# Training in Lieu of Experience – Heavy Combination

### T.I.L.E. Pre-course Learner Guide

November 2023



**Government of South Australia** Department for Infrastructure and Transport Build Move Connect

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We acknowledge the Traditional Custodians of the Country throughout South Australia and recognise their continuing connection to land and waters. We pay our respects to the diversity of cultures, significance of contributions and to Elders past, present and emerging.

### Preface

This resource provides key references, licensing requirements and knowledge required by heavy vehicle licence applicants <u>prior</u> to undertaking further training with a Registered Training Organisation (RTO).

It is an expectation that as preparation for the T.I.L.E. course, all applicants will thoroughly read and complete the questions in this booklet <u>before</u> they attend training face to face.

To ensure you understand the information there will be a discussion on the answers to the questions included in this pre-course work at the start of your face-to-face session.

Information contained within this guide will be expanded on during your theory training sessions. You will find some of the information is provided to you several times.

Please watch the short videos which are linked throughout this document. You may see them again in training. Most are only 1-2 minutes in length.

By reading the information contained within this guide you will have a good basis of understanding that you will build on throughout the remainder of the course. Something to start you thinking about truck driving!

## Important documents and manuals

Recommended reading and references

We recommend **obtaining copies** of the following documents, prior to undertaking the theory training, to provide a reliable reference and background information:

<u>Heavy Vehicle Drivers Handbook</u> – you can download a soft copy or purchase a hard copy <u>Load Restraint Guide</u> – please obtain a copy for your reference <u>Master Code</u> - Industry code of practice under section 706 of the Heavy Vehicle National Law

The following sites contain valuable information that can assist you in your endeavour to become a successful and safe truck driver. Within the listed sites there are links to further information if you want to build on your knowledge.

- My Licence SA -
- National Heavy Vehicle Regulator
- Heavy Vehicle National Law (South Australia) Act 2013
- <u>Master Code Registered Industry Code of Practice (Section 706 of HVNL)</u>

**REMEMBER:** Please, bring this pre-course guide to your theory training session.

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## Theory purpose

This resource provides key references, licensing requirements and knowledge required by heavy vehicle licence applicants.

This theory course is designed as a **Road Rule Refresher**. To re-enforce existing driving concepts and introduce others related to heavy vehicles.

The HC competency-based training and assessment program is designed to raise your awareness of the roles and responsibilities as a professional heavy vehicle operator.

The theory training and assessment program includes:

- Road Laws
- Industry Practice
- Heavy vehicle specifics
- Assessment(s)

It is recommended that you spend some time studying the contents of this booklet. The answers will be discussed during the training session.

After the module training, you will be required to complete a further two written assessments as part of your theory training session.

Prerequisite driving experience for participants is to have had a class MR or HR for at least one year (with the exception of TILE Training)

### Heavy Combination (HC) TILE Program

By obtaining an HC licence the driver is permitted to drive:

- A motor vehicle authorised to be driven by a licence of a preceding class.
- A prime mover to which is attached a single semi-trailer (whether or not any unladen converter dolly or low loader dolly is also attached)
- A rigid motor vehicle to which is attached a single trailer with a GVM greater than 9 tonne (whether or not any unladen converter dolly or low loader dolly is also attached)
- Participants will go from Class C to HC. Unique to this course is the requirement to have a learner's permit issued to operate an HC under learner conditions.

### **Class HC Licence**

A Learner's Permit is issued for 12 months only.

Where Module three is not completed within 12 months, permission is required from the Registrar of Motor Vehicles to extend the learner's permit.

The following table displays current licence classes.

Licence	Licence classes		
Class	Authorised to drive	Examples	Minimum age/ driving experience
С	<ol> <li>A motor vehicle with a gross vehicle mass (GVM) not greater than 4.5 tonne but not including:         <ul> <li>A bus designed to carry more than 12 passengers: or</li> <li>A motor bike or motor trike</li> </ul> </li> <li>A motor vehicle included in 1 towing a single trailer, subject to the combination mass limits fixed under the <i>Road Traffic Act 1961</i>.</li> <li>For example: Small truck towing a horse float, trailer, or caravan.</li> <li>May tow: trailer, horse float, caravan, or farm implement.</li> </ol>		Must be at least 17 years old. • If you are under the age of 25 you must have held your learner's permit for at least 12 months. • If you are aged 25 or over, you must have held your learner's permit for at least 6 months.
LR	<ol> <li>A motor vehicle authorised to be driven by a licence of the preceding class</li> <li>A motor vehicle with a GVM greater than 4.5 tonne but not greater than 8 tonne (e.g. trucks, vans, tippers, special purpose vehicles, and buses designed to carry 13 or more seated passengers.</li> <li>A bus with a GVM not greater than 8 tonne</li> <li>A motor vehicle included in 2 or 3 towing a single trailer, subject to the combination mass limits fixed under <i>the Road Traffic Act 1961</i> or the <i>Heavy Vehicle National Law (South Australia)</i></li> <li>May tow: any farm implement. Any trailer provided the overall mass is within the gross combination mass (GCM) of the towing vehicle.</li> </ol>		Must have held a class C for at least one year.
MR	<ol> <li>A motor vehicle authorised to be driven by a licence of a preceding class</li> <li>A motor vehicle (other than aa special purpose vehicle) with 2 axles and a GVM greater than 8 tonne (e.g. Two axle trucks, tippers, and buses)</li> <li>A motor vehicle included in 2 towing a single trailer (other than a semi-trailer) with a GVM not greater than 9 tonne, subject to the combination mass limits fixed under the <i>Heavy Vehicle National Law (South Australia)</i></li> <li>A special purpose vehicle with:         <ul> <li>a. 2 axles and GVM greater than 8 tonnes or</li> <li>b. 3 or more axles and a GVM not greater than 15 tonne</li> </ul> </li> <li>May tow: any farm implement. Any trailer with GVM not exceeding 9 tonne provided it is within the GCM of the towing vehicle.</li> </ol>		Must have held a class C for at least one year.
	Driver's licence must be carried if driving a vehicle over 4.5 tonne		

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HR	<ol> <li>A motor vehicle authorised to be driven by a licence of a preceding class</li> <li>A motor vehicle (other than an articulated motor vehicle or a special purpose vehicle)with 3 or more axles and a GVM greater than 8 tonne</li> <li>A motor vehicle included in 2 towing a single trailer (other than a semi-trailer) with a GVM not greater than 9 tonne, subject to the combination mass limits fixed under the <i>Heavy Vehicle National Law</i> (<i>South Australia</i>)</li> <li>An articulated bus with 3 or more axles and a GVM greater than 8 tonne</li> <li>A special purpose vehicle with 3 or more axles and a GVM greater than 15 tonne</li> <li>May tow: any farm implement. Any trailer with a GVM not exceeding 9 tonne provided it is within the GCM of the towing vehicle.</li> <li>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</li> </ol>		Must have held: a. Class C for at least two years b. Class LR for at least one year
HC	<ol> <li>A motor vehicle authorised to be driven by a licence of a preceding class.</li> <li>A prime mover to which is attached a single semitrailer (whether or not any unladen converter dolly or low loader dolly is also attached)</li> <li>A rigid motor vehicle to which is attached a single trailer with GVM greater than 9 tonne (whether to not any unladen converter dolly or low loader dolly is also attached)</li> <li>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</li> </ol>		Must have held a class MR or HR for at least one year.
МС	<ol> <li>Any motor vehicle or combination of motor vehicles except a motor bike or motor trike (includes B doubles, road trains)</li> <li>Driver's licence must be carried if driving a vehicle over 4.5 tonne.</li> </ol>		Must have held a class HR or HC for at least one year.
R-Date	<ol> <li>A motor bike or motor trike that:         <ul> <li>has engine capacity not exceeding 660 ml and a power weight ration not exceeding 150 KW per tonne and</li> <li>is of a kind approved from time to time by the Registrar by notice in the Gazette.</li> </ul> </li> </ol>	53	<ul> <li>17 years old and if no other licence is held:</li> <li>If under age of 25 must have held learner's permit for at least 12 months</li> <li>Aged 25 or over must have held learner's permit for at least 6 months</li> </ul>
R	1. Any motor bike or motor trike	673	Must have held the R-Date for at least one year.

\*R-Date means the expiry date of the learner's permit or the date falling one year after class R-Date was endorsed on the licence. It indicates the date on which the holder may apply for a class R licence. The holder of a class R-Date licence remains restricted to a motorcycle with an engine capacity of up to 660ml with a power-to-weight ratio of 150kw/t until granted a class R licence despite the fact that the date included in the classification has passed.

Note: The class of licence required to drive a commercial vehicle is determined by the number of axles and /or the vehicles gross vehicle mass, not the load the vehicle is carrying.

### **Heavy Vehicle Licensing Requirements**

#### Under the Motor Vehicles Act 1959 s98AAA - Driver's Licence

A person must carry their driver's licence at all times while driving heavy vehicle on a road and must produce the licence forthwith if requested by a police officer or authorised officer. A heavy vehicle means a motor vehicle that has a GVM greater than 4500 kg.

Under the Motor Vehicles Act 1959 s75AAA - Learner's Permit

The holder of a Learner's permit must not drive unless accompanied by a person acting as a qualified supervising driver for the holder of the permit, they must not exceed signed speed limits and must not drive at a speed exceeding 100 km/h sign posted on a road in any part of the State.

The following licence codes are in addition to the licence class, and may appear on the driver's licence as a printed code:

Code	Condition description
А	Permitted to drive ONLY a motor vehicle with an automatic transmission
В	Permitted to drive a vehicle with a synchromesh transmission
E	Motorcycle up to 660ml
I	Alcohol interlock device is fitted
S	Corrective lenses
Т	Automatic truck or bus
V	Modified vehicle
Х	Miscellaneous – information will be printed on reverse of photo licence
Y	Court restriction
Z	No alcohol



## **Reference information (South Australia)**

The following reference links are useful when driving in South Australia to locate current information, and where possible, obtain a copy of the documents for your records.

- National Heavy Vehicle Regulator (NHVR), <u>www.nhvr.gov.au</u> for updated information on heavy vehicle safety, accreditation and compliance, road access (RAVnet), laws and policies.
- Load Restraint Guide, <u>https://www.ntc.gov.au/codes-and-guidelines/load-restraint-guide</u>
- Heavy Vehicle Driver's Handbook
- Australian Road Rules (ARR)
   <u>https://www.legislation.sa.gov.au/LZ/C/R/Australian%20Road%20Rules.aspx</u>
- Heavy Vehicle National Law
- Link to appropriate heavy vehicle configuration charts, <u>https://www.nhvr.gov.au/road-access/mass-dimension-and-loading/general-mass-and-dimension-limits</u>

For more information on heavy vehicle licensing refer to <u>https://mylicence.sa.gov.au/my-heavy-vehicle-licence</u>

### **Eligibility to Drive**

The minimum requirements to obtain a Heavy Vehicle licence can be found at:

My Licence - My heavy vehicle licence - Heavy rigid or heavy combination

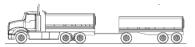
This site outlines medical requirements, driving experience, previous licensing conditions.

If you have had a **medical condition** that may affect your ability to safely operate a motor vehicle e.g. diabetes, epilepsy, regardless of whether you have previously advised the Registrar of Motor Vehicles of the condition, you **may** be required to provide a **Certificate of Fitness** to confirm that you meet the medical standards needed to hold a heavy vehicle licence.

## Quiz 1 Knowledge Check

These questions relate to what you have read in the previous pages.

- 1) Which class of licence is required to drive a 2-axle truck with a GVM greater than 8 tonnes?
  - a. Light Rigid (LR)
  - b. Medium Rigid (MR)
  - c. Heavy Rigid (HR)
- 2) What type of licence do I need to tow trailer with a GVM greater than 9 tonnes?
  - a. HC
  - b. MR
  - c. HR
- 3) What is the minimum licence required to drive the type of vehicle shown in the diagram with a trailer weight of less than 9 tonne?
  - a. MC
  - b. HC
  - c. HR



- 4) Can the driver of a heavy combination vehicle legally drive a heavy rigid vehicle?
  - a. Only if empty
  - b. No
  - c. Yes
- 5) When driving a motor vehicle, when is it compulsory to carry your driver's licence with you?
  - a. At all times when driving
  - b. Only when driving a vehicle with a gross vehicle mass (GVM) exceeding 4.5 tonnes
  - c. During daylight hours
- 6) You need to look for updated heavy vehicle safety information or apply for a permit online. Where do you go to find this information?
  - a. Refer to Heavy Vehicle National law for information.
  - b. Refer to Department for Infrastructure and Transport (DIT)
  - c. Refer to the National Heavy Vehicle Regulator (NHVR)

Total: \_\_\_ / 6

## Definitions

The following definitions are used for the **mass** of a vehicle:

Acronym	Definition
Unladen Mass ( <b>UL</b> )	The weight of the vehicle without any cargo <b>but</b> does include fuel, oil, and tools.
Gross Vehicle Mass (GVM)	The maximum <b>loaded</b> mass of the vehicle.
Gross Combination Mass (GCM)	The greatest possible sum of the maximum loaded mass of a motor vehicle and of any vehicles that may lawfully be towed by it at one time, as specified by the motor vehicle manufacturer or the registration authority.
Gross Trailer Mass ( <b>GTM</b> )	The mass transmitted to the ground by the axle or axles of the trailer when coupled to a drawing vehicle and carrying the maximum load.
Aggregate Trailer Mass (ATM)	The total mass through the axles and drawbar of the laden trailer when carrying the maximum load recommended by the manufacturer.

These following acronyms represent the peak bodies involved in the transport industry in Australia.

Heavy Vehicle National Law ( <b>HVNL</b> )	Department specifies limits for height, width, length, and mass of vehicles which travel on public roads.
National Heavy Vehicle Regulator ( <b>NHVR</b> )	Established in 2013 as a national statutory authority (except WA and NT) for the Heavy Vehicle National Law.

## **Signs and Road Markings**

There are three categories of road signs:

- Regulatory
- Warning Hazards
- Guidance

**Regulatory** signs include stop signs, give-way signs, speed limits, no entry, or roundabout signs and more.



**Warning** signs include advance warnings, curves and bends, trucks slow down, side road or crossroad signs and many more.



**Guidance** signs include distances, major roads, points of interest for tourists, public toilets caravan parks and truck stops, and many more.



Hazard or temporary signs include dip in a road, lane changes, road works or road changes.



## **Australian Road Rules**

### **Driver's Licence**

Whilst driving a heavy vehicle (vehicle with GVM of > 4500kg) it is required that you **always** carry your licence with you. You must be able to produce your licence if requested.

(Motor Vehicles Act, section 98AAA)

The holder of a Learner's permit must not exceed any speed limit by 10km/h and must not drive at a speed exceeding 100 km/h on a road in any part of the state.

(Motor Vehicles Act, section 75A.)

### Australian Road Rule Definitions

### Definition of a Road (ARR12)

A road is an area, open to the public to be used for the driving or riding of motor vehicles.

It does not include:

- Kerbed road any part of the kerb
- Sealed road any unsealed part of the road and any sealed part of the road outside the edge line of the road.

#### An intersection

An intersection means the area where 2 or more roads (except any road related area) meet.

#### A T-intersection

A T-Intersection means an intersection, other than a roundabout, where 2 roads meet (whether at right angles) and one of the roads ends.

## **Give Way**

Giving way is an important part of driving a heavy vehicle. You will cover this information several times.

To give way, for a driver or pedestrian means:

- If the driver or pedestrian is stopped remain stationary until it is safe to proceed.
- In any other case, slow down and where necessary stop to avoid a collision.

Knowing the give-way rules ensures all road users are safer. Never **assume** the other road user will know to give way to you. It is safer to slow down and stop if necessary to allow other traffic free thoroughfare.

When the driver of a vehicle approaches any intersection, the requirements for giving way should be considered in this order:

**Note:** No one road user **always** has sole right of way. Take into consideration, conditions, and incidents in your vicinity. **Always give way** and **stop if in doubt**!

Direction given by	Your actions
Police	Where police officers are directing traffic in any situation, <b>obey</b> all directions provided.
Traffic lights	Obey traffic light rules (Refer Pt 4 below)
Signs	Obey sign information
Terminating roads	Be aware of roads that are about to end
Emergency vehicles	Have right of way when lights are flashing – move over safely.

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Please watch this video: <u>Giving Way at Intersections</u> (1.23 mins)

#### Giving way at a roundabout (ARR 114)

A driver entering a roundabout **must** give way to any vehicle in the roundabout. In this instance the driver must slow down or stop if necessary to avoid a collision.



#### Giving way at uncontrolled intersections

- Vehicles turning to the right must give way to vehicles approaching from the opposite direction.
- If the driver is turning right, the driver must give way to any oncoming vehicle that is going straight ahead or turning left at the intersection, unless
- A stop sign, stop line, give way sign, or give way line applies to the driver of the oncoming vehicle, or
- the oncoming vehicle is turning left using a slip lane.

 OO
 Please watch this video:
 Merging Lanes Safely
 (1.23 mins)

Learner's practice tests - Test your SA driving knowledge online | RAA

## **Heavy Vehicle Safety and Speed limits**

### Minimum distance between long vehicles (ARR127)

The driver of a long vehicle must drive at least the required minimum distance behind another long vehicle travelling in front of the driver, unless the driver is:

- Driving on a multi-lane road or any length of road in a built-up area or
- Overtaking

Required minimum distances:

- For a road train behind a long vehicle 200 metres
- For any other long vehicle behind a long vehicle 60 metres



#### (Refer Heavy Vehicle Drivers Handbook (pp 50 - 52)

When descending the **South-Eastern freeway** – ensure you select a low gear that will limit the speed of your vehicle without having to use the primary brake (your foot brake), if you do use your footbrake, you may risk road safety whilst contravening **(ARR 108)** 

You must **not** drive at a speed greater than the speed shown on the **signs** on any given part of the freeway.

Refer: <u>SA.GOV.AU - Heavy vehicles on the South Eastern Freeway (www.sa.gov.au)</u>



Courtesy: The Advertiser – South-Eastern Freeway 2014

In a **school** or when children are present you MUST remain at **25 km/h**.

For restrictions to heavy vehicle travel refer to the **National Network Map**, this initiative aims to improve heavy vehicle access efficiency and decision-making by bringing together the statebased heavy vehicle networks and display them in one location.

All South Australian Heavy Vehicle maps, promoting the roads and restrictions to heavy vehicles is published by NHVR through <u>National Network Map</u>.

The interactive mapping system allows you to see what conditions and restrictions that apply across the country. Further information about the map can be found on the <u>National Network</u> <u>Map Fact Sheet</u>

Trips in South Australia refer to the following link to discover any roadworks, road closures and accidents. <u>SA.GOV.AU - Daily roadworks, hazards and news (www.sa.gov.au)</u>

The networks shown provide an indication only and the relevant state road transport authority maps should be used, <u>https://www.nhvr.gov.au/road-access/route-planner</u>

### Speed limiters

Speed limiters, as the name suggests, limits a vehicle's maximum speed. If your vehicle falls into one of the following groups, it must be speed limited to **100 km/h**.

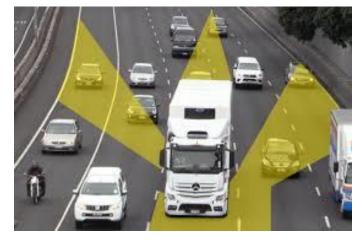
- Trucks having a GVM exceeding 15 tonnes.
- Buses used to provide a public passenger service and with a GVM exceeding 14.5 tonnes.
- A heavy vehicle or bus manufactured on or after 1 January 1991 being either a:
  - Truck having a GVM exceeding 12 tonnes.
  - Buses used to provide a public passenger service and with GVM exceeding 5 tonnes.

Please read <u>Heavy Vehicle Driver's Handbook</u> (pp 65)

### **Blind spots**

The blind spot areas on heavy vehicle increase when the truck is turning. Blind spots are located:

- Beside each door,
- Directly behind the truck and
- Immediately in front of the vehicle.



### **Bike Riders**

If overtaking bicycle riders, you need to give a minimum of:

- 1m when passing in a 60km/h or less speed zone.
- 1.5m where the speed limit is over 60km/h

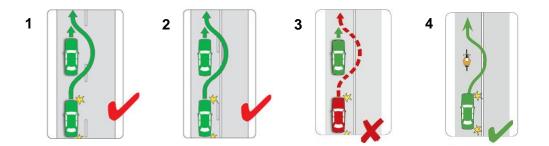
It is legal for two bicycle riders to ride side-by-side on a road if they are **not more** than 1.5m apart.

You must overtake a bicycle rider with care, indicate 'right' long enough to warn other road users and when you have passed indicate 'left' before returning to your original position. **Do not sound your warning device.** 

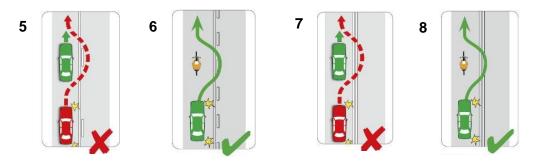


### **Overtaking and Lane Changing**

Study these overtaking examples. The explanations are below the graphics.



- 1. Broken dividing line, overtaking is permitted if safe to do so.
- 2. Broken dividing line to the left of a single continuous line, overtaking is permitted if safe to do so.
- 3. Single continuous dividing line, overtaking is not permitted.
- 4. A single continuous dividing line can be crossed if overtaking a bike rider and it is safe to do so.



- 5. Continuous dividing line on the left of a broken line, overtaking is not permitted.
- 6. Continuous dividing line to left of a broken line, permitted to overtake a bicycle rider if safe to do so.
- 7. Two parallel continuous dividing lines, overtaking is not permitted.
- 8. Crossing a double continuous dividing line is permitted if overtaking a bicycle rider if safe to do so.

## Quiz 2. Knowledge Check

- 1. What is the speed in any school zone in South Australia when children are present?
  - a) 25 km/hour
  - b) 40 km/hour
  - c) 50 km/hour
- 2. In <u>South Australia</u>, what is the maximum speed allowed when passing emergency vehicles with flashing lights on the side of the road?
  - a) 25km/hour
  - b) 40 km/hour
  - c) 50 km/hour
- 3. When descending the South-Eastern Freeway, from the Crafers interchange to the bottom, truck and bus drivers are limited to what maximum speed?
  - a) 100 km/hour
  - b) 90 km/hour
  - c) 60 km/hour
- 4. Before beginning to overtake another vehicle, you should
  - a) Check ahead, check behind (both mirrors) signal your intentions, change gear if necessary.
  - b) Sound your horn, move out and overtake.
  - c) Signal and slow down so you will have more room to overtake.

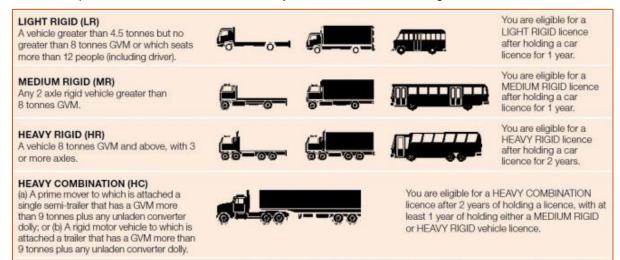
Total \_\_\_/ 4

## Heavy vehicles

Basic heavy vehicle axle weight information is below, however further information is available in the *Heavy Driver Handbook*. (pp.15, 16, 106, 141, 144)



Successful completion of a TILE course allows you to drive the following vehicles:



#### Maximum axle weight

On each steer axle there are two tyres, and on all other axles there are four (excluding "super singles" - tyres which have a section width equal to or greater than 375 mm).

These are the most common groupings in general use:

- $\checkmark$  Any single axle fitted with two tyres (6.0 t)
- ✓ Any single axle fitted with four tyres (9.0 t)
- ✓ Any Tandem axle group fitted with eight tyres (16.5 t)
- ✓ Any Tri-axle group fitted with twelve tyres (20.0 t)
- ✓ Any Tri-axle group fitted with six "wide" tyres (20.0 t)
- ✓ Any variation to a Tri-axle (15.0 t)

Pig trailers:

- ✓ Any Tandem axle fitted with eight tyres (15.0 t)
- ✓ Any Tri-axle fitted with twelve tyres (18.0 t)
- ✓ Any Tri-axle fitted with six "wide" tyres (18.0 t)

### Maximum height of vehicles

A heavy vehicle must not exceed 4.3 metres in height.



However:

- A vehicle built to carry cattle, sheep, pigs, or horses must not exceed 4.6 metres in height.
- A car carrier must not exceed 4.6 metres in height when loaded.
- A double-decker bus must not exceed 4.4 metres in height.

Load rear projection:

- 1. The rear of a load on a vehicle must carry a warning signal if the load:
  - Projects more than 1.2 metres behind the vehicle
  - Projects to the rear of the vehicle so that the end of the load cannot be seen easily from behind.
  - Is on a pole-type trailer.
- 2. In daytime, the warning signal must be a brightly coloured flag or a piece of material with each side at least 300 millimetres long.
- 3. At night, the warning signal must be a red light which can be seen for **200 metres**.

More information will be provided on this during the course. A secure load is critical for the safety of all road users. **Read Section 7** <u>Heavy Vehicle Driver's Handbook</u> and refer to <u>Load Restraint Guide</u> for detailed information on safe heavy vehicle load restraint.

### **Rear marker plates**

Any vehicle can be fitted with rear marker plates, however, the following vehicles MUST have them fitted:

- Vehicle with a GVM over 12t
- Trailers with GTM over 10t
- Buses with GVM over 12T
- Vehicles over 7.5m or longer



## **Heavy Vehicle Safety**

Most fatigue-related accidents occur during normal sleeping hours, between 11pm and 8am and then again mid-afternoon 2pm until 4pm.

**Fatigue** is a factor in almost one third of single-vehicle crashes in rural areas. Driving tired affects your safety as well as the safety of your passengers and other road users.

There is not a single factor that causes fatigue. If someone is regularly getting poor quality sleep, or insufficient hours, a sleep debt can build up over time that seriously affects a driver's ability to function safely at work.

Driving on less than 5 hours sleep, **triples your risk** of having a crash, being **awake for 17 hours** is equivalent to driving under the **influence of alcohol**.

### **Driver Fatigue**

Fatigue does not only make you feel tired it but can affect your whole body and driving ability.

Professional drivers need to notice the signs of fatigue and pull over and rest if they experience any of these warning signs:

- Slowing your reaction time and reflexes,
- Making fewer and larger steering corrections,
- Reduced concentration, ability to focus,
- Boredom, memory lapses or daydreaming,
- Drifting in your lane,
- Driving speed creeps up or down,
- Driving performance such as poor gear changes,
- Stiffness or cramps,
- Impaired Impatience,
- Loss of motivation,
- Missing road signs and taking wrong turns,
- Sore and tired eyes with reduced peripheral vision,
- Reduced awareness of surrounding environment,
- Affected judgement,
- Yawning and restlessness, fidgeting in your seat,
- Drowsiness, microsleeps, nodding off for a few seconds.

Causes of fatigue include:

- Working long hours,
- Prolonged night work
- Working irregular hours or shift work
- Little or poor sleep,
- Early start times or late finishes,
- Sleep apnea, poor driver health and inactivity,
- Emotional stress e.g., problems at home or at work,
- Lack of quality sleep or a sleep debt built up from regular insufficient hours of quality sleep.

Your body cannot fight the need to sleep. Chemicals build up in your brain until they reach a tipping point, and you will fall asleep. **The only cure or preventative measure for fatigue is sleep**.

General tips on managing driver fatigue:

- Get a **good night's sleep prior** to heading off on a long trip.
- Sleep at night is better than sleep during the day.
- Regular night sleep of seven to eight hours is the best way to manage driver fatigue.
- Try to avoid driving when you would normally be sleeping.
- Plan the trip and allow for plenty of rest breaks.
- **Resist** the **urge to continue** driving if you are feeling tired.
- Stop and take a break even if it is not scheduled.
- Share the driving wherever possible.
- Stay fit and healthy. Managing your weight with regular exercise and eating healthy foods.
- Avoid consuming any alcohol or eating a big or heavy meal as it contributes to driver fatigue.
   You <u>cannot</u> consume alcohol if you are going to drive a prescribed heavy vehicle.
- Try to relieve stress. Stress affects your driving.

**Note:** The National Heavy Vehicle Regulator (NHVR) administers heavy vehicle driver fatigue laws for heavy vehicles. Fatigue regulated vehicles, fatigue management programs and the National Driver **Work Diary**e detail during the face-to-face course.



Please watch these videos: <u>The Dangers of Driver Fatigue</u> Driver Safety – Fatigue

## Quiz 3 Knowledge Check

Note: You may need to refer to the Heavy Vehicle Driver's Handbook (pp 114 - 126) to complete this quiz. (HVDH can be accessed online) You will be given the answers in Module 1.

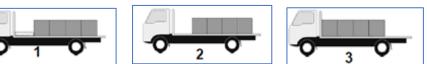
- 1. The truck shown in the diagram below is braking heavily. In what direction will the unrestrained load on the truck tray move?
  - a) Sideways
  - b) Backwards
  - c) Forwards



- 2. For vehicles with a GVM over 4.5 tonnes (excluding cranes) the vehicle width, including the load, must not be greater than
  - a) 1.2 metres
  - b) 2.5 metres
  - c) 3.2 metres
- Sheets and tarpaulins are not strong enough to hold down bulk loads unless the load is
  - a) Very light
  - b) Very wet
  - c) Very heavy
- 4. Which diagram shows the correct position for carrying loads with potentially dangerous projections?
  - a) Diagram 1
  - b) Diagram 2
  - c) Diagram 3



- 5. What is the maximum height of a car carrier, or a vehicle used to transport livestock?
  - a) 4.6 metres
  - b) 4.8 metres
  - c) 5 metres
- 6. In which diagram is the load NOT blocked?
  - a) Truck 1
  - b) Truck 2
  - c) Truck 3



- 7. You set out on a long trip. After a while you start feeling tired, but you are not scheduled to take a break yet. What is the **best** option for you?
  - a) Get plenty of fresh air circulating inside the vehicle by winding down your window.
  - b) Stop at a shop and get a drink that contains caffeine to help keep you awake.
  - c) Pull of the road, stop, and rest until you no longer feel tired. Total: /7





## **Driver Distractions**

Driving is a complex activity performed in an environment that is constantly changing. Despite this complexity, drivers often engage in additional activities that can take both their mind and their eyes off the road. A distracted driver is not only a risk to themselves, but they also endanger other road users.

Evidence demonstrates **inexperienced drivers** already have a **higher crash risk** and the risk increases with distractions.

It is difficult to have a simple conversation in complex driving situations such as driving at peak hour, on unfamiliar roads, at night and in wet weather. Similarly, it is difficult to have a complex conversation whilst performing a simple driving task as the conversation task demands a greater investment of the driver's attention.



Please watch the following video: <u>9 News - Bus Driver Using his Mobile Phone</u>

### **Driving in wet conditions**

Pre-drive **inspections and frequent maintenance** are essential before any trip especially during wet weather conditions.

Driving in wet weather can be dangerous as **wet roads reduce tyre grip** and can contribute to **loss of vehicle control**. Inspecting the condition of **tyres**, **brakes** and checking the **vehicle's lights are clean** and in working order can make all the difference.

You should drive at a speed that allows you to **brake gradually and stop** within the distance you can see. The safe speed for your vehicle and its load may be much lower than the posted speed limit.

Heavy Vehicles should drive at least 4 seconds behind the vehicle in front of you during ideal driving conditions. When conditions are poor you should double the following distance between your vehicle and the vehicle in front.

To avoid skidding, slow down when approaching corners to allow you to select the appropriate gear to maintain vehicle control without the need for braking in the corner (*this should be achieved prior to changing your direction*). Avoid braking, accelerating, or turning suddenly.

**Read Page 61** of the <u>Heavy Vehicle Driver's Handbook on jack-knife and trailer swing and watch the</u> <u>narrow escape on the South Eastern Freeway.</u>



**Aquaplaning** is the result of build-up of water between the road surface and your tyres causing them to lose contact with the road surface completely. If this happens, you may lose control of the vehicle. Reduce your speed and do not use cruise control.

#### Braking on Wet and Dry Roads

For example a heavy vehicle with a gross combination mass (GCM / GVM) of 40 tonne requires:

Vehicle Speed	Stopping Distance Dry Road	Stopping Distance Wet Road
(km/h)	(Approximate metres)	(Approximate metres)
60	78	84
80	123	147
100	177	238

A heavy vehicle with a GCM of 60 t requires:

Vehicle Speed	Stopping Distance Dry Road	Stopping Distance Wet Road
(km/h)	(Approximate metres)	(Approximate metres)
60	81	87
80	127	153
100	183	247

## **Driving Safely in Tunnels**

Things you need to be aware of before driving through a tunnel.

- Remove sunglasses (swap to untinted glasses if you require prescription lenses) before entering the tunnel.
- Turn on your head lights, so your vehicle is more visible.
- Avoid lane changing and overtaking while travelling through tunnels.
- Do not stop in a tunnel except in an emergency, try to drive out even if your vehicle is damaged or has a mechanical malfunction.
- Keep a safe distance behind other vehicles.
- Do not reverse in a tunnel.



A breakdown or other emergency in a tunnel:

- If possible, drive out of the tunnel; otherwise, try to stop in a left lane (right lane if you have to) but never the centre lane.
- Switch on your hazard lights and the two-way radio.
- Stay calm and remain in your vehicle unless there is a fire, and you are asked to evacuate.
- If you do have to get out, watch carefully for other traffic and move to either the walkway or in front of your vehicle. Never stand behind your vehicle.
- In an evacuation, look for the running man symbols and flashing lights for a safe exit point.

### **Common accidents and consequences**

It is important to understand different types of crashes and how to avoid them. Crash types include:

- Rear-end crashes.
- Single vehicle crashes such as running off the road, hitting a stationary object or rolling a vehicle over.
- Turning at intersection crashes
- Crashes when changing lanes and when merging or diverging.
- Head-on crashes



Reasons for a crash can vary, but may include:

- Alcohol and drugs
- Following another vehicle too closely
- Unsuitable speed for road conditions or lack of speed control
- Poor judgment selecting a safe gap in traffic when turning, crossing traffic, or changing lanes.
- Failure to check blind spots.
- Not scanning for hazards ahead, behind and to the side
- Mechanical failure

# Heavy Vehicle Competency Based Training and Assessment (CBT&A)

Heavy vehicle CBT&A is a **progressive assessment system** managed by an **Authorised Examiner**. It allows you to **learn at your own pace**, be trained and assessed in tasks from the Learner Guide and demonstrate you can drive competently in a range of conditions.

All heavy vehicles presented for the heavy vehicle training and assessment must be **currently registered**, be **roadworthy** and **loaded to at least 75 per cent** of the mass allowable for the vehicle to be driven on public roads (the legal mass limit).

If you obtain your licence in a vehicle fitted with an **automatic** or **synchromesh transmission**, you will be **restricted to driving these types of vehicles**. To have the condition removed you must pass a driving assessment in a vehicle fitted with the relevant transmission.

If you have **not** been successful in an assessment task you will be **retrained and reassessed** to assist you to achieve the required standard for that task to be signed off as competent.

All practical assessments need to meet the standard of **100% compliance with ARR** and minimum **80%** for **System of Vehicle Control**. A government officer may be present during any training or assessment session to audit the process.

For more information refer to the <u>Heavy Vehicle Driver's Handbook</u> and relevant Learner Guides at <u>www.sa.gov.au</u>.

## Complaints

- If the complaint is in regard to the standard of training or result of an assessment, discuss the issue first with your instructor/facilitator or the Registered Training Organisation (RTO).
- If you have been unable to resolve the matter and the complaint is in regard to the way the assessment was conducted or about the conduct of the instructor or RTO:
  - a. Email <u>dit.mdiadmin@sa.gov.au</u>
  - b. Lodge a complaint via the Department for Infrastructure and Transport (DIT) complaints webpage <a href="https://www.dit.sa.gov.au/contact\_us/compliments\_and\_complaints">https://www.dit.sa.gov.au/contact\_us/compliments\_and\_complaints</a>.

When lodging a complaint please provide the following information:

- Your details name, address, email, contact number and licence number.
- Your facilitators name and name of the RTO.
- An overview of what occurred including date, time, and location.
- What attempts have been made to resolve this issue with the facilitator or training organisation?
- If your enquiry or complaint is in relation to the business practice of the training organisation, including refusal to issue receipts for payments made, please contact Consumer and Business Services on 13 18 82 or via their website <u>www.cbs.sa.gov.au</u>.

For other types of enquiries or complaints, please refer to the following:

- For discrimination refer to the Equal Opportunity Commission by calling 8207 1977 or emailing eoc@agd.sa.gov.au;
- Allegations of criminal behaviour refer to the South Australia Police by calling 131 444.
- Allegations of corruption, misconduct and malpractice refer to the Independent Commissioner Against Corruption (ICAC)/Office of Public Integrity via phone 8207 1777 or email <u>admin@opi.sa.gov.au</u>; or

If your complaint relates to a nationally recognised qualification, contact ASQA (Australian Skills Quality Authority) via their online portal <u>www.asqa.gov.au/complaints/complaints-about-training-providers</u>.

## **Bribing People is Against the Law**

It is **illegal** to offer, request or accept gifts, rewards, money, or other favours in order to get a licence without passing the required assessments. Penalties are severe and include fines and imprisonment.

If you know or believe that someone has, or is about to get a licence by offering or responding to a request for a bribe - or if you suspect or know of any other corruption or misconduct involving an authorised examiner or an employee of the South Australian Government call the Independent Commissioner Against Corruption (ICAC) either by:

- Email <u>admin@opi.sa.gov.au</u>,
- Phone 1300 782 489 or 8207 1777, or
- Written complaints can be sent to GPO Box 11066, Adelaide, South Australia 5001.

