Fatigue management for workers

NSW mining and extractives industry

Introduction

Employers, contractors and employees all have an obligation to manage the risks associated with fatigue at the mine.

Mine operators/employers must provide systems of work and a work environment that are safe and without risk to health. For fatigue risks this means that if a fatigue risk is identified mine operators/employers should develop and implement a fatigue management plan.

Employers must also consult with workers and contractors at the mine in the development of the fatigue management plan.

All those working at or visiting a mine have a responsibility towards maintaining the safe systems of work set by the management of that mine. This includes:

- Cooperating with the operator/employer to manage fatigue risks.
- Reporting any hazards or problems relating to fatigue.

What is fatigue?

Fatigue is a physical or mental state impairment that can include physical and/or mental elements, associated with lower alertness and reduced performance.

Signs of fatigue can include tiredness even after sleep, psychological disturbances, loss of energy and inability to concentrate.

What causes fatigue?

Fatigue results from insufficient rest and sleep between activities (eg poor quality sleep). Other work related and individual factors such as shift length, more than 48 hours of work per week, night work, inadequate time to recover between shifts and blocks of shifts, job demands, long commuting times and lifestyle factors all contribute to fatigue.

What causes acute fatigue?

Acute fatigue is caused by immediate episodes of sleep deprivation; for example, because of long periods of wakefulness from excessively long shifts without adequate daytime rest. Ongoing sleep disruption can lead to sleep debt and chronic sleep deprivation.

Why is fatigue a problem?

Fatigue causes an increased likelihood (risk) of incidents because of tiredness and lack of alertness. Fatigue may result in a slower reaction to signals or situations and affect the ability to make good decisions and adapt to a constantly changing environment like mining. Consequently the human error component of incidents is increased along with the risks to health and safety.

Fatigue can also impact more personally on an individual. The negative long term health effects of fatigue typically include:

- Digestive problems.
- Stress.
- Drug and Alcohol abuse.
- Heart disease.
- Mental illness.

The information contained in this publication is based on knowledge and understanding at the time of writing in April 2010. However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of Industry & Investment NSW or the user's independent adviser.



Work-related causes of fatigue

Work-related causes of fatigue may be a combination of one or more following:

- too many consecutive night shifts;
- lack of opportunity for quality of sleep prior to and during the roster cycle;
- unplanned work, overtime, emergencies, breakdowns and call-outs; or
- the working environment (eg noise and temperature extremes) and the mental and physical demands of the work task.

Non work-related causes of fatigue

Causes of fatigue arising from non-work related issues can stem from:

- sleep disruption due to family demands;
- strenuous activities outside work, such as a second job;
- sleep disorders;
- inappropriate use of alcohol, prescription and illegal drugs, and
- stress associated with financial difficulties or domestic responsibilities.

Factors influencing fatigue

Mental and physical demands of work

Work scheduling and planning - Night work

Work scheduling and planning - Shift work

Work scheduling and planning - Hours

Excessive commuting times necessary

Individual and non - individual work factors

Work environment and work conditions

Points to remember

- If you become fatigued you should cease any hazardous task or high consequence operation immediately and notify your supervisor.
- In consultation with your supervisor, take steps to manage fatigue including; taking a break or short nap (night shift), having some refreshments (food/drink), doing some stretching or some physical exercise, modify the work environment (lighting, temperature etc.).
- Should you feel fatigued after taking such measures cease work and contact your supervisor for a fatigue risk assessment.
- Individual factors (hobbies, family, personal health etc.) can all contribute to the development of fatigue.
 Individuals should be able to raise these matters with their supervisors without blame.
- Look for warning signs in your mates and in those you work around.
- Remember also, supervisors and managers can and do become fatigued.

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