

**PARTNERSHIP  
PROGRAM**

# DRIVER DISTRACTION AND THE CONNECTION TO SLEEP DEPRIVATION

## Sleepy Drivers are Distracted Drivers

Keep track of how much sleep you are having to reduce your susceptibility to distraction and increase road safety.



### The Issue

Driver distraction is one of the biggest causes of serious injuries and fatalities on Australian roads. In fact, research estimates that 1 in 4 vehicle crashes on our roads are caused by distracted or inattentive drivers.

Drivers who are sleep deprived are subject to many neurocognitive consequences, including increased distractibility.

## The Impacts of Acute Sleep Deprivation on Distraction

Increased distractibility is one of the many neurocognitive consequences of acute sleep deprivation as well as increase in risk-taking behaviour and impaired impulse control.

Acute sleep deprivation is caused by too little sleep in the past 24 hours or staying awake for more than 17 hours. Physical symptoms include heavy eyes, head nodding and yawning.

## The Impacts of Chronic Sleep Deprivation on Distraction

Unlike acute sleep deprivation, chronic sleep deprivation is caused by getting up to 6 hours sleep on a regular basis.

While most adults need between 7-9 hours of sleep each night, it is now common for many working individuals to get less than six hours sleep throughout the week.

Research shows that individuals who have chronic sleep deprivation adapt to feelings of tiredness and do not report feeling a sense of sleepiness.



However, they display the same decreases in psychomotor vigilance, working memory and cognitive performance, as someone who has not slept for two days.

Therefore, drivers who are chronically sleep deprived experience the same consequences (i.e., increased distractibility) as an acutely sleep deprived driver, but these symptoms are often hidden or unrecognised.

## What is Driver Distraction?

In a driving setting, distraction is described as a diversion of attention away from any activity that encourages safe driving.



While driver distraction is often thought to involve the use of within vehicle technology (e.g., a mobile phone)



Non-driving related distractions (e.g., talking to passengers in the vehicle)



Internal distractions to a driver (e.g., disturbing thoughts or feelings of stress)

Source:  
Chronic sleep deprivation and its connection with distraction- Dr Carmel Harrington  
<https://research.qut.edu.au/carsa/wp-content/uploads/sites/45/2017/04/Mobile-phone-distraction.pdf>  
Van Dongen et al; The Cumulative Cost of Additional Wakefulness SLEEP, Vol. 26, No. 2, 2003  
V. Beanland et al, Driver inattention and driver distraction in serious casualty crashes: Data from the Australian National Crash In-depth Study Accident Analysis and Prevention 54 (2013) 99–107