

WORK ON DRIVING SAFELY

A road safety guide for drivers of fleet vehicles



Driver fatigue

Do you know you're four times more likely to have a fatal fatigue crash if you're driving between 10pm and dawn?

That's because your body's circadian rhythms are programming you to sleep.

Driving while sleep deprived, especially late at night and at dawn, increases the risk of having a 'microsleep' and losing control of your vehicle.

The science of sleep

Microsleep

During a four second microsleep, a car travelling at 100 km/h will travel 111 metres while completely out of the driver's control.

A microsleep is a brief and unintended loss of consciousness. It can cost you your life if it happens when you're behind the wheel. It's characterised by head snapping, nodding or closing your eyes for more than a couple of seconds.

Microsleeps commonly occur when you try to stay awake while performing monotonous tasks like driving. They can last from a few seconds to several minutes. You may not even notice it's happened.

The sleep and wake cycle

The best way to avoid driver fatigue is to make sure you have enough sleep before driving, regardless of the length of your trip. There are three sleep factors to consider before deciding whether or not

to start driving – circadian rhythms, sleep debt and sleep inertia.

Circadian rhythms

We are programmed by our body's circadian rhythms to sleep at night and be awake during the day. During night-time hours and – to a lesser extent – during afternoon siesta hours, most types of human performance are impaired, including our ability to drive.

Problems occur if we disrupt our natural sleep cycles (eg by staying awake during the night), do not get enough sleep or get poor quality sleep.

Circadian rhythms cannot be reversed. Even if you have been working nightshifts for many years, your body will still be programmed to sleep at night.

Sleep debt

We all need around eight hours of sleep a night to function effectively. When we reduce the amount we sleep each night, we start to accumulate a sleep debt. It's the difference between the hours of sleep you need and the hours you get.

When we have sleep debt, our tendency to fall asleep the next day increases.

FACT FILE

During a four second microsleep, a car travelling at 100 km/h will travel 111 metres while completely out of the driver's control.



Sleep debt can only be reduced by having more sleep.

The larger the sleep debt, the stronger the tendency to fall asleep.

Sleep debt can only be reduced by – you guessed it – having more sleep.

Sleep inertia

Sleep inertia is most dangerous for people who drive in the early morning hours, particularly shortly after waking from sleep.

Sleep inertia is the feeling of grogginess you get after waking. It can affect your ability to perform even simple tasks. It is usually reversed within 15 minutes by activity and noise. However, it can last up to four hours. Its severity depends on how much sleep you had and at what stage of sleep you awoke.

How to prevent driver fatigue

The best way to prevent driver fatigue is to make sure you have enough sleep before driving, regardless of the length of your trip.

The best way to avoid a fatal fatigue crash while driving is to recognise the early warning signs:

- Yawning
- Poor concentration

- Tired eyes
- Restlessness
- Drowsiness
- Slow reactions
- Boredom
- Oversteering

Stop Revive Survive

Tips on avoiding fatigue-related accidents:

- Get a good night's sleep before commencing a long trip.
- Do not drive at times when you would normally be asleep.
- Avoid long drives after work.
- Take regular breaks from driving (use rest areas).
- Share the driving whenever possible.
- Pull over and stop when drowsiness, discomfort or loss of concentration occurs.
- Find out whether any medicine you are taking may affect your driving.

Source: Roads and Traffic Authority (RTA) website 2009