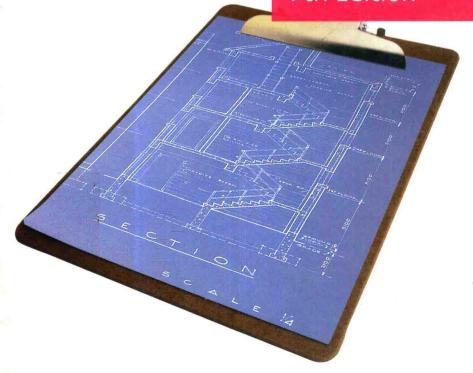
# Planning Occupational Health & Safety



a Wolters Kluwer business

a guide to OHS risk management

7th Edition







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#### **FOREWORD**

Planning Occupational Health & Safety — a Guide to OHS Risk Management — 7th edition is a practical guide for occupational health and safety (OHS) professionals or others with workplace responsibilities for health and safety, students of the subject, and people employed in human resources departments.

Occupational health and safety is now accepted as an integral part of business operation, due to growing recognition that risks to health and safety need to be managed, along with other areas of possible risk, such as quality management, the environment and customer relations. A planned approach to OHS is recognised as essential, considering the high cost of work-related injury and illness to organisations, individuals and society at large.

This publication aims to describe how to introduce and maintain the OHS function in an organisation. The book includes discussion of the impact of legislation, OHS management systems, factors to consider when planning and implementing the function, the role of various people in the organisation, administration and methods of risk management and review.

Chapter 1 examines the importance of planning OHS, including the cost of unsafe practices and the changes in approach occasioned by these costs.

Chapter 2 provides an overview of the legislation dealing with health and safety in Australia.

Chapter 3 is an outline of the risk management process, which is the basis of the modern approach to OHS legislation. It provides practical advice on tackling each stage.

Chapter 4 outlines the use of OHS management systems, and Chapters 5–7 discuss the infrastructure, planning and practicalities of the risk management process. This includes an assessment of the organisation's current position, staffing considerations, the role of OHS representatives and committees, and techniques for identifying, assessing and controlling health and safety risks and investigating accidents at the workplace. Ongoing evaluation of OHS practice is also discussed, and Chapter 8 outlines the key features of injury management and workers compensation.

Chapters 9–11 provide an introduction to examples of common health and safety problems, setting out some typical approaches to risk control in these areas.

Appendices A, B and C outline further resources to assist with health and safety management, including government departments, private organisations, OHS professionals and sources of information.

For more detailed discussions on any of the topics raised in the book, see the extensive range of OHS products published by CCH Australia Limited.

Information on the state of the art in OHS practice (including information on conferences/seminars, videos, books and education) is published in CCH's bimonthly magazine, *The Journal of Occupational Health and Safety* — *Australia and New Zealand*.

CCH also publishes an online reporting service (also available in three volumes of hard copy), Australian Occupational Health & Safety Law, which provides the text of OHS legislation in each state and territory. CCH's single-volume loose-leaf service, Managing Occupational Health & Safety (also available online), is a practical on-site reference for those managing health and safety. For a more extensive list of CCH titles in the area of OHS, refer to Appendix B.

CCH Australia Limited October 2005

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# **Chapter 1**

# BEST PRACTICE OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT

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## ¶1-100 Introduction

Every year, around two million people lose their lives because of work-related injury and illness. This means an average of over three people dying every minute, due to on-the-job health and safety problems. According to the World Health Organization's global estimates, about 1.7 million of these deaths are due to occupational diseases, for example, cancer or other illness, caused by exposure to workplace hazards such as chemical substances or asbestos. It has often been noted that the occupational death toll is higher than that for road accidents or war.

Apart from cancer, the most common job-related health problems are respiratory diseases, musculoskeletal disorders, hearing loss, circulatory diseases and communicable diseases caused by exposure to pathogens. Worldwide, asbestos alone is reported to be responsible for 100,000 deaths per year. In addition to the deaths, literally hundreds of millions of people are hurt in non-fatal work accidents each year.

Health and safety failures at work cost Australia at least \$31 billion per year in lost production, treatment of injuries and illnesses, and rehabilitation and compensation for those injured or made sick by their work, according to estimates from the Productivity Commission's 2004 report, *National Workers' Compensation and Occupational Health and Safety Frameworks*. This imposes very significant costs on individuals, businesses, the community and the economy as a whole.

These facts highlight the challenges faced by employers in Australia, in fulfilling their legal obligations to provide safe and healthy working conditions.

# ¶1-120 Changing approaches to occupational health and safety

In past decades, occupational health and safety (OHS) law in Australia consisted of thousands of pages of detailed requirements specifying restrictions on work practices. For example, legislation applying to factories, shops and industries prescribed that all dangerous machinery must be guarded, and women could not legally be asked to lift weights of more than  $16\,\mathrm{kg}$ .

Employers were expected to comply with prescriptive requirements such as these, and it was hoped that these measures would protect the health and safety of people at work.

By the mid 1970s, however, it was realised that this approach, known as "minimum standards compliance", was very limited in its ability to protect people from work-related injury and illness. Much of the workforce was not covered by the legislation. With regard to back injuries, for example, the restrictions on weights to be lifted by women and juniors in factories gave no protection to women working as nurses in hospitals or as carers in childcare centres, and no protection at all to men. Moreover, many injuries to backs, shoulders and necks occurred as a result of falls, repetitive movements or

awkward postures workers were obliged to adopt because of poorly designed equipment or workplaces — in other words, the problem could not be fixed merely by restricting the weight of loads to be lifted.

This realisation led to a new approach to controlling health and safety problems. In a series of changes to health and safety laws in all Australian states and territories, legislation focusing on outcomes — that is, on employers' performance in protecting workers' health and safety — was introduced across Australia in the 1980s and 1990s. The new laws required employers to ensure their workers' health and safety was not endangered by their work, as far as is reasonably practicable.

This shift to so-called "performance-based" legislation has changed the way employers must deal with threats to health and safety. It is no longer considered adequate or acceptable merely to ensure that workers have suitable workers compensation cover, provide first aid facilities and exhort workers to be careful. Employers' duty of care to workers and others affected by their undertakings has been written into Acts of parliament in all Australian jurisdictions, and the process of meeting legal requirements and efforts in harm minimisation have become more complex and sophisticated. Risk management has become the key tool of OHS practitioners in establishing prevention priorities, given the vast array of potential risks to be mitigated to make the workplace "healthy and safe" and to demonstrate due diligence.

There has also been a shift in what organisations expect from their health and safety programs. Cost — in the context of organisational goals relating to competitiveness — has become more of a concern, although even today few organisations measure and monitor the direct and indirect costs of workplace incidents in the same way that injuries and incidents are monitored.

### Benefits of best practice health and safety management

While there is plenty to be done for many organisations within a minimum compliance/harm minimisation framework, best practice organisations have moved to embrace a broader set of goals and objectives.

Within this framework, companies recognise that organisational health and safety in its broadest sense can positively contribute to a company's strategic objectives. Companies can benefit from positively promoting the health and wellbeing of employees — organisational design that meets the needs of those that work within it will support more efficient, effective production.

Moreover, organisational goals for best practice organisations extend beyond short-term profitability and cost minimisation. Corporate social responsibility recognises that the value of reputation in the market place and the growth in socially responsible investment funds (and associated screening for health and safety performance) makes even traditional OHS a potential business development opportunity (or risk) rather than a minor internal function.

As well as these considerations, developments such as the increase in terrorist attacks and the outbreaks of SARS (Severe Acute Respiratory Syndrome) and "bird flu" have led many organisations to question their readiness for

managing emergency situations and to ask whether the impact on their business continuity would be economically catastrophic. In addition, high profile financial failures, such as insurers HIH in Australia and energy company Enron in the United States, highlighted the importance of corporate governance and the system of internal controls aimed at mitigating financial risks.

The impact of these types of events on investor confidence (as evidenced by stock market falls worldwide) has been substantial. Investors want to be assured that companies are effectively managing risks.

This book promotes an integrated approach to occupational health and safety. It puts OHS in the context of a wider range of risks which might impede the organisation's capacity to meet its objectives. Health and safety is seen as the concern of the whole organisation, with a particular emphasis on management's role in planning and supporting the management of OHS risks. Risk management becomes the focus, rather than compliance with regulations or reaction to individual occurrences.

The purpose of this chapter is to indicate the magnitude of the health and safety problem for organisations and to show why a planned approach to health and safety is essential. This introduction includes explanations on the role of management and employees in a planned health and safety program, and the aims of such a program.

## ¶1-130 Measuring the problem

In Australia the problem is usually measured by considering the number of workers compensation cases. According to the National Occupational Health and Safety Commission's *Compendium of Workers' Compensation Statistics Australia*, in 2001–02 there were 38,810 accepted workers compensation cases which resulted in a fatality, or a permanent or temporary disability involving a week or more off work.

The actual number of work-related injuries and illnesses would be considerably higher, according to the *National Workers' Compensation and Occupational Health and Safety Frameworks*. In support of this claim, the productivity commission cited a recent survey by the Australian Bureau of Statistics which found that many individuals who experienced a work-related injury or illness did not apply for workers compensation. In most cases this was because the injury was considered to be minor, but other reasons included a lack of awareness of eligibility or the availability of benefits, the negative impact on employment, the effort of making a claim, or the employer agreeing to pay the cost outside a workers compensation scheme.

Studies of coroners' reports have confirmed that the 300 or so occupational fatalities reflected annually in workers compensation statistics do not tell the whole story. The real number of work-related deaths is much higher, as many are never the subject of workers compensation claims.

In addition, many occupational diseases are never recognised as being wholly or partly attributable to work, therefore these too, are not reflected in workers compensation statistics. The National Occupational Health and Safety Commission estimated that there are about 2,200 deaths a year due to workplace exposure to hazardous substances such as asbestos and harmful chemicals.

Diseases and injuries experienced by workers such as sole traders and independent contractors are also omitted from official statistics, as most of these are not covered by workers compensation. These limitations on the data mean that the problem is in fact much larger than it may appear from workers compensation figures.

### The scope of the impact

While it is difficult to assess accurately the size of the problem, it is clear that the cost to the Australian community is huge. As well as the direct costs to individuals in terms of distress and disruption, business bears a burden of hidden, indirect costs — discussed at ¶1-140. Other hidden costs such as rehabilitation centres and other hospitalisation costs also add to the total burden on the community.

In the light of Australian industry's strivings for international competitiveness, there is substantial potential for cost reductions in this area. Costs can be reduced by eliminating risks as far as practicable, by reducing the severity and the number of work-related injury and disease cases, and by better management of injury cases which do occur.

### The human factor

Besides the "drama" of death or personal injury, there is a hidden incidence of occupational disease, which in many cases is a slow deterioration going unnoticed in the early stages. Examples include occupational hearing loss, dust diseases and occupational cancer. It may be only after a time delay of five years or more that the existence of such diseases is established, by which time their effects may have become irreversible.

The social costs of work-related injury (to the affected employee, his/her family and the community) can be less obvious than the economic impact. An employee whose injury disallows continuing employment becomes to some extent invisible and, once the individual matter of compensation is settled, the incident may no longer be an influence for change at that or other workplaces.

### ¶1-140 Indirect costs

There can be no dispute that injuries, ill-health and deaths of workers represent very significant insurance costs to an organisation, but on top of these direct insurance costs and the basic human considerations are other losses of which management should be particularly aware. These include indirect costs such as loss of productivity, loss of morale, labour turnover, absenteeism, industrial disputation over working conditions, and an impaired public image which may be reflected in loss of orders/accounts.

The costs to management are often divided into "insured" and "uninsured" categories. Note that, although the "uninsured" costs are in many instances difficult to calculate, their potential is to create a total cost several times that of the total insured costs. The following table shows some types of costs associated with accidents.

### Costs of accidents

INSURED COSTS	UNINSURED COSTS
Injuries	Injuries
Compensation for lost earnings	<ul> <li>First aid expenses</li> </ul>
Medical and hospital costs	<ul> <li>Transportation costs</li> </ul>
Awards for permanent disability	<ul> <li>Cost of investigations</li> </ul>
Rehabilitation costs	<ul> <li>Cost of processing reports</li> </ul>
Funeral charges	
Pensions for dependants	Wage losses
Public liability	<ul> <li>Idle time of workers whose work is interrupted</li> </ul>
Property damage	
Fire	<ul> <li>Person hours spent in cleaning up to accident area</li> </ul>
Loss and damage	<ul> <li>Time spent repairing damaged equipment</li> </ul>
	<ul> <li>Time lost by workers receiving first aid</li> </ul>
	<ul> <li>Possible extra overtime</li> </ul>
	Production losses
	<ul> <li>Product spoiled by accident</li> </ul>
_	<ul> <li>Loss of skill and experience</li> </ul>
	<ul> <li>Lowered production of worker replacement</li> </ul>
= , *	<ul> <li>Idle machine time</li> </ul>
	<ul> <li>Unfavourable public image</li> </ul>
	<ul> <li>Loss of goodwill</li> </ul>
	Associated costs
%.	<ul> <li>Difference between losses and amount recovered</li> </ul>
	<ul> <li>Rental of equipment to replace damaged equipment</li> </ul>
	<ul> <li>Recruitment of workers for replacement of injured employee</li> </ul>
	<ul> <li>Training of replacement worker</li> </ul>
	<ul> <li>Wages or other benefits paid to disabled worker</li> </ul>
	<ul> <li>Overhead costs while production is stopped</li> </ul>
	<ul> <li>Loss of bonus or payment of forfeiture for delays</li> </ul>

INSURED COSTS	UNINSURED COSTS
	Off-the-job accidents
	<ul> <li>Cost of medical services</li> </ul>
	<ul> <li>Time spent on injured worker's welfare</li> </ul>
	<ul> <li>Decreased production of replacement Intangibles</li> </ul>
	<ul> <li>Raised staff turnover</li> </ul>
	Lowered employee morale
	<ul> <li>Increased labour conflict</li> </ul>

An organisation with an active, ongoing, consultation-based health and safety program will have reduced the risk of accidents occurring and have efficient procedures to deal with the human or technical emergencies that become part of a work accident. Money, time and, most importantly, lives can be saved. The data gathered through accident/incident investigation can be fed back into the overall management administration to help prevent future incidents.

Accidents may also have harmful effects on the general environment beyond the workplace. For example, if an oil barge discharges oil into a river, there may be damage to the foreshores, other boats, wildlife and nearby homes. Pollution from chimney discharge may affect nearby residents, cars parked in the street, etc. Management should also be aware of the implications of public liability (persons other than employees who become injured) and product liability (adverse consumer reaction, loss of sales, cost of recalls, etc).

# 1-150 Performance-based requirements

The "cost" realisations referred to at ¶1-140, as well as the recognition that the old style of legislation was inadequate, have prompted changes in the approach to the practice of occupational health and safety in Australia. These changes emphasise practical means to achieve injury prevention and to encourage health maintenance and enhancement at the workplace. The changes include the following:

- 1. The traditional "minimum standards"/compliance approach to the formulation of the law on health and safety is an inheritance from an earlier, more static, work environment and is ill-suited to keeping pace with the rapid and uneven adoption of new work practices initiated by technological change. This has given way to a "performance-based"/self-regulated approach which emphasises the employer's duty of care and a process of risk management (detailed in Chapter 3), as well as consultation with employees (outlined in Chapter 2). The term "performance-based" as it is applied to the modern style of health and safety legislation draws on the notion that any system of protecting workers from work-related injury or illness is only as good as its performance that is, the outcome is of primary importance, rather than compliance with minimum standards.
- Increasingly, codes of practice provide detailed instructions on how certain industries can operate safely, how to avoid certain common

injuries (such as Occupational Overuse Syndrome, manual handling injuries and occupational hearing loss) or how to handle certain dangerous substances (such as asbestos, vinyl chloride or synthetic mineral fibres). National codes of practice produced by NOHSC are merely advisory, while some states have chosen to adopt codes of practice in their legislation.

- All states and territories have revamped their workers compensation schemes, which continue to be volatile, in their attempts to deal with spiralling workers compensation costs.
- 4. Historically, occupational health and safety has been regulated by separate legislation in each state and territory, with the result that in Australia there are nine separate sets of health and safety laws (for the six states, two territories and the Commonwealth). The establishment of the National Occupational Health and Safety Commission (NOHSC) in 1985 created a gradual movement towards more uniform requirements. This is reflected now in a strong degree of consistency Australia-wide in many key requirements, though differing details mean that reference should always be made to local state/territory legislation. The NOHSC has been replaced by the Australian Safety and Compensation Council (ASCC). Like its predecessor, the new body is comprised of representatives from the Commonwealth government, as well as each state and territory government, along with employer and employee representatives, and it will continue NOHSC's role in developing national OHS standards and codes of practice. The ASCC's main aim is to establish a national approach to workplace safety and workers compensation, and it will also coordinate research and provide policy advice to the Workplace Relations Ministerial Council - which comprises the Federal Workplace Relations Minister and state and territory counterparts.

## ¶1-160 Management's role

The main emphasis of this book is that the dangers of the workplace cannot be dealt with haphazardly; risks must be eliminated, or at least controlled, through the basic functions of risk management, in the context of planning, organising, staffing and controlling.

Management's role in this process should be clearly seen and demonstrated. The employment of trained OHS personnel, the establishment of health and safety representatives and/or committees and cooperation with these, as well as the provision of adequate financial backing for their function, will, of course, be management's responsibility. Most importantly, management at all organisational levels needs to demonstrate by personal example and positive attitudes, in addition to its financial support, a commitment to high standards of health and safety for all employees wherever they may be employed. The standard of care demanded of an employer is high and one owed to individual workers rather than to workers in general.

If workers are not made aware of the reasons for the implementation of an OHS risk management program or do not see management staff complying with it, they will become suspicious of the motives behind such a program. They may resent any interference with their established work patterns, and may not report certain accidents or incidents if they feel they are being monitored, or that they could be blamed or punished for reporting them. Therefore, they must be convinced that change is essential before they will accept it.

Workers should be involved in the planning and implementation of health and safety programs (see ¶1-170). Yet it is management which must accept final responsibility in regard to its workers, its shareholders, its legal requirements, and the community at large. It is only on the basis of management responsibility and accountability that OHS programs will succeed.

### Strategic planning versus operational planning

Management will be concerned with ensuring that the organisation's overall planning (strategic planning) incorporates health and safety. This will involve giving health and safety a high priority, staffing and financing the health and safety function, and determining what safety issues should receive priority.

In relation to health and safety, operational planning (which is concerned with shorter-term matters) will be carried out by supervisors or the human resources department (see ¶1-180) in consultation with employees and with the involvement of OHS representatives or committees, as appropriate.

# ¶1-170 Employees' role — participation and the consultative approach

The modern approach to occupational health and safety emphasises consultation between employers and employees. The usual method of achieving this is through health and safety representatives and/or a health and safety committee. In all states and territories, there are legislative requirements to elect/appoint either representatives or a committee (see ¶2-140).

Health and safety representatives are generally elected by the employees, with the workplace being broken down into locations/units, and each location/unit electing one representative. Elected representatives will generally be more acceptable to employees than appointed representatives. Health and safety committees may be made up of elected representatives and appointed employer representatives. In each state, the legislation provides some framework as to how the representatives and/or committee members must be selected (see ¶2-140).

The functions of representatives and committee members are discussed at \$5-470.

In addition to consultation through representatives and committees, employees should be made aware of all health and safety initiatives at the