

NOHSAC

National Occupational Health
and Safety Advisory Committee
Kōmiti Tūhutohu Mahi A-Motu Hauora me te Haumanu



**NATIONAL PROFILE OF
Occupational Health
and Safety
IN NEW ZEALAND**

**REPORT TO
THE MINISTER
OF LABOUR**

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List of Acronyms

ACC	Accident Compensation Corporation
ACOP	approved code of practice
ACOSH	Advisory Committee on Occupational Safety and Health
ASCC	Australian Safety and Compensation Council
AWCBC	Association of Workers' Compensation Boards of Canada
CAA	Civil Aviation Authority
CCDOSH	Co-ordinating Committee of Departments on Occupational Safety and Health
CCOHS	Canadian Centre for Occupational Health and Safety
CPI	consumer price index
CTU	Council of Trade Unions
CVIU	Commercial Vehicle Investigation Unit
DoL	Department of Labour
EASHW	European Agency for Safety and Health at Work
ERMA	Environmental Risk Management Authority
EU	European Union
FAII	Federation of Accident Insurance Institutions
FIOH	Finnish Institute of Occupational Health
FTE	full-time equivalent

GDP	gross domestic product
HRC	Health Research Council
HRSDC	Human Resources and Social Development Canada
HSC	Health and Safety Commission
HSE	Health and Safety Executive
HSE Act	Health and Safety in Employment Act 1992
HSNO Act	Hazardous Substances and New Organisms Act 1996
IPRC Act	Injury Prevention, Rehabilitation, and Compensation Act 2001
ILO	International Labour Organization
ITO	industry training organisation
JRP	joint research portfolio
MNZ	Maritime New Zealand
MSAH (Finland)	Ministry of Social Affairs and Health
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
NODS	Notifiable Occupational Diseases System
NOHSAC	National Occupational Health and Safety Advisory Committee
NORA	National Occupational Research Agenda
NZQA	New Zealand Qualifications Authority
NZIPS	New Zealand Injury Prevention Strategy
OHS	occupational health and safety
OSH	Occupational Safety and Health Service
OSHA	Occupational Safety and Health Administration
OSHA (Finland)	Occupational Safety and Health Administration
WHO	World Health Organization
WHSS	Workplace Health and Safety Strategy
WSMP	Workplace Safety Management Practices
WSE	Workplace Safety Evaluation

Foreword

The National Occupational Health and Safety Advisory Committee (NOHSAC) was established in June 2003 to provide independent advice directly to the Minister of Labour on major occupational health and safety issues. During this time, the committee has produced a series of reports that have not only outlined the burden of occupational disease and injury in New Zealand but also discussed the need for an increased commitment to the prevention of occupational disease and injury based on:

- improved data collection
- surveillance and control of workplace exposures
- prevention programmes that address not only occupational injury but also occupational health.

This report outlines some of the key principles underpinning New Zealand's current approach to preventing occupational disease and injury in the workplace and summarises New Zealand's occupational health and safety system.

The report also outlines key issues identified by the research and includes stakeholder comments regarding the current occupational health and safety system.

Strategies and priorities in occupational health and safety cannot be developed by government agencies alone. Workplaces in New Zealand are characterised by increasingly complex work processes and changing working conditions, which are combining to create new or changing types of hazards. The setting of priorities and strategies should be carried out in conjunction with employers and employee representatives and be based on evidence and accurate and comprehensive disease and injury data.

It is clear from our research that the agencies responsible for occupational health and safety in New Zealand are increasingly under-resourced. However, increased spending on occupational health and safety alone will not necessarily lead to a corresponding reduction in work-related disease and injury. Prevention programmes and health and safety policies developed by government agencies must be based on evidence and evaluated for effectiveness. Workplaces must be able to access relevant and current information from government agencies to assist in the development of effective health and safety systems in workplaces.

All of the elements of an effective occupational health and safety system are potentially present in New Zealand, but these elements are spread across a number of government agencies and often not co-ordinated. This report proposes a way forward that will lead to a more effective occupational health and safety system.



PROFESSOR NEIL PEARCE

Chair, National Occupational Health and Safety Advisory Committee

Introduction

The overriding aim of all comprehensive occupational health and safety systems is to prevent work-related disease and injury. NOHSAC has produced a series of reports¹⁻³ that show that, in many key areas, New Zealand does not have effective systems in place to prevent work-related disease and injury.

- *The burden of occupational disease and injury in New Zealand: Report to the Associate Minister of Labour.*
- *Surveillance of occupational disease and injury in New Zealand: Report to the Minister of Labour.*
- *Surveillance and control of workplace exposures in New Zealand: Report to the Minister of Labour.*

These reports have contained several recommendations for improving occupational health and safety in New Zealand and have been accompanied by corresponding technical reports providing details of the current situation in New Zealand and international practice.

The first NOHSAC technical report, *The burden of occupational disease and injury in New Zealand*,⁴ shows that, each year in New Zealand, there are:

- 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 six percent in permanent disability.

According to the Workplace Relations Ministers' Council,⁵ in 2004–05, New Zealand's preliminary incidence of work-related injury and disease was 13.2 cases per 1,000 employees. The data for New Zealand showed a 15 percent increase in incidence rates from 2000–01 to 2003–04. Though the New Zealand rate remains lower than that of Australia, the New Zealand compensation scheme does not provide the same level of coverage of occupational diseases (such as work-related stress) as Australia.

The economic and social costs of occupational disease and injury in New Zealand are estimated to be \$20.9 billion per annum.⁶ (This includes direct financial costs of \$4.9 billion.)

Further reports from NOHSAC have clearly identified that New Zealand needs a comprehensive surveillance system that incorporates both the surveillance of occupational disease and injury,^{2, 7, 8} and the surveillance of workplace exposures and controls as a key element of an effective occupational health and safety system.^{3, 9, 10}

The conclusions and recommendations of this report are intended to provide an overview of the governance and practice of occupational health and safety in New Zealand, and options for future development. As background information for this report, in 2005/2006, NOHSAC commissioned two technical reports described below.

Occupational health and safety in New Zealand: NOHSAC Technical Report 7¹¹

This report covers:

- general information
- national occupational health and safety systems
- national occupational health and safety programmes
- barriers to occupational health and safety.

In addition, the report includes information on:

- co-ordination and collaboration mechanisms at national and enterprise levels, including national programme review mechanisms
- technical standards, codes of practice and guidelines
- educational and awareness-raising structures
- specialised technical, medical and scientific institutions with linkages to various aspects of occupational health and safety, including research institutes and laboratories
- human resources active in the area of occupational health and safety, such as inspectors, officers, occupational physicians and hygienists
- occupational accident and disease statistics
- policies and programmes of organisations of employers and workers
- regular or on-going activities related to occupational health and safety, including international collaboration
- related data addressing, for example, demography, literacy, economy and employment, as available, as well as any other relevant information.

Management and governance of occupational health and safety in five countries (United Kingdom, United States of America, Finland, Canada, Australia): NOHSAC Technical Report 8¹²

This report contains information on the selected countries in relation to:

- general information
- national OHS systems
- national OHS programmes.

In the following sections of this report to the Minister, we first summarise the findings of these two technical reports, before drawing conclusions and making recommendations.

The New Zealand Injury Prevention Strategy (NZIPS) provides the framework for the injury prevention activities of government agencies, local government, non-government organisations, communities and individuals.

The New Zealand Injury Prevention Strategy has six priority areas. Each of the priority areas is led by specific government agencies:

- Motor vehicle crashes – Ministry of Transport
- Suicide and deliberate self harm – Ministry of Health
- Falls – ACC
- Assault – Ministry of Justice and Ministry of Social Development
- Drowning – ACC
- Workplace injuries including occupational diseases – Department of Labour.

The Workplace Health and Safety Council was established in May 2007 to advise government on workplace health and safety matters. The council's role is to provide leadership and co-ordination, and advice on relevant legislation, standards and policies. In particular, council members will focus on the best ways to make progress with the Workplace Health and Safety Strategy (WHSS) for New Zealand to 2015.

The Workplace Health and Safety Strategy for New Zealand to 2015 provides the framework for workplace health and safety activities of government agencies, local government, unions, employer and industry organisations, other non-government organisations and workplaces, and is led by the Department of Labour. The strategy will be referred to in this report.

Occupational Health and Safety in New Zealand

INTERNATIONAL OBLIGATIONS

New Zealand is a party to a small number of International Labour Organization (ILO) Conventions; however, most of these are older Conventions, and New Zealand has not ratified some of the more recent ILO documents. There may not be any advantages to ratifying these Conventions, as the text can provide for very prescriptive regimes that do not fit with the performance-based approach adopted in New Zealand's legislative framework. Moreover, in many cases, the approach reflected in New Zealand's legislation results in stricter controls than are provided by the Convention.

NEW ZEALAND'S LEGISLATIVE FRAMEWORK

Three main Acts comprise New Zealand's health and safety legislative framework:

- The Health and Safety in Employment Act 1992 is the principal health and safety statute, and aims to prevent harm occurring in the workplace.
- The Hazardous Substances and New Organisms Act 1996 provides for the management of hazardous substances and new organisms in the workplace.
- The Injury Prevention, Rehabilitation, and Compensation Act 2001 establishes New Zealand's compensation and rehabilitation system.

The Health and Safety in Employment Act 1992 (the HSE Act) and the Hazardous Substances and New Organisms Act 1996 (the HSNO Act) provide an enabling and performance-based system modelled on the United Kingdom Robens approach. Under each Act, duty holders, such as persons who control places of work, employers and employees and others, are required to take all practicable steps to remove, control, or otherwise manage hazards in the workplace. To ensure compliance, the Acts also give specific duties to inspectorates. The Department of Labour (DoL) administers and enforces the HSE Act in most workplaces. Maritime New Zealand (MNZ) and the Civil Aviation Authority (CAA) administer and enforce the HSE Act in the maritime and aviation sectors respectively.

Further detail on how to achieve required performance is provided through more prescriptive regulations, approved codes of practice, standards, industry codes of practice and guidelines, in keeping with the performance-based approach of the HSE and HSNO Acts.

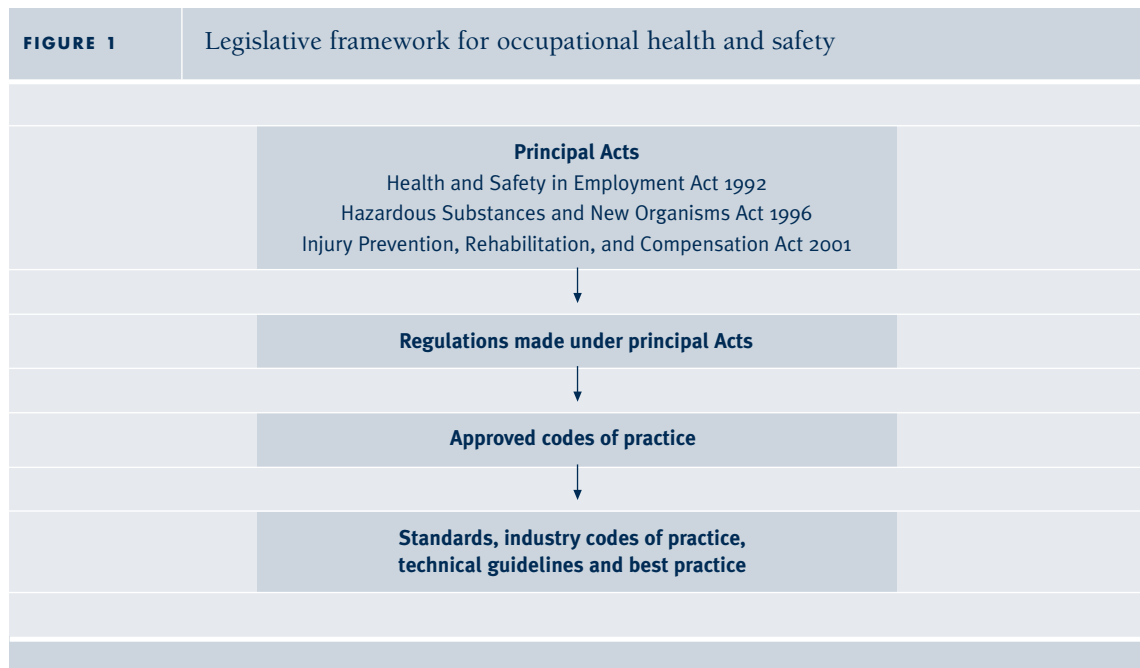
The HSNO Act is part of New Zealand's framework to ensure that people in workplaces are not harmed by exposure to any such substances. The legislative framework set out by the HSNO Act is similar to that provided for by the HSE Act, in that there is a principal Act (the HSNO Act), a suite of regulations made under the principal Act, and approved codes of practice and approved guidelines.

The Ministry for the Environment administers the HSNO Act, although the Act charges the Environmental Risk Management Authority with many functions. Responsibility for enforcing the HSNO Act falls to the following agencies:

- The Department of Labour (in respect of workplaces)
- The Ministry of Economic Development (in respect of gas installations)
- The New Zealand Police (in respect of motor vehicles and railways)
- The Civil Aviation Authority (in respect of aircraft and aerodromes)
- Maritime New Zealand (in respect of ships)
- The Ministry of Health (in respect of protecting the public health)
- Territorial authorities (in respect of all other locations).

The Injury Prevention, Rehabilitation, and Compensation Act 2001 (the IPRC Act) provides the basis for New Zealand’s no-fault, 24-hour insurance scheme for work-related injury and disease. It also provides a mandate for the Accident Compensation Corporation to undertake activities aimed at preventing and reducing the incidence of injury at work, including the operation of specific incentives schemes for workplaces.

The three main Acts are supported by a number of other Acts and regulations that can have an impact on workplace health and safety (even though this is not a key purpose of these instruments): the Electricity Act 1992, the Gas Act 1992, the Smokefree Environments Act 1990, the Radiation Protection Act 1965 and the Health Act 1956, and regulations made under these Acts or other revoked legislation.



Overall, New Zealand’s legislative system provides for a relatively simple, performance-based and consistent approach to preventing harm in the workplace.

NATIONAL BUDGET FOR OCCUPATIONAL HEALTH AND SAFETY

The national budget for occupational health and safety activities is approximately \$47 million. Approximately \$37 million is provided through the Department of Labour for compliance and enforcement services (funded through Vote: Labour).

TABLE 1		Vote: Labour appropriation for occupational health and safety services 2005/06	
FUNDING CATEGORY		AMOUNT (GST EXCL)	
Policy advice:			
•	Workplace Health and Safety Strategy		\$2,289,000
•	Health and safety policy work in general		\$833,000
•	Funding for NOHSAC (including DOL/HRC Occupational Health Research Fund)		\$896,000
	Subtotal		\$4,018,000
Services to promote and support safe and healthy workplaces:			
•	Inspection and advice service delivery (including the hazardous substances inspection function)		\$16,723,000
•	Overheads associated with running the inspectorate (eg, office costs, management, legal services, travel, contact centre, etc.)		\$12,627,000
•	Training		\$477,000
•	Special projects		\$1,768,000
	Subtotal		\$29,750,000
Services to promote the safe management of hazardous substances in the workplace and amusement devices:			
•	Co-ordination of hazardous substances activity and the management of non-Department specialists (eg, training, sub-contracting local authorities for enforcement and education, legal costs, etc.)		\$2,200,000
	Subtotal		\$2,200,000
Additional funding for occupational health			\$730,000
	Total		\$36,698,000

The Accident Compensation Corporation provides funding for injury prevention activities through the levy system. This amounted to approximately \$10 million in 2004/05. This includes the operation of specific incentives and awareness-raising programmes but does not include levy discounts.

The cost of work-related injury and disease claims to the Accident Compensation Corporation is provided through a self-funded system of levies paid by employers and the self-employed and is not therefore included in this total.

The amount of funding provided to prevent workplace harm appears to be significantly less than what may actually be required to address these issues. The direct financial cost of occupational disease and injury amounts to approximately NZ\$4.9 billion,⁶ while the expenditure to prevent such harm currently amounts to approximately NZ\$47 million. Funding details for 2005/06 and 2006/07 for health and safety activities within the Department of Labour are listed in Appendix 2.

In addition, in real terms, the approximate overall funding provided for health and safety services in 2005/06 is less than the amount provided for delivery of these services in 1989/90 as outlined in Table 2, page 8.

TABLE 2 Funding for occupational health and safety services in 1989		
AGENCY	FUNDING	PURPOSE OF FUNDING
ACC	\$2,800,000	Consultant services (eg, safety and accident prevention education, grants, etc.)
	\$4,792,722 ⁱ	Financial assistance programme to promote injury and prevention and rehabilitation
	\$29,500 ⁱ	Research
Area health boards	\$3,150,000 ⁱⁱ	80 FTE staff involved in occupational health (amounting to \$2.8 million in salaries and a further \$350,000 in operating costs)
Department of Health	\$1,598,500	\$478,300 Operations \$290,000 ICI Ministerial Committee \$60,200 Educational resources \$770,000 Specialist analytical and monitoring services (eg, services provided by the Department of Scientific and Industrial Research (DSIR) and the National Audiology Centre. Further funding (amount unspecified) was also provided to the National Radiation Laboratory and the National Poisons Centre to provide specialist services)
Department of Labour	\$18,400,000	Operational costs including salaries for 267 staff, equipment and overheads
Ministry of Energy	\$3,580,000 ⁱⁱⁱ	The Mining Inspection Group (salaries for 44 staff)
Ministry of Transport	\$2,243,000	Staffing and some operational costs associated with the Engineering Safety branch (73 surveyors and 15 support staff) but some overheads were excluded
	\$36,593,722	

Source: Department of Labour³

THE COMPLIANCE AND ENFORCEMENT SYSTEM

Duty holders' compliance with the legislative provisions of the HSE Act and the HSNO Act is achieved through a voluntary compliance regime, backed up by statutory enforcement mechanisms. While the compliance and enforcement system is based on the Robens principle of "One Act, One Authority", the operational responsibility is, in reality, split over several organisations with inspectorate and enforcement powers:

- The Department of Labour is the lead agency responsible for ensuring compliance with the HSE and HSNO Acts in respect of all workplaces except operating aircraft and ships.

i This funding was identified as occupational health and safety funding but was not transferred as the services were considered to be best delivered by ACC.

ii This included 25 FTE Health Protection Officers and 55 FTE in public health nurses and Medical Officers of Health.

iii The resources identified by the transition team excluded \$204,000 in capital.

- Maritime New Zealand is the lead agency for enforcing legislative provisions onboard ships, with technical support provided by the Department of Labour.
- The Civil Aviation Authority is the lead agency for enforcing legislative provisions on operating aircraft and for enforcing the HSNO Act in respect of aerodromes.
- The Commercial Vehicle Investigation Unit (a unit of the New Zealand Police) is responsible for enforcing the provisions of the HSNO Act in relation to the commercial vehicle fleet.
- The Ministry of Health enforces the Smokefree Environments Act 1990, some older regulations made under the Health Act 1956 and the now-revoked Factories and Commercial Premises Act 1981.

The relationships between the Department of Labour and the other agencies are governed through a number of mechanisms, including formal Prime Ministerial delegation of functions and Memoranda of Understanding.

The Department of Labour commenced the restructuring of the operation of its regional health and safety inspectorate and centralised supporting professional and technical services in February 2005. Appendix 3 shows regional and head office staff levels in the Department of Labour as at 31 January 2007.

THE REHABILITATION AND COMPENSATION SYSTEM

The lead agency for the rehabilitation and compensation system is the Accident Compensation Corporation (ACC). This agency is charged with delivering a 24-hour, no-fault, comprehensive insurance system for personal injuries that occur in New Zealand (including work-related injuries). ACC has a key function of preventing injury, which is given effect through incentives programmes and other specific programmes targeted at reducing the impact of occupational injury and disease.

The coverage provided by the ACC system appears to be a good model for addressing work-related harm, although there are a small number of areas for potential improvement (including clarity over leadership in injury prevention activities and a broader scope to the work-related injuries and diseases covered by the system).

EDUCATION AND TRAINING

Education and training covers a number of different components of the occupational health and safety system, including the qualification of health and safety professionals (for example, occupational medicine practitioners, occupational hygienists and ergonomists) and the training available to health and safety representatives elected under the HSE Act. Further training is available through the private market. Overall, there are a number of qualifications and unit standards available to people who wish to work in the occupational health and safety field. However, there are also limited training opportunities available for certain professional groups (for example, occupational physicians, occupational hygienists and general practitioners).

There are two key facilities that provide dedicated health and safety training: the Occupational (Health and Safety) Development Centre (ODC) – a unit of the Department of Labour that provides practical training for the inspectorate – and a purpose-built training centre, CAPENZ, run in partnership between regional industry and ACC in Taranaki. Additional private training in a range of health and safety issues is provided by private trainers. Health and safety representative training is available through 12 approved courses operated by a range of providers, including the

unions, Business New Zealand, and industry-specific training providers such as Site Safe. Approximately 20,000 people have been trained in these courses. Funding to subsidise this training is available through the Employment Relations Education Contestable Fund.

EXPERT ADVICE

There is a range of mechanisms and institutions that provide access to expert advice. These include ministerial advisory committees and panels to give advice on specific issues relating to occupational health and safety, specialist panels convened by government agencies to provide specific technical advice on issues, and a range of analytical and monitoring services provided by laboratories and other technical bodies. These services are provided at both the localised and national levels.

COLLABORATION AND LEADERSHIP

The occupational health and safety sector is diverse, and many players are required to take actions in order to support the prevention of work-related harm. New Zealand has a number of mechanisms to support collaboration and co-ordination at all levels. These include:

- political collaboration through the Injury Prevention Ministerial Committee
- informal relationships between key Crown agencies and their social partners
- collaboration between government agencies responsible for enforcing various components of the system (for example, through formal mechanisms such as Memoranda of Understanding and interagency groups, and more informal, relationship-driven mechanisms)
- government and industry partnerships to promote health and safety
- industry groups formed to promote occupational health and safety.

With so many agencies involved in health and safety, leadership is vital. In New Zealand, leadership of the compliance and enforcement sector and of the Workplace Health and Safety Strategy is provided through the Department of Labour. Leadership of the rehabilitation and compensation sector is provided by the Accident Compensation Corporation through the New Zealand Injury Prevention Strategy.

WORKFORCE

The health and safety workforce is very diverse, both in terms of the functions undertaken by specific classes of practitioner and in terms of the levels of qualification held. However, limited information was available for some professions, which would normally be included in such a discussion.

As such, this report focuses only on the health practitioner workforce, selected health and safety professionals, the inspectorate workforce, and the Accident Compensation Corporation's full-time equivalent (FTE) staff.

The inspectorate workforce comprises a range of professional warranted officers who undertake statutory functions under the HSE and HSNO Acts. These officers are employed by the Department of Labour, Maritime

New Zealand, the Civil Aviation Authority and the Commercial Vehicle Investigation Unit. This amounts to approximately 270 FTE staff.

TABLE 3	Historical occupational health resources 1991–2005		
	1992/93	2004	2005
Head office			
Departmental medical practitioners	5 staff (part FTE)	2.4 FTE (15 staff)	2.5 FTE (13 staff)
Ergonomists	1	0	0
NODS registrar	0	1	0
Noise scientists	1	0	0
Nursing advisors	1	0	0
Occupational hygienists	5	3	0
Occupational physician	1	0	0
Occupational scientists	3	2	2 ^{iv}
Policy advisors and support staff	2	2	2
Regional offices			
Health and safety inspectors ^v	Not available	130	142
Occupational health nurses	37	13	15

Source: Collated from information supplied by the Department of Labour and the Ministry of Health.

Current Department of Labour full-time equivalent (FTE) staff numbers for 2007 are listed in Appendix 3.

According to the Workplace Relations Ministers' Council,⁵ the number of active inspectors^{vi} in relation to occupational health and safety has been decreasing since 2001.

TABLE 4	Number of field active inspectors in New Zealand per 10,000 employees	
2001–01		1.2
2001–02		0.9
2002–03		0.8
2003–04		0.8
2004–05		0.8

A small number of health professionals work in the field of occupational health, including occupational physicians, occupational health nurses and physiotherapists.

These professionals operate in a range of settings, including working for key government agencies, in private practice and for industry. A small number of ergonomists and occupational hygienists also practise in New Zealand. These health and safety professionals are represented by a range of professional bodies that focus on training and continued professional development.

iv There is currently one vacancy at the Department of Labour for this position.

v Some health and safety inspectors have qualifications in occupational health but the data does not enable a clear distinction of these inspectors from other safety-oriented inspectors.

vi Field active inspectors are defined as gazetted inspectors whose role is to spend the majority of their time enforcing provisions of the OHS legislation directly with workplaces i.e. a compliance field role. They do not include managers of the inspectorate.

There are also a number of health and safety consultants operating. These consultants provide a range of professional services to industry and businesses. At present, health and safety consultants are unregulated, and this raises concerns about the advice provided to workplaces in relation to occupational health and safety.

NATIONAL POLICY FRAMEWORK

New Zealand is serviced by two key national policies to support the prevention of work-related injury and disease: the New Zealand Injury Prevention Strategy (NZIPS) and the Workplace Health and Safety Strategy (WHSS). The WHSS, in particular, provides a clear set of strategic outcomes with regard to work-related injury and disease and details the actions necessary to achieve them. Priority areas for the WHSS are:

- airborne substances
- workplace vehicles
- manual handling
- slips, trips and falls
- psychosocial work factors
- vulnerable workers
- small business
- high-risk industries.

NATIONAL PROGRAMMES

There are four national programmes run by the Accident Compensation Corporation to reduce work-related injury:

- ACC Accredited Employer (Partnership) Programme
- Workplace Safety Management Practices (WSMP) programme
- Workplace Safety Evaluation (WSE) programme
- Workplace Safety Discount (WSD) for some small businesses and self-employed people.

These programmes aim to support organisations in improving workplace health and safety practice through incentives in the form of ACC levy discounts or upwards adjustments in ACC levies. Other programmes supported by the Accident Compensation Corporation allow industry groups to meet, and develop initiatives that address issues specific to their particular industry (for example, the Safer Industries programme).

SURVEILLANCE

Surveillance systems involve the on-going and systematic collection, analysis and interpretation of information on occupational disease and injury so that the major hazards can be identified, preventative action can be taken, and the effectiveness of prevention can be evaluated.

Occupational disease and injury surveillance in New Zealand, however, is characterised by an ad hoc arrangement of multiple organisations running different data collection systems. Some of the key organisations involved are the Injury Information Manager, the Accident Compensation Corporation, the Department of Internal Affairs

(through the births, deaths and marriages database), the Department of Labour (through the NODS database and WorkBench), the New Zealand Health Information Service (through the National Minimum Dataset, the New Zealand Cancer Registry and the New Zealand Mortality Collection), the Institute of Environmental Science and Research (through the EpiSurv database and the Chemical Injury Surveillance System), the Civil Aviation Authority and Maritime New Zealand. The Injury Surveillance Ministerial Advisory Panel was established in 2003 to provide independent advice to the government about injury-related information.

A number of issues with the surveillance of occupational disease and injury have been identified by NOHSAC.^{2,7,8}

RESEARCH ACTIVITIES

There is currently no overall strategy for occupational health and safety research in New Zealand. Research into work-related health and safety issues is funded through two key channels: public funding (such as that provided via the Health Research Council and through other government agencies, like the Department of Labour and the Accident Compensation Corporation, or independent bodies such as NOHSAC) and private funding. In 2005, the Department of Labour established a joint Occupational Health Research Fund of approximately \$1.8 million, but the fund remains largely unspent.

Research is carried out by individuals and specific organisations, including:

- the Centre for Public Health Research (Massey University) – research into occupational health topics including respiratory disease and cancer
- the Injury Prevention Research Unit (University of Otago) – research into injury surveillance and initiatives to reduce injury incidence in both work and non-work settings
- the Injury Prevention Research Centre (University of Auckland) – multi-disciplinary research to identify the causes of injuries and effective ways to prevent or reduce injury, including work-related injury
- the Centre for Human Factors and Ergonomics – solutions-focused research into ergonomics and design
- the Sleep/Wake Research Centre (Massey University) – research into fatigue and shift work
- the Centre for Ergonomics, Occupational Safety and Health (Massey University) – research and consultancy and provision of specialist courses and information services in ergonomics and occupational safety and health.

Generally, New Zealand research tends to focus on occupational injury rather than occupational health. This is reflected in the research priorities identified for funding.

AWARENESS-RAISING ACTIVITIES

A significant number of awareness-raising activities are currently undertaken in New Zealand with regard to general injury prevention. These include publications, websites and electronic material, and public broadcasts such as television and radio advertisements. While much of this information is targeted at general injury prevention activities, it can also feed into behavioural and attitudinal change in the workplace.

Stakeholder Concerns

During consultation with stakeholders, several concerns were identified in relation to occupational health and safety in New Zealand. (A list of key stakeholders consulted is listed in Appendix 1). These comments are summarised in the following section.

LACK OF SUPPORT AND GUIDANCE FOR WORKPLACES

- There are gaps in the guidance material that supports compliance with the performance-based framework and in the resources to support such a framework (for example, the approved codes of practice are not always up to date, and some are inconsistent with current best practice). The following table outlines the current approved codes of practice issued by the Department of Labour, date of publication and scheduled review dates.

TABLE 5 Current HSE approved codes of practice		
TITLE	DATE OF PUBLICATION	SCHEDULED REVIEW DATE
Forestry		
ACOP for health and safety in tree work – Part 1 (Arboriculture)	1994	Under review
ACOP for health and safety in tree work – Part 2 (Maintenance of trees around power lines)	1996	Under review
ACOP for health and safety in tree work – Part 3 (River and stream operations)	1998	Not stated
ACOP for forest operations – Part 5 (Timber stacking, packeting and transportation)	1994	Under review
ACOP for health and safety in forest operations	1999 Reviewed: 2005	Not stated
ACOP for helicopter logging	2001	Not stated
Industrial processes		
ACOP for safety in photoengraving and lithographic processes	1993	Not stated
ACOP for the prevention, detection and control of fire and explosion in New Zealand dairy industry spray drying plant	1993	Not stated
Machinery		
ACOP for the design, safe operation, maintenance and servicing of boilers	1996 Reviewed: 2000 2004	2005
ACOP for roll over protective structures on tractors in agricultural operations	2001 Reviewed: 2004	Under review
ACOP for the design, manufacture, supply, safe operation, maintenance and inspection of cranes	2001	Under review
ACOP for training operators and instructors of powered industrial forklifts	1995	Under review
ACOP for passenger ropeways in New Zealand	1998 Reviewed: 2003	Not stated
ACOP for pressure equipment (excluding boilers)	2001	Not stated
ACOP for load-lifting rigging	2001	Not stated
ACOP for power-operated elevating work platforms	1995	2005

TITLE	DATE OF PUBLICATION	SCHEDULED REVIEW DATE
Construction and building maintenance		
ACOP for operator protective structures on self-propelled mobile mechanical plant	1999	Under review
ACOP for power-actuated hand-held fastening tools	1995	Under review (revocation)
ACOP for the safe erection and use of scaffolding	1995	Under review (revocation)
ACOP for the safe handling, transportation and erection of pre-cast concrete	2002	Not stated
Mining		
ACOP for the prevention of sulphur fires and explosions	1993	Not stated
Chemicals		
ACOP for the management of substances hazardous to health in the place of work	1997	Under review
ACOP for the safe use of timber preservatives and anti-sapstain chemicals	1994	Not stated
ACOP for health and safety in the manufacture of paint, printing inks and resins	1993	Not stated
ACOP for the safe use of isocyanates	1994	Not stated
General		
ACOP for the safe use of visual display units in the place of work	1995	Under review
ACOP for the management of noise in the workplace	1996 Reviewed: 2002	Not stated
Source: This information was sourced from an internal Department of Labour paper.		

- Responsible agencies need to prioritise the development of resources to assist duty holders in complying with the performance-based approach of the legislative framework.
- There are some interface issues between the HSE and HSNO Acts (particularly in relation to differing applications of the performance approach, and to duplication of material that assists duty holders to comply under both Acts).
- The compliance costs associated with the performance-based framework do not fall equally on all businesses, with small businesses (less than 10 employees) likely to bear greater costs per person than larger businesses.
- The content of publications needs to be simple, accessible and appropriate to the target audience.

RESOURCING TO PREVENT WORK-RELATED INJURY AND DISEASE APPEARS TO BE INSUFFICIENT WHEN COMPARED TO THE TOTAL COST OF SUCH INJURY AND DISEASE

- The overall resourcing provided to the Department of Labour to administer and enforce the HSE and enforce the HSNO Act in workplaces appears to be insufficient, given economic growth and inflation.

GAPS IN EDUCATION AND TRAINING

- There are limited New Zealand-based training opportunities for occupational hygienists and certain health practitioners wishing to enter occupational medicine, as well as limited support to assist in managing other case-loads while studying.
- Only limited training in occupational medicine is provided to general practitioners during study for the Bachelor of Medicine/Bachelor of Surgery qualification.
- The uptake of health and safety representative training may not be consistent across all sectors, with lower engagement in training occurring in the transport, construction and on-hire sectors.
- Limited training opportunities are available for approved handlers and enforcement officers warranted under the HSNO Act.
- The quality of privately-provided training in occupational health and safety appears to vary considerably, and there are few standards applied to ensure that purchasers are aware of the quality of training offered.
- Accessing small- and medium-sized employers can be difficult, and it is necessary to ensure that resources developed for this group are appropriate.

ISSUES AND PROBLEMS WITH COLLABORATION AND LEADERSHIP IN OCCUPATIONAL HEALTH AND SAFETY

- Sometimes the lead agency for health and safety is not clear (for example, a lack of clarity around which agency is the lead for education-based injury prevention activities, and/or resource and technical expertise limitations at the Department of Labour).
- More seamless service between the Department of Labour and the Accident Compensation Corporation is required.

WORKFORCE

- The Department of Labour does not have the technical capacity to provide effective leadership in occupational health and safety and, in particular, has lost a significant level of occupational health capacity that was transferred from the Ministry of Health.
- There appear to be shortages across a number of technical specialities including epidemiologists, ergonomists, biostatisticians, toxicologists, scientists and researchers working in occupational health and safety and in occupational medicine.
- Leadership in occupational medicine is required.
- There are no registration or education requirements for health and safety consultants.
- Groups within the workforce do not hold consistent qualifications.

- There appears to be a lack of awareness about the role of certain professional groups in occupational health and safety.
- The development of the occupational health and safety workforce may be facilitated by the formulation of a comprehensive workforce development strategy.

ACC INCENTIVE PROGRAMMES

- Evaluations of the incentive programmes have been limited by poor design, and subsequently, it is difficult to ascertain whether these programmes have had a positive impact on reducing work-related injury and disease in those exposed to the programmes in the workplace.
- Few and poorly designed evaluations of public awareness campaigns mean that it is difficult to assess the impact of these campaigns on behavioural and attitudinal change.

SURVEILLANCE

The problems associated with the surveillance of occupational health and safety include:

- ad hoc organisation
- limited data on occupational disease
- definitional issues
- limited co-ordination
- aggregation of collected statistics.

RESEARCH

- Research priorities need to be clearly articulated and co-ordinated.
- There is a limited amount of funding available in New Zealand for occupational health and safety research, and developing a research strategy may help to co-ordinate research so that the most pressing research topics are identified and undertaken.
- There appears to be less focus on researching and monitoring occupational health issues than occupational safety issues.

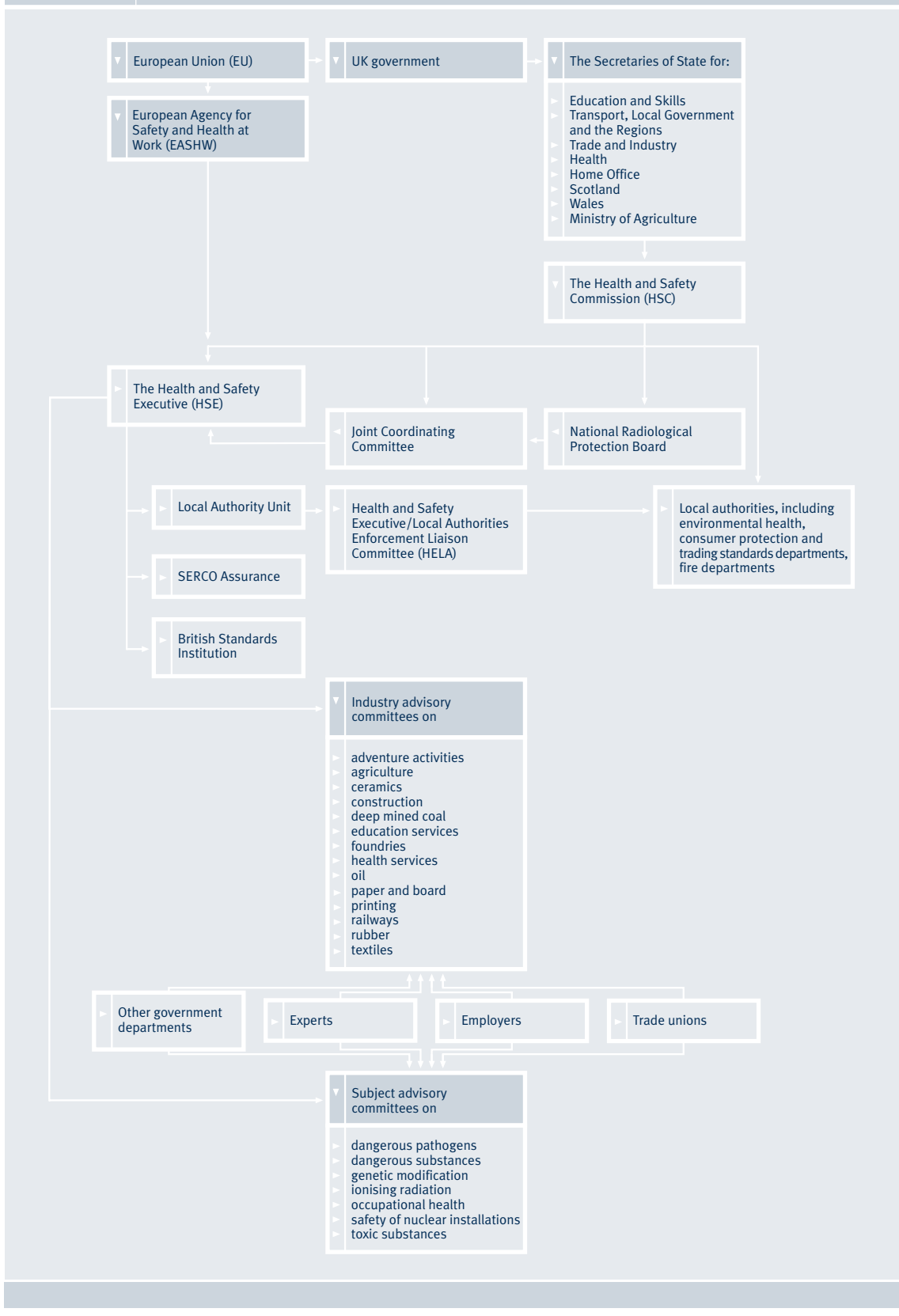
National Profiles of Occupational Health and Safety in Five Countries (United Kingdom, United States of America, Finland, Canada, Australia)

UNITED KINGDOM

There is a single governance body with enabling legislation and regulations. The Health and Safety Executive (HSE) drives policy, via the Health and Safety Commission (HSC), directly to the government. However, the role of EU directives has become more relevant, with the HSE now acting as a portal for the European Agency for Safety and Health at Work (EASHW). The major bonus from this is improving harmonisation with other European systems, allowing greater comparability and data pooling. The HSE and local authorities have responsibility for occupational safety and health, but the HSE is the final authority. Both the HSE and local authorities conduct inspections and employ inspectors. Currently, about 38 percent of the HSE's staff are inspectors. Enforcement is through the issuing of notices, and prosecutions when required. There is a lack of a co-operative or collaborative approach, and the main focus is on employers, with much less on employees. The HSE provides information, but is relatively passive with respect to education. Current data collection systems are fragmented, with low capture rates. This represents a major and on-going disadvantage, with little apparent opportunity for remedy in the near future. There are modest research facilities, although these are primarily laboratory based. However, substantial external research projects are regularly contracted. There is no workers' compensation system per se. Instead, there is a sole reliance on compulsory employers' liability insurance and state-funded social security benefits. Litigation has been playing an increasing role in British society. The HSE's national programmes strongly emphasise hazard identification and enforcement. However, there has been a more recent emphasis on managing sickness absence and lost time at work, but it remains to be seen if this will translate into effective and practical programmes. The major goals and aspirations are to reduce fatalities, occupational disease and injury rates. Unfortunately, current evaluation of these goals is based on data that are unreliable due to low capture rates. The evaluation of strategic projects and policy is not conducted in a systematic manner.

FIGURE 2

Main health and safety institutions in the UK



Note: SERCO provides independent safety, risk management and engineering services to the nuclear industry.

UNITED STATES OF AMERICA

There is a single federal governance body, the Occupational Safety and Health Administration (OSHA), but there are many others involved state by state, especially with implementation. There is enabling federal legislation and regulations, but also a plethora of local state legislation. Policy is strongly driven by the federal approach set out by OSHA in setting standards and methods to enforce these. The National Institute for Occupational Safety and Health (NIOSH) conducts research, and OSHA and NIOSH are supposed to work together. However, it is not entirely clear how effective this relationship is, and whether, in practice, ideas and concepts derived from NIOSH research actually end up assisting to develop policy with OSHA. OSHA has responsibility for most non-governmental employees in the US, and there is also the Mine Safety and Health Administration (MSHA) that works in collaboration in the mining sector. Some states administer their own safety and health programme, although they are obliged to use standards and enforcement at least as effective as federal requirements. In theory, OSHA is the final authority. Both OSHA and MSHA have inspectors. Effort is made to achieve compliance through co-operative programmes aimed at getting employers onside, but enforcement is through inspections, usually without notice, and this may be followed with citations and then penalties. There is a greater emphasis on employers, and less on employees. OSHA disseminates information and provides some education and training. Data collection is quite fragmented, with mixed capture rates, and these are more often low. The National Occupational Research Agenda (NORA) drives the NIOSH research approach. There is also an initiative aimed at getting research into practice. The workers' compensation system is mandatory, but is applied at state level. There is wide variation in these systems between states. There is also social security, and this is largely a social insurance approach. There is a large personal injury litigation sector. The research programmes conducted by NIOSH are comprehensive, but there is a strong emphasis on hazard and risk identification. OSHA's national programmes emphasise standards development and employer compliance. The major goals and aspirations are to reduce fatalities, and the occupational disease and injury rates. Evaluation of progress towards these goals is based on data that may be less reliable due to mixed capture rates. The evaluation of strategic projects and policy is not systematic.

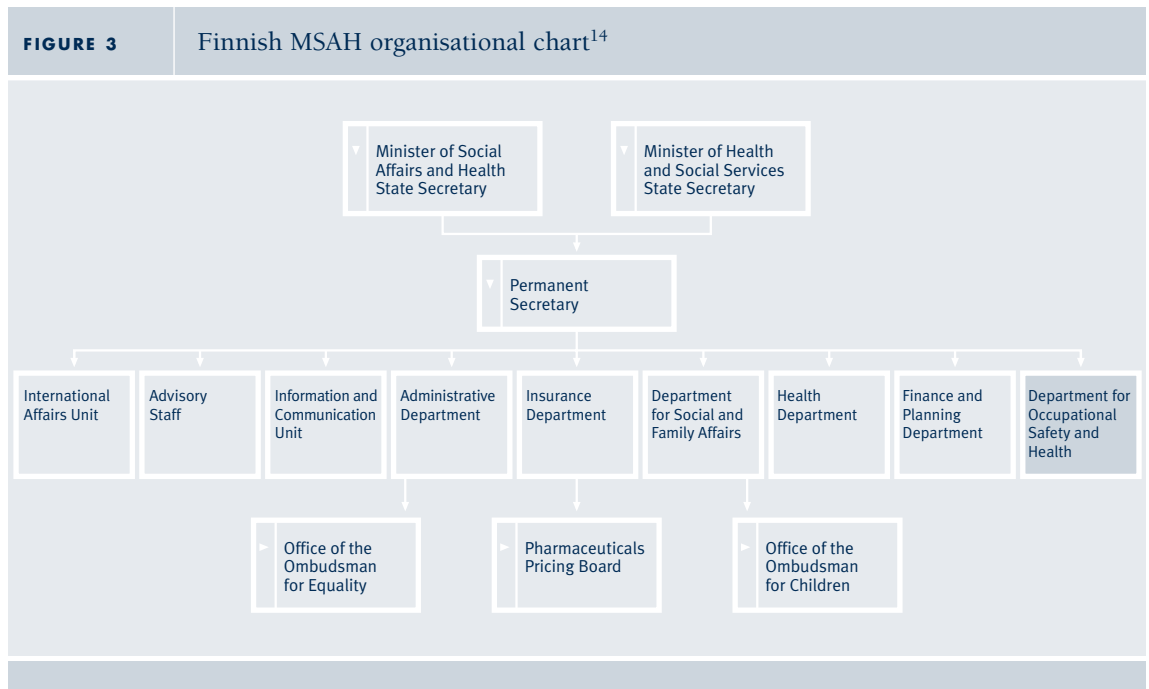
FINLAND

One government department has the major responsibility for occupational health and safety, and this is delegated to the Finnish Occupational Safety and Health Administration (OSHA). There is national enabling legislation and regulations. The Finnish OSHA drafts and develops policy, and this is contributed directly to the responsible ministry and government. Finland contributes to EU directives and policy development. The Finnish OSHA is given responsibility for occupational safety and health, and has enforcement powers. Inspectors work for the ministry supervised by the Finnish OSHA. Enforcement is conducted through issuing notices and fines. Statistics Finland collects and collates data from all sources, and there are modest to high capture rates.

The Finnish Institute of Occupational Health (FIOH) conducts research and provides education and training. There is a very large and active research centre.

Compensation comes from social insurance and statutory accident insurance (that covers both work-related disease and injury). The Federation of Accident Insurance Institutions (FAII) oversees it. National programmes are proactive and include strategies aimed towards wellbeing in the workplace as well as prevention. Emphasis is placed on both employers and employees.

Goals are also to reduce fatalities and the occupational disease and injury rates. The evaluation of progress towards these goals is based on data with moderate to high capture rates. Strategic programmes are externally evaluated, and this appears to be moderately systematic.



CANADA

There are multiple governance bodies. These are federal for some workers and provincial for others. There is a large body of enabling legislation and regulations. Provincial statutes are based on a federal code, but there is a lot of variability. Health and safety is often made into a part of the workers' compensation system. Human Resources and Social Development Canada (HRSDC) is a federal department that has responsibility for occupational health and safety. It develops policy. The Canadian Centre for Occupational Health and Safety (CCOHS) disseminates information and provides some education and training. The Association of Workers' Compensation Boards of Canada (AWCBC) is not a designated authority, but serves as a bridge between provincial workers' compensation boards. Each province has its own legislation.

Inspections are empowered by a federal code. However, inspectors are employed in provinces, under separate systems that are usually driven by the provincial workers' compensation system. Data are collected centrally by Statistics Canada, but there appear to be only low or inconsistent capture rates. There are four major research organisations, but these are not necessarily well co-ordinated. The workers' compensation system is mandatory, but it exists at the provincial level, with considerable variation in form and structure. There is also a social security system and a personal injury litigation sector. HRSDC runs national programmes, and many of these are multifactorial, aimed at collaboration with workplaces, with an emphasis on high-risk sectors and employers, and the development of partnerships with employers and employees. The overall goals and aspirations are to reduce fatalities, and occupational disease and injury rates, but there are also shorter-term pragmatic goals of improving information quality, usability and user satisfaction, and to increase awareness of services. Evaluation of progress towards goals is currently based on data that are likely to be unreliable due to lower capture rates and lack of comparability between different provincial systems. The evaluation of strategic projects is more systematic.

AUSTRALIA

The Australian Safety and Compensation Council (ASCC) acts as a federal body that can declare standards and codes of practice, but these need to be adopted by states and territories before they have legal force. There is enabling legislation and regulations, but this is complicated by a plethora of statutes and regulations from states and territories with large variation and a lack of harmonisation. The major policy focus for occupational health and safety is derived from the workers' compensation approaches, which differ for each state or territory. ASCC is not a regulatory body but seems designed to influence federal policy making. Each state and territory government is the final authority in its area of jurisdiction. State and territory governments run the inspection and compliance systems. The greatest emphasis seems to be on employers. Data collection is fragmented, with variable capture rates, and there is an inevitable tendency to emphasise workers' compensation data because of this. The research sector appears weak, lacking a national focus or strong leadership to provide co-ordination. Workers' compensation insurance is mandatory for all employers, but the rules and conditions vary between states and territories. There is a personal injury litigation sector. The ASCC is starting to demonstrate strong leadership, and has undertaken long-term planning, with a systematic approach. An important goal is to harmonise systems within Australia. Current evaluation of progress towards these goals is based on data that currently seem unreliable, due to lower capture rates and lack of comparability between states and workers' compensation systems. The evaluation of strategic policy has not been systematic, but is showing clear promise that it will be under the leadership of the ASCC.

INTERNATIONAL SUMMARY

The governance of health and safety systems in the countries reviewed all acknowledge both a moral and a practical dimension to occupational health and safety. It is widely accepted that employees should be protected in the workplace and that others should not be adversely affected by work activities. The influence of international movements such as the ILO and World Health Organization (WHO) have contributed to a convergence of opinion about this issue. Governments also realise that poor occupational health and safety performance affects workplace productivity.

There is no consensus, however, as to which enforcement or compliance system is the most effective. The effectiveness of occupational health and safety initiatives is hard to quantify for a number of reasons, including:

- changes within systems over time
- lack of comparability between systems.

There is a lack of consistency between the five countries in the type and manner of application of sanctions (applied usually to employers) if health and safety regulations and rules are broken or not followed. In the US, the OSHA model, which relies heavily on the threat of punitive sanctions, is widely perceived by both employees and employers as onerous to comply with, but also as largely ineffective due to a lack of "ownership".

In the five countries reviewed:

- Countries with devolved or separate legislatures functioning within a federated group suffer important disadvantages resulting from lack of harmonisation between the various occupational health and safety systems including incongruent definitions between systems and the complexities of legislation and regulations.
- The occupational health and safety systems are based on the assumption that identifying risk factors or potential contributors to occupational disease and injury is the foundation of effective prevention strategies. None of the systems reviewed question the limitations of the hazard identification model and the assumption that a high level of avoidance of all risk will have only beneficial effects.
- Limited evidence indicates that independent or at least semi-autonomous departments function more effectively with greater focus and the ability to evolve more rapidly in response to changing needs.
- Strategies and methods used to get employers to participate in occupational health and safety range from those that use a co-operative model through to sole reliance on punitive measures.
- Employee involvement in occupational health and safety ranges from the simple approach of merely giving employees rights to complain, to others taking the view that active involvement of employees in hazard identification and risk reduction is more effective.
- The classification of work-related disease and injury has an arbitrary component. Systems that provide incentives for a health problem to be classified as an illness, rather than as an injury, report much higher rates of work-related diseases. In the UK, 61 percent of incidents are classified as ill health and only 39 percent as injuries. This is in contrast to the US, with only about 6 percent of cases classified as occupational illnesses and 94 percent as work-related injury.
- The impact a compensation system might have on occupational health and safety initiatives is not clear. The most common method to inform prevention strategies is to feed back claims history in an attempt to identify occupational health and safety priorities. There is consistent anecdotal evidence from those involved in direct management of such systems that a frequent outcome is merely behaviour modification, such as re-classification or re-coding of cases by GPs or others, rather than reduction in total claims. However, this may only hold true for less severe injuries or illnesses. Feedback on work fatalities, for example, seems to have a more robust effect.
- In the countries reviewed, occupational health and safety can often be linked in with public health initiatives and strategies due to overlapping areas of interest and similar applicable methodology. However, in practice, this rarely occurs. Anecdotal information from those inside the respective systems suggests that this is not a matter of territorial or boundary issues, but rather there is a general perception that occupational health and injury issues are either better funded, or have a specific tagged funding stream.

- The evidence base on the effectiveness of prevention strategies remains weak and equivocal. All the systems reviewed do place a strong emphasis on research. Many countries have given the task to a single large research organisation. However, all seek external and independent research providers. The most flexible and effective approach is to have a semi-autonomous research organisation that is required to drive a research agenda based on expert and stakeholder consultation, and that manages and co-ordinates a number of specialised groups who conduct the actual research. Ideally, this should be augmented by overall independent evaluation of the research outputs.

The problem of identifying hitherto unknown risks and hazards or potential contributing factors remains a major challenge in all the countries reviewed. The lack of consistency within systems over time, and between the various systems, has presented significant barriers for researchers and policy makers to collect, aggregate and analyse data in a meaningful way. Harmonised data sets will allow more effective comparisons and identification of factors, and show the relationships between factors. It is expected that more sophisticated methods targeted in key areas identified by the stronger data sets will yield more effective prevention strategies.

Of the five countries reviewed, Finland has the most effective integration between research and analysis, policy development, data systems (including surveillance) and programme implementation as a result of careful planning to construct systems that are able to integrate with each other.

Lessons and Conclusions

Workplaces in New Zealand face many of the same occupational health and safety risks as workplaces in Australia, Canada, England, Finland and the United States of America. The agencies responsible for occupational health and safety in New Zealand are responsible for the same issues as larger and better resourced agencies from countries with similar occupational health and safety legislation. It is clear that the resources (financial and people) are, and will always be, constrained in New Zealand in relation to the challenges faced in providing “healthy people in safe and productive workplaces”.¹⁵

National occupational health and safety systems that lead to healthier and safer workplaces require the effective integration of research, data systems, policy development and prevention programmes. Effective systems are also characterised by a sustained commitment to a strategic vision.

Occupational health and safety in New Zealand has long been characterised by a lack of long-term strategic vision, epitomised by many intervention programmes concerned about high profile interventions with quick results. These interventions have often been based on inadequate data rather than following strategic evidence-based intervention programmes.

Stakeholder comments and previous NOHSAC reports also clearly demonstrate that agencies responsible for occupational health and safety often appear to operate in “silos”, with a resulting inability to effectively work together in the crucial areas of research, policy and prevention programmes.

In 2002, the Honourable Margaret Wilson stated that

“The health dimension of workplace health and safety – including workplace stress and fatigue – has not been given the attention and emphasis overseas and New Zealand research suggests it deserves... until we have a well developed and robust national view of injury – including occupational illness and disease – then we will be well off the mark in terms of effective prevention strategies. Simply stated, limited resources require intelligent targeting, and intelligent targeting must be driven by quality information”.¹⁶

This lack of quality information with regard to occupational health and safety is not new. The 1996 *Governmental Inquiry into the Administration of Occupational Safety and Health Policy* stated that:

“The current state of the non-existence of meaningful statistics, which has been the case for 20 years, cannot be allowed to continue”.¹⁷

Eight years later in 2004, NOHSAC released its report *Surveillance of occupational disease and injury in New Zealand: Report to the Minister of Labour*, which also noted the same concerns as the Minister and the Governmental Inquiry, stating:

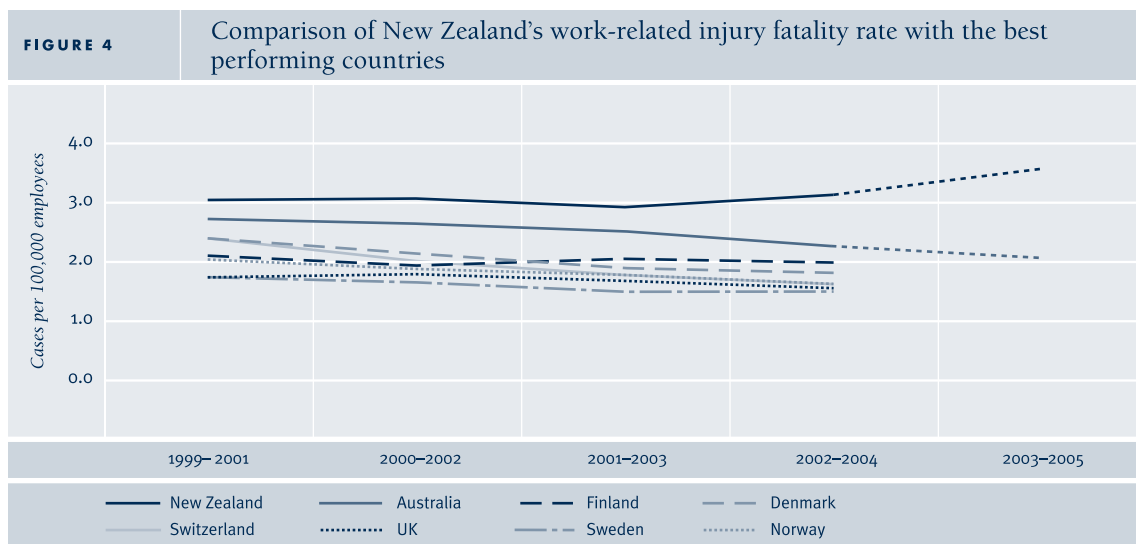
“In the field of occupational disease and injury, we still have a long way to go in even identifying the size and nature of the problems, let alone developing effective interventions”.

Funding for occupational health and safety in New Zealand has declined in the last 17 years. In 1989, the approximate overall budget for occupational health and safety services was \$36.7 million; in 2005, the overall budget was approximately \$47.0 million. Using the CPI,^{vii} this represents a reduction of \$6.6 million in total budget for occupational health and safety services over this period, despite a significant investment in injury prevention activities by the ACC.

Given substantial growth in the New Zealand economy and, in particular, an increase in the number of workplaces, the number of workers and changes in the workplace environment during this time, it is clear that the occupational health and safety system is functioning with fewer resources but is required to meet a greater demand for service delivery.

vii CPI – Reserve Bank Calculator

In comparison with other countries, New Zealand's rate of compensated fatalities is increasing and is significantly higher than Australia and selected European Countries according to data provided to the Workplace Relations Ministers Council.⁵ There were 80 compensated fatalities in New Zealand in 2004–05, up from 75 recorded in 2003–04 and 63 recorded in 2000–01.^{viii} In the year 2005/06, ACC compensated^{ix} 120 workplace fatalities.



The introduction of performance-based legislation in 1992 has resulted in significant gaps in the material available to assist in compliance, such as dated approved codes of practice. Codes that are available are sometimes inconsistent with current industry best practice. Fifteen years after the introduction of the HSE Act, stakeholders remain concerned about a lack of support and guidance for workplaces. The cost of compliance with the performance-based legislation places a disproportionate burden on small to medium enterprises. Small to medium enterprises often face the same costs of compliance as larger organisations, but lack the resources available to larger organisations or access to appropriate advice from the Department of Labour and other agencies.

The combination of performance-based legislation, lack of appropriate resources, and no registration requirements and standards for health and safety consultants means that employers and workplaces are often unsure how and where to get advice to prevent disease and injury in the workplace.

WORKPLACE HEALTH AND SAFETY STRATEGY FOR NEW ZEALAND TO 2015

NOHSAC welcomed the launch of the Workplace Health and Safety Strategy for New Zealand to 2015 (WHSS) in June 2005 as providing a long-term strategic vision for occupational health and safety in New Zealand. The strategy noted that:

“Work activities can be hazardous to the health of New Zealanders. Our work-related disease and injury rate is higher than the road toll, and many of these diseases and injuries are preventable”.

viii The analysis undertaken in the report only used fatalities from injuries, making adjustments where possible for differences in scope and coverage. The data were then standardised to take account of different industry mixes, and finally, a three-year average was calculated to remove some of the volatility that results from working with small numbers.

ix ACC Press Release, 14 August 2006.

The WHSS has a vision of “healthy people in safe and productive workplaces”. The strategy identifies three interconnecting outcomes that support its vision:

- government leadership and practices
- preventive workplace cultures
- industry leadership and community engagement.

A copy of the strategy, action plan and progress is available from the website www.whss.govt.nz

The Department of Labour is the lead agency for WHSS. However, over the past 15 years, technical capacity within the Department has decreased, making it more difficult to exercise the effective leadership, policy development and implementation that is required under the WHSS.

NATIONAL OCCUPATIONAL HEALTH AND SAFETY SYSTEM

No one model exists for the development of a national occupational health and safety system. However, it is clear from the review of occupational health and safety in New Zealand, England, Canada, Australia, Finland and the United States of America that an effective system should include:

- a set of mandatory, workplace requirements with a legislative basis
- a collaborative approach between the OSH system and the workplace that includes the involvement of both employers and employees
- involvement of technical specialists such as occupational medicine specialists, occupational health nurses, occupational hygienists, specialists in occupational health and safety surveillance, and qualified and experienced occupational health and safety consultants
- monitoring of the workplace that involves inspections by the regulator
- effective systems for the surveillance of occupational disease and injury
- interventions based on evidence
- workplace inspections that are prioritised toward the most dangerous jobs and tasks.
- sanctions that can be applied both positively and negatively by the regulatory and the compensation agencies
- careful monitoring and evaluation of the effectiveness of interventions and prevention programmes
- co-ordination and appropriate funding of research for both occupational health and occupational injury.

Occupational health and safety systems are usually based on a common principle of hazard identification using some form of risk assessment based on an agreed rule or “standard”. This approach rests on a sequence of assumptions:

- That risks and hazards are known and understood.
- That they can be accurately identified.

- That once they have been identified, they can be eliminated, or at least reduced, and that this will yield a subsequent reduction in cases of injury or illness.

However, due to the continued lack of reliable New Zealand occupational disease and injury data, we cannot adequately document the size of the problem and suggest and enable solutions, even though this lack of data was identified over 30 years ago and despite a succession of reports.

This lack of data also means that:

- not all occupational health and safety risks, particularly occupational health risks that are often multi-factorial and multi-causal in origin, are known and understood
- identification of risks has historically focused on occupational injury while occupational health risks have been largely ignored, even though such risks present a greater burden in terms of mortality.

As identified in earlier NOHSAC reports, the Department of Labour and other government agencies do not know how many people die from work-related causes each year.

- It is estimated that more than 80 percent of work-related deaths (most due to disease rather than injury) are not documented or reported and are not investigated.
- New Zealand does not have an adequate system for the surveillance of occupational disease and injury.
- New Zealand does not have a system for the surveillance of workplace exposures.
- The direct financial costs of occupational disease and injury are estimated to be \$4.9 billion per annum.
- The Injury Information Manager has yet to produce significant reports on injury data. Reports were expected in May 2005 but have not yet been published.

According to data supplied by the Department of Labour, Ministry of Health and the Workplace Relations Ministers' Council:

- substantial occupational health resources and technical expertise were transferred from the Ministry of Health at the time of the creation of OSH in 1992; however, these have since declined, and a number of positions have been disestablished
- active field inspectors for occupational health and safety have decreased by 25 percent in the last four years. By comparison with Australia, the number of active field inspectors has increased in most states over the same period.

NATIONAL OCCUPATIONAL HEALTH AND SAFETY PROGRAMMES

NATIONAL PREVENTION PROGRAMMES

The Department of Labour is the lead agency responsible for the WHSS and has been undertaking a significant restructuring that commenced in 2004 and is still on-going.

During this period, many experienced and qualified staff members have left the organisation. This prolonged restructuring has considerably reduced the Department's ability to respond to existing health and safety issues over the last three years. Action plans have been developed, but often resources appear unavailable for effective implementation. Research funding made available to the Department of Labour for Occupational Health in 2004 remains largely unspent three years after the funds were made available.

The four major injury prevention programmes run by the Accident Compensation Corporation are the:

- ACC Accredited Employer (Partnership) programme
- Workplace Safety Management Practices (WSMP) programme
- Workplace Safety Evaluation (WSE) programme
- Workplace Safety Discount (WSD) for some small businesses and self-employed people.

ACC provides a discount on levies for compliance with a systems-based audit tool that is consistent with the HSE Act. The audit does not ensure that all known occupational health and safety hazards are identified and controlled effectively, only that a system exists for the identification of such hazards. Auditors involved with the programme are not required to have a health and safety background, and gaps exist between the HSE Act and the audit standards.

Organisations participating in the Partnership Plan and Workplace Safety Management Practices programme received discounts in 2005 of \$147 million and \$13.0 million respectively. Despite being in operation for over six years, reviews of the Partnership Programme and the Workplace Safety Management Practices programme showed that, due to insufficient data, it was not possible to say that these programmes have been effective in reducing workplace disease and injury.

ACC also operates the Safer Industry programme, which, in 2005/06, focused on seven priority areas and two medium risk areas. The budget for the Safer Industry programme in 2005/06 was approximately \$3.1 million. This programme has also been in operation for over six years. No evaluation of the effectiveness of the Safer Industry programme has been undertaken, except for Farm Safe in the agricultural sector.

Recommendations

The review of the management and governance of occupational health and safety in five countries has indicated that there is no one ideal system, but there are a number of elements that are required for an effective system. All of the countries reviewed recognise that poor OHS performance results in both direct and indirect cost burdens to governments, employers and employees. However, many countries now view the primary rationale for establishing OSH systems and standards as a moral obligation. That is, an employee should not be engaging in work activities nor expose themselves to unacceptable levels of risk, and nor should others be adversely affected by the work they do.

In the New Zealand context, all of the elements of an effective occupational health and safety system are potentially present, but these are spread across a number of government agencies and often not co-ordinated. Many of the government agencies, particularly the Department of Labour, are increasingly under-resourced to meet the challenge of growing and increasingly diverse workplaces and workforces.

Our recommendations, while particularly relevant to the work of the Department of Labour as the lead agency for the Workplace Health and Safety Strategy, are also relevant to the work of a number of other government agencies including ACC, the Environmental Risk Management Authority, the Civil Aviation Authority, Maritime New Zealand and the Ministry of Health.

Although a number of agencies will continue to play a role or have designated roles in relation to occupational health and safety, it is essential that there is one lead agency that provides leadership and co-ordination. This was the original mandate of the Occupational Safety and Health Service (OSH) when it was established in 1988. In particular, OSH's responsibilities, which have now become the responsibilities of the Workplace Group of the Department of Labour, included "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".

The Department of Labour has exercised such a leadership role with the development of the national Workplace Health and Safety Strategy (WHSS). However, the present survey of stakeholders has indicated concerns about co-ordination between the agencies, lack of occupational health and safety leadership, insufficient resources within the lead agency, inadequate surveillance and exposure data, and the decline in the technical capacity of the occupational health and safety workforce. These problems raise serious concerns as to whether the long-term objectives of the WHSS can be achieved.

Requirements to ensure the long-term objectives of the strategy can be met:

- There should be a clear lead agency that inherits, restores and implements the original mandate under which OSH was created.
- This lead agency should have occupational health and safety as its primary responsibility and a clearly identifiable public profile.
- The lead agency should produce an annual report to Parliament on the overall state of occupational health and safety, including the relevant work of other agencies.
- This report should include information on both occupational disease and injury.
- There should be an effective operational all-of-government approach, on the ground as well as at head office level, so that there is true co-operation between the various agencies.
- The lead agency should be provided with appropriate resources for both regulatory enforcement and education. These roles should be complementary to the ACC's role in injury prevention.

- The lead agency must base its programmes on a balanced model of technical knowledge and effective engagement.
- The lead agency and other government agencies must act as exemplars to workplaces in the practical implementation of occupational health and safety in the workplace.

In light of these requirements and the issues identified in this report, the committee makes the following recommendations:

1. Reverse the decline in the qualified occupational safety and health workforce in government agencies, and restore the former technical capabilities,^x both on the ground and at head office level.

- Ensure an increase in the number of specialist health and safety inspectors.
- Ensure that appropriate training and remuneration is provided for health and safety inspectors and aligned with other agencies.
- Occupational health specialists, including occupational medicine specialists, occupational health nurses, occupational hygienists and occupational epidemiologists, have line management roles.

2. Memoranda of understanding between government agencies responsible for occupational health and safety should contain mechanisms to ensure that both policy and intervention outcomes and objectives are achieved as described.

- The performance of senior managers within the agencies is reviewed against the objectives and outcomes contained within the memoranda of understanding.
- Planning cycles of the agencies responsible for occupational health and safety are aligned.
- Social partners (Business New Zealand and the Council of Trade Unions) are formally consulted in the development of annual plans.

3. Intervention programmes and engagement programmes are evidence-based and effective.

- Provide adequate and on-going funding for:
 - existing occupational health and safety issues
 - new and emerging issues.
- Ensure that evaluation methods are developed as part of all intervention programmes.
- All publicly-funded research regarding occupational health and safety interventions and evaluations of interventions should be published.

4. Fully align the audit standards of the ACC Workplace Safety Management Practices programme and other ACC programmes with the HSE Act.

- Ensure that the audit focuses on the hazards and associated risks prevalent in each industry sector. To achieve the effective control of such hazards, it is essential that the auditors for the programme have relevant experience and training in occupational health and safety.
- Evidence should be required not only of the system, but also of the practical implementation and appropriateness of controls and interventions within the workplace.

x This recommendation has major implications for occupational health and safety workforce training and development, which will be the subject of a future NOHSAC report.

- 5. Establish minimum standards for occupational health and safety consultants to ensure that the advice and services provided to workplaces reflects current practice and knowledge.**
 - DoL and ACC provide funding and work with recognised groups such as the New Zealand Institute of Safety Management and the New Zealand Safety Council and accredited training providers to develop agreed minimum professional standards for accredited occupational health and safety consultants.
 - The Department of Labour maintains and promotes a register of accredited occupational health and safety consultants on its website.
- 6. Implement the recommendations of NOHSAC’s report on the surveillance of occupational disease and injury in New Zealand.**
 - Implement the specific recommendations contained within the report for improving data quality, within the next twelve months.
 - Develop a strategic plan for the implementation and resources required for the general recommendations of the report in the next three years.
 - Independently review and progress the Injury Information Manager Project.
- 7. Implement the recommendations of NOHSAC’s report on the surveillance and control of occupational exposures in New Zealand.**
 - Develop a strategic plan for how this can be implemented and resourced over the next five years, in the next twelve months.
 - Implement joint projects for the surveillance of workplace exposures with Australian authorities.
- 8. Provide appropriate advice and technical assistance for New Zealand workplaces.**
 - Provide increased levels of appropriate guidance materials for workplaces, particularly small to medium enterprises.
 - Ensure that the guidance material is developed with the end users as the priority, rather than just meeting the needs of separate agencies.
 - A streamlined process should be adopted for the development of approved codes of practice and other regulatory instruments for occupational health and safety.^{xi}
- 9. The government should provide leadership in occupational health and safety.**
 - An independent review of occupational health and safety practice in government departments is conducted every two years and a report provided to the Minister of Labour and the Minister for ACC on establishing and maintaining best practice, particularly with regard to procurement procedures.
 - All government departments and Crown entities must meet and maintain “tertiary level” status in either the ACC Partnership Programme or WSMP.
 - Occupational health and safety managers within government departments are appropriately trained and supported.

xi NOHSAC and the ASCC have commissioned a joint research project on the key characteristics that determine the efficacy of OHS instruments.

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Appendix 1

This appendix lists the key informants with whom Allen and Clarke and NOHSAC met as part of the information collection phase of this report.

A1. GOVERNMENT AGENCIES

- Accident Compensation Corporation
- Civil Aviation Authority of New Zealand
- Department of Labour
- Department of Statistics
- Environmental Risk Management Authority
- Land Transport New Zealand
- Maritime New Zealand
- Ministry of Health
- Ministry of Transport
- National Poisons Centre
- National Radiation Laboratory
- Standards New Zealand

A2. EMPLOYER ORGANISATIONS

- Business New Zealand
- Employers and Manufacturers Association (Northern)

A3. EMPLOYEE REPRESENTATIVES

- NZ Council of Trade Unions

A4. RESEARCH INSTITUTIONS AND LABORATORIES

- Belhouse Consultants
- Centre for Public Health Research
- Dowdell and Associates
- Health Research Council
- Injury Prevention Research Unit

A5. OCCUPATIONAL HEALTH PRACTITIONERS

- Australasian Faculty of Occupational Medicine
- New Zealand Ergonomics Society
- New Zealand Occupational Health Nurses' Association
- New Zealand Occupational Hygienists' Society
- Occupational Safety and Health Information Group

A6. INDIVIDUALS

- Dr Evan Dryson
- Dr Bill Glass
- Dr Chris Walls
- Errol Hodgkinson

A7. SAFETY ORGANISATIONS

- New Zealand Institute of Safety Management
- New Zealand Safety Council

A8. INDUSTRY GROUPS

- Construction Industry Council
- DHBNZ National Occupational Health and Safety Managers' Group
- Federated Farmers
- New Zealand Chemical Industries Council
- New Zealand Forest Owners' Association
- New Zealand Timber Industry Federation
- Road Transport Forum

A9. EDUCATION PROVIDERS

- Building and Construction Industry Training Organisation
- Extractives Industry Training Organisation
- New Zealand Industry Training Organisation
- Opportunity Industry Training Organisation
- Site Safe New Zealand

Appendix 2

DEPARTMENT OF LABOUR HEALTH AND SAFETY RESOURCES 2006/07

Department of Labour funding of activity that supports health and safety – March 07		
	2005/06 OBU UPDATE \$000	2006/07 MARCH UPDATE \$000
VOTE: LABOUR – POLICY ADVICE		
Policy advice, includes overheads*	2,660	3,414
<i>Vote: Labour – Services to Promote Safe and Healthy People and Workplaces</i>		
Senior management, finance, HR, training, comms, planning, ICT, audit functions, technical support*	8,733	6,845
Legal activity	841	764
Regional delivery and contact centre	16,720	16,527
Operational policy, special projects, operational services management	3,399	4,470
Total Services	29,693	28,606
Energy Safety Review Bill	330	330
<i>Vote: Labour – Hazardous Substances</i>		
Hazardous substances, includes some overheads*^	3,672	4,718
Total Policy Advice, H&S and HSNO	36,355	37,067
<p>Notes:</p> <p>*These figures are impacted by a redistribution of costs, a technical change of the overhead cost method applied. The Department centralised most functions in 2005/06, and further marginal changes were made in 2006/07 (for example, centralising some communications funding).</p> <p>^The Department also received a sizable increase in HSNO funding in Budget 2006 to resource contract management and training of the regional contract delivery.</p>		

Appendix 3

DEPARTMENT OF LABOUR FTES AS AT 31 JAN 2007

Budgeted FTEs		
REGIONAL STAFF	PREVIOUS	AS AT 31 JAN 2007
Management	31	31
Practice leaders		4
H&S inspectors	157	138
Technical specialists	15	11
Support staff	29	26
HEAD OFFICE STAFF		
Chief advisors	2	2
Business advisors	10	6
Engineering safety	5	5
Support staff	3	2
Management	2	4
HSNO		4

