

Tip Sheet – Fatigue

Roadmap reference: Build Resilience and Coping Skills

What is fatigue?

Fatigue is a feeling or behaviour commonly associated with tiredness. Fatigue is a subjective experience that differs from person to person, which makes it difficult to precisely define. The heavy vehicle national law (HVNL) says that it includes:¹

- Feeling sleepy; and
- Feeling physically or mentally tired, weary or drowsy; and
- Feeling exhausted or lacking energy; and
- Behaving in a way consistent with the above.

Fatigue can occur as a result of (1) poor or inadequate sleep, (2) time on task and (3) because of the nature of the task, especially where it is repetitive or monotonous or requires intense periods of concentration. The Job Design Guide [placeholder link] talks about the importance of building variety into work tasks as a means of managing fatigue.

Why is fatigue dangerous?

Fatigue creates performance decrements because it makes us less attentive and more prone to distraction. As we fatigue we make more mistakes, which can impact work performance.

Fatigue also tends to lower our emotional discipline so we are prone to being short- tempered and uncooperative. This can create friction within workplace teams.

Fatigue can be particularly serious in the context of driving. Once it reaches a certain level, drivers can experience 'impairment by fatigue'. Impairment by fatigue is estimated to be the predominant cause of 8.2% of serious injury crashes involving heavy vehicles.²

Once drivers become impaired by fatigue, they:

- perform more inappropriate lane deviations and have slower steering responses
- are slower to respond to speed changes in vehicles travelling ahead of them
- vary their speeds more than non-fatigued drivers
- exhibit slower reaction times
- experience impaired visual scanning or tunnel vision
- are at risk of falling asleep at the wheel³

¹ Heavy Vehicle National Law Act 2012, s. 228

² National Truck Accident Research Centre, 2022 Major Accident Investigation Report, 2022, p.4

³ North American Fatigue Management Program, Guidelines and materials to enable motor carriers to implement a fatigue management program: Implementation Manual, [Date unknown], p.21

Even if fatigued drivers manage to avoid on-road incidents, fatigue can cause or contribute to long term health effects including:

- Increased blood pressure
- Increased risk of heart disease
- Gastrointestinal problems
- Increased calorie consumption
- Weight gain
- Disruption of circadian rhythm
- Type II diabetes
- Poor immune system function
- Increased likelihood to smoke and use alcohol
- Increased irritability and depression
- Disruption in relationships
- Worsening of psychiatric conditions
- Decreased quality of life
- Increased number of sick days used⁴

Managing fatigue is therefore essential to promote the health and well-being of transport and logistics workers.

Fatigue rules for workers

Workplace health and safety laws are in place in **all** Australian states. Most of them are based on the model *Work Health and Safety Act.*

The Act sets out the broad obligations of persons conducting a business or undertaking (PCBU) and workers. It does not specifically mention fatigue. However, it does require that persons conducting a business or undertaking and workers take steps to ensure the health and safety of workers and those at worksites.

In contrast there are highly prescriptive fatigue rules for truck drivers. These rules vary from state to state. It is important that you have a sound understanding of those rules.

The National Heavy Vehicle Regulator enforces the Heavy Vehicle National Law <u>fatigue rules</u> in Queensland, Victoria, South Australia, Tasmania and the ACT.

Western Australian fatigue rules are governed by <u>occupational health and safety rules</u> and supplemented by a Code of Practice: Fatigue Management for Commercial Vehicle Drivers (2004).

The Northern Territory regulates fatigue under the Road Transport Fatigue Management Package.

Fatigue Myths

Below are a few common misconceptions about fatigue.

Myth 1: Feeling fatigued at work won't affect your mental health

Reality: Any level or type of fatigue will likely impact your ability to manage and regulate your emotions effectively, which contributes to poorer mental health outcomes. The emotional circuits of the brain (amygdala) are changed and modified by a lack of sleep.

Myth 2: You're a weak person if you say you're not "fit for duty" because you're tired and feeling emotional.

Reality: Feeling fatigued for any reason is not a sign of weakness. No amount of willpower or strength of character will overcome the need for sleep. Sleep is essential from an evolutionary standpoint. Every single system and process in the body is impact by a lack of sleep.

⁴ North American Fatigue Management Program, Guidelines and materials to enable motor carriers to implement a fatigue management program: Implementation Manual, [Date unknown], p.21

Myth 3: You can push through feeling fatigued and mentally exhausted.

Reality: There is no such thing as pushing through and banking sleep for later or on the weekend. Lack of sleep can have serious negative impacts on your emotional health as different cognitive systems in your brain also work during sleep. Without enough sleep, your memory creation, ability to learn new things along with your physical and mental health are all negatively impacted.

What the Workplace can do to Help Manage Fatigue

Preventing and reducing fatigue may lead to better mental health and safety outcomes, including fewer workplace incidents and injuries, less absenteeism and staff turnover and increased performance and productivity. It is important to understand the various types of fatigue which may be affecting an individual's mental health, so the workplace can adequately support their staff. Below are some key steps, along with an example of how this might look:

Identify

Identify the fatigue-related hazards that may cause harm in your workplace. These would typically include shift duration, shift time of day, nature of task (repetitive or monotonous) and opportunities for restorative rest. Note that the Heavy Vehicle National Law covers all fatigue-related risks, regardless of whether they arise in the workplace or at home.

Example

Rob works in a warehouse and is currently helping care for his elderly mother. This means that Rob is not always resting well when not working. As well as trying to spend time with his own wife and kids, Rob is helping to maintain his mother's house (mowing lawns, shopping etc). Rob is also emotionally affected by his mother's deteriorating health and is not sleeping well.

Assess

Assess the nature of the fatigue related harm identified in the first step, including the seriousness of the harm and likelihood of reoccurrence.

Example

Rob has been irritable at work and is finding it hard to concentrate. He feels clumsy at times. Until Rob gets more rest between shifts, this cycle will continue. It constitutes a significant risk to his mental health and safety.

Control

Implement the controls that will have the most impact, so far as reasonably practicable. This might include changes to scheduling, longer sleep opportunities (i.e. time between shifts), fatigue monitoring technologies, truck cabins with sleeper berths and minimised exposure to vibration.

Example

Rob requires additional support to alleviate the pressure on himself. Rob's EAP can recommend community support services to assist his mother and sleep hygiene practices to help Rob maximise the sleep that he does get.

Monitor & Review

Monitor the control measures used to ensure they are effective and review over time to make any necessary changes. This process may require identify and assess to be repeated to ensure all risks are controlled.

Example

Rob has a weekly check in with his supervisor to monitor his wellbeing. The focus is on better rest and fitness for duty. Rob's EAP sessions continue. They have found a service provider to assist his mother with routine maintenance around the house.

What the individual worker can do to help manage fatigue

Workers have a responsibility to take reasonable care for their health and safety, including fatigue management. Because fatigue can be cumulative and can cause impairment even where work and rest rules are complied with, workers need to be mindful of their lifestyle choices. Exercise, diet, hydration and sleep all contribute to work performance.

The amount of sleep needed to function effectively differs from person to person, though 7-9 hours is the commonly recommended amount.⁵ There is good evidence that truck drivers sleep much less than this: an average of 5 to 6.5 hours per night.⁶

The importance of sleep to safe driving cannot be over-stated. The relationship between sleep deprivation, alertness and road safety outcomes is well documented:

- On average, fatigue-related crashes are associated with approximately 1.5 to 2 hours less sleep for drivers in the 24 hours before the crash than other crashes. At-fault drivers in fatigue-related crashes average around 6.5 hours compared to 8.5 hours for other vehicle drivers in crashes.⁷
- One alcoholic drink combined with the levels of sleepiness that occur when sleep is restricted to only five hours (a normal occurrence for commercial drivers) affects driving at the same level as two or three drinks.⁸

Where personal activities or routines have the potential to cause fatigue, it is important for workers generally and drivers especially to communicate this to their scheduler or manager as early as possible. Situations where this may be necessary include where:

- a new baby has joined the household
- prescription medication is impacting wakefulness
- a sleep disorder, such as sleep apnoea, is compromising quality of sleep
- stress and trauma are at unusually high levels
- over-indulgence in personal time might compromise fitness for duty

It is not always easy to disclose information about health, wellbeing and personal circumstances. This is where workplace culture and leadership are so important. An environment where difficult conversations are the norm provides workers with the confidence to disclose issues around fatigue and health and wellbeing.

⁵ Hirshkowitz, Whiton, Albert, Alessi et al., 'National Sleep Foundation's sleep time duration recommendations: methodology and results summary, Sleep Health, vol 1, issue 1, March 2015, pp. 40-43

⁶ Sharwood, Elkington, Stevenson and Wong, 'Investigating the role of fatigue, sleep and sleep disorders in commercial vehicle crashes: a systematic review', Journal of the Australasian College of Road Safety, 22(3), 24-30, 2011, p. 25

⁷ Austroads, Road Crash Injuries: Cost and Prevention, Research report AP-R491-15, 2015, p. 61

⁸ Canadian Sleep Institute, <u>Development of a North-American Fatigue Management Program for Commercial Motor Carriers Phase II (Pilot Study)</u>, January 2006, p.6

⁹ Kindly reproduced and adapted with permission from Toll Energy, Fatigue Management (Fitness for Work), December 2014

Sleep Hygiene⁹

Common sleeping problems, such as insomnia, are often caused by bad habits reinforced over years. It is possible to retrain the body and mind to promote restorative sleep. Suggestions include:

- Don't go to bed hungry, eat a large meal or drink too much liquid before sleep.
- Food and drink consumed before going to bed can affect sleep quality, because the digestive system is controlled by the body clock digestion slows down at night irrespective of activity. Avoid alcohol, caffeine, nicotine and other chemical stimulants close to bedtime.
- Develop a regular bedtime routine. Keep the time you go to bed and get up the same.
- Try not to engage in mentally stimulating activities close to bedtime. Use the last hour or so before sleep to wind down.
- Relax your mind. Insomnia is often caused by worrying.
- Don't have things in the bedroom that distract you from sleep e.g. television
- Make sure the room is at the right temperature. Cool conditions help getting to and staying asleep.
- Ensure the room is dark enough.
- Don't ignore tiredness. Go to bed when your body tells you it's ready.
- Don't go to bed if you don't feel tired. You will only reinforce bad habits such as lying awake.
- If you are not asleep after 20 minutes in bed, go to another room and do something relaxing, such as reading a book, until you feel tired again and then go back to bed.
- Sleeping pills have drawbacks daytime sleepiness, failure to address the causes of sleeping problems, & the "rebound" effect after a stint of using sleeping pills, falling asleep without them tends to be even harder. These drugs should only be used as a temporary last resort and under strict medical advice.
- Get enough early morning sunshine. Exposure to light during early waking hours helps to set your body clock.
- Some people experience excessive sleepiness during the day, despite an apparently adequate length of sleep. This may suggest the presence of a sleep related disorder that may require medical attention. If you have tried and failed to improve the quality of your sleep, consider seeking professional help from your doctor.

⁵ Hirshkowitz, Whiton, Albert, Alessi et al., 'National Sleep Foundation's sleep time duration recommendations: methodology and results summary, Sleep Health, vol 1, issue 1, March 2015, pp. 40-43

⁶ Sharwood, Elkington, Stevenson and Wong, 'Investigating the role of fatigue, sleep and sleep disorders in commercial vehicle crashes: a systematic review', Journal of the Australasian College of Road Safety, 22(3), 24-30, 2011, p. 25

⁷ Austroads, Road Crash Injuries: Cost and Prevention, Research report AP-R491-15, 2015, p. 61

⁸ Canadian Sleep Institute, <u>Development of a North-American Fatigue Management Program for Commercial Motor Carriers Phase II (Pilot Study)</u>, January 2006, p.6

⁹ Kindly reproduced and adapted with permission from Toll Energy, Fatigue Management (Fitness for Work), December 2014

Discretionary Rest

It may be necessary to take discretionary rest beyond what is mandated in law. For example, drivers may need to take discretionary rest in situations where:

- road and weather conditions are difficult/stressful/dangerous
- they are involved in or have witnessed an incident
- they have been involved in stressful or confrontational on-road enforcement
- they become unwell
- they believe they may be impaired by fatigue

Schedules should be flexible enough to accommodate these and other contingencies. Drivers need to understand, and be supported in their understanding, that driving while impaired by fatigue is an offence regardless of whether prescribed work and rest hours are complied with.

Additional Resources:

If you would like more information on fatigue, go to the <u>Healthy Heads Trucks and Sheds Workforce Handbook</u> or download the Healthy Heads App and track your own wellbeing.

The National Road Safety Partnership Program has excellent driver fatigue management toolbox talks

If you would like more information on work related fatigue, go to the WorkSafe VIC website.

For more information on safety related fatigue management, go to National Heavy Vehicle Regulator.

For assistance on starting the conversation with your employer about mental health go to Healthy Heads website