

LTSC Program for testing & treating Obstructive Sleep Apnea (OSA)

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Fatigue is a common and unavoidable by-product of the 24/7 demands of most industry sectors. Defined as a decreased capacity to perform mental or physical work, or the subjective state in which one can no longer perform a task, fatigue manifests in physiological performance decreases and cognitive impairment. To this end, fatigue poses elevated risk to an employees safety during work and non-work activities.

The recognition that sleep disorders are a significant contributing factor to an employee's excessive daytime sleepiness level, makes screening and treating sleep disorders a reasonable & practicable step to take in order to mitigate fatigue in the workplace.

It is important to remember that just because you identify employee fatigue (or employees with sleep disorders) and you report these as hazards in your business does not mean you are going to find yourself in the middle of a Worksafe investigation! Fatigue is a globally recognised hazard for Commercial Transport Operators and so as a PCBU it would be reasonable to report and manage fatigue in your business, and that's where Fit for Duty and EdenSleep can help!

Testing & treating obstructive sleep apnea

The very nature of being a commercial driver lends itself to a lifestyle that exacerbates the sleep disorder, Obstructive Sleep Apnea, and it can result in unnecessary traffic and work place accidents and in some cases those accidents have been fatal.

We believe the screening and treatment of OSA is a critical part of any fatigue mitigation program in the 24/7 sector, therefore we offer a complete turn-key service for the diagnosis and treatment for Obstructive Sleep Apnea in the commercial transport sector.

What is Sleep Apnea?

Many people have sleep apnea and don't realise it. Sleep apnea is a serious, potentially life-threatening condition that is far more common than is generally understood. It is a breathing disorder characterised by pauses in breath during sleep and nightly snoring. This restless sleep leaves people feeling 'dog tired' - sleepy and exhausted - during the day.

Obstructive Sleep Apnea (OSA) - The effect of OSA is that a person can stop breathing for periods of time when asleep. These interruptions (apneas), which can last for up to 10 seconds or more, occur when the airway narrows so much that it closes. This stops breathing, and the brain reacts by briefly waking the subject, causing the airways to re-open and breathing to restart. The individual may not be aware of this awakening and the process can be repeated up to several hundred times during the night. Proper sleep becomes impossible, resulting in sleepiness and impairment of daytime (work time) function.

Stimulants (like coffee) taken to counter the effects of tiredness are not a substitute for sleep. The regular use of stimulants by individuals may be a clue to the existence of an underlying sleep disorder.

Why do we need to treat OSA?

Due to interrupted sleep patterns, OSA suffers rarely have restorative rest, manifesting in some of the following problems:

- 40% increase in excessive daytime sleepiness
- Twice as many traffic accidents per KM
- Threefold risk of occupational accidents
- 1.3 to 2.5 times more hypertension
- 2.2 times increased risk of nocturnal cardiac arrhythmia
- 3.0 times more likely to have congestive heart failure
- 1.4-2.3 times greater risk of heart attack
- 40% increased risk of depression
- Australian research has shown that up to 41% of commercial drivers are likely to have obstructive sleep apnea.

Fit for Duty and EdenSleep Program purpose

The purpose of offering an overnight sleep study may assist in identifying individuals who have a risk, or think they may have the sleep disorder called obstructive sleep apnea (OSA).

Individuals who may benefit from this program include:

- Those who think they have a problem with their sleep and would like a formal diagnosis
- Those who are 'red flags' in the business i.e. have high accident & incident rates; high absenteeism; presenting with excessive sleepiness; micro-sleep/fatigue related driving incident
- All drivers as part of LTSC Members' pre-employment medicals and ongoing occupational health monitoring efforts

Program design

- 1. LTSC Members to provide drivers access to OSA education and resources. (see appendix for resources list)
- 2. Manager to complete the LTSC Members 'referral for overnight testing' form.
- 3. Referral is received and acknowledged.
- 4. OneSleepTest (OST) is issued to the individual.
- 5. Once OST is completed the data is reviewed by our physiologists who will email the outcome report to the individual (the individual has the opportunity to speak with one of the team to go through the results).
- 6. An outcome letter will be sent to the associated Manager/Supervisor making treatment/intervention recommendations as necessary.
- 7. Follow up conversation with Manager/Supervisor to agree on next steps.
- 8. If a trial of CPAP is agreed, the equipment will be issued. CPAP therapy support will be provided for the duration of the trial.
- 9. A summary of the completed CPAP trial will be provided to the Manager/Supervisor and Company Doctor (if applicable).
- 10. For those individuals who successfully tolerate & establish to CPAP, there are options for the long term provision of the sleep therapy. These including signing up for one of our therapy plans or purchase of a device.

Please note: we do not send a copy of the outcome report to the individuals GP without written consent. The outcome of the studies are not shared with NZTA.

* Please note the option to use the LTSC pre-screen assessment is still available, this would be completed first and if their was a moderate/high risk profile and a sleep study was approved, then we would follow the above program workflow.

Investment

LTSC Pre-screen assessment \$35+GST

Home-based sleep test (multi-night/disposable) \$145+GST (subsidised \$50 by

LTSC) = \$90+GST

4 week CPAP trial \$250+GST

Sleep Specialist consult if required \$365+GST

Follow up Sleep Specialist consult if required \$190+GST

Long term provision options:

• CPAP therapy plan \$18-24.50/weekly - depending on

plan

• CPAP machine purchase Machines range from \$1490-\$2100

• CPAP compliance checks can be requested \$50+GST/report

• Compliance & monitoring program \$121+GST per month

(includes provision of CPAP machine,

therapy support and monthly compliance reports)

Other sleep therapy support will be advised and quoted upon as required.

We look forward to working further with the LTSC Members team.

Yours in health & safety

Rachel Lehen

Fit for Duty Ltd in association with EdenSleep

Appendix

Resources include:

- 'Referral for testing' form
- LTSC Pre-screen Assessment
- Log Transport Safety council driver testimonial video https://logtruck.co.nz/resources/sleep-apnea/
- OneSleepTest (OST) intro video https://www.youtube.com/watch?v=MX6AdrZcFvY
- OST Set Up Guide
- Sleep Health foundation resources
 - Obstructive Sleep Apnea https://www.sleephealthfoundation.org.au/ obstructive-sleep-apnea.html
 - CPAP Continuous Positive Airway Pressure https://www.sleephealthfoundation.org.au/cpap.html
 - Treatment Options for Obstructive Sleep Apnea https://www.sleephealthfoundation.org.au/treatment-options-for-obstructive-sleep-apnea-osa.html
 - Healthy Sleep Practices for Shift Workers https:// www.sleephealthfoundation.org.au/fact-sheets.html? view=article&id=1141&catid=98