Healthy Work

Managing stress and
fatigue in the workplace
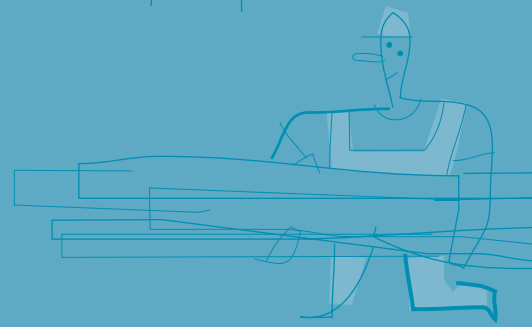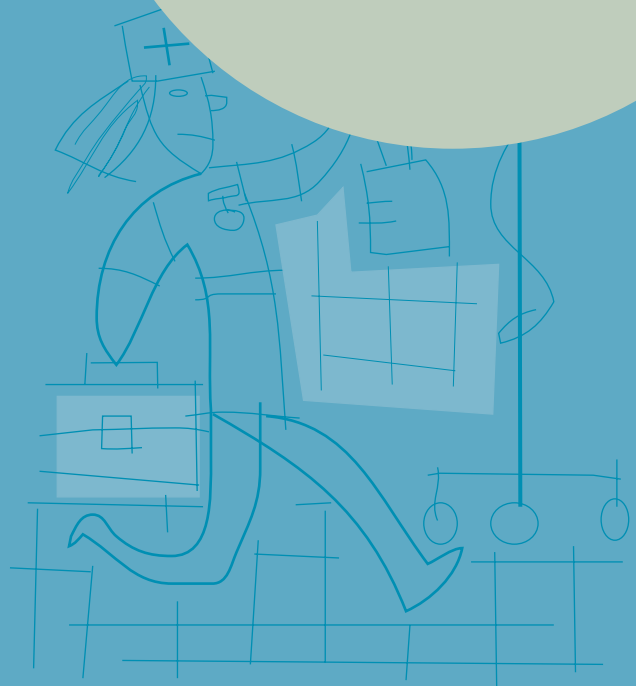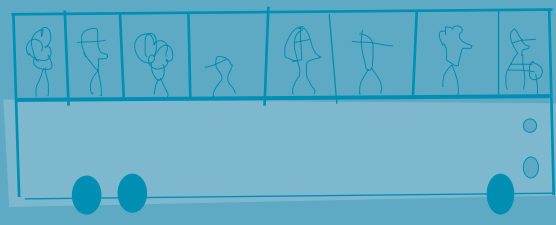
FOREWORD

In 1998 OSH published *'Stress and Fatigue, Their Impact on Health and Safety in the Workplace'*, a scientific summary of the then current knowledge on these topics. Since 1998, little new material about stress has been forthcoming, and there have been no developments that indicate a need to revise the basic concepts of that guideline.

OSH has developed this new guideline for employers and employees, to promote the concept of 'healthy work' and thus avoid 'occupational stress'. Healthy work promotes personal health, and is more fulfilling for employees and more productive for organisations than badly designed work. The features that make work healthy illuminate the negative aspects of work that is inherently difficult to cope with or poorly organised, and address the objective expressed in section 5.2 (a) of the Health and Safety in Employment Act (HSE Act) 1992 – *'promoting excellence in health and safety management'*.

There is clear evidence that badly designed and managed work can result in negative health outcomes, both for the individual and the community at large. It can also lead to poor employment relations and less than optimal productivity.

Creating healthy work is a shared, co-operative venture, where both employees and employers have roles and responsibilities, including the maintenance of a balance between work and non-work activities. It is not something that can be imposed – and it will require mutual understanding, accommodation, respect and the normal processes of give and take for its success.

Some processes and tools that employers and employees might use to pursue excellence in the management of stress and fatigue are

presented in this guideline. This may mean a twofold process – adding good things to work and removing bad things from it. These two activities are independent, as section 1.7 suggests.

The preferred control methods are to identify workplace stressors and then manage these hazards by elimination, isolation or minimisation in the normal way. This approach means that the impact of the demands and content of work, together with the way it is organised, are acknowledged and managed.

'Stress management' is a popular way of addressing individual stress. This guide encourages instead a focus on the prevention of stress and the provision of healthy work. While 'stress management' can be considered one of the components of hazard management, it is not a sufficient solution in its own right and there is no convincing, consistent evidence that it is effective. A focus on the amount, content and organisation of work is essential if it is to be healthy, safe and productive.

I trust you will find this guide useful, will share the information in it with your colleagues and will work together with OSH to promote excellence in health and safety management and productive employment relationships.

R J M Hill
General Manager
Occupational Safety and Health Service
6 June 2003

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Glossary

Fatigue	The temporary inability, decrease in ability, or strong disinclination to respond to a situation, because of previous over-activity, either mental or physical.
Harm	(a) means illness, injury, or both; and (b) includes physical or mental harm caused by work-related stress.
Hazard	(a) means an activity, arrangement, circumstance, event, occurrence, phenomenon, process, situation or substance (whether arising or caused, within or outside a place of work) that is an actual or potential cause or source of harm; and (b) includes (i) a situation where a person's behaviour may be an actual or potential cause or source of harm to the person or another person; and (ii) without limitation, a situation described in subparagraph I resulting from physical or mental fatigue, drugs, alcohol, traumatic shock, or another temporary condition that affects a person's behaviour.
Individual Stress Management	Where an individual is taught coping skills.
Prevention	Primary Prevention: creating a healthy place of work and controlling stressors so that the work is interesting, rewarding and paced within the person's capabilities (i.e. elimination of the hazard).
	Secondary Prevention: improving the fit between the person and the job by selection, on-the-job training, performance feedback and monitoring of problems (i.e. isolation of the hazard to adequately trained and equipped personnel).
	Tertiary Prevention: helping the person suffering from stress (also called minimisation or stress management).
Stress	An interaction between the person and their (work) environment and is the awareness of not being able to cope with the demands of one's environment, when this realisation is of concern to the person, in that both are associated with a negative emotional response.
Stress Management Systems	This phrase is used in this guide to refer to three ways of dealing with workplace hazards that lead to stress and fatigue: Eliminate, isolate and minimise. The HSE Act requires that these strategies be considered, in that order of priority. Examples of each are:
	Eliminate: replacing level crossings with bridges so that it is impossible for trains and cars to collide.
	Isolate: confine the work to special purpose areas; confine the performance of the work to specially trained people or teams.
	Minimise: reduce the time of exposure to the stressor, provide prompt performance feedback and training if necessary, select the right people for the work and provide support in the work and prompt access to help when it is needed.
Stressor	Events or circumstances which generally result in pressure.

Disclaimer

The examples and the mention of specific types of work are generalised indications only and are not evidence that particular work types and arrangements are necessarily stressful.

Introduction

This guide, *Healthy Work – Preventing Stress and Fatigue in the Workplace*, aims to help employers and employees to:

- implement healthy work (sections 1, 4 and 5)
- identify stressors that are potential workplace hazards (sections 1 and 7)
- identify simple processes for telling when 'stress' may be present, identify corresponding stressors and implement control measures
- respond to a report of stress in the workplace
- categorise work so that employer responsibilities for foreseeing hazards of stress and fatigue are clear
- assess the ability of employees who may be impaired to continue working safely
- create a healthy work programme – to identify causes of stress in the workplace and develop control measures for them.

The Health and Safety in Employment Act makes specific mention of the physical or mental harm that may be caused by work-related stress and that physical and mental fatigue may affect a person's behaviour to the point where it is a potential source or cause of harm.

Using the processes and tools in this guide, or achieving the same standard by other means, can help ensure that an employer manages issues of stress and fatigue and develops a healthy and safe workplace.

Employees have responsibilities as well and can use this guide to understand how they can reduce the causes and effects of stress and fatigue for themselves and their workmates.

As with all health and safety matters the District Court is the ultimate judge of 'all practicable steps' and whether an employer has fallen short with respect to the management of stress and fatigue. The questions presented in section 7.3 are, until the Courts establish case law, the questions OSH will use when dealing with the worst cases of work-related stress.

This guide is based on the publication *Stress and Fatigue, Their Impact on Health and Safety in the Workplace*. This publication remains current as a scientific summary of stress and fatigue. It was published by OSH in 1998 and can be downloaded free from **www.osh.dol.govt.nz**.

1 Basic facts about stress and fatigue

1.1 What is 'stress' and how does it affect us?

There are many definitions of stress, and many theories about it. No definition or theory of 'stress' is perfect. Each theory and definition seems to answer one aspect of the problem well but other aspects less well. The definitions adopted by OSH are:

Stress – defined in terms of the interaction between a person and their (work) environment and is the awareness of not being able to cope with the demands of one's environment, when this realisation is of concern to the person, in that both are associated with a negative emotional response.

Stressors – events or circumstances which may lead to the perception that physical or psychological demands are about to be exceeded. They can be of several types and can arise in and out of work. For example, work-related stressors may be:
- **inevitable:** e.g. starting a new job, learning a new skill, the difficulty of dealing with adverse weather conditions such as drought or flood, unpredictable emergencies in the workplace, intrinsic difficulties in the work such as working in a competitive industry
- **avoidable:** e.g. undertaking hazardous work for too many hours each week for long periods in a physically demanding environment; producing multiple reports which no-one reads; inhospitable or dangerous physical environments; no performance feedback or only negative feedback; no interest shown by the supervisor in helping solve problems.

Non work-related stressors may include:
- **personal:** e.g. relationship, child or other family problems, financial difficulties
- **intrinsic:** feelings of not coping may just arise from within, with no apparent stressor(s) being discernible.

Stressors may be beyond the control of the employer

An electrical subcontractor gains more and more work from a large construction company. He is rendered 'dependent' on the company by the amount of work he gains. The subcontractor takes on two more staff.

The subcontractor learns that the company is in financial difficulty. Inquiries result in assurances.

The subcontractor reads in the paper that the company has filed for bankruptcy. He has to dispense with the services of all his staff.

His four employees, who have been kept fully informed by the employer, have a variety of experiences after this event. Two gain work promptly with other employers. One remains unemployed for a month, but then gets work. The fourth cannot get electrical work and has to take a position as a manual labourer.

The distress caused to the employer in having to dispense with the services of his employees and by monetary loss affects his morale to the extent that he seeks work in a company that was previously a competitor.

Fatigue – the temporary inability, or decrease in ability, or a strong disinclination, to respond to a situation, because of previous over-activity, either mental, emotional or physical.

While fatigue can be the result of many things, this guide is concerned with the fatigue that can result from both physical and mental effort. The definitions are tied together as in Figure 1.1.

Figure 1.1 Workplace stressors, stress and fatigue

Stressors – Events or circumstances which may lead to the perception that physical or mental resources are about to be exceeded	→	**Stress** – The awareness of not being able to cope and that awareness being of concern		Other sources of fatigue

| Immediate safety concerns | ← | **Physical and/or mental fatigue** The temporary inability or decrease in ability or a strong disinclination to respond to a situation |
| Potential long-term health effects | ← | |

Stress is not an illness but an awareness that a person is not coping, and that this is a negative feeling, which may need to be conveyed to the employer.

How (and why) does stress affect us?
The interactions between all aspects of our lives are complex. No one model of 'stress' covers all the fragments of information that are known about it and its implied coping strategies. A more complicated model of the situation is shown in Figure 1.2.

Figure 1.2 An academic model of stress interactions
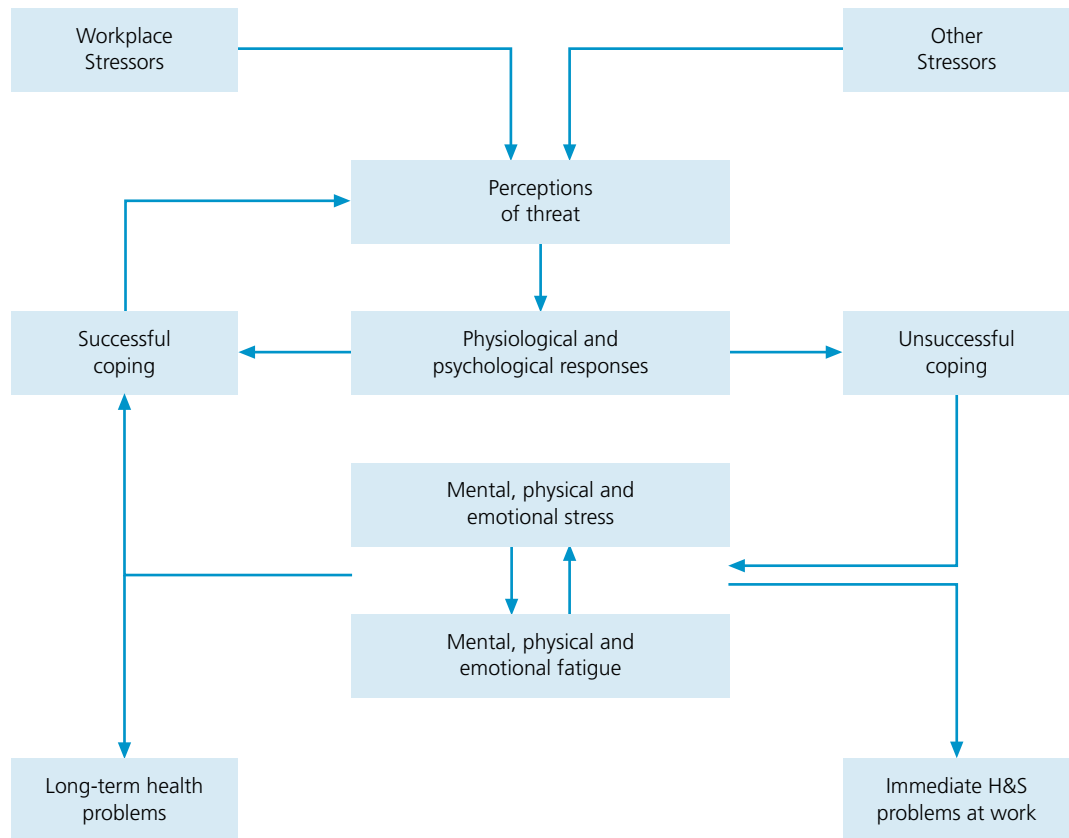
The feedback loops imply the idea that we tend to learn by adapting and modifying successful solutions from our past[2].

This makes the presence of the feedback loops important in the understanding of how 'stress' can turn out to be a positive experience or one which may develop into individual harm:

• This worked before and is working again – I am going to survive.
• This worked before but it isn't working now – I am getting deeper into trouble.

The simpler 'bucket' model suggests that stress and fatigue may occur when a person's reservoir (bucket) of personal resilience is drained faster than it can be replenished. Interesting work, highly rewarded work, supportive relationships, good health and rest can fill the bucket. Excessive or too few demands, extreme working conditions, conflict at work or at home or emotionally draining work are examples of things that can drain the bucket. Coping is about maintaining the balance between these factors.

There's no point in 'filling the bucket' if stressors are continuing to drain it quickly. In that situation, recovery may continue to be insufficient and may quickly lead to fatigue accumulating and reports of stress. Control of stressors is like plugging the holes in the bucket (or at least reducing their size) in a way that prevents the accumulation of fatigue.

Figure 1.3 The bucket model of fatigue

Recuperation – rest, recuperative sleep, relaxation, healthy nutrition, good health, intersting, stimulating and rewarding work, supportive friendships and family, etc.

Effort – excessive or insufficient intensity and or duration of physical and mental effort

The bucket of personal resources

Personal illness, pain, disturbed circadian rhythms, sleep loss, poor nutrition, inadequate exercise

Environment – demanding or hazardous environment – climate, noise, ergonomics, etc.

Organisation demands of work – including shiftwork, especially badly designed shiftwork

Emotional demands – responsibilities, worries, conflicts

The prolonged awareness of not coping can lead to harm (or serious harm) for the person and the organisation in the form of:
- immediate safety problems (I was so tired I didn't see the warning light flashing)
- long-term health problems such as depression, 'burnout' and heart disease.

The person may show the following sorts of signs:
- in the short term they may become 'down', anxious, irritable or clinically depressed. He or she may lose confidence or talk about sleeping badly. Relationships with colleagues may suffer, and behaviour may be irritable, indecisive and result in reduced performance or more errors. He or she might smoke or drink more alcohol than usual or turn to other drugs. They might also complain about their health.

Stress is not harm. For 'harm' or 'serious harm' to have occurred there would need to be reliable medical evidence[3] supported by a reputable diagnosis.

The organisation with stress:
- may have numbers of staff with low morale, high sickness absence or other absenteeism, staff turnover, and poor industrial relations. Quality and productivity may be low, and accident and illness rates may be high. Customer complaints may increase or customers may be lost. Stress claims, the use of EAP services, and grievance procedures may increase.

When are the effects of stress and fatigue critical?

Stress and fatigue can create safety hazards in the workplace, particularly in safety-critical or safety-sensitive jobs and are especially critical where other workers of members of the public may be affected. Errors that can be made are not exclusive to health and safety:

- A fatigued pilot or air traffic controller is likely to place many more lives at risk than their own.
- A fatigued worker on a scaffold.
- Fatigued employees using dangerous machinery or a fatigued driver.
- A highly trained employee becomes unable to cope with being at the interface between public expectations and legislative/operational requirements, and resigns.
- An employee in a company where business is increasing rapidly loses track of the status of an order – and the company loses that customer's business.

Managers need to be able to recognise stress and fatigue when it develops in their employees and leads to impairment, and should have the training and systems to make sure they can recognise impairment and its potential causes, and act to prevent problems. Section 6 suggests a way of addressing this question.

1.2   Stress as part of life

It would be a dull life if there were no challenges in it. Indeed there is some evidence[4] that having no challenges at work is more 'stressful' than the presence of challenges that stretch us to a degree.

The idea that we 'need stress' in our lives is obviously capable of exploitation. A balance between stimulation and rest is required and common experience suggests that our ability to respond to challenges is limited. We can be overstretched and lose function or we can operate within our tolerances and function effectively. This means that two keys to considering whether stressors are 'good' or 'bad' is to ask if people are working within their tolerance and if they have adequate 'recovery' time.

This approach tells us that prolonged and/or profound stress can be unhealthy for a person and, by implication, the organisation he or she works for. One indication of a negative (as opposed to a challenging) situation is when many employees report stress or where a work group becomes dysfunctional.

Individual differences
Individuals, depending on the current context of their working life, have different tolerances or susceptibilities to 'stress' (different sizes of their personal 'resilience' buckets). This can depend partly on the amount of support they get from personal and work relationships, the work demands and factors such as their health status and the interest and meaning in their job. There is no reason to expect that resilience will be constant. As a person experiences life changes and their inevitable difficulties, there will be times when resilience is lesser or greater.

The concept of individual susceptibility is not new in occupational health[5]. Workplace Exposure Standards, which are fundamental to health and safety management systems, are set at levels that protect the majority of people and they acknowledge the possibility of harm to sensitive individuals who work in an environment that meets these standards. In compliance terms the employer, having

met those standards, is considered to have taken 'all practicable steps'. Employers still have some responsibility to more sensitive employees who develop problems but, given the wide range of individual susceptibility, are not expected to guarantee 100% protection over every person's working life.

Therefore, acceptable levels of workplace stressors should not be established by either the last survivor or the most vulnerable. As with all health and safety systems, the standard procedure is to identify known stressors (hazards) and introduce management systems that prevent these stressors translating into harm for individuals.

1.3   Common workplace stressors

There is evidence[6] that particular types of work may be intrinsically more difficult to cope with than others. Some examples of work that contains intrinsic stressors are:

- work that is emotionally challenging, draining or even repugnant (e.g. policing, emergency medicine, corrections service, some aspects of social work)
- work that requires long periods of intense concentration (e.g. air traffic control)
- work that has high consequences from error (air traffic control, policing, social work, medicine).

Some work may be overly demanding because it is poorly organised.

Cox, in discussing work that is free from the intrinsic stressors found in these sorts of occupations, divides 'poorly organised' work into two categories:

- job context – how the work is organised
- job content – what the job involves.

Table 1.1 A: The context in which the work takes place

Work characteristic	Conditions predisposing to stress
Organisational function and culture	• Rigid work practices – people unable to work out their own solutions to the day-to-day problems they encounter (in the workplace). • Poor communication within the workplace. • A non-supportive work culture – concerns and requests are dismissed without consideration.
Role in organisation	• Role or task ambiguity/uncertainty – (for example), people are unsure about what they should doing. • Role conflict (from) imprecise or conflicting job descriptions. • Responsibility for people beyond the individual's capacity.
Career development	• Career uncertainty or stagnation *(where the employer has no jobs with greater responsibility or content to offer)*. • Poor status or status incongruity – a mismatch between qualifications and job demands. • Poor pay. • Job insecurity and fear of redundancy. • A low social value of the employee's work. • *Lack of rewards (status, self esteem, recognition).*
Decision latitude/control	• Low participation in decision-making. • Lack of control over the speed and scheduling of work.
Relationships at work	• Physical isolation. • *No formal employee participation system.* • Poor relationships with supervisors and fellow workers. • Interpersonal conflict and violence at work (or at home). • A lack of social support at work or home.
Home/work interface	• Conflicting demands of work and home life. • Low social or practical support at home. • Dual career problems (having two jobs or juggling schedules with a working partner).

NOTE: The items in italics are additions to Table 1 as presented in the 1998 OSH publication[7].
These descriptions indicate some of the features of work that may make it unreasonably demanding.
The presence of an item in this table should not be taken to mean that it is a hazard that OSH thinks
should be controlled. Rather, the mention of an item reflects scientific findings about the averaged
results of studies of groups of people.

Table 1.1 B: The content of the work

Work characteristic	Conditions predisposing to stress
Task design	• Lack of variety and/or short work cycles. • Fragmented or meaningless work. • Under-utilisation of skill. • Continual dealing with customers.
Workload or work pace	• Lack of control over work rate/pacing. • Work overload or underload. • High work rate or time pressure.
Work schedule	• Shiftworking. The disruption to body processes caused by changes in shift work patterns especially when these are badly designed. • Inflexible work schedules. • Unpredictable working hours. • Long or unsociable working hours.
Work context	• Inherently hazardous work. • No two-way communication on workplace issues.

In assessing the impact of these factors, many of which are subjective, employers and employees will need to take account of all the environmental factors in which an organisation and its workers are operating. A key aspect of a good faith assessment is to consider the control that both employees and employers have over each feature.

Note that there are a number of possible contradictions in this table. For example, the resolution of task ambiguity may result in rigid work practices or an increase in the variety of work may result in an over-extension of a person's ability to handle responsibility. As in all things, a balance, in each particular circumstance, needs to be worked out.

The control options for these types of work are discussed in sections 3.1 and 7.5.

The nature of the work is not the only factor that may result in a person reporting 'unreasonable demands'. If a person is not well-matched to their job, stress and fatigue may continue no matter how well it is organised. It is common experience that some people are better off not doing particular sorts of work and that they find a better niche and more satisfaction when they move on.

1.4   Stress due to causes outside work

Things outside the workplace, like family problems, or having poor mental or physical health, can be responsible for stress and fatigue. These factors can operate by themselves or in combination with workplace factors. Employers have no control over non-work factors and therefore have no responsibility for controlling them.

Increased pressure and demands in the workplace may arise because of the expectations and behaviour of members of the public, over whom employers may have little control. While employers are not expected to cocoon employees from such demands they are expected to take the practicable steps that are available to them in the circumstances. Usually, employees will be able to suggest some steps that can be taken.

The safety of employers and employees may be affected, however, by the consequences of an individual's out of work influences. While employees are expected to report to work in a fit state, employers may need to take action if an employee is impaired.

The mini case studies represent the responses of two employers to these sorts of situations.

**Mini case study –
Stress originating from outside work**

An employer who had a contract to assemble scaffolding was told by an employee at the start of his shift that his four-year-old son was in hospital and very sick.

The employer considered that, because the employee had been awake most of the night and was very distracted, he was not in a fit state to carry on working safely. The employer sent the employee home.

**Mini case study –
Stress originating from outside work**

A young woman began to show signs that she could not cope with her work load.

Investigation by a concerned employer revealed that the son of the family she was boarding with was violent towards her.

She was given time away from work while she relocated her accommodation and sought advice on how to cope with the problem.

These measures, plus reduced work outputs for a week or two, were a valuable part of her coping strategy and meant that she was able to resume a full workload again within a month.

Employers should take all practicable steps to identify and assess impairment in an employee arising from whatever source: medication, illness, recreational drug taking or fatigue. (An approach to ensuring they don't represent a hazard for themselves or their colleagues while at work is shown in section 6 of this guideline.) This identification and assessment is difficult but employers are expected to take only those steps that are reasonably practicable.

1.5 Work is healthy and often enjoyable and rewarding

Work is often stimulating, fulfilling, enjoyable and highly rewarding. In the workplace, people can recover from stress and fatigue by:
- completing fulfilling tasks that provide a sense of completion, mastery and achievement
- gaining expertise in a field
- resolving problems
- meeting and overcoming new challenges (boredom can be a stressor)
- having opportunities for advancement
- having supportive relationships (including acknowledgement of success)
- working with others on shared goals.

People cope better with stressors, whether at work or in the balance of their lives by:
- having good health, a good diet, adequate sleep and regular exercise
- relaxing, doing something enjoyable
- enjoying supportive relationships and friendships
- playing sport and having hobbies
- being part of a wider social circle
- taking part in volunteer work or community service which provides a sense of fulfilment.

Stress management is not enough by itself

An individual stress management programme alone is not enough. Management of stressors in a systematic fashion is required.

Treating only the effects of stress, not its cause, will only be successful where the stressor is a unique event. Continued exposure to stressors allows stress to continue.

Stressors can be managed by elimination, isolation or minimisation.

Working to live rather than living to work!

Work can be tiring. However, where this tiredness goes on getting worse each day – and particularly where people do not get an opportunity to make a full recovery during weekends or their time off work – then the work demands need to be examined.

When this is the case, the main way that people will recover from stress is by having the stressor identified and eliminated, or at least minimised.

In workplaces where the main causes of stress are job content and job organisational factors, an individual is usually powerless to alter the content and structure of work. Trying to teach someone to cope where stressors can be controlled but are not may be both demeaning and futile.

Employees from all levels of the organisation should be involved in the development of solutions that are specific to each workplace. All staff have a part to play in managing and preventing workplace stressors.

The advantage of an approach that addresses the control of stressors is that it can free up personal resources to concentrate on getting the job done, to do tasks better, or to look further ahead to find out how to meet new challenges.

1.6   What creates a healthy place of work?

When work contains unhealthy characteristics, safety and long-term health problems are more likely to occur. The features of healthy work have been stated in a number of publications, as referenced in Table 1.2.

Suggested basic actions to implement healthy work, for employers and employees, are also shown in Table 1.2. Many more may be available to both employers and employees, depending on the work context. A number of comments need to be made about several features in this table:

- The suggestions relate to averaged findings of results about groups of people. Some people can be expected to be happy working in some of the situations described as 'unhealthy'.
- Work **underload** can be as 'stressful' as work **overload**.
- The initiative in creating healthy work lies with employers, but it is a shared responsibility. Employers can implement the suggestions in Table 1.2 only with the co-operation of employees. By the nature of their operating environment, employers may have little latitude to address some of the features.
- All the items in Table 1.2, but especially 3, 7 and 8, rely in some measure on how people perceive them. There is a degree of choice in those perceptions, and therefore the opportunity to make the best of something.
- Implementing all the things in Table 1.2 will be difficult in some organisations owing to the nature of their business. In those cases, the presence of some good features in work can be expected to make up for the features that cannot be made good. OSH suggests that those factors be made good and that employers keep abreast of opportunities to do so.
- Nobody should fix on an isolated feature of this table as the source of all their problems. The awareness of not coping is a complex mixture of workplace, environmental and personal factors and to isolate one feature may be scapegoating.

Some of these comments apply also to Table 1.1.

Table 1.2 Characteristics of healthy work – with suggested actions to promote it

Work content

Healthy work[8]	Unhealthy work	Suggested focus for employers	Suggested focus for employees
A balance of effort and rest[9]	Extended, intense, physical and mental effort without breaks. No ability to switch off from work out of hours.	Make sure there are sufficient breaks in periods of intense physical and mental effort and adequate recovery time outside work.	Know limitations; do not accept pressure or create it by 'competing'; use recovery time wisely; have a life outside work.
A variety of tasks[10]	Boring, repetitive, unfulfilling tasks.	To the extent possible, provide a variety of tasks for each employee; match the right people to the right tasks.	Do not be afraid to try something new; where practicable, share less interesting tasks with other people
A sense of personal control[11]	Little control or independence in the workplace – there is no ability to decide how or when to carry out tasks.	Provide employees with the means to take some control over the way they do their work – perhaps the order in which they do tasks or the means used to accomplish them.	Take responsibility for personal tasks; use discretion provided wisely; respect the employer's position when there is no latitude available.

Workplace relationships

Healthy work	Unhealthy work	Suggested focus for employers	Suggested focus for employees
Poor relationships are resolved swiftly	Poor relationships in the workplace remain unsatisfactory.	Provide fair mechanisms to identify and reconcile workplace relationship difficulties and conflicts – opportunities to meet and exchange views; promote dialogue.	Work on maintaining healthy personal relationships; understand the difference between giving way and giving in; apologise if necessary.
Good communication	Poor communication among people at work, particularly between extremes in the workplace hierarchy.	Have strategies for communicating about work; promote honest feedback in both directions; praise success at work; Have systems for employee participation.	Contribute to a positive atmosphere in the workplace; avoid criticising destructively or undermining colleagues; ask necessary questions.
Workplace hierarchies promote confidence[12]	No-one appears to be in charge; pecking orders rife. Artificial and/or marked separation between people.	Experienced people valued for their ability to inspire confidence and give direction. Hierarchies do not dominate; status (the ability to contribute) is valued at all levels.	Refuse to play status games; take responsibility for personal tasks; use discretion provided wisely. Acknowledge the usefulness of well-designed hierarchies.

Employee involvement

Healthy work	Unhealthy work	Suggested focus for employers	Suggested focus for employees
Workplace collaboration		Ensure employees can be involved in workplace health and safety.	Participate effectively and co-operatively with the employer and fellow employees.
Healthy and safe workplace design and environment	Poor workplace design, e.g. poor lighting and warmth, noise. Poor physical safety.	A well-designed and participatory health and safety programme, e.g. provide sufficient lighting and warmth; control noise; provide well-designed equipment using ergonomic principles.	Participate in the health and safety programme. Obey health and safety instructions; report hazards; take such responsibility as possible for personal comfort and safety; attend training.
Good change management	It is assumed change will just happen.	Understand that change can be extremely tiring and threatening and threaten morale; have good communication and consultation strategies during times of change.	Accept that change may be inevitable and necessary; participate in communicating about and helping manage change.

Employee support

Healthy work	Unhealthy work	Suggested focus for employers	Suggested focus for employees
Appropriate rewards[13]	Personal contributions ignored or demeaned. A mismatch between effort and reward.	Let employees know how they contribute to the organisation; acknowledge work well done and suggestions made.	Maintain skills and knowledge; have a realistic sense of self worth; acknowledge others' accomplishments.
A supportive workplace[8]	No support or leeway when a person has a bad patch.	Have realistic expectations about outputs; offer support in difficulties; acknowledge skills/expertise; Stand between staff and external criticism.	Ask for help when you need it; accept support when you need it; give support when possible.
Personal progress	No opportunities for personal growth.	Provide opportunities to work well and improve performance; match individuals to tasks; provide opportunities to progress.	Maintain skills and knowledge; learn from mistakes; contribute to the organisation's goals; be willing to accept the change and knocks that are necessary for personal growth.

1.7 Relationships between Tables 1.1 and 1.2

A recent view of the literature on job satisfaction summarises and integrates several theories.
It concludes, in part, that:

Thus, …for most people, the most effective way to increase job satisfaction would be to increase intrinsic job characteristics[14].

Intrinsic job characteristics – 'the nature of the work' – include things like:

- **task identity:** the degree to which one can see one's work from beginning to end
- **task significance:** the degree to which one's work is seen as important and significant
- **skill variety:** the extent to which the job allows employees to do different tasks
- **autonomy:** the degree to which employees have control and discretion for their jobs
- **feedback:** the degree to which the work provides feedback on how the employee is performing.

This finding suggests that efforts to control stressors need, ideally, to be accompanied by efforts to add these dimensions to work where possible.

1.8 Where does 'stress' fit into traditional health and safety systems?

Figure 1.4 is one way of illustrating the traditional, general health and safety approach to identifying a hazard, developing management solutions and monitoring the outcome to determine the success of these interventions.

Figure 1.4 Part of the traditional approach to health and safety management
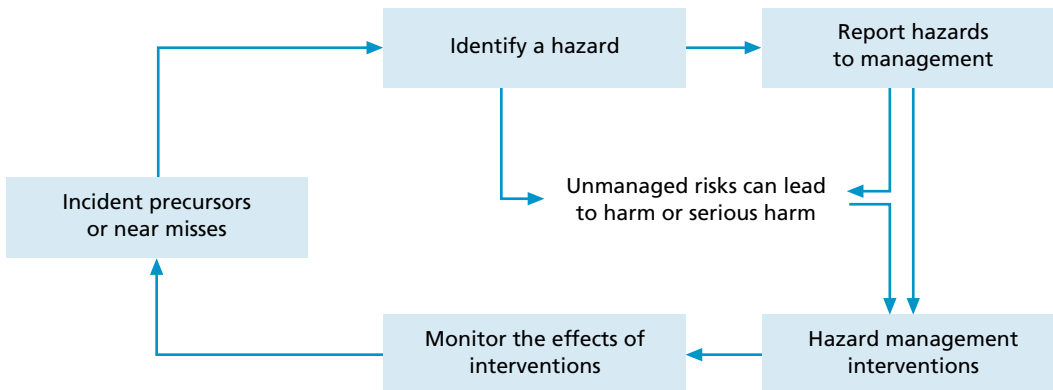
Employers are expected to have knowledge of the hazards their employees may face either through their own hazard identification programmes (which should include employee participation), from the reports of similar organisations or from external advice. If a hazard that has not been identified in this way is reported to management, then it should be investigated, evaluated and, if necessary, management systems introduced.

Such hazard reports need not be accepted without question but employers should investigate them with an open mind to see if they are work related.

Figure 1.5 illustrates the principle that stressors – the things that may lead to stress and fatigue – fit into the same sequence of hazard management as shown in Figure 1.4.

Figure 1.5 Inclusion of stress/fatigue in traditional health and safety management
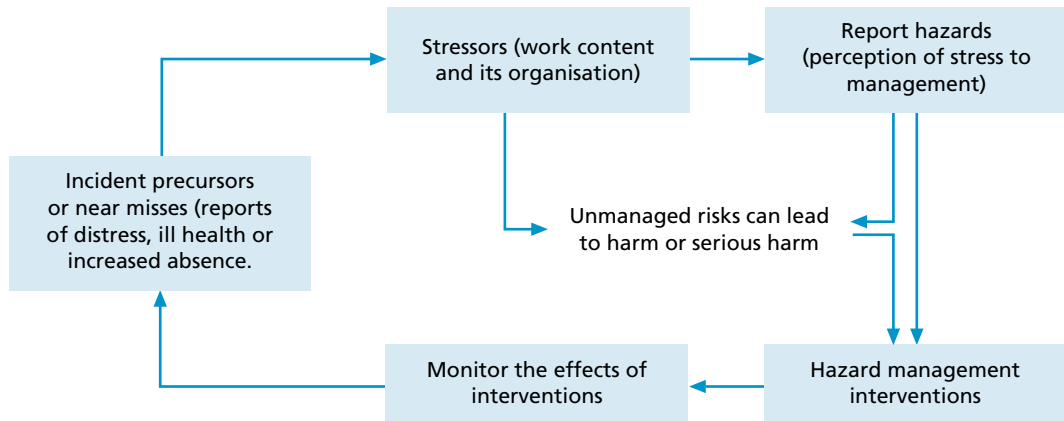
If evidence exists that stressors have become a hazard, then they are subject to the same sorts of health and safety management systems (elimination, isolation, minimisation, communication and monitoring) as other hazards.

Employees from all levels of the organisation should be involved in the development of solutions that are specific to each workplace. All staff have a part to play in managing and preventing workplace stressors.

Key messages

Providing healthy work can be a positive step towards improving working conditions. The features of healthy work are well known. The management of stress can be built into standard health and safety management systems and should involve employees. To prevent and manage workplace stress, employers and employees must be able to distinguish between:
- reasonable and unreasonable demands in the workplace
- stressors that are unavoidable or outside the employer's control and those that are avoidable within the workplace
- the features of and relations between healthy and unhealthy work.

2 Reacting to reports of work-related stress in the workplace

This section outlines a method for dealing with reports of workplace stress.

2.1 Reactive responses to reports of stress

The outline in the box suggests a framework for investigating a report of work-related stress at work. It takes the same consultative process that you should use to investigate any health and safety issue.

> **Responding to reports of 'stress'**
>
> 1 Investigate the facts of the report.
> 2 Make a decision about the work-relatedness of the problem.
> 3 Discuss the results of your investigation.
> 4 Suggest solutions.
> 5 Ask for additional solutions.
> 6 Agree on the implementation of the solutions.

In some circumstances you may also need to establish whether the person can carry on working safely.

1 Investigate the facts of the report.
- What does the person mean by 'stress' and how long has it been going on?

- Have they consulted a doctor? If so, do they have a diagnosis?
  - You may have to report this as 'Serious Harm' (See section 7.2).
  - Note: 'Stress' is not a medical diagnosis. A certificate stating that someone is unwell from 'stress' does not automatically constitute evidence of Serious Harm.
    - An appropriate diagnosis from the treating doctor should relate to established diagnostic categories (see reference 5) and may require referral to a specialist.
    - Nevertheless, a certificate citing 'stress' should be investigated by the employer.

- What work factors have led this employee to consider they are 'stressed'?
  - Are other employees doing similar work affected similarly?
  - What workplace changes have occurred for the employee – have there been recent organisational changes that have caused problems for numbers of employees?
  - Are there any significant out-of-work or personal factors?
  If it is work related –
  - Is it the content of the work?
  - Is it how work is organised?
    - e.g. too much to do, conflicting reporting requirements, no performance feedback, not trained for the sort of work.

- What do you as the employer think has caused a problem (if a problem exists)?
  - Is the sort of business you are in known to be difficult for employees to cope with? See section 3.1.
  - Is the stressor to do with the match of the person to the job?

- Is the stressor environmental:
  - e.g. constantly dealing with difficult customers, unsupportive relationships at work, communication difficulties at work, the physical environment, the safety of the environment, shiftwork, particularly badly designed shiftwork, the prospect of violence or bullying.
- Are other people in the workplace experiencing the same problems?
- Is there evidence of organisational 'ill health'?
  - Sickness rates, absenteeism, declining productivity, industrial relations problems, increased labour turnover, negative feedback from other staff, resignations from 'stable' staff, etc.
- Is the stress related to something in the person's life outside the workplace?

2 Make a decision about the work-relatedness of the problem.
- That the problem is work related need not be accepted without question but employers should investigate with an open mind.

3 Discuss the results.
- Discuss the results of your investigation with the employee. Give him or her the chance to comment on any aspects they have not been involved in. Agree on the nature of the problem, its severity and whether it is work related.
  - If you think it isn't work related be frank with your employee. You may be able to offer some assistance in dealing with non-work issues, such as flexible hours, job sharing, budgetary advice, etc. while they cope with whatever life has thrown at them.
  - Employees do not have to accept employers' findings.

4 Discuss solutions.
- Discuss solutions – if you agree that it's work related. Ideally, these solutions will address both the causes and the symptoms of stress.
- Ask for additional solutions that the person might think are necessary.

5 Agree on the implementation of solutions.
- Agree on the implementation of the solutions, and how they will be followed up.

6 Find solutions to reports of work-related stress.
- Section 3 suggests how to approach finding solutions which can involve:
  - removing the stressors
  - improving the 'fit' between the person and the job
  - helping the person recover from the effects of stress.
- Tables 7.4 – 7.6 in section 7.5 of this guide carry more detail.

7 Communicate throughout the process.

- The parties need to communicate, to work together in good faith and to focus on a solution that both find satisfactory. This is where a robust employee participation system can add significant value through ensuring dialogue.

- Dealing with problems before they escalate is always best practice. The Act is about assessing the potential for harm and taking some practicable steps to avert that harm. Hoping the issue will go away increases the risk of harm occurring, and may also cause attitudes and poor practices to become ingrained.

- As with all problem solving, the first step is to ensure that you have all the facts, and that you have looked at them calmly and carefully. The second is to talk the issue through with everyone involved, and identify not just the obvious cause but also any underlying causes.

- Employees affected by stress or feelings that they cannot cope may especially benefit from having a supporter present during any discussions. The workplace health and safety representative, a trusted colleague, a union representative or a family supporter can help make sure the issues are clear and all possible solutions are considered.

- Employers who need assistance can consult an employers organisation.

8 If you need further help.

- A variety of organisations can assist including:
  - OSH and the Employment Relations Service – Contact WorkInfo on 0800 20 90 20
  - local Employers Associations
  - unions or the CTU.

Documentation of the process will be important if personal grievance or legal action is a possibility.

2.2   Application in small businesses

Small businesses enjoy the potential advantage of having open, personal and prompt lines of communication. The six-step investigation summary suggested here is presented as a framework for action. It is not intended as a written reporting and recording template.

While small and large businesses have the same legal obligations, it is anticipated that, in many instances, the six items could be covered in a short conversation or series of short conversations.

2.3   What if employees don't tell me about stress?

Employees may be reluctant to admit they are feeling 'stressed' by work. This admission can be seen as a sign of weakness, or reflect the idea that reporting 'stress' may be disadvantageous.

Employees should nevertheless contact their employer promptly when they believe they are not coping. If they are reluctant to do this directly, they should contact a Health and Safety Representative or their Union.

You can make it easier for your staff to discuss stress by indicating that, if a person is having difficulty coping, it may have undesirable consequences for your organisation and that you need to know about that. Reassure your employees that the information they give you will be taken seriously and treated in confidence.

Key messages

- Employers should treat reports of stress at face value.
- Employees should contact their employer promptly when they believe they are not coping, either directly, through a Health and Safety Representative or through their Union.
- Employees should appreciate the stressful circumstances in which businesses may operate.
- The standard investigation protocol provided above represents one way of reacting to employee reports of stress. There will be others.
- Reacting to reports of stress need not be time consuming.
- There are advantages in knowing that employees feel stressed.

3   Taking a proactive approach

This section identifies some sorts of work as intrinsically demanding, suggests that there are four categories of work, identifies methods of assessing workloads and outlines control measures.

3.1   Some work is intrinsically difficult to cope with

Evidence identifies some work as inherently difficult to cope with. This evidence reflects either consistent reports of distress by the people who do the work in question or refers to data reflecting adverse health outcomes in large groups of people doing the work (e.g. increased incidence of cardiovascular disorders, gastrointestinal problems, sickness absence or unhealthy behaviour e.g: alcohol/drug abuse).

Some occupations that have been identified in this category are[6]:
* ambulance services
* health care personnel, including medical practitioners[15,16,17,18]
* police[19]
* prison services
* social work
* teaching.

There is evidence that two general aspects of work, which are spread across many occupations, can lead to poor health outcomes:
* Long working hours[20].
* Shiftwork[21,22,23,24,25].

These lists should not be taken as comprehensive.

The weight of evidence is such that in these professions or aspects of work employers, employees and workplace professionals should be proactive in considering and evaluating the potential for harm to occur.

Section 3.2 describes four categories of work. People in the occupations just listed will likely fall into the most 'stressful' of these categories (Category Four). The stressors identified in this type of work will require different management strategies (see Table 7.6) compared with people in occupations belonging to the other three categories (see Tables 7.4 and 7.5).

3.2   Four categories of work

Whether you aim to eliminate, isolate, or minimise stressors will depend on the type of work you are dealing with, and on the people who are doing the work. You are required to consider these three approaches to prevention, in that order of priority, by the Health and Safety in Employment Act.

OSH suggests that there are four 'categories of work' in this regard. These categories aren't necessarily fixed as they will overlap with each other, circumstances change and work that one person finds stimulating will be work that another person finds stressful (see Category Two). However, these broad categories may give you a useful starting point for thinking about whether you can eliminate, isolate, or minimise the stressors associated with work, and then how you may go about doing so.

Category One – Healthy work is work that is enjoyable, interesting, rewarding and stimulating, with many elements of healthy work shown in Table 1.2 such as task variety and personal control over how the tasks are performed. It is well-organised, with realistic deadlines and a balance of effort and rest, and the worker receives good recognition and rewards.

• Ideally, an evaluation of this kind of job will reveal that the stressors that exist in it are challenges rather than a constant drain on resources, or that the healthy features of the work outweigh its unhealthy features. Any significant stressors that do show up can probably be eliminated through primary (work-focused), secondary (training and person focused) and tertiary (person-focused) prevention methods.

Category Two – Self-generated stress. This is where the person creates their own stressors because of personal choices. A person in Category Two might be trying to hold multiple jobs, or agreeing to unreasonable demands on themselves (saying 'yes' instead of 'no', which may imply a degree of management responsibility), pursuing agendas that are not those of the organisation, refusing to ask for help when they should or refusing reasonable change.

• An evaluation of a Category Two job will reveal that the employee is creating stressors. The stress prevention programme will aim to eliminate the stressors through secondary (person-job fit) and tertiary (person-focused) prevention methods, and to alert supervisors not to take advantage of the person.

The identification, assessment and control of problems in Category Two work may require the consideration of all the factors in the person's life to find out if the person is **choosing** to behave that way or is **constrained** to behave that way by various pressures (see Table 7.4).

Category Three – Badly organised work. This is work that is free from the intrinsic stressors that characterise Category Four work, is normally enjoyable and satisfying, but is organised so that it has become difficult for a number of people doing the work to cope with. Jobs in this category typically can be done safely and enjoyably but are often being worked too many hours in each week or needlessly contain uncontrolled stressors (see Table 1.1).

• An evaluation of a Category Three job will reveal stressors in the job that will often relate to time and other organisational pressures. The stress prevention programme will aim to eliminate, isolate and minimise these stressors through a mix of primary, secondary, and tertiary prevention methods. Employers should ensure that their work organisation and structure do not match the factors identified in Table 1.1.

Category Four – Intrinsically stressful work. This kind of work could involve activities that are emotionally challenging, draining or even repugnant, require intense, prolonged concentration, or have very high consequences of error. Some of these were identified in section 3.1 and include policing, health care, supervision of disturbed people, and air traffic control.

• An evaluation of a Category Four job will reveal a high number of intrinsic stressors that may, at times, be intense and unmanageable. The stress prevention programme will be unable to eliminate or isolate these stressors (except perhaps in isolated or specific ways), and will aim to minimise them through all three prevention methods.

3.3 Assessing the demands of work

The above categories are a template for assessing work. Not all work may fall into one of these categories, or there may be doubt about the demands on a person doing a certain job. In those situations it may be necessary to assess the demands of work.

The kinds of things that may need to be considered when assessing workload include both physical and mental demands.
- Information reception (mental workload).
- Information processing (mental workload).
- Control of muscular activities – both dynamic and static physical workload.

Objective measures of physical workload, such as heart rate and oxygen consumption can be measured and compared with standards. This guide together with the use of the basic questionnaires (such as those in section 7) can be used to measure mental demands but more specialised methods may be required.

3.4 Overview of prevention methods

The terms *eliminate*, *isolate*, and *minimise* mean the same for stressors as they do for other workplace hazards and should be explored in that order of priority.
- **Eliminating** a stressor means removing it altogether.
- **Isolating** the stressor means regulating and limiting employees' exposure to it – either by limiting the time of exposure or by limiting the exposure to people or groups of people specially selected or trained for the work.
- **Minimising** the stressor means reducing its extent and impact or reducing the time for which people are exposed to it.

Primary, secondary, and tertiary prevention methods exist to eliminate, isolate, or minimise stressors.
- **Primary prevention:** creating a healthy place of work. Identifying and controlling stressors so that the work is interesting, rewarding and paced within the person's capabilities (i.e. elimination of the hazard where that is possible).
- **Secondary prevention:** improving the fit between the person and the job by selection, on the job training, performance feedback and monitoring of problems (i.e. isolation of the hazard to adequately trained and equipped personnel).
- **Tertiary prevention:** helping the person experiencing stress or harm that may have resulted from it (also called stress management).

The approach used will depend on the resources available, the category the work falls into and what you are aiming to achieve.

Employees from all levels of the organisation should be involved in the development of solutions that are specific to each workplace. All staff have a part to play in managing and preventing workplace stressors.

3.5   Details of prevention methods

Primary prevention (elimination of work organisation stressors) focuses on identifying and removing stressors in the workplace and creating a healthy place of work. Examples are:

- designing work so it is safe and healthy
- creating flexible, balanced work schedules
- providing family-friendly work (e.g. flexible hours, assistance/leeway in times of emergency);
- hazard identification – having systems for detecting the presence of stressors – either by hazard ID methods or the ability for employees to report stress
- avoiding isolation and crowding in the workplace
- providing physical barriers to deter violence (e.g. in banks).

Secondary prevention focuses on improving the 'goodness of fit' between people and tasks. Examples are:

- providing needed training
- providing any needed mentoring and supporting for the person in the skills required for the job
- providing performance feedback
- assessing the workload – ability match
- moving the person to a more suitable job
- using best practice personnel selection procedures.

Tertiary prevention focuses on helping the person who is regularly exposed to stressors and/or who is suffering the effects of stress or harm related to stress. This is also called 'stress management'. Examples are:

- controlling the timing and duration of the exposure to stressors;
- inducting/training employees into ways of dealing with shiftwork (and perhaps including partners);
- training in dealing with the demands posed by the work. This should be directed at helping the person achieve the required results – rather than on how to deal with the effects of not coping (e.g. training in how to identify the levels of threat posed by aggressive customers and how to respond to each different level is more effective than training in how to deal with the effects of customer aggression);
- training in time management, priority setting, and clarifying goals;
- providing practical assistance for specific personal issues;
- temporary reduction of workloads;
- making short personal exercise programmes a reality (e.g. is there enough time for a short run at lunchtime?);
- appropriate management after a traumatic incident (see section 7.7)[26]
- promoting employee involvement
- providing contact details for centres that can assist staff.

Note that evidence[27] suggests that stress management by itself produces only short-term improvements in self-reported well-being and no effects on job satisfaction.

3.6 Prevention methods for Category Four work

For this category of work, prevention methods can also mean:
- careful selection of people best suited to the type of work:
  - People that are more suited to the work involved and have the appropriate skills and experience are more likely to cope with its demands. However, other measures will be required to manage the stressors they face
- short-term rotation of staff away from stressful situations. For example:
  - In a large hospital with a constantly busy emergency department, emergency physicians work a five days per week roster but only three days involve patient contact (for 12 hours each day). The other two days are dedicated to research, training (both receiving and giving), report writing, Court appearances, etc.
- long-term rotation of staff – sabbatical arrangements. For example:
  - Many inherently stressful organisations ensure that front-line staff can look forward to a complete change of scene for some months every few years
  - Front-line staff are predictably rotated to 'backroom' or head office work for several months or for one week a month
- scheduling training and retraining into the working year
- ensuring that the administrative requirements of this sort of work are effective and expedited (senior staff duties are supported by junior staff)
- providing mechanisms for 'stressed' staff to share their experiences and learn from each other in (legal) safety:
  - Suggestions box; Anonymous incident reports (which make it possible to raise concerns about near hits in safety).
  - The potential intrusion of legal proceedings into some of these Category Four jobs means that experiences and suggestions about best practice and procedure optimisation can be subject to legal discovery. Employers should ensure that 'continuous improvement' programmes are legally safe for employees. (For example, (a) a trainee doctor may wish to discuss procedures and options after the treatment of a patient does not go as planned, (b) aviation incident reporting systems.)
- ensuring, as far as possible, that output quality is not compromised by economic and administrative decisions
- ensuring that the inherently difficult aspects of Category Four work are not made less tolerable by work organisational structures.

Key messages

- Some types of work are intrinsically more demanding than others. Employers should be proactive in addressing the stressors in these jobs.
- Work can be divided into four categories. The strategies for eliminating, isolating or minimising stressors depend on which type of work is involved.
- There are primary, secondary and tertiary methods of preventing stress.
- Workload assessment will be necessary for some types of work.
- Within primary prevention there are three methods of controlling stressors which should be considered in the order shown:
    – Eliminate – isolate – minimise.

4 Creating a healthy work programme – large business

This section describes what a healthy work programme is, what it can achieve, and how employers and employees can find out how well a programme of this nature is working. Two frameworks are provided depending on whether you are a small employer (see section 5) or a large one. You can adapt these frameworks as you need to, depending on the nature, size and needs of your organisation.

4.1 What is a healthy work programme?

A healthy work programme is a planned and measurable programme that aims to identify (a) features of healthy work and (b) the workplace stressors that reduce people's coping abilities.

A 'healthy work' programme develops measures to manage stressors and involves:
- confirming the good things about work
- identifying further good things that can be added to work (see Figure 1.6)
- identifying stressors in the workplace
- developing ways to eliminate, isolate, or minimise the stressors you find
- training and supporting employees to deal with difficult work content or unavoidably difficult organisational issues
- monitoring the success of the programme, and revising it when necessary
- building a mentally healthy workplace[28]
- active, good faith involvement of workers in the process.

4.2 Why have a healthy work programme?

One reason is that stressors can be hazards in the workplace, and employers have legal obligations to prevent and manage them and their effects.

A healthy work programme may also have measurable benefits to business. Studies in large employers show that well-organised and rewarding work may help to reduce employee absenteeism, increase productivity and efficiency, and create more efficient work systems. The authors of a recent expert summary that considered the effects of 11 such interventions[29] concluded that:

> "In this book, by analysing and comparing various stress prevention projects, we have tried to contribute to both stress research and practice by reducing the gap between both fields, strongly suggesting that stress prevention may be beneficial to both the employee and the organisation."

4.3 Healthy work versus individual 'stress management' – what's the difference?

Stress management involves teaching the individual who is suffering the effects of stress different coping skills. This is the way most organisations currently deal with stress in the workplace. However, this approach does not alter any workplace factors that people working in that organisation may have difficulties coping with. Studies show that individual 'stress management' alone usually only has at best a short-term benefit on the personal sense of well-being and zero or only a short-lived effect on personal health and organisational effectiveness and function[27].

This makes sense because most individuals are relatively powerless within an organisation and have a limited authority to change work arrangements. Wherever possible the causes of stress – the stressors – need to be dealt with as well.

A well-designed healthy work (stress prevention) programme therefore uses:
- **primary prevention:** creating a healthy place of work and identifying and controlling stressors so that the work is interesting, rewarding and paced within the person's capabilities (i.e. elimination of the hazard)
- **secondary prevention:** improving the fit between the person and the job by selection, on-the-job training, performance feedback and monitoring of problems (i.e. isolation of the hazard to adequately trained and equipped personnel)
- **tertiary prevention:** helping the person suffering from stress (also called minimisation or stress management).

Section 7 has more information on primary, secondary and tertiary prevention methods.

4.4 The essentials of a healthy work programme – the large business approach

Case studies have shown success for a programme when the following things were present[30]:
- Management commitment. The message that managing stressors (preventing stress) matters must come from the top down.
- Employee participation. Employees from all levels of the organisation must be involved. All staff need to be aware that managing stressors and preventing stressors is everyone's concern and responsibility.
- A systematic, step-by-step approach. A healthy work programme must be carefully planned, and should be based, ideally, on an approach that uses a variety of methods to identify hazards such as: observations, task analysis, job descriptions, analysis of sickness absence and reports of harm[31].
- Prevention methods that focus on the causes as well as the effects of stressors.
- Realistic expectations about the results of the programme need to be held (see the box on the right).

4.5   Use internal expertise

OSH recommends that organisations develop their own programme, using their own expertise and resources, wherever possible. This is because:

- standard off-the shelf questionnaires that are said to measure 'stress' or 'stressors' have little scientific validity[31]
- the people who work in an organisation are the experts in understanding its business and will have the local knowledge about the stressors that exist in it and how they can be prevented
- management and employees have to be involved for the programme to work
- you are probably already doing things to prevent and deal with stressors in your workplace – developing a healthy work programme may mean building on your strengths and existing systems (see the box below).

Consultants can, however, help you with things like:

- designing and analysing stress questionnaires if you decide that they are necessary. The evidence suggests that these should:
  - relate to the specifics of your workplace
  - focus on jobs and roles
  - be informed by best practice (frequency based response formats)
  - take a risk management approach
- providing specific advice to individuals.
- the necessary management training about specific techniques to assess and control stressors
- education about stressors and stress for workers.

Healthy work systems in organisations have the following characteristics:

1 Open and transparent **performance review** systems – the golden rule is 'no surprises'.
2 Clear **job descriptions** and **performance criteria** – with prompt positive and negative performance feedback.
3 **Communication** – letting staff know what's happening and providing for discussion and dialogue. Listening to staff feedback.
4 **Relationship** management – there are ways to tell when relationships deteriorate and there are repair mechanisms that can be used when they become dysfunctional.
5 **Process review** – examination of the ways work is done to remove unnecessary or redundant tasks and devise better ways of doing things.
6 **Expectations** held of people – realistic expectations about performance and output by all parties.

4.6   Good training is the key to success

Employees and management must know how to identify, report, and deal with stressors and the realisation that people are not coping with work demands. It is very likely that any prevention method you choose will involve some form of training of the people in your organisation.

4.7   Creating the programme, step by step

The steps we suggest for creating a healthy work programme are set out below. This programme is based on the approach that was used to prevent overuse syndromes[30] and which led to the ACC approach to safety management[32]. Steps one to three involve planning and development. Steps four to six involve design and implementation. Step seven involves evaluation.

Planning

1   Assign the role of 'healthy work co-ordinator' to a suitable person.
2   Create a healthy work team – involving health and safety representatives.
3   Create a programme plan.

Design and implementation

4   Confirm healthy aspects of work and identify work-related stressors:
    –   Use the tools in this guide or devise your own.

5   Choose the right management method (using the models in this guide or your own):
    –   Select a range of possible management methods.
    –   Choose what seems to be the most successful for your business.
    –   Pilot the management method.
    –   Adjust the method and introduce it business wide with ongoing monitoring.

6   Communicate about the changes and implement them.

Evaluation

7   Evaluate the success of the programme.

Steps for creating a healthy work programme

1   Assign the role of 'healthy work co-ordinator'

The healthy work co-ordinator will oversee the planning, development, and implementation of the programme. The co-ordinator's role would be to help managers and supervisors embed healthy work methods as part of normal working activities. The co-ordinator might also organise staff training in stress prevention and management. A co-ordinator should:
- be interested in workers' well-being and have good personal skills
- be able to set up and monitor systems
- be able to negotiate with supervisors, managers and employees
- have access to funds and decision makers
- have enough time, authority, and resources to do the job properly
- Adopt a Pareto (80/20) approach – most problems can be solved with little effort but solving every problem requires a lot of effort.

2   Create a healthy work team (or expand your health and safety team)

The healthy work team will work with the co-ordinator to develop, implement, and communicate the healthy work programme. Creating a team helps spread the workload, and makes sure that employees from all levels in the organisation are fully involved, kept informed and are able to have their input. Representatives from all levels and sections of the organisation should be part of the team. You may have a health and safety team working already and this could be an expansion of their role.

Team members will need an introductory training programme to make them aware of:
- their organisation's legal responsibilities under the HSE Act concerning stress in the workplace
- existing health and safety structures in the organisation
- the definitions of stressors, stress and fatigue
- the purpose of the healthy work programme
- how the programme will work
- their responsibilities as part of the healthy work team.

3   Create a programme plan

The co-ordinator and the healthy work team will create a programme plan (management system) that states what the team plans to do, when they will do it, and who will be responsible for each action. The detail in your plan will depend on the size of your organisation. Whatever the size, however, create a clear and logical plan to follow to save time in the long run.

Your plan should also contain clear and realistic **goals** about what the healthy work programme aims to achieve. If things get off track, refer back to the goals. Goals for a simple programme might be:
- to identify the single factor absent from work which, when added to it, would make it better (see Tables 1.2 and 7.1)
- to identify the single worst aspect of each person's work (see Tables 1.1 and 7.2)
- to control the items listed in order of their frequency of reporting
- to identify the things that employees find most difficult about the way work is organised – and to list the three or four items most frequently reported

- to agree on how to address these stressors, within the limits of the resources available
- to pilot a chosen solution and measure its impact on sickness absence and the sense of well-being of employees
- to decide what category or categories of work your organisation has.

4 Conduct a healthy work assessment

A healthy work assessment involves finding out the things that people report as rewarding and enjoyable in your work (identifying what is healthy about the work) and identifying its hazards.

It asks:
- What are the good things about the work?
- How can we build on those things?
- How stressful is the place of work?
- What things (stressors) are causing the stress?
- Are the stressors created by the work itself, or by the people doing the work or by the way the people do their work?
- What are the most important stressors to deal with first?

Use a **questionnaire** to ask employees what they regard as the stressors in the workplace, and the effect that these stressors have on them. Table 7.1 addresses healthy work while Table 7.2 addresses workplace hazards. Section 7.8 contains an example of a brief questionnaire while section 7.7 illustrates a more complete set of questions. You could adapt any of these for use in your own organisation and there are several ways of using them (as described in the introduction to section 7.4). One of the tasks of the healthy work team could be to select the questions that will be used in any questionnaire, pilot it and then apply it to the organisation on a planned basis as a problem identification tool. (Developing and piloting a questionnaire is an area where you may need assistance.)

Questionnaires usually have broad results that are useful for showing general trends and opinions. The healthy work team can also analyse:
- rates and costs of absenteeism for the organisation as a whole and for individual departments
- reports of harm, such as injury incidents and work-related ACC claims (some of these may be the result of fatigue)
- staff turnover (high turnover is a reliable indicator of a stressful environment)
- finding out the real reasons people are absent (which implies anonymity) or leave the organisation (exit interviews)
- productivity and quality measurements
- interviews (confidential) with employees (perhaps randomly selected) and supervisors to identify general trends
- interviews (confidential) with specific employees and supervisors to review progress where known problems exist or known solutions and successes have been achieved.

You might not be able to deal with all the stressors at once. Ask your employees to organise them in order of importance, and then select the ones you will deal with. When setting priorities, a poll of all employees to ascertain their opinion as to the worst stressors may be helpful.

You will need a longer-term plan to deal with some stressors. This can mean working over a period of time to change some important parameters of how your organisation does business. For example, if the shift system is constantly identified by a significant number of the staff as being a major problem, then researching the problem, discussing shift alternatives, ensuring productivity needs are met and implementing a shift change will take considerable time, discussion, negotiation and careful planning.

5   Choose the right prevention methods

Choose the methods you will use to control each stressor using the general headings of eliminate, isolate or minimise:

- What it is, who is affected by it, and how.
- Whether you'll eliminate, isolate, or minimise the stressor.
- What methods you'll use to control stressors.
- How you'll measure the success of the methods.

Here's an example:

- **Stressor** – A high workload which affects everyone in the organisation to some degree.
- **Results** – This results in poor quality product, high absenteeism and poor personal relationships at work.
- **Healthy Work Programme Aim** – Our aim is to minimise this stressor and its effects. Because of the nature of our business, the work content (violence, emotionally draining work) and some aspects of the organisation (night shift, urgent work disrupting planned leave, etc.), some stressors cannot be eliminated.
- **Minimisation** – Methods to minimise this stressor:
  - The healthy work team analyses who is most affected, when the effects occur, the consequences of the effects (to the business and people).
  - A special team analyses work requirements to detect redundant or unnecessary operations, to develop new work processes and schedules, reorganise deadline requirements, and create new workload guidelines – over the next two months.
  - Training for supervisors in helping staff deal with problems.
  - Specific training provided for employees who report consistent work pressures.
  - Where resource issues are identified steps are undertaken to address these issues in the short term and to negotiate realistic output requirements in the short term.
- **Measurement:**
  - Reported improvement in staff morale and relationships.
  - Reduction in absenteeism because of stress.
  - Improved quality of outputs.

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6   Communicate about the changes

Communication is essential while you're implementing the stress prevention methods. Employees will need to know what is happening, and will need to feel their opinions have been heard. Good communication supports people in healthy and safe workplace practices. It requires skilful consultation, feedback, and sometimes mediation between differing points of view.

Meetings, presentations, newsletters, suggestion boxes, and informal discussions are all useful forms of communication.

7   Evaluate the success of the programme

As you have developed and implemented this programme, you have begun to create a cycle of workplace health and safety (concerning the stressors in your workplace but almost certainly moving into other health and safety concerns and other aspects of your business).

Your final evaluation will be of the effectiveness of this overall cycle. Use these questions to guide you:
*   Are the co-ordinator and programme team getting enough time, resources and support to do the job? Is management showing strong commitment to stress prevention?
*   Did we assess the stressors in the workplace well enough? How well did our questionnaires and interviews work?
*   Do the people who work here take responsibility for their own health and safety in the area of stress? Could we be doing more communication and training?
*   Did we successfully eliminate, isolate or minimise stressors where possible? Did we choose the right prevention methods – primary, secondary and tertiary?
*   Which prevention plans have got good results? Which ones do we need to look at again?

At the end of your evaluation, make any necessary changes to the process, and begin the cycle of identification and assessment once more.

> Dealing with stress in the workplace is an ongoing task that needs to become part of your organisation's work systems. Using this framework is an excellent place to begin.

Key messages

- Work systems exist in any organisation. Part of the healthy work programme is to examine those systems to see if they can be made more effective (with the implication that if they are already effective, then that may need to be drawn to the attention of staff).
- Healthy work programmes should be mounted in-house, with consultants being used for specific purposes.

5 Creating a healthy work programme – small businesses

Small businesses face difficulties that large businesses do not, but can enjoy a number of advantages not enjoyed by them.

New Zealand businesses are divided into small, medium and large as follows:

Table 5.1 Business size and employment distributions

	Business size Employees	Number and % of Businesses	Number and % of Employees
	0	21,700 (8.3%)	0 (0.0%)
Small	1-5	185,000 (70.9%)	373,800 (23.1%)
Medium	6-20	41,500 (15.9%)	409,200 (25.3%)
Large	21-100	10,900 (4.2%)	429,200 (26.6%)
	101+	1,700 (0.7%)	404,400 (25.0%)

These data tell us that, while 71% of New Zealand businesses are small, they employ only 23% of the working population. When small and medium business are combined (up to 20 people), 87% of businesses and 48% of employees are covered,

Small businesses may not feel they have the time, resources or need for complex management systems to address activities such as health and safety – which they may perceive as 'non-core'.

Small businesses have a distinctive approach to health and safety issues. Lamm[33] quotes the Australian writer Mayhew's summary of the problem:

> "The major individual constraints to improve OHS in very small businesses is that these are practical people focused on concrete tasks. Abstract concepts and obligations are an anathema. They do not like to read copious guides. Minor and chronic work-related injuries are usually accepted as part of the job, 'normalised', ignored – and repeated. Prevention is rarely, if ever, considered. OHS is usually misinterpreted as workers' compensation. The costs of treating work-related injury are frequently externalised into Medicare (ACC in the New Zealand context). OHS is virtually never seen as a benefit."

OSH's research[34] into health and safety compliance activities in New Zealand small businesses supported these statements, and found a low level of compliance with basic health and safety steps.

The keys to successful health and safety in a small business, in OSH's view, are acknowledging the existence of workplace hazards, open, good faith communication between employers and workers about them and the risks they pose, and taking practicable control measures.

Table 5.1 expands Lamm's ideas by the addition of an interpretation of how these factors interact with health and safety culture in a typical small New Zealand business.

Table 5.1 Features of New Zealand small businesses that may affect stress and fatigue

Work Feature	Possible Advantages	Possible Disadvantages
Definition of the work role	• Implied variety of tasks • Implied discretion and opportunities for initiative • Implied ability to take breaks.	• An atmosphere of uncertainty • Employees take on too much or too little work • Uncertainty as to who does what, when – and who is responsible • Problems with accountability/ responsibility.
Employer participation in the work	• Knowledge of local conditions • Open communication • Problems dealt with promptly.	• Extended working hours • Employer expertise concentrated on work may mean others do not develop skills • A lack of autonomy.
Involvement of family members and friends	• Work is sociable and supportive • High loyalty, trust, commitment and motivation • Family and personal support.	• Employment status may be unclear • Loyalty may be abused (unintentionally) • Things can go badly wrong if there are disputes • Training may be shallow – or it may be assumed it is not needed.
Employees are scattered across a number of work-sites[35]	• Independence encourages initiative • Greater variety, autonomy and control.	• Difficulties of communication • Difficulties in consistency and quality control.
Options are affected by the behaviour of larger businesses	• Large business approach to contracting may improve health and safety • Large businesses may mentor small business health and safety efforts.	• Large businesses may exploit the dependency of small businesses through pricing competition • Non-communication about health and safety issues.
Access to resources	• Industry Associations can act to create and disseminate information.	• Difficult to find succinct, comprehensible, reliable, specific information.
Precarious employment	• People may cycle rapidly through unpleasant work.	• Reduces incentive for employer to train and employee to learn.
Family commitments	• Employers can choose to provide good conditions to work around family commitments.	• Poor conditions for family commitments • Pressure on other employees when people with family commitments are away from work.

An adaptation of a table developed by Lamm (Table 5.2) explores common-sense, practicable steps based on communication and the good faith evaluation of reported hazards.

Table 5.2 Common-sense solutions for health and safety in the small business sector

Management and organisational factors	Suggested common-sense solutions for small business with respect to 'stress and fatigue' issues	Employment factors	Suggested common-sense solutions for small business with respect to 'stress and fatigue' issues
Access to resources	• OSH provides clear advice about steps to take when assessing stress and/or fatigue problems • Industry associations set up a mechanism to certify H&S advice from a variety of sources • Industry associations share solutions with members.	Use of friends and family	• Ensure that family and friends receive the same training as 'regular' employees.
Training and industry experience	• Providing training and recognising industry experience directly addresses issues in Table 1.1 and is a necessary 'practicable step'.	Casual employment	• HSE obligations mean that even casual employees require the same information about hazards and their management as do permanent employees.
New technology	• New technology requires that employees be trained to ensure maximum benefit and promote healthy work – Table 1.2 • Employers should not sacrifice H&S standards for a cheaper product. For example buying noisier but cheaper machinery is more expensive in the long term.	Family responsibilities – people with dependants	• Healthy work that recognises out of work and family demands (e.g. flexi time built around school hours, job sharing, industrial estate employers facilitating a crèche, etc.)
Influence of quality management	• Health and safety aspects of work should be an integral part of quality management. Don't just focus on error rates but look at the latent failures in management systems that lead to individual error. • Avoid where possible: continual high workloads, jobs with low 'motivating' potential, jobs with short cycle time and work where performance is paced by machine/line speed.	Social and cultural values	• Societal attitudes (towards health and safety) need to be recognised as significant influences on New Zealand employers and employees. • While all care needs to be taken over prevention, human error may need to be regarded compassionately.

Management and organisational factors	Suggested common-sense solutions for small business with respect to 'stress and fatigue' issues	Employment factors	Suggested common-sense solutions for small business with respect to 'stress and fatigue' issues
Type of industry	• Hazard identification and management should reflect some assessment of healthy work principles such as the categorisation in Table 1.2.		
Influence of large businesses	• Compliant large businesses will be a positive influence when they require and mentor health and safety management systems in subcontractors. • Non-compliant large businesses may be liable for health and safety lapses by their subcontractors if their tendering and contractual procedures result in OHS problems.		
Use of advisors	• See above.		

The next two pages outline suggested or required actions for small businesses over stress and fatigue.

Step 1 Hazard identification

Think about (a) the positive aspects of your work, and (b) any hazards that might lead to stress and fatigue in your business – from the point of view of the productivity and enjoyment of work as well as its health and safety. You could use Tables 7.1 and 7.2 for this purpose.

Step 2 Inherently difficult work

If the work in your business is inherently difficult to cope with (i.e. is in Category Four – see page 31), then you will face the same responsibilities as any business to identify the hazards in your work, to assess their significance and control the stressors it contains. The possible control approaches and suggestions are shown fully in Tables 7.4 – 7.6.

Step 3 Assess employee fitness to carry on working safely

If your employees are in safety-critical jobs and if they are affected by fatigue, their actions may be a hazard and may endanger themselves, their fellow workers or members of the public.

You should take all practicable steps to ensure that your employees are not impaired by fatigue, 'stress' or medical problems to the point of being unsafe to carry on working safely. Section 6 discusses this issue in more detail.

Step 4 Ask your employees about stress and fatigue

- If you don't know already, ask your employees about the causes of work-related stress and fatigue. If everyone lists 'the dirty tea room', 'John's supervision style' or 'dealing with difficult clients' as a problem, then that is a clear indication of actions that are likely to be helpful – or which may just have to be put up with.
- If the list is several items long, agree with your employees on priorities for action for each item.

Step 5 Use Tables 7.1 and 7.2 to find out how to make your work healthy

- Table 7.1 can be used to highlight the existence of healthy features in your work – this can serve as a reminder that your work is healthy – and may suggest some lines for action for yourself as employer and your employees.
- Table 7.2 can be used to identify undesirable features of work. For every bad feature that is identified by employees, their offering a feasible solution is a positive step.
- Use of these tables will work best when everyone in the business can agree on what the healthy features are in the work, and its problems and solutions. If total agreement can't be found, it should be possible to list the things people can agree on and address those.
- How to deal with those things that cannot be agreed on.

Step 6 Find solutions

- Consult Tables 7.4 – 7.6 for possible solutions to problems of stress and fatigue, depending on the category of work in your business.
- Ask your employees for solutions. They may suggest things you had not thought of.

Step 7 Inform your employees

- Involve your employees in what you are doing.
- If your employees are causing difficulties for you, tell them so. Reference to Table 1.2 may help couch this in neutral, objective terms.
- If they do not know already, you may need to inform your employees of the restraints under which your business operates.

6 Determining employee fitness to carry on working safely

The actions of a fatigued employee may be a hazard and endanger the safety of the employee and his/her fellow workers. Employers should take the practicable steps open to them to ensure that their employees are not impaired by fatigue, 'stress' or medical problems to the point of being unsafe to carry on working safely.

This can be difficult, but the HSE Act does not require employers to take steps that are not reasonably practicable. However, employers do need to do what they can to detect employees who are impaired to the point where their actions may be a danger to themselves or to others.

In many organisations this issue will arise only in exceptional circumstances. When these occur, and in organisations where the consequences of fatigue-related errors are important, OSH suggests that Table 6.1 can be used as a systematic framework for addressing the issue.

The table provides a set of questions that the employer might be able to ask to determine whether stress and fatigue are making it unsafe for the employee to carry on working.

The questions list the main factors involved and is **one** possible mechanism only.

Some of the questions may obviously be difficult for an employer to ask of an employee for reasons of privacy, for example. In those cases, it is not expected that an employer should ask them. It may be possible to expect a medical provider or occupational health nurse to have covered these issues. In the end, the test would be whether or not an employer had taken all **reasonably practicable** steps to determine whether or not an employee was able to carry on working safely.

Depending on the situation, you may need to take the instant decision to remove the employee from work for a time (although this would be uncommon). An employer might need on other occasions to get a medical opinion as to a diagnosis, the likely cause of the fatigue and whether that person is safe to be at work (both from personal safety and the safety of their workmates or the public at large).

Table 6.1 Assessing an employee's safety to be at work

Criterion	Assessment scale		
	Won't usually need assessment		Increasing need for assessment
1 How many hours did the employee work in the past week?	Under 40 hours		Increasing numbers of hours*
2 What is the pattern of the hours worked in the past week?	Regular 8-hour shifts		Extended irregular shifts
3 Is the employee suffering from acute sleep loss?	Regular sleep of usual day/night pattern and length		Disturbed or curtailed sleep
4 Does the employee have a sleep debt?	No reason for sleep debt		Hours worked and personal circumstances make sleep depth likely
5 Is the employee required to work at a time that is out of synchrony with the working cycle of the employee's circadian rhythm?	No		Sleep patterns are out of synchrony with the employee's personal circadian rhythm
6 What events are currently occurring away from work – is the employee experiencing life stressors?	None		Life events pose major problems
7 How well has the employee coped in the past?	Has coped well in the past		Has not coped well in the past
8 Does the employee get support at work – and at home?	Has had good support in the past		Support networks not evident
9 What is the physical intensity of the work?	Medium		Very low or very high
10 Does the employee's physical fitness match the demands of the work?	Close fit between fitness and requirements		Obvious discrepancies
11 What are the mental and emotional demands of the work?	Medium		Very low or very high
12 Does the employee's mental/emotional state match the demands of the work?	Close fit		Obvious discrepancies
13 Do environmental factors pose an additional load?	No influences		Major influences

* Notes on hours of work

- Each situation will need to be considered on its own merits. The difficulties of working increasing numbers of hours a week are not in simple linear proportion to the numbers of hours worked.
- While no firm mathematical formula can be supplied, it is likely that, because as the working time increases the available recovery time decreases, the relationship will be exponential.
- In other words, an increase in working hours from 40 to 45 hours per week (8 – 9 hours work implies the recovery time reduces from 16 to 15 hours) will be much less demanding than an increase from 60 to 65 hours per week (12 – 13 hours work implies the recovery time reduces from 12 to 11 hours).

7 Resources

7.1 Definitions

The definitions given in the OSH guide are as follows:

Stress: The awareness of not being able to cope with the demands of one's environment, when this realisation is of concern to the person, in that both are associated with a negative emotional response.

Stressors: Events or circumstances which may lead to the perception that physical or psychological abilities are about to be exceeded.

Fatigue: The temporary inability, or decrease in ability, or strong disinclination, to respond to a situation, because of inadequate recuperation from previous over-activity, either mental, emotional or physical.

7.2 Legal requirements

Legal requirements for stress and fatigue are no different from any hazard and can, in principle, be stated briefly. For employers who have health and safety systems in place, it should be possible to incorporate the identification, assessment and control of stress and fatigue by straightforward extensions of these systems.

Health and safety systems to address stress and fatigue should address:
- the design of work to be 'safe' (section 6 of the HSE Act – see Table 1.1 of this guide)
- the identification and assessment of hazards (section 7 of the HSE Act – see sections 4 and 7.4 of this guide)
- the control of hazards through elimination, isolation and minimisation (sections 8-10 of the HSE Act and section 7.5 of this guide):
  - where significant hazards are minimised (rather than eliminated or isolated) the need to monitor exposure to the hazard and health in relation to it (section 10.2 of the HSE Act and the continuation of this section of this guide)
- information and training (sections 12 and 13 of the HSE Act)
- employee responsibilities (section 19 of the HSE Act and the continuation of this section of this guide)
- employee participation
- responding to reports of stress and fatigue and to report serious harm (section 25 of the HSE Act);
- right to refuse dangerous work (section 28A of the HSE Act)
- the need to detect impairment in employees (sections 19 of the HSE Act and section 6 of this guide).

Details of each of these requirements are explained on the following pages.

Summary of requirements of the Health and Safety in Employment Act 1992, as amended in 2002, in respect of Stress and Fatigue

The requirements on employers and on employees are contained in several sections of the Act. Employers who are familiar with the Act will find that the suggestions below will simply extend their present systems into the area of stress and fatigue.

In essence, the Act requires employers to design for safety and to adopt a systematic approach to identifying hazards, assessing which are significant hazards, and controlling these hazards by means of a hierarchy of eliminate, isolate and minimise.

The Act requires employee involvement (concerning the identified hazards and the appropriate control measures) and of ongoing monitoring. The sections that are particularly relevant to stress and fatigue are described below.

Section 6
This section requires that employers design for safety to prevent harm occurring to employees.
- 'Harm', for the purposes of the Act, is defined as 'illness or injury or both'.

Section 6(d) requires employers to take all practicable steps to prevent harm occurring to employees from the way work is organised. This has direct implications for the design of shift-work and the length of the hours worked.

Section 7
This section requires employers to use systematic and effective methods to identify hazards and then to assess each hazard to see if it is a significant hazard or not.
- A 'significant hazard' is defined as one that (a) can result in 'serious harm' or (b) is harm, being more than harm which is trivial, the severity of whose effects on any person depend (entirely, or among other things) on the extent or frequency of exposure to the hazard.

Sections 8, 9 and 10
These three sections outline a hierarchy of controls that must be used when a significant hazard is identified. The hierarchy consists of the three steps: eliminate, isolate or minimise the hazard.

When organisations cannot eliminate or isolate risks for stress and fatigue and must minimise them – and where these hazards pose significant hazards – employers are required to monitor exposure to the hazard and, with informed consent, the health of people in relation to the hazard. Examples of this type of monitoring are:
(a) keeping a track of how long people work (e.g. hours worked per week; keeping log books of drivers' hours of work)
(b) workload assessment – using subjective methods to find out how people view their task demands
(c) asking people how they feel about their health and coping ability from time to time
(d) monitoring the health of staff doing Category Four work – or Category Three work if appropriate.

A variety of methods exist for this monitoring – which need not be onerous – such as simply talking to staff or using paper questionnaires periodically. In some instances more thorough methods may be required.

Monitoring can be used to detect symptoms and signs of organisational not-coping. If carried out in an atmosphere of trust and open communication, it may also address the employer's right to know – the idea that an employer has some right to know when a person has out of work problems that are affecting performance in the workplace.

Section 11
Employees must be given the results of monitoring in a manner that protects individual privacy.

Section 12
Employees must be given information about all the hazards that are inherent in the work they do and the steps taken by the employer to minimise the likelihood that these hazards will be a source of harm.

Section 13
With respect to stress and fatigue, training should include, for example, information about the best means of responding to stressors, the hazard reporting and assessment systems and the methods used to monitor exposure and health.

Section 19
Employees should take all practicable steps to ensure their own safety and the safety of any other person while at work. In practice this translates to the following kinds of actions:
- Co-operating with the employer and providing constructive feedback in matters of health and safety
- Attending training and implementing the health and safety objectives of the training as far as possible
- Reporting hazards and incidents (including stress and fatigue)
- Presenting themselves in a fit state to carry on working safely.

Section 19A
Involvement of employees in processes relating to health and safety. This guideline sets out some ways to promote those processes in respect of stress and fatigue.

Section 25
Recording and notification of accidents and serious harm. Serious harm in respect of stress and fatigue would be defined by a reputable diagnosis[5].

Serious harm is defined in a schedule to the Act. In some circumstances the health consequences of extreme stress could be classified as serious harm, for example:
- A teller in a bank where an armed robbery and murder takes place is hospitalised for two days because of his reaction to the event.

These examples are clear-cut and relate to readily identifiable workplace causes and or incidents. Other types of harm may occur when exposure to stressors goes on over a longer period of time, possibly at a lower level of intensity:

- A police photographer continually video filming and editing disturbing scenes for training purposes develops a post-traumatic stress disorder which can be triggered by hearing music associated with the training videos or other sights or sounds associated with some of the crime/accident scenes.

- A probation officer, subject to organisational pressures while dealing with difficult and challenging clients, develops heart disease that experts attribute, in the main, to his work.

However, because people differ in their reactions, it is not always possible to predict if or when a particular person will react in a particular way. With this in mind, employers should consider what is foreseeable when identifying and assessing hazards associated with stress and fatigue.

Where it is difficult to foresee what may occur, the steps described below under 'monitoring' provide a way of keeping tabs on an employee's progress.

Section 28A

The right to refuse work likely to cause serious harm. This section describes the circumstances in which an employee can refuse to carry out work that is likely to cause serious harm and the processes that must be followed to resolve the matter with the employer. The provisions could apply in some circumstances where an employee believed that fatigue had affected his or her ability to carry on working safely.

7.3   OSH enforcement action

OSH has an enforcement policy about when it would consider taking legal action in respect of stress. Before OSH considered enforcement action the following six questions would be asked in any investigation:

Is there clear evidence:

1 **of harm**, supported by a reputable medical diagnosis relating to standard medical diagnostic criteria (e.g. those in the *Diagnostic Service Manual*, Edition 4 from the USA or the European *International Classification of Diseases*, Edition 10)

2 **of recognisable stressors** – that the employer was told of or knew about or ought reasonably to have known about the employee's difficulties, because of the nature or content of the work (for example, it was Category Four work) or because of the way in which it was organised

3 **of some major hazard** (e.g. inherently difficult (Category Four) work, an unmanaged and unrealistic workload, or persistent bullying) in the workplace, which, if it had not been present, would have meant that the harm did not occur

4 **that there were no pre-existing conditions or there was no significant personal contribution** to the harm (e.g. that the harm diagnosed did not exist before the person commenced that
work, that there were no significant out-of-work stressors, or that the person accepted more than their share of work in spite of repeated instructions from management not to do so and after disciplinary action)

5 **of lack of choice or elements of coercion in employment alternatives** – in some way the employee was constrained from choosing to work elsewhere for example from training obligations, degree of specialisation, superannuation entitlements, a lack of alternative employment and the employer was aware of the lack of choice and coercion to work in an unacceptable manner was taking place

6 **of a lack of practicable action by the employer** – on becoming aware of the report of stressors, failing to investigate the report and, if appropriate, take practicable steps to manage the stressors.

These questions may change with time. The OSH Website should be consulted for the current set of questions: www.osh.dol.govt.nz.

7.4   Healthy work assessment tools

Tables 7.1 – 7.3 provide three ways of assessing the 'healthiness' of work. Uses for all three tables are to:
* get a picture of the nature of the work being done by a person or in an organisation
* gather information about a person's difficulties in a job
* identify stressors in a person's job
* explore the extent of agreement between an employee and a supervisor about a person's work
* gather information to spot trends across an organisation
* gather baseline data for later comparison with evaluations.

Table 7.1 can be used to highlight the healthy features of work. There are many ways of using such a tool – with people working singly or in groups – to list individual concerns or to agree about a group conclusion. A worker and a supervisor could complete the table together to better understand

its opportunities and difficulties. Refer to Table 1.2 for details. One point of the tool is to emphasise the idea that while it is healthy for a worker to feel a sense of control at work, employers may very well feel a strong lack of control over the way they are constrained to conduct their business.

Table 7.2 can be used to identify problems in work in similar ways. Refer to Table 1.1 for details. Once a negative feature of work is identified, then the significance of its impact and the extent to which employers and employees have control over it will need to be assessed.

In both Tables 7.1 and 7.2, care should be taken to view the job as a whole and to avoid fixing on single items and allowing them to dominate the discussion.

Table 7.3 can be used to get an overall view of a person's job. This approach provides a reproducible summary of a person's assessment. Common sense and your knowledge of the job and person take precedence. Interpretation of the score must be made internally/locally for each employee because the demands of working are represented by some net effect of the organisation, its management, its employees, its activities, its clients/customers and its relationship to the outside world.

This means that no key to the significance of the scores can be provided. Experience and integrity will show the significance of scores you obtain, which will be most relevant when comparing a situation before and after – perhaps after a healthy work intervention of some sort.

Note: The ranges of the scores that can be applied in columns B – E and the scores applied in Column A are suggestions only. Scoring criteria may be determined in-house.

When using any of these tools the practical realities faced by employers and their possibly limited abilities and opportunities to respond need to be acknowledged.

Feature of healthy work	What is the evidence for the presence or absence of this feature in the workplace?	Extent to which this feature can be controlled by the…		Actions needed to promote this feature –	
		Employer	Employee	Employer… How can employees be supported?	Employee… How can I support the employer and my colleagues?
There is a balance of effort and rest		High … Low	High … Low		
There is a variety of tasks, interest and stimulation		High … Low	High … Low		
There is a sense of personal control		High … Low	High … Low		
Mechanisms exist to address poor workplace relationships		High … Low	High … Low		
There is good communication		High … Low	High … Low		
Workplace hierarchies promote confidence		High … Low	High … Low		
Workplace collaboration is effective		High … Low	High … Low		
Healthy and safe workplace design and environment		High … Low	High … Low		
There is good change management		High … Low	High … Low		
There are appropriate rewards		High … Low	High … Low		
The workplace is supportive		High … Low	High … Low		
There are opportunities for personal progress		High … Low	High … Low		

Feature of healthy work	What is the evidence for the presence or absence of this feature in the workplace?	Extent to which this feature can be controlled by the…		Actions needed to promote this feature –	
		Employer	Employee	Employer… How can employees be supported?	Employee… How can I support the employer and my colleagues?
Organisational function and culture: rigid work practices, poor communication, non-supportive work culture		High … Low	High … Low		
Role in organisation: role/task ambiguity, role conflict, too much responsibility		High … Low	High … Low		
Career development: Career uncertainty/stagnation, poor status or status incongruity, lack of rewards		High … Low	High … Low		
Decision latitude/control: Little opportunity to participate in decision making, lack of control over work rate and/or scheduling		High … Low	High … Low		
Relationships at work: Physical isolation, no formal employee participation system, poor relationships between people, conflict and violence, poor social support		High … Low	High … Low		
Home/work interface: Conflicting demands, dual career problems		High … Low	High … Low		
Task design: Lack of variety, short cycle tasks, fragmented/tedious work, under-utilisation of skills, constant customer contact		High … Low	High … Low		

Feature of healthy work	What is the evidence for the presence or absence of this feature in the workplace?	Extent to which this feature can be controlled by the…		Actions needed to promote this feature –	
		Employer	Employee	Employer… How can employees be supported?	Employee… How can I support the employer and my colleagues?
Workload or work pace: Lack of control over work pace, work overload or underload, high levels of time pressure		High … Low	High … Low		
Work schedule: Shiftwork, particularly badly designed shift rosters; inflexible work schedules; unpredictable, long or unsociable work hours		High … Low	High … Low		
Work context: Inherently hazardous work; no two-way communication on workplace issues		High … Low	High … Low		

Table 7.3 Healthy work assessment tool

This approach provides a reproducible summary of an assessment. Common sense and your knowledge of the job and person take precedence. Interpretation of the score must be made internally/locally because the demands of working, for each individual employee, are represented by some net effect of the organisation, its management, its employees, its activities and its clients/customers. This means that no key to the significance of the scores can be provided. Experience and integrity will show the significance of scores you obtain. Note: The ranges of the scores that can be applied in columns B – E and the scores applied in Column A are suggestions only. Scoring criteria may be determined in-house.

A Category of work Select one category	B Work organisation (Possible total for category ranges from -12 to +12)	C Context of work (Possible total for category ranges from -12 to +12)	D Content of work (Possible total for category ranges from -8 to +8)	E Personal factors (Possible total for category ranges from -10 to +10)
Category One: Healthy work – an interesting and stimulating job, adequately appreciated, with specific project endpoints that are acknowledged. Peaks of excess demand do not occur with monotonous regularity and there is adequate recuperative time. +50 Category Two: Personal choice – neither inherently stressful nor so organised as to be difficult to cope with but the individual is choosing to work unreasonable routines. 0 Category Three – not inherently stressful but so organised as to be difficult to cope with. -15 Category Four – work that is inherently emotionally challenging, draining or even repugnant. -20	• There is a good person-job fit (aptitude, training, experience and skills for the tasks and job). • Training is ongoing and of good quality and coverage. There is 'safe' peer audit and support. • Planned time away from the customer interface is available. • Performance feedback is prompt and comprehensive. • There are opportunities to do interesting tasks. • Disputes and differences are identified and resolved promptly.	• The organisational function and culture avoids rigid work practices, poor communication and promotes a supportive work culture. • The role in the organisation avoids task ambiguity, uncertainty or conflict. • Employment is organised to avoid uncertainty and a stagnant or insecure career development. • Decision latitude or control is present and rigid work practices are avoided. • Physical isolation or poor relationships at work, including violence at work, are avoided. • Conflicting demands from work on personal life requirements is avoided.	• Task design avoids tedious or fragmented work, a lack of variety or short work cycles. • The content of work avoids under-utilisation of skills or continual customer interactions. • There is control of work rate, and work overload or underload are avoided. High levels of work pacing (time pressure) are avoided. • Work scheduling avoids inflexible work schedules, unpredictable work hours or long and unsociable working hours. Shiftwork is well designed.	• The employee's total work hours allow adequate recuperation. • There is a degree of support at home. • There are few significant personal difficulties outside work. • The employee does not have poor physical health and /or low fitness. • The employee's personal limitations are acknowledged.
	Score each item on the scale below and sum for this category	Score each item on the scale below and sum for this category	Score each item on the scale below and sum for this category	Score each item on the scale below and sum for this category
	-2 -1 0 +1 +2 poor average excellent	-2 -1 0 +1 +2 poor average excellent	-2 -1 0 +1 +2 poor average excellent	-2 -1 0 +1 +2 poor average excellent

7.5 Control measures for work Categories Two, Three and Four

The following tables outline one approach to the control of stressors for Category Two, Category Three and Category Four types of work.

Category Two work

A person in Category Two work might be not skilled enough for the job (or too highly skilled), might be trying to hold multiple jobs, or might place unreasonable demands on him or herself (saying 'yes' where he or she should say 'no'), does not ask for help or refuses reasonable change.

The person may not be temperamentally suited for the type of work required (trying to make a shy, retiring person a world class salesperson) and may require redirection in their career choice.

Table 7.4 Control measures for Category Two work

Interventions to eliminate hazards	Interventions to isolate hazards
• There is a role for counselling. • Employers – do not take advantage of people who are willing to work more than is good for them. You may need to insist they take a break from work. • Insisting on appropriate standards of conduct at work. • Requiring attendance at training.	• Training about the dangers of and loss of productivity associated with prolonged hours of work or inadequate recuperative time. • Restriction of output requests where the employer is aware of personal or 'out of work' peaks of demand (e.g. a mother caring for a gravely ill child).

The identification, assessment and control of problems in Category Two work may require the careful analysis of all of the social, cultural, hierarchical and domestic factors affecting the person to find out if the person is choosing to behave that way or is constrained to behave that way by various pressures. For example:

• A person may need to hold two jobs from economic pressure.
• A person with a violent/drunk spouse needs to provide for children.
• In some cultures people are not expected/able to say 'no' to a superior.
• A man in his 50's would be unlikely to say 'no' to a young graduate with the power to fire him.
• Cultural and social expectations may make it difficult to depart from the 'normal behaviour'.

Category Three work

Category Three is work that is largely free from intrinsic stressors and is normally enjoyable and satisfying, but which has been organised to be stressful. Jobs in this category typically can be done safely for eight hours a day and five days a week but are being worked for too many hours each week or needlessly contain uncontrolled stressors.

Table 7.5 Control measures for Category Three work

Elimination	Isolation	Minimisation
Eliminate organisational and contextual work factors leading to fatigue such as:	Where elimination is impracticable, isolate the factors identified to:	**Primary prevention:** Reduce the extent of and/or impact of stressors by: • ensuring regular and adequate time away from work. This could include time spent on training, completing paperwork • ensuring limited exposure by job rotation, multi-skilling, etc. • training • working with producer/customer groups to produce joint understanding of what is to be delivered by when.
Job/Task Design • Rigid work practices • Role or task ambiguity • Loss of or lack of control of work due to work pacing or scheduling • Lack of variety and/or short work cycles • Fragmented or tedious work • Under-utilisation of skill • Work overload or underload • High levels of pacing or time pressure • Inflexible work schedules • Badly designed shift work • Unpredictable, long, unsociable working hours.	(a) specific portions of the work cycle (b) specially trained personnel (c) special work groups employed specifically for that purpose.	**Secondary prevention:** Increase the fit between people and tasks by: • using best practice methods of personnel selection (don't appoint if no-one is suitable) • adequate training including ongoing training • ensuring feedback from competent peers – with further training if required • ensuring output demands do not interfere with planned, adequate recuperative breaks • giving prompt attention to organisational impediments to optimum work practice • ensuring required outputs reflect the skills and training of employees.
Workplace relationships • Poor communication • Constant customer contact • Low participation in decision making • Poor relationships at work • Interpersonal conflict/violence at work.		**Tertiary Prevention:** Alter the way people perceive and deal with the demands placed on them – the typical 'stress management' approach – by: • adequate communication between employer and employee • monitoring and adjusting of workloads to match abilities • use of leave entitlements • managing perceptions and expectations of employers, employees and clients to match the reality of the available resource.
Support at work • Non-supportive work culture • Lack of social support at work • Role conflict.		
Prospects and value • Career uncertainty or stagnation • Poor status • Job insecurity.		
Miscellaneous • Physical isolation • Uncontrolled physical hazards • Dual career problems.		

Category Four work

Category Four work involves a high number of intrinsic stressors. This kind of work could involve activities that are emotionally challenging, draining or even repugnant, require intense, prolonged concentration, or have very high consequences of error. Policing, health care, supervision of disturbed adolescents, and air traffic control are examples.

Table 7.6 Control measures for Category Four work

Elimination	Isolation	Minimisation
Not often practicable. Eliminating these hazards fundamentally alters the output requirements of this work. It may be possible to eliminate some aspects of this work by design or the introduction of new technology, e.g. (a) removing car/train level crossings thus reducing the potential for post-event adverse reactions (b) designing interview rooms so that the chance of an assault is minimised (c) providing barriers to prevent robberies (d) providing emergency GPS to people making visits to potentially dangerous clients.	Not practicable for these occupations. Society has 'reserved' this work for these occupations.	**Primary prevention:** Reduce the extent of and/or impact of stressors by: • ensuring regular and adequate time away from the people/stressor interface. This could include time spent on training, maintaining competencies, completing paperwork and, in some professions, sabbatical arrangements • ensuring limited exposure at any one time to 'frontline' work (e.g. rotation to non-frontline duties after x weeks/months/years exposure) • training including pre-event training (e.g. mass disaster response training) • 'risk free' peer support and review • working with client groups to produce joint understanding given resource limits (e.g. the general practitioner negotiates safe access and egress during 'home visits' to gang headquarters; employees supervising disturbed adolescents discuss and negotiate expectations with parents and the community). **Secondary prevention:** Increase the goodness of fit between people and tasks by: • using best practice personnel selection (don't appoint if no-one is suitable, re-position or terminate employment if a person proves unsuitable for the task) • providing adequate induction training and ongoing training • arranging regular audit and feedback by competent peers coupled with further training if required • ensuring that demands for performance do not interfere with planned, adequate recuperative breaks • ensuring prompt attention to organisational impediments to optimum work practice • ensuring that the required outputs reflect the skills, training and job demands rather than bureaucratic requirements **Tertiary prevention:** Alter the way people perceive and deal with (a) demands placed on them (b) the effects of these demands. • Adequate communication between employer and employee. • Monitoring and adjusting of workloads to match abilities. • Use of leave entitlements. • Managing perceptions and expectations of employers, employees and clients to match the reality of the available resource. • Supervision, debriefing, and counselling are available.

7.6 The selection of 'stress prone' people

The general application of methods to detect 'stress proneness' should not be used as a sole control measure where stressors can be controlled but where employers have not taken the practicable steps open to them to do so.

People are usually aware when they have not coped in the past. Discussion about past coping skills with an employee will usually allow the employer and the employee to decide if the current or future job is within – or can become within – the person's abilities.

In certain professions (for example, air traffic control and policing), the ability to do the work is of paramount importance. Standard personnel selection methods are used in those types of occupations to ensure this as far as is possible. It must be accepted that not everyone will have the personal resources to do certain sorts of work – which by its nature is very demanding on human resources, even though all practicable steps will have been taken to control stressors. In situations like these the focus is on the selection of people with the positive traits required for the task.

7.7 Debriefing after critical events

A critical incident means an accident, robbery, industrial accident, etc.

'Critical Incident Stress Management' (CISM) refers to any procedure undertaken after a critical incident, whereas 'Critical Incident Stress Debriefing' (CISD) refers to a group meeting held as soon as possible after the incident. OSH is not aware of any dispute among practitioners about the need to provide services to some people after a critical incident, but there is considerable evidence that the CISD method does not produce the intended results.

In general, CISD meetings include:
- providing factual information about what happened
- explaining and 'normalising' the different reactions that people might experience (normalising just means explaining that these reactions are all normal)
- talking about the problem with the aim of 'catharsis', or expressing your feelings, so as to 'defuse' them
- giving people contact details so they can seek further help if needed.

Three broad types of criticism have been made about CISD

1   Criticisms of specific aspects of CISD
- Explaining possible reactions to an emotionally aroused person is risky because it might actually cause those reactions to occur.
- Behavioural psychologists would say that (rather than getting people to relive their fear and horror so as to 'discharge' these feelings) what is needed is to expose people to the circumstances of the trauma, for instance, to the place where it happened, so that they can see and feel that the danger has passed[36].

2   Criticisms of the outcomes of CISD

A recent review of 11 published studies for the effectiveness of CISD found no evidence for benefit, and some indications that some people were made worse. The review recommended that **compulsory debriefing after trauma should cease**. However, the review has been criticised on the grounds that it did not define CISD and that randomly controlled trials in this area are difficult to conduct.

3   Criticism that CISD runs counter to worker preference

A recent article compared the CISD approach with methods favoured by emergency services staff themselves. There was agreement on one thing – the need, somehow, to face what had happened – but in most other respects workers did not agree with the CISD approach.

- 86% of workers thought that meetings (if held at all) should not follow a standard pattern, but should be flexible peer-support meetings.
- Whereas CISD is based on talking, 20% of these workers did not want to talk about what happened. Preferred coping mechanisms included humour and exercising.
- When they do talk, 85% of workers wanted to do this in a free and flexible manner.
- Only 90% thought that health professionals should be involved as a matter of course.

The authors concluded that the provision of services should be radically altered so as to incorporate these expressed preferences.

Some health professionals might argue that workers' preferences, although usually healthy, would sometimes be against their own best interests. For example, someone who is afraid might not want to face the fearful event again but, until they do, fear may remain. Worker preferences should not be overridden, but at least in relation to fear, the option of safe exposure should be offered. There are numerous examples, including Vietnam veterans returning to the battlefield, where people have gained great benefit from revisiting the physical location of a traumatic event.

OSH therefore makes the following general and specific recommendations:

General recommendations:

- Staff **definitely** should not be compelled to attend standard debriefing sessions; **probably** such sessions are of no value, and **perhaps** they do harm.
- Organisations should focus instead on providing an environment in which workers feel able to take their own steps towards coping, and in which peer and community support can emerge unfettered by organisational constraints. This will require organisations to develop an appropriate policy in conjunction with workers for traumatic events, that is appropriate for the type of events that could plausibly (or do regularly) occur. It might include simple things such as making a safe, warm and comfortable room or tent available; providing tea, coffee, food, blankets, etc. as required; providing facilities for workers to keep in touch with anxious relatives, etc (see detailed recommendations below).
- Training emergency workers, and other people who might be exposed to critical incidents, in coping skills before they are exposed is likely to be beneficial. Any such training programmes should incorporate available current evidence, and should also draw on the experience and preferences of the workers involved.
- Organisations should, as a matter of normal personnel practice, have psychological support mechanisms available for those who require it.

Specific recommendations

Before an event:
- give the opportunity to discuss the possibilities for unpleasant events to occur
- take all the practicable steps that are reasonably available for prevention
- develop instructions for staff on what to do should the event occur
- for emergency service workers and others where there is at least a moderate likelihood of exposure, provide training in the personal skills that can help a person get through the unpleasant scenarios that you have identified. This training appears to be most useful when it addresses the skills and attitudes that will help people get through an incident (as opposed to preparing them for its after-effects)
- depending on the nature and likelihood of a critical incident, arrange to get help from a sensible person* or sensible people in advance, should it be needed
- identify any other resources that you might require, and make arrangements for them in advance. Depending on the size of your organisation and the work you do, you could find it helpful to make contact now with emergency services and volunteer groups, as they can help you to plan responses to a serious incident. You could also arrange for access to a local hall in the event of an incident that renders your office or factory inoperable; if your organisation performs outdoors work, you could ensure access to sufficient tents, etc.

In the days and weeks after the event:
- aim to maintain the person/people at work. If they are afraid of the event recurring, take whatever steps are necessary so that they feel safe (and are in fact demonstrably safe)
- ensure that societal rituals of closure are observed (for example, burial, tangi, police investigation and court action)
- if and when it seems appropriate, make opportunities for the event to be fully discussed. Discourage repetitive re-tellings (once is enough), instead look for constructive outcomes such as improvements that can be made to reduce the risk
- adopt and project the view that people come equipped to deal with tragedy and trauma# – that it is hard but survivable, while keeping a gentle lookout for staff members who are not coping
- keep an open door – to allow the person or people affected access to a supervisor or manager
- provide easy access to professional help for those who seem to be falling well behind.

Dates to mark in your calendar:
- Be aware that a person who has been very strongly affected may remember the event more vividly at Christmas, on birthdays and on the anniversary of the event.

These recommendations indicate that what happens after a critical incident needs to be the topic of some thought rather than something purchased 'off the shelf'.

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* A 'sensible person' might be: practical and supportive and have a knowledge of workplace issues.

\# Opinion among some researchers and 'professional helpers' who have dealt with this difficult topic is often that the informal, common-sense networks of family, whanau, friends and work colleagues that people have developed previously are strong sources of support[38].

7.8 Stress audit – sample questionnaire

This section reproduces the questions of a comprehensive standard questionnaire[39] that can be used to assess the way people react to their work. Its use – or the use of a selection of questions from it – will allow a more detailed (but less integrated) investigation compared to the work-health assessment tool shown in Table 7.3.

The questions only are reproduced and they will require some method for scoring.

A variety of scoring methods are possible. A common one is an indication on a score of 1 to 5 of how much the person agrees with each statement.

SAMPLE OCCUPATIONAL STRESS QUESTIONNAIRE – QUESTIONS ONLY

1   PERSONAL BACKGROUND (B)

B1   Respondent name
B2   Age
B3   Sex
B4   Basic education
B5   Occupational education
B6   Occupation and job
B7   Workplace and department

2   MODIFYING FACTORS (M)

Possibilities for control:
M1   At work, can you influence matters concerning you?
M2   How autonomous is your work? (Do you work under your own supervision?)

Social relations:
M3   In your close circle of acquaintance, is there someone you can openly discuss personal matters and problems with?
M4   Does your superior provide help and support when needed?
M5   How do workmates get along at your workplace?
M6   Do workmates keep an eye on each other?

3   PERCEIVED ENVIRONMENT (E)

Work demands:
E1   Can you use your knowledge and skills in your work?
E2   How monotonous or varied is your work?
E3   Does your work require thinking and weighing alternatives?
E4   At work, do you repeat the same partial task or work phase?
E5   Does your work involve observations or sorting requiring precision?
E6   Do you have to hurry to get your work done?
E7   Do you have to neglect some tasks because you have too much to do?
E8   At work, are you able to take breaks or rest for a moment?
E9   Is the amount of work distributed unevenly so that work piles up?

E10   Is the distribution of work fair at your work unit?

E11   Does your work have phases that are too difficult?

E12   Does your work involve tasks for which you have too little training or instructions?

Work strain

E13   Is your work mentally strenuous?

E14   Is your work physically strenuous?

Boundness (Compunction)

E15   Can you set your work pace yourself?

E16   Is there a degree of discretion in how you carry out your work?

E17   Can you leave your work site for a short time?

E18   Can you move about your department whenever you want?

Esteem

E19   Does your work group appreciate your work?

E20   Do you consider your work important and meaningful?

E21   Does your family (companion) appreciate your work?

Supervision

E22   How does your immediate superior plan and supervise work?

E23   How does your superior treat workers?

E24   How does your superior control work?

E25   Does your superior take your views into account in matters concerning your work?

Clarity of the work role

E26   Are you given sufficiently clear instructions for your work?

E27   Have you ever been told what you are responsible for in your work?

E28   Do your superiors and workmates give you contradictory orders or instructions?

Feedback

E29   Can you see yourself whether your work has been done well or poorly?

Responsibility (Hazards)

E30   Does your work involve the risk that you might cause someone else to have an accident?

E31   Does your work involve the risk that you might hurt yourself?

E32   At work, can you accidentally ruin some valuable equipment or work result?

Isolation

E33   Does your work cut you off from others?

E34   During your holiday, can you talk with your workmates if you want to?

Comfort

E35   Do you think your work environment is pleasant?

4   STRESS AND SATISFACTION (SS)

Stress and health

SS1   Stress means the situation when a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his/her mind is troubled all the time. Do you feel that kind of stress these days?

SS2   What is your health state compared with that of other people your age?

Satisfaction with work and life

SS3   How satisfied are you with your present work?

SS4   Only seldom is a person completely satisfied with his/her own situation. Think about your own work and compare it with a situation where you could say you would be completely satisfied. How much would your present work have to change for you to be completely satisfied?

SS5   How satisfied are you with your present life?

SS6   Only seldom is a person completely satisfied with his/her own situation. Think about your whole life (family, leisure, work) and compare it with a situation where you would be completely satisfied. How much would your present situation have to change for you to be completely satisfied?

5   NEED FOR WORK DEVELOPMENT AND SUPPORT

DS1   If you had a chance, would you want to discuss your problems with a health professional, counsellor, kaumatua or support person?

Would the following measures be useful for developing your work? In particular?

DS2   Modernising machines and equipment.

DS3   Reorganisation of work.

DS4   Development of personnel co-operation.

SUPPLEMENTARY FORM 1 – PERCEIVED MENTAL DEMANDS OF THE WORK

Psychological demands which may be required in certain types of work are described below.
Think about how often your work requires each characteristic.

E36   Does your work require a good memory?

E37   Does your work require the ability to make independent decisions?

E38   Does your work require the ability to make quick decisions?

E39   Does your work require intense concentration?

E40   Does your work require special vigilance?

E41   Does your work require the ability to get along with different kinds of people?

E42   Does your work require special precision?

E43   Does your work require organisational and planning ability?

E44   Does your work require initiative?

E45   Does your work require manual dexterity?

SUPPLEMENTARY FORM 2 – EXPERIENCED SYMPTOMS AND RESOURCES

Some symptoms and feelings which may bother anybody at times are described below.
Do you have these feelings?

Mental symptoms

SS7   Have you been unusually tired lately?

SS8   Do other people seem to annoy you?

SS9   Are you depressed?

SS10   Are you nervous?

SS11   Do you feel lonely?

SS12   Is it difficult to gather your thoughts or to concentrate?

Somatic symptoms

SS13   Do you have headaches?

SS14   Does your heart beat too quickly or unevenly?

SS15   Do you feel faint?

SS16   Do you feel nauseous?

SS17   Do you have constriction, tightness or pain in the chest?

SS18   Do you have stomach aches?

SS19   Is falling asleep a problem for you?

SS20   Do you sleep well?

Mental resources

SS21   Have you been active and energetic lately?

SS22   Do you feel capable and confident?

SS23   Do you think you've done your daily chores well lately?

SUPPLEMENTARY FORM 3 – OCCUPATIONAL STRESS QUESTIONNAIRE

Need for work development

Work can be changed and developed, though this is often slow and difficult. Think about your own work and consider whether the following measures would be useful for developing YOUR work. Pay particular attention to whether it would be useful for your work, not useful for the general good.

Would the following measures be useful for developing your work?

DS5   Swapping tasks for a while with someone else
DS6   Increasing the independence of work groups
DS7   Automation of some work phases
DS8   More advanced potential at work
DS9   More work phases – broader tasks
DS10 More efficient occupational safety
DS11 A slower work pace
DS12 Training for superiors
DS13 More initial instruction and guidance about work
DS14 More detailed information about changes
DS15 More discussions between superiors and workers
DS16 Revising accepted procedures
DS17 Redefinition of objectives
DS18 Training to develop work skills

Any other thoughts you may have?

7.9 Sample brief stress questionnaire[40]

	Rarely or never stressed				A great deal of stress	
1 Trouble with clients/customers	0	1	2	3	4	5
2 Having to work late	0	1	2	3	4	5
3 Constant people interruptions	0	1	2	3	4	5
4 Trouble with boss	0	1	2	3	4	5
5 Deadlines and time pressures	0	1	2	3	4	5
6 Dealing with the bureaucracy at work	0	1	2	3	4	5
7 Technological breakdowns (e.g. computers)	0	1	2	3	4	5
8 Trouble with work colleagues	0	1	2	3	4	5
9 Too many jobs to do at once	0	1	2	3	4	5
10 Telephone interruptions	0	1	2	3	4	5
11 Travelling to and from work	0	1	2	3	4	5
12 Travelling associated with job	0	1	2	3	4	5
13 Making mistakes	0	1	2	3	4	5
14 Job interfering with home/family life	0	1	2	3	4	5
15 Can't cope with 'in' tray	0	1	2	3	4	5
16 Can't say 'no' when I should	0	1	2	3	4	5
17 Not enough stimulating things to do	0	1	2	3	4	5
18 Too many meetings	0	1	2	3	4	5
19 Having to tell colleagues or subordinates unpleasant things	0	1	2	3	4	5
20 Co-ordinating activities with colleagues or boss	0	1	2	3	4	5

Suggested scoring:

80 – 100:   Severe
50 – 79:   Moderate
20 – 49:   Mild
0 – 19:   Insignificant

Note: A score of 4 or 5 in any category may indicate a need for action, no matter what the total score is.

7.10 Fatigue questionnaire[41]

On Page 74 a fatigue questionnaire called the CIS20R is reproduced. There are any other types of fatigue assessment questionnaire and approached to assessing fatigue[42].

Instruction: With these statements we wish to get an impression of how you have felt during the past two weeks.
For example: *I feel relaxed* – If you feel that this statement is true, place a cross in the left box; like this:

| I feel relaxed | **YES,** THAT IS TRUE | ✕ | | | | | **NO,** THAT IS NOT TRUE |

If you feel that this statement is not true at all, place a cross in the right box; like this:

| I feel relaxed | **YES,** THAT IS TRUE | | | | | ✕ | **NO,** THAT IS NOT TRUE |

If you feel that this statement is not 'yes, that is true', but also not 'no, that is not true', place a cross in the box that is most in accordance with how you have felt. For example, if you feel relaxed, but not very relaxed, place a cross in one of the boxes close to 'yes, that is true': like this:

| I feel relaxed | **YES,** THAT IS TRUE | | ✕ | | | | **NO,** THAT IS NOT TRUE |

Do not skip any statement and place only one cross for each statement.

7.11 Fatigue questionnaire

		YES, THAT IS TRUE							NO, THAT IS NOT TRUE
1	I feel tired								
2	I feel very active								
3	Thinking requires effort								
4	Physically I feel exhausted								
5	I feel like doing all kinds of nice things								
6	I feel fit								
7	I do quite a lot within a day								
8	When I am doing something, I can concentrate quite well								
9	I feel weak								
10	I don't do much during the day								
11	I can concentrate well								
12	I feel rested								
13	I have trouble concentrating								
14	Physically I feel I'm in a bad condition								
15	I am full of plans								
16	I get tired very quickly								
17	I have a low output								
18	I feel no desire to do anything								
19	My thoughts easily wander								
20	Physically I feel in a good shape								

SCORING CIS20R

For the items: 2, 5, 6, 7, 8, 11, 12, 15, 20 the scoring is as follows:
yes, that is true 1 2 3 4 5 6 7 No, that is not true

For the items: 1, 3, 4, 9, 10, 13, 14, 16, 17, 18, 19 the scoring is as follows:
yes, that is true 7 6 5 4 3 2 1 No, that is not true

Subsequently the four subscales are calculated by summing the respective items

Subscale 1: Subjective feeling of fatigue – items 1, 4, 6, 9, 12, 14, 16, 20
Subscale 2: Concentration – items 3, 8, 11, 13, 19
Subscale 3: Motivation – items 2, 5, 15, 18
Subscale 4: Physical activity – items 7, 10, 17

References

[1] *Stress and Fatigue, Their Impact on Health and Safety in the Workplace*. Wellington, New Zealand: Occupational Safety and Health Service, Department of Labour, 1998.

[2] Reason, J. *Human Error*. Cambridge University Press, 1990.

[3] Stress is not 'harm' or 'serious harm' in terms of the HSE Act definitions and is therefore not a diagnosis. Where stress is regarded as a possible cause of harm or serious harm, the harm must fit into a recognised medical diagnostic category. New Zealand case law has determined that the cardiac disease experienced by a probation officer was a consequence of workplace 'stress', and that the post-traumatic stress disorder experienced by a Police photographer was a consequence of workplace exposures. With respect to psychological or psychiatric disorders two classifications are internationally accepted: the DSM IV (*Diagnostic and Statistical Manual of Mental Disorders IV* in the USA) and ICD10 (*International Classification of Diseases, Edition 10* in Europe).

[4] Dollard, M. *Work Stress: Theory and Interventions: From Evidence to Policy*. NOHSC Symposium on the OHS Implications of Stress. Melbourne, 2001.

[5] For example: Individuals have different susceptibilities to noise and suffer noise-induced hearing loss at different rates as a consequence. However, there is no argument that excess noise exposure for a prolonged period of time will eventually make everyone deaf. Workplace Exposure Standards (WES) for noise control are set by neither the most or least resilient of employees but at a level that protects an acceptable percentage of the employees working an average working day for an average working lifetime (usually set at 40 hours per week for 40 years). WES tend to decrease with time as new knowledge becomes available and expectations change.

[6] Cooper, C. 'Stress at work: how your job rates'. *Sunday Times* May 1997. Professor Cooper was commissioned by the *Sunday Times* to find out which occupations in the UK were most 'stressful'.

[7] Cox, T. 'Stress research and stress management: putting theory to work'. *HSE Contract Research Report* no. 61. London: HSE, 1992. This table is reproduced from the 1998 OSH guide (Reference 1). The mention of an item in this table should not be taken to mean that it is a hazard that OSH thinks should be controlled. Rather, the mention of an item reflects scientific findings about the averaged results of studies of groups of people.

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[37] For example: Anna K. Luce and J. Firth-Cozens. 'After the Omagh bombing: Northumbria University. The impact on healthcare workers'. Proceedings of the Work, Stress and Health Conference, Toronto: American Psychological Association and NIOSH, 2003.

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'CISD' is a term that encompasses a wide range of activities carried out by a wide range of people (with differing qualifications) after a wide range of events with different time-scales with people who have been affected to varying degrees. Given these variables in the overall equation, OSH's advice, for those interested, is to read summaries of the arguments both for and against to obtain an appreciation of the issues involved. At the present time there seem to be few concrete recommendations available in this difficult area.

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