asthma, Socioeconomic Status, Time Trends

11. Protection against Allergy: Study in Rural Environments (PASTURE)



AIMS:

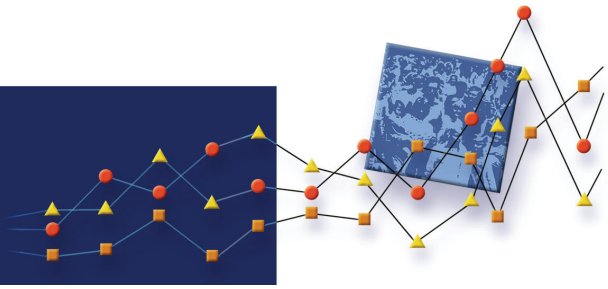
1. To assess whether T-cell effector status is more characteristic of Th1 immunity in farmers' infants at 12 months of age compared to non-farming control infants.
2. To assess whether mothers' exposures during pregnancy to indoor endotoxin, unpasteurised milk, and barn environment are associated with Th1 immunity in their offspring.
3. To assess whether elevated levels of endotoxin in house dust and milk samples are associated with a maturation of initially Th2-like skewed immune responses to Th1 immunity, and a lack of IgE response to common allergens at age 12 months.
4. To assess whether the expression of genes related to the recognition of microbial products differs with respect to microbial exposures and a subject's genetic background (polymorphisms in these genes).
5. To assess whether subjects with polymorphisms in those genes differ with respect to the relation between environmental exposures and atopic outcomes.

COLLABORATORS: Professor Erika von Mutius, Dr. Von Haunersche (Kinderklinik, Munich, Germany)
Dr Charlotte Braun-Fahrländer (Institute for Social and Preventive Medicine, University of Basel, Switzerland)
Dr Juha Pekkanen (National Public Health Institute, Kuopio, Finland)
Dr Josef Riedler (Childrens Hospital, Salzburg, Austria)
Dr Jean-Charles Dalphin (UFR Faculté de Medicine & Pharmacie, Besancon, France)
Professor Harald Renz (Marburg, Germany)
Professor Bert Brunekreef (Institute for Risk Assessment Sciences, Utrecht, The Netherlands)
Dr Michael Kabesch (Munich, Germany)
Dr Roger Lauener (Zürich, Switzerland)

CPHR RESEARCHER: Jeroen Douwes

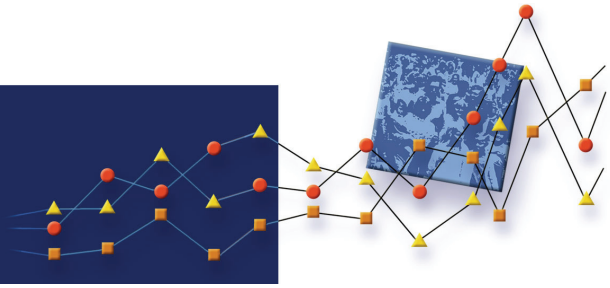
KEY WORDS: Asthma, Allergy, Farming, Respiratory Disease, Child Health

Training
PGDipPH projects



Anita O'Boyle	**Title: Midwives experiences of antenatal HIV screening in the first year of routine offer in Wellington** *Supervisor: Lis Ellison-Loschmann*
Phoebe Taptiklis	**Title: Dampness exposure in the home environment and respiratory outcomes** *Supervisors: Jeroen Douwes, Associate Professor Robin Phipps (School of Engineering & Advanced Technology, Massey University), Dr Michael Keall (University of Otago, Wellington)*
Nigel Fitzpatrick	**Title: Multiple hospitalisations in children under five admitted to Midcentral Hospital 2000-2004 (with an emphasis on injury admissions)** *Supervisor: Barry Borman*
Caroline Fyfe	**Title: An analysis of call distribution characteristics of the Cancer Society of New Zealand's '0800 CANCER' freephone cancer support service** *Supervisor: Barry Borman*
Patricia Morison	**Title: Factors influencing provision of food and drink at sports clubs** *Supervisor: Chris Cunningham*
Justine Solomon	**Title: A community-based physical activity programme: what are the wider benefits?** *Supervisor: Anna Matheson*
Wendy Lorigan	**Title: Perceptions of risk of obesity in children** *Supervisor: Barry Borman*

Training
MPH theses



Wendy Donaldson

Title: Integrating health promotion within a standard model of primary care: does it lead to better outcomes?

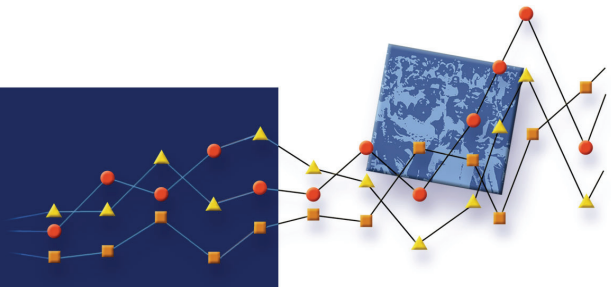
Supervisor: Anna Matheson

Bronwyn White

Title: Three year prospective follow up of Māori and non-Māori general practice patients who participated in the Northland diabetes screening and cvd risk assessment pilot

Supervisors: Barry Borman, Christine van Dalen

Masters students based in other research groups



Jason Kingsley

Title: Fungal allergy and exposure to fungi in asthma

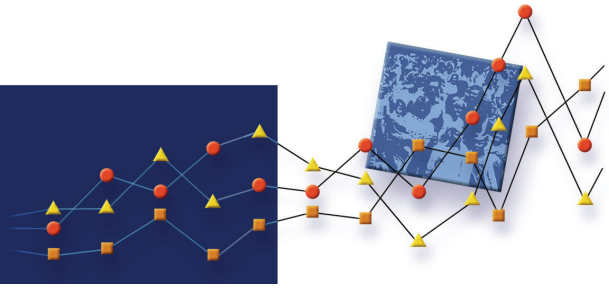
Supervisors: Professor Euan Tovey (Woolcock Institute for Medical Research, University of Sydney, Australia), Jeroen Douwes

Ruth Hinz

Title: Hydrogen sulphide exposure and potential associated health effects in the adult population of Rotorua

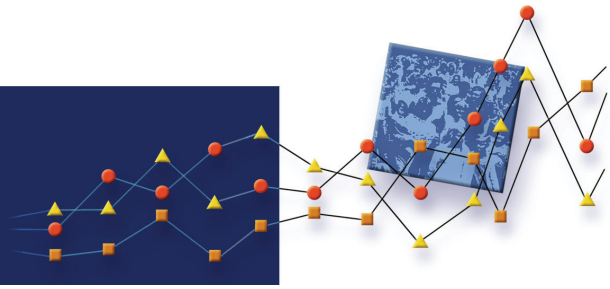
Supervisors: Dr Neil Vince (Department of Earth Sciences, Massey University), Jeroen Douwes

Training
Doctoral



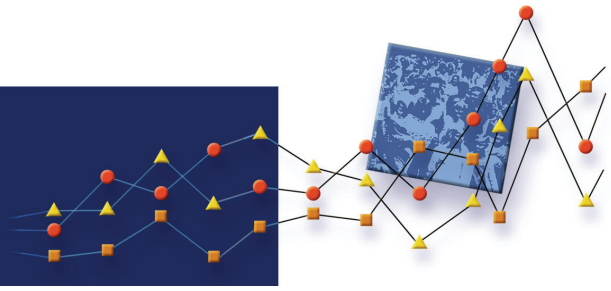
Naomi Brewer	**Title: Epidemiological studies of cervical cancer in New Zealand** *Supervisors: Barry Borman, Dr Lorenzo Richiardi (University of Turin)*
Collin Brooks	**Title: Innate immunity and asthma** *Supervisors: Jeroen Douwes and Dr Ian Hermanns (Malaghan Institute of Medical Research)*
Marine Corbin	**Title: Bayesian methods in epidemiology** *Supervisors: Neil Pearce, Dr Milena Maule (University of Turin, Italy)*
Amanda Eng	**Title: Epidemiological studies of occupational exposures and health effects in the New Zealand workforce** *Supervisors: Andrea 't Mannetje, Neil Pearce*
MD Alfazal Khan	**Title: Epidemiology of bronchial asthma in children in Bangladesh** *Supervisors: Allan Smith, Jeroen Douwes, Neil Pearce*
Fiona McKenzie	**Title: Breast cancer survival in New Zealand** *Supervisors: Lis Ellison-Loschmann, Dr Mona Jeffreys (University of Bristol)*
Tania Slater	**Title: The role and potential of community-based cancer care for Māori in Aotearoa/New Zealand** *Supervisors: Lis Ellison-Loschmann, Anna Matheson*

Doctoral students based in other research groups



Diana Sarfati	**Title: Developing a co-morbidity index for New Zealand** *Supervisors: Professor Peter Crampton (Wellington School of Medicine), Neil Pearce*
Phatcha Hirunwatthanaku	**Title: The impact of a visual impairment on quality of life among older persons in a rural area of Northeastern Thailand** *Supervisors: Professor Steve LaGrow (School of Health Sciences, Massey University), Barry Borman*
Geoff Duff	**Title: A multi-scale systems study of eye health services in New Zealand** *Supervisors: Dr Richard Edwards, Professor Peter Crampton (Wellington School of Medicine), Barry Borman*
Brendon Stevenson	**Title: Te Hoe Nuku Roa** *Supervisors: Professor Chris Cunningham (Research Centre for Maori Health and Development, Massey University), Neil Pearce*

Training
Post-doctoral



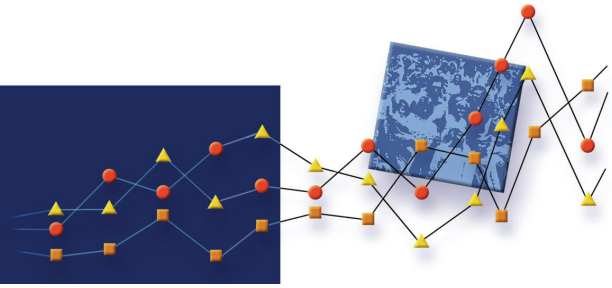
Sunia Foliaki

HRC Pacific Health Postdoctoral Research Fellow

Title: Cancer in Pacific populations

Supervisors: Neil Pearce, Dr Mona Jeffreys (University of Bristol)

Presentations



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Brewer N, Pearce N, Jeffreys M, **Borman B, Ellison-Loschmann L.** Does screening history explain the ethnic differences in cervical cancer in New Zealand? J Epidemiol 2010; 20: S51 (abstract).

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Eng A, 't Mannetje A, Douwes J, Ellison-Loschmann L, McLean D, Pearce N. Occupational risk factors for chronic bronchitis and asthma in New Zealand J Epidemiol 2010; 20: S85 (abstract).

McKenzie F, Jeffreys M, Ives A. Are there socio-economic inequalities in survival from screen-detected breast cancer? Epidemiol 2010; 20: S57 (abstract).

Pearce N. Epidemiology in a changing world. J Epidemiol 2010; 20: S33 (abstract).

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Pearce N. The analysis of variance and the analysis of causes: issues at the interface between epidemiology and biostatistics.

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Douwes J. Environmental health surveillance: case studies.

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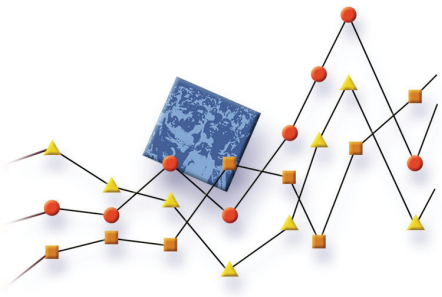
Pearce N. Methodology for epidemiological studies in the 21st century.



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McLean D. Occupational cancers: About 30-40% of work-related deaths are thought to be due to occupational cancer.

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Borman B, Read D. 2,4,5-T and birth defects in New Zealand.

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Corbin M, Maule M, **Pearce N**. Application of multiple imputation for correction of misclassification of smoking status in the association between smoking and lung cancer: a Bayesian approach. Australasian Epidemiologist 2010; 17: 53-54 (abstract).

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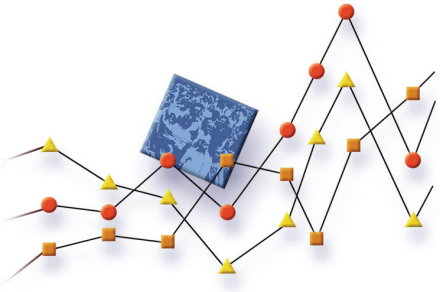
Australia and New Zealand Society for Occupational Medicine (ANZSOM), Wellington, September 2010.

Pearce N. Dioxin.

Wellington School of Medicine, Wellington, September 2010.

Pearce N. The analysis of variance and the analysis of causes: Genetics, race, ethnicity, obesity, exercise, energy intake, and why you shouldn't use stepwise regression.



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McLean D. Cancer in meat workers: identifying the causal exposures.

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Pearce N. Epidemiology in a changing world.

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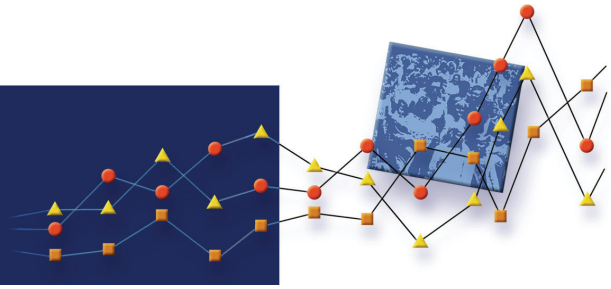

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Brewer N, Pearce N, Jeffreys M, **Borman B, Ellison-Loschmann L.** Does screening history explain the ethnic differences in stage at diagnosis of cervical cancer in New Zealand? Int J Epidemiol 2010: 39: 156-165.

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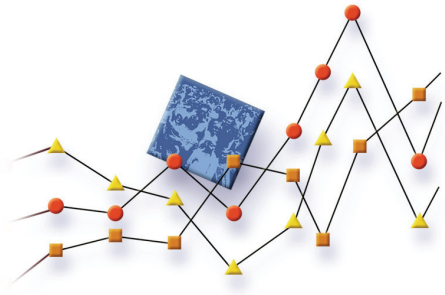

lymphoma. Epidemiology 2010; 21(6): 905-10.

Nagel G, Weinmayr G, Kleiner A, Garcia-Marcos L, Strachan DP, and **The ISAAC Phase Two Study Group**. Effect of diet on asthma and allergic sensitisation in the International Study of Asthma and Allergies in Childhood (ISAAC) Phase Two. Thorax 2010; 65: 516-522.

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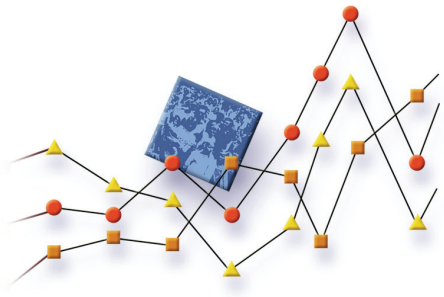
CPHR Technical Reports



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't Mannetje A, Douwes J, Duckett H, Brogan S-B, Emmerton L, Harding E, Brooks C, Harrad S, **Ellison-Loschmann L, Smith AH, Pearce N.** Concentrations of persistent organic pollutants in the milk of New Zealand women. Report prepared as part of a Ministry of Health contract for scientific services. CPHR Technical Report No. 32. Wellington: CPHR, 2010.

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Other Publications

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Olsen J, **Pearce N,** Victora C, Ebrahim S. The IEA Dictionary and who should be the editor. Int J Epidemiol 2010; 39: 630 (letter).

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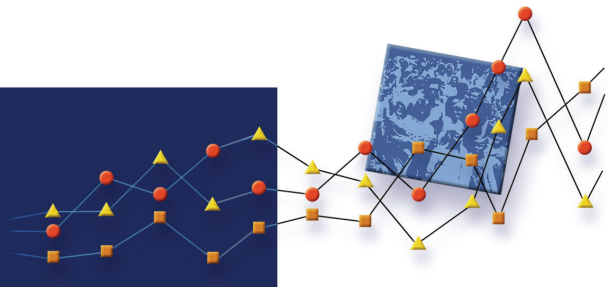
Seminars



16 March – Lisa Lee.
Ethics and public health surveillance: what should we be considering?

26 March – Jorn Olsen.
Reproductive failures related to prenatal exposures to PFOA and PFOS: Results from the Danish National Birth Cohort.

04 May – John Potter.
Chemoprevention: Why do we keep getting it wrong?

25 May – Geoff Simmons. The "Policy Prescription".

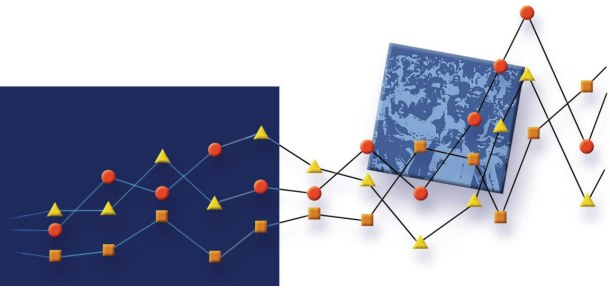
20 August – Wendyl D'Souza.
Epilepsy epidemiology in the internet age – Do you like to watch?

16 November – Lorenzo Richiardi.
Prenatal and postnatal risk factors for testicular cancer.

19 November – James Hurley.
Comparing pneumonia rates in Intensive Care Units: An application of ecological methods to comparisons across >100 published studies of prevention methods.

7 December – David Strachan.
The first two decades of the hygiene hypothesis for allergic disease.

Advisory Committees



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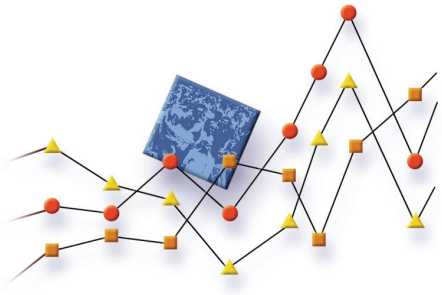

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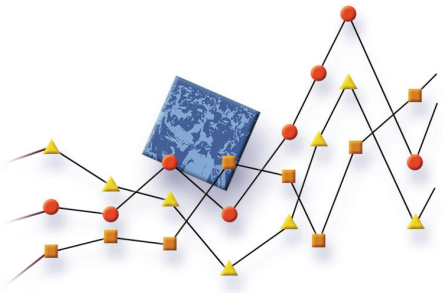

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Steering Committee, International Agricultural Consortium (Jeroen Douwes)

Member of the College of Humanities & Social Sciences PBRF Working Party, Massey University (Jeroen Douwes)

Member of steering committee of the International Agricultural Cohort Consortium International Agency for Research on Cancer (IARC)
(Jeroen Douwes)

Member of the College of Humanities & Social Sciences Research Committee, Massey University (Jeroen Douwes)

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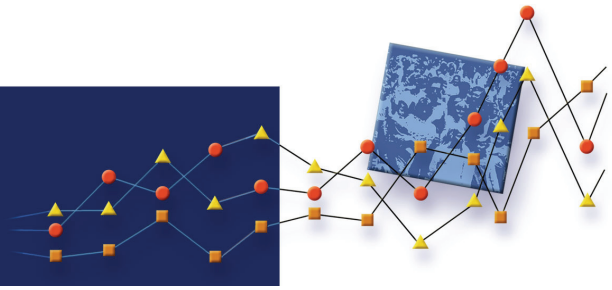

Professor Patricia Buffler
Department of Epidemiology
School of Public Health
University of California,
Berkeley, CA
USA

Professor David Byrne
Durham University
Durham, United Kingdom

Associate Professor James Hurley
School of Rural Health
University of Melbourne

Professor Nancy Krieger
Department of Epidemiology
Harvard School of Public Health
Boston, MA
USA

Dr Lisa Lee
Assistant Science Officer
Centers for Disease Control and Prevention
Atlanta, GA
USA

Professor Ahmed Mandil
King Saud University
Riyadh
Saudi Arabia

Professor Jorn Olsen
Department of Epidemiology
UCLA School of Public Health
Los Angeles, CA
USA

Professor John Potter
Fred Hutchison Cancer Research Centre
University of Washington
Seattle, WA, USA

Dr Lorenzo Richiardi
Cancer Epidemiology Unit
University of Turin
Turin, Italy

Professor David Strachan
Department of Public Health Sciences
St Georges Hospital Medical School
London, UK

Professor Cesar Victora
Professor of Epidemiology
Federal University of Pelotas
Pelotas, Brazil

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For further information contact:

Centre for Public Health Research
Massey University Wellington Campus
PO Box 756
Wellington 6140
Phone: 64-4-380-0602
Fax: 64-4-380-0600
E-mail: cphr@massey.ac.nz
Website: www.publichealth.ac.nz