

Tool Box Talk 14 | Driving for Work: Health and Well-being Fact Sheet

NRSP
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While one in five Australians are likely to experience a mental health condition at some point in their life, people who drive for work have a higher chance of developing depression than the general population¹.

The Issue

People who drive for work are susceptible to a number of health problems due to the sedentary nature of the job, compounding pressures and greater exposure to health risks and medical issues¹⁻⁴. They may suffer from musculoskeletal pain caused by prolonged sitting for extended periods of time². The vibrations of the vehicle, particularly off-road heavy vehicles, may also cause pain and contribute to driving fatigue². Poor eating habits and limited access to healthy food options on the road can cause digestive disorders². Irregular and long working hours can also contribute to fatigue and sleeping disorders.

This exposure to multiple health risks can result in an elevated risk of many physiological and psychological health conditions such as diabetes, cancer, sleep apnoea, cardiovascular disease, and mental health disorders such as depression and anxiety³.

These health outcomes can also burden the employer, who may experience increased driver turnover, health care and insurance costs, workers' compensation claims, lost time injuries, and lower productivity as a result of the poor health and well-being of their drivers⁵.

For example, a report from the consulting firm Price-waterhouse-Coopers (PwC) has estimated that Australian businesses were losing \$10.9 billion annually for neglecting to address health and well-being (with a focus on mental health) in the workplace⁶.

However, the good news is that businesses that take a proactive approach to health and well-being in their workplace can make considerable savings from investing in health and well-being initiatives. According to the same PwC report, in the transport industry, businesses will experience a return of \$2.80 for every \$1 invested in initiatives that foster better mental health in the workplace⁶.

Common risk factors for poor health and well-being⁷⁻¹⁰

People who drive for work, heavy vehicle drivers in particular, are exposed to a wide range of conditions which increase their risk of developing poor health and well-being. Risk factors include:

- Long working hours (e.g., 75+ hours/week)
- Pressure to meet delivery schedules
- Long sitting hours during driving shifts (e.g., 12+ hours/day)
- Chronic sleep deprivation due to irregular working patterns (e.g., <6 hours of sleep daily)
- Lack of physical activity due to long sitting hours
- Driving seat vibration
- Uncomfortable seating, gear levers, foot pedals and steering wheels
- Poor diet, due to the convenience of truck stop foods and difficulty of accessing heavy vehicle parking near healthy food stores
- High levels of alcohol consumption and smoking

- Exposure to physical and chemical hazards such as diesel exhaust
- Lack of access to workplace resources to promote health
- Low job-control and satisfaction, which can lead to negative moods or even depression
- Extended social isolation, which also affects family relationships
- Obstructive sleep apnoea – which is common in predominantly middle-aged and overweight males – can lead to impairment in sleep quality, resulting in daytime sleepiness, and impaired concentration and performance if left untreated

Drivers with a BMI of 35 or higher have a 43% to 55% increased risk of experiencing a motor vehicle crash¹⁰.

Development of chronic health conditions

Drivers who are regularly exposed to the above risk factors are more likely to develop poor health and well-being. If left unchecked for an extended period, the likelihood of developing a chronic health condition increases. Chronic conditions include, but are not limited to, chronic fatigue, poor mental health, stress, depression, anxiety, cardiovascular disease, musculoskeletal disorders, gastric disorders, diabetes and obesity.

Chronic Fatigue^{2,4-11,8}

- Inadequate quality and quantity of sleep due to irregular working patterns can contribute to the development of chronic fatigue and sleeping disorders. Incurring a 'sleep debt' (i.e., inadequate sleep over days or weeks) is a major risk factor for dangerous driving that is a contributing factor to crashes.
- Obstructive sleep apnoea may also be a hidden cause of chronic fatigue, as repeated airway closure during sleep can result in multiple awakenings and lack of oxygen intake during sleep. For example, obstructive sleep apnoea increases the crash risk of drivers by two- to seven-fold.

Poor Mental Health¹²

Poor mental health is well known to cause impairments in cognitive function, including attention, concentration, memory, motivation, decision-making and slowed reaction times. Long working hours and high work demands can impact upon the mental health of employees.

Stress^{3,8,12}

Long working hours, irregular working patterns and pressures to meet delivery schedules are major contributors to stress in the transport industry. Stress can increase levels of cortisol (i.e., stress hormone) in the blood, resulting in a wide range of potential chronic health issues.

Depression^{3,12}

- Depression is one of the most common mental health conditions in the transport industry. One study found that 13.3% of heavy vehicle drivers in Australia had depression.
- Drivers with depression are more likely to be involved in a crash or near miss, and this risk increases with the severity of depression.
- For example, severely and very severely depressed drivers are as dangerous as alcohol impaired drivers with a BAC of 0.08%!

*BMI is a measure of weight in relation to overall body size. It is calculated by dividing a person's weight in kgs by the square of the height in metres.

Anxiety¹²

- Like depression, anxiety is associated with the symptoms of being easily fatigued, having difficulty concentrating and disturbed sleep. However, unlike depression, the presence of anxiety does not increase the risk of being involved in a crash or near miss. This may be because people with anxiety are extra vigilant whilst driving.
- Unlike depression, anxiety is not associated with absenteeism or accidents/near misses.

Cardiovascular Diseases^{3,13}

- Among work drivers, high rates of obesity, lack of exercise, poor diet, alcohol and smoking increase the risk of cardiovascular diseases. For example, one study found that 9.2% of fatalities involving heavy vehicle drivers involved some form of heart-related condition.
- A study on bus drivers who sat for an average of 5.5 hours found an increase in the risk of a heart attack, illustrating the importance of avoiding prolonged sitting.

Musculoskeletal Disorders^{2,14}

- Heavy vehicle drivers have a high incidence of musculoskeletal disorders and more than half report a chronic injury. This may be due to a range of factors, including prolonged sitting and their high exposures to whole body vibration.
- Mining vehicle operators, in particular, are often exposed to 12+ hours of whole-body vibrations in an off-road work environment. This can result in damage to the soft tissues in the spine and associated muscles if the risk of sustaining injury is not mitigated.

Gastric Disorders^{2,7,13}

- The risk of developing a gastric disorder such as gastroesophageal reflux disease (i.e., GERD) and gastritis is high among work drivers. This may be due to poor diet, irregular eating and/or stress.
- Truck stop service centres which are accessible to heavy vehicles may not always stock healthy food options. This factor, as well as delivery time pressures, often results in drivers making poor food choices during their driving shifts, increasing their risk for developing a gastric disorder.

Diabetes^{7,13}

- There is a high incidence of Type 2 Diabetes among working drivers. This may be due to a range of factors, including sedentary behaviour, poor diet and stressful working patterns.

Obesity^{8,10}

- Among work drivers, lack of exercise, poor diet, and alcohol and smoking increase the risk of obesity. Obesity can also increase risk of developing Type 2 Diabetes, Prediabetes, Hypertension, Metabolic Syndrome and Cardiovascular Disease.
- Work drivers with BMIs of 35 or higher are also far more likely to experience crashes and near misses.

Prevention Strategies to Encourage Health & Well-being

The sedentary nature of driving for work, with lack of access to physical activity amenities and healthy food, can create barriers to the health and well-being of drivers. In addition to these barriers, given most work drivers are middle-aged males, it is not surprising that often these conditions can go undiagnosed for many years. Men are far less likely to report their symptoms than women. This may be due to males not recognizing their symptoms or not wanting to be perceived as weak by their colleagues or employers. This factor alone makes early intervention key in the prevention of poor health and well-being. There are several strategies drivers can use to support their health and well-being on the road:

1. Take regular breaks for exercise⁸

By far the biggest contributor to poor health and well-being among work drivers is their sedentary lifestyle (i.e., the high number of hours spent sitting in their vehicle). Research suggests that interchanging 30 minutes per day of sitting with moderate-to-vigorous stepping exercise can improve heart health.

Even taking standing breaks has been found to reduce the risk of diabetes and heart problems. So, make sure you take regular breaks from driving to stretch your legs and move your muscles. Try these simple strategies to increase your exercise throughout the day:

- In the morning before work, schedule in a short walk to stretch your muscles, calm your mind, and get your blood pumping and ready for the day;
- Use a pedometer or an activity tracking app on your phone to count how many steps you take during the day. See what your baseline step count is and gradually increase your target each week;
- Instead of entering the end destination into your GPS, enter the rest stops along the way. When you reach each rest stop, take a jog or fast walk around the block to increase your heart rate. These simple exercises might mean the difference between developing a chronic illness and staying healthy.

2. Be mindful of your eating habits³

Many chronic illnesses can result from a poor diet. It is important to be mindful of how your eating habits are affecting your health and your ability to do your job. Lowering your intake of fat, salt, sugar and alcohol will not only prevent a range of chronic illnesses but will also make you feel healthier and more energetic.

Try to avoid fatty fast foods which are common at truck stops. Instead, opt for a salad, sushi or a chicken and salad sandwich. Don't forget that drinks like Coca Cola, Red Bull, Dare Iced Coffee, and even orange juice are packed full of sugar. Make the healthy choice and opt for a bottle of water, a lightly flavoured sparkling water, or a veggie juice. You will feel much better for it. When you arrive at a service station, a simple approach to ensure the food is fresh is to order a chicken and salad sandwich minus something so they have to make the food fresh for you. Who knows how long that sandwich may have been sitting there?

3. Be aware of your fatigue levels^{9,15}

If you drive for long hours and have an irregular working schedule, it can be difficult to adopt a healthy sleeping pattern. However, driving when tired when can considerably increase your risk of a crash. Make sure that you are taking regular breaks whilst driving, and plan for more than 6 hours of sleep when you finish a shift. If you are still feeling fatigued despite adequate sleep, talk to your doctor about obstructive sleep apnoea, as this is a common condition experienced by work drivers. If you are diagnosed with obstructive sleep apnoea, your doctor may recommend a Continuous Positive Airway Pressure (or CPAP) device, which is a wearable mask that delivers continuous air into your lungs throughout the night.

Receiving CPAP treatment for obstructive sleep apnoea has been shown to reduce drivers' crash risk significantly.

4. Check in with your mental health¹²

Driving long work hours across the country with high work demands and limited opportunities to socialise can be stressful and lonely. Symptoms of depression, anxiety and stress are not uncommon in these situations – one study found that 17% of heavy vehicle drivers experience mental health issues. Don't forget to check your own mental health from time to time. If you are feeling socially isolated, share your concerns with colleagues, family or friends. You could also join a local community group outside of your work schedule. Having a sense of belonging and purpose outside of work contributes to good mental health. Visit the Act Belong Commit website to find a community group that interests you in your area (<https://www.actbelongcommit.org.au/>).

If you are experiencing sadness, mood swings, loss of interest, fatigue, agitation, lack of concentration or thoughts of suicide, talk to your GP or ask your employer about their Employee Assistance Program to talk with a counsellor.

5. Making changes starts at the top⁹⁻¹⁶

The most successful workplace interventions to improve the health and well-being of employees are initiated by management. Taking a proactive approach to health and well-being in the workplace means educating employees to improve their lifestyle, including exercise programs, dietary intervention, sleep hygiene and mental health promotion. Creating a 'social hub' for employees may also be beneficial for disseminating information and encouraging socialisation among 'lone' workers. Providing opportunities for socialisation, communication with management, and promoting healthy behaviours will encourage employees to feel they are valued by their company.

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