

# OCCUPATIONAL HEALTH AND SAFETY

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## Objectives

After reading this chapter, you should be able to:

- 1 Understand the importance of preventative OHS practices.
- 2 Understand the major features of the legislative context for OHS in Australia.
- 3 Identify characteristics of a positive 'safety culture'.
- 4 Identify the basic features of an OHS management system.
- 5 Understand processes for measuring the effectiveness of OHS management.
- 6 Discuss the relationship between human resource management practices and OHS.



## Hundreds will die at work this year—inevitable, or not?

In September 2008, Foster's Australia Limited, one of Australia's largest brewery companies, was fined \$1.125 million under the *Occupational Health and Safety Act 2004* (Vic) following the death of a worker at its inner Melbourne brewery. The worker's neck had been crushed between a pneumatically operated door and a handrail. He was found by a workmate, rushed to hospital but died six days later. The deceased worker, 'who loved ballroom dancing and always had a smile for his colleagues', left behind a widow and three children.

The production process at the brewery involved 'depalletiser' machines which moved pallets of empty bottles through pneumatically powered doors to a chamber where they were unloaded before being filled with beer. Once a pallet was unloaded, the doors would automatically open for the next pallet. Workers entered the chamber about 20 times per shift to remove plastic tape, broken bottles, and ensure sensor lights were working. They could stop the depalletiser from moving (and therefore the doors from automatically opening and closing) when they entered the chamber, however the culture of the workplace discouraged them from interrupting production in such a way. Down time of machines was tracked by a computer, and operators were queried by supervisors when stoppages occurred. In addition, stopping the machine could result in bottles falling and breaking. There was also an additional incentive to leave the machinery running while cleaning it. Workers could leave work an hour earlier at the end of the last shift each week once the machine had been cleaned. It was thought the deceased worker may have been cleaning or inspecting a cracked photoelectric sensor when he became trapped by the closing door.

A written operating procedure existed for cleaning machines during production breaks, but not for dealing with clearing jams in machinery. In any case, most knowledge about the machinery operation was learnt on the job. Some of the operators were unfamiliar with the written procedure, while others been given a pamphlet which they could not understand because they did not read English (the deceased worker was of Vietnamese origin). According to the union, workers had previously asked for safety guidelines to be translated to other languages, but this had not eventuated.

Three years earlier a similar incident had occurred at the brewery, on a similar machine. On that occasion, the worker was trapped for 10 minutes but survived. Guarding was subsequently added to that machine to prevent a similar injury reoccurring, but the machine involved in the fatality had not been improved despite reports from two engineers recommending such steps. The similarity between this earlier incident and the fatality contributed to the larger-than-average fine. Foster's was fined \$562 500 for failing to provide and maintain a safe working environment, and a further \$562 500 for failing to provide safety instruction training and supervision. Foster's subsequently spent around \$3.9 million on upgrading its depalletiser machinery and training.

According to WorkSafe Victoria's Executive Director:

*The problem had been identified, someone had been hurt previously, the solution was known and it wasn't fixed until after a man had died. The opportunities to make improvements were repeatedly deferred ... being a good corporate citizen is not just about sponsoring charities, grassroots community projects and having good environmental standards. A successful business is a safe business.*

Source: Adapted from 'Prosecution summaries', WorkSafe Victoria, [www.worksafe.gov.vic.au](http://www.worksafe.gov.vic.au); and 'Foster's fined for workplace death', 2008, *Age*, 6 August, p. 7.

## Introduction

We might be tempted to think of most contemporary workplaces as safe places. More workers are employed in knowledge jobs, technological change has eliminated or reduced many physical hazards, and more sophisticated and systematic approaches to managing occupational health and safety (OHS) are widely promoted. Traditional OHS risks appear to have been contained. But statistics tell us otherwise. New risks have emerged while some traditional risks continue to injure. As the opening case shows, occupational health and safety is an important concern with significant personal and financial implications. Failure to ensure the health and safety of employees can have tragic consequences.

**Occupational health and safety (OHS)** the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations.

**Occupational health and safety** refers to 'the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations ...'.<sup>1</sup> It includes protecting workers from work-related risks to their health, and maintaining a work environment adapted to their physiological and psychological capabilities. According to a joint communiqué issued by the International Labour Organisation (ILO) and the World Health Organization (WHO) in 1995, OHS should focus on three objectives. First is the 'maintenance and promotion of workers' health and working capacity'. Second is 'the improvement of the working environment and work to become conducive to safety and health'. Third is 'the development of work organisations and working cultures ... which support health and safety at work and in so doing promote a positive social climate ... [which] may enhance productivity'.<sup>2</sup>

**Blaming the victim** focuses on individual characteristics and behaviours which contribute to injury.

Approaches to understanding why workers continue to be injured at work, notwithstanding significant advances in technology and knowledge about the nature of workplace hazards, have tended to fall into two categories. These are the **blaming the victim** approach, whereby the focus is on individual characteristics and behaviours that contribute to injury; and the **blaming the system** approach, which focuses on the 'organisational, social and economic environments in which injury and disease occur'.<sup>3</sup> The former emphasises individual factors, and extends from concepts of 'accident proneness' through to scientific analysis of accident causation. Solutions range from training and counselling, through to ergonomic modifications and re-engineering to eliminate hazards. The latter takes a broader approach and seeks solutions that focus on organisational settings, including organisational climate and employee involvement in OHS, through to the regulatory and political environment.<sup>4</sup>

**Blaming the system** focuses on the organisational, social and economic environment in which injury and disease occur.

These varying approaches illustrate the multidisciplinary nature of inputs into managing OHS. They also hint at why the human resource function can play a critical role in improving OHS outcomes. As our opening case illustrated, inappropriate rewards (such as incentives to work in an unsafe manner), inadequate training and supervision, and gaps in communication (such as not accommodating diverse language needs) can have fatal and costly consequences. We expand on the interaction of the human resource function with a preventative approach to OHS as we analyse a range of OHS concepts and issues throughout this chapter.

Few HR practitioners will have expertise in OHS, but most OHS specialists are located within the HRM function. Also, depending on the size of the organisation, OHS specialists may be employed or hired on a needs basis. Multidisciplinary teams, for example, are often required because of the range of expertise entailed in the process of identifying, removing and controlling risks and managing the return to work of injured workers. Such expertise may include specialist nurses and physicians, ergonomists, engineers, scientists, psychologists, sociologists, risk managers, epidemiologists, and rehabilitation experts.<sup>5</sup> HRM and OHS specialists need to work closely together to ensure that OHS risks are considered when HR policies and practices are developed and implemented.

In this chapter, we begin with an account of the major sources of workplace hazards and the risk assessment process that underpins other OHS practices. This provides a context for our later discussions about how to prevent risks to health and safety. We then look at the costs of OHS, counterbalanced by the organisational benefits derived from managing OHS well. Unlike some aspects of human resource management, OHS is subject to extensive legal requirements. We look at these next because managers need to be familiar with the legal context within which OHS operates. Organisations with a more proactive approach to OHS are distinguished by positive safety cultures that incorporate effective OHS management systems. We discuss both of these concepts and ways in which their effectiveness can be measured. Finally, we examine two issues of contemporary importance in preventative OHS: occupational stress and bullying, and flexible and precarious employment. The first is increasingly placing significant financial burdens on organisations; the second is a source of longer health risks and, in some cases, a source of greater vulnerability to injury. Managing OHS in a strategic, proactive and preventative manner can be a real source of competitive advantage. Human resource management policies that integrate health and safety issues can reduce the likelihood of injury, reduce the costs of OHS to the organisation, and increase the capacity of workers to work in a safe manner.

## Workplace hazards

**Workplace hazards** derive from both the physical and psychosocial, or mental, environment at work. These hazards need to be identified, assessed and eliminated or controlled to create a safe workplace, which is a process known as risk assessment.

**Workplace hazards** circumstances, procedures or environments that expose individuals to possible injury, illness, damage or loss.

### The nature of workplace hazards

*Physical hazards:* a range of physical hazards exist in the workplace. These include excessive noise, which can result in temporary or permanent hearing loss, and contribute to high levels of discomfort and psychological distress. Hearing loss itself creates a further risk because it can result in the failure to hear safety warnings at work (such as calls to get out of the way), and social isolation at work and beyond.<sup>6</sup> Vibration is another hazard and is most often associated with occupations involving the use of pneumatic drills, chain saws and heavy transport/equipment. It can have both temporary (for example, blurred vision and nausea) and permanent effects (such as damage to bones and joints, and 'dead finger').<sup>7</sup> Excessive heat and noise, through either immediate contact or through environmental contexts (such as laundries) contribute to a range of injuries. These include thermal stress, exhaustion, lung damage, burns and reproductive disorders, to name a few.<sup>8</sup> Lastly is exposure to electrophysical and other sources of radiation. The range of workers potentially exposed to radiation has expanded as a wider range of technologies incorporates electrophysical agents (common examples include microwaves, lasers, ultra-sound and x-rays). The known consequences of exposure to radiation include cancers, eye cataracts, reproductive problems, burns and changes in the immune system.<sup>9</sup>

*Chemicals and other hazardous substances:* exposure to chemicals in the workplace is widespread yet their associated risks are often unknown. Over seven million chemicals were identified by the International Labour Organisation 10 years ago, and thousands more are created every year.<sup>10</sup> The risks associated with chemicals and other hazardous substances are diverse and can be extreme. They may result in skin irritations (for example, hairdressers), asthma (for example, bakery workers effected by flour and dust), and a range of other injuries such as chemical burns and fatal diseases. Delays in

official recognition of substances as hazardous can have widespread and long-term implications. The use of asbestos, for example, was associated with disease in scientific studies in the early 1900s, but the first court case in Australia affirming liability of an employer for a worker's fatal illnesses from asbestos exposure did not occur until the 1970s. Many workers (and their families but also consumers) had been exposed over that lengthy period before official recognition of the hazardous nature of asbestos. The incidence of disease associated with asbestos is not expected to peak in Australia until 2025. At least 4700 deaths from mesothelioma have occurred in Australia since the early 1980s (when records began), and more than 25 000 more are expected to die from it by 2040.<sup>11</sup>

New technologies also produce potentially new risks, some of which involve hazardous substances. Nanotechnology, the process of manipulating matter on an atomic scale, is the most recent and controversial of these. Nanomaterials are very tiny particles—so small you cannot see them; so small that they may be absorbed into the body with unknown health consequences. They are increasingly used in products such as sun screen lotion (to make a clear lotion) and food (to enhance the flavour), as well as cars, electronic goods and plastics. Research on the OHS risks associated with exposure to nanomaterials is in its infancy, hence regulatory agencies are poorly placed to introduce exposure standards to ensure safe work processes. Some countries have introduced mandatory reporting of nanomaterials in cosmetics, but none have yet introduced legislation for workers employed in the production of nanotechnologies. In response, the European Trade Union Confederation is lobbying for a 'no data, no exposure' precautionary approach to minimise workers' exposure.<sup>12</sup> Safe Work Australia (the Australian government's OHS agency) has released two research reports on nanomaterials. The first found that conclusive evidence of the 'unique toxicity' of nanomaterials did not exist, but they were 'potentially more toxic' than larger particles. The second found that extraction ventilation, when correctly designed and installed, could significantly reduce workers' exposure to the particles. Safe Work Australia and other government agencies are about to undertake further research on nanomaterials and the requirements for its safe handling in the workplace.<sup>13</sup>

*Ergonomic hazards:* the way jobs are designed, such as the repetitive nature of tasks, arduous physical labour, long working hours and shift work can pose risks to health and safety.<sup>14</sup> Ergonomists (specialists in the interface between physiological characteristics and the physical work environment) are involved in the design of jobs and equipment (together with engineers) to remove hazards, but some still prevail. Body stressing, which refers to injuries from manual handling, repetitive work and constrained postures, is the most common cause of injury in Australia, contributing to 41 per cent of all serious injuries in 2006–07.<sup>15</sup>

*Psychosocial risks:* the psychosocial work environment refers to the opportunities available at work for an individual 'to meet his or her needs of well-being, productivity and positive self-experience'.<sup>16</sup> Unlike other workplace hazards, **psychosocial risks** are often associated with a range of factors that combine to produce a work environment that contributes to occupational stress and longer term adverse health effects such as high blood pressure and heart disease. A variety of organisational factors and the psychosocial environment contribute to occupational stress. These include the interaction of low levels of task control with high workplace demands (known as the demand/control imbalance), a situation compounded when support from co-workers and supervisors is low;<sup>17</sup> the interaction of high work effort and low rewards (the effort/reward imbalance);<sup>18</sup> and perceptions of organisational justice, both procedural and relational.<sup>19</sup> The latter refers to perceptions of fairness in organisational decision-making processes, and in the treatment of workers by supervisors. Management styles and structures, and decision-making processes impact on psychosocial risks,

**Psychosocial risks**  
risks associated with the design, management, and social and organisational context of work that may cause psychological or physical harm.

as well as the extent to which workers can become involved in the identification and management of hazards (discussed below). We look at occupational stress in more detail later; however, it is important to note that psychosocial risks are associated with a range of human resource policies. Encouraging and supporting high levels of employee participation, for example, and ensuring OHS is integrated with other policies such as performance management systems can contribute to a positive psychosocial work environment.<sup>20</sup>

A wide variety of workplace hazards need to be eliminated or controlled to create a safe and healthy work environment. A surprisingly high proportion of the workforce in Australia continues to be exposed to such risks. In 2008, an estimated one in five workers who were exposed to physical hazards in Australia (including dust, smoke, gas, direct sunlight and excessive noise) were given no protection from those hazards, and one-third of all workers felt exposed to psychosocial hazards such as stress and bullying.<sup>21</sup>

### Assessing workplace hazards

**Risk assessment** involves identifying hazards in the workplace; assessing the likelihood of the hazard occurring and its consequences; and deciding whether the hazard can be eliminated, and if not, how it can be controlled. It involves looking at every task to determine whether it could harm someone, and then working out how to eliminate the risk of harm. In some cases, the risk control process will be subject to OHS regulations; in other cases it may involve a simple solution such as clearing walkways of obstructions that may trip people. Past injury records can also assist in identifying hazards. Risk assessment is not a one-off process, but is conducted regularly (at least annually) and whenever changes are introduced in the workplace, such as when new equipment is purchased or when abnormal situations arise.<sup>22</sup> All organisations must conduct risk assessments, irrespective of industry or size. This is because it is fundamental to providing a safe and healthy working environment, and is one of many legal obligations that employers have to comply with in relation to OHS.

Complex risks with potentially large and severe consequences, such as those that arise on mining sites, are usually assessed by specialist risk assessors. In less complex situations, risk assessments are often conducted by OHS staff together with shopfloor workers trained in hazard identification. Training is important because working conditions to which people become accustomed, such as untidy, cramped or noisy conditions, may not be recognised as hazardous without training.<sup>23</sup> Also, laypersons' perception of risk often differs from scientific data.<sup>24</sup> The risk of an explosion in a mine, for example, is perceived as far greater than the risk of being injured by opting not to wear protective eye equipment or clothing, even though the probability of being injured from a mine explosion is far lower. They tend to overestimate the level of risk when the effect is larger (for example, catastrophic), when exposure is involuntary, when they are less informed about the nature of the risk, and when they have known people injured by that risk.<sup>25</sup> This gap between perception and reality is overcome through the provision of information, training and development.

The Melbourne manufacturing plant of BASF, the international chemical company, provides formal risk training to its entire staff. Risk assessments are conducted by the Health, Safety, Security and Environment (HSSE) manager, shopfloor operators, health and safety representatives, site supervisors and health and safety team members. External expertise is only drawn upon when necessary. Every employee is likely to have been involved in at least one risk assessment exercise, contributing to an enhanced awareness of risks and ownership of solutions. According to the HSSE manager, 'Everyone looks out for each other, doing what they can to avoid situations where they

**Risk assessment**  
the process of  
identifying, assessing  
and eliminating or  
controlling hazards.



## Keeping young workers safe

Young workers have a much greater risk of being injured at work, in part because of their lack of experience, but also because of inadequate training and supervision, and a tendency not to ask for advice, preferring instead to appear responsible and capable of performing designated tasks. While not all injuries suffered by younger workers are serious, a severe injury can result in a lifetime of permanent disability (with long-term financial and personal hardship). OHS statutory authorities often target young workers in advertising campaigns to inform them about the nature of workplace risks, and the steps they can take to avoid injury. WorkSafe Victoria, for example, commenced a major advertising campaign in 2008 around the theme of 'it's OK to ask' to impress on young workers how important it was to ask questions if they were unsure about safe work practices. That campaign was loosely based on real traumatic injuries, and included 'shock tactic' advertisements similar to those used in road safety advertisements.

In 2009, the NSW government launched a number of websites designed to appeal to young workers and educate them about OHS risks. Included among these are an interactive health and safety tutorial which young workers can use to learn about health and safety. It includes animations which test the viewers' understanding of 'right' and 'wrong' solutions to workplace issues from a safety perspective, as well as online tests. It also includes real-life case studies about injuries sustained by young workers, such as a 16-year-old kitchenhand casual who received several fractures when he fell through a skylight onto a table. He had been told to secure a loose rope attached to an inflatable sign on the roof of the restaurant. His injuries required six weeks off work.

Acting CEO of NSW WorkCover John Watson explained further: 'A major innovation that WorkCover is trialling for introduction later this year is a free, online learning tool called Hazard a Guess, which will assist employers and educators in meeting their OHS training obligations.'

'Using the Hazard a Guess program, employers and trainers will be able to put together a set of online workplace tasks appropriate to their particular industry and test the OHS knowledge of their young workers or students,' said Mr Watson. 'The results of these online tests will enable employers and trainers to track the progress of their young workers or students, and decide whether further training is required,' he said.

NSW WorkCover's approach to educating young workers has a number of features designed to enhance its effectiveness. It has been designed specifically for young workers, using technology with which they are most familiar. Its interactive animated style is intended to educate while also keeping users interested in the content. It is accessible at any time—an employer, for example, could easily get young workers to complete the tests during working hours when they first commence employment (completing the online quizzes during working hours ensures results can be verified by the employer). Lastly, it is free. Small employers who may have been reluctant to invest in the training of their younger workers can now provide that training with the only cost being young workers' time.

Source: Adapted from WorkCover NSW website: <http://www.workcover.nsw.gov.au/aboutus/newsroom/Pages/WorkCoverfocusonyoungworkersafety.aspx>; <http://hazardaguess-public.youngworkers.com.au/>.

could be exposed to dangers. This is emphasised by the managing director, who conducts periodic safety walks onsite and also gets involved in our safety committee meetings'.<sup>26</sup>

Tieman Industries, the manufacturer of liquid road tankers, dock products and lifting and access equipment, takes a similar approach. Its manufacturing process involves multiple potential hazards such as extensive manual handling, confined spaces and welding with hazardous fumes. It has a comprehensive hazard identification process for each task, with accountability for the process managed down to team leader level. All health and safety representatives are trained in the risk management process. According to the national risk manager, 'employees and health and safety representatives are also engaged in the hazard identification process. Through consultation, they provide real solutions to identified risks'.<sup>27</sup>

## Managing occupational health and safety—cost or investment?

Some organisations still regard expenditure on OHS as a cost, allocating only sufficient resources to meet minimum legal compliance requirements.<sup>28</sup> As shown in the opening case, even large public companies may not allocate sufficient resources, or may prioritise other factors above OHS, thus placing workers at risk. Yet, not only is poor OHS costly to individuals and organisations, but effective OHS management can improve firm performance beyond saving the costs that flow from workplace injuries.<sup>29</sup>

At a global level, the ILO estimates that around 4 per cent of gross domestic product (GDP) (US\$1.25 trillion) is lost each year due to occupational injuries and diseases, including lost working time, production interruptions, and workers compensation costs. In Australia, the cost of occupational injury, illness and death was estimated at \$57.5 billion or 5.9 per cent of GDP for 2005–06.<sup>30</sup> Employers bore 3 per cent of these costs (through sick leave, staff turnover, legal costs and the like); workers bore 49 per cent (including loss of income, medical and carer payments, and administrative costs associated with workers compensation claims etc.); and the community carried the remaining 47 per cent through government transfer payments, public health system payments, and administering compensation systems. These calculations do not include the costs of suffering and early death, which, in 2000–01, were estimated to be at least A\$57 billion.<sup>31</sup>

In common with other developed countries, the number of workers in Australia with a serious injury or illness (including deaths, permanent incapacity or injuries requiring at least one week's absence), based on workers compensation claims, has declined over recent decades. Injured workers can lodge a workers compensation claim to receive income while they are absent from work and to cover medical costs, hence the number of claims is the most common measure of workplace injuries and disease. In 2006–07, just over 132 000 workers compensation claims were lodged for serious injury and illness (including 236 fatalities), the equivalent of 1.4 per cent of the Australian workforce.<sup>32</sup> This compares to 144 740 six years earlier (2000–01).<sup>33</sup> But not all workers injured at work lodge a workers compensation claim.<sup>34</sup> An alternative measure, drawn from the Australian Bureau of Statistics National Household Survey, found a much higher 6.4 per cent of the workforce (625 900 employees) experienced a workplace injury or illness in 2005–06.<sup>35</sup> Almost two-thirds had not lodged a workers compensation claim. Of these, 52 000 were not aware of their right to claim workers compensation, and a further 31 300 were too concerned about the impact of a claim on their current or future employment.<sup>36</sup> Casual employees were particularly reluctant to lodge a claim



because of the fear of job loss.<sup>37</sup> As precarious employment has expanded (through casual and fixed term employment, temporary agency work and independent contracting), the proportion of the workforce unwilling to lodge a claim, and subsequent understatement of the extent of workplace injuries based on measures such as workers compensation claims, is likely to have increased.<sup>38</sup> Also, not all deaths associated with work are counted in workers compensation claims data. Bystander fatalities are excluded, as are some commuting-related fatalities. A more comprehensive measure, although limited to traumatic fatalities (excluding work-related diseases), found 453 people died from work-related injuries in Australia in 2006–07, an increase of 18 per cent since 2003–04. In 2006–07, 295 people died from injuries sustained at work (2.8 deaths per 100 000 workers), 93 died from injuries sustained while travelling to or from work (commuting-related), and 65 died as a result of someone else's work activity.<sup>39</sup>

At an organisational level, the costs of poor OHS can be substantial: lost production, higher workers compensation premiums and potentially heavy fines for breaches of legal obligations (as shown in the opening case). But costs also flow from lower morale and job satisfaction, higher levels of absenteeism, presenteeism (attending work while ill or injured), and labour turnover. Some of these costs can be readily measured. BHP Billiton, for example, failed to meet its production targets in the Pilbara in the 2009 financial year due to mine shut-downs following five workplace deaths during the 12-month period—an outcome that made the front page of the leading national financial newspaper.<sup>40</sup> Workers compensation premiums, the insurance premium paid by organisations to cover the wages, and medical and associated costs of injured workers, can also be measured and impose significant costs. In most Australian jurisdictions, premiums are experience rated. They are adjusted to reflect the organisation's past injury experience (the number and cost of workers compensation claims). One of the largest labour hire companies in Australia, the Skilled Group, for example, had workers compensation premiums in 1998 of around A\$20 million (equivalent to about 5.4 per cent of their total revenue) when their operating profit after tax was only \$5.9 million.<sup>41</sup> Following major changes to the way it managed OHS, its workers compensation premiums fell quickly and its 2000–01 annual report highlighted a reduction in workers compensation premiums as a 'significant achievement' of that financial year.<sup>42</sup> Similarly, Elders Limited, the international agribusiness, was reported in 2009 as having reduced its workers compensation premiums by more than half since 2004, saving millions of dollars. Its OHS and environment manager was subsequently nominated for Australian Businesswomen of the Year in 2009 in recognition of her achievements in improving health and safety.<sup>43</sup> These examples illustrate both the magnitude of the costs of workers compensation premiums, and the tangible financial gains that can be made through good OHS practices.

Other OHS costs, such as lower morale and job satisfaction, are less easily measured as they are likely to result from a package of human resource practices, of which OHS is only a part. The HRM function in larger organisations will seek to measure these outcomes, and those that have integrated their OHS management with other HRM functions will be better placed to identify OHS's contribution to these outcomes. Surveys on job satisfaction and exit interviews, for example, will include questions that capture employees' perceptions and experience of psychosocial risks, their capacity to participate in OHS issues, and the responsiveness of management to controlling or eliminating risks in the workplace.

Lastly, the impact and costs of poor OHS practices can extend beyond the immediate workplace. Fatalities to bystanders were mentioned earlier, but less obvious, for example, are the effects on neighbours of plants emitting health risks into the environment (such as lead or asbestos dust) and

customers (such as those who purchased building materials composed of asbestos). On occasion these effects are more overt. In 2001, a massive explosion at a chemical plant in France killed 31 people, injured at least 3000 and damaged more than 30 000 homes and business within a radius of 6 kilometres. The devastation of the site was so complete that the actual cause of the explosion could not be determined. However, investigators of the explosion found abnormally large quantities of ammonium nitrate (a highly volatile and flammable chemical) stored at the plant. The company has since paid 2 billion euros in compensation to those affected by the blast.<sup>44</sup>

An organisation that views its competitive advantage as flowing from a motivated, efficient and healthy workforce, where an investment in skills and organisational knowledge is returned through lower absence and labour turnover, needs strategies that promote job satisfaction, commitment, and safe and healthy employees. Organisations with a comprehensive approach to managing health and safety, such as systematic policies and practices supporting training, employee involvement, and ongoing communication about risks and their resolution, perform better than their competitors.<sup>45</sup> They can produce higher quality products and services—an outcome of the systematic analysis of tasks, instructions, planning and job control that underpins safe work. That quality is accompanied by a reduction in production costs—there are fewer injuries and associated costly disruptions, and increased customer satisfaction. And the organisation's reputation is enhanced through evidence of active corporate social responsibility. The technological and organisational innovations that flow from finding solutions to hazards in the workplace can also contribute to innovations in product and service development. Lastly, a safer workplace will be accompanied by a higher level of worker motivation.<sup>46</sup> An investment in OHS allows organisations 'to maintain and develop their intangibles, specifically their intellectual capital, which has a fundamental value for the development of the firm.'<sup>47</sup> An effective health and safety strategy supports the achievement of these objectives.<sup>48</sup>

## Regulation of occupational health and safety

### Australian occupational health and safety laws

A range of OHS activities are governed by legislation, which managers and HRM practitioners need to be familiar with. Until the 1980s, OHS was regulated by a prescriptive approach whereby the law prescribed specific actions required of employers. Over time, industrialised countries have moved to performance-orientated or goal-setting standards. Contemporary legislation is typically couched in broad terms such as, 'an employer must, so far as is reasonably practicable, provide and maintain ... a working environment that is safe and without risks to health'.<sup>49</sup> This **duty of care** underpins all OHS activities required of employers. OHS Acts are then supported by 'codes of practice' tailored to particular risks, which set out the steps an employer is required to take to remove or control that risk. Depending on the jurisdiction, compliance with a code of practice will be taken as evidence of compliance with the legislation should an employer be subject to prosecution. Regulations also accompany OHS Acts, again specific to particular risks. For example, in Victoria, the regulation covering employers' duties in relation to guarding machinery states that when machine guarding is used to control risk, that guarding should include a physical barrier that only allows access to the machinery when it safe to do so (such as only allowing access when the machine is switched off).<sup>50</sup> In Australia, this package of OHS laws, codes of practice and regulations has traditionally been state based, amounting to a large volume of legal requirements, particularly for employers operating in

**Duty of care**  
the requirement for everything reasonably practicable to be done to protect the health and safety of the workplace.

more than one state. By 2009, there were 10 OHS Acts, at least 50 other regulatory instruments and 282 codes of practice concerned with workplace health and safety across Australia.<sup>51</sup>

When the Rudd Government was elected in 2007, it commenced developing a uniform set of laws in OHS to cover all of Australia. This is a substantial shift in the regulatory context for OHS in Australia. Uniformity is intended to bring efficiencies and remove the complexities that confront organisations operating in multiple jurisdictions. In 2009, after extensive consultations, a national review committee produced a draft 'Model' OHS Act for further discussion. Consultations between the federal government, employer associations and trade unions over the content of the 'Model' OHS laws were intense. Unions were concerned that, in order to be acceptable to employers and state governments, the new Act would reflect the lowest common denominator of state Acts. Employer associations, on the other hand, were concerned that the more controversial elements of some state Acts, such as the right of unions to prosecute employers for breaches of OHS legislation and collect the fines from those prosecutions (a feature of the NSW and ACT Acts), would be imposed on all states. They were also concerned about the new maximum fines, an area of major difference between states. In Tasmania, for example, the maximum fine on a corporation is only A\$180 000, but it is A\$1.5 million in New South Wales.<sup>52</sup> The new Act will include a maximum fine of A\$3 million, and includes custodial sentences for serious breaches involving recklessness.<sup>53</sup> While some compromises were forthcoming, the new *Work Health and Safety Act 2010* was eventually endorsed in December 2009 notwithstanding continued objection by the unions that parts of the Act may reduce OHS standards. All state governments (except Western Australia) agreed to enact state legislation identical to the federal 'Model' Act by the end of 2011.<sup>54</sup> State governments will retain OHS powers, but the new state OHS Acts will be identical to that agreed with the federal government. New national regulations will progressively replace those of the states.<sup>55</sup> Several features of the Bill supporting the 'Model' Act are outlined here. Existing state and territory Acts can be accessed from the respective government OHS agency websites.

From 2012, organisations will have to ensure workplaces are safe and without risks to all types of workers carrying out activities on behalf of the organisation (including employees of subcontractors), and any other person affected by those activities (such as customers).<sup>56</sup> This includes ensuring that plant and systems of work do not impose risks on the health or safety of any person, and providing adequate welfare facilities, information, training, instruction and supervision for all workers. This broadening of obligations permeates all obligations of employers under the Act, but is most clearly seen with respect to the need to consult over OHS. Organisations will be obliged to consult about OHS with workers and other relevant duty holders (such as contractors) where reasonably practicable.<sup>57</sup> Consultation is not limited to OHS representatives or employees, but includes workers such as volunteers and temporary agency workers employed by an agency but placed with the organisation. Organisations will need to share information, give workers a reasonable opportunity to raise OHS work issues and contribute to the decision-making process, take workers' views into account, and advise them of the outcomes of consultation. A failure to consult can result in a fine of up to \$100 000 for a corporation, and \$20 000 for an individual.<sup>58</sup>

Continuing the practice of existing state OHS Acts, workers will have an obligation to undertake reasonable care for themselves and for others, and to cooperate with any reasonable instruction by the organisation.<sup>59</sup> They will also have the right to elect health and safety representatives to represent them in a range of OHS processes. These include (but are not limited to) representation in consultations, in monitoring OHS measures taken at the workplace, investigating OHS complaints, and inquiring

into anything that appears to present a risk to health and safety at work. An OHS representative can direct a worker to cease work when there is a concern that continuing to work could result in immediate or imminent exposure to a hazard. They need to consult with the employer before issuing such a direction, unless it is impracticable to do so.<sup>60</sup> Employees can also request that an OHS committee be formed, of which at least half the members must be workers (not nominated by the employer). The role of OHS committees is to facilitate cooperation between the organisation and workers in relation to instigating, developing and carrying out measures designed to ensure a safe and healthy work environment.<sup>61</sup> According to a member of the review panel that developed the new OHS laws, they will 'require and thereby encourage people to take a more all-inclusive approach [to safety], and to focus on their relationships with others that are involved in the work they are doing ... it focuses on making people work together for the betterment of safety'.<sup>62</sup>

State and territory OHS Acts are currently enforced through a process of inspection, investigation, education and prosecution, a process that will continue under the new national system. OHS inspectors have a range of powers, including entering workplaces to conduct searches, inspections, examinations and tests; requiring persons to give reasonable help to exercise their powers; use search warrants; and seize dangerous workplaces and 'things', such as sealing the entrance to a room containing a dangerous thing or dismantling dangerous plant or structures.<sup>63</sup> Both inspectors and the regulator have the power to initiate prosecutions.<sup>64</sup> OHS authorities have always had discretionary power to decide whether to prosecute, and they have tended to limit prosecutions to offences involving risk of death or serious injury, or if the public interest would benefit. Their primary focus instead has been on education and encouraging employers to comply with legal obligations. Also, it is widely acknowledged that OHS inspectorates have insufficient resources to visit workplaces regularly, especially smaller workplaces. Trade unions have filled some of this gap in unionised workplaces through the education of members, negotiations with employers, and when necessary, industrial action.

### Related regulation: workers compensation law

The principal OHS statutes throughout Australia are accompanied by workers compensation regulation, which sets out the rights and obligations of employers and employees following a work-related injury. These state workers compensation Acts will continue notwithstanding the move to a national OHS system. Workers compensation (and rehabilitation) legislation provides for compensation to injured employees, regardless of who is responsible for the workplace illness or injury. Historically, injured employees could only bring a common law action against their employer, which required proof of negligence by the employer or a person acting on behalf of the employer. Contemporary workers compensation has either abolished or severely limited the rights of workers to sue for common law negligence. Instead, injured workers are entitled to compensation for lost wages while injured (at a rate lower than their pre-injury earnings) and medical and related expenses. They are also entitled to be offered suitable duties (such as tasks requiring light rather than heavy lifting) or their pre-injury employment for a limited time following their injury. This return to work approach is based on the joint assumptions that it will benefit injured workers and reduce the costs of compensation. It is intended to encourage the rehabilitation of injured workers and safeguard them against dismissal.<sup>65</sup>

In 2007–08, 85 per cent of injured workers across Australia returned to work after being injured, but only 75 per cent were still at work when surveyed 7–9 months after submitting their workers compensation claim. Importantly, in 25 per cent of cases, injured workers felt their main supervisor

or employer made it hard to return to work, which is indicative of the need for organisations to invest more resources into managing injured workers' return to work, including investing in the training of supervisors and managers.<sup>66</sup> It was explained earlier that workers compensation premiums are typically experience rated in Australia. Organisations that do not support the successful return to work of injured workers are penalised through higher workers compensation costs. This does not, however, necessarily assist the injured worker who is not accepted back by their employer. Injured workers forced to seek new employment following their recovery have been shown to be less successful in returning to work,<sup>67</sup> and to earn lower wages than they received pre-injury.<sup>68</sup>

## Prevention through a positive safety culture

It will be recalled from the introduction that the ILO/WHO objectives in relation to OHS included the development of work cultures that support health and safety at work. Following a number of catastrophic incidents, such as the Chernobyl nuclear reactor disaster in the former USSR (with 56 deaths and at least 4000 cancer victims)<sup>69</sup> and the North Sea Piper Alpha oil rig explosion (in which 167 workers died),<sup>70</sup> the emphasis in preventative health and safety practices has shifted to the development of an organisational culture that promotes safe practices throughout the organisation on a daily basis. Known as a **positive safety culture**, it is:

### Positive safety culture

a set of values, perceptions, attitudes and patterns of behaviour with regard to safety shared by members of the organisation, reflecting a high level of concern and commitment to the prevention of accidents and illnesses.

*a set of values, perceptions, attitudes and patterns of behaviour with regard to safety shared by members of the organisation; as well as a set of policies, practices and procedures relating to the reduction of employees' exposure to occupational risks, implemented at every level of the organisation, and reflecting a high level of concern and commitment to the prevention of accidents and illnesses.<sup>71</sup>*

The objective of a positive safety culture is 'to create an atmosphere in which employees are aware of the risks in their workplace, are continually on guard against them, and avoid taking any unsafe actions.'<sup>72</sup>

### Reporting culture

people are prepared to report errors, near misses, unsafe conditions, inappropriate procedures, and any other concerns they may have about safety.

A positive safety culture has also been described as a **reporting culture**, in which 'people are prepared to report errors, near misses, unsafe conditions, inappropriate procedures, and any other concerns they may have about safety. These are the warning signs of ways in which things might go disastrously wrong'.<sup>73</sup> But these warning signs are only useful when analysed and acted upon. Elders Limited, for example, began developing a positive safety culture in 2004. Their OHS manager raised the awareness of OHS through Elders' weekly employee newsletter (with an OHS story always on the front page); through visiting all branches throughout Australia to consult with staff and conduct OHS training, and through an annual OHS 'innovation' prize to encourage staff to think about solutions to OHS problems, which could be replicated across the firm's many branches. Elders' lost time injury rates have since fallen by over 50 per cent, and the number of incident reports (including near-miss reports) have increased by about 20 per cent. The incident reporting system had not changed; the increase was attributable to a better understanding of OHS and the benefits of reporting incidents.<sup>74</sup>

When an organisation has a positive safety culture, employees are more likely to comply with safety procedures because they are more aware of and have greater ownership of those procedures; they are more likely to participate in extra-role activities related to safety, such as taking additional steps to support other employees' safety, and less likely to participate in unsafe acts.<sup>75</sup> These behaviours

are largely dependent on the priority that organisations and supervisors place on safety, and the systems in place to support such behaviours. They will be influenced by the values and priorities of their immediate supervisors, group processes, and the degree of job autonomy to comply with safety procedures and participate in extra-role activities. In other words, a positive safety climate cannot be developed without consideration of the daily constraints on employees.

Three key indicators of a positive safety culture are management commitment to safety; employee involvement in safety, and an effective safety management system.<sup>76</sup> Management commitment to safety is critical to the development and maintenance of a positive safety culture.<sup>77</sup> Managers directly influence employee safety behaviour through their own attitudes and behaviours, and through the allocation of resources to support a safe working environment. Positive behaviours include regular formal and informal communication with employees about safety, participation in safety committees, safety training and through regular visits to worksites to ‘talk safety’.<sup>78</sup> These behaviours must be backed by the allocation of resources to support a comprehensive safety management system, and by actions to ensure lower level managers understand the importance of safe practices. When supervisors continually assert the importance of production pressures over safety practices, for example, employees will respond by also giving safety a lower priority irrespective of statements from senior management.<sup>79</sup>

Employee involvement in safety is the second indicator of a positive safety culture. Employee involvement has been described as the equivalent of hiring ‘cost-effective safety consultants’.<sup>80</sup> Their intimate knowledge of work processes exceeds that of management and of external consultants who might otherwise be hired to identify risks. In addition, employees are more likely to take ownership of solutions, thereby changing the nature of workplace risks. Importantly, studies have consistently found employee participation in decisions about safety results in reduced injury rates.<sup>81</sup> Their involvement is fundamental to reducing injuries because they:

*have the most direct interest in OHS of any party: it is their lives and limbs that are at risk when things go wrong. Moreover, workers often know more about the hazards associated with their workplace than anyone else, for the obvious reason that they have to live with them, day by day.*<sup>82</sup>

Bice and Hayes’s<sup>83</sup> account of a process plant’s workshop on the preparation of equipment containing hazardous chemicals prior to maintenance work, illustrates this well:

*Plant operations personnel said that there was always a 10 litre chemical spill when one particular piece of equipment was prepared for maintenance work because the configuration of the piping prevented liquids from draining from the system. The engineers who had designed the drainage system were unaware of the problem.*<sup>84</sup>

The regulation of OHS in Australia, it will be recalled, supports employee involvement through giving employees a legally enforceable right to participation, consultation and representation in health and safety.

The third indicator of a positive safety culture is when an organisation has an effective OHS management system. This is discussed further below. Positive safety cultures are more commonly found in organisations with high performance work systems (HPWS). These are organisations characterised by employment security; careful recruitment and selection; ongoing and extensive training; self-managed teams and decentralised decision making; information sharing; reduced status distinctions within the organisational hierarchy; an emphasis on quality output; and measurement of management

practices.<sup>85</sup> HRM policies and practices that enable HPWS also support the development of a safety climate because they are, in part, associated with a higher level of trust between management and workers.<sup>86</sup> When management commitment to safety is consistent with other HR policies, such as training, job security and task autonomy, workers have a greater level of trust in management and can participate in safer work practices without fear of retribution. In this way, the promotion of a positive safety climate is also dependent on a range of other complementary and reinforcing HRM practices.

MANAGING FOR  
INNOVATION

## Focusing on individual health

The Australian population continues to become more obese and overweight. In 2007–08, 25 per cent of persons aged 18 years and over were obese, and 37 per cent overweight. Adult males were more obese or overweight (68 per cent) than females (55 per cent). This phenomenon is not unique to Australia. A recent study found 66 per cent of Americans were overweight or obese, and nearly half had at least one chronic disease such as diabetes. In the United States, employer-based health insurance covers more than 60 per cent of the workforce, giving employers a financial incentive to improve their employees' health. Also, healthy employees are less likely to require days off sick, potentially resulting in higher productivity. 'Wellness programs' are increasingly being introduced by large employers in the United States to improve employees' health. By 2008, an estimated 77 per cent of large manufacturers offered formal wellness programs.

Some employers have reported impressive results. Johnson & Johnson reported its health and wellness program had helped it avoid US\$15.9 million in healthcare costs in 2007, while Safeway reported a 13 per cent reduction in healthcare spending and more than 20 per cent saving in healthcare premiums for employees participating in the scheme in 2006. While many programs have focused on single issues, such as weight loss or smoking cessation, employers are increasingly offering a 'whole-person' range of programs such as discounted gym memberships, seminars and online nutritional advice, counselling, and active lifestyle promotions (such as counting the number of steps taken daily). Incentives for employees to participate in the schemes have also expanded. They include cash rewards, gift vouchers, and free or subsidised health club membership. In addition, technology has offered novel ways of monitoring progress in some programs, such as wireless technology-based pedometers, which track and record the degree of intensity, kilometres walked and calories burnt.

A meta-analysis of wellness programs in the United States found the average return on investment (based on savings in medical costs) was US\$3.37 for every dollar spent. The return on investment in relation to reduced absenteeism was US\$2.73 for each dollar spent, assuming average hourly wages of US\$20.49. All but one study showed a reduction in absenteeism, with around 1.8 fewer days lost per year on average. These valuations did not include the replacement costs for absent workers, nor the recruitment benefits of becoming a more attractive employer. The authors also cautioned that the returns on investment were likely to differ between industries (manufacturing workers, for example, may have different health issues from finance workers), and incentives to participate, corporate culture and other factors will also impact on the effectiveness of programs.

In Australia, the National Australia Bank introduced a 'positive psychology and employee well-being program' in 2004, which is said to have saved its Group Technology Operations A\$90 million per

MANAGING FOR INNOVATION *Continued*

year. The program offers fruit daily, a gym, bi-annual health checks, an online health database, and regular workshops and seminars, one of which included a Buddhist monk presenting on workplace ‘mindfulness’. Employees were also trained to be ‘resilient’, which included education on psychological distress. The former staff development officer at NAB said that over a two-year period, sick leave absence fell on average from seven to five days and stress-related injuries fell 70 per cent. His advice to those considering such a program was:

- *constantly strive for leadership commitment—nothing motivated employees to participate in programs more than the endorsement or participation of executives*
- *engage employees by starting at the top and working down*
- *constantly promote and mix things up*
- *stay on top of logistics*
- *constantly measure results to prove to management that programs are profitable.*

Sources: Adapted from ABS, 2009, *National Health Survey, 2007–08*, catalogue no. 4364, Australian Bureau of Statistics, Canberra; G.T. DeVries III, 2010, ‘Innovations in workplace wellness: six new tools to enhance programs and maximize employee health and productivity’, *Compensation & Benefits Review*, 42(1), pp. 46–51; K. Baicker, D. Cutler & Z. Song, 2010, ‘Workplace wellness programs can generate savings’, *Health Affairs*, 29(2), pp. 1–8; “‘Honest’ wellbeing program saves NAB \$90 million”, 2008, *OHSAlert*, 25 November.

## OHS management systems

An **OHS management system** (OHSMS) has been defined as ‘a combination of the planning and review, the management organisational arrangements, the consultative arrangements, and the specific program elements that work together in an integrated way to improve health and safety performance’.<sup>87</sup> It involves a systematic approach to managing health and safety, rather than ad hoc structures and prescriptions. Basic elements of an OHS management system can be categorised into three groups: organisation, responsibility and accountability; consultative arrangements; and specific program elements.<sup>88</sup>

*Organisation, responsibility and accountability.* Responsibility for OHS is shared among HR, executive, senior and line managers, and employees. Each group has responsibility and accountability with regard to OHS, although the organisation of OHS responsibilities will vary between organisations. Responsibilities are reinforced through overt commitment by senior management, the organisation’s OHS policies, and performance management systems.<sup>89</sup> Larger organisations are more likely to have a dedicated OHS manager, reporting directly to senior management. An OHS manager’s responsibilities may include:

- designing, evaluating and reviewing **OHS policy** and programs through consultative processes
- checking OHS legal compliance
- conducting or coordinating OHS audits with OHS representatives
- providing advice to managers, supervisors and OHS representatives or committees
- communicating OHS information to all stakeholders
- overseeing OHS programs such as training and health promotion.

In many organisations, where OHS staff are located within the HR function, these activities will be the responsibility of the HR function.

**OHS management system**  
organisational policy and programs that cover the planning, implementation, evaluation and improvement of OHS in an organisation.

**OHS policy**  
a written statement approved by top management, typically accompanied by a set of OHS programs, rules and instructions, that identifies OHS accountabilities and sets out the ways in which OHS compliance will be met.



*Consultative arrangements.* These include elements such as OHS representatives, committees and broad employee participation. Just as employee involvement is critical to risk assessment and a positive safety culture, it is also critical to an effective safety management system. Employee participation can be supported and encouraged through:

- adopting ideas which have originated from workers' suggestions or consultative committees
- holding regular OHS committee meetings to make decisions on OHS
- using teams made up of workers from different parts of the organisation to resolve specific OHS problems<sup>90</sup>
- providing appropriate training to OHS representatives and OHS committee members
- sharing decision making on the role of advice provided by external experts.

*Specific OHS program elements.* These include:

- health and safety rules and procedures
- training programs
- workplace inspections
- incident reporting and investigation
- statement of principles for hazard prevention and control
- data collection and analysis/record keeping
- OHS promotion and information provision
- purchasing and design
- emergency procedures
- medical and first aid
- monitoring and evaluation
- dealing with specific hazards and work organisation issues.<sup>91</sup>

The growing emphasis on OHS management systems has had both positive and negative consequences. On the one hand, organisations that view an OHS management system as a means of developing a comprehensive approach to OHS, and a positive safety culture, benefit from having a systematic approach, which ensures all facets of OHS are recognised and supported.<sup>92</sup> On the other hand, organisations that adopt a standardised OHS system because of contractual obligations with customers (such as those supplying production inputs to another organisation) may find that nothing changes once they have a documented system, and that the specifications of that system do not match the organisation's needs.<sup>93</sup> A study of OHS in the NSW mining industry, for example, recommended that mining companies be:

*encouraged to develop a systematic approach to managing OHS, not complex, paper-based OHS management systems. Such an approach must be built upon clear goals and participative strategies to achieve them. The OHSMS can then be a tool that supports achievement of agreed goals and effective risk control, rather than act as an end in itself.<sup>94</sup>*

The effectiveness of an OHS management system is often assessed through an OHS audit process. Auditing (of OHS) is a systematic examination against established criteria, conducted regularly, to identify deviations from the OHS management system, and to determine whether these deviations can compromise health, safety and productivity. Several auditing tools are available from various OHS

authorities and professional organisations. For example, SafetyMAP (Safety Management Achievement Program) is an OHS management system audit tool developed by WorkSafe Victoria.<sup>95</sup> The National Safety Council of Australia uses a Five-star Health and Safety Management System, which is a quality system approach to OHS management. It includes a comprehensive manual and audit standard, including more than 1200 audit criteria, and is available as a computer-based system.<sup>96</sup> The National Safety Council of Australia also conducts an annual national OHS awards program, which recognises people and organisations integrating excellent OHS practices into their mainstream operations.

Not all OHS management systems are effective in producing safer and healthier workplaces. The major barriers to an effective OHS management system can be summarised as:

- 1 *Failure to meet necessary conditions for OHSMS success (by not customising systems to organisational needs, imposition without consultation, weak senior management commitment and poor employee involvement).*
- 2 *The inappropriate use of audit tools (where they become an end in themselves, are governed by misplaced management objectives, and are conducted without sound auditor skills, standards and criteria).*
- 3 *Application in hostile contexts (small business, precarious employment, contractors and labour hire companies).<sup>97</sup>*

The factors contributing to, and barriers to, effective OHS management systems in Australia are summarised in Table 4.1. Many of the barriers flow from a lack of genuine management commitment to OHS (reflected in the reasons for introducing, low resourcing and inappropriate auditing of the system), a workplace environment that does not support employee involvement, and HR practices that undermine safe practices (such as an unstable or flexible workforce where training and experience in OHS cannot be adequately developed). These barriers also impede the development of a positive safety culture, and reinforce the need for OHS considerations to be integrated into HRM policies and practices more broadly.

TABLE 4.1 Factors impacting on effectiveness of OHS management systems	
FACTORS CONTRIBUTING TO EFFECTIVE OHSMS	BARRIERS TO EFFECTIVE OHSMS
<b>A. Type of system</b>	
Customised to organisation's needs	Off-the-shelf system imposed without modification
Developed with support and involvement of all organisation stakeholders	Imposed by senior management without consultation
Safe place/innovative system	Safe person/traditional system
<b>B. Internal organisational factors</b>	
<b>(i) Management commitment</b>	
Strong senior management involvement	Delegation of OHS responsibility to line & OHS management positions
OHSMS introduced to improve OHS	Introduced and supported for non-OHS reasons
Provision of adequate resources	Inadequate resources
OHS integral to management performance appraisals	Limited accountability mechanisms
Leading by example	Words unsupported by practice
<b>(ii) Integration into management systems</b>	
All organisational functions incorporate OHS	OHSMS activities marginalised

(Continued)

TABLE 4.1 Factors impacting on effectiveness of OHS management systems (Continued)	
FACTORS CONTRIBUTING TO EFFECTIVE OHSMS	BARRIERS TO EFFECTIVE OHSMS
<b>(iii) Employee involvement</b>	
All employees encouraged and capable of participation	OHS restricted to 'technical' experts Inadequate training of employees in OHS and in consultation
Independent representation of employees encouraged and supported	Selective employee involvement at management's discretion
<b>(iv) Workforce characteristics</b>	
Stable workforce	High labour turnover, extensive casual and part-time workforce Reliance on and exclusion of labour hire employees from OHSMS
<b>C. Nature of organisation</b>	
Larger organisation familiar with systems and with adequate resources	Small business with limited resources and unfamiliar with systems concept
Stable workplace	Labour hire company with employees working between multiple client sites Disorganisation of work associated with presence of labour hire employees and contractors
<b>D. Contractor relations</b>	
Principal contractor works with subcontractor to develop compatible OHSMS	Principal contractor simply requires subcontractor to have OHSMS Principal contractor simply imposes their OHSMS on subcontractor Subcontractor's OHSMS inconsistent with principal's OHSMS
<b>E. Audits and audit tools</b>	
Appropriately used audits can verify and validate OHSMS and facilitate continuous improvement	Inappropriately used audits encourage 'paper systems' and an instrumentalist approach to OHSMS
Adequate audit tools are tailored to organisational needs and reflect key OHSMS success factors	Inadequate audit tools support mediocre OHSMS
Audit processes are robust and auditors are technically competent	Quality-style audit processes and inadequate auditor skills limit audit comprehensiveness
Audits are integrated within a comprehensive approach to measurement	Use of audits as the primary measurement tool

Source: C. Gallagher, E. Underhill & M. Rimmer, 2001, *Review of the Effectiveness of OHS Management Systems in Securing Healthy & Safe Workplaces*, National Occupational Health & Safety Commission, Sydney, p. viii.

## Measuring and evaluating OHS performance

The effectiveness of OHS practices can be measured in a number of ways. Auditing the OHS management system is one tool; others are outcome, input, and process measures. Outcome measures include the number of days lost to injury, the lost time injury frequency rate (LTIFR: a measure of the number of injuries relative to working time), the number of near-misses (almost but not injured), and the number of workers compensation claims and their costs. Increasingly, public companies in Australia include some of these measures (most often LTIFR) in their annual reports to shareholders, alongside other information about their commitment to OHS and corporate social responsibility. Outcome measures can provide a general indication of the effectiveness of OHS practices, but they can also hide problems or be inaccurate. For example, workers may be encouraged to take sick leave

rather than lodge a workers compensation claim; be encouraged to work with an injury rather than risk loss of employment by lodging a workers compensation claim; or not be aware of the need to report near-misses.<sup>98</sup> At Australia Post, for example, managers are subject to a number of OHS-related performance measures, which vary according to their role. They include injury reduction targets, and evidence of implementing their OHS management system. Around 5 per cent of a manager's annual bonus may be attributable to the achievement of those targets.<sup>99</sup> During a Senate inquiry into Australia Post's treatment of injured workers, it was alleged by the union representing Australia Post employees that managers pressured workers to return to work before they had adequately recovered from their injuries in order to reduce lost time injury rates, and pressured workers to take sick leave rather than attribute an injury or illness to a work-related issue (thereby also reducing lost time statistics).<sup>100</sup>

The NSW government recently approved the abolition of the use of output measures in the NSW mining industry. This is discussed further in 'Managing for sustainability' on page 128.

The second form of measurement is **input measures**. These evaluate the input of various stakeholders into the prevention of risk and maintenance of safe and healthy workplaces. They include measures of the commitment of senior management, such as written policy commitments, OHS reports to the board, and the involvement of board members and senior managers in discussions with workers about OHS. They can also include measures of overall resource expenditure on OHS (such as percentage of revenue). Other input measures include the numbers and qualifications of specialist staff employed in OHS, and the inclusion of risk assessment or preventative activities in job specifications.<sup>101</sup>

The third group of measures focuses on OHS **process measures** within the organisation and can inform on where gaps exist in practice, and what steps are necessary to improve those processes. Comcare, the Australian government's agency responsible for safety and workers compensation for federal employees (and a limited number of private sector firms), issued a list of 'positive performance indicators' categorised into five areas of OHS management in 2005.<sup>102</sup> A selection of these are listed in Table 4.2.

You can see from Table 4.2 that these OHS performance indicators are designed to measure the extent to which an OHS management system is being implemented, and problems resolved once identified. The development of OHS indicators, tailored to the organisation's needs, should be a joint

**Input measures** measure the input of stakeholders into the prevention of risk and maintenance of safe and healthy workplaces.

**Process measures** measure the extent to which an OHS management system is being implemented, and problems resolved once identified.

**TABLE 4.2** Example OHS process measures

Process	Measure
Risk management	% of planned risk assessments completed % of reported incidents investigated
Management of work	% of risk assessment recommendations implemented % of incident investigation recommendations implemented % of injured workers who have been offered support to return to work
Participation, communication and skills	Employee perception of management commitment—survey % of staff with adequate OHS training % of health and safety representative positions filled % of OHS committee recommendations implemented
Planning, design and procurement	% of service contracts with OHS clauses % of new design changes with OHS risk assessment
Monitoring and review	% of OHS systems audit recommendations implemented % of return to work (post-injury) management systems assessment recommendations implemented

Source: Comcare, 2005, *Positive Performance Indicators*, www.comcare.gov.au.

## Sustaining a safe working environment through proactive measures

Performance management systems that include OHS indicators are an increasingly common means of ensuring managers take their OHS responsibilities seriously. The type of measure incorporated into such schemes, however, can be critical to OHS practices. Those that focus on outcomes, such as lost injury frequency rates, can have perverse effects. Managers may encourage workers not to report injuries, and they shift the focus away from improving occupational health and safety and removing hazards towards individual employees' behaviour. Similar effects can result from safety incentive schemes that offer financial rewards based on the number of working days without a recorded injury. Schemes that focus on contributions to OHS processes, on the other hand, have been found to have a positive impact on health and safety standards.

After three deaths in the NSW mining industry in 2005, the state government conducted a government inquiry and commissioned a major study on OHS in that industry. A number of mining sites had safety incentive schemes whereby all employees received a financial reward when no injuries were recorded, but conversely, a single reported injury resulted in the loss of rewards for all employees. The study found these rewards either made no difference at all to safety performance, or had negative effects on incident reporting. These effects were more pronounced when the rewards for not reporting lost time injuries were greater. The study made a number of recommendations focused on safety incentive schemes, including the abolition of those that focused on reducing lost time injury rates. Other recommendations for OHS recognition and reward programs included that they should:

- 1 *reward and encourage contributions to effective OHS management, not outcomes*
- 2 *promote all aspects of a safe and healthy workplace*
- 3 *have significant management commitment, which necessarily involves resource allocation*
- 4 *be designed, implemented and reviewed in a consultative process (such as through the OHS consultative committee)*
- 5 *be reviewed and evaluated regularly to ensure that the scheme is targeting the desired results and not producing perverse incentives*
- 6 *be integrated within broader organisational improvement strategies*
- 7 *encourage effective OHS culture through team-based approaches.*

These recommendations have been supported by the NSW government. According to the Minister for Mineral Resources, 'This project highlighted what is really happening in the industry, and addressing its recommendations will allow measures to be developed to improve industry health and safety for the state's miners.'

Source: Adapted from Shaw Idea, 2007, *Digging Deeper, Wran Consultancy Project Vol 2*, NSW Department of Primary Industries and NSW Mine Safety Advisory Council, Sydney; 'Emma Government backs plan to increase mine safety', Media release, 7 February 2008, [www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au).

process involving managers, OHS officers, employee health and safety representatives and relevant union representatives. This will maximise workforce acceptance and the relevance of the measures. Likewise, joint discussion of how well the organisation is meeting targets will reinforce employees' perception that management is committed to OHS. The measures adopted will also reflect the nature of the organisation's operations and management systems.

Irrespective of whether the measure is an input or a process indicator, it is important that the measures:

- *be relevant and meaningful to improving health [and safety]*
- *be selected to show changes and progress in ohs*
- *provide a basis for benchmarking*
- *provide a basis for assessment for all interested parties*
- *provide a basis for self assessment*
- *provide a basis for quality assurance.*<sup>103</sup>

## Current issues in OHS

### Occupational stress and bullying at work

The level of occupational stress has increased in recent years both in Australia and internationally. Bullying at work has also become more prevalent. We discuss occupational stress and bullying together because while bullying can also be accompanied by physical injuries (such as physical assaults) it is most commonly associated with psychological distress culminating in occupational stress.

**Stress** is 'the adverse reaction people have to excessive pressures or other types of demand placed on them'.<sup>104</sup> Occupational stress accounted for just under 6000 workers compensation claims across Australia in 2007–08.<sup>105</sup> It is associated with excessive pressures that go beyond reasonable targets or goals, which might be motivational. While the number of workers compensation claims for stress has fallen in recent years, the level reported in 2007–08 was 34 per cent higher than that of 10 years earlier.<sup>106</sup> Also, there is compelling evidence to suggest the number of workers compensation claims lodged for stress is just the tip of the iceberg. Estimates based on survey data, rather than workers compensation claims, suggest a 30-fold underestimation of the actual extent of job-related depression in Australia, with a greater prevalence among workers in lower paid, low-skilled occupations.<sup>107</sup> Of those who lodged workers compensation claims, 35 per cent attributed their injury to work pressures, 24 per cent to harassment, and 19 per cent to occupational violence (with the remainder attributed to other factors).<sup>108</sup> Significantly, workers compensations claims for stress are far more costly than other types of injuries and often result in extended absences from work. The median cost for an occupational stress claim attributable to work pressure in 2003–04, for example, was \$14 500 compared to \$5800 for all other claims, and resulted in 11 weeks off work compared to only four for other types of claims.<sup>109</sup>

The job stress process has been described by LaMontagne et al. as:

*Exposure to stressors (either psychosocial or physical) can lead to perceived stress. Perceived stress can, in turn, lead to short-term response to stress. These short-term responses can be physiological (e.g. elevated blood pressure), psychological (e.g. tenseness) or behavioural (e.g. smoking as a form of coping). Short-term responses can then lead to enduring health*

#### Stress

the adverse emotional and/or physiological reaction to excessive pressures or other types of demands placed on a worker.

*outcomes of a physiological (e.g. coronary heart disease), psychological (e.g. anxiety disorder), or behavioural (e.g. nicotine addiction, alcoholism) nature ... In addition, physical and psychosocial stressors can interact to increase vulnerability to enduring healthy effects of job stress. Notable examples in this regard are noise and ergonomic exposures.<sup>110</sup>*

Occupational stress has been associated with a number of organisational situations. These include organisational change; poorly designed performance management systems; excessive work intensification; and job insecurity. The most comprehensive study of the health effects of organisational change was the 'Whitehall studies' conducted in the United Kingdom. That study tracked the health of over 10 000 public servants for more than a decade (1985–99), using clinical screening and self-reporting by those in the study. Workers involved in major restructuring (including redundancies) experienced an increase in health problems during the lead-up to redundancies, which deteriorated further once redundancies commenced. This included significant increases in self-reported morbidity, higher cholesterol levels, weight gain, blood pressure and ischaemia (a restriction on blood flow, which can result in angina). Personal habits among women (but not men) also changed, including taking less exercise, and consuming higher levels of alcohol and tobacco.<sup>111</sup> Loss of social support at work was an important contributor to these outcomes.<sup>112</sup> For those who eventually received job security, residual poor health effects remained, while those who experienced chronic job insecurity continued to be adversely affected even after controlling for demographic and lifestyle differences.<sup>113</sup> More than 70 studies worldwide have confirmed adverse health effects associated with downsizing and job insecurity.<sup>114</sup>

Organisational change, especially redundancies, can contribute to occupational stress and other adverse health outcomes in a number of ways. It is often associated with a breach of effort/reward reciprocity, because employees are expected to remain committed to an organisation that has 'failed to make any commensurate commitment to their ongoing employment'.<sup>115</sup> It has also been associated with increased work intensification and fatigue, presenteeism, unrewarded additional efforts, and less collaborative management styles, each of which contribute to a poor psychosocial work environment.<sup>116</sup>

In its extreme form, occupational stress can result in industrial suicides. The most widely cited example of industrial suicide is the Japanese phenomenon of karo-jisatsu, or suicide attributed to depression associated with overwork. This is distinguished from karoshi, or death by work, which captures unexpected deaths (such as heart attacks and strokes) following excessive hours of work.<sup>117</sup> In 2006, 147 cases of karoshi were recognised for compensation purposes, and 66 cases of karo-jisatsu were reported in Japan.<sup>118</sup> These were attributed to changing employment practices, particularly the decline of lifelong employment and the introduction of new work evaluation systems.<sup>119</sup> In France, in 2007, an inquiry was held into working conditions at the car manufacturer Renault following three suicides in four months, one of which involved a 38-year-old father, whose suicide note blamed work difficulties; the Renault plant had been undergoing major organisational restructuring. In 2009, France Telecom was involved in 'crisis meetings' with the French government following suicides by 23 of its workers within 18 months, several of which took place at work. France Telecom was undergoing a restructuring program at the time. One female employee took an overdose of barbiturates at work after being advised she was to be relocated to another location in France, the third such relocation within a year.<sup>120</sup> Both Renault and France Telecom subsequently introduced hotlines and free counselling services for its employees, and France Telecom suspended 500 planned employee relocations.<sup>121</sup>

Suicides attributable to working conditions are not publicised in Australia. In 2008, however, the ABC television series *Four Corners* presented a documentary about the suicides of two Telstra employees, which were alleged by family members to be associated with occupational stress.<sup>122</sup> One involved a young call-centre worker who was regarded as a 'star' performer when she first started at the call centre. According to her family, she experienced increasing levels of depression once performance targets were continually increased to unachievable levels. In 2005, for example, call centre workers were expected to earn \$242 in revenue from selling mobile phones per logged-on hour; by September 2006 it had increased to \$525 per hour. A poorly designed performance management system can result in unrealistic performance targets being set, resulting in excessive fatigue (such as

## ATTRACTING AND RETAINING TALENT

### Finding ways to reduce occupational stress

The increased prevalence of occupational stress across industrialised nations, with associated costs of staff absence, turnover, and injury compensation claims has focused governments' attention on organisational practices that contribute to occupational stress. Past preventative practices that focused on individual coping mechanisms are steadily being replaced by changes at an organisational level. The Health & Safety Executive in the United Kingdom (the government body responsible for OHS) issued a stress management standard in 2005 to assist organisations to reduce workplace stress. The standard covers six primary sources of stress: job demands; job control; support (social and resources); relationships; roles (clarity and elimination of role conflicts); and managing change.

Among the organisations that have used this standard to successfully reduce workplace stress is the Great Western Hospitals NHS Foundation Trust, which manages two hospitals and employs 3300 employees. Before introducing the stress reduction program, 32 per cent of staff reported workplace stress, and it was the main reason for staff absence. The organisation expanded the number of stress-related questions in their staff surveys, analysed workforce key performance indicators and held confidential interviews to explore the issue further. Working groups were formed to examine stress 'hot spots', and a stress working group considered initiatives on a monthly basis. Nurses identified potential sources of stress, which were acted upon on a ward by ward basis. In one ward, nurses spent only 38 per cent of their time on patient care, but 16 per cent on walking around. The layout of the ward was rearranged and the time spent walking around subsequently fell to 7 per cent, freeing up time for the work that was important to the nurses, and the hospital. The level of patient care increased by 20 per cent. Face-to-face briefings at the end of each shift now give nurses the opportunity to raise concerns, and the sessions are transcribed so those unable to attend can read about what was said. Senior managers visit the wards more often to talk with staff, and intensive training has provided more task variety. After 12 months, the staff survey found stress reported by only 25 per cent of nurses, and stress-related absence had fallen from nearly 20 per cent to 13 per cent of all absences. The hospital reported three key learnings. First, 'no one initiative works but together different ideas can make a big difference'; second, listen to staff and take a chance on piloting different ideas; and third, invest in training.

Source: Adapted from [www.hse.gov.uk/stress/casestudies/great-western-hospitals.htm](http://www.hse.gov.uk/stress/casestudies/great-western-hospitals.htm).



working excessive hours to meet production targets),<sup>123</sup> as well as occupational stress and depression. It can also contribute to bullying behaviours when the means of enforcing performance standards is poorly managed.<sup>124</sup>

As discussed in 'Attracting and retaining talent' on page 131, some relatively inexpensive solutions can be found for reducing occupational stress when consultative processes are used to identify problems.

**Workplace bullying**  
repeated, unreasonable  
behaviour directed  
towards a person or  
group of persons at a  
workplace which creates  
a risk to health and  
safety.

**Workplace bullying** is defined as 'repeated, unreasonable behaviour directed towards a person or group of persons at a workplace which creates a risk to health and safety'.<sup>125</sup> It refers to repeated behaviour, not one-off incidences. Bullying is usually downward—from managers to subordinates. But it can also occur upwards, and sideways when workers bully fellow workers. It leads to psychological distress, eventually resulting in occupational stress. In some cases it also involves physical assaults. Surveys indicate workplace bullying is a widespread problem in Australia and overseas,<sup>126</sup> with estimates in 2008 suggesting it costs Australian businesses between A\$6 and A\$13 billion yearly through absenteeism, labour turnover, productivity losses and legal costs.<sup>127</sup> Explanations for the rise in bullying across industrialised economies have increasingly drawn upon broader shifts in organisational environments, including work intensification, depersonalised forms of management and new management practices as creating environments where bullying becomes prevalent.<sup>128</sup> Decentralised management structures, for example, create intense downward pressures on lower level managers, which can result in the bullying of their subordinates; performance management and payment systems can be tools for bullying (such as imposing unrealistic objectives and refusing promotions), or contribute to the prevalence of bullying by creating high-pressured work environments.<sup>129</sup> Other studies have identified three commonly found factors in workplace environments conducive to bullying. These are:

- 1 an organisational culture that promotes conformity and regards diversity as a threat to mutual cooperation<sup>130</sup>
- 2 work organisation involving poor job design, which promotes role ambiguities and role conflicts, coupled with a low level of individual worker control including a lack of involvement in setting work objectives<sup>131</sup>
- 3 leadership styles that are excessively authoritarian or laissez-faire.<sup>132</sup>

Workplace bullying can also extend to physical violence, such as an apprentice who was punched, bitten on the upper arm, and twice hooked onto a crane by his overalls and hoisted into the air, left suspended above the ground.<sup>133</sup> The bullying worker, who had been previously warned by his employer that 'fooling around' was unacceptable, was prosecuted and fined; in most cases employers are also prosecuted for the bullying behaviour of their employees because they are responsible for the work environment.<sup>134</sup> In one particularly high-profile Victorian bullying prosecution, which followed the suicide of an 18-year-old waitress, the employer was fined A\$250 000, and three employees were fined a total of A\$85 000. A range of verbal and physical bullying behaviours had occurred, including relentlessly insulting, criticising, kicking, spitting on the victim, throwing food at her, placing rat killer in her tip bag, and restraining and pouring sauce over her.<sup>135</sup> The Acting Executive Director of WorkSafe commented that, 'People who hear about bullying need to speak up at their workplace ... Young people in particular are vulnerable in the workplace, and they need to be supported, to ask questions [and] raise issues.'<sup>136</sup>

When bullied workers complain about their treatment, it is often misinterpreted as personality clashes or communication issues rather than a health and safety risk.<sup>137</sup> In a recent case, for example, where the employer was held liable for a workers compensation claim for psychological injury, the worker had been subject to a supervisor who continually addressed her in a loud and aggressive voice; leaned over desk and beckoned her by pointing her finger; interrogated her about her responses to a 'confidential' staff survey; and abused her when she offered to assist another employee. When the worker complained to a more senior manager, he directed the supervisor to both modify her behaviour and meet with the concerned worker for 15 minutes at the start of each shift. As the judge hearing the case commented, that edict 'institutionalised a 15-minute opportunity for bullying at the commencement of each day'. Several months later, the supervisor organised a meeting between the worker and a senior manager where the supervisor read out a litany of complaints about the worker without any prior warning. The senior manager involved had continued to deal with the issue as a communication problem, rather than recognising the behaviour as bullying and a risk to health.<sup>138</sup>

Like other OHS risks, factors contributing to a bullying environment need to be identified, assessed and controlled. Most OHS statutory agencies provide guidance materials to assist organisations to identify bullying behaviours and guide them in the steps necessary to eliminate such behaviour. ACT Work Safety, for example, recommends that organisations:

- develop a workplace bullying policy
- have a clearly stated 'no tolerance' approach
- establish expectations of appropriate behaviours and consequences for not meeting those expectations
- develop a compliant-handling and investigation procedure that includes due process and natural justice
- provide training, information and awareness on workplace bullying to all employees, irrespective of their level within the organisation
- ensure all who have responsibility for employees are aware of their need to assist their employer in complying with a bullying-free workplace
- nominate a contact person
- provide clear job descriptions, which outline specific roles and responsibilities
- take disciplinary action against employees and managers engaged in bullying
- keep statistical records and information relating to productivity, absenteeism, grievances, injuries, customer complaints, disciplinary actions and so on. These can provide evidence of actions taken, and also draw attention to recurring problems.<sup>139</sup>

Organisations should also:

- take prompt and impartial action to resolve situations perceived as bullying or harassment
- provide access to external investigations and/or mediation
- ensure there is a follow-through on such actions
- provide training, particularly for supervisors and managers in preventing and responding to bullying
- provide responsible, mature supervision to ensure bullying is not tolerated.<sup>140</sup>

Both occupational stress and bullying behaviours are associated with a range of broad organisational settings, including inappropriate performance management systems and their implementation. Performance management systems seek to ensure employees' performance is congruent with organisational objectives, and that performance problems are identified and resolved, such as through additional training (see Chapter 10 Performance management). However, it is important that they do not create a psychosocial risk in the workplace. HRM staff involved in the development of performance management systems need to be aware of the factors that may result in such systems contributing to OHS risks. These include targets that are unrealistic, unachievable and overload employees; are based on measures over which employees have insufficient control; involve constant surveillance; are used arbitrarily to deny training and promotion opportunities; and discussed in a way that humiliates subordinates, especially in front of other staff.<sup>141</sup>

The HRM function should ensure information that may indicate the prevalence of occupational stress or bullying is collected and analysed. Organisations increasingly include occupational stress in staff surveys, and are well placed to monitor absenteeism, staff turnover, exit interviews, and grievances, which may signify localised stress and bullying problems.<sup>142</sup> Also, as bullying often becomes intertwined with sexual harassment and discrimination complaints, HR staff need to work with their equal opportunity specialists to identify and eliminate bullying behaviours.

### Flexible and precarious employment

The expansion of more flexible and **precarious employment**, such as the use of casual, fixed term, temporary agency (labour hire) workers and subcontracting has increased the level of job insecurity among employees, changed the nature of relations between workers, and between workers and their managers, and been associated with **work intensification**.<sup>143</sup> The adverse health effects of job insecurity have been noted above with respect to organisational change and redundancies, and similar health outcomes have been observed among workers without permanent employment.<sup>144</sup> Uncertainty about work scheduling and the effort to remain employed, such as holding down two jobs or continually being monitored, are especially associated with poorer health among precarious employees, although support from co-workers and supervisors can lessen these impacts.<sup>145</sup>

Not all workers employed under flexible arrangements are subject to adverse health outcomes. Those who prefer flexible employment, or have a say in their working hours, can benefit from flexibility.<sup>146</sup> They are less likely to be impacted by a lack of certainty in working hours and income, and have more control over both their work and non-work time, contributing to greater overall well-being.<sup>147</sup> However, many employees hired under flexible employment arrangements prefer more stable arrangements, with estimates suggesting up to half of those employed as casuals with irregular working hours in Australia would prefer predictable working hours.<sup>148</sup>

The higher risks associated with flexible or precarious employment are not limited to poorer psychosocial work environments but also extend to a greater degree of exposure to other workplace risks compared to permanent employees.<sup>149</sup> Temporary workers in the French nuclear industry, for example, are allocated the tasks where radiation exposure is more likely, and then removed from the plant once they have reached the maximum radiation exposure level.<sup>150</sup> In the wider European Union, temporary workers have reported performing working in more painful and tiring positions than permanent employees, as well as being exposed to intense noise and repetitive tasks.<sup>151</sup> A similar

#### **Precarious employment**

forms of work with limited statutory protection, job insecurity, and low wages.

#### **Work intensification**

employees working longer hours and working harder than ever before.

situation is evident in Australia, where temporary agency workers are exposed to more hazardous tasks and experience higher injury rates than comparable permanent employees.<sup>152</sup> Precarious employees are also less well placed to understand and respond to the risks to which they are exposed. They are less likely to receive OHS training, more likely to be excluded from OHS workplace consultative processes, and may risk job loss by raising workplace concerns.<sup>153</sup>

Concerns about the expansion of flexible and precarious employment and its OHS risks led to an international study by the WHO in 2007,<sup>154</sup> and most OHS statutory agencies have produced guidance materials tailored to some forms of precarious employment. In addition, the changes to the regulatory environment outlined above mean that organisations will have OHS responsibility for and need to consult with all workers who perform work for them, irrespective of whom their employer is. In Victoria, for example, the responsibility for the OHS of temporary agency workers is already shared between the agency employer and the client using the worker. Injuries to agency workers can thus result in prosecutions of both the employer and the host. In a recent case where a temporary agency worker had three fingers amputated while removing a blockage from a machine that was still operating, the host client was fined A\$45 000 and the agency employer A\$90 000 because neither had provided adequate training or risk assessments.

The use of flexible forms of employment carries a number of implications for human resource practices. Some of these are outlined here.

- The adverse health effects associated with working time scheduling can be reduced through human resource planning and shift rostering, which incorporates the preferences of flexible employees. Implicit in such arrangements is consultation over working hours with casual employees.
- The timing and access to training needs to accommodate the variable attendance times of employees who do not attend every day during standard working hours. This is particularly so for training that an organisation has a legal obligation to provide.
- OHS consultative processes need to be structured in such a way that the input of casuals and agency workers is possible, along with access to OHS employee representation, irrespective of the timing of the shift (for example, night shift) or the nature of work performed (such as tasks outsourced to temporary agency workers).
- Risks to temporary agency workers can be reduced (in part) by organisations ensuring the temporary worker is suited to the task, has received OHS training from their employer, and is properly supervised once they commence their placement. This requires thorough job descriptions, vetting of agency employers, comprehensive consultation with the agency, and an understanding by supervisors that the organisation's OHS responsibilities include these workers.
- Risk assessments need to be conducted to identify, assess, and eliminate or control all hazards, irrespective of the employment status of the worker performing that work.

These examples are not comprehensive, but illustrate how health and safety considerations are integral to key human resource decisions, from the choice about what kind of employment relationship will be offered, through to up-to-date and accurate job descriptions, accessible human resource training and development, and employee consultative processes to name a few.

## Networking across borders to improve OHS

While globalisation has raised the spectre of organisations in developed economies outsourcing production processes to countries with lower OHS standards, it also offers the opportunity for organisations to more easily learn about safe workplace practices from other companies irrespective of their geographic location. One example is the 'World Safety Declaration', which was established in 2005 at the initiative of DuPont, a company with an international reputation for high OHS standards. The Declaration is described as:

*a formal call to action and a vehicle for collaboration. It is a global industry commitment to workplace safety and the development of ideas that can be shared and adopted by companies throughout the world. It recognizes the global nature of workplace and home safety and calls for the broadest possible cooperation by industry. It asserts that individuals and organizations have the right and moral obligation to make a commitment to improve safety conditions ... the enhancement of safety in the workplace ... is an achievable objective.*

Organisations that join the international network make certain commitments. These are a public commitment to improving workplace safety; the sharing of information and collaboration on steps to enhance safety in the workplace and in the home; and the reporting of the challenges, progress and successes before an international OHS congress attended by several thousand delegates from industry, government and unions.

To date, signatories have come from a diverse range of industries and countries—from Nestlé in Switzerland, to Hindustan Unilever in India and the China State Construction Engineering Corporation in Hong Kong. The network's first progress report provides examples of practices implemented by members, as well as results of a survey of their achievements; the challenges they faced; and what they see as the most important steps for the future of the declaration. Endesa (Spain), one of the largest electrical companies in the world, had introduced an executive development program on OHS for their top 700 executives to influence leaders' behaviour to support OHS cultural change. Tata Steel (India) had implemented a program specifically for contractors, the group with the highest injury rates at their worksites. It included contract selection, preparation, awarding, orientation and training, monitoring and post-contract evaluation. Contractors that achieved predetermined measures on implementing OHS systems were rewarded, while those that did not comply were penalised.

The main areas of progress reported by signatories were:

Issues	Score (1 = least progress; 5 = most progress)
Driving safety culture across company	4.1
Driving line management accountability for safety	4.1
Reducing occupational accidents and injuries	3.9
Gaining employee commitment to safety	3.8
Maintaining consistency of safety behaviour across the company	3.8

MANAGING FOR GLOBALISATION *Continued*

The greatest challenges for improving safety were:

Issues	Score (1 = least progress; 5 = most progress)
Driving safety culture across company	3.9
Reducing occupational accidents and injuries	3.6
Driving line management accountability for safety	3.4
Gaining employee commitment to safety	3.3

The experience reported by these companies differs little from what one would expect of a company in Australia undergoing a cultural change in safety. Importantly, these companies can draw upon an international network of companies for new ideas and approaches.

Source: Adapted from [www.worldsafetydeclaration.com/](http://www.worldsafetydeclaration.com/).

## Ethical considerations and managing OHS

Ethical considerations permeate OHS management, not least because an injury at work impacts on workers as employees, as family members, and as participants in society. Severe work-related injuries and illnesses can irreversibly and negatively alter an employees' life course. Hence, at a fundamental level, it is important to bear in mind that organisations have neither a legal nor ethical right to expect workers to risk their personal well-being to support an organisation achieving its competitive advantage. We will consider only two circumstances when ethical questions will be prominent in relation to managing OHS. First, medical and health professionals hired by organisations to manage workplace health programs and the rehabilitation of injured workers may at times find they have to manage multiple loyalties—to the workers, to their employer and towards the public.<sup>155</sup> Likewise, they may have conflicts of interest over 'safeguarding the rights of the individual employee and those of the employers, other employers and the general public'.<sup>156</sup> Most professional associations have codes of conduct to promote the independence of practitioners from influence by third parties. The International Commission on Occupational Health, for example, developed an 'International Code of Ethics for Occupational Health Professionals', which includes:

*Occupational health professionals must always act, as a matter of prime concern, in the interest of the health and safety of the workers ... base their judgements on scientific knowledge and technical competence ... must under no circumstances allow their judgement and statements to be influenced by any conflict of interest, in particular when advising the employer, the workers or their representatives in the undertaking on occupational hazards and situations which present evidence of danger to health or safety.*<sup>157</sup>

Second, the use of pre-employment health screening and health surveillance (such as monitoring for bodily changes through exposure to hazardous substances) raises questions about who can access subsequent medical records and how that information will be used. It also raises questions about

whether screening and surveillance become substitutes for eliminating the hazard. In Australia, governments have typically legislated to protect workers from the misuse of such information. In South Australia, for example, employers are required to implement health surveillance when workers are exposed to specific hazardous substances (such as asbestos, crystalline silica, vinyl chloride). The surveillance must be conducted under the supervision of a medical practitioner; when excessive exposure is identified, the medical practitioner must inform and explain the results to the employee and advise the employer of the need to control exposure; health records cannot be passed on to a third party without the consent of the employee; and records must be kept for 30 years (to ensure exposure resulting in long latency diseases is recorded). Individual employees' records should not be identifiable to an employer.<sup>158</sup> These requirements protect the privacy of employees, while also clearly establishing the responsibility of the medical practitioner towards both the employee and employer. Similarly, when a worker is injured, legislation typically allows an employer access to information from a treating doctor about the worker's capacity to return to work (to enable adjustments to work allocation to be made), but it does not allow access to confidential medical information without prior written consent from the injured worker.

Conflicts, including those resulting in collective action by employees, are not uncommon when policies that are intended to reduce occupational risk are perceived by employees as invading their non-work lives (such as drug testing, which identifies personal habits outside of working hours). While privacy and OHS regulation can inform the human resource function on permissible actions, more ambiguous issues are better dealt with through OHS consultative processes.



## CHAPTER SUMMARY

One of HRM's major challenges is to ensure, in a dynamic workplace environment where new hazards are continually emerging, that the health and safety of workers in an organisation is not placed at risk. Human resource managers, line managers and employees need a good understanding of the sources of risks in a workplace so that they may be eliminated or controlled. Senior management need to understand the competitive advantage that can flow from good OHS practices so that they can 'champion' the issue, and provide resources to support effective OHS management. Significant progress has been made with respect to the development of positive OHS cultures and OHS management systems. Critical to these are management commitment and employee involvement.

As industrialised economies move away from production-orientated to service-orientated activities, the level of risk associated with the psychosocial environment is likely to increase. HRM is especially well placed to contribute to the reduction in these risks because many of the risks are derived from how the employment relationship is managed. Likewise the risks associated with precarious employment. Decisions around hiring, training, the nature of the performance management system, employee representation, decision-making structures, and organisational change are all areas into which the HRM function has input. By developing an understanding of OHS, and working with OHS specialists, HRM practitioners can contribute to substantial improvements in OHS for the organisation and its employees. OHS will continue to be an important concern for organisations, governments, employees and unions in Australia and throughout the Asia-Pacific region.

- A** The 'Spotlight on HRM' account of recent NSW WorkCover initiatives to reduce injuries to younger workers includes the interactive website 'Saftey Zone'. The website is designed for younger workers, but can be informative for workers of any age, especially those commencing new employment. Access that website: <http://www.youngworkers.com.au/>. Test your knowledge about common OHS risks.
- B** Studying and working in an office can involve extended times sitting at a desk in front of a computer. A number of websites offer advice on the ergonomic standards for such work, including height and position of office chairs, desks and computer screens, and the need to take regular breaks. The following is one such an example: [http://www.ergonomics.com.au/pages/400\\_useful\\_info/420\\_how\\_to\\_sit.htm](http://www.ergonomics.com.au/pages/400_useful_info/420_how_to_sit.htm). Access the website to check if your working arrangements while studying are ergonomically sound and safe.
- C** For information about OHS and workers compensation at state level, visit one of the following state government websites:
- Victorian Government website for OHS: [www.worksafe.vic.gov.au](http://www.worksafe.vic.gov.au)
  - WorkCover Queensland website: [www.workcover.qld.gov.au](http://www.workcover.qld.gov.au)
  - WorkCover Western Australia website: [www.workcover.wa.gov.au](http://www.workcover.wa.gov.au).
- D** Visit the website of the 'World Safety Declaration' at [www.worldsafetydeclaration.com](http://www.worldsafetydeclaration.com) to see which companies are networking at an international level to improve health and safety at work and in homes.
- E** For the latest information about Australian OHS such as the national strategy, OHS standards and statistics, including the National OHS Strategy 2002–2012 and the Compendium of Workers' Compensation Statistics Australia, visit <http://safeworkaustralia.gov.au>.
- F** Visit the website of the International Commission on Occupational Health (ICOH) at <http://www.icohweb.org/>. This commission is an international non-government professional society whose aims are to foster the scientific progress, knowledge and development of OHS.

### QUESTIONS

- 1 What are the main hazards faced by students and staff in a university work environment?
- 2 What are the major OHS problems and challenges related to flexible employment? How can HRM mitigate these problems?
- 3 What are the major features of OHS legislation in your location?
- 4 Why is employee involvement so important for effective management of OHS?

- 1 What are the main features of a positive safety climate, and what obstacles might prevent an organisation from developing a positive safety climate?
- 2 What are the major OHS problems and HRM challenges related to occupational stress and bullying?
- 3 Suppose you were asked to design an OHS management strategy for an organisation. Identify the basic steps you would take, the important factors to be considered and the evaluation measures to be included.
- 4 What are the major costs and benefits associated with OHS for individuals, organisations and society?



### WEB EXERCISES



### DISCUSSION QUESTIONS



The collapse at a mine in Beaconsfield, Tasmania, on 25 April 2006, killed one miner and trapped two others for 14 days. The case received a lot of media attention and sparked considerable debate about workplace safety, as the following selection of articles indicates.

### 1. Pressure applied on safety—Beaconsfield

Beaconsfield mine manager Matthew Gill came under pressure from elements in the joint venture owners to take a less cautious approach to safety.

The Beaconsfield mine in northern Tasmania is 51.5 per cent owned and run by Allstate Explorations, which is in receivership, with Beaconsfield Gold the junior partner.

Former Beaconsfield Gold director John Miedecke said yesterday Mr Gill was 'a very cautious and conservative mine manager when it came to safety'.

'At times he was criticised for that by various people in both (joint venture) companies', Mr Miedecke said. This began at the reopening of the century-old mine in 1999.

Mr Gill was criticised over his estimates of the capital and operating expenditure required to extract gold safely, he said.

Allstate chairman Rod Elvish did not deny yesterday that Mr Gill had faced pressure from elements of the joint venture companies over the expenditure needed to extract gold safely.

Such conflicts were a normal part of mining, he said. 'I don't know any mine manager who hasn't had that sort of thing, who hasn't put a proposal up. That's just standard industry practice.'

Mr Miedecke, who quit two years ago because of concerns about the joint venture's structure and management, defended Mr Gill following safety issues raised by miners and unionists.

In his time at the mine, he had never known Mr Gill to succumb to pressure to sacrifice safety to cut costs. 'I would be astounded if he knowingly put people at risk', Mr Miedecke said.

Mr Elvish would not respond to the criticisms of safety from miners and the Australian Workers Union. 'We have a policy that while the guys are still underground we're not going to comment', he said. 'There will be full inquiries and all those matters will be looked at in the proper place.'

Mr Gill has taken a similar position and did not respond to a request for comment.

Source: Excerpt from M. Denholm, 2006, 'Pressure applied on safety—Beaconsfield', *Australian*, 5 May, p. 8.

### 2. A disaster waiting to happen

The Australian Workers Union has opened fire on the Beaconsfield mine, detailing for the first time a succession of safety failures before the rock fall that killed one miner and trapped Brant Webb and Todd Russell for 14 days.

After meeting miners yesterday, the AWU revealed:

- It could not identify a single underground miner who had received occupational health and safety training at the Tasmanian goldmine.
- Miners complained of a reduction in the amount of cement used to harden concrete that backfilled exploited areas of the mine.
- Key 'crown' pillars meant to provide support had been removed from deep workings.

MANAGING FOR PERFORMANCE *Continued*

- Steel safety mesh bolted to the walls of the mine—used to stabilise the workings—had failed to contain rocks. The rocks were so active that they were ‘blowing out’—that is, blowing the safety protection off the walls.

Mr Russell, Mr Webb and their colleague Larry Knight—who was killed in the rock collapse—had been pinning the mesh to a tunnel 925 metres underground on Anzac Day night when the disaster happened. A representative of Mr Knight’s family attended the grim union meeting yesterday, where his former workmates instructed officials to be unyielding in their search for the cause of the tragedy.

Tasmania’s Premier, Paul Lennon, said last night the claims should be put before what is expected to be an independent judicial inquiry into the tragedy.

Mr Lennon met the AWU’s federal secretary, Bill Shorten, after the union meeting at Beaconsfield. The union wants scrutiny of Workplace Standards Tasmania, the official regulator, after miners complained it had shown little interest in safety at Beaconsfield.

There had been an unexplained significant ‘near miss’ at the mine, but Mr Shorten said, ‘We’ve heard there was no visit out to the mine, and it was all done by self-regulation. Photos were taken by the mine and posted off to the regulator.’

The regulator’s chief inspector, Don Schofield, described the law as ‘non-prescriptive, performance legislation’ where the onus was on employers to ensure a mine was safe.

The mine and its majority owner in administration, Allstate, have been virtually silent since the miners were rescued last Tuesday.

Source: Excerpt from A. Darby, 2006, ‘A disaster waiting to happen’, *Sydney Morning Herald*, 16 May, p. 1.

### 3. Mine survivor insists bosses must take rap

Beaconsfield mine survivor Brant Webb—whose friend Larry Knight died in the Anzac Day accident—has called for directors to be jailed if their companies are found responsible for workplace deaths.

Mr Webb told a workplace safety forum in Hobart yesterday that a ‘breakdown in communications’ contributed to the Beaconsfield accident, which entombed him and fellow miner Todd Russell for two weeks.

He said the best way to prevent workplace fatalities was for employers to involve workers in safety decisions and for company directors to be held responsible.

‘I think the biggest problem is we have toolbox meetings and staff meetings—all these meetings—and all these minutes are taken ... but ultimately there’s not a real lot done out of the meetings’, he said.

‘I think if they made not the top management but the directors accountable for a life—so if you take a life, you go and sit inside a pen or jail for 15 years—things would change. Someone should be accountable.’

Mr Webb still bears physical and emotional injuries from the 25 April rock fall at the northern Tasmanian goldmine, which had been subject to ‘mini earthquakes’ linked to mining activity.

Speaking about his experiences at a public forum for the first time, Mr Webb said the mine had seismic monitoring equipment in place and that he would not have worked there had he not believed at the time that it was safe.

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MANAGING FOR PERFORMANCE *Continued*

However, asked why the mine's safety regime had failed, he said: 'A lack of communication—systems only work if information is passed on.'

Mr Webb said there was also a 'breakdown of communication' between himself and Mr Russell on 25 April. Before beginning their shift in a tunnel 925 metres below ground, the two had spent five minutes listening for movement in the surrounding rock.

'We sat there for about five minutes and took the earplugs out and there was no noise at all ... so we thought this sounds pretty good, there's nothing happening in here, we'll just go in and attack', he said.

In hindsight, he wished they had spent more time listening to the rocks and debating safety. 'We just wanted to finish the job, get back into it', he said.

Mr Webb, who on Monday will launch a book with Mr Russell about their ordeal, also called for a change of culture in heavy industry to reward, rather than intimidate, workers who raise safety concerns.

Employers tended to treat workers' views on safety as 'not credible' and should instead seek to involve workers in work-safety decisions. 'They don't listen to the workers', he said.

Source: Excerpt from M. Denholm, 2006, 'Mine survivor insists bosses must take rap', *Australian*, 28 October, p. 11.

#### 4. Drilling to deepen Beaconsfield mine

Mining at the Beaconsfield goldmine has moved a step closer after Tasmania's work safety regulator yesterday approved a resumption of blasting and drilling to make the mine deeper.

Workplace Standards Tasmania rescinded a ban on work on the mine's main decline imposed after the Anzac Day rockfall that killed miner Larry Knight just over six months ago.

Allowing work to resume on the main decline is the first stage towards beginning production in new areas of the mine below 1090 metres. WST bans remain in place on the construction of drives to production stopes and on the extraction of gold.

A full return to mining must also pass a financial analysis by mine management.

The Australian Workers Union has vowed to make its own judgment about safety before allowing its members to return to work. AWU national secretary Bill Shorten said he remained to be convinced the mine could be operated safely.

State secretary Ian Wakefield said the union would decide whether decline work could be done safely after receiving a briefing, most likely next week.

Mine joint venture manager Allstate Explorations welcomed the WST approval for resumption of work on the main decline, following a 'rigorous' assessment of a safe work plan prepared by consultants.

Source: Excerpt from M. Denholm, 2006, 'Drilling to deepen Beaconsfield mine', *Australian*, 3 November, p. 6.

#### QUESTIONS

- 1 What do you think are the major lessons for HR practitioners and managers to learn from this case?
- 2 How might a strategic approach to HRM help prevent such tragedies in future?