



basic safe driving knowledge

Driving is a complex task that requires the use and coordination of many different skills. This guide provides only the basic steps. There is much more to driving than just being able to make a vehicle go, stop, or turn a corner.

There are many factors that can lead to a crash and the severity of injuries that may be sustained from a crash. Drink/drug driving, your vehicle, road and weather conditions, speed, fatigue and distractions can all contribute to your risk of a crash - you need to drive within your driving skills and experience, to the road conditions, your vehicles capability and the weather conditions to lower your risk of being involved in a crash.

Safe driving tips

- Look at the drivers of cars approaching you rather than at the car itself, because you will notice if they are distracted and can drive accordingly.
- Try to work out the likely intentions of other road users, allow for the possibility of them doing something else!
- Always be ready to give way to other road users (safer for you and them).
- Think of your brakes as your first line of defence in an emergency (avoid the impulse to swerve).

When braking is required, the initial pressure on the pedal should be very gentle. This will light up the brake warning lamps and give anyone following you as much warning as possible that you plan to slow down or stop.

- Maintain a good crash avoidance space around your vehicle.

Crash avoidance space (road positioning)

A low-risk driver maintains what is called a 'crash avoidance space' around the vehicle at all times. Crash avoidance space is simply the clear space needed around a vehicle to reduce or avoid the risk of a crash.

The crash avoidance space is managed by the driver adjusting the vehicle's speed and position on the road.

Always check your mirrors before making any change to your speed or position.

Front crash avoidance space

To determine the crash avoidance space to the front of the vehicle, you need to take into account two key factors: reaction time and response time.

Reaction time is the time you as the driver needs to:

- see the information (the hazard)
- recognise what the information means
- decide on a response
- activate that response.

A driver who is fit, concentrating and alert and not distracted or affected by alcohol, drugs or fatigue will still require about 1.5 seconds to react to a hazard.

Response time is the time required to take action to respond to a situation or avoid the hazard. Generally, at least 1.5 seconds is needed to respond.

In most situations, braking should be the only response. Swerving is rarely appropriate because it can result in a more severe crash, such as a head-on collision if the driver swerves into the oncoming traffic.

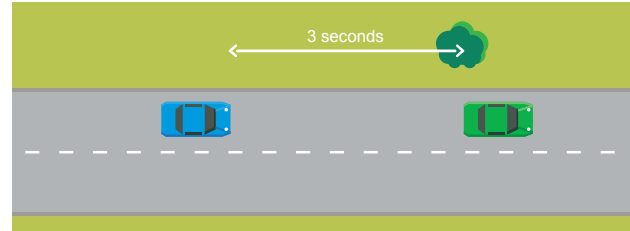
A total of at least three seconds crash avoidance space (a three-second gap between your vehicle and the one you are following) is needed to react and respond to a situation in front of you. You will need even longer in poor conditions, such as in rain or darkness.

How to calculate your crash avoidance space

To calculate a three-second crash avoidance space when following another vehicle, use this basic technique:

As the rear of the vehicle in front of you passes an object at the side of the road, such as a power pole, tree or sign, start a three-second count of 'one thousand and one, one thousand and two, one thousand and three'.

There should be three seconds before the front of your vehicle reaches the same object.



Potential for something to move into the crash avoidance space

The three-second gap can also be used in situations where there is potential for something to move into your crash avoidance space. For example, a car in an adjacent street could fail to give way and pull out in front of you.

A safe, low risk driver, experienced in maintaining a three-second following distance, is able to mentally judge a three-second crash avoidance space in front of their vehicle. If there is a chance that a hazard will enter your crash avoidance space, reduce your speed to create a buffer.

It is necessary to maintain the crash avoidance space for all potentially hazardous situations, including blind corners and crests.

Road positioning (buffering)

Position your vehicle on the road to increase the crash avoidance space around all sides of your vehicle and reduce the risk of a crash (referred to as 'buffering').

Buffering is a simple concept that really just means moving away from hazards.

Buffering could include:

- using the left or second lane rather than the right lane to reduce the risk from oncoming vehicles
- moving to the left of your lane at the crest of a hill to create extra space between you and any vehicles or hazards that you might not be able to see on the other side of the hill
- moving away from parked cars to avoid pedestrians and doors opening
- moving to the right lane when passing hazards on the left side of your vehicle.

Crash avoidance space when stopped

When you are stopped it is important to leave a crash avoidance space between vehicles. Making sure that there is a clear space between vehicles will reduce the risk of a crash from being pushed forward into the vehicle in front or from the vehicle in front rolling backwards.

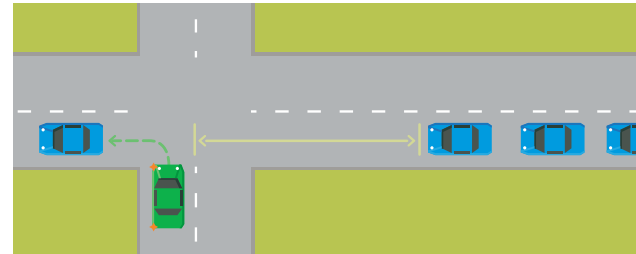
Stop in a position behind other vehicles that allows you enough space to steer around the vehicle in front if needed. This will not be always be practical. In some cases it might be safer to stop closer to the vehicle in

front, such as when stopped in a turning lane to prevent blocking the flow of traffic in continuing lanes and avoid rear-end collisions.

Crash avoidance space when entering traffic

When deciding when to enter or cross a line of traffic, such as pulling into traffic or at an intersection, a safe driver will not impact on the crash avoidance space of other road users.

This means that when entering a line of traffic you should make sure there is enough space for you to enter the line of traffic and accelerate to reach the speed of the rest of the traffic without other road users needing to adjust their crash avoidance space.



Crash avoidance space when entering traffic – turning left into flow of traffic

Crash avoidance space at intersections

When approaching and making a turn at an intersection you must maintain your crash avoidance space and make sure your vehicle does not impact on the crash avoidance space of others. This can be done by positioning your vehicle correctly on the approach and when travelling through an intersection.

When turning left:

- Approach the intersection as far left as possible. On roads marked with lanes, this means from the left lane, or any marked left-turn lane. On unmarked roads this means from as close to the left edge of the road as possible.
- Make the turn staying as far left as possible. On roads marked with lanes, do not change lanes within the intersection.

When turning right:

- Approach the intersection as close to the centre line of the road as possible on unmarked and single-lane roads. Approach in the marked right-turn lane on multi-lane roads.
- While waiting to turn right across traffic, the wheels of your vehicle should be kept straight. This will help stop you being pushed into oncoming traffic if another vehicle crashes into the rear of your vehicle.
- Make the turn by steering to the right of an imaginary centre of the intersection, or, if lane lines are marked, stay within the lane.
- As you exit you must keep to the left of the centre of the road, or within the same lane if lanes are marked.

Crash patterns for learner drivers

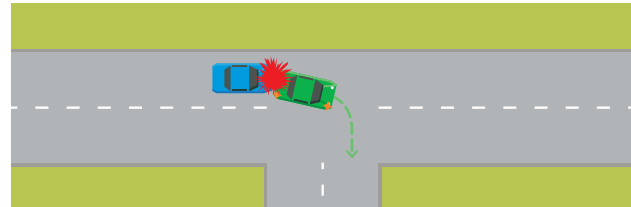
Crash patterns for learner and newly licensed drivers are different from those of experienced drivers.

Most new driver crashes fall within five main crash types, as shown on the following pages.

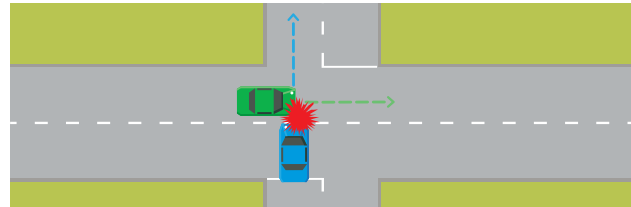
Many of these types of crashes can be prevented if the driver maintains the crash avoidance space, is alert and drives to the conditions.

The five most common crashes are:

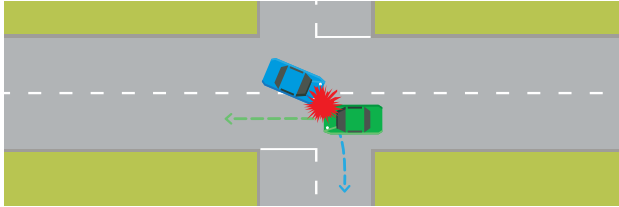
1. Colliding with the rear of another vehicle



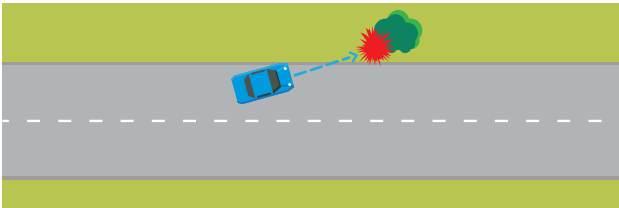
2. Colliding with the side of another vehicle



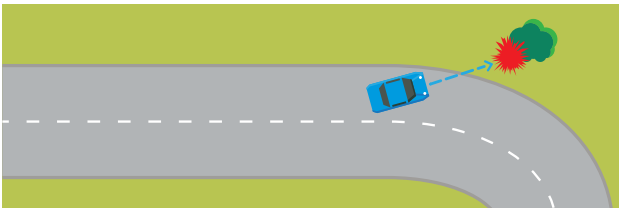
3. Colliding with another vehicle coming from the opposite direction



4. Running off the road on a straight section and hitting an object or parked vehicle



5. Running off the road on a curve or bend and hitting an object or parked vehicle



Remember to:

- **Maintain your vehicle**
(never drive an unregistered vehicle).
- **Wear your seatbelt**
(it could save your life one day).
- **Pay attention to other road users**
(people are unpredictable).
- **Drive with caution**
(be prepared for hazardous situations).

Night driving

When driving at night you need to be able to see and be seen clearly by others. Compared with daylight driving, visibility at night is extremely limited. Even with the best street lighting combined with the most efficient headlights; your ability to see at night is significantly reduced.

Before driving at night, make sure you have:

- good lights
- clean windows.

It is a legal requirement to have your headlights switched on when driving your vehicle between sunset and sunrise and when weather conditions make it necessary.

Isolated patches of light and then dark areas will strain your eyes and cause them to constantly adjust, which makes it difficult to see.

At night time, including dusk and dawn, many serious crashes occur because of limited visibility and fatigue.

If the light of an approaching vehicle dazzles you, slow down and look at the edge of the road until your eyes have adjusted or the vehicle has passed. If a vehicle approaches you from behind with their high beam headlights on, you can adjust your internal mirrors to avoid being dazzled.

In low-light areas always reduce your speed and keep a careful look out for pedestrians and cyclists.

If there is no street lighting and no other vehicles close by, then you can use your headlights on high beam. You must change to low beam as soon as you see an approaching vehicle so you do not dazzle the other driver.

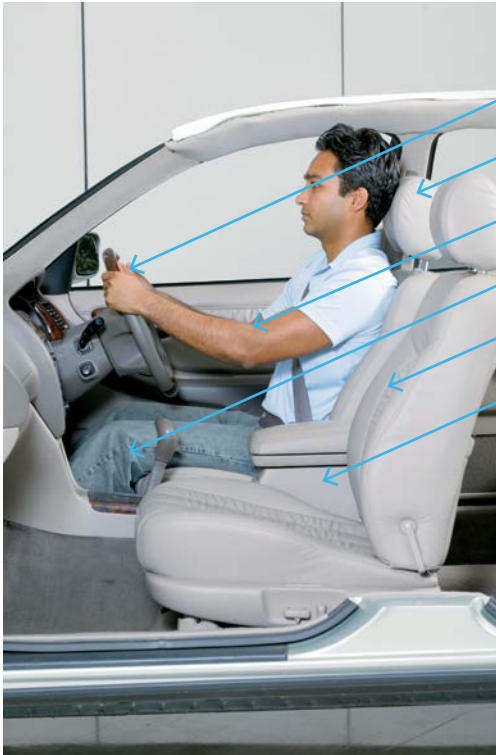
High beam can be used on any road, but you must dip your headlights to low beam when an approaching vehicle is within 200 metres, or when the other vehicle's headlights dip, whichever is sooner. You should always dip your headlights when following another vehicle.

It is important to adjust your driving to night time conditions. Your driving speed at night should be adjusted to the range of your headlights. Drive so that you can stop well within the distance you can see.

Dip your headlights before negotiating a crest or curve.

Driving posture and techniques

The key to good driving technique is smoothness, and the secret to smoothness is good preparation.



The steering wheel should be adjusted low, facing the driver's chest rather than the face.

Adjust the head restraint for your height. See the vehicle owner's manual.

Keep your arms bent; thumbs should be on the rim of the steering wheel.

Keep your knees slightly bent.

Have the seat fairly upright to fully support your back and shoulders.

Sit deep in the seat with your backside against the back of the seat.



Brace your body
using your left foot

Driving posture

When you first get into a car, take the time to adjust the seat and controls to suit your height and build. Correct driving posture reduces fatigue, improves your control of the vehicle and allows the safety features of the vehicle to operate effectively.

Seatbelts

For seatbelts to work effectively they should be adjusted 'low, flat and firm':

- Low – placed below your hips to fully secure your body weight.
- Flat – no twists, turns or folds.
- Firm – when you drive, pull the belt firm regularly to remove any slack.

Airbags

Airbags are a supplementary restraining system (SRS) designed to be used in conjunction with seatbelts. To get the most benefit from the driver's airbag, the steering wheel should be adjusted low, facing the driver's chest rather than the face.

Braking technique

Correct braking is done in two stages. First put light pressure on the brake pedal and pause (set up the brakes), and then progressively apply the necessary braking pressure (squeeze).

Two-stage braking (set up and squeeze) improves braking effectiveness, reduces the likelihood of skidding and provides better control.

Harsh or excessive braking pressure may cause skidding and a loss of control, particularly on wet or gravel roads.

Steering technique

There are two main steering techniques: 'push/pull' and 'hand over hand'.

With the **push/pull technique**, one hand pulls the steering wheel into the other hand. The right hand stays on the right half of the steering wheel; the left hand stays on the left half.

With the **hand over hand technique**, the hands are continually crossing over on top of the steering wheel.

Regardless of which steering technique you use, some general rules apply:

- steering must be smooth and progressive
- keep both hands on the outside of the steering wheel and thumbs along the rim
- use your hands to slow down and guide the wheel when it automatically returns to the centre position after a turn
- reduce speed before steering and wait until the vehicle begins to straighten before accelerating.

Footwear

It is strongly recommended that you wear enclosed footwear when driving.

Thongs and other footwear without an enclosed heel are not considered safe because they can interfere with the operation of the pedals.

Safe Driving Tips

Driving with road trains and heavy vehicles

Some safety tips to keep in mind when driving with road trains or heavy vehicles.

- **Stopping safely**

Do not cut in front of road trains when they are slowing down at traffic lights or when out on the highway. They need more road space than you to slow down and stop. Be patient and keep everyone safe.

- **Do not overtake a turning vehicle**

Road trains and other heavy vehicles need extra room when turning, be patient and follow the signs. Do not move into the blind spots to the left of the road train cabin or drive directly behind the trailer. If you can't see the road train mirrors, the driver can't see you.

- **Roundabouts and traffic lights**

Stay clear when behind a road train at roundabouts and traffic lights. Road trains often make wide turns and sometimes need the entire road to maneuver. To reduce traffic disruptions, road train drivers often slow down significantly to avoid having to come to a complete stop.

- **Road positioning**

Like most heavy vehicles, a road train often uses the entire lane, so avoid travelling right on the center line. Stick to the left side in your lane to give yourself ample space. Park well clear of the roadway and use your parking lights during times of low visibility. Be sure to use your hazard lights if you are in a hazardous position.

Driving with Cyclists

Bicycles are classed as vehicles and, therefore, cyclists have the same rights and responsibilities as all other road users. They deserve the same respect and courtesy.

Always look for cyclists and expect the unexpected:

- give cyclists space when sharing the road as sometimes they need to ride out of a lane to avoid a hazard or obstacle
- when travelling 60km/h or less, you must leave a minimum of one metre passing distance when overtaking a cyclist
- when travelling over 60km/h, you must leave a minimum of one and half metres passing distance when overtaking a cyclist
- look for cyclists hand signals, so you are aware of their intentions
- watch for pedestrians and cyclists when leaving or entering a driveway
- cyclists riding two abreast must be overtaken as if you are overtaking a car.

If you do not have good visibility of the footpath when reversing out of your driveway, use the horn to warn cyclists and pedestrians that you are entering the roadway.

Remember - wider of the rider - keep your distance when passing cyclists.

Police

You must always obey any direction you are given from a police officer. If you are requested to pull over, you must immediately pull over and stop in the nearest safe location.

When you hear a siren or see the flashing blue or red lights of an emergency vehicle (such as a police, fire or ambulance vehicle) you must give way. This means get out of the way so the emergency vehicle has a clear passage through traffic.

Generally, if you hear a siren or see the flashing lights, pull over to the left until the emergency vehicle passes.

Your vehicle and driving conditions

Before you drive make sure your vehicle is safe and roadworthy. You should be confident that it will get you to your destination safely. Check:

- all fluid levels are correct (fuel, water, brake, radiator, battery)
- all lights, wipers and washers are in working order
- tyres and spares are inflated as specified
- the vehicle is not overloaded
- your vehicle registration is current and covers you for the entirety of the journey.

Plan for regular stops if you are taking a long trip.

Tyres:

Instructions on how to change your tyre will be in the vehicle manual. Choose a safe place to change your tyre so you can be easily seen by oncoming traffic. A flat, straight section off the road is the best place. Pull off the road and turn on your hazard lights.

Road Works:

- Slow down and look for any hazards.
- You must obey any signal from a traffic controller and give way to any worker.
- Speed limit signs at work zones are enforceable and must be obeyed.

Road Hazards:

- Wind, rain, fire, smoke from bushfires, debris and many different animals can be road hazards (kangaroos, dingos, buffaloes, horses, cats and dogs). Animals are most active at sunrise, sunset or at night.
- You may encounter sections of the road that are unfenced which can lead to animals or live stock being on or near a road. If you encounter an animal on the road you should slow down and sound your horn but **do not swerve** around them as this can lead to losing control of your vehicle and the possibility that it may roll over.
- If you are forced to drive off the side of the road, do not over correct or brake heavily. Slow down and return to the road when the vehicle is travelling at a safe speed and the road is clear of other traffic.
- When you encounter a road hazard, slow down.

Dust and Smoke:

Driving on dry unsealed dirt roads will always produce dust as you drive. Bushfires can often generate dense smoke. As dust and smoke can reduce your visibility as you drive you should:

- Always drive with your headlights on low beam, this will make you more visible to oncoming traffic and traffic ahead of you.
- Never overtake if you cannot see what is coming the other way through the dust or smoke. Be patient, reduce your speed and stay alert – you may catch up to the vehicle in front but not see them through the dust or smoke.
- Do not stop unnecessarily as there may be another vehicle behind you. If you need to stop and it is safe to do so, pull off to the side of the road.
- Do not move to the centre of the road, stay on the left hand side at all times.
- Dust and smoke can linger in the air if there is no wind. If it lingers, keep your speed to a minimum until you have clear vision and remember, BE PATIENT.

Corrugations:

Dry unsealed dirt roads and dirt tracks may have corrugations which can make driving hazardous.

- A corrugated dirt road is a road with a series of regular bumps or ripples with short spacing's in the road surface.
- Always be cautious when driving on corrugations and slow down when rounding curves as speed may cause loss of traction and control of your vehicle or trailer, and significantly increase your braking distance.
- Try to avoid overtaking on corrugations – BE PATIENT.

Flooded Roads:

- In heavy rain it is safer to slow down or pull off to the side of the road. Always use your headlights in these conditions.
- If you encounter a flooded road, check the depth, strength of the water flow and the possibility of obstructions before proceeding or wait until the water has subsided. Do not travel on roads that are closed – heavy penalties apply.
- Regularly updated road condition reports are available by phone on 1800 246 199 or by visiting the NT road report website or Facebook page.

Bogged:

Should you get bogged, try the following:

- Engage 4WD if you haven't already (remember to lock your hubs if need be).
- Try reversing out.
- Let some air out of your tyres and try to drive out. Remember once you are out, to pump your tyres back up using your air compressor.
- Place sticks, bushes or other material under the tyres and then try to drive out.
- Wait with your vehicle for another vehicle to come along and pull you out using a snatch strap or load rated rope. Do not use the tow ball as an anchor point.
- If you are still bogged, stay with your vehicle until help arrives.

Breakdowns:

If your vehicle breaks down while driving:

- Switch on your hazard lights or use some other device to warn other road users of the hazard.
- Have any passengers leave the vehicle and stand in a safe place away from the vehicle on the side of the road.
- Push your vehicle off to the side of the road if it is safe to do so.
- Avoid working or standing on the traffic side of your vehicle.