

NOHSAC

National Occupational Health
and Safety Advisory Committee
Komitii Tōhūohu Māhi A-Motu Hāora me te Haumarū

SECOND ANNUAL REPORT TO THE ASSOCIATE MINISTER OF LABOUR

JUNE 2005

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Foreword

This is the second annual report of the National Occupational Health and Safety Advisory Committee (NOHSAC). The report summarises the year's work of the Committee. NOHSAC was established in July 2003 to provide independent contestable advice and currently reports directly to the Associate Minister of Labour on major occupational health and safety issues.

In November 2004, NOHSAC published its first report on "The Burden of Occupational Disease and Injury in New Zealand". The report highlighted the fact that occupational disease has not received the attention that it could have from the Department of Labour, even though it accounts for a much greater burden of occupational mortality than occupational injury. Even in the field of occupational injury we still have a long way to go in identifying the size and nature of problems, let alone developing effective interventions.

The release of the report, however, has stimulated substantial debate and activity in relation to occupational health. As a result of the report and the activities of the Committee:

- new funding of \$730,000 in 2005/2006 has been allocated to the Department of Labour to strengthen its technical expertise and start to upgrade systems for reporting and measuring occupational disease
- the Employers' and Manufacturers' Association Annual Health and Safety Conference was focused on occupational health
- the Department of Labour, in conjunction with the Health Research Council, established the Occupational Health Research Programme with funding of \$1.8 million over the next three years
- the Workplace Health and Safety Strategy for New Zealand to 2015 lists several occupational health issues as priority areas
- the Department of Labour is reviewing its core training module in occupational health.

While encouraging, these initiatives alone will not be enough to ensure that we are able to tackle the burden of occupational disease and injury in New Zealand.

In addition to traditional occupational health and safety problems, new occupational health and safety issues will emerge in the coming years, often with multi-factorial and multi-causal origins.

The Committee's ongoing work programme will continue to build the evidence base necessary to ensure that effective strategies are developed for reducing the burden of disease and injury on all New Zealanders.



DR EVAN DRYSON

Acting Chair, National Occupational Health and Safety Advisory Committee

The National Occupational Health and Safety Advisory Committee

The National Occupational Health and Safety Advisory Committee (NOHSAC) was established in July 2003.

The Committee's function is to provide independent advice directly to the Minister of Labour (or Associate Minister of Labour) on major occupational health and safety issues.

TERMS OF REFERENCE

The key tasks for the Committee are to:

- provide an independent assessment to the Minister on the major occupational health and safety issues for the New Zealand workforce
- advise the Minister on measures that would deliver the greatest benefit for the prevention of occupational injury and disease
- develop an evidence-based approach to occupational health and safety issues
- develop and implement an annual work programme approved by the Minister, including a research agenda
- have due regard for available resources and how the Committee's advice might impact both on occupational health and safety and on economic development
- advise the Minister on such other matters as the Minister specifies by notice to the Committee.

MEMBERSHIP OF NOHSAC AT JUNE 2005

The membership of the Committee represents a range of expertise within the broad fields of occupational health and safety. The Committee meets at least five times a year to discuss issues related to its Terms of Reference and to review progress on its work programme. The Committee is supported by a Secretariat, within the Department of Labour, comprising a project manager and a part-time administrative support officer.

PROFESSOR NEIL PEARCE

Professor Neil Pearce is currently the Professor and Director of the Centre for Public Health Research, Massey University. Professor Pearce has extensive research experience, with particular interests in occupational epidemiology, asthma epidemiology and more general public health research. Professor Pearce has previous experience in chairing committees, including chairing the Health Research Council Public Health Research Committee. Since 1988 Professor Pearce has been appointed to numerous committees advising Government, including the Occupational Health Technical Advisory Committee and the Ministerial Advisory Panel on Work-related Gradual Process, Disease, or Infection. (Professor Pearce is currently on sabbatical leave in Milan.)

DR EVAN DRYSON (ACTING CHAIR)

Dr Evan Dryson is a practising occupational medicine specialist, lecturer and the immediate past President of the Royal Australasian College of Physicians – Faculty of Occupational Medicine. Dr Dryson has significant expertise and experience in the clinical practice, diagnosis, management and rehabilitation of people with occupational disease. He has strong affiliations with a range of international occupational health/disease bodies. Dr Dryson has also published widely in New Zealand and overseas on original research into occupational medicine.

PROFESSOR ANNE-MARIE FEYER

Professor Anne-Marie Feyer is a Director of Health/Risk Management Practice at PricewaterhouseCoopers in Sydney. She also has a professorial appointment in the Department of Social and Preventive Medicine, University of Otago. Professor Feyer has extensive experience in occupational health and safety in both New Zealand and Australia. Her research interests are in occupational injury epidemiology, fatigue management and work-related determinants of health and well-being.

PROFESSOR PHILIPPA GANDER

Professor Philippa Gander is currently the Director of the Sleep/Wake Research Centre, Massey University in Wellington. Professor Gander's research interests are in circadian and sleep physiology and its implications for occupational safety and health, particularly in shift work. She has extensive international experience in developing and implementing fatigue and shift work management programmes with the transport sector.

SELWYN McCracken

Selwyn McCracken is currently completing a PhD, funded by the Health Research Council, focusing on improved construction industry health and safety through surveillance system development. Mr McCracken is of Māori descent and has links to the Ngai Tahu Māori Health Research Unit, University of Otago. He has published an epidemiology of work-related fatal injuries involving Māori.

Reports Released by NOHSAC During 2004/2005

“THE BURDEN OF OCCUPATIONAL DISEASE AND INJURY IN NEW ZEALAND”

“The Burden of Occupational Disease and Injury in New Zealand” was published in November 2004 and is a review of New Zealand and international literature on the burden of fatal and non-fatal occupational disease and injury.

The report covers all conditions that, according to reasonable evidence, have causes related to work. They were determined from two recent review articles, identified literature, and conditions particularly relevant to New Zealand. The report also includes quantitative estimates of:

- the annual number of deaths from occupational disease and injury
- the annual number of new cases of work-related disease and injury in New Zealand.

In many cases these could not be estimated directly from New Zealand data, so a combination of New Zealand and overseas data has been used. The report’s estimates are primarily based on studies undertaken in countries that have working conditions reasonably similar to New Zealand’s. This means the estimates should be considered indicative.

It is important to note that present estimates of mortality often reflect past exposure conditions. Many of the deaths in one year do not automatically reflect present-day exposure conditions. However, conditions such as asbestos-related cancers will continue to increase in number over the next decade.

Therefore this report is a starting point for developing the evidence-based approach, using what is currently known or can be reasonably inferred from international evidence.

To build the evidence base, the information needs to be updated with New Zealand data as it becomes available. At present the lack of New Zealand data means that we are unable to document adequately the size of the problem and also unable to suggest and enable solutions, particularly for occupational disease and injury in women and Māori.

REPORT RECOMMENDATIONS

As the report was being prepared, the Department of Labour was reorganised and OSH became part of its Workplace Group. However, OSH’s responsibility for occupational health and safety in New Zealand continues.

Our recommendations are therefore particularly relevant to the work of OSH or an equivalent agency, but the committee recognises they are also relevant to the work of a number of other government agencies including the Ministry of Health, ACC, the Environmental Risk Management Authority, the Land Transport Safety Authority and others.

OSH’s responsibilities include:

- influencing societal attitudes about the benefits of good workplace health and safety practice
- raising awareness of workplace participants’ rights and obligations under the Health and Safety in Employment Act 1992 (“the HSE Act”)
- leading the development of national workplace health and safety initiatives across government and industry sectors and working collaboratively with industry sector organisations and other agencies to develop and promote workplace health and safety

- providing information and advice through the contact centre, website, presentations, seminars, consultations and workplace information visits to help individuals, workplaces and industry sectors understand the legislation and apply best practice health and safety
- assessing workplace health and safety performance and responding to and investigating notifications, complaints and incidents
- identifying breaches and taking appropriate compliance or enforcement action to reduce purposeful or serious breaches of minimum standards under the HSE Act.

In light of these responsibilities and the issues raised in the report, the Committee makes the following recommendations:

1. There should be a markedly increased focus on occupational health. Work-related cancer, respiratory disease, musculoskeletal disease and workplace fatigue should be particular priorities.
2. An increased emphasis on occupational health should not be at the expense of reducing current activities undertaken by OSH in relation to health and safety.
3. It is essential that a single central agency, such as OSH, takes the lead in, and ultimate responsibility for, occupational health and safety, rather than this task being handled by a variety of agencies for which occupational health and safety is a secondary responsibility.
4. The work of such an agency should involve an “all-of-government” approach, with the agency complementing rather than duplicating the work of other agencies such as the Ministry of Health and ACC, while taking ultimate responsibility for the “big picture” of occupational health and safety in New Zealand.
5. In particular, such an agency can be viewed as the occupational health equivalent of the Ministry of Health’s Public Health Directorate. The role of the Director of Public Health in the Ministry of Health is particularly interesting and relevant, and this could serve as a model for a position of Director of Occupational Health within OSH who would complement, and work closely with, the Director of Public Health.
6. OSH should have a greater proactive role in promoting occupational health as being in the interests of workers, employers and the country as a whole.
7. An emphasis on occupational health and the prevention of occupational disease requires significant involvement from occupational health specialists, including occupational medicine specialists, occupational health nurses, occupational hygienists and occupational epidemiologists, particularly at the head office level and also at the district level. This in turn requires the development and support of appropriate training programmes to restore and revitalise the specialist occupational health workforce.
8. Agencies responsible for occupational health and safety should measure improvements in workplace practices as well as injury and disease rates.
9. A major emphasis should be given to the surveillance of occupational disease and injury so that we know how many work-related deaths and cases of work-related disease and injury happen in New Zealand each year. This will be addressed in our next report, but some preliminary measures should be adopted at this stage. Firstly, the current NODS should be preserved, improved and extended. Secondly, information on occupation should be routinely collected for deaths, cancer registrations and hospital admissions, and occupation should be incorporated as a field into the National Health Index (NHI) system. The NZHIS should then routinely code this information.
10. A concentrated effort must be made to reduce the toll of work-related deaths, as is currently done for deaths on the road.

Summary Findings: The Overall Burden of Work-Related Disease and Injury

IT IS ESTIMATED THAT EACH YEAR IN NEW ZEALAND THERE ARE:

IN ADDITION, IT IS ESTIMATED THAT:

IN A STUDY OF WORK-RELATED INJURY AND DISEASE, THE AUSTRALIAN PRODUCTIVITY COMMISSION ESTIMATES THAT THESE COSTS ARE DISTRIBUTED IN SOCIETY AS FOLLOWS:

- about 700-1,000 deaths from occupational disease, particularly cancer, respiratory disease and ischaemic heart disease
 - about 100 deaths from occupational injury
 - 17,000-20,000 new cases of work-related disease
 - about 200,000 occupational accidents resulting in ACC claims, about half of which result in disability and about 6% in permanent disability.
-

- of all deaths in people age 20 or older, 2%-4% are due to occupational disease
- of all cancer deaths in people age 30 or older, 3%-6% are due to occupational cancer
- work-related fatal injuries account for 7.3% of all external causes of death in people age 20 or older (105 of 1,435).

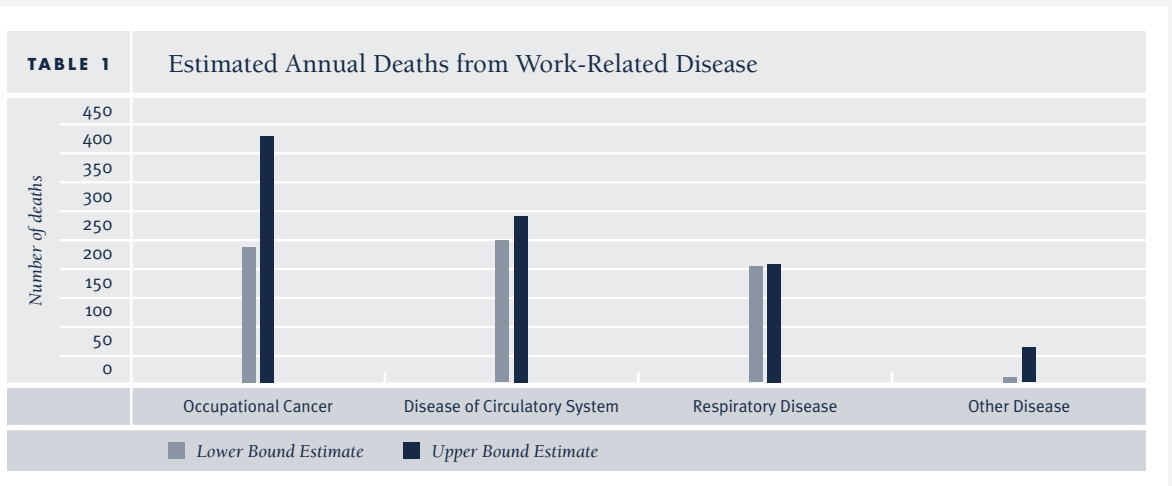
There is no valid data available on the costs to New Zealand of these deaths, injuries and illnesses. However, it is believed that the cost to society is about \$4.3 billion to \$8.7 billion each year.

- Employers bear approximately 40% of costs, including workers' compensation, loss of productivity and overtime.
- Injured workers bear approximately 30% of costs, including loss of income, pain and suffering, loss of future earnings, and medical costs.
- The community bears approximately 30% of costs, including social welfare payments, medical and health costs, and loss of human capital.

Death Due to Work-Related Disease

It is estimated that between 700 and 1,000 workers die in New Zealand as a result of work-related disease every year.

- About 80% of these deaths occur in men.
- About 30%-40% of these deaths are due to occupational cancer, mainly lung cancer.
- Other occupational diseases representing a high burden include ischaemic heart disease and respiratory diseases.



Occupational Cancer

The 237-425 work-related deaths from occupational cancer each year are caused by:

- lung cancer due to exposure to asbestos, arsenic, beryllium, cadmium, chromium, diesel fumes, nickel, silica and environmental tobacco smoke
- mesothelioma due to asbestos exposure
- leukaemia from benzene exposure and low-frequency electromagnetic field exposure
- bladder cancer (from textile dyes, paints, pigments, leather, rubber, solvents and poly-cyclic aromatic hydrocarbons).

Disease of the Circulatory System

The 246-286 work-related deaths from circulatory diseases each year are primarily due to:

- work strain (including the effects of shift work)
- exposure to carbon monoxide from engine exhausts
- exposure to environmental tobacco smoke.

Respiratory Disease

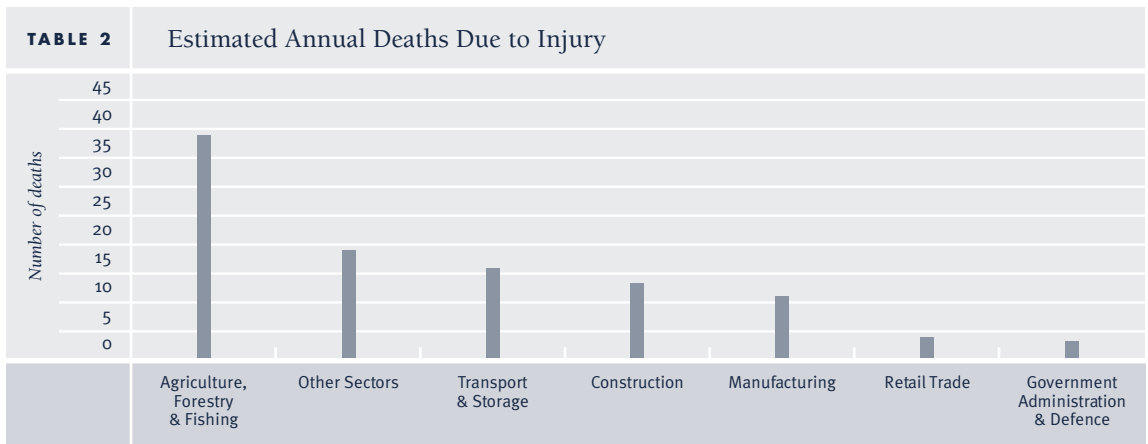
The 200-205 work-related deaths from respiratory disease each year are caused by:

- chronic obstructive pulmonary disease due to exposure to organic dust, microbial dust, endotoxins, welding fumes and environmental tobacco smoke
- occupational asthma
- asbestosis.

Death Due to Work-Related Injury

There are about 100 work-related fatal injuries in New Zealand every year.

- 94% of these deaths occur in men.
- The “agriculture, forestry and fishing” industry has the highest number of fatal work-related injuries (39 a year).
- 30% of all work-related fatal injuries are traffic-related and happen while people are working or commuting.



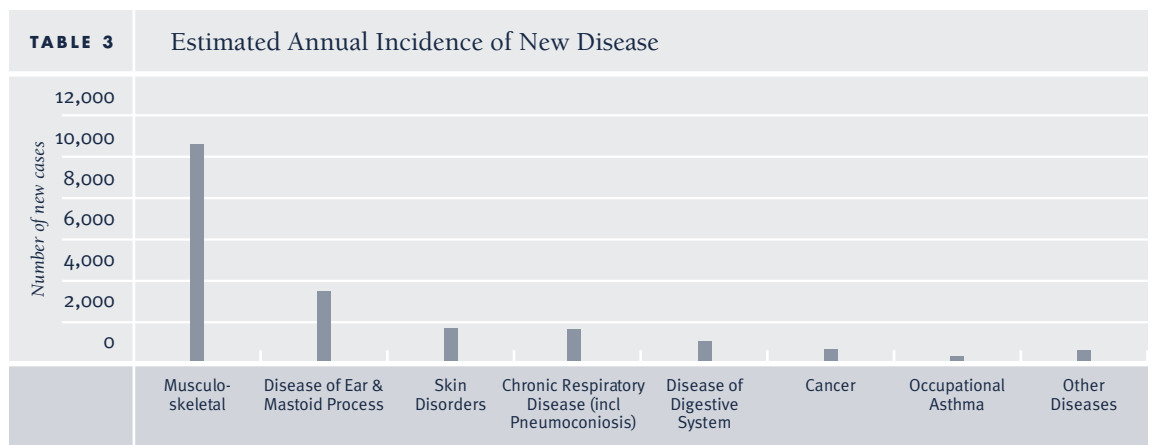
Deaths from work-related injury are primarily due to:

- traffic accidents (31 deaths)
- machinery-related accidents (17)
- water transport accidents (10)
- being struck by falling objects (10)
- falls (7).

Incidence of Work-Related Disease

In New Zealand each year there are an estimated 17,000-20,000 new cases of work-related disease and 2,500-5,500 new severe cases of work-related disease.

- Around 75% of these diseases occur in men.
- Of all cancer cases in people age 30 or older, 2%-6% are estimated to be work related (325-773 of 16,294).
- For men this is estimated to be 3%-8% (288-653 of 8,681).
- For women this is estimated to be 0.5%-1.5% (37-120 of 7,613).
- Musculoskeletal disease is thought to be the highest-incidence occupation-related disease, followed by diseases of the ear, skin disorders, chronic respiratory disease, diseases of the digestive system and cancer.



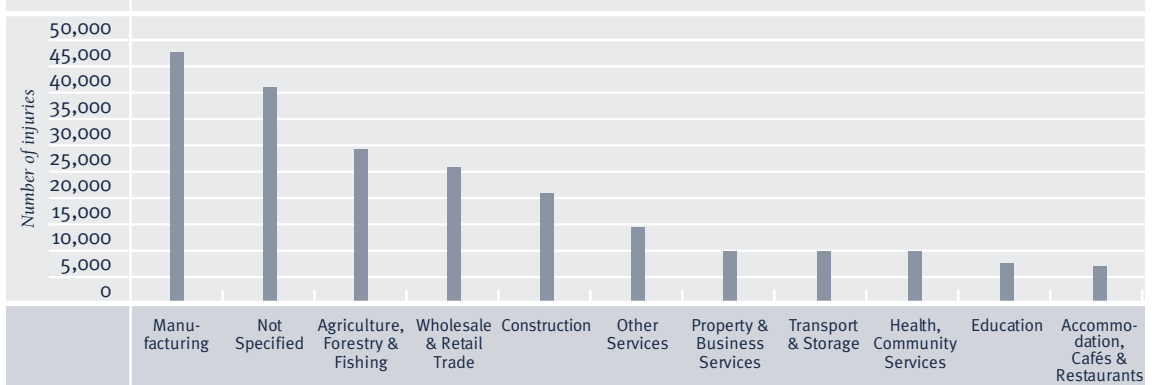
Incidence of Work-Related Injury

Each year in New Zealand over 200,000 occupational injuries result in ACC claims. This corresponds to 12 injuries per 100 workers.

An estimated half of the injuries result in disability, and 6% in permanent disability.

- 74% of the work-related injuries occur in male workers.
- The manufacturing industry has the highest number of work-related injuries.
- The mining, agriculture, forestry and fishing, and construction industries have the highest injury rates.
- Mining has the most injuries per 100,000 workers, followed by agriculture/forestry/fishing and manufacturing.
- Sprains and strains are by far the most frequent injury (90,000 claims), followed by open wounds (37,000 claims).

TABLE 4 Estimates of Annual Work-Related Injuries



Summary of the Committee's 2004/2005 Work Programme

NOHSAC commissioned a further series of reports in 2004/2005.

1. REVIEW OF THE METHODS AND SYSTEMS USED TO MEASURE AND MONITOR OCCUPATIONAL DISEASE AND INJURY

- New Zealand Review – Health Outcomes International
- International Review – Dr Nicholas Kendall

These two reports will provide a thorough and critical review of methods and systems used to measure and monitor occupational disease and injury in New Zealand and internationally.

A secondary objective of these reports is to determine the ability of surveillance systems to measure and monitor changes in work methods and organisation.

2. REVIEW OF SURVEILLANCE AND CONTROL OF WORKPLACE EXPOSURES (THIS REVIEW IS IN PARTNERSHIP WITH THE OFFICE OF THE AUSTRALIAN SAFETY AND COMPENSATION COUNCIL)

- International Review – Victorian Institute of Occupational Safety and Health, University of Ballarat

This report will identify the nature and range of systematic surveillance systems that assess occupational exposures to hazards (but not health monitoring).

Although the emphasis is on surveillance of exposures, in some instances this may directly lead to the control of exposures. The discussion of surveillance systems should also include issues of control where relevant information is available.

NOHSAC will make recommendations to the Associate Minister of Labour in a report that will be released in November 2005.

NOHSAC ISSUED REQUESTS FOR PROPOSALS FOR TWO FURTHER REPORTS IN JUNE 2005:

“National Profile of Occupational Health and Safety in New Zealand”

This review will develop a comprehensive national profile of occupational safety and health in New Zealand. The selection of items and indicators for the profile should be referenced and compatible with the requirements of the proposed International Labour Organisation Promotional Framework for Occupational Safety and Health.

“The Social and Economic Costs of Occupational Disease and Injury in New Zealand”

The report will provide quantitative estimates of the social and economic costs of occupational disease and injury in New Zealand. The estimates of the social and economic costs of occupational disease and injury in New Zealand will be based on the disease and injury information contained with the NOHSAC report “The Burden of Occupational Disease and Injury in New Zealand: Technical Report”.

NOHSAC will consider the findings of these reports and make recommendations to the Associate Minister of Labour in a report entitled “Improving Occupational Health and Safety in New Zealand”. This report will be released in July 2006.

NOHSAC SECRETARIAT

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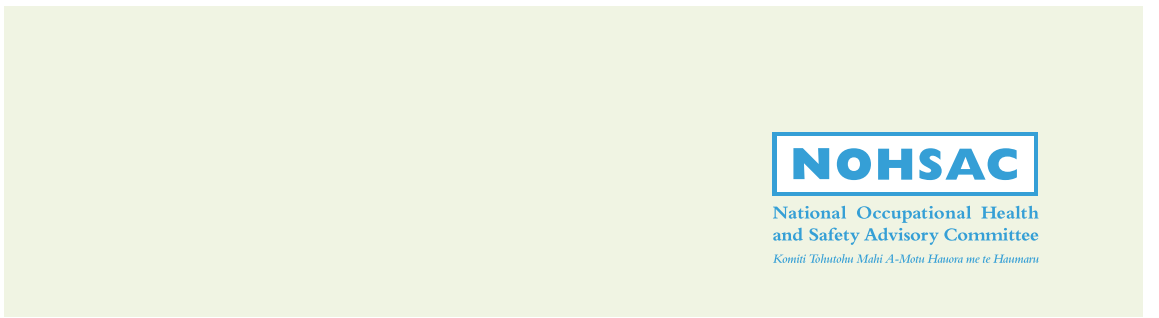
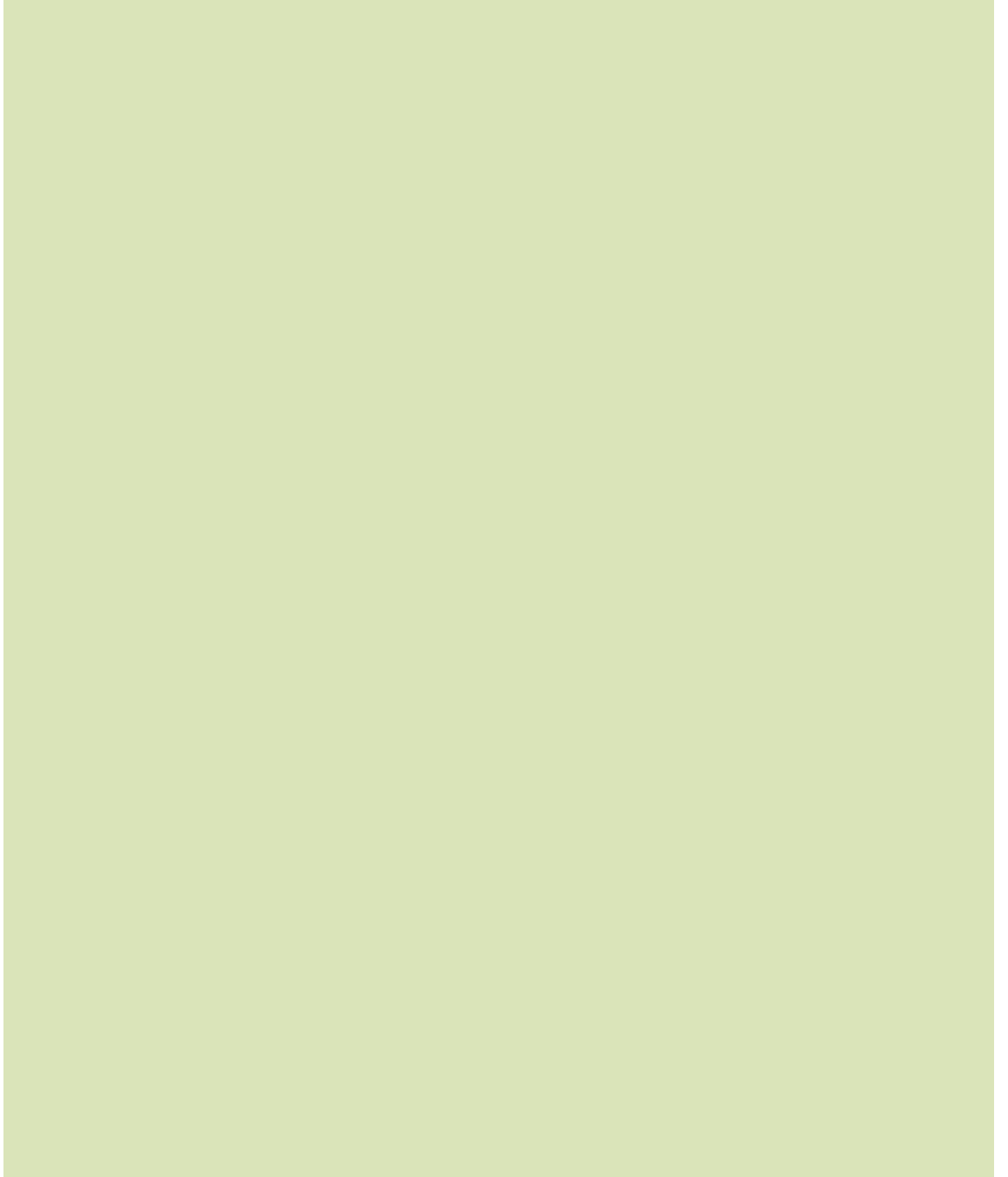
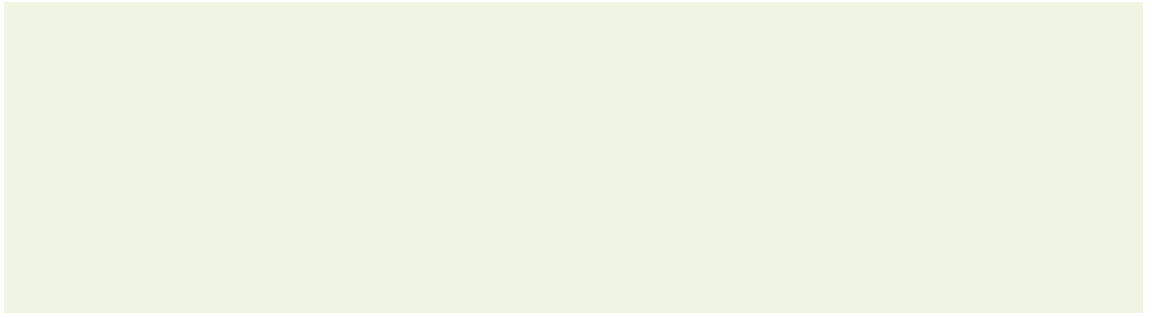
Website: www.nohsac.govt.nz

Postal address: PO Box 3705, Wellington

NOHSAC WEBSITE

The NOHSAC website contains:

- a research database
- Requests for Proposals
- reports – “The Burden of Occupational Disease and Injury in New Zealand”:
 - review of specific occupational diseases and injuries
 - estimates of burden
 - index to exposures and occupations.



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