



Fatigue at Work

When workers are fatigued it can result in problems for the worker and the work place. Performance can decline, poor decisions can have adverse consequence, errors and accidents may happen. These can all be dangerous and costly. In this article Jo Kitney looks at the risks of fatigue and how these can be managed. Jo Kitney explains.

What is Fatigue?

Fatigue is as an acute or ongoing state of tiredness that leads to mental or physical exhaustion and prevents people from functioning in their normal boundaries. Fatigue can be caused by work and non-work factors.

Work factors include roster patterns, lengths of shifts, times of shifts, long periods of time awake, harsh working conditions, inadequate rest breaks and mentally or physically demanding work. Non-work factors include poor quality of sleep, family needs, travelling for work, sleep disorders and emotional issues.

The most significant and largest cause of fatigue is a lack of sleep or being awake for too long (generally greater than 17 hours). This can be equated to the effects of alcohol in the bloodstream:

Being awake for 17 hours

= a blood alcohol level of 0.05

Being awake for 20 hours

= a blood alcohol level of 0.1

Signs of fatigue can be physical (yawning, heavy eye lids, lack of energy), mental (difficulty concentrating, lapses in attention, accidentally doing the wrong thing) and emotional (more quiet than normal, mood changes). Symptoms of fatigue include feeling anxious, dizziness, slow reflexes, vision and memory problems.

People may experience different symptoms and exhibit different signs due to fatigue. In most cases, the risk of errors increases, in turn increasing risks of incident, accident and injury.

WHS considerations

For manufacturing workers, fatigue may present as an everyday risk and when circumstances change. Health and safety legislation imposes obligations on employers to manage hazards and risks. For fatigue, this involves identifying hazards and risks and eliminating these or putting in place control measures to prevent harm to workers and others who may be affected.

Similar to other workplace hazards, managing fatigue is a shared responsibility and employees have responsibilities for arriving at work fit and not fatigued and for following policies and procedures to prevent, detect and manage fatigue.

If workers are fatigued and unfit for work tasks, they should take action to manage this and, if necessary, advise their manager or supervisor. Some roles may require particular fitness requirements and a decision needed on whether to allow an employee to continue with work. Medical opinion may be needed to determine the best course of action.

This shared responsibility makes consultation and communication between employer and employees (or union or workplace representatives) critical. This is particularly important when changes are proposed to work schedules and procedures, when there are indications that fatigue is affecting health and safety at work, after an incident or if a 'near miss' occurs.

Managing risks of fatigue

Risk management is the best way to prevent and manage fatigue at work, with managers, supervisors, workers, health and safety

practitioners and representatives identifying and assessing hazards and risks, determining and putting in place control measures, monitoring and evaluating the effectiveness of controls with continual improvement where necessary.

Hazards and risks can be identified by inspecting workplace rosters, consulting with workers and representatives, analysing injury and incident reports, undertaking worker surveys, consulting industry or employee associations.

Fatigue risks should be included within the organisation's hazard and risk register, with risk assessment used to decide which hazards need to be addressed and in what order. Questions to be asked include:

- What are the risks of fatigue?
- When, which and how many workers are likely to be at risk of fatigue?
- How often this is likely to occur and the degree of harm that would result?

It is important to recognise factors can be interrelated as, when combined, there may be increased risk levels. Some hazards can compound the effects of fatigue, such as working extended hours, high levels of concentration, poor ergonomics, hazardous substances and noise.

Implementing control measures is a shared responsibility between employer and employees. Fatigue can arise from a combination of factors and the most effective way to reduce the risk is to implement a combination of risk control measures.

If fatigue risks cannot be eliminated, the hierarchy of control should be used. Examples of controls include scheduling start times to ensure sufficient sleep time, minimising routine and repetitive tasks at night, providing adequate work breaks and allocating work demands that increase towards the middle of a shift and decrease towards the end.

Administrative controls include information for managers, supervisors and employees and ensuring detection and response should issues arise.

Control measures must be monitored and effectiveness evaluated. This should be periodically and in response to an incident or change of work circumstances. Consideration should be given to withdrawing workers who are approaching, or are at, their working limit, regardless of time they have worked.

Managers and supervisors need clear direction and support for recognising and dealing with fatigue issues. It is sensible for a workplace to provide support for workers experiencing fatigue-related issues. Information on fatigue can be applied to manufacturing work to understand and inform the risk management and controls measures that may be needed.

Further Information

WHS Queensland: Managing Fatigue

WA Government: Code of Practice: Working Hours

Health and Safety Executive (UK): Fatigue / Risk Index and Calculator for Shift Workers (RR446)

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