



Module 2:

Overview of fatigue and legislation



Start Module





Learning objectives

By the end of 'Module 2 – Overview of fatigue and legislation', you will be able to:

1

Define fatigue

2

Explain the importance of fatigue management



3

Identify key fatigue management legislation and regulations

4

Describe the potential impacts of a breach of the legislation or regulations



What is fatigue?

Fatigue is **more** than a feeling of being tired, and it is **not** the same as being weary from normal daily activity or exertion.

An ongoing state of tiredness



Fatigue can affect a person:

- physically
- mentally
- both

Affects a person's performance, safety and health



It can build up over time and impact on your ability to:

- safely operate equipment
- make judgements
- manage risks
- function effectively

Requires rest or sleep in order to recover



Difficult to recognise that you are fatigued





What does it mean to be 'impaired by fatigue'?

A driver or operator is considered to be **impaired** by fatigue, if their ability to function in a safe manner is **compromised** by the effects of fatigue on their **body** or their **mental state**.

Some signs of being **impaired** by fatigue include:



- ✘ Slowed reaction times
- ✘ Lack of concentration
- ✘ Increased likelihood of taking unnecessary risks



Being able to recognise the signs of impairment due to fatigue, before they become hazardous, can save your life or the lives of others





Why is fatigue management important?

Driving vehicles, and operating safety critical plant and equipment, are **complex** tasks that demand **prolonged periods of concentration** and a certain level of proficiency to perform effectively and safely.

Continuing to work in a state of fatigue can:

- negatively affect a driver or operator's health
- reduce your performance or productivity
- lead to penalties for breaching the legislation
- increase the chance of a workplace or road accident

Workplace and road accidents can result in:

- injury
- trauma or death
- loss of quality of life
- loss of income

Fatigue is a **major cause** of **road accidents** involving the drivers of **heavy vehicles**.

Heavy vehicles and buses:

- 3% of the vehicles on Australian roads
- Involved in 18% of all road fatalities
- About 250 deaths each year



Effective fatigue management is essential to ensure that any risks associated with fatigue are eliminated, minimised or controlled.





How does fatigue impact performance?

As a driver or operator, it is necessary to be aware of how fatigue impacts on **your** ability to **perform your job safely**.

Some **impacts** of fatigue on performance include:

- poor judgement
- slower reactions
- impaired coordination
- poor memory
- inability to concentrate
- unnecessary risk-taking behaviour
- reduced ability to quickly interpret signs, signals and anticipate the behaviour other road users





What factors increase fatigue-related accidents?

Whilst it is important for fatigue management strategies to be in place for all occasions, there are some situations where a **greater emphasis** on fatigue management practices are of particular importance.



When operating or driving:

- at night
- under certain weather conditions
- at certain times of the day
- particular equipment
- in certain work environments





What are the key legislation requirements?

Legislation exists to regulate work and rest hours and prevent fatigue in drivers and operators.
Click each image for more information.

Work Health and Safety Act 2011 (WHS Act)



Heavy Vehicle National Law (HVNL)





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Work Health and Safety Act 2011 (WHS Act)



Employers have a responsibility to provide a **safe and healthy workplace** for workers

Requires employers to:

- update and maintain the knowledge of work health and safety matters
- understand the work being carried out by workers and the associated risks
- provide workers with appropriate resources and processes to eliminate or minimise health and safety risks
- ensure workers receive and can respond promptly to information regarding incidents, hazards and risks
- ensure workers have and use processes to comply with the duties under the Act

Support a systematic approach to **reducing the risk of fatigue** related incidents

Heavy Vehicle National Law (HVNL)



[Work Health and Safety Act 2011](#)





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Work Health and Safety Act 2011
(WHS Act)



Heavy Vehicle National Law
(HVNL)



Provide **one set of laws** for heavy vehicles

Regulated by the **National Heavy Vehicle Regulator (NHVR)**

Chain of Responsibility



Holds all parties **accountable** for tasks where their **actions, inactions** or **demands** put driver's lives and other lives at risk

Targets **fatigue, speed, load restraint** and **mass and dimension**

Each party in the chain has a **responsibility** to contribute to the **safety of drivers**



[Heavy Vehicle National Law](#)

Fatigue Management



Sets out the **three options** for work and rest hour requirements

Standard BFM AFM

Specifies the requirements for **driving records** for all drivers who are **driving in a non-local area**

Records are most commonly maintained using a **Driver Work Diary**





Regulated hours

Due to the nature of different businesses and industries, there is **no 'one size fits all' solution** to regulating work and rest hours.

To provide **flexibility** for businesses, without compromising the safety of employees and contractors, Regulations sets out **three options** for the **scheduling of work and rest hours**.

Standard Hours

Default option

- ✓ Minimum rest
- ✓ Maximum working hours

Basic Fatigue Management (BFM)

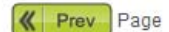
Allows additional working hours

- ✓ Increased fatigue management and compliance responsibilities

Advanced Fatigue Management (AFM)

Allows more flexible working hours

- ✓ Based on:
 - risk management
 - alternative compliance
 - quality assurance
- ✓ Adhere to agreed standards and operating limits in return for more flexible working arrangements





Work and rest

Work time is counted as:

- any time a driver spends driving a regulated heavy vehicle
- any time spent performing tasks related to the operation of the vehicle
 - loading
 - unloading
 - refuelling
 - repairing
 - inspecting
 - cleaning the vehicle

Work time also includes:

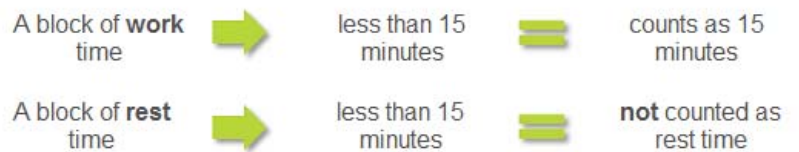
- attending to passengers of a bus
- helping with, or supervising any of these tasks

All other time is considered rest time.

All time is counted from the **time zone** of the driver's base.

When counting work and rest time:

- blocks of 15 minutes are used
- time is rounded **up** for work hours
- **down** for rest hours



A period of working for 14 minutes counts as 15 minutes work time.



A period of not working for 17 minutes counts as 15 minutes rest time.





Standard hours

It's important to for everyone in the Chain of Responsibility to understand the **standard hours for drivers**.

These are the **maximum work times** and **minimum rest times**.

Breaks must have been taken in **15 minute blocks** or longer.

In any period of...	Solo Drivers		Two-up Drivers		Bus Drivers	
	Maximum work time	Minimum rest time	Maximum work time	Minimum rest time	Maximum work time	Minimum rest time
5 1/2 hrs	5 1/4 hrs	15 mins	5 1/4 hrs	15 mins	5 1/4 hrs	15 mins
8 hrs	7 1/2 hrs	30 mins	7 1/2 hrs	30 mins	7 1/2 hrs	30 mins
11 hrs	10 hrs	1 hr	10 hrs	1 hr	10 hrs	1 hr
24 hrs	12 hrs	7 hrs	12 hrs	5 hrs	12 hrs	7 hrs
7 days	72 hrs	24 hrs	60 hrs	24 hrs	n/a	6 nights
14 days	144 hrs	4 nights *2 single + 2 consecutive	120 hrs	4 nights *2 single + 2 consecutive	n/a	n/a
28 days	n/a	n/a	n/a	n/a	288 hrs	4 days *4 x 24 hrs

For more information on standard hours, refer to the regulation:



[Heavy Vehicle \(Fatigue Management\) National Regulation](#)





Basic Fatigue Management (BFM) hours

Where an organisation requires **more flexibility** in scheduling than the Standard Hours option permits, approval to operate under **BFM hours** may be sought.

The business will need to:

- achieve BFM accreditation
- confirming they are able to manage the increased risks of fatigue.

Six BFM Standards

1. Scheduling and rostering
2. Fitness for duty
3. Fatigue knowledge and awareness
4. Responsibilities
5. Internal review
6. Records and documentation

Scheduling and rostering

- Solo drivers and two-up drivers

Fitness for duty

- Drivers must be fit to perform their duty
- Meet any medical requirements

Fatigue knowledge and awareness/Responsibilities

- Induction into the BFM fatigue management system

Internal review

- Audit of the organisation's BFM fatigue management system
- Confirm the system will comply with the standards

Records and documentation

- Appropriate records must be kept
- Details of drivers operating under the BFM accreditation
- Inducted into the BFM fatigue management system





Basic Fatigue Management (BFM) hours

These are the **maximum work times** and **minimum rest times**.

Breaks must have been taken in **15 minute blocks** or longer.

In any period of...	Solo Drivers		Two-up Drivers	
	Maximum work time	Minimum rest time	Maximum work time	Minimum rest time
6 ¹ / ₄ hrs	6 hrs	15 mins	6 hrs	15 mins
9 hrs	8 ¹ / ₂ hrs	30 mins	8 ¹ / ₂ hrs	30 mins
12 hrs	11 hrs	1 hr	11 hrs	1 hr
24 hrs	14 hrs	7 hrs	14 hrs	10 hrs
82 hrs	n/a	n/a	70 hrs	10 hrs
7 days	36 hrs Long/night work time	n/a	70 hrs	24 continuous hrs + 24 hrs in blocks of at least 7 continuous hrs
14 days	144 hrs	24 hrs after no more than 84 work hrs + 24 hrs + 4 nights (2 single + 2 consecutive)	140 hrs	4 x 7 hrs (Between 10pm on a day and 8am the next day)





BFM hours – The '36-hour rule'

"36 hour rule"

↓

Long shifts/night work

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Up to 36 long and night hours in a 7 day period

Long hours

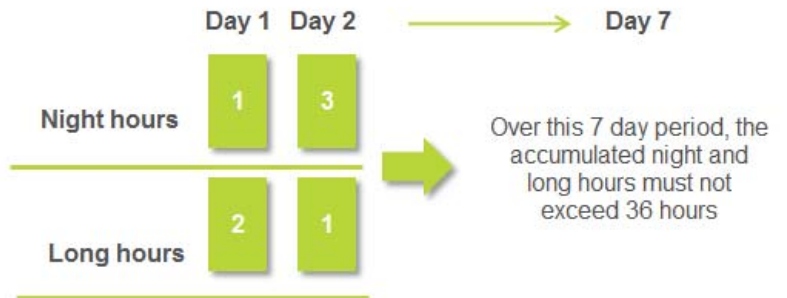
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More than 12 hours in a 24 hour period

Night hours

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Any hour worked between midnight and 6am



For more information on BFM hours, refer to the regulation:

↓ [Heavy Vehicle \(Fatigue Management\) Regulation](#)

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Advanced Fatigue Management (AFM) hours

A transport organisation requiring **additional scheduling flexibility** can apply to operate under **AFM hours**.

Ten AFM Standards

1. Scheduling and rostering
2. Readiness for duty
3. Fatigue knowledge and awareness
4. Responsibilities
5. Internal review
6. Records and documentation
7. Health
8. Workplace conditions
9. Management practices
10. Operating limits

Proposal

- Limits for work and rest hours for drivers
- Risks associated with working under these limits
- Planned measures to manage these risks
- Details required by the AFM standards and business rules

AFM Fatigue Management System

- Method used by the operator to comply with AFM standards and business rules

Include:

- driver's licence and contact details
- confirmation that each driver is fit to perform their duty

Managers, supervisors, schedulers and drivers are:

- inducted into the AFM fatigue management system
- informed of the accredited AFM hours the organisation operates under

Accreditation certificate

- specifying the applicable limits to work and rest hours



All drivers operating under AFM accreditation **must carry details** of the AFM hours allowed under the accreditation in their work diary.





AFM hours – Operating limits

The organisation will propose:

- the normal operating limits that will guide the development of schedules and rosters
- the frequency that the normal operating limits may be exceeded
- based on the risk assessment and counter measures to be used to manage the risks

Fatigue risk management system, documents:

- strategies for the management of the extra fatigue risk
- actions driver will take under those circumstances where normal operating limits are exceeded

In any period of...	Normal operating limits	Frequency for exceeding normal operating limit
24 hrs	Proposed by operator	Proposed by operator
14 days	Proposed by operator	Proposed by operator
28 days	Proposed by operator	Proposed by operator



If normal operating limits are **exceeded** by more than the specified frequency, a **non-compliance report** must be created by the organisation, and made available for an external audit





AFM hours – Outer limits

There may be occasions where a driver **exceeds the operating limits** set out under their AFM option, however there are **outer limits** that apply that **must never be exceeded**.

The table below specifies the outer limits that apply under AFM accreditation.

In any period of...	Outer Limit	
	Maximum work time	Minimum rest time
24 hrs	16 hrs	6 continuous hrs stationery rest time OR 8 hours stationery rest time taken in no more than 2 blocks (rest in an approved berth for 2-up drivers)
14 days	154 hrs	2 x 7 continuous hrs stationery between 10pm on a day and 8am on the next day
28 days	288 hrs	4 x 24 continuous hrs stationery rest time

For more information on AFM hours, refer to the regulation:



[Heavy Vehicle \(Fatigue Management\) Regulation](#)





What are the potential impacts of a breach?

Fatigue management legislation exists to **protect workers** and the **wider community**

Impacts of **breaches** of the legislation:

- loss of life or serious injury
- damage to property
- personal/company fines
- damage to reputation

An authorised **officer** or **police officer** may direct a driver to rest immediately or work for a shorter time:

- if the driver has not had adequate rest time
- if the officer believes that the driver is impaired by fatigue

Breach	Definition	Example
Minor	The risk of someone gaining a minor unfair commercial advantage over those who operate legally, but there is no risk to safety or infrastructure.	A driver on Standard Hours who reaches 5 ½ hours without taking their 15 minute rest break
Substantial	The risk of damage to infrastructure, increasing traffic congestion and unfair competition. It may also involve some risk to safety, although not a substantial risk.	A driver on Standard Hours who only takes 15 minutes rest instead of 60 minutes rest in an 11 hour period
Severe	An appreciable risk to safety, more severe risk to infrastructure, greater risk of traffic congestion or a greater level of unfair competition.	A driver on BFM Hours who drives 15 and a ¼ hours in a 24 hour period
Critical	A contravention of fatigue regulated maximum work time and/or minimum rest time which would adversely affect the driver's ability to drive safely.	A driver on AFM hours who exceeds the maximum work time across a 7 day period by more than 90 minutes

Individuals: \$3-4k, \$5-6k, \$10k and \$15-20k

Company fines are 5x the amount of the individual fine



[Heavy Vehicle National Law and Regulations](#)









Summary

Congratulations! You have now completed Module 2: Overview of fatigue and legislation.

You should now be able to:

-  Define fatigue
-  Explain the importance of fatigue management
-  Identify key fatigue management legislation and regulations
-  Describe the potential impacts of a breach of the legislation or regulations.



You can now return to the home page and move on to the next module which will look at the causes, effects and warning signs of fatigue.

