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MINIMISING RISKS AND MANAGING EMERGENCIES IN THE TRANSPORT INDUSTRIES

Session 2 – Objective 3.5

Ability to assess emergency situations

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> SESSION 2 OBJECTIVES

Objective heading

Ability to assess emergency situations.

Directive text

Behaviour in emergency situations: assessment of the situation, avoiding complications of an accident, summoning assistance, assisting casualties and giving first aid, reaction in the event of fire, evacuation of occupants of a lorry/bus passengers, ensuring the safety of all passengers, reaction in the event of aggression: basic principles for the drafting of an accident report.

Training Aim

On completion of this module you will be able to:

1. Assess the situation and name the correct procedure to prevent further damage or injuries.
2. Apply the basics of first aid.
3. Explain how a fire develops and determine the risk for explosion.
4. Describe the risks of accidents and incidents for society.
5. Fill in an accident report and give an oral report.
6. Describe the procedure when, how, to react when confronted with an accident or incident.
7. Describe how injuries can affect the human body.

SECTION A. DEALING WITH EMERGENCIES.

Dealing with emergencies that can occur in your role as a professional driver. Emergencies are those situations in which only your quick response can prevent a crash. These emergencies can occur in all kinds of ways. The following paragraphs give the most common types of emergencies that people who drive buses and trucks can find themselves in.

TRAFFIC EMERGENCIES

Traffic emergencies happen when you and another object are about to end up in the same place at the same time.

EMERGENCY BRAKING

If someone pulls out in front of you, it is a natural response to brake. This is a good response if there is enough distance to stop and you use your brakes the right way.

The following sections look at these key areas, and look at what a professional driver can do to prevent or avoid these potential emergencies. We will also look at what to do if the actual emergency arises.

Braking the proper way

You need to brake in a way that will keep your vehicle in a straight line and allow you to turn if you have to. The best way of doing this is:

- Apply your brakes just hard enough to almost lock the wheels;
- If the vehicle starts to skid, release the brake so the vehicle straightens out;
- As soon as the wheels start rolling, apply the brakes again a bit more gently.

It takes time for the wheels to start rolling again after you release the brakes. If you use the brakes again before the wheels are rolling, the vehicle will not straighten out.

Do not jam on the brakes. Emergency braking does not mean stepping on the brake pedal as hard as you can. This will only lock the wheels causing a skid making matters worse and possibly causing your load to shift. If you are in a skid, you cannot control the vehicle, and you probably will start going sideways. Proper braking will prevent this and allow you to stop in the shortest possible distance.

Correct use of ABS

The onus is on the driver to firmly establish if any vehicle and or trailer he is operating is equipped with ABS.

If a vehicle is fitted with an ABS, a warning lamp will be illuminated when the 'ignition' is switched to the on position. After a short period of time or on some vehicles, once the vehicle is driven to a speed of 5 to 10km/h, the lamp should go out. If this does not happen the system is registering a fault, which should be reported to an appropriate person.

Under heavy braking or braking on slippery surfaces, if the ABS is activated the driver will feel a 'pulsing' in the brake pedal. This pulsing is the result of the brake modulator increasing and decreasing pressure in the system. If this pulsing sensation is felt, it is important that the driver keeps the brake pedal fully depressed. Keeping the brake pedal fully depressed will ensure that maximum braking effort is applied to the road wheels.

Emergency braking with ABS

If your vehicle is equipped with an anti-lock braking system and you're faced with an emergency braking situation apply maximum force to the brake pedal, maintaining this force. You shouldn't "pump" the brake pedal as this will reduce the effectiveness of the ABS system.

Emergency braking without ABS

If your vehicle doesn't have ABS, wheel lock can be controlled during heavy decelerations by cadence braking. In this instance to alter the course of your vehicle and perhaps avoid a collision the road wheels must be allowed to rotate. The greatest degree of control is gained by pumping the brakes rhythmically (cadence braking). Brakes are most effective when they are on the point of locking, so each time the brake is pumped hard, maximum braking effect takes place, then when the brakes are released the wheels rotate and steering control is regained. Therefore cadence braking gives a combination of: "braking while the brakes are on" and "steering while they are off".

Remember: pump the brakes with a deliberate movement, pausing momentarily at the full extent of brake pedal travel; avoid bouncing the foot on

and off the pedal.

ABS and Trailers

If the vehicle being driven is the drawing unit for a trailer, it should display two ABS lamps when the ignition is switched on. These lamps may be marked for example ABS I and ABS II. When the 'ABS Suzie' is connected both of these lamps should be extinguished after a short period or once the vehicle is driven.

Older trailers may not be equipped with an ABS, and if connected to a drawing unit with ABS, may cause a fault to be registered.

If this occurs, it must be understood that there is an increased possibility of trailer swing if heavy braking is required. This would occur when the drawing unit's brakes, controlled by the ABS stop correctly, but the trailer wheels lock – causing the trailer to swing to either side of the drawing unit. The fitment of an ABS to heavy vehicles drawing trailers has significantly helped to reduce the occurrences of 'jack-knifing' because of the drive wheels locking under braking.

Notes: The primary function of an ABS is to maintain directional control of the vehicle. In normal conditions, the ABS should not engage if the vehicle is being driven correctly. It will only activate in adverse road conditions or under emergency braking. A vehicle fitted with an ABS should not be driven faster or braked harder. If the ABS is activated, keep the brake pedal fully depressed.

The Anti-Lock Braking system does not shorten stopping distances.

Checking ABS

It's important to ensure that the ABS is functioning before setting off on a journey.

Driving with a defective ABS may constitute an offence. Modern anti-lock braking systems require electrical power for their operation. Multi-pin connectors are required to carry the electrical supply to operate the trailer brakes.

The satisfactory operation of the ABS can be checked from the warning signal on the dashboard. The way the warning lamp operates varies between manufacturers, but with all types of signal it should be displayed when the ignition is switched on and should go out no later than when the vehicle has reached a speed of about 10 km/h (6 mph).

Overview of combination possibilities

	ABS EBS	ABS	EBS
ABS EBS	✓	✓	✗
ABS	✓	✓	✓
EBS	✓	✓	✓

regarding combination braking systems.

Electronically (controlled) Braking System (EBS)

The EBS integrates and enhances the ABS in a vehicle. As the title suggests it controls the braking function electronically. With the EBS, the brake pedal in effect becomes an electric switch, which transmits a signal to the ECU, Electronic Control Unit. This ECU then assesses the signal received from the pedal actuation, and instructs a brake modulator to apportion braking pressure to all wheels individually. Braking pressure is also controlled and apportioned to any trailer being drawn at the time. As the EBS fully integrates an ABS facility, it performs the same functions in respect of steering control as detailed in the previous section.

In addition to an ABS function, EBS may also provide monitoring of brake lining wear and automatically balances the distribution of braking effort between axles depending on the load on that axle. Because the EBS is electrically operated, the 'activation time' from the driver pressing the brake pedal to the wheels decelerating is greatly reduced. Conversely, the brakes are also released faster and in a more even fashion, helping to reduce drag when moving away from a stop.

Notes:

Some advantages of EBS:

- Faster response times for brake activation
- Even brake force application to individual road wheels
- Balanced braking effort across axles
- Constant monitoring of brake lining wear rates
- Quick release of brakes to reduce drag when moving off
- Controlled uniform braking reduces lining wear rates, and therefore downtime
- Integrated ABS to enhance directional control

- Automatic tractor and trailer compatibility

Endurance Braking Systems. (Retarders).

These systems provide a way of controlling the vehicle's speed without using the wheel-mounted brakes (service brakes/footbrake). They operate by applying resistance, via the transmission, to the rotation of the vehicle's driven wheels; this may be achieved by;

- Increased engine braking.
- Exhaust braking.
- Transmission-mounted electromagnetic or hydraulic devices.

Endurance brakes can be particularly useful on the descent of long hills, when the vehicle's speed can be controlled without using the service brakes.

The system is sometimes designed to operate either with the service brake (integrated) or by using a separate hand control (independent).

Always follow the manufacturer's instructions in the use of any type of endurance braking systems.

Skids

Skids occur when tyres lose their grip on the road. Skids are caused by:

- Over-braking – when you apply the brakes too hard and lock the wheels;
- Over-steering – when you turn the wheels more sharply than the vehicle can turn;
- Giving too much power to the drive wheels, making them lose grip and spin.

Most skids result from driving too fast for road conditions. If you adjust your speed to suit the road conditions you will not get into a skid.

Drive wheel skids

The most common sort of skid is where the drive wheels lose traction because the brakes have been applied too hard or the drive wheels given too much power, causing them to spin and lose grip. This usually happens on slippery surfaces. It can be stopped by easing off the accelerator.

Drive wheel braking skids

These happen when you put too much pressure on the brake pedal for the road conditions. The drive wheels lock and the vehicle skids.

In a rigid vehicle, the whole vehicle will slide sideways. A rigid vehicle with trailer attached will be even more difficult to control and correct.

Front wheel skids

In a front wheel skid, the front end tends to go straight ahead, no matter how you turn the steering wheel. If the surface is slippery you can fail to make it around a turn or a bend.

When you have a front wheel skid, release the brakes and make sure the wheels are turning before using the brakes again.

Excessive speed is the main cause but another contributing factor may be poor loading of the vehicle.

Evasive steering

Stopping may be the safest thing to do in an emergency. When you don't have enough room to stop, you will have to steer and try to turn away from whatever is in your path.

Remember, you can often turn more quickly than you can stop. But also remember that a heavy vehicle will tend to continue in a straight line, because of its mass and momentum.

Keep both hands on the steering wheel. In order to be able to turn quickly you must have a firm grip on the steering with both hands. If you don't, you may not be able to exert enough force to turn the wheel quickly. The only way to ensure having both hands on the wheel in an emergency, is to have your hands on the wheel at all possible times.

Jack-knifing

The term Jack-knifing is commonly used to describe a particular type of incident which relates solely to vehicles towing trailers. Therefore it relates to all vehicles in classes BE, CE and DE. A Jack-knife occurs when the drive wheels of the drawing vehicle lose adhesion with the road. This may occur for one of two reasons - when the drive wheels spin, or when the drive wheels lock-up.

The two causes of vehicle Jack-knife, are separate and distinct. The first is called a '*Power Jack-knife*' and the second is called a '*Brake Jack-knife*'.

Power Jack-knife

A Power Jack-knife occurs when the drive wheels on the drawing vehicle spin excessively. This causes tyre adhesion with the road to be lost, and the tractor unit will be turned into the side of the trailer. Common places for a Power Jack-knife to occur are when negotiating a roundabout, or when heavy acceleration is applied when overtaking. Road conditions and the weight of the vehicle can increase the potential for a Power-Jack-knife.

Conditions such as ice, mud, or an oil spill can cause the wheels to spin even at low speeds. It is possible to recover from a Power Jack-knife, by releasing the throttle and correcting the steering, then gently re-applying the throttle.

Brake Jack-knife

A brake jack-knife is caused by the drive wheels on the tractive unit locking under excessive braking. The trailer then pushes through to either side of the tractive unit. The possibility of recovering from a Brake jack-knife is remote. As with the Power-Jack-knife, road conditions also play an important part in the possibility of this happening.

Trailer Swing

Trailer swing is often confused with Jack-knifing, however the causes and effects are different. Trailer swing occurs when the trailer wheels lock under braking. What results from trailer swing is that the tractive unit stays straight and the trailer comes around to meet the truck. If this occurs, the trailer will swing across the road in front of oncoming traffic or move to mount the near side footpath.

Emergency steering techniques

A quick turn can be made safely, if it's done the right way. Here are some points:

- Use a steering method that allows quick and accurate control of the steering wheel.
- Do not brake while you are turning. It's very easy to lock your wheels in a turn. If that happens, you'll be skidding out of control before you realise it.
- Don't turn any more than needed to clear whatever is in your way. The more sharply you turn, the greater the chance of a skid or a rollover, or dislodging the load.
- Be prepared to counter steer. That is turn the wheel back in the other direction, once you've passed whatever was in your path. Unless you

are prepared to counter steer, you won't be able to do it quickly enough. You should think of emergency steering and counter steering as two parts of the one driving action.

- Always keep those steering movements to the minimum required to avoid the obstacle.

Where to steer

If an oncoming driver has drifted into your lane, take evasive action as necessary. Realising what has happened, the other driver's natural response will be to return to his/her own lane.

If a vehicle has stopped in your path, the best escape route will depend upon the situation.

If you have been using your mirrors, you'll know which lane is empty and can be used safely. **If not check!**

If the shoulder on the left side is clear, that may be your best bet. No one should be driving on the shoulder but someone may be overtaking you on the right. Again, you will know this if you have been using your mirrors as you've been driving.

Leaving the road

In some emergencies, you might have to leave the road. Almost all drivers are fearful of driving on an unpaved shoulder. But it's better than colliding with another vehicle.

Most hard shoulders are strong enough to support the weight of a large vehicle. They can be an escape. Here are some guidelines if you have to leave the road:

- Brake gently. If possible, avoid using the brakes until your speed has dropped. Then brake very gently to avoid skidding if there is a loose surface.
- Stay on the hard shoulder. If the shoulder is clear, stay on it until your vehicle has come to a stop. Check your mirrors and signal before pulling back onto the road.

Returning to the road

If you are forced to return to the road before you can stop, use the following procedure:

- Keep minimum power on to aid your steering;
- Try to ease back onto the road gradually;
- Be careful in case your tyres grab unexpectedly and your vehicle is pushed across the road;
- Be ready to counter steer.

Mechanical Emergencies

There are some emergencies which can be very dangerous:

- Brake failure
- Tyre failure

Brake failure

Brakes kept in good condition rarely fail. Most brake failures occur for the following reasons:

- Loss of air pressure
- Loss of hydraulic pressure
- Brake fade on long hills
- Poorly maintained brakes

Loss of air pressure

At all times when driving you should make sure that sufficient air pressure is available by regularly checking the gauges. A loss of air pressure can be caused by a leak in the air system or by a faulty compressor. A warning buzzer or light will indicate that the pressure has fallen to a dangerously low level. If this happens, stop as soon and as safely as you can.

- The first thing to do is change down gears. This will help in two ways. It will cause engine compression to slow the vehicle. It will also increase engine speed and cause the air compressor to work harder. This will then supply more air to the brake system.
- Keep changing down for as long as it is safe to do so.
- Once your vehicle is moving slowly, apply the brakes. If the air supply is gone, the emergency brakes will come on and bring the vehicle to a stop. Be prepared for the wheels to lock and skid. If you have time try to ensure that you stop off the road in a safe place.

Loss of hydraulic pressure

Not all vehicles with hydraulic brakes have emergency braking systems. If your vehicle is one of these, when hydraulic brakes fail, you will have to bring your vehicle to a stop by other means.

Here are some things you can do:

- Change down gears. This will help to slow down the vehicle.
- Pump the brakes. Sometimes pumping the brake pedal will produce enough hydraulic pressure to stop the vehicle.
- Use the parking brake. The parking brake is separate from the hydraulic brake, so it can

be used to slow the vehicle. Be sure to press the ratchet release button if fitted, and keep it pressed at the same time you use the brake. You can then adjust the brake pressure and stop the wheels from locking.

- Find an escape route. While slowing down, try to find an escape route. It could be a driveway, an open paddock or a side street.

Brake fade on long hills

On long downhill stretches brake drums can become very hot due to prolonged usage. They then expand and the brake shoes can no longer make effective contact with them, which is why brake fade occurs.

Being in the proper gear and braking properly, including the use of endurance brakes will prevent most brake failures on long hills. But if the brakes have failed you will have to look outside your vehicle for something to stop it.

- If there's a escape lane, road signs will tell you about it. Use it.
- If there is no escape lane, take the best escape route you can, such as an open paddock, or a side road that flattens out or turns uphill.

Poorly maintained brakes

The correct solution is to make sure your brakes are always maintained properly and checked regularly.

Tyre Failure

Tyre failure on one of the drive wheels or trailer wheels will not usually cause a crash. Failure of one of the front tyres could cause a loss of steering control.



To avoid tyre failure, check your tyres regularly during a trip.

There are some important things that safe drivers do to handle a tyre failure safely. They are:

- Know the signs that a tyre has failed;
- Grip the steering wheel firmly with both hands;
- Stay off the brakes.

Recognise tyre failure signs. If you know that you have a tyre failure, you can do the right thing and do it quickly. The main signs of tyre failure are:

- **Sound.** Although many tyre failures cannot be heard, the loud bang of a blow out is an

easily recognised sign. Many bus and truck breakdowns involve tyre failures or blow-outs. Not only are these dangerous in themselves by causing loss of control, but the resulting debris also presents a hazard to other road users.

- **Vibration.** If the vehicle thumps or vibrates heavily it may be a sign that one of the tyres has gone flat. With a rear tyre, this may be the only sign you get.
- **Feel.** If the steering feels “heavy”, it is probably a sign that one of the front tyres has failed.

Any of these signs should be a warning of a possible tyre failure.

If your tyres have failed, you should:

- **Grip the wheel firmly.** When a front tyre fails, it can twist around the rim, exerting such a powerful force that it could snatch the steering wheel out of your hands. The only way to stop this happening is to have a firm grip on the steering wheel with both hands. Keep your thumbs out from under the spokes of the wheel. Your thumbs could get broken if the steering wheel snaps around before you can get control of it. The best way to ensure that you have a firm grip when a front tyre fails is to keep a firm grip on the steering wheel at all times.
- **Stay off the brake.** It’s natural to want to brake in an emergency. However in a tyre failure it could make wheels lock up and result in a skid. Stay off the brakes until the vehicle has slowed down. After you’ve slowed down, brake very gently, pull off the road, and stop.
- **Check the tyres.** After stopping, get out and check all the tyres. Do this every time you stop even if the vehicle seems to be handling correctly. If one of your dual tyres deflates, the only way you may know, is by getting out and checking it.

Forced Air Suspension. (Compressor/Air-bags)

Air-bag failure on any of the axles of a truck, trailer, or bus may not in itself cause a crash. Failure of an air-bag can cause the vehicle to become unstable due to the shift in weight, and

can place additional pressure on the remaining air-bags in the suspension system. Air-bags have similar characteristics to tyres when they blow. A common cause of an air-bag blow-out can be attributed to equipment that has been left lying up for long periods of time without use. This can lead to problems such as perished/perforation of the rubber compound causing a weakness in the wall of the air-bag. Air-bag blow-outs are rare in comparison to tyre blow-outs. In the event of an air-bag blow-out it is recommended to pull the vehicle in to a stop in a safe place as soon as possible. Extreme caution should be taken if examining the condition of the remaining air-bags, in case of another blow-out. An air-bag blow-out can lead to serious injury if a driver is in close proximity when it blows.

It is also likely to deposit debris on the road which can cause a hazard for other motorists.

The signs that an air-bag has blown are:

- **Sound** - the loud bang of an air-bag blow-out is easily recognisable. It is almost identical to that of a tyre blow-out. Many drivers at first assume it must have been another vehicle, but it is recommended that drivers stop and check their own air-bags and tyres.
- **Vibration**- If the vehicle seems to shudder, thump or vibrate heavily it may be a sign that one of the air-bags has blown out.
- **Angle/Lean/Tilt**- if the vehicle is carrying a heavy load or is a high-sided vehicle the driver may notice the vehicle leaning to one side. An air-bag blow-out will put increased pressure on the remaining air-bags.

The driver and emergencies

In summary it is vital that you, as a professional driver, understand your responsibility to ensure that you manage each emergency situation in which you find yourself, in a professional and calm manner. It is important to keep your skills and knowledge up to date on all the key areas that are important in the driving career of a professional driver.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to help assess your understanding of the module so far:

Q.1 What causes trailer swing?

Your Response

Q.2 What should you do if you have a front wheel blow-out?

Your Response

Q.3 What is the difference between a Power Jack-Knife and a Brake Jack-Knife?

Your Response

Q.4 How would you know if an air-bag has blown?

Your Response

Q.5 Describe the difference between ABS and EBS.

Your Response

Q.6 What is the correct procedure for braking in case of emergency?

Your Response

Q.7 When should you use an Endurance Brake?

Your Response

Q.8 What are the main causes of skidding?

Your Response

Q.9 Should a tractive unit without ABS or EBS be used with a trailer fitted with EBS?

Your Response



SECTION B – CORRECT BEHAVIOUR AT THE SCENE OF AN ACCIDENT.

The chain of help begins with those who are present or who arrive first at the scene of a crash. Lay bystanders can also play an important role in various ways.

What drivers must do at an accident or in an emergency

- If you are involved in an accident, you must stop your vehicle and remain at the scene for a reasonable time. If vehicles are blocking the roadway or posing a danger to other road users, the roadway should be marked and the vehicle should then be removed as soon as possible.
- If you are asked by a Garda, you must give your name and address, the address where the vehicle is kept, the name and address of the vehicle owner, the vehicle's registration number and evidence of insurance, such as the name of your insurance company or a disc or motor insurance certificate. If there is no Garda at the scene, you must give this information to any person involved in the crash or, if requested, to an independent witness.
- If you or another person are injured and there is no Garda at the scene, the accident must be reported to the nearest Garda station.
- If the accident damages only property and there is a Garda in the immediate vicinity you must report it to the Garda. If there is no Garda available you must provide this information to the owner or the person in charge of the property. If, for any reason, neither a Garda nor the owner is immediately available you must give all relevant information at a Garda station as soon as reasonably practicable.
- You are advised to carry an accident reporting kit containing a disposable camera with built-in flash, a measuring tape, a torch, a pen and a blank accident report form. Photographs taken by a digital or phone camera are not normally accepted as evidence by the Courts.
- Take care when moving damaged or broken-down vehicles and make every effort to warn oncoming traffic of the accident.
- You can warn other road users by using your hazard lights.
- If you need to ask for another road users help to warn traffic, do so right away.
- If you have a reflective advance-warning triangle, (heavy vehicles and buses must have one), place it on the road far enough from the scene of the accident to give enough warning to approaching traffic.
- When placing a triangle you should take account of prevailing road conditions, traffic speed and volume. This is particularly important on dual-carriageways. Do not place any device such as a triangle on a motorway as it is too dangerous.
- If the breakdown occurs near a bend in the road, make sure you give warning to traffic on both sides of the bend.
- Leaking fuel from a crashed vehicle is dangerous, so be careful approaching any vehicle after an accident.
- Carry a high visibility vest or jacket and a torch in your vehicle. If there is an accident, wear the vest or jacket and use the torch to alert other road users of your presence.



What to do if you arrive at the scene of an accident

Do's ✓	Don'ts ✗
<ul style="list-style-type: none"> • Do remain calm. 	<ul style="list-style-type: none"> • Don't panic – assess the situation before taking action.
<ul style="list-style-type: none"> • Do switch off the engine and apply the handbrake. 	<ul style="list-style-type: none"> • Don't stay at the scene if there are enough people helping and keeping it under control.
<ul style="list-style-type: none"> • Do use a reflective advance-warning triangle if available. 	<ul style="list-style-type: none"> • Don't get injured yourself – park your vehicle safely out of the way.
<ul style="list-style-type: none"> • Do switch on hazard warning lights and parking lights. 	<ul style="list-style-type: none"> • Don't move an injured person unless there is a risk of fire or of the vehicle turning over.
<ul style="list-style-type: none"> • Do make sure you are safe as you try to help others. 	<ul style="list-style-type: none"> • Don't attempt to lift a car off an injured person without help.
<ul style="list-style-type: none"> • Do make sure others are safe, however you should keep any injured people warm, by placing coats or rugs around them. 	<ul style="list-style-type: none"> • Don't remove helmets from injured motorcyclists. Neck injuries are common in motorcycle collisions, and any attempt by inexperienced people to remove the helmet may leave the injured person paralysed from the neck down.
<ul style="list-style-type: none"> • Do organise bystanders to warn oncoming traffic from both directions, if this has not already been done. Be particularly careful at night so that people giving help are visible (by wearing reflective armbands or bright clothes or carrying lit torches). 	<ul style="list-style-type: none"> • Don't allow anyone to smoke at, or close, to the scene.
<ul style="list-style-type: none"> • Do call for help. Contact the emergency services on 999 or 112. 	<ul style="list-style-type: none"> • Don't give an injured person anything to eat or drink.

NOTE: Do not attempt to place any type of advance warning device on a motorway

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to help assess your understanding of the module so far:

Q.1 Name 4 things you should do if you arrive at the scene of an accident.

Your Response

Q.2 Why should you carry a disposable camera in your bus or truck.

Your Response

Q.3 Should you remove the helmet from an injured motorcyclist?

Your Response

Q.4 Where should you place a red reflective triangle at the scene of a crash?

Your Response

Q.5 If a person is injured in an accident, who must it be reported to ?

Your Response

SECTION C – VULNERABLE ROAD USERS.

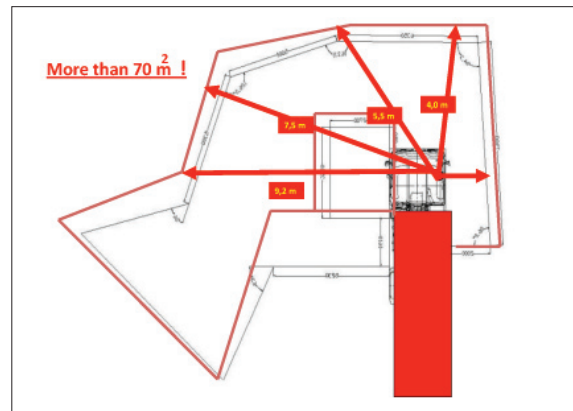
Professional driving standards should be practiced by the driver at all times. The professional driver should drive at all times with anticipation and awareness. By acting in this way he/she reduces the risk of being involved in an accident. A bus or truck can create a vacuum or a slip-stream effect when travelling at speed. Drivers of large/ heavy vehicles should know the effects their vehicle can have on more vulnerable road users such as pedestrians or cyclists.

Blind spot crashes for motorcyclists and cyclists

Each year a number of fatalities and serious crashes occur on Irish roads involving motorcyclists and cyclists. While there are many dangers for these particular groups one of the biggest can be attributed to the sharing of road space with much larger vehicles (trucks and buses). Drivers of large vehicles need to take into account that motorcyclists and cyclists may be more difficult to see because of their relatively small frontal area (narrow profile) when compared to cars and other vehicles. The field of vision (the area seen by the driver) can be reduced greatly in larger vehicles due to the design of the vehicle which can result in unavoidable blind spots.

Some of the causes of blind spot crashes can be;

- High trucks that do not have the appropriate mirrors fitted (Cyclops/front view mirror / passing-clearance mirror over passenger door)
- Drivers not making best use of the available mirrors or they are not correctly adjusted.
- A lack of due care and attention by either party.
- The mirror assemblies may cause blind spots.
- Because of blind spots on trucks or buses, motorcyclists and cyclists may not be immediately visible.



The fitting of Cyclops or front-view mirrors on trucks is mandatory from October 1st, 2012.

Young pedestrians and cyclists

Most crashes involving children occur in the late afternoon, when they are either walking back home or playing outside. Several studies have shown that most of the fatalities occurred when the children were running or not paying attention at the time of the crash.

More than average crash opponents are cars for young pedestrians, and heavy vehicles (vans and trucks) for young cyclists. Collisions between cyclists and heavy goods vehicles include the well known crash scenario where the cyclist is in the blind spot of a truck or bus that is turning right or turning left into a junction.

While all children are vulnerable, some children are more at risk than others. There is some evidence of a gender correlation between road safety behaviour and crash involvement. In the United Kingdom,

crash patterns for pedestrians reveal a consistently higher rate of incidence for boys than for girls under age 12. In the 5-11 age groups twice as many boys are likely to be killed or severely injured than girls. In the Netherlands, 64% of the traffic victims under 14 are boys. Teenage male cyclist fatalities exhibit a similar pattern.

Elderly pedestrians and cyclists

An important cause of the high fatality rate of older cyclists and pedestrians is the physical vulnerability of elderly people.

Since their bones are more brittle and their soft tissue less elastic, they are at higher risk of severe injury, even if the crash forces are the same.

At the same time, the elderly have a higher chance of being involved in a crash because locomotive functions deteriorate with increasing years. This deterioration generally consists of slower movement; a decrease of muscular tone, a decrease in fine coordination, and a particularly strong decrease in the ability to adapt to sudden changes in posture (keeping balance). This latter aspect is particularly important for cyclists and pedestrians, but also for public transport users. Older pedestrians are over-represented in crashes at intersections, particularly those without traffic signals, and being struck by a turning vehicle. They are also over-represented in crashes when they are crossing mid-block sections of roads, particularly on wide multi-lane roads, in busy bidirectional traffic. Pedestrian accidents in which no moving vehicle is involved also occur more frequently among older pedestrians. However, these accidents are not included in the definition of road accident and are, therefore, heavily underreported or not included in accident databases at all. Older cyclists are more often involved in crashes with passenger cars than other cyclists. In many of these cases, the cyclist had to cross a multi-lane road. This crash type resembles the crash type that is over-represented among older car drivers: while turning; the older driver collides with oncoming traffic with right of way on the main road. Negotiating an intersection clearly represents a “testing of the limits” type of task; it requires a host of age-sensitive functions while simultaneously limiting the usefulness of normal safe driving strategies such as anticipating oncoming traffic.

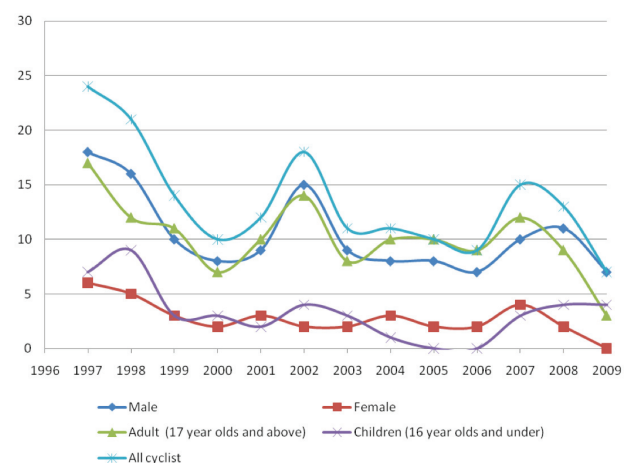
Cyclists Road Collision Facts

Over the period 1997-2009, 175 pedal cyclists have been killed on Irish roads. This represents 3.6% of

all fatalities on Irish roads between 1997 and 2009. An additional 444 cyclists were seriously injured over the same period.

Overview

- Cyclists not wearing a helmet have a risk of being killed on the road that is approximately two times the risk of those wearing a helmet
- 64.5% of cyclists killed were involved in a collision with a car
- 24% of cyclists killed were involved in a collision with a HGV
- 31.4% of the cyclists were killed in County Dublin
- 22.3% of the cyclists were killed in Dublin City
- 30.9% of the cyclists were killed during evening rush hour (4pm-6pm)
- 34.9% of the cyclists were killed during the months (July, August and September)
- 79% of the cyclists were male
- 24.6% of the cyclists were aged 16 or under
- 13.7% of pedal cyclists killed were male aged 10-16 years
- 51.4% of cyclists road deaths occurred on rural roads (roads with speed limits exceeding 60km/h)
- 67.4% of cyclists road deaths occurred during daylight hours



Number of cyclists road deaths between 1997 and 2009 by age and gender.

Motorcyclists Road Collision Facts;

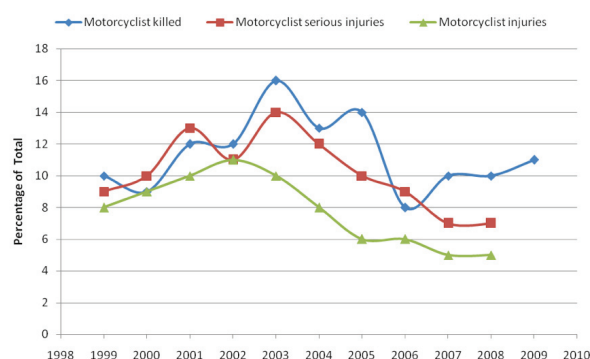
Motorcycles make up only 2% (approx) of all vehicular traffic yet they accounted for approximately 11% of all fatalities in 2009;

this percentage has been constant over the previous 2 years. From 2000-2005 the trend was higher reaching 16 % in 2003. So reducing, and maintaining, a low level of fatalities among motorcycle users will do much to contribute to achieving the national target.

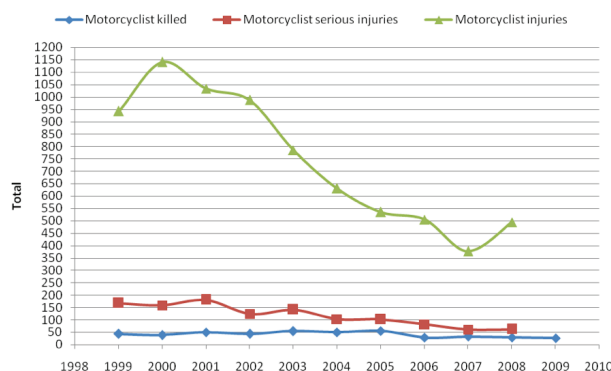
Overview

- Over the Period 1997-2009, 560 motorcyclists have been killed on Irish roads.
- Motorcycle road deaths have reduced by 60% over the period 1997-2009.
- 63% of motorcyclists killed were male aged 17-24

The percentage of Total Road Casualties, 1999-2009



Trend in motorcyclist Casualties, 1999-2009



Fatality rates for Motorcyclists

	2009	2010	2011 provisional
Killed	25	17	17
Rate killed per billion vehicle km	78.1	55.1	57.4
Rate killed per 10 000 vehicle	6.3	4.5	4.6

Recent developments in fatality trends

Road User Type	2009	2010	2011	2011-2010	2010-2009
Pedal Cyclists	7	5	9	80%	-29%
Motor Cyclists	25	17	17	0%	-32%

Campaigns aimed at other road users likely to encounter Motorcyclists and Cyclists

It is crucial that all road users and in particular drivers of large vehicles are aware of the presence, behaviour, needs and vulnerability of motorcyclists and cyclists. The behaviour of the three road user groups cannot be treated in isolation, however, as the non – standard behaviour of motorcyclists (faster acceleration and overtaking, coupled with riding on the offside in queuing traffic) or the cyclist who might take advantage of the space that has been created by the “HGV” driver trying to make a tight left turn, can in some circumstances be unexpected or unnoticed by the truck or bus driver with potentially fatal results.

Other road users

Drivers need to realise and accept that other road users aren’t always aware of the extra room or time the driver of a large vehicle needs due to the size of their vehicle. Others may make mistakes too.

Pedestrians in general

Near the edge of the kerb, they are especially vulnerable to the danger of being drawn under the wheels of your vehicle or any trailer. Drivers must be constantly anticipating the actions of other road users.

Learner Drivers

As they aren’t used to all driving situations, learner drivers may be affected by a closely following bus or truck. They may be driving at a slow speed or they may be hesitant. Be patient and give them sufficient room. Professional drivers have an ideal opportunity to lead by example in this regard.

Young children

Young children are especially impulsive and may run onto the road suddenly. If drivers are passing pedestrians who are on the path particularly close to the kerb, then they should be aware that the size of their vehicle may cause a vacuum which could destabilize a child. Drivers must always pay particular attention to the nearside mirrors as they are passing by.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to help assess your understanding of the module so far:

Q.1 Why are elderly pedestrians more vulnerable on the roads.

Your Response

Q.2 What should you watch out for where children are playing near the road.

Your Response

Q.3 Is it harder or easier to see motorcyclists on the road? Explain.

Your Response

Q.4 What can a driver do to reduce blind spots.

Your Response

Q.5 How many motorcyclists were killed on Irish roads between 1997 and 2009.

Your Response

SECTION D – HOW TO AVOID CONTRIBUTING TO AN ACCIDENT.

If you suspect that there's something wrong with your vehicle, don't be tempted to carry on driving. You could end up causing traffic jams if your vehicle eventually breaks down in an awkward place. A minor problem could turn out to have major effects. For example, a broken injector pipe dripping fuel onto a hot exhaust manifold may only seem to be a slight engine hesitation to the driver. However, this problem has been known to cause fires in which the vehicle was completely destroyed.

Breakdowns - If your vehicle breaks down, try to stop as far to the left as possible. If you can, get off the main carriageway without causing danger or inconvenience to other road users, especially pedestrians. In a bus, move your passengers as far forward in the vehicle as you can. This should help to limit injuries if another vehicle runs into the back of yours. Some form of warning is vital if an electrical problem has put the rear lights out of action. Place a warning cone, pyramid or reflective triangle an appropriate distance behind the vehicle on normal roads. However, do not attempt to place any type of warning device on a motorway.

Don't attempt to work on the right-hand side of the vehicle unless protected by a recovery vehicle with flashing amber beacons. Even then, take great care on roads carrying fast-moving traffic. Many accidents happen at breakdowns. Protect yourself, your passengers and your vehicle.

Assessing the dangers - If your vehicle is creating an obstruction or is a potential danger to other road users tell the Gardaí as soon as possible. This is particularly important if your vehicle is carrying passengers. Their safety must come first. If you think that there's a serious risk of collision, escort your passengers off the bus. Ensure that they wait somewhere well away from the traffic. Explain carefully what you're doing and ask people to go for help if necessary. Make sure that you:

- Know where all your passengers are;
- Know what they're doing;
- Keep them informed;
- Don't leave them, unless absolutely necessary.

Long Distances - If you are driving long distances or on overnight services, you must know what to do if you break down and require a replacement vehicle for your passengers, or the attendance of a breakdown or recovery vehicle.

If you are an operator, even if you only have one vehicle, you must be prepared for anything that might happen.

Under no circumstances must passengers be left stranded.

Vehicles that break down on a motorway must be removed as soon as possible for safety reasons.

Safe driving

Drive at all times with anticipation and awareness. By driving defensively you lessen the risk of an accident. However if you're involved in, or have to stop at, an accident, you should act decisively and with care to prevent any further damage or injury. Ultimately, your own safety and that of others must be your first concern. Stay alert and try to anticipate the actions of other road users. You need to understand how your vehicle will affect other road users, especially:

- Cyclists
- Pedestrians
- Motorcyclists

Cyclists and pedestrians standing on the edge of a kerb are more vulnerable to being hit by your mirrors or being drawn under your wheels.

You can remove most of the risk by:

- Concentrating
- Driving safely and sensibly
- Staying alert
- Being fully fit
- Planning well ahead
- Observing the changes in traffic conditions
- Driving at a safe speed to suit the road, traffic and weather conditions
- Keeping your vehicle in good overall condition
- Make sure that you are not distracted.
- Not rushing
- Avoiding the need to act hurriedly.

If you're involved in an accident **you must stop**. It's an offence not to do so.

Driver's Guide To Tiredness

"It was early evening and I'd been on the road for a couple of hours. I was due a rest break, but the road was clear so I was keen to push on, my drop was only 20 kilometres away. I felt relaxed, but my mind was wandering and I found it difficult to

concentrate. My eyes started to close and I had to struggle to keep them open. So, I wound down the window and turned up the radio to wake up a bit. The next thing I knew I was in hospital

I'd fallen asleep at the wheel and ended up in a field. Luckily no one was seriously injured, but it could have been so much worse."

Parts of that story will be familiar to most drivers who drive for a living. Most of us have experienced that feeling of drifting off while driving. But until recently, few of us took the issue that seriously - it was just something you had to come to terms with.

But recent high profile collisions have highlighted how disastrous the results can be if you ignore the warning signs. While foolish to drive when tired and or fatigued it is not illegal. If you lose control of your vehicle due to tiredness and or fatigue it is likely you will end up in either a criminal court facing a prosecution and or a civil court facing a claim from an aggrieved party.

Driver Tiredness - The Facts

Research has shown that tired drivers are a major road safety risk, both to themselves and to others. The extent of the problem is only now starting to be understood:

- Across Europe at Least 4000 people are killed each year as a result of driver tiredness
- Research indicates that driver fatigue could be a contributory factor in 1 in 5 driver deaths in Ireland*
- Tiredness-related collisions are 3 times more likely to result in death or serious injury because of the high impact speed and lack of avoiding action.
- These collisions tend to occur when our body rhythms are at a natural low point during the early hours of the morning typically between 2 and 6am) and between 3 and 5 in the afternoon.
- In the early morning a motorist is 13 times as likely to have a tiredness-related collision as some one who is driving in the middle of the morning or early evening.

**Professor Jim Horne, Head of the Sleep Research Laboratory, Loughborough University, UK, advising the RSA has said driver fatigue could be a contributory factor in 1 in 5 crashes in Ireland.*

Source: Causes of road traffic collisions LSRC / N. Yorkshire Police, UK (1999)

The Following Groups Are Particularly At Risk from Driver Tiredness

We are all at risk from driver tiredness, but research has shown the following to be at particularly high.

- Night workers - especially after the first night of a shift when the body has not acclimatised to a change in sleep patterns.
- People driving home after a night shift (in the early morning): at this time of the day we are naturally at our least alert. This, coupled with tiredness from a hard night's work, makes early morning driving particularly dangerous.
- Lorry drivers (who may be more prone to sleep disorders such as obstructive sleep apnoea). This is discussed further below.
- Company car drivers. Unlike truck drivers their work and driving hours are not regulated. Consequently, it is not uncommon to rise early to drive to a meeting on the other side of the country, work all day and then drive back again.
- Men, particularly those aged 18-24 and 50 plus. Young men have a problem admitting they are feeling tired and are more likely to push on to avoid losing face. Older men are more susceptible to falling asleep in the afternoon due to changes in body rhythms.
- Skilled manual workers: like company car drivers, the driving hours of this group are unregulated and so it is common to drive considerable distances to get to a job, work a physically demanding, long day, and then drive back home. This causes particular problems as tiredness builds up over the course of the week.

Driving for Work

Truck drivers fall into several high risk groups: shift work, long hours behind the wheel, regularly driving during the peak times for sleep-related collisions all add up to a particularly high risk. In addition, being out on the road all day makes it hard to maintain a healthy lifestyle: many of us grab a bite to eat when we can and end up eating badly, rather than planning properly.

Reasons Why You May Feel Sleepy?

- Are you on any medication?
- Are you working when you would normally be asleep?
- Are you getting less sleep than normal?

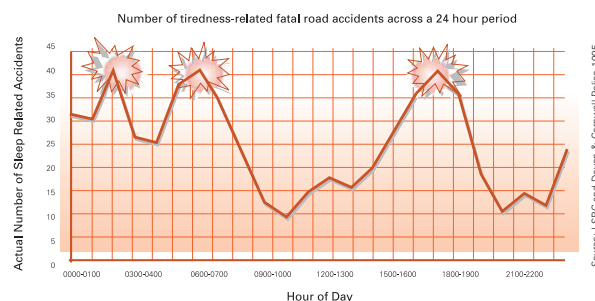
Are You On Any Medication?

Some medicines can cause daytime sleepiness. Many of the over-the-counter treatments for colds, flu and hay fever, that can be bought without a doctor's prescription, also cause unwanted sleepiness which might impair your work or driving. These medicines usually contain one or more of a group of substances called antihistamines. As well as reducing a runny nose, sneezing, allergies, etc, some also cause marked sleepiness, and because of this they are also sold in different packaging as sleep aids.

Are You Working When You Would Normally Be Asleep?

Sleeping when you would normally be awake (e.g. in the middle of the day) can cause excessive sleepiness during your working day. Throughout the 24 hour period we have a natural biological rhythm which affects body temperature, hunger, thirst and most importantly - our alertness. This can have an important effect on our working lives, especially if we are working at times when we are prone to sleepiness.

- There are distinct peaks and troughs in our biological rhythm.
- These troughs can also combine with boredom and monotony to increase risk further.
- We are most vulnerable to sleepiness at around 2-6am and 3-6pm. Driving and shiftwork collisions show peaks at these times.
- These sleepiness troughs are worsened by poor sleep previously. This is particularly dangerous in safety critical industries such as transport.



- Employees are also at risk when driving home after work.

Apart from the afternoon peak of tiredness-related collisions, due to the natural daily trough in sleepiness, the figure above shows two early morning peaks for these collisions: one at around 2am usually caused by people coming back late from a night out; the other, at around 4-6am, which is often associated with night work and with shift-

workers driving to or from work at the beginning or end of a shift.

Are You Getting Less Sleep Than Normal?

If your quality of sleep is poor, this could be due to certain medical conditions which cause excessive daytime drowsiness.

Sleep Apnoea - A Common Problem

Obstructive Sleep Apnoea (OSA) is a medical condition that causes difficulties in breathing during sleep. Typical symptoms are excessive snoring, choking or stopping breathing during sleep. You may be suffering from sleep apnoea and be unaware of the problem, as you seem to sleep through the night. But because you stop breathing many times during sleep your body goes into 'emergency mode' and wakes you up with a gasp for air. The result is that the next day you find yourself nodding off due to the very poor quality of sleep you had the night before. OSA is a problem mainly suffered by men aged over 50.

Key indicators are a large collar size and obesity. There are devices now available that can help the problem if it is diagnosed. If you suspect that you may suffer from OSA, speak to your GP. Often it is the partner of a sufferer who is the first to know.

What Can You Do To Minimise Risk?

Before Driving

- Prepare yourself for driving by ensuring you get adequate sleep.
- If you need treatment for hay fever, allergies, cold or flu, be sure to mention to your GP or pharmacist that you drive for a living, and ask about the medicine's side effects and how this may affect your driving. You may also ask about non sedating alternatives.
- If you are a shift worker then your family have a major part to play in ensuring you get quality sleep. Shift work can be hard work for all the family as they have to adjust to your hours. But it is essential that they understand how important it is for you to get adequate sleep.
- Simple measures like making the family aware of what shift pattern you are on, taking the phone off the hook, letting delivery people know that there is a shift worker sleeping, or putting a "Do not disturb sign" on the door, can all contribute to better quality rest.

What Can You Do To Minimise Risk?

While Driving

- Prepare your journey properly and plan where you can take a safe break from driving.
- Stop in a safe place when you feel tired. If you're on the motorway don't stop on the hard shoulder, take the next exit and find somewhere to park.
- Drink a cup or two of strong coffee or a stimulation drink containing caffeine.
- Caffeine takes about 20 minutes to take effect, so try and have a short nap of no more than 15-20 minutes. Much more than that and you might wake up feeling groggy. Remember to lock the doors before settling down for your nap.

However, these should only be considered emergency counter measures. As a professional driver you should not be relying on these on a regular basis, but instead should consider what changes you can make to your lifestyle which will help you get the sleep that you need.

Minutes from home?

Don't be tempted to keep driving when you are tired just because you are close to your destination. Many tiredness-related collisions occur within a few minutes of the driver's destination because the driver has relaxed and the body takes this as a signal that it is okay to fall asleep.

Many of the things people do to stop themselves falling asleep at the wheel are only effective for a very limited time.

The following do not work and will refresh you only for a short while:

- Getting out of your vehicle to stretch your legs
- Opening the window
- Turning on the radio
- No amount of will power will keep you awake

While At Home

As a professional driver you should take more long term steps to reduce your tiredness. This is likely to involve some changes to your personal lifestyle and will need the cooperation of the rest of your family. Make sure they understand how important it is that you get good quality sleep.

Sleep problems are the number one complaint among shift-workers, and you can expect to be

losing some sleep on most schedules. Remember the effects of sleep loss build up day by day, as you accumulate a sleep debt. Don't begin a schedule "in the red". Maximise the amount of sleep you get before going back to work. Aim to begin any work period as well rested as possible. When you are working shifts, particularly night shifts, you may have trouble getting the sleep you need in one block. You should still try to get at least as many hours of sleep as you need to feel well rested on a day off. Particularly if you are working nights, you may need to sleep in the morning and then again before you go back to work in the evening.

Naps can also be very beneficial, but keep them to no more than 20 minutes and don't substitute naps for getting proper sleep. In some parts of the body clock cycle you feel especially sleepy, and in other parts you do not. You will feel sleepier in all parts of the cycle if you have a sleep debt. If you are struggling to stay awake, that sleepiness is a signal you need to get some sleep. Take a 15-20 minute nap to refresh yourself.

On the other hand, if you are not feeling sleepy, you cannot force yourself to fall asleep. If you wake up spontaneously and cannot get back to sleep within 15 - 30 minutes, then get out of bed. If you have limited time available for sleep, try doing something quiet, like reading or something else relaxing to help you fall asleep. Lying awake worrying about being unable to sleep is not useful.

Good Sleep Habits - 10 tips for getting good sleep

1. Avoid stimulants. Tea, coffee and smoking in the evenings can disrupt your natural sleep patterns. Try a hot milky drink or herbal tea instead.
2. Don't over-indulge. Too much food or alcohol, just before bedtime, can interrupt sleep. Alcohol may help you all asleep initially, but will disturb your sleep later on in the night.
3. Your bedroom should provide a restful place for sleep. It should be cool dark and quiet. Consider removing things that will keep you awake, such as the TV and radio.
4. Try to get to bed at the same time every night — weekends included. Doing the same things each night just before bed prepares your body for sleep.
5. Try to relax before going to bed. Have a warm bath, listen to some quiet music, do some yoga all help to relax both the mind and body.

6. Don't lie in bed worrying about getting to sleep. If you can't drop off in a short while then get up and do something you find relaxing until you feel sleepy again - then go back to bed.
7. Deal with worries by making a list of what needs to be done the next day,
8. Try to get up at the same time every morning, irrespective of whatever time you eventually fell asleep that night. A constant rising time helps to reset the body's own natural clock regulating sleep and wakefulness.
9. Although regular exercise will help you to relieve the stress of the day, avoid exercising too close to bedtime or you may find it difficult to sleep.
10. If you are feeling drowsy while driving then taking a break and having a short nap will certainly help. However, avoid napping for longer than 15-20 minutes, much more than this and you might wake up feeling groggy. It may also interrupt your regular sleep patterns.

Tachographs

A tachograph is a calibrated instrument specified in vehicles, operated under the EU drivers' hours rules, which is capable of recording time, speed, distance and the driver's various activities. Tachographs can also be used to assist with an accident investigation.

Drivers are responsible for operating the tachograph correctly, and recording all their activities in full

The effects of stress on a driver

Stress can manifest itself in a number of different ways and from a number of different sources, including domestic, personal, financial and working

conditions and can have an adverse effect on a person's wellbeing if it is not managed effectively.

Stress can be seen as a stimulus or cause, or as a response or effect, or as an interaction between the demands made on an individual or group and the degrees of coping available to them.

Stress occurs when demands in our work and non-work environments exceed our ability to cope.

It exists since the dawn of time and operates under the control of the autonomic nervous system.

Managing stress starts with understanding the difference between pressure and stress.

Pressure is the start of the process, while stress is the outcome or possible response to the pressure.

Pressure is unavoidable and actually helps us to produce peak performance.

We work best when we are stimulated and stretched and not when we are bored and disinterested.

Imagine driving when you are not stimulated - it is during this kind of time that accidents occur as drivers lose concentration.

However, too much stress can be detrimental as it can strain our ability to cope.

Like all workers, professional bus and truck drivers are prone to stress and should be aware of its possible implications for their personal wellbeing.

Stress can be reduced in a number of different ways, including (a) keeping things in perspective, (b) learning from mistakes, (c) taking regular exercise, (d) breathing exercises, (f) analysing the causes of stress, (g) anticipating and avoiding it.

Bus & PSV Driver Walkaround Checks

In Cab Checks

- Check driving controls, seat & safety belt position (if fitted)
- Heater / demister working properly
- Tachograph: Correct hours, calibrated & speed limiter plaque displayed
- ABS/EBS warning lights working
- Instruments, gauges & warning devices working
- Horn working properly & accessible to driver

Internal PSV Checks

- Fire Extinguisher in place, fully charged & in date
- First Aid Kit in place & in date
- Passenger safety belts working (if fitted)
- Seats & handrails in good conditions
- All walkways clear
- Internal lighting working & luggage racks in good condition
- Emergency exit hammer in place (if fitted)
- Emergency door warning buzzer working (if fitted)
- Emergency exit doors & signs

Windows (Windscreen & Side Windows)

- Clean & in good condition
- View not obstructed e.g. by stickers, etc.
- Valid Tax/insurance discs present
- Windscreen washers & wipers working correctly & in good condition

Lights, Indicators & Reflectors

- All in place & undamaged
- Working
- Clean
- Correct colour

Mirrors

- Clean & in good condition
- Correctly aligned
- Correct operation of electrical mirror (if fitted)

Vehicle Access

- Steps undamaged
- Good unworn surface
- Clean
- Good handholds
- Door working properly

External Checks

- Check underneath vehicle for fluid leaks
- Exhaust: No excessive noise or smoke
- Number plates: In place, clean & in good condition
- Check engine oil, coolant and windscreen wash for levels
- Fuel cut off clearly marked & accessible
- Fuel cap seal: In place, in good condition & no leaks
- Air suspension correctly set
- Check for sounds of air leaks or drop in air pressure
- Luggage door secure

Wheels & Tyres

- Tyres correctly inflated
- Tyres correct tread depth
- Tyres undamaged: no abrasions, bulges or tears
- Wheel nut indicators correctly aligned (if fitted)
- Road wheel nuts all in place, correctly fitted & secure



HGV Driver Walkaround Checks

In Cab Checks

- Check driving controls, seat position, safety belt (if fitted)
- Tachograph: Correct hours, calibrated & speed limiter plaque displayed
- ABS/EBS warning lights working
- Instruments, gauges & warning devices working
- Wipers, washers, horn, demister & temperature controls working correctly

Load Security

- Loaded correctly
- Weight distributed across axles
- Not overloaded
- Load restrained & contained

External Checks

- Check underneath front of vehicle for fluid leaks
- Exhaust: No excessive noise or smoke
- Landing legs fully raised & handle in position
- Trailer park brake operates correctly & is fully released
- Air suspension correctly set
- Number & marker plates in place, clean & in good condition

- Check vehicle sitting square & not leaning to one side
- Check engine oil, coolant, windscreen wash & fuel for levels & leaks
- Check for sounds of air leaks or drop in air pressure
- Fuel cap seal in good condition & no leaks
- Side & rear reflective markings fitted, clean & in good condition

Windows (Windscreen & Side Windows)

- Undamaged
- Clean
- View not obstructed e.g. by stickers, etc.
- Valid Tax/insurance discs present
- Windscreen washers & wipers working correctly & in good condition

Lights & Indicators

- Working
- Clean
- Correct colour
- All in place & undamaged

Mirrors

- Cover side & rear blind spots (if fitted)
- Clean & in good condition
- Correctly aligned

Suzie Connections

- All required air & electrical Suzie connectors present & correctly located
- In good condition: No chaffing, stretching or any other damage
- ABS/EBS cable fitted (if required)
- No air leaks from connectors



Vehicle Access

- Steps undamaged
- Good unworn surface
- Clean
- Good handholds
- Proper access to catwalk & load area (if required)
- Safe access for driver
- Safe access to Suzie Connections



Tyres, Wheels & Couplings

- Tyres correctly inflated
- Tyres correct tread depth
- Tyres undamaged: No abrasions, bulges or tears
- Wheel nut indicators correctly aligned (if fitted)
- Road wheel nuts all in place, correctly fitted & secure
- Road wheels in good condition
- Semi-trailer is correctly located in fifth wheel & locked in position (if applicable)
- Drawbar coupling in place & good condition



Bus / PSV Driver Walk-Around Check Sheet				
Vehicle Registration Number		Mileage		OK 
				Defect 
Check Items				
In-Cab Checks				
1	Good visibility for driver through bus windows and mirrors. All required mirrors fitted and adjusted correctly.			
2	Driving controls, seat and driver safety belt adjusted correctly.			
3	Windscreen washer, wipers, demister and horn operating correctly.			
4	Tachograph calibrated with correct hours. Speed limiter plaque displayed.			
5	All instruments, gauges and other warning devices operating correctly (including ABS/EBS in-cab warning lights).			
6	No air leaks or pressure drop.			
PSV Checks				
7	Fire extinguisher, first aid kit, emergency hammer (if applicable) in place and serviceable.			
8	Passenger safety belts, seats, handrails, walkways, lighting and luggage racks in good condition.			
9	Emergency exit door and buzzer working correctly. Emergency signs in place.			
External Vehicle Checks				
10	Vehicle sitting square and not leaning to one side.			
11	Tax disc, insurance disc and PSV plate (if applicable) present and valid. Number plates clearly visible.			
12	Wheels in good condition and secure. Tyres undamaged with correct inflation and tread depth.			
13	All lights and reflectors fitted, clean and in good condition.			
14	Exhaust secure with no excess noise or smoke.			
15	Vehicle body work in good condition, fuel cut off working.			
16	Vehicle access, steps, handholds and surfaces in good condition.			
17	Air suspension correctly set (if fitted).			
18	Engine oil, water, windscreen washer reservoir and fuel levels checked and no leaks (including fuel cap).			
Prior to Leaving Depot				
19	Steering and brakes operating correctly.			
20	Luggage door secure.			
On-the-Road				
21	Tachograph, speedometer and speed limiter operating correctly.			
22	ABS/EBS warning lights off.			
Defect Details				
Signed			Date	

NOTE: This is a sample driver walk-around Bus / PSV checklist. It is recommended that operators prepare their own driver walk-around checklists to account for the type and use of their own vehicles.

HGV Driver Walk-Around Check Sheet				
Vehicle Registration Number		Mileage		OK 
				Defect 
Check Items				
In-Cab Checks				
1	Good visibility for driver through cab windows and mirrors. All required mirrors fitted and adjusted correctly.			
2	Driving controls, seat and driver safety belt adjusted correctly.			
3	Windscreen washer, wipers, demister and horn operating correctly.			
4	Tachograph calibrated with correct hours. Speed limiter plaque displayed.			
5	All instruments, gauges and other warning devices operating correctly (including ABS/EBS in-cab warning lights).			
6	No air leaks or pressure drop.			
External Vehicle Checks				
7	Vehicle sitting square and not leaning to one side.			
8	Tax, insurance and transport discs (if applicable) present and valid. Number plates clearly visible.			
9	Wheels in good condition and secure. Tyres undamaged with correct inflation and tread depth.			
10	All lights, reflectors and markings fitted, clean and in good condition.			
11	Exhaust secure with no excess noise or smoke.			
12	Air & electrical suzies and connectors fitted correctly (inc. ABS / EBS cable).			
13	Vehicle access, steps, catwalk or drawbar coupling in good condition.			
14	Vehicle body / wings / guards, side and rear / curtains and straps / doors / tail lift in good condition.			
15	Fifth wheel located and locked correctly, landing legs and handle in correct position.			
16	Trailer park brake operating correctly.			
17	Air suspension correctly set.			
18	Engine oil, water, windscreen washer reservoir and fuel levels checked and no leaks.			
Prior to Leaving Depot				
19	Steering and brakes operating correctly.			
20	Loads secured and weight distributed correctly.			
On-the-Road				
21	Tachograph, speedometer and speed limiter operating correctly.			
22	ABS/EBS warning lights off.			
Defect Details				
Signed			Date	

NOTE: This is a sample driver walk-around HGV checklist. It is recommended that operators prepare their own driver walk-around checklists to account for the type and use of their own vehicles.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 Name 5 items a driver should take note of on a walkaround check.

Your Response

Q.2 How can Stress affect a Driver?

Your Response

Q.3 What does a tachograph record?

Your Response

Q.4 What is the biological rhythm?

Your Response

Q.5 How can driver tiredness affect road safety.

Your Response

Q.6 Name 5 tips for getting good quality sleep.

Your Response

Q.7 What are shift workers vulnerable to?

Your Response

Q.8 How can over-the-counter medicines affect a driver?

Your Response

Q.9 What should you do if your vehicle breaks down?

Your Response

Q.10 What is sleep apnoea?

Your Response

SECTION E – SUMMONING ASSISTANCE

A national emergency number speeds up the process and guarantees that all relevant agencies are warned and involved. In high-income countries, access to the emergency medical system is almost always made by telephone, but the coverage and reliability of the telephone link varies between countries. The growth in the use of mobile telephones is having a helpful effect on crash notification.

EU 112 emergency notification number

112 is the emergency telephone number that allows European citizens in distress to contact the emergency services in all member states. It was established by Council Decision of 29 July 1991 and reinforced through the Directive 98/10/EC and is now to be found in the Universal Service Directive. According to the European Commission, it has now been implemented in all EU countries, although the number is little known by EU citizens according to European Commission monitoring. No information is available about the time taken to answer this emergency call number and no EU standard exists for call receipt.

Emergency medical dispatch

In Europe, calls received by the emergency medical system result in either:

- Automatic dispatch of an emergency ambulance, requiring the call taker to give accurate identification of the location of the incident and to mobilise the emergency crew;

OR

- Selective dispatch, depending on the perceived nature and urgency of the incident, and the process of doing this is known as emergency medical dispatch.

The functions of the emergency dispatch system are:

- Prioritisation by level of urgency (triage) to determine the speed of response;
- Prioritisation by level of need to determine type of response;
- Provision of pre-ambulance arrival instructions in first aid and scene management;
- Communication with those on the scene and in the receiving hospital.

Clinical experts across Europe believe that all calls to the emergency medical system in Europe should be transferred as soon as possible to a trained dispatcher who is able to make a layered response using an appropriate emergency dispatch system.

The availability and response times of ambulances

Land ambulances are used in the majority of road collisions in Europe. The standardisation of equipment in ambulances in Europe has been recommended, together with the development of appropriate vehicle and driver safety standards, given the considerable number of crashes involving ambulances.

A research overview indicates that the faster a road casualty can gain access to expert first aid, the greater the chance of survival and full recovery. Research shows that:

- In general, road traffic deaths increase with increasing ambulance response time which is strongly related to population density;
- The proportion of fatal crashes is lowest where ambulance availability is best and highest where ambulance availability is poor.

Emergency vehicles

Be aware that emergency vehicles may approach at any time while you are on the road. You should look and listen for flashing blue, red or green lights, headlights or sirens being used by ambulances, fire engines, Gardaí or other emergency vehicles. When one approaches do not panic; consider the route it is taking and take appropriate action to let it pass. If necessary, pull to the side of the road and stop, but make sure you are aware of other road users and that you do not endanger them in any way. If you see or hear emergency vehicles in the distance, be aware that there may be an accident ahead and that other emergency vehicles may be approaching.

Sharing the road with emergency Service vehicles – some basic tips

Emergency services personnel risk their lives every day to help others. They might be called out to a medical emergency, a fire and rescue, a disaster response or indeed to assist in a roadside breakdown. Therefore, when you're using the public road, it is important that you pay attention to emergency vehicles as they make their way to help others. Emergency services vehicles include ambulances, fire engines, and Garda cars.

The following information will help keep you and other road users safe as well as making sure those in need receive help as quickly as possible.

You need to know what to do when you see an emergency vehicle. You must react quickly, safely and carefully to allow emergency vehicles to pass.

emergency services

Gardaí, fire fighters, ambulance emergency medical technicians (EMTs) and other emergency services personnel save lives in the course of their work. Every second counts when they are responding to an emergency. They must get to the scene quickly and safely without putting other road users in danger. Emergency services personnel receive specialist training to do this. But road users must also know what to do to make sure they don't get in the way of an emergency vehicle.



Flashing lights and sirens

Flashing lights and sirens are used by emergency services vehicles when responding to various types of emergencies. The lights and sirens alert all road users that an emergency exists and that they need to take extra care. Road users should always be on the alert for Garda vehicles, ambulance and fire services vehicles as well as other rescue vehicles which help out in emergencies. These include, for example, breakdown assist vehicles and the Irish Coast Guard.

Emergency flashing lights indicate a danger. These lights are designed to be seen from a distance and offer an early warning of a hazard.

Blue Flashing Lights and sirens

Only the following are permitted by law to use blue lights and sirens: the Gardaí, the Fire Service, the Ambulance Service, the Irish Coast Guard, the Irish Blood Transfusion Service and the army. **they use them to:**

- respond to an emergency,
- let road users know they are there,
- alert people that there is a hazard on the road or at the scene of an emergency.

amber Flashing Lights

Amber flashing lights are used by breakdown vehicles and road clearance vehicles. **they use them:**

- at the scene of an emergency;
- to let road users know they are there;
- when attending to a broken-down vehicle;
- when towing a broken-down vehicle;
- when escorting a very long or very wide vehicle.



garda signals

It is important to be familiar with Garda signals. If a garda is controlling traffic, their signals take priority over all other road signs such as traffic lights. Refer to www.rulesoftheroad.ie for more information on hand signals.

Be alert

It is important to be alert and attentive at all times. Remember to keep noise levels in your vehicle at a level that allows you to hear the sirens from emergency vehicles. Emergency vehicles mostly use their sirens at intersections. They may be coming from behind you with only flashing lights as a warning.

motorists

when an emergency vehicle approaches:

- Clear the way as soon as you can do so safely when you see the flashing lights and hear the sirens.
- Never mount the kerb unless you absolutely have to and, even then, only if you are certain that there are no pedestrians in the area.
- Check your rear mirror and both side mirrors to gauge the speed of the emergency vehicle and also look out for pedestrians, cyclists, motorcyclists and other road users. Indicate your intention to pull over. Pull over only in a place which has enough space for the emergency vehicle to pass you safely.
- Stay there until the emergency vehicle has passed. Watch out for other emergency vehicles as there may be more than one.
- Indicate that you're going to pull out again. When it's safe to do so, gradually merge back into traffic.

remember

never:

- tailgate or overtake an emergency vehicle
- race after an emergency vehicle to get through a traffic light
- break a red light or speed to allow emergency vehicles to pass unless you're directed to do this by the Gardaí or emergency services personnel
- pass a moving emergency vehicle displaying flashing lights



Pedestrians, cyclists and motorcyclists

Pedestrians, cyclists (and motorcyclists) should look and listen for emergency vehicles. It is important to think about the route of the emergency vehicle to make sure that you are not in its path. Keep in as far as possible on the correct side of the road.

If you are a pedestrian and there is an embankment or grass verge, you should use it in order to keep out of danger if it is safe to do so. If you have children with you, make sure that you are holding their hands at all times.

If you are pushing a pram or buggy this may not be possible so make sure that you keep in as far as possible, anticipate the route that the emergency vehicle is taking and attempt to alert the emergency vehicle to your presence on the road. It is important to wear reflective clothing at all times to make sure other road users can see you. Pedestrians should always wait until emergency vehicles have passed before crossing the road at traffic lights, pedestrian lights, zebra crossings or pelican crossings.

approaching the scene of a collision

- Approach the scene of a collision carefully.
- Slow down to a safe speed and be prepared to stop.
- Clear the way for emergency vehicles as soon as you can do so safely.

Every second counts in an emergency situation. If emergency services personnel are delayed on their way to an emergency, it could make a big difference to the well-being of a patient.

when you are approaching the scene of a collision:

- Always concentrate on your driving; and
- Make sure to avoid causing congestion.

Motorists are often seen 'rubbernecking'. This means turning your head and stretching your neck to get a better view of what's happening. It can be the cause of traffic jams as drivers slow down to 'rubberneck'. It can also cause road incidents as drivers become distracted and change their speed while other drivers are also distracted.

If you are the first to arrive at the scene of a road incident you can reduce potential hazards and protect the well being of the people involved.

- Stay calm;
- Find a safe place to park;
- Switch off your engine and put on the handbrake;
- Switch on your hazard warning lights and parking lights;
- Be careful when getting out of your vehicle;
- Make sure you are safe when you try to help others (wear high visibility clothing); and
- Use a reflective advance-warning triangle if you have one.





calling for help

Contact the emergency services on 999 or 112. If this is difficult, or if there may be a delay before you have detailed information about the incident, you should still call the operator immediately with what you know.

what to tell the operator

It is important to tell the operator the following”

1. what service you need

Tell the operator the service or services which you need for example:

- Gardaí (police);
- Fire Brigade;
- Ambulance.

2. your exact location and other details

Tell the operator:

- the exact location of the incident;
- the phone number you are calling from;
- what has happened – for example a car crash or a person has been knocked down.

3. casualties

Tell the operator:

- the total number of casualties, if any;
- if anyone is trapped;
- if you know of any medical conditions, for example maternity or cardiac chest pain.

4. other hazards

Tell the operator if there are any other hazards such as:

- fire;
- an oil spillage.

remember don't hang up until the operator tells you to.

after you call the operator:

- Try and make sure others are safe and keep any injured people warm by placing coats or rugs around them.
- As long as it is safe to do so, you can organise bystanders to warn traffic coming from both directions, if this has not already been done.
- Be particularly careful at night by making sure that the people giving help can be seen – they should be wearing reflective clothing, bright clothes or carrying bright torches
- You can leave the scene if there are enough people there keeping it under control.

Further information

If you would like further information on emergency situations, please refer to the Rules of the Road book or the Rules of the Road website at www.rulesoftheroad.ie

You may wish to consider doing an emergency first aid training course. If so, contact the National Ambulance Training Centre.

Further information is available at www.nats.ie

other useful contacts

An Garda Síochana	www.garda.ie
Road Safety Authority	www.rsa.ie
Health and Safety Authority	www.hsa.ie
Health Service Executive	www.hse.ie

emergency telephone numbers

Contact the emergency services on **999** or **112**.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 What is the purpose of a national emergency number?

Your Response

Q.2 What is the EU emergency notification number?

Your Response

Q.3 What should you do if an emergency vehicle approaches.

Your Response

Q.4 How do you recognise an emergency vehicle?

Your Response

Q.5 List two benefits of faster Emergency responses?

Your Response

SCENARIO

Jim, a truck driver, had just driven around a left-hand bend on a single carriageway road when he noticed a motorcyclist lying apparently unconscious on the road just ahead. Jim stopped the truck and immediately rushed over to the motorcyclist, and pulled him in to the side of the road. He then removed the helmet to check if the motorcyclist was still breathing. As the man was unconscious, Jim went back to the truck to get his mobile phone. He called his depot and reported the accident. He then hung up and returned to the victim.

1. What did Jim do right in this case.
2. What did he do wrong.

SECTION F – ASSISTING CASUALTIES AND DELIVERING FIRST AID

If you are one of the first to arrive at an accident scene your actions could be vital. Any first aid given at the scene of an accident should only be looked on as a temporary measure until the emergency services arrive. All buses must carry First Aid equipment. It is recommended best practice that truck drivers should also carry and know how to use First Aid equipment. You must know:

- Where it is;
- How to get at it (if it's kept behind glass or in a safety compartment);
- What's in it;
- How and when to use it.

First aid on the road

As a professional driver, you are encouraged to take some first-aid training. It could help save a life. Nevertheless, the following information may be of general assistance, but there's no substitute for proper training. If you haven't any first-aid training the following points could be helpful.

Accident Scene Safety and First Aid

- Protect yourself
- Keep calm and park a safe distance from the incident.
- Activate hazard warning lights.
- Wear Hi-Viz clothing.
- Place a red warning triangle to warn other traffic.
- Try to keep traffic moving.

Rules and purpose of First Aid

- Preserve life
- Prevent injury
- Promote recovery
- Life over limb

Assess the area for potential dangers

- Fuel leaking from vehicles
- Further movement of vehicles
- Risks of further impacts or injuries
- Warn other persons and vehicles
- Enlist appropriate help
- Assess any injuries
- Call Emergency Services – dial 112
- Speak clearly, calmly, give your name, do not hang up until told to do so

State

- What has happened
- The exact location of the incident
- When it occurred
- Number and type of persons involved
- Number and type of vehicles involved
- The nature and extent of any injuries

First Aid procedures

- Do not try to move casualties
- Do not give casualties food or drink
- Keep casualties warm
- Monitor any deterioration in casualties condition
- Do not remove a crash helmet from a rider
- Check with the victim for medical information

Remember the letters ABC – they stand for Airway, Breathing, Circulation.

- A – the airway must be cleared and kept open. Unless you suspect a head or neck injury, use a head tilt to check for and clear any obstruction in the mouth, such as false teeth, food or chewing gum.
- B – breathing must be established and maintained. If breathing has stopped, tilt the head back, pinch their nostrils together, and blow into their mouth until their chest rises. Pause to allow the chest to fall, and repeat until regular breathing is restored.
- C – blood circulation must be maintained.

Accident involving a vehicle carrying Dangerous Goods

- Vehicles are regulated under the ADR Agreement
- Keep clear of the scene
- Try to establish the nature of the cargo to inform the Emergency Services
- Rescuing of persons and containment of the incident should be left to the Emergency Services

OTHER INJURIES

Bleeding

To stem the flow of blood, apply firm pressure to the wound without pressing on anything that may be caught in or sticking out from it. As soon as practical, fasten a pad to the wound with a bandage or length of cloth. Use the cleanest material available. If a limb is bleeding, but not broken, raise it to reduce the flow of blood. Any restriction of blood circulation for more than a short time could cause long-term injuries. It is vital to obtain skilled medical help as soon as possible. Make sure that someone dials 112.

Unconscious and breathing

Do not move a casualty unless there's further danger. Movement could add to spinal/neck injury. If breathing is difficult or stops, treat as recommended in the breathing section. Don't attempt to remove a motorcyclist's safety helmet.

Burns

Check the casualty for shock and, if possible, try to cool the burn. Try to find a liquid that is clean, cold and non-toxic with which to douse it. Do not try to remove anything that is sticking to the burn.



Shock

The effects of shock may not be immediately obvious. Warning signs to look for include:

- Rapid pulse

- Pale grey skin
- Sweating
- Rapid shallow breathing.

Prompt treatment can help to deal with shock

- Don't give the casualty anything to eat or drink.
- Reassure the victim confidently and keep checking on them.
- Keep casualties warm and make them as comfortable as you can.
- Talk firmly and quietly to anyone who's hysterical.
- Don't let shock victims wander into the path of other traffic.
- Try not to leave any casualty alone.
- Don't move the casualty unless it's necessary.
- If a casualty does need to be moved for their own safety, take care to avoid making their injuries worse.

Electric shock

Some accidents involve a vehicle hitting overhead cables or electrical supplies to traffic bollards, traffic lights or street lights. Make a quick check before trying to get someone out of a vehicle in such cases. Don't touch any person who's obviously in contact with live electricity, unless you can use some non-conducting item, such as a piece of dry wood, plastic or similar - anything wet should not be used. You must not try to give first aid until contact has been broken. A person can also be electrocuted by simply being too close to a high voltage overhead cable. Contact the provider, a number may be shown on a nearby pole, then follow their advice.

What type of treatment?

Basic Life Support (BLS): There are two types of pre-hospital interventions – basic and advanced systems of pre-hospital care. BLS consists of emergency medical care to restore or sustain vital functions (airway, respiration, circulation) without specialised medical equipment and to limit further damage before the arrival of specialised, advanced emergency medical care.

Advanced Life Support (ALS): This is medical care given by medical doctors and nurses trained in critical care medicine, with the use of specialised technical equipment, infusion of fluids and drugs aimed to stabilise or restore vital functions.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 What are the four things you must know with regard to your first-aid kit?

Your Response

Q.2 What actions should be given priority if an accident victim is unconscious?

Your Response

Q.3 What do you do to stem the flow of blood on a wound?

Your Response

Q.4 What do you do if a limb is bleeding but not broken?

Your Response

Q.5 Should an accident victim be given something to drink.

Your Response

Q.6 In burn cases should you remove clothing?

Your Response

Q.7 What are the warning signs of shock?

Your Response

Q.8 What items can you use to help a person who has been electrocuted or is in contact with live electricity?

Your Response

Q.9 Explain the difference between Basic Life support (BLS) and Advanced Life Support (ALS)

Your Response

SCENARIO

Lucy, a coach driver, was driving a coach on a dual carriageway at 75km/h with 45 passengers on board, and was running late. The coach was being overtaken by a HGV. She heard a loud bang just as the HGV finished overtaking. Lucy wasn't sure what the bang was but continued on. A few moments later she felt the coach becoming unstable and difficult to control, and she decided to pull into the hard shoulder. She left the engine running and applied the handbrake. She exited through the passenger door and went back along the coach and noticed that one of the rear tyres had suffered a blow out. Upon turning to get back into the coach she saw that a number of passengers had disembarked to see what the problem was. Lucy advised them to return to their seats as there was a lot of fast moving traffic on the road. Lucy then got back on board the coach and telephoned her base and reported what had happened.

1. How would you assess the actions the driver took in the scenario?
2. Would you have done anything differently?
3. What are the possible consequences to the passengers that could result from the steps the driver took?
4. Develop a list of the correct steps drivers should take if they encounter a similar situation in the course of their work.

SECTION G – REACTION IN THE EVENT OF FIRE

As a professional driver you are in charge of your vehicle and any cargo or passengers carried. In an emergency situation you are the person who must resolve the problem encountered. Fire could occur in your vehicle and as a professional driver it is your responsibility to be aware of the danger of fire and be able to respond appropriately. Fire can occur in a number of locations on a vehicle.

Fire can start in a passenger service vehicle in areas such as:

- Engine
- Passenger areas
- Kitchens and services
- Toilets
- Crew sleeping accommodation
- Luggage lockers
- Transmission
- Tyres
- Fuel system
- Electrical circuits
- Running gear.

Actions the driver should take

- Stop the vehicle as soon as it is safe to do so and assess the situation.
- Before evacuating passengers take the fire extinguisher with you.
- When you check the upper saloon of a double-decker tell someone at the scene what you are doing.
- Evacuate the passengers to a safe position away from the bus.
- Contact the emergency services direct, then remember to inform home depot, giving all available information fully and accurately regarding the incident.
- If it is safe to do so, use the battery isolation switch and emergency fuel cut off.
- If you decide to tackle the fire, then tell someone what you intend to do.
- If it is an engine fire do not open the engine cover, leave that to the fire brigade.

Fire can start in a goods vehicle

Equally a fire can occur on trucks in a number of locations, for example:

- Engine
- Cargo area
- Transmission
- Tyres
- Fuel system
- Electrical circuits
- Cab area
- Running gear.

A vehicle and its load can be destroyed by fire within an alarmingly short period of time. If fire is suspected or discovered, in order to avoid danger to others it's essential to follow these general actions:

- Stop as quickly and safely as possible;
- Get all individuals out of the vehicle;
- Tell them to stand in a safe place;
- Dial 112 or get someone else to do it immediately.

Fire extinguishers

If your vehicle is required to carry fire extinguishers, you must know where they're located and how to get them out and use them. Regulations specify the type and size of fire extinguisher that must be carried on a bus or coach. You should be able to recognise the various types of fire extinguisher and know which fires they're intended to tackle.



Remember on discovery of a fire raise the alarm and call the fire brigade!

When operating a fire extinguisher always follow the instructions you were given during training:

- Remove extinguisher from bracket;
- Remove safety pin or clip, aim at the base of the fire and squeeze handle.

For example, it's dangerous to tackle a fuel fire with a water or carbon dioxide fire extinguisher, since this may only spread the fire further. Most extinguishers are intended to smother the source of the fire by either the action of an inert gas or a dry powder. Many modern vehicles are fitted with fire suppression systems in the engine compartment. Try to isolate the source of the fire. If at all possible:

- Disconnect electrical leads;
- Cut off the fuel supply.

Confined spaces

You must avoid operating a fire extinguisher in a confined space. Never put yourself in danger when tackling a fire. Always call the fire service as quickly as possible because they are the experts. Make sure any passengers leave the vehicle and go to a place of safety.

Dangerous goods

The transport of substances defined as dangerous, is regulated by the 'Accord Dangereuse Routier' (ADR). The ADR agreement is the protocol which implements the agreed regulations as defined by the United Nations into European Law. Within the ADR, substances that by their nature may pose a risk to the person or the environment, are defined by their primary danger and allocated into a series of 'classes' designated 1 to 9, with some classes having a number of sub-sections.

For a driver to transport any scheduled substance which comes under the scope of the regulations, they must be in possession of a valid 'Training Certificate for the Drivers of Vehicles Carrying Dangerous Goods'. Certification can only be achieved by attending an approved training course and successfully passing an examination. On passing the exam, the driver is issued with a certificate specifying what ADR Classes he/she may transport and in what types of transport unit, either packages or tanks. This certificate is valid for a period of five years after which the driver must undergo a refresher course and a further examination to renew the entitlement.



In certain circumstances some scheduled substances may be transported by an untrained driver. However, these particular consignments are exempt from the ADR regulations due to the size, nature, or packaging of the consignment under the 'Limited Quantities' provision of the protocol. It must be noted that if a single consignment comes under the scope of the ADR then the whole vehicle or trailer is defined as an ADR vehicle.

The penalties for transporting scheduled substances or substances classed as dangerous under the ADR regulations, by a driver not in possession of a valid vocational training certificate may include fine/s or prosecution.

Important Note:

Attendance at any of the Driver Certificate of Professional Competence Modules does not entitle a person to transport dangerous goods. This can only be achieved by attending an approved course delivered by an approved trainer, authorised by the Health & Safety Authority. For further information please consult the Health & Safety Authority by telephone or at - www.hsa.ie

Fire suppression

Some fire extinguishers are connected (plumbed in) to pipe work which runs the length of the bus, terminating in the engine compartment. This allows the contents of the extinguisher to be discharged into the engine compartment in the event of an engine fire. Where this is the case, if you need to use the extinguisher by hand, you will have to remove the safety clip from the pipe work first. Where a fire extinguisher is fitted with a pressure gauge, it is important to check that the needle is pointing in the safe area during your daily vehicle check. If it is not, the extinguisher may have been used or has developed a fault, in which case it must be replaced before the bus can be taken out.

Some vehicles are fitted with an Engine Compartment Fire Suppression system as standard. The fire suppression system is configured to release automatically an extinguishing agent once certain conditions are met in the engine compartment i.e. a naked flame or unusually high temperatures are detected in the engine bay area. The system is fully automatic and detection tubing/sensors in the engine compartment should not be tampered with.

The fire suppression system is only effective in the event of a fire in the **engine bay** area. The system has limited capacity so, once triggered, is only active for up to 60 seconds. Activation of the system will be indicated by an audible and/or visual alarm (depending on the system fitted) in the driver's cab. It is important that once the driver is aware of a fire he/she should stop the vehicle as soon as possible and evacuate the passengers. The fire suppression system may extinguish a fire but if the engine is running there is a possibility of re-ignition after the suppression system has been exhausted.

All drivers must:

- Follow the manufacturer's instructions regarding the checking and use of fire suppression systems;
- Familiarise themselves with the procedure to be followed in the event of a fire warning;
- Ensure that they know the location of fire exits, assembly points, fire alarms and fire extinguishers;
- Understand which types of extinguisher are to be used in various types of fires.

Tunnels

In addition to the procedures listed above, if your driving takes you through road tunnels, the following additional measures may be required if confronted with a fire whilst using tunnels:

- Switch off your engine;
- Evacuate your passengers to a place of safety from the fire, smoke and other road users;
- Leave your vehicle immediately;
- Go to an emergency station and use the emergency phone to inform the tunnel operator;
- Leave the tunnel with your passengers at the nearest available exit;
- Check all electronic signs in the tunnel for information.

If there is smoke or fire in another vehicle:

- If the fire is behind you, drive out of the tunnel;
- If the fire is ahead of you, turn off your engine, leave the vehicle immediately, and leave the tunnel by the nearest emergency exit.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 List five areas where fire can start in a bus.

Your Response

Q.2 List three of the steps you must complete if a fire starts in a passenger service vehicle.

Your Response

Q.3 List three areas where a fire can start in a truck.

Your Response

Q.4 What should you NOT do if your vehicle has an engine fire?

Your Response

Q.5 What do you do on first discovery of a fire?

Your Response

Q.6 What steps must you follow to operate a fire extinguisher correctly?

Your Response

Q.7 How is the engine fire suppression system triggered?

Your Response

Q.8 What must you do if confronted with a fire in a tunnel?

Your Response

SECTION H – EVACUATION OF OCCUPANTS OF A LORRY/BUS

In the event where a vehicle requires evacuation it is the safety of the passengers which must be of paramount importance. The fact that the vehicle is to be evacuated indicates that there is a danger to passenger safety . However, when evacuating passengers it is imperative that they are not further endangered from road traffic or the evacuation process itself. The following general procedures are to be followed when evacuating a bus and or a truck.

1. Stop vehicle, if not already stopped, off the road and out of the mainstream of traffic, if possible.
2. Identify a place of safety from the fire, smoke and other road users for all passengers.
3. Put on emergency hazard warning lights and immediately issue orders as to which exit is to be used.
4. Maintain calm and direct passengers to “walk - not run”, not to take belongings, etc., and to be careful when disembarking.
5. Remember the dangers of allowing passengers to leave the vehicle, especially on a motorway.
6. Send someone or call for help after making sure that all passengers are evacuated.
7. Form passengers into a group at a safe distance from the vehicle and as far away from traffic as feasible.
8. Do not allow persons to stand at the rear of the vehicle obscuring the hazard warning/rear lights etc.
9. Check bus list to verify all passengers are accounted for and are in good condition.
10. Emergency evacuation of disabled people may require modification of the above procedures.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 What is the most important thing to remember when evacuating occupants of a lorry or bus?

Your Response

Q.2 What other dangers are there for passengers in an evacuation situation?

Your Response

Q.3 Where should you stop your vehicle in cases of emergency evacuation?

Your Response

Q.4 How far away from the vehicle should you have the passengers group?

Your Response

Q.5 What should you do when all passengers are evacuated?

Your Response

SECTION I – ENSURING THE SAFETY OF ALL PASSENGERS

You must do everything you can to protect your passengers at a breakdown or scene of an accident. Decide if there's any further danger and how best to reduce the risk. Tell passengers what's happening:

- Without upsetting them further;
- By only giving them accurate information that they need to know.

You'll need to decide whether it's appropriate for passengers to:

- Stay where they are;
- Move to a safer position in the bus, if they're able (e.g., to the front if another vehicle could run into the back);
- Get off the bus carefully and wait in a safe place, which you must select.

If you're unable to supervise the movement of your passengers, ask someone responsible to do it for you. You must not allow people to wander around. They could put themselves at risk or get in the way of the emergency services. You should ask for people with medical qualifications to come forward and help.

In most cases it's best to avoid moving injured people until the emergency services arrive. You should be extremely careful about moving casualties – it could prove fatal. Casualties should only normally be moved if:

- They're in need of resuscitation (that is, not breathing);
- In immediate danger (from fire, chemicals, fuel spillage, etc.).

You should

- Move any apparently uninjured people away from the vehicle(s) to a place of safety.
- Give first aid if anyone is unconscious.
- Check for the effects of shock. A person may appear to be uninjured but might be suffering from shock.
- Keep casualties warm but don't give them anything to eat or drink.
- Give the facts (not assumptions, etc.) to medical staff when they arrive.

On the motorway

Because of the higher speeds on motorways there's more danger of an accident turning into a serious incident. You must inform the motorway Gardaí and emergency services as quickly as you can.

- Use the nearest emergency telephone, this is connected directly to the Gardaí.
- If you use a mobile phone, identify your location from marker posts on the hard shoulder first.
- Don't cross the carriageway to get to an emergency telephone.
- Try to warn oncoming traffic, but don't endanger yourself.
- Move any uninjured people well away from the main carriageway and onto an embankment, etc.
- Watch out for emergency vehicles coming along the hard shoulder.

Bomb Threat

- Assess the situation and remain calm.
- Stop the vehicle at the nearest safe stopping point, and switch off the engine.
- Advise passengers of a serious problem on board the vehicle and instruct them to disembark immediately in an orderly fashion, leaving personal belongings behind.
- Take passengers to a safe location away from the vehicle.
- Call emergency services and await arrival.
- Co-operate fully with the emergency services.
- Alert other road users to the situation.
- Phone designated contact person and give details.

A direct threat to the driver/passengers on the vehicle, e.g. a hi-jack or hostage situation

- Remain calm, and if it is a bus, reassure the passengers.
- Do not take any action which may jeopardise your own safety or the safety of the passengers.
- Under no circumstances should you take any aggressive or other precipitative action.
- Obey any orders given by the person making the threat.

- Comply with any instructions given by State authorities.
- Try to remember details of the incident/ individual involved to assist the State authorities.

Road blocked – vehicle unable to pass

- Bring the vehicle to a stop a safe distance from the obstruction.
- Tell the passengers to remain calm and to stay on the vehicle.
- Attempt to ascertain the nature of the incident.
- Ring the emergency services, if they are not on the scene already.
- Follow the instructions given by any State authorities at the scene.
- Phone your designated contact person.
- Phone the relevant authorities if possible.
- Follow any suitable diversionary route, either signposted or known.
- Confirm with the state authority that there are no physical restrictions on height, weight, length or width on the diversionary route.

Gardaí – If a breakdown occurs on the motorway, inform the Gardaí. Give licence plate number, depot, driver's name, number of passengers, description of load, depot you wish to contact, type of defect, if you know; if not known, explain how the breakdown occurred.

Next journey – Make sure your depot is aware of your next scheduled journey, so that arrangements can be made to cover it, in the event of you being unable to do so.

Replacement vehicle (information) – Keep your customers informed with regard to the rescue operation.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 What type of people/passengers could be of help in an emergency situation?

Your Response

Q.2 List three things you must do in the event of a bomb scare.

Your Response

Q.3 List four things you must do in the event of a hostage situation.

Your Response

Q.4 What information should you provide to the Gardaí in the event of breakdown on the motorway?

Your Response

Q.5 If you need to evacuate your passengers what is one of your options to ensure that your passengers arrive at their destination?

Your Response

SECTION J – REACTION IN THE EVENT OF AGGRESSION

Human aggression has been separated into “emotional” aggression, carried out by people with the main intention of harming someone, and “instrumental” aggression, with some other objective, such as to obtain something rewarding, rather than specifically to injure a victim. In general, both the form of the aggressive act and the context in which it occurs have to be taken into account. It’s crucial to acknowledge that a problem exists. Behaviour that is intended to threaten or inflict physical injury on another person may also include such categories as verbal attack, discriminatory behaviour and economic exploitation. Listed below are 7 practical steps which drivers can take to reduce the risk of violence and abuse.

1. If you are verbally abused, keep calm and try to defuse the situation.
2. Do not get out of the cab to deal with incidents unless you are absolutely sure that it is safe for you to do so.
3. If it is not possible to calm the situation, get help.
4. Follow company procedures. Take advantage of any training that is offered in how to deal with potentially threatening situations and be familiar with written guidance and instructions.
5. If a passenger causes trouble, remember that you have the power under the conduct regulations to ask them to leave. But you must use this power sensitively and in line with company policy.
6. Always report incidents in writing to management and do so as soon as you can. This includes both physical and verbal abuse. If you are assaulted you should seek medical attention.
7. Tell management about any general concerns regarding safety, and suggest improvements.

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 What should you do if you are verbally abused?

Your Response

Q.2 When should you get out of the cab to deal with an incident?

Your Response

Q.3 How must the incident be reported?

Your Response

SECTION K – DRAFTING OF AN ACCIDENT/INCIDENT REPORT

This section covers what you must do if you have been involved in an accident, whether with another vehicle, another user of the road and/or with an object along the road. It also outlines what to do if you come across an accident. A serious accident is one involving loss of life, personal injury, extensive vehicle or property damage, or any accident which has implications for the mechanical condition of the vehicles involved. This section also deals with recording information about the accident as accurate recording of the events is important for subsequent claims or court hearings



If your vehicle is involved in an accident, think first of safety:

- Stop, switch on your hazard warning lights;
 - Before alighting from your vehicle make sure it is safe to do so;
 - Wear your fluorescent (hi-viz) clothing, and place the hazard warning triangle behind the vehicle. However, do not place a red warning triangle on a Motorway
 - Check that none of the vehicles involved is on fire, or are carrying hazardous materials;
 - Evacuate any passengers to a safe position away from the vehicle.
 - Continuously check for approaching vehicles;
 - Only when you are satisfied that the scene is safe for yourself should you start to give assistance;
 - Call 112 or 999, report your position and the facts as you know them.
 - Check for injuries and administer first aid as appropriate (A,B,C)
 - Enlist help from competent passers by to render first aid or to manage traffic;
 - Do not move any injured persons unless there is a danger of fire or chemical spillage;
 - Continue rendering assistance until the emergency services arrive.
- c) Summon assistance of fire brigade and ambulance as necessary.
 - d) Contact nearest Garda station (or the nearest police station when the accident happens outside State).
 - e) Ascertain more detailed information on the facts of the accident as follows:
 - (i) Names and addresses of all injured persons;
 - (ii) Names and addresses of all witnesses;
 - (iii) Name of driver and of owner, registration number and particulars of insurance cover where another vehicle involved;
 - (iv) Take road measurements and establish point of impact, note time of accident, condition of road, street lighting or other contributory causes of the accident which would be of value in any subsequent developments;
 - f) Where a conductor or assistant is present he should render all possible assistance to the driver in carrying out the foregoing.

Drivers must follow these procedures at the scene:

- a) Seek medical and spiritual aid for injured persons;
- b) Warn on-coming traffic in both directions;
- c) The driver must stop;
- b) The driver (or person in charge) must keep the vehicle at the scene of the accident for a reasonable period. (Obstruction should be avoided, the position of vehicles marked and the road cleared as soon as possible.)
- c) The driver (or person in charge) must give, on request, certain information to a Garda or (if there is not a Garda present) to anyone present

Legal requirements

If a vehicle is involved in an accident:

involved in or affected by the accident; in any other case, the information must be given on request to any one independent witness.

- d) The information that must be given is:
- (i) The name and address of the driver (or person in charge);
 - (ii) The name and address of the owner of the vehicle;
 - (iii) The registration number of the vehicle;
 - (iv) Particulars of the insurance covering it.
- e) If neither a garda or any person entitled to the information is present or able to demand the information, the driver (or person in charge) must report the accident as soon as possible to An Garda Síochána.

Incident reporting

At the accident scene you must:

- Exchange details with any other driver or road user involved in the accident;
 - Obtain names and addresses of any witnesses who saw the accident;
 - Take notes at the scene so that you have the information when you need it. Make a note of:
- The time
 - The place
 - Street names
 - Vehicle registration numbers
 - Weather conditions
 - Lighting (if applicable)
 - Any road signs or road markings
 - Road conditions
 - Damage to vehicles or property
 - Traffic lights (colour at the time)
 - Any indicator signals or warning (horn)
 - Any statements made by other people involved
 - Any skid marks, debris, etc.

Drivers must complete the prescribed accident report form. Accidents involving school children about to board or immediately after alighting should be regarded as serious accidents and procedures as set out above, where applicable, should be followed. The procedures do not substitute for or supersede statutory rules and regulations already in force regarding accidents.

Accident to a customer on coach/ bus

- Make a careful note of all injuries, e.g. to the left leg/arm, etc.
- Exact position on the vehicle where the accident happened.
- Fleet number and registration number of vehicle involved.
- The type of shoes a customer was wearing (did they contribute to the accident?); did customer slip on floor/ step of coach/ bus?
- Was floor/step structurally defective?
- Examine for wet, oily or greasy conditions etc.
- Was the person carrying luggage in both hands/ one hand or unable to “hold on” to grab rails etc?
- Was person injured as result of harsh braking? Was braking caused by evasive action or caused by another vehicle (note reg. no.) or pedestrian, weather or road conditions?
- Report all accidents to the Gardaí when immediately convenient, in cases of personal injury.
- Endeavour to obtain witnesses names and addresses.

EXAMPLE OF ACCIDENT/INCIDENT REPORTING FORM

Company name <input type="text"/>		
Date of Incident <input type="text"/>	Time of Incident <input type="text"/>	Service No <input type="text"/>
Route No <input type="text"/>	Vehicle Type <input type="text"/>	Vehicle No <input type="text"/>
Where did the incident happen? <input type="text"/> <small>(nearest landmark or stop)</small>		
What kind of incident was it?		
<input type="checkbox"/> Seat damage	<input type="checkbox"/> Broken window	<input type="checkbox"/> Bodywork damage
<input type="checkbox"/> Fire on vehicle	<input type="checkbox"/> Emergency doors opened	<input type="checkbox"/> Missiles thrown at vehicle
<input type="checkbox"/> Missiles on vehicle	<input type="checkbox"/> Abuse to staff	<input type="checkbox"/> Spitting at staff
<input type="checkbox"/> Theft from staff	<input type="checkbox"/> Assault on staff	<input type="checkbox"/> Theft from passenger
<input type="checkbox"/> Assault on passenger	<input type="checkbox"/> Other type of incident <input type="text"/> <small>(please describe briefly)</small>	
Was anyone physically injured in the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, who was injured?		
<input type="checkbox"/> Driver	<input type="checkbox"/> Conductor	<input type="checkbox"/> Revenue inspector <input type="checkbox"/> Passenger
Who was responsible for the incident?		
<input type="checkbox"/> Adult passenger(s)	<input type="checkbox"/> Young person/ young people	<input type="checkbox"/> Don't know
<input type="checkbox"/> Someone else	<input type="text"/> <small>(please describe)</small>	
Briefly, could you describe what happened? <small>(use separate sheet if necessary)</small>		
<input type="text"/>		
Have the police been informed? <input type="checkbox"/> Yes <input type="checkbox"/> No		
If yes, which police station was it reported to?		
<input type="text"/>		
What is the crime number?	<input type="text"/>	No crime number given <input type="checkbox"/>
Your Name	<input type="text"/>	Contact Tel Number <input type="text"/>

Accident Report Form

Does **not** constitute an admission of liability, just a statement of identity and the circumstances.

1 Date of accident	Time	2 Locality · Country · Place	3 Injuries even if slight no <input type="checkbox"/> yes <input type="checkbox"/>
4 Material damage other than to vehicles A and B: <input type="checkbox"/> no <input type="checkbox"/> yes objects other than vehicles: <input type="checkbox"/> no <input type="checkbox"/> yes		5 Witnesses: names, addresses, tel.	

Vehicle A	Circumstances	Vehicle B																																																						
6 Insured/policyholder* Surname First name Address ZIP code Country Tel. or e-mail	12 Put a cross in each of the relevant boxes to help explain the drawing -* delete where appropriate: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th style="width: 5%;">A</th> <th style="width: 90%;">What happened?</th> <th style="width: 5%;">B</th> </tr> <tr><td>1</td><td>* parked / stopped</td><td>1</td></tr> <tr><td>2</td><td>* leaving a parking space / opening a vehicle door</td><td>2</td></tr> <tr><td>3</td><td>entering a parking space</td><td>3</td></tr> <tr><td>4</td><td>* emerging from a parking space, from private premises, from a track</td><td>4</td></tr> <tr><td>5</td><td>* entering a parking space, private premises, a track</td><td>5</td></tr> <tr><td>6</td><td>entering a roundabout</td><td>6</td></tr> <tr><td>7</td><td>circulating a roundabout</td><td>7</td></tr> <tr><td>8</td><td>striking the rear of the other vehicle in the same line of traffic and travelling in the same direction</td><td>8</td></tr> <tr><td>9</td><td>going in the same direction but in a different line of traffic</td><td>9</td></tr> <tr><td>10</td><td>changing lines of traffic</td><td>10</td></tr> <tr><td>11</td><td>overtaking</td><td>11</td></tr> <tr><td>12</td><td>turning to the right</td><td>12</td></tr> <tr><td>13</td><td>turning to the left</td><td>13</td></tr> <tr><td>14</td><td>reversing</td><td>14</td></tr> <tr><td>15</td><td>changing to a lane reserved for traffic in the opposite direction</td><td>15</td></tr> <tr><td>16</td><td>coming from the right (at a junction)</td><td>16</td></tr> <tr><td>17</td><td>had not observed a priority sign or a red light</td><td>17</td></tr> </table> <div style="text-align: center; margin-top: 5px;"> <input type="checkbox"/> ← State the number of boxes marked with a cross → <input type="checkbox"/> </div>	A	What happened?	B	1	* parked / stopped	1	2	* leaving a parking space / opening a vehicle door	2	3	entering a parking space	3	4	* emerging from a parking space, from private premises, from a track	4	5	* entering a parking space, private premises, a track	5	6	entering a roundabout	6	7	circulating a roundabout	7	8	striking the rear of the other vehicle in the same line of traffic and travelling in the same direction	8	9	going in the same direction but in a different line of traffic	9	10	changing lines of traffic	10	11	overtaking	11	12	turning to the right	12	13	turning to the left	13	14	reversing	14	15	changing to a lane reserved for traffic in the opposite direction	15	16	coming from the right (at a junction)	16	17	had not observed a priority sign or a red light	17	6 Insured/policyholder* Surname First name Address Zip code Country Tel. or e-mail
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7 Vehicle Motor: Make, type Registration No. Country of registration Trailer: Registration No. Country of registration		7 Vehicle Motor: Make, type Registration No. Country of registration Trailer: Registration No. Country of registration																																																						
8 Insurance company (see insurance certificate) Surname Policy No. Insurance Certificate valid from to Agency (or bureau, or broker) Address Country Tel. or e-mail Does the policy cover material damage to the vehicle? <input type="checkbox"/> no <input type="checkbox"/> yes		8 Insurance company (see insurance certificate) Surname Policy No. Insurance Certificate valid from to Agency (or bureau, or broker) Address Country Tel. or e-mail Does the policy cover material damage to the vehicle? <input type="checkbox"/> no <input type="checkbox"/> yes																																																						
9 Driver (see driving licence) Surname First name Date of birth Address Country Tel. or email Driving licence No. Category Driving licence valid until:	13 Sketch of accident when impact occurred Indicate 1. the layout of the road 2. by arrows the direction of the vehicles A, B 3. their position at the time of impact 4. the road signs 5. names of the streets or roads	9 Driver (see driving licence) Surname First name Date of birth Address Country Tel. or email Driving licence No. Category Driving licence valid until:																																																						
10 Indicate the point of initial impact to vehicle A by an arrow → 	Your Sketch of the accident: 	10 Indicate the point of initial impact to vehicle B by an arrow → 																																																						
11 Visible damage to vehicle A:		11 Visible damage to vehicle B:																																																						
14 My remarks:	15 Signatures of the drivers <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> A </div> <div style="text-align: center;"> B </div> </div>	14 My remarks:																																																						

SELF-ASSESSMENT OF KNOWLEDGE

Please complete the following questions to assess your understanding of the module so far:

Q.1 What are drivers prohibited from using on motorways in cases of accident/breakdown?

Your Response

Q.2 List four legal requirements if a vehicle is involved in an accident.

Your Response

Q.3 List five things that must be documented on an accident report form at the scene of an accident.

Your Response

Q.4 Do the company accident procedures supersede the statutory rules and regulations in force regarding accidents?

Your Response

Q.5 List four things you must detail in regard to an accident on a coach.

Your Response

SHOW AND TELL – ASSESSMENT QUESTIONS

This is the final exercise of this module, and is designed to ensure that people are able to apply the learning from the module in very practical ways when you are carrying out your role as a professional driver.

This exercise is based on the Show and Tell assessment that is carried out by the RSA on the initial CPC Driver qualification process. The “show and tell process” is aimed at ensuring that professional drivers are able to apply the knowledge they have on the key aspects of driving in a very practical way. The process asks you a question on some aspect of your role as a professional driver, and asks you to identify the possible answers to the question. For each question asked there are a number of answers expected. In the assessment process a person would be deemed to have failed the question, and consequently received a grade two fault, if they are unable to identify even one correct response to the question concerned. If drivers can identify only two answers, they would receive a grade one fault.

Please complete the following show and tell practical exercises, which will help you to apply the knowledge of the following areas:

- A Dealing with emergencies
- B Correct behaviour at the scene of an accident
- C Vulnerable road users
- D How to avoid contributing to an accident
- E Summoning assistance
- F Assisting casualties and delivering first aid
- G Reaction in event of fire
- H Evacuation of occupants of a truck or bus
- I Ensuring the safety of all passengers
- J Reaction in the event of aggression
- K Drafting an accident report form

A. What should you do in the event of brake failure?

1.
2.
3.
4.

B. Where should you be more observant for motorcyclists on the road?

1.
2.
3.
4.

C. What should you be aware of in case of breakdown of a passenger vehicle?

1.
2.
3.
4.

D. What are the functions of an emergency dispatch system?

1.
2.
3.
4.

E. What can you do to help accident victims deal with shock?

1.
2.
3.
4.

F. What procedures should you follow when evacuating a bus/truck?

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11.

G. What must you do if the road is blocked or you are unable to pass?

1.
2.
3.
4.
5.
6.
7.
8.

H. What steps can you take to reduce the risk of abuse and violence?

1.
2.
3.
4.
5.
6.
7.

I. What procedure must you follow at the scene of an accident?

1.
2.
3.
4.
5.
6.

SHOW AND TELL – ASSESSMENT ANSWERS

A. What should you do in the event of brake failure?

1. Use the endurance brake
2. Use emergency steering techniques
3. Change down gears
4. Look for an escape lane and sound the horn to warn others

B. Where should you be more observant for motorcyclists on the road?

1. Emerging at junctions
2. Manoeuvring lanes, e.g. turning left or right
3. Changing lanes or moving out to overtake
4. Turning into a road on your right

C. What should you be aware of in case of a breakdown of a passenger vehicle?

1. Know where all your passengers are
2. Know what they're doing
3. Keep them informed
4. Don't leave them, unless absolutely necessary

D. What are the functions of an emergency dispatch system?

1. Prioritisation by level of urgency (triage) to determine the speed of response
2. Prioritisation by level of need to determine type of response
3. Provision of pre-ambulance arrival instructions in first aid and scene management
4. Communication with those on the scene and in the receiving hospital

E. What can you do to help accident victims deal with shock?

1. Don't give the casualty anything to eat or drink
2. Reassure the victim confidently and keep checking on them
3. Keep casualties warm and make them as comfortable as you can
4. Talk firmly and quietly to anyone who's hysterical
5. Don't let shock victims wander into the path of other traffic
6. Try not to leave any casualty alone
7. Don't move the casualty unless it's necessary
8. If a casualty does need to be moved for their own safety, take care to avoid making their injuries worse

F. What procedures should you follow when evacuating a bus/truck?

1. Stop vehicle, off the road and out of the mainstream of traffic, if possible
2. Identify a place of safety from the fire, smoke and other road users for all passengers
3. Put on emergency hazard warning lights
4. Issue orders as to which exit is to be used
5. Maintain calm and direct passengers to "walk - not run", not to take belongings, etc., and to be careful when disembarking
6. Remember the dangers of allowing passengers to leave the vehicle
7. Make sure that all passengers are evacuated
8. Send someone or call for help
9. Form passengers into a group at least 100 feet from the vehicle
10. Do not allow persons to stand at the rear of the vehicle obscuring the hazard warning/ rear lights etc.
11. Check bus list to verify all passengers are accounted for

G. What must you do if the road is blocked or you are unable to pass?

1. Bring the vehicle to a stop a safe distance from the obstruction
2. Tell the passengers to remain calm and to stay on the vehicle
3. Attempt to ascertain the nature of the incident
4. Ring the emergency services, if they are not on the scene already
5. Follow the instructions given by any State authorities at the scene
6. Phone your designated contact person
7. Phone the relevant authorities if possible
8. Follow any suitable diversionary route, either signposted or known

H. What steps can you take to reduce the risk of abuse and violence?

1. If you are verbally abused, keep calm and try to defuse the situation
2. Do not get out of the cab to deal with incidents
3. If it is not possible to calm the situation, get help, either by panic alarm, two-way radio or mobile phone
4. Follow company procedures
5. If a passenger causes trouble, remember that you have the power under the conduct regulations to ask them to leave
6. Always report incidents in writing to management
7. Tell management about any general concerns regarding safety, and suggest improvements

I. What procedure must you follow at the scene of an accident?

1. Seek medical and spiritual aid for injured persons
2. Warn on-coming traffic in both directions
3. Summon assistance of fire brigade and ambulance as necessary
4. Contact nearest Garda station
5. Ascertain more detailed information on the facts of the accident
6. Where a conductor or assistant is present he should render all possible assistance to the driver in carrying out the foregoing

ROAD SIGNS OF PARTICULAR INTEREST TO DRIVERS OF LARGE VEHICLES.

See Rules of the Road for the complete list of Road Signs



Height Restriction



No Entry by reference to Weight



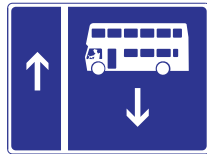
School Warden



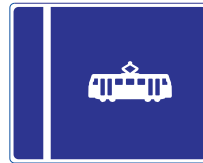
Clearway



No Entry for HGVs. by no. of axles



Contra-flow bus lane



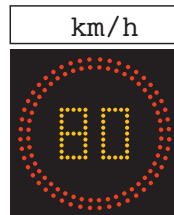
Tram lane on right



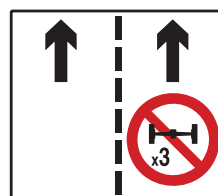
No Parking of Large Vehicles



Cycle Track



Tunnel Speed Limit



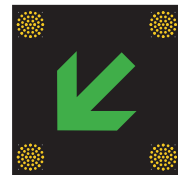
Tunnel Lane Prohibition



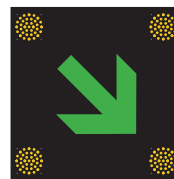
Tunnel lane open



Tunnel Lane Closed



Move to Left Hand Lane



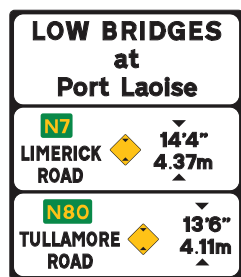
Move to Left Hand Lane



Variable Speed Limit



Restricted Headroom



Low Bridges



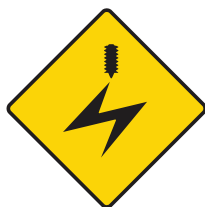
Traffic crossover



Low flying aircraft



Safe height



Overhead electric cables



Slippery road ahead



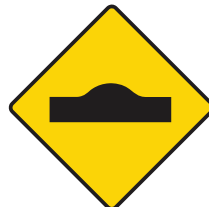
Road narrows



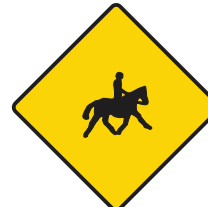
Tunnel ahead



Sharp dip ahead



Sharp rise ahead



Horse riders ahead



Steep descent



Crosswinds



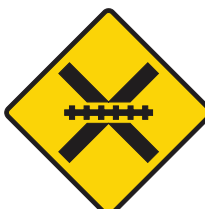
Steep ascent ahead



Unprotected quay



Low bridge ahead



Level crossing ahead



Sharp diversion ahead to the left



Tram crossing ahead



Deer or wild animals



Roadworks ahead



Left hand lane closed



Site access



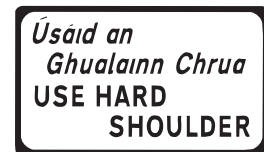
Detour ahead



Diverted Traffic



Concealed entrance



Use hard shoulder



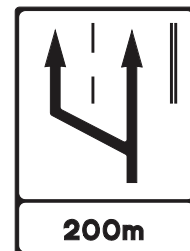
Flagman ahead



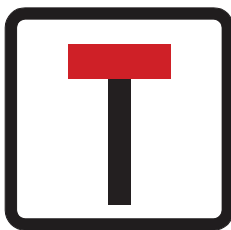
Barrier boards



Stop at roadworks



Slow Lane Ahead



Cul-de-Sac



Industrial Estate



Airport Ahead



Ferry Ahead



Alternative Route for High Vehicles



Lay-by Ahead



SOS Lay-by



Low Bridge Ahead



Low Bridge Ahead



Traffic Calming Ahead



Traffic Calming



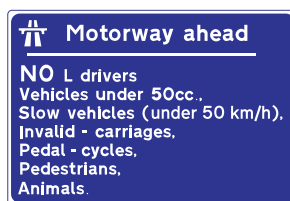
Speed control ramps



Lay-by facilities



Parking Bay for Disabled Persons



Motorway ahead



End of Motorway



300 metres to next exit

REFLECTION ON CPC WORKSHOP

Take a few moments to reflect on the following questions and discuss your answers with at least one other colleague from the programme:

What have I gained/learned from the workshop?

Your Response

■ For myself

■ In my work

■ In relation to my colleagues

What personal changes will I undertake/implement?

What do I want to leave here?

(Anything that I used to do before I came to the programme that I am now going to discontinue thinking, saying or doing.)

Your Response

What do I want to take with me?

(Anything that I did not do, say or think before I came to the programme that I am now going to start doing, saying or thinking.)

Your Response

REFERENCES

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3. Dublin Bus Initial Driver Training, 2012
4. European Road Safety Observatory (2006) Post Impact Care, retrieved March 20, 2007 from www.erso.eu
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