



FATIGUE AWARENESS

 Motorsport Australia
Fatigue Awareness
Program



MEMBER OF





The Fatigue Awareness Initiative

Safety is everybody's responsibility. Motorsport Australia recognises safety as a shared responsibility and is fundamental to achieving a 'Safety 1st' culture, where all participants in motorsport, regardless of their role, actively participate rather than passively receive safety services.

Above all else Motorsport Australia has a moral obligation to provide the safest possible environment for participants, families and friends to return home safely after each event or workday.

I encourage you to embrace this proactive approach recognising the effects, symptoms, and treatment for fatigue.

Let us all share the Stop Sleep Survive message and continue to enjoy safe involvement in motorsport.

Eugene Arocca
Chief Executive Officer

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Stop. Sleep. Survive. What it is

Motorsport Australia recognises the importance of fatigue as a high priority health and safety issue, and is conducting the Stop Sleep Survive campaign to raise awareness of the importance of sleep to prevent fatigue.

Motorsport Australia launched the Stop Sleep Survive campaign not only as part of its statutory requirements under the OH&S Acts and Duty of Care obligations, but also as a fundamental component of Motorsport Australia's own Safety 1st Strategy, the comprehensive strategy addressing all aspects of health and safety culture for motorsport officials, participants and volunteers to follow for the future.

The Stop Sleep Survive provides information that enables Motorsport Australia members to be proactive in obtaining adequate quality sleep. Stop Sleep Survive aims to educate motorsport participants about the effects of fatigue and inform them of practical strategies to not only identify fatigue hazards during the planning and operational phases of motorsport events but also enable officials, competitors and volunteers to arrive at the start line prepared and refreshed by:

- understanding the importance and effects of fatigue in injury and fatalities in motor transport
- increasing knowledge of the risks and causes of fatigue to participants at motorsport events
- providing practical information and skills to manage fatigue
- generally contributing to health and safety by promoting the principles of the Motorsport Australia's Safety 1st culture



What are the Effects of Fatigue?

Fatigue is a syndrome of physical and physiological effects arising from a wide variety of potential causes and risk factors resulting in impaired physical and mental performance and an increased risk of chronic physical conditions (long term) such as:

- digestive problems
- cardiovascular disease
- respiratory disease
- stress
- mental illness

Fatigue is different from drowsiness. In general, drowsiness is feeling the need to sleep, while fatigue is the lack of energy and motivation.

Drowsiness and apathy (a feeling of indifference or not caring about what happens) can be symptoms that go along with fatigue. Fatigue can be a normal and important response to physical exertion, emotional stress, boredom or lack of sleep.

Why is fatigue a problem?

Fatigue leads to an increased risk of injuries, fatalities and damage to the environment because of tiredness and lack of alertness when performing tasks. Fatigue in transport is of concern and has immense potential to contribute to disastrous incidents.

Driver fatigue is the primary cause of around of one third of motor vehicle fatalities in Australia. Fatigue in road crashes includes a wide spectrum of effects ranging from falling asleep to attention while at the wheel.

In the road haulage (trucking) industry, one means presently available to combat fatigue is consistently applying, enforcing and auditing the driver's habits (including resting hours) and by constantly reinforcing a safety culture. The aviation industry enforces similar restrictions on its pilots and air crew.

Motorsport participants are at increased risk of exercising poor judgement, lack of concentration and slow reaction time when fatigued, and so are less able to respond effectively to the changing circumstances which can be dynamic, hazardous and unpredictable. Motorsport Australia members need to understand the causes and identify the early warning signs of fatigue to act before it affects not only performance but also safety.

For example fatigue can affect:

- a track marshal's ability to exercise safe judgment on track
- the Clerk of the Course's ability to make decisions that affect each competitor, driver and automobile and the ability to make interventions/accident assessments
- drivers and co-drivers ability to make split-second decisions and execute skills
- a team member's ability to make prompt and accurate strategic mechanical assessments



Fatigue Symptoms

Motorsport officials, drivers, crew and volunteers may become fatigued during an event.

Fatigue can reduce the ability to concentrate and process information. Officials, competitors and crew constantly make time critical decisions requiring accuracy and precision - this ensures safety is a priority.

Drivers and their support crew need to be alert and focused in order to drive both competitively and safely and avoid dangerous situations. Individuals participating in events across a number of consecutive days may be at greatest risk of obtaining insufficient and poor quality sleep.

While a number of risk factors may cause fatigue, long hours at motorsport events and inadequate or poor sleep are key areas where Motorsport Australia members can minimize their risks.

Symptoms Leading to Fatigue

What are the common signs and symptoms that may be displayed by an individual in regards to fatigue?

Sleepiness

- Yawning
- Sleeping
- Falling Asleep
- Drowsy
- Lazy

Physical Discomfort

- Tense Muscles
- Aching
- Stiff Joints
- Hurting
- Numbness

Lack of Motivation

- Lack of Concern
- Indifferent
- Listless
- Passive
- Uninterested

Lack of Energy

- Spent
- Exhausted
- Drained
- Overworked
- Worn Out

Physical Exertion

- Warm
- Sweaty
- Out of Breath
- Palpitation
- Breathing Heavily

What is Sleep?

While we tend to think of sleep as a time of rest, for our bodies it is a period of increased activity. All of our vital organs and systems are active, mainly in repairing and restoring function.

Why do we need sleep?

Curiously, there is no single reliable scientific answer to the question as to why we need sleep. But what we do know from the scientific evidence is that:


- sleep is important for recovery from the preceding day and to conserve energy and restore function to be refreshed for the following day's activities
- sleep is important in staying alive as all humans have a strong drive to sleep and experience impaired physical and psychological function when deprived of adequate quality sleep
- following 18 hours of being awake, hand eye coordination is affected by the equivalent of a blood alcohol concentration of 0.05%. This rises to 0.10% after 24 hours of being awake

Importantly, sleep is a readily adjustable risk factor for fatigue that we can all actively take steps to control.

Last night's sleep is the most important for your function today, and sleep cannot be "banked" or recovered. That is,

- if you usually sleep for 8 hours each night, you can't sleep 10 hours per night for 3 nights to prepare for a night where you have 2 hours sleep.
- similarly, if you have a night where you sleep for 2 hours, you won't be able to recover by sleeping 14 hours the following night.





General tips for getting a good night's sleep

It is important to aim for not only good quantity but also good quality of sleep.

While most people need from seven to nine hours sleep on a regular basis to maintain optimal mental and physical function, there are significant differences in the number of hours of sleep required between individuals.

For most people, a week of six and a half hours sleep, and one night of less than five hours sleep is enough to accumulate a sleep debt sufficient to impair psychological function to the same level as a 0.05% blood alcohol concentration.

The preparation for a good night's sleep starts long before you're in bed and the lights go out.

The key to a good night's sleep is to have a routine in the 3 hours before bed that works for you, so that your brain and body clocks are set and maintained.

Useful hints

- relaxing activities, such as reading or a warm shower; avoid reading or watching TV in bed
- create an environment for sleep; dark, slightly cool, comfortable bed, pillow and coverings, quiet or with a little "white noise"
- avoid large, fatty spicy evening meals, as these can not only fire up your metabolism but also cause discomfort, indigestion or heartburn
- limit your alcohol intake as this affects sleep quality by increasing the number of times you wake, especially in the latter half of your sleep
- avoid nicotine and caffeine, as these stimulate the brain and make it harder for you to get to sleep
- while physical activity and exercise late in the afternoon improves sleep quality, strenuous activity within 2 hours of lights out stimulates the body and brain and makes it harder for you to get to sleep
- if you have a big event coming up, prepare for it by getting as much rest as possible beforehand
- ensure you have a good night's sleep before you start at your event
- if you have a extra long day try to get extra time off to recover. Your risk is particularly increased if you are already short of sleep
- in some cases people may need longer times to sleep. Let someone know if you have any sleeping issues

Managing Sleep Disorders

Around half the population has occasional difficulty in falling or staying asleep. This is mainly due to:

- poor sleep habit, or a disturbed sleep routine
- poor sleep environment, with uncomfortable bed, pillow or coverings, excessive light or noise or the room is too hot or cold
- poor lifestyle (lack of physical activity, high fat diet, excessive alcohol and nicotine)
- excessive stress and poor stress management.

However, you may need to see a medical specialist for a diagnosis of a sleep disorder if you regularly:

- have tingling or restless legs when trying to sleep
- snore loudly during sleep
- stop or gasp for breath during sleep
- have difficulty falling/staying asleep
- wake feeling unrefreshed
- doze inappropriately during the day

Fatigue Checklist

Take frequent rests

- Listen to your body. Don't be tempted to overdo it

Recognise the signs of fatigue

- Danger times can often be late a night and early in the morning

Nutrition

- Try to stick to a healthy diet
- Raw nuts such as almonds, are a good natural source of protein energy

Exercise

- Try to keep active by exercising regularly

Maintain optimal hydration

- Continue to drink water away from the event to arrive hydrated for the next event or day

Prioritise activities

- Prioritise tasks/activities into those that are essential and those that can wait

Adopt a good posture

- Long hours of standing or sitting, within the competition vehicle try to maintain an upright and symmetrical in position



In Summary

A lack of good quality sleep can effect competitors driving an automobile, co-drivers from interpreting a roadbook, a flag marshal from flagging, support crews working on cars and organisers and their officials running an event.

As a motorsport participant you need to understand what causes fatigue and how to recognise the early warning signs of not getting enough sleep so you can reduce the risk of being affected.

Fatigue can be reduced considerably or prevented by understanding and identifying the signs and symptoms leading to fatigue and one that can easily be understood is sleep .

By understanding the risks, causes and effects of poor quality sleep, event organisers, officials, volunteers, competitors and crews may take simple steps to enjoy participation and minimise the associated risks arising from fatigue.



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