



# Queensland Motorcycle Riders' Guide



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# Introduction

This guide contains important information on getting a motorcycle licence, road rules, protective gear, low-risk riding tips and techniques, risk management and registering a motorcycle.

Motorcycling can be fun, economical and safe, but we have to recognise that motorcycle riders are among our most vulnerable road users.

In a crash, motorcycle riders have less protection than drivers and have a greater chance of being killed or injured — motorcycle riders and their passengers are overrepresented in the Queensland road toll.

The motorcycle licensing system is designed to help you become a safe rider. Our aim is to make motorcycling a safe and enjoyable experience for those who choose to ride.

You can become a safer rider by getting the necessary skills, and understanding the road environment. You always need to ride sensibly and safely, be alert and defensive, anticipate and respond to the road environment, and accept that you are responsible for your safety on the road.

**Enjoy your riding, but above all, ride to survive.**

# Motorcycle licensing in Queensland

Queensland has a graduated licensing system for new riders, with two motorcycle licence classes:

- **RE** (restricted to learner approved motorcycles)
- **R** (unrestricted — may ride any motorcycle)

New riders are required to complete stages of training and assessment to obtain an unrestricted, R motorcycle licence. The training covers the key skills required for riding on the road and is taught in three stages — pre-learner, restricted (RE) and unrestricted (R).

## Overview of the motorcycle licensing system

	<b>Pre-learner course</b>
	<b>Knowledge test</b>
	<b>RE learner licence</b>
	<b>Motorcycle hazard perception test</b>
	<b>Restricted (RE) course</b>
  	<b>RE provisional or open licence</b>
	<b>Unrestricted (R) course</b>
  	<b>R provisional or open licence</b>

## Licence types

New riders are required to pass through three licensing stages to obtain an unrestricted motorcycle licence.

- RE learner licence.
- RE provisional or open licence.
- R licence.

## RE learner licence

An RE learner licence authorises you to learn to ride a learner approved motorcycle under supervision. To apply for an RE learner licence you must:

- Hold a car (class C) provisional or open licence and have held the licence for at least one year (in the five years before applying for the learner licence).
- Successfully complete a Q-Ride Pre-Learner Course.  
*You may apply for an exemption from the Q-Ride pre-learner course if you live outside a 100 kilometre radius of a Q-Ride training area, however you will then need to hold your learner licence for longer.*
- Pass the motorcycle knowledge test, and pay the test fee.

You may also apply for an RE learner licence if you are a returning rider — you previously held a provisional or open motorcycle licence but it stopped being valid more than five years ago. If you are a returning rider you will be given a certificate that you must carry while learning to ride.

While learning to ride you must:

- Wear an approved helmet.
- Only ride a learner approved motorcycle.
- Be supervised by a licensed rider, who has held an open RE or R licence for at least one year. Your supervisor may direct you from a sidecar attached to your motorcycle, from another motorcycle or vehicle.
- Display a capital L that is clearly visible from 20 metres to the rear of the motorcycle. You can display an L-plate or wear a vest.
- Not carry a pillion passenger.
- Have zero blood alcohol concentration.
- Not lane or edge filter. For more information about lane or edge filtering, see page 12.
- Always carry your licence, or driver licence receipt if waiting for the licence in the mail.

You must hold your RE learner licence for at least three months before you can progress to an RE provisional or open licence (at least one year if you were granted an exemption from the pre-learner course). However, if you are a returning rider there is no minimum time that you must hold your learner licence.

## RE provisional or open licence

An RE provisional or open licence authorises you to ride a learner approved motorcycle unsupervised. To progress from an RE learner licence to an RE provisional or open licence you must:

- Have successfully completed the Motorcycle Hazard Perception Test.  
*This test is available online on the Queensland Government website [www.qld.gov.au](http://www.qld.gov.au) and search 'Motorcycle Hazard Perception Test'.*
- Have held your RE learner licence for at least three months.  
*If you were granted an exemption from the pre-learner course you will need to have held your learner licence for at least one year.*
- Successfully complete a Q-Ride Restricted (RE) Course.  
*You may complete the Q-SAFE riding test if you live outside a 100 kilometres radius of a Q-Ride training area.*

The type of RE licence (provisional, probationary, or open) you get will be determined by the licence you hold. For example, if you hold a car P1 licence, you will be issued an RE P1 licence.

While riding with an RE provisional or open licence you must:

- Wear an approved helmet.
- Only ride a learner approved motorcycle.
- Display the correct P-plate clearly visible from 20 metres to the rear of the motorcycle, if you hold a provisional licence.
  - For P1 riders: red P plate or vest with red P .
  - For P2 riders: green P plate or vest with green P .
- Not carry a passenger for the first year.
- Have zero blood alcohol concentration for the first year (at all times if you hold a provisional licence).
- Not lane or edge filter, if you hold a provisional licence.
- Always carry your licence, or driver licence receipt if waiting for the licence in the mail, if you hold a provisional licence.

You must hold your class RE provisional or open licence for at least two years before you can progress to a class R provisional or open licence.

After two years you are automatically authorised to commence learning to ride a class R motorcycle. While learning to ride a class R motorcycle you must display an L-plate clearly visible from 20 metres to the rear of the motorcycle, and be supervised by a licensed rider, who has held an open class R licence for at least one year.

If you are a returning rider for a class R licence, there is no minimum time that you must hold your class RE provisional or open licence.

## R provisional or open licence

An R licence authorises you to ride any motorcycle unsupervised.

To learn to ride an R motorcycle or progress from an RE provisional or open licence to an R licence you must:

- Have held your RE provisional or open licence for at least two years.
- Successfully complete a Q-Ride Unrestricted (R) Course.  
*You may complete the Q-SAFE riding test if you live outside a 100 kilometre radius of a Q-Ride training area.*

The type of R licence (provisional, probationary, or open) you get is determined by the licence you hold. For example, if you hold an RE open licence, you will get an R open licence.

While riding with an R licence you must:

- Wear an approved helmet.
- Display a P-plate clearly visible from 20 metres to the rear of the motorcycle, if you hold a provisional licence.
- Not lane or edge filter, if you hold a provisional licence.
- Always carry your licence (driver licence receipt if waiting for the licence in the mail), if you hold a provisional licence.

## Training and testing requirements

### Knowledge test

The motorcycle knowledge test is designed to ensure all riders understand important licensing requirements, road rules, and risk management and hazard perception principles before learning to ride on the road.

The test consists of 30 multiple choice questions based on information contained in this Guide and in Your Keys to Driving in Queensland. You need to answer at least 27 out of 30 questions correctly to pass the test.

To be eligible to take the test you must have:

- Successfully completed the Q-Ride Pre-Learner Course, or obtained an exemption.
- A valid provisional, probationary or open licence.
- Held a car licence for at least one year in the past five years.

## Online

You can take the knowledge test and pay the test fee online at [www.qld.gov.au](http://www.qld.gov.au) and search 'transport knowledge test'. To take the test online, the successful completion of the Q-Ride Pre-Learner Course, or an exemption, must be recorded on your Department of Transport and Main Roads (TMR) licence record. Your Q-Ride training provider may notify TMR that you have successfully completed the course, or you may present your competency declaration at a driver licence issuing centre.

You can take the test once a day and a one-off fee is required when you pass. If you pass and pay for the test online, you may be able to have the RE learner added to your licence and a new licence sent to you, without attending a driver licence issuing centre.

## In person

You can take the knowledge test and pay the test fee in person at a driver licence issuing centre. You can only take the test once a day, and must pay the fee for each attempt.

If you are a returning rider, you need to complete the test in person.

## Motorcycle Hazard Perception Test

The Motorcycle Hazard Perception Test is designed to ensure that riders have adequate hazard perception skills before they progress to unsupervised riding. Hazard perception when riding a motorcycle is very different to driving a car. Being able to identify and respond appropriately to a hazard is an important safe riding skill. The test features situations that have proven to be the most dangerous for riders.

The Motorcycle Hazard Perception Test depicts hazards from the perspective of the rider.

To be eligible to take the test you must have your learner motorcycle licence. There is no tenure requirement. You need to successfully complete the test before you can take the Q-Ride RE Course or Q-Safe practical riding test and upgrade from a learner licence.

The test is available online at [www.qld.gov.au](http://www.qld.gov.au) and search 'Motorcycle Hazard Perception Test'. It is not available at driver licence issuing centres.

## Q-Ride courses

The three Q-Ride courses, pre-learner, restricted (RE) and unrestricted (R), form a holistic competency-based training and assessment program. The courses are delivered by Q-Ride training providers, accredited by TMR.

You must undertake the Q-Ride courses to progress through the motorcycle licensing system if you live within a 100 kilometer radius of a Q-Ride training area.

Q-Ride training providers set their own course fees. It is recommended that you contact a number of Q-Ride training providers to choose a provider that best suits your location, learning style and budget. To find a Q-ride provider near you go to [www.qld.gov.au](http://www.qld.gov.au) and search 'Q-Ride trainer'.

### Pre-learner course

The Q-Ride Pre-Learner Course is designed to help you gain basic riding knowledge and motorcycle handling skills in a safe environment before learning to ride on the road.

Designed for people with no riding experience, the course is conducted entirely off-road encompassing theory elements, demonstrations, coaching and riding practice. The course covers the basics of riding including protective gear, riding curves, controlled braking and good roadcraft.

The course aims to ensure you have the knowledge and skills to manage routine riding situations under supervision, to instil good riding attitudes, and to minimise the likelihood of harm due to inadequate riding knowledge or skills.

### Restricted (RE) course

The Q-Ride Restricted (RE) Course is designed to help you further develop your riding knowledge and skills.

Designed for people who have completed the pre-learner course and have some riding experience, the course is split between off-road and on-road activities. The course reviews and builds on the pre-learner course to further develop your knowledge and skills.

The course aims to ensure you have the knowledge and skills to manage riding situations unsupervised, to reinforce good riding attitudes and to minimise the likelihood of harm due to inadequate knowledge, skills, or risk management.

### Unrestricted (R) course

The Q-Ride Unrestricted (R) Course is designed to reinforce your riding knowledge and skills, and further develop your higher order cognitive skills and risk management strategies. Designed for people who have completed the restricted course and have

significant riding experience, the course is conducted predominantly on-road. After an off-road check to ensure you can safely be taken on-road, the course consists of on-road riding interspersed with stops to provide coaching and discuss safe riding behaviours and strategies.

The course aims to enhance and reinforce your riding knowledge and skills to effectively manage riding situations on a more powerful motorcycle, to reinforce good riding attitudes and to minimise the likelihood of harm due to inappropriate riding skills, behaviours or risk management.

## Completing a Q-Ride course

When you have demonstrated all of the competencies for the course, the Q-Ride training provider will issue a Q-Ride competency declaration. Your training provider may notify TMR directly that you have successfully completed the course, or may tell you to present the competency declaration at a driver licence issuing centre.

If your Q-Ride training provider notifies TMR directly that you have successfully completed the restricted or unrestricted course you may be eligible to upgrade your licence online at [www.qld.gov.au/transport](http://www.qld.gov.au/transport).

A Q-Ride competency declaration is not a licence. You must apply for and be issued the relevant motorcycle licence (learner, restricted or unrestricted) before you are authorised to learn to ride or ride that class of motorcycle unsupervised.

### What to wear

To undertake a Q-Ride course you must wear:

- An approved helmet.
- Eye protection.
- Gloves providing appropriate protection.
- Long sleeved shirt or jacket.
- Long pants that completely cover your legs.
- Fully enclosed shoes or boots.

Your Q-Ride training provider may supply protective gear for the course.

## What to ride

You must undertake a Q-Ride course on a two-wheeled motorcycle that is not a moped. You will not be able to do a course on a trike as you cannot demonstrate all of the competencies required, as you could on a two-wheeled motorcycle.

If you are undertaking the pre-learner or restricted courses the motorcycle must be a learner approved motorcycle. If you are undertaking the unrestricted course the motorcycle must not be a learner approved motorcycle.

## Q-SAFE riding tests

The Q-SAFE riding tests are designed to evaluate a person's ability to ride safely and correctly, in different road situations. There are two Q-SAFE riding tests, one to obtain a class RE provisional or open licence and one to obtain a class R provisional or open licence.

You can undertake a Q-SAFE riding test, as an alternative to a Q-Ride course, if you live outside a 100 kilometre radius of a Q-Ride training area.

The requirements that apply to Q-Ride courses regarding what to wear, and what to ride also apply to the Q-SAFE riding tests.



# Rules for riders

Generally you must adhere to the same rules as other motorists. Most rules that apply to drivers also apply to riders, for example, give way rules, traffic light rules and speed limits. However there are some rules that specifically apply to riders.

## Helmets

You, and any passenger on the motorcycle, must wear a helmet that complies with the Australian standards (AS/NZS1698 or AS1698), or the United Nations Economic Commission for Europe standard (ECE 22), in force at the time of purchasing the helmet, when riding.

The helmet must have a label certifying compliance with the standard. The label can be stitched to the inside of the helmet or a sticker on the outside of the helmet.



*Example of the Australian standard label.*



*Example of the ECE standard label.  
The label may contain any number  
from 1 upwards.*

Your helmet must be correctly fitted and securely fastened.

## Motorcycle control

You must stay in control of your motorcycle at all times. You must sit with one leg on either side of your seat at all times, but you can lift your leg from the footrests or raise yourself from the seat if you need to while riding.

### Passengers

#### Pillion passengers

You cannot carry a pillion passenger if you are a learner rider, even if the pillion passenger is your supervisor. If you hold an RE provisional or open licence you must hold that licence for at least one year before you can carry a pillion passenger. You can carry a pillion passenger as soon as you get your R licence.

To carry a pillion passenger, the motorcycle must have an approved seat and adequate footrests for the passenger.

If you are a pillion passenger you must:

- Be at least eight years old and your feet must reach the footrests.
- Wear an approved helmet, correctly fitted and fastened.
- Sit astride the pillion seat facing forward.
- Not interfere with the rider's control of the motorcycle.

## **Sidecar passengers**

If you are a learner rider the only passenger you can carry in a sidecar is your supervisor. If you hold an RE provisional or open licence you must hold your licence for at least one year before you carry a passenger in a sidecar. You can carry a passenger in a sidecar immediately when you get your R licence.

If you are a passenger in a sidecar you must:

- Wear an approved helmet, correctly fitted and fastened.
- Remain safely seated in the sidecar.

You can only carry the number of passengers the sidecar is designed to carry.

## **Keeping left**

Generally on a single lane road drivers must keep as near as practical to the left side of the road. However, due to the importance of lane positioning for rider safety, this rule does not apply to riders and you can legally use any part of the lane.

If the lane is wide enough you can share it with another vehicle. You may ride side-by-side with another motorcycle if you are not more than 1.5 metres apart, however you must not ride more than two riders abreast unless you are overtaking.



## Lane and edge filtering

### Lane filtering

Lane filtering is riding at low speed between stationary or slow moving traffic travelling in the same direction as you. You can only lane filter if it's safe to do so, you're riding at 30km/hr or less, and you hold an open licence for the motorcycle you're riding.

You cannot lane filter:

- At a speed of more than 30km/hr.
- Between a vehicle and the kerb.
- In school zones during school zone hours.
- If you hold a learner or provisional licence.

### Edge filtering

Edge filtering is riding at low speed on road shoulders or in emergency stopping lanes past stationary or slow moving traffic. You can only edge filter if it's safe to do so, you're riding at 30km/hr or less, and you hold an open licence for the motorcycle you're riding.

You cannot edge filter:

- At a speed of more than 30km/hr.
- On roads with a speed limit less than 90km/hr.
- On an unsealed part of the road.
- If you hold a learner or provisional licence.

## Carrying an animal or a load

### Carrying animals

You can carry an animal in a box, cage or bag attached to the rear or side of your motorcycle as long as it does not affect the operation of the motorcycle. You must not carry an animal between your arms and the handlebars.

### Carrying loads

You must ensure that any load you carry on your motorcycle, including in a sidecar or trailer:

- Is properly secured.
- Does not cause the motorcycle to become unstable.
- Does not protrude in a way that is likely to injure or obstruct other vehicles or pedestrians, or cause damage to a vehicle or other objects, including the road surface.

## Towing a motorcycle

Towing a motorcycle is not recommended due to the dangers involved and the fact it doesn't have a towing point to attach a cable. However, if a motorcycle is being towed the distance between the two vehicles must not exceed 2.5 metres. If the towline is longer than 2 metres, a white or brightly coloured flag, must be attached to the line as a warning.

## Parking

When parking you should position the motorcycle so at least one wheel is as close as possible to the kerb or side of the road.

## Road areas

### Bicycle storage areas

Bicycle storage areas are located at traffic lights to allow bicycle riders to wait in front of vehicles stopped at the lights. They are often painted green with a white bicycle symbol.

Motorcycle riders are allowed to enter bicycle storage areas as long as they give way to bicycle and motorcycle riders already there.

### Bicycle lanes

You are not allowed to ride in a bicycle lane unless you are entering or leaving the road, overtaking a vehicle turning right or avoiding an obstruction. You can only ride in the bicycle lane for 50 metres.



### Footpaths

You must not ride on a footpath except when you are moving from a driveway or parking space to the road.

**Note:** Employees, contractors or subcontractors engaged with Australia Post may ride on a footpath or road reserve in limited circumstances. For information about the rules for riding postal vehicles on a footpath visit [www.qld.gov.au/transport](http://www.qld.gov.au/transport).

# Protective gear

No matter what size or style of motorcycle you ride, good gear is an investment in your safety and everyday riding enjoyment. Riders are vulnerable to injury in a crash, and the elements — heat, cold, rain, hail and wind.

The right protective gear could make the difference between a nasty fall and injuries that prevent you from ever riding again. The right gear can also enhance your riding enjoyment and performance by protecting you from the elements.

Riding without protective gear is a risk never worth taking. Every time you get on your motorcycle, from a trip down to the shops to a weekend ride in the mountains, you need to protect yourself.

## Protection

### Protection from injury

In a crash you are particularly vulnerable to injury. The right gear can prevent or reduce many of the most common injuries, and almost certainly:

- Prevent or reduce the severity of fractures and joint damage.
- Protect you from cuts and punctures from sharp objects.
- Save you from having the skin and muscle stripped from your body.
- Prevent most of the cuts, gravel rash and friction burns from sliding across the road.
- Reduce the severity of contact burns from the engine and exhaust pipes.

Research suggests that riders who wear protective clothing spend fewer days in hospital and are 40 per cent less likely to have permanent debilitating injuries.

### Protection from the elements

It is not just about injuries from crashes; unprotected skin and eyes are also vulnerable to flying insects, as well as stones and other debris sprayed up by other vehicles.

Being cold, wet or hot also takes the fun out of a ride, and can be a safety risk by affecting your riding through distraction, fatigue and dehydration.

Wearing the right gear can:

- Protect you from the weather.
- Improve your comfort when riding.
- Improve your concentration, reducing the likelihood of a crash.

## Protective gear basics

Full protective gear is the only way to help save you and your skin. Follow these basic rules to protect yourself:

- Cover your whole body.
- Wear gear designed for riding.
- Protect your joints with impact protectors.
- Ensure you have high abrasion resistance and impact protection in your most vulnerable areas.
- Ensure all seams have more than one line of stitching and at least one line of concealed stitching on exposed seams.
- Ensure all fastenings are secure and protected from contact with the road or other surfaces in a crash.
- Use insulation, waterproofing and windproofing to cope with the cold.
- Use ventilation and colours to cope with the heat.
- Don't carry anything in your pockets — falling on hard objects hurts.
- Avoid wearing a backpack. Landing on it in a crash could cause serious spinal injuries.

## Helmets

Your most important piece of protective gear is your helmet. You, and any passenger on the motorcycle, must wear an approved helmet when riding.

There are two key types of helmets:

- Full face — has a chin panel and visor. Protects your face, jaw and chin and offers better eye, wind, sun and impact protection.
- Open face — face open to the elements. Offers less protection from the elements and impact.

There are many makes and models of helmets available; find one that has the right features and fit for you. Consider a light colour — light colours are more visible to other road users and are generally cooler in summer.

Your helmet should:

- Fit firmly.
- If it hurts or there's a line on your forehead it's too tight.
- If you can swivel it on your head it's too loose.



Regularly check your helmet to ensure there are no dents or weak spots, the strap is sturdy and the padding hasn't compressed making the helmet loose. Use mild soapy water to clean your helmet — some cleaners may weaken the shell.

You should replace your helmet at least every five years, or immediately after a crash or significant impact, if it becomes loose or the straps are worn. Loose fitting helmets don't offer the needed protection, and a worn strap may break in a crash.

**Don't buy a second-hand helmet. You don't know if it's been dropped or damaged, or if it will hold up in a crash.**

## Eye protection



Your eyes need protection from the wind, dust, rain, insects and stones thrown up by other vehicles. Only a visor attached to your helmet or goggles provide the protection you need.

Some motorcycles have screens or fairings to provide weather protection. However, these do not provide adequate protection for your eyes and you should still use a visor or goggles. Glasses, including sunglasses, are not

adequate.

Your visor or goggles should:

- Be clean and not scratched.
- Be shatterproof.

At night you should use a clear visor or goggles.

You should replace your eye protection if it is scratched as this can impair your vision, especially at night when scratches can blur and distort light. Clean clear eye protection will give you the best view of the road environment.

## Gloves

The natural reaction in a fall is to use your hands to protect yourself, even in a minor crash your hands will often be injured. Only gloves that are specifically designed for riding will provide protection, without compromising your ability to operate the controls.

Your gloves should:

- Be fully enclosed, covering the whole hand and wrist.





- Have a strengthened palm area.
- Have armour for your knuckles and wrists.
- Overlap your jacket (gauntlet style).
- Have fastenings around your wrists.

## Jackets

A purpose made jacket provides the greatest comfort and protection from the weather and in a crash. There's a wide range of riding jackets available; find one that has the right features and fit for you.

Your jacket should:

- Completely cover your arms and body.
  - Be highly abrasion and tear resistant.
  - Have armour for your back, shoulders and elbows.
  - Be close fitting but comfortable in riding position.
  - A tight jacket will become uncomfortable when riding.
- A loose jacket will flap, which is distracting, and may position the armour in the wrong position on your body.
  - Be zipped up and secured at the wrists.

## Pants

Your legs will often take most of the impact in a crash. Only pants designed for riding will provide protection from serious injuries. Pants designed for riding will also provide more comfort and protection from the weather.

Your pants should:

- Completely cover your legs.
- Be highly abrasion and tear resistant.
- Have armour for your hips and knees.
- Be secured at your ankles.



**MotoCAP ratings can help you choose the safest purpose-made riding gear to suit your riding style and protect your skin whether you prefer wearing textile, denim, or leather. Find out more at [www.motocap.com.au](http://www.motocap.com.au)**

## Footwear

Boots are the best footwear for riding, and boots specifically designed for riding will provide the greatest protection, without compromising your ability to operate the controls.

Your boots should:

- Be highly abrasion resistant.
- Have armour for your shins and ankles.
- Have zips or velcro fasteners.
- Overlap your pants.
- Have fasteners around your legs.



Don't ride in running shoes, or worse, in sandals or bare feet. Avoid shoes with rings or laces that could catch on the motorcycle, and elastic sided boots that are not suitably reinforced and slip off too easily. Also, beware of steel-capped boots, which can cause friction burns or may cut into your toes in a crash.

## Wet weather gear

Changes in the weather are unpredictable so it often pays to carry wet weather gear with you at all times. Waterproof, rather than water resistant clothing, that lets your body breathe is the best way to keep dry. Waterproof gear lets your sweat out, while stopping the rain water from getting in.

## Other protective gear

You should also consider other protective gear such as:

- Back protectors, to protect your spine in a crash.
- Kidney belts, to support your organs and reduce fatigue.



## Visibility

Increasing your visibility can greatly reduce your chances of being involved in a crash — if other road users can see you, even in poor light or bad weather, they can avoid you.

Dress to be seen by choosing gear that maximises your visibility — wear light or brightly coloured clothing, a fluorescent vest, or use reflective strips.



**Helmet:** Must be an approved helmet.

**Visor:** Clear for night and shatterproof without scratches and, if the helmet is approved under an Australian Standard, must be approved to Australian Standard AS 1609.

**Back protector:** To protect the spine in the case of a crash. Dual density foam is recommended.

**Gloves:** Gauntlet style with a strengthened palm area and knuckle protection (e.g. extra layer of leather). Zip or velcro fastening around wrist.

**Jacket and pants:** Should be highly abrasion and tear resistant and completely cover your arms, legs and body. They should be secured at the wrists, waist and ankles to prevent your protective clothing from riding up and exposing your skin during a fall.

**Footwear:** Boots should be leather and overlap the pants in order to provide shin, ankle and instep protection. They should also have zipper and/or velcro fasteners in preference to laces to prevent the boots from sliding off or being caught in the pegs, gears, brake levers etc.



# Motorcycle types, trailers and sidecars

Choosing a motorcycle can be one of the most enjoyable and exciting aspects of riding. Your motorcycle will have a significant impact on how safe you are on the road and how much you enjoy riding.

Ensure you choose the motorcycle that's right for you, considering your experience, physical characteristics and riding intentions — talk to experienced riders, read up, ask lots of questions at motorcycle retailers and test ride your options.

## Learner approved motorcycles

You must ride only a learner approved motorcycle if you hold an RE learner, provisional or open licence.

A learner approved motorcycle is a production motorcycle that has an electric motor, or an internal combustion engine with a capacity of not more than 660mL and a power-to-weight ratio of 150kW/t or less. The motorcycle must not have been modified.

Almost all motorcycles up to 250mL are learner approved motorcycles. However, the Suzuki RGV250, Kawasaki KR250 (KR-1 and KR1s), Honda NSR250, Yamaha TZR250 and Aprilia RS250 have been excluded as learner approved motorcycles.

To help you identify what you can legally ride if you hold an RE learner, provisional or open licence, a list of the motorcycles between 251mL and 660mL is available online — visit [www.qld.gov.au](http://www.qld.gov.au) and search learner approved motorcycles.

# Types of motorcycles

## Naked/Standard

Naked motorcycles are designed for functionality. This is the basic form of motorcycle stripped down to its fundamental parts. These motorcycles are generally light weight, partly due to the lack of bodywork or fairings. The riding position is neutral with feet under the rider's seat, back upright and shoulders above the hips.



## Sports

Sports motorcycles are designed for speed and handling. Also known as performance bikes, the emphasis is on speed, acceleration, and manoeuvrability. These motorcycles are generally relatively light weight with powerful engines, strong brakes, and fairings shaped to reduce aerodynamic drag. The riding position is relatively aggressive with feet back and the body leaning forward over the engine.



## Cruiser

Cruisers are designed for relaxed, laid-back riding. These motorcycles are generally heavy with a low seat and centre of gravity. The riding position places the feet forward and the hands up with the back erect or leaning back slightly.



## Road/Trail

Dual purpose motorcycles are designed for use both on-road and off-road. These motorcycles are generally light weight with a high seat height and centre of gravity. The riding position is neutral with feet under the rider's seat, back upright and shoulders above the hips.



## Tourer

Tourers are designed for long-distance comfort. These motorcycles are generally heavy with large windscreens and fairings, good passenger seating and creature comforts such as radios, navigation systems and storage. The riding position is neutral with feet under the rider's seat, back upright and shoulders above the hips.



## Moped

Mopeds are small light motorcycles that have an electric motor, or an internal combustion engine with a capacity of 50mL or less, and a manufacturer's top speed of 50km/hr or less. These motorcycles generally have a step-through style frame, are light weight and have no clutch or gears. The riding position places the feet in front of the body, back upright with shoulders above the hips.



## Trike

A trike is a motorcycle with three wheels. Most trikes have one wheel in front and two wheels behind, however some trikes have two wheels in front and one wheel behind.

# Trailers and sidecars

## Trailers

Trailers designed to be towed by motorcycles are available. However, because of the added risk involved, manufacturers of single-track motorcycles do not recommend that they be used to tow trailers.

## Sidecars

A sidecar is attached to the left hand side of a motorcycle to create a three-wheeled combination. A motorcycle with a sidecar has unique handling characteristics, you will need special riding techniques to safely operate a motorcycle with a sidecar.

# Motorcycle controls and maintenance

## Major controls

To safely operate the motorcycle you must be able to use all of the major controls.

- **Mirrors** — located on either side of the handlebars.
- **Throttle** — located on the right side of the handlebars, it controls the flow of fuel going to the engine — more fuel increases your speed.
- **Front brake lever** — located in front of the grip on the right side of the handlebars, it applies brakes to the front wheel. The front brake is the primary stopping brake, providing the majority of the motorcycle's braking performance. It is used with the rear brake when reducing speed.
- **Rear brake pedal** — located in front of the right footrest, it applies brakes to the rear wheel. The rear brake is used with the front brake when reducing speed to stabilise the motorcycle and on its own when manoeuvring at walking pace to aid control.
- **Clutch lever** — located in front of the grip on the left side of the handlebars, it connects and disconnects drive from the engine to the rear wheel.
- **Gear lever** — located in front of the left footrest, it is used to select your gear; lift up to change up, press down to change down.

## Minor controls

Similar to the major controls, to safely operate the motorcycle you must be able to use all of the minor controls.

- **Starter** — generally located on the right side switch block on the handlebars, this button starts the engine.
- **Engine stop switch (kill switch)** — located on the right side of the handlebars, it cuts power to the engine.
- **Ignition** — generally located on or near the centre of the handlebars, it must be in the ON position to start the engine.
- **Low/high beam** — generally located on the left side switch block on the handlebars (some motorcycles have a separate flash button to activate high beam), and is operated with the left thumb.
- **Indicator switch** — generally located on the left side switch block on the handlebars. Ensure you know how to cancel the indicator, this isn't automatic on motorcycles (check your manual for instructions).
- **Horn** — generally located on the left side switch block on the handlebars.

- **Choke lever** – generally located on the handlebars, near fuel tap or on carburettor, it is used to start a cold engine. Ensure you turn the choke off before riding; if left on the choke will affect engine performance.
- **Fuel tap** – generally located under the left side of the petrol tank, it is used to control fuel flow to the engine between the main and reserve tanks.

## Motorcycle parts and controls



# Safety checks and maintenance

You should check your motorcycle before every ride — your safety begins with your motorcycle. Routinely check and maintain your motorcycle to reduce your risk of injury and the risk of damage to your motorcycle.



**Chain** — ensure the chain has the correct tension, not too tight or too loose, and is appropriately lubricated.



**Lights** — ensure all lights (headlights, tail lights, brake lights) and indicators are clean and operational.



**Tyres** — ensure the tyres are in good condition and are wearing evenly. Check that they have a tread depth of at least 1.5mm across the tread surface, and are inflated in line with the manufacturer's recommendations.



**Brakes** — ensure both the front and rear brakes are operational, and that the brake pads are in good condition.

**Horn** — ensure the horn is operational.



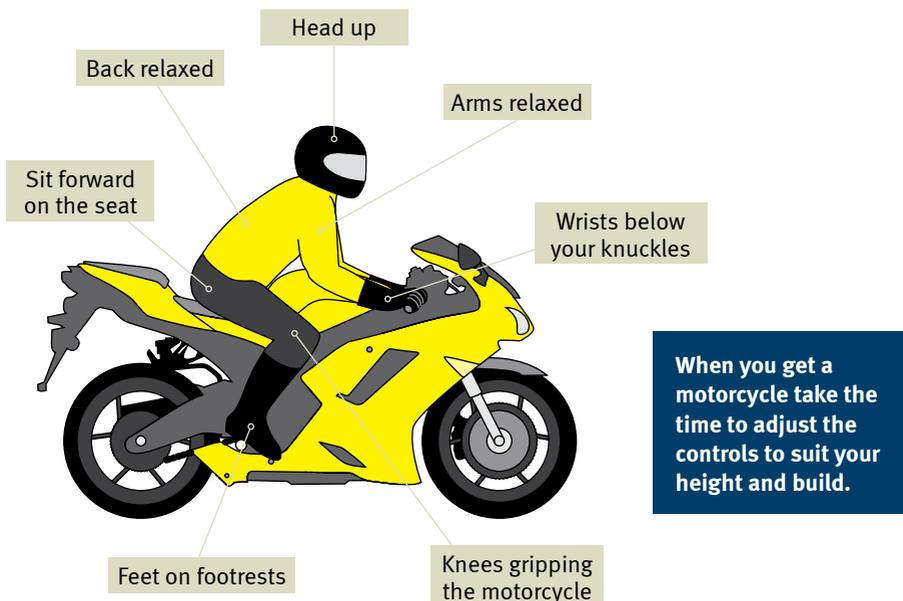
# Riding techniques

The key to good riding technique is smoothness, and the key to smoothness is good preparation and practice.

## Riding posture

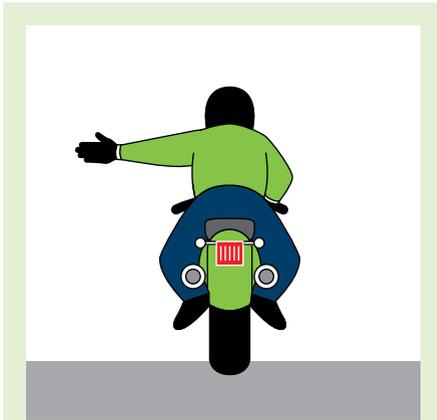
The correct riding posture is essential for good motorcycle handling, efficient operation of controls, maximising stability and reducing fatigue.

- Keep your feet on the footrests, arches on the footrests and toes pointed slightly down and out. This allows quick access to the foot controls.
- Firmly grip the fuel tank with your knees. This balances the motorcycle and allows the upper body to relax, reducing fatigue and improving control.
- Sit well forward with your weight over the footrests (except if riding a cruiser). This balances the motorcycle, enhancing steering and braking performance.
- Keep your back relaxed with a slight bend (not hunched). This reduces fatigue and improves motorcycle handling.
- Keep your arms relaxed with a slight bend. This reduces fatigue and improves steering and throttle control.
- Position your wrists slightly below the knuckles when not using the hand controls, and flat when using the controls. This reduces fatigue and allows quick access to controls.



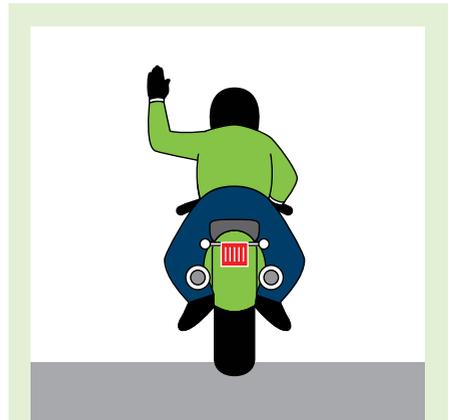
## Hand signals

Hand signals can improve your safety in situations where lighting conditions make it difficult for your brake and indicator lights to be seen.



### Turning

*To give a hand signal for turning, extend either arm straight with flat palm pointing in the direction of the turn.*



### Stopping

*To give a hand signal for stopping, extend either arm at a right angle with a flat palm.*

## Braking

Motorcycles have two brakes — the front brake providing stopping power and the rear brake providing stability and control. You need both of them to stop quickly and safely. Correct braking is done in two stages, set up and squeeze, and are then gently and gradually released to maintain stability of the motorcycle.

- Set up — the fast but gentle take up of the lever free play.
- Squeeze — the smooth increase of braking pressure.

Two-stage braking improves braking effectiveness, reduces the likelihood of skidding and provides better control. Get into the habit of always using two stage braking with both the front and rear brakes every time you slow down or are stopping. The brakes are most effective when you are upright and travelling in a straight line — braking performance reduces as steering and the lean of the motorcycle increase. You should aim to brake before you enter a turn or curve, not in it.

## Skidding

Harsh or excessive braking may cause skidding particularly on wet, gravel or slippery roads. If the front wheel locks up when braking and begins to skid, gently release the front

brake and reapply it more smoothly. If the rear wheel skids, steer into the skid, gently release the rear brake and reapply it more smoothly.

## Emergency braking

Emergency braking is the most important control skill to avoid a crash. The quickest way to stop a motorcycle is to:

- Position your motorcycle so you are upright and travelling straight.
- Close the throttle.
- Apply the front brake (set up and squeeze), then the rear brake (set up and squeeze).
- Pull the clutch in just before you stop.

Ensure you are prepared if emergencies arise. Practice emergency braking in a safe, quiet area to develop and hone your skills so you know you are prepared to respond in emergency braking situations.

## Steering

A motorcycle can be steered using direct steering or counter steering, however your body weight and speed also affect your motorcycle's direction of travel.

### Direct steering

With direct steering your motorcycle goes in the direction that you turn the handlebars. Direct steering is only used for very low speed turns, such as U-turns or intersections.

### Counter steering

With counter steering your motorcycle goes in the opposite direction to which you turn the handlebars — a slight forward pressure on the left handlebar makes the motorcycle lean and move left, although the front wheel actually turns slightly right.

Counter steering is used by all riders, many without knowing it — you use counter steering for all changes in direction, commencing a turn, adjusting your path of travel in a curve or steering around an object on the road.

### Body weight

How you use your body weight will have a significant effect on your motorcycle. Leaning with your motorcycle in a turn or curve allows your motorcycle to be more upright, giving the tyres better grip and your motorcycle greater ground clearance. With low speed turns, such as U-turns or intersections, leaning out from the turn can help balance your motorcycle.

### Effect of speed

Motorcycles are designed to naturally want to travel straight to aid in stability — you have to make the motorcycle turn. The faster your motorcycle is travelling, the more it wants to continue straight and the harder it is to turn. Reducing speed before turning or riding through a curve is essential.

When exiting a turn or curve, wait until your motorcycle begins to straighten before accelerating. Accelerating will stand your motorcycle up and too much throttle will make your motorcycle run wide.

## Riding curves

Riding around curves requires extra care — it's important that you get your approach and road positioning right.

### Effect of speed

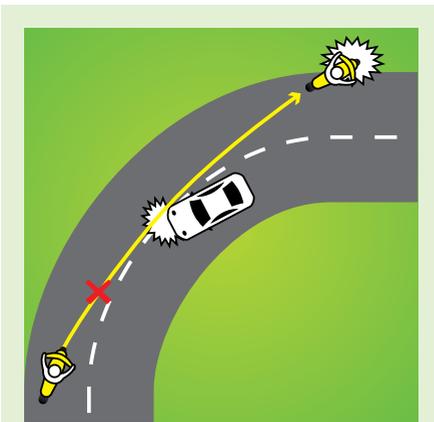
You should always aim to brake before you enter the curve not while riding through it. Slowing down on the approach and getting your speed right will give you time to plan the best path through the curve, ensure you maximise your tyres' grip on the road, and allow you to accelerate out of the curve.

### Positioning

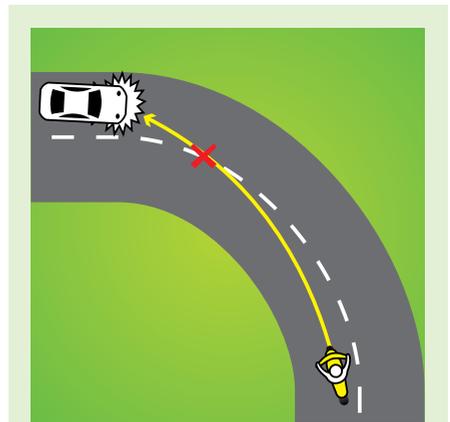
There are three key principles for a low risk line to ride curves.

- Start curves wide to improve your vision, maintain at least 6 seconds of vision of the road ahead.
- Buffer the head-on zone to keep away from the area where oncoming vehicles are likely to cross the centre of the road.
- Plan to finish curves in tight to help get your speed right and leave you room for slight errors.

Where you start turning into the curve (your turning-in point) will determine the path you will take through the curve.



*Turning-in too early will reduce your visibility around the curve and can result in a head on crash or running wide on the exit.*



*Turning-in too late will mean you end up on the wrong side of the road, or running off the road.*

## Planning a series of curves

Starting a curve wide and planning to finish tight allows you to link a series of curves together. By exiting each curve in tight you will be in the right position to enter the next curve.

## Vanishing point

The vanishing point can help you anticipate what the curve is going to do. The vanishing point is where the sides of the road appear to come together, or disappear behind an obstruction. This point moves relative to your position in the curve, so observing the vanishing point can help you identify if the curve is going to open out or tighten up.

- If the vanishing point moves away from you as you are approaching and riding through the curve, it's likely the curve is going to open out.
- If the vanishing point moves toward you as you are approaching and riding through the curve, it's likely the curve is going to tighten up.

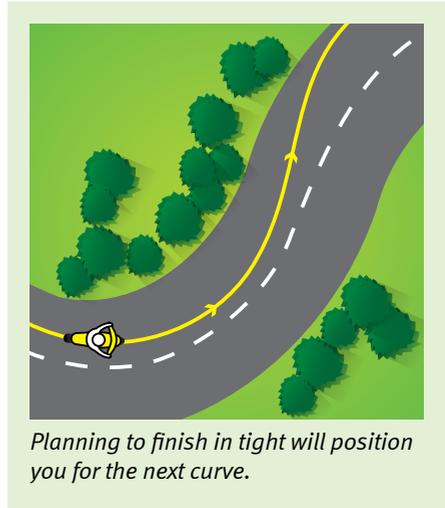
## Road camber

The road camber can help you to anticipate the nature of the curve. Camber is the difference in height between the centre and outside of the lane — it can be positive or negative. Most Queensland roads have a crown camber, the middle of the road is higher than the edges to assist water runoff.

- In a left curve the road will have a positive camber — the outside of the curve (the middle of the road) is higher than the inside of the curve (the side of the road).
- In a right curve the road has a negative camber — the outside of the curve (the side of the road) is lower than the inside (the middle of the road).

Anticipating the road camber can help you determine the right speed and lean angle for riding the curve.

- Positive camber generally assists you in riding the curve as the road slopes in the direction of curve — this maximises your tyres' grip, your clearance from the road and how much you can lean your motorcycle.
- Negative camber generally works against you as the road slopes away from the direction of curve — this reduces your tyres' grip, your clearance from the road and how much you can lean your motorcycle.



## Parking

The best place to park is somewhere with sufficient space and protection where the ground is level and firm:

- Sloping ground may result in your motorcycle toppling over, or you not being able to lift it off the side stand.
- Unstable ground may cause your feet to slide.
- Soft ground, such as loose gravel, sand or grass, may cause the stand to sink and your motorcycle to topple over.

Some hints and tips on parking:

- Leave the motorcycle in first gear to prevent it rolling.
- If you need to park on a slope, reverse in and park facing uphill — this will make getting out a lot easier.
- Position the motorcycle on a 30 degree angle facing in the direction that you will leave, with the rear wheel close to the kerb or side of the road — this will put you in a good position to move off when you are ready to go.

## Learning to ride

While you're learning to ride there are some strategies you can use to reduce your risks:

- Start on quiet streets — avoid riding in heavy traffic.
- Practise in areas you know well — avoid unfamiliar areas where your attention will be diverted to navigating.
- Ride in good conditions — avoid riding on poorly lit roads at night and in bad weather while you are still learning.
- Choose a supervisor who values skill development and will ride to your ability.

# Roadcraft

Riding is never risk free, but a truly skilful rider rides 'low risk', applying good roadcraft to anticipate and respond to hazards. Hazards are anything in your crash avoidance space, or with the potential to move into that space, that may place you or others in danger.

Ride 'low risk' by applying the three key principles of roadcraft; observation, speed management and road positioning.

## Observation

Traffic and road situations change constantly — skilful riders are vigilant in their observation to always be aware of the road environment.

You can apply good observation using the '12, 6, 3' principle:

- Look **12 seconds** ahead to scan your surroundings, observe potential hazards, and plan your path.
- Maintain at least **6 seconds** of vision of the road ahead to give you time to perceive hazards and take action.
- Keep a **3 second** survival space to give you time to respond, and stop if required, to avoid a crash.

Good observation is more than just 'seeing' it's actively scanning for potential hazards and perceiving situations as something that may require you to take action.

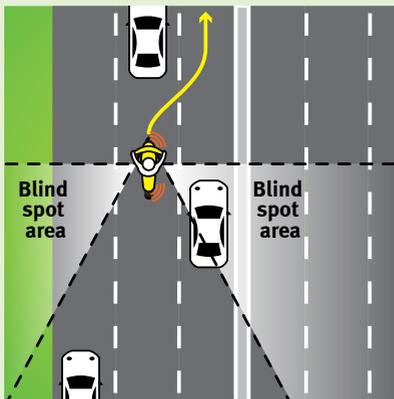
**Good observation can significantly reduce the risk of a crash — keep your eyes moving, check in one area for a couple of seconds then move your eyes to another area.**

## Mirrors and head checks

The main purpose of having mirrors is to give you a better view of road conditions behind you. Checking your mirrors will help you assess how your actions could affect traffic behind you. You should check your mirrors every few seconds so you always know what is behind you.

But your mirrors won't give you the full picture — motorcycles have blind spots just like other vehicles and a head check is the only way to see what's in your blind spot.

Check your mirrors before making any changes to your speed, or when approaching situations that may require you to brake. Be aware of what's behind you and anticipate how they may respond if you speed up, slow down or stop.



*Check your mirrors and do a head check before changing your road position.*

**Check your mirrors and do a head check** to check your blind spots before moving off from a stationary position or changing your road position (within your lane, changing lanes or turning). Check around you to ensure it's safe before you move off or change your position, be extra vigilant in case other road users haven't seen you or your indicators.

## Speed management

The road environment changes constantly, skilful riders manage their speed and anticipate that they may need to stop unexpectedly.

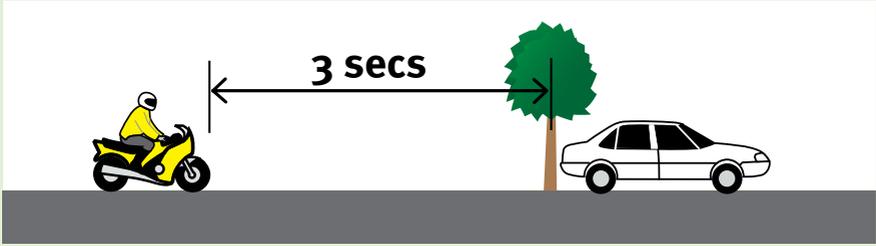
You should always ride to the conditions, and never exceed the posted speed limit, as the faster you are travelling, the longer it takes to stop.

## Crash avoidance space

Your crash avoidance space is your response time plus the time it takes for you to stop from when you start braking. You need at least 3 seconds to react and respond to a situation. An alert, experienced rider needs at least 1.5 seconds to observe, perceive and respond to a hazard — a novice rider can require much longer.

Maintain at least a 3 second crash avoidance space to allow you to respond to the unexpected. In poor conditions such as rain, night and gravel roads, double your crash avoidance space to 6 or more seconds.

To calculate your 3 second crash avoidance space, as the rear of the vehicle in front passes a stationary object, such as a power pole or sign, start counting 'one thousand and one, one thousand and two, one thousand and three'. If your motorcycle passes the object before you finish the count, your crash avoidance space is too small. Slow down and repeat the count again until you get a 3 second crash avoidance space.



*Slow down to keep at least a 3 second crash avoidance space in good conditions.*

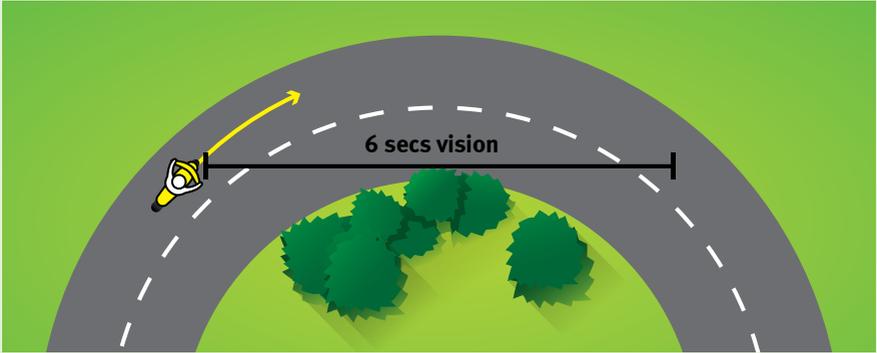


*Slow down to keep at least a 6 second crash avoidance space in poor conditions.*

## Vision

You must slow down if you do not have at least 6 seconds vision of the road ahead. Situations where your vision may be reduced include blind curves, crests, blocked intersections and poor weather.

To calculate 6 seconds of vision, pick a fixed point in front of you that has just come into view and start a count 'one thousand and one, one thousand and two ... one thousand and six'. If you reach the point before 6 seconds you are riding too fast for the available vision and need to slow down.



*Slow down if you cannot see 6 seconds ahead – maintain 6 seconds of vision.*

**Good speed management can significantly reduce the risk of a crash – ride to the conditions and slow down to maintain a 3 second crash avoidance space and 6 seconds of vision.**



# Position

## Space, surface and sight

Traffic and road situations are constantly changing and so is the safest position on the road — skilful riders aim to be in the right place. There are three key things to consider when choosing your position on the road; space, surface and sight.

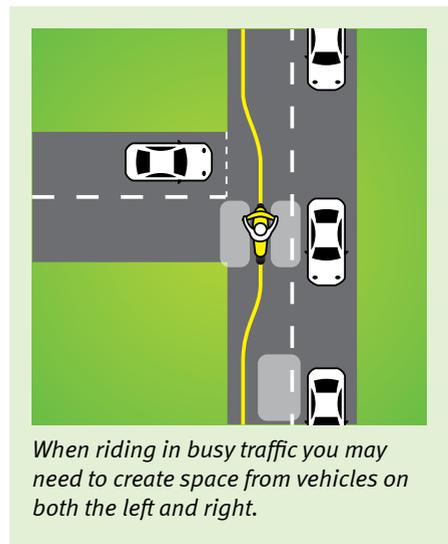
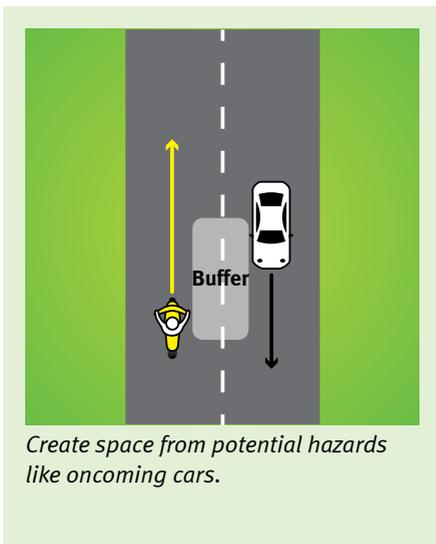
### Space

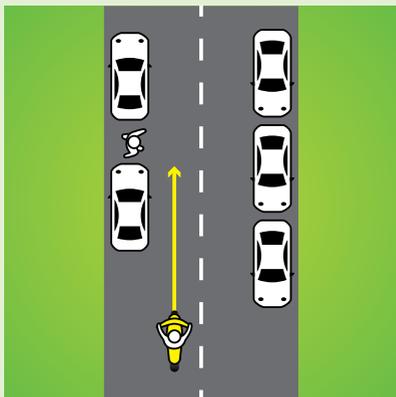
As a rider you have very little to protect you in a crash. The more space you create between you and potential hazards the better. Moving away and creating space allows you more time to stop or take evasive action, and can increase the likelihood of you being seen.

Creating space is also called buffering — always choose a position that creates the greatest buffer.

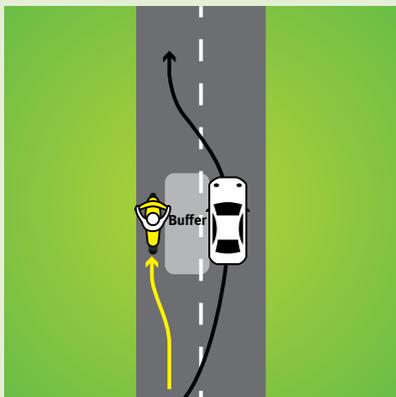
It is difficult to maintain a crash avoidance space behind you, as another driver or rider controls the space. If a vehicle behind is travelling too closely, slow down slightly to increase the space you have in front of you. This will enable you to brake more gradually if you spot a hazard in front, which will enable the following vehicle more time to stop as well.

When you stop behind another vehicle leave at least one and a half motorcycle lengths between your front wheel and the back of the vehicle in front. This will provide some space in case they roll back or if you need to ride around them.

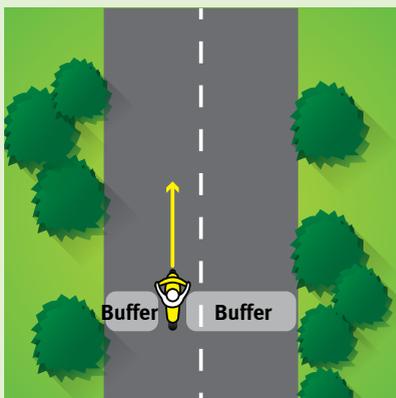




*When riding near parked cars, avoid problems caused by doors opening, vehicles pulling out or people stepping from between cars, by staying toward the centre or right of your lane.*



*When being overtaken by another vehicle, create space from it by moving to the left of the lane.*



*When riding on country roads, create space from the wildlife by riding on the right side of your lane.*

## Surface

You need to be very aware of the road surface — paint, oil, water, sand, gravel, potholes and metal plates are some of the road surfaces you will need to manage whilst riding.

Generally the best road surface is the right wheel track of the lane, without the oil slick that can form in the centre of the lane or the broken pavement and loose gravel at the road edge.

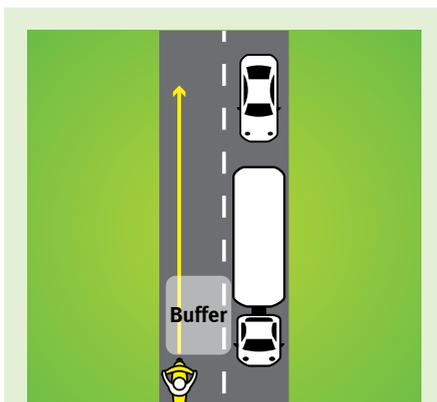
You should try to avoid riding on a poor surface, but sometimes you may need to ride on a less than ideal surface to create space from another hazard or to ensure you are seen. Choosing the best position requires constant evaluation of variables of the road environment.

Whether you should compromise the road surface will depend on the nature of the issue and other potential hazards. It may be preferable to ride on the less risky surface, such as light water, to create space from an oncoming vehicle. But if there is a large oil patch on the road it may be preferable to slightly compromise visibility to avoid it.

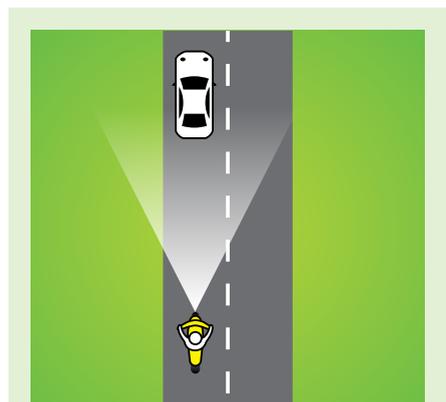
Remember, a small change in your position could result in a significant change in the quality of road surface. If you have to ride on a less than ideal surface, slow down.

## Sight

A good road position allows you to see and be seen. Generally the right wheel track of the lane provides good vision ahead, to the sides and behind you. It also puts you in a good position to be seen by other motorists — you are directly in front of the driver in the vehicle travelling behind you, and can be seen in the rear vision and side mirrors of the vehicle in front.

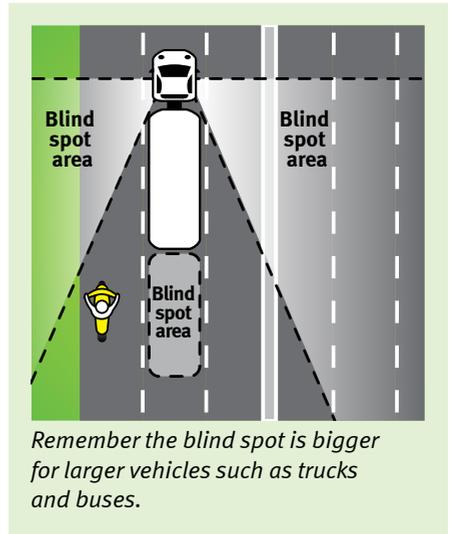
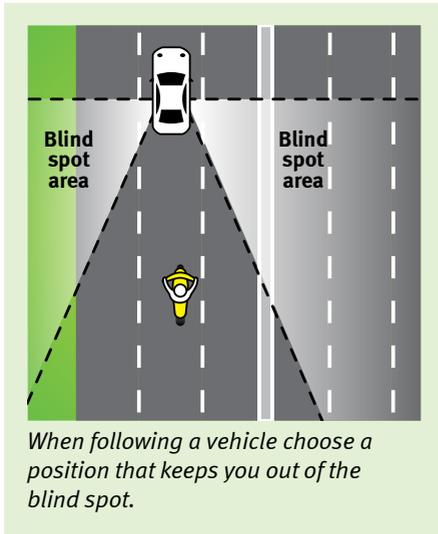


*Creating space from other vehicles can improve your vision of the road ahead and make it easier for other motorists to see you.*



*The further back you follow other vehicles the better you can see around them.*

You should try to avoid riding in other motorists' blind spots. If you cannot see the external mirrors of the vehicle in front, the driver cannot see you — this should be a 'no ride spot'.



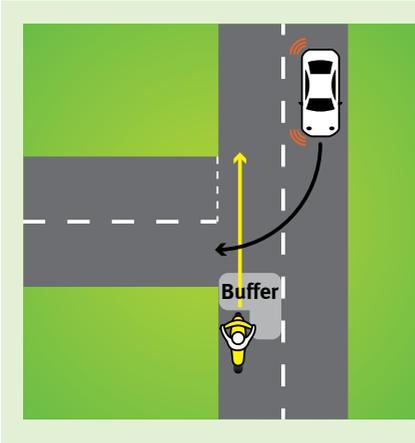
But remember, sometimes you may need to ride in a position that is less than ideal for maximising your sight in order to maintain enough space from hazards — reducing space to improve sight can be risky as it leaves no room for error. Choosing the best position requires constant evaluation of variables of the road environment.

**Ride in a position that balances maximising your space from hazards with the quality of the road surface and the importance of seeing and being seen.**

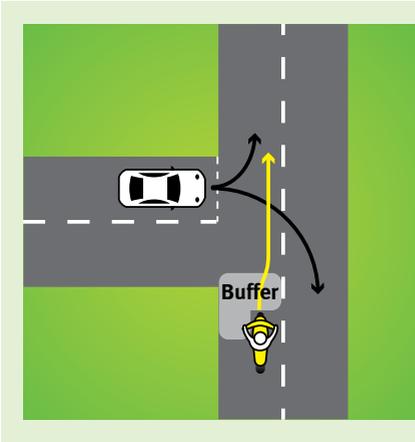
## Applying roadcraft

### Intersections

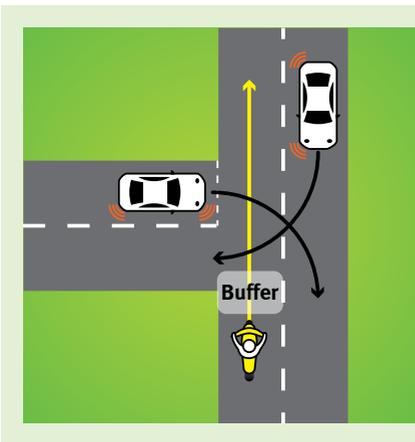
The greatest potential for a crash between you and other motorists is at an intersection. Vehicles turning in front of you pose the greatest danger and there are no guarantees other motorists will see you. If another vehicle can enter or cross your path, assume that it will. As you approach an intersection, slow down and choose a position to create space from other vehicles and to increase your visibility.



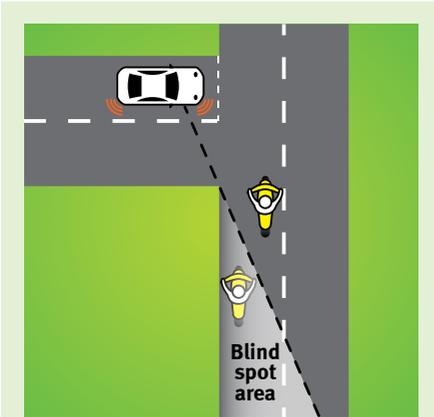
*When a vehicle could turn across your path, slow down and create space from the vehicle.*



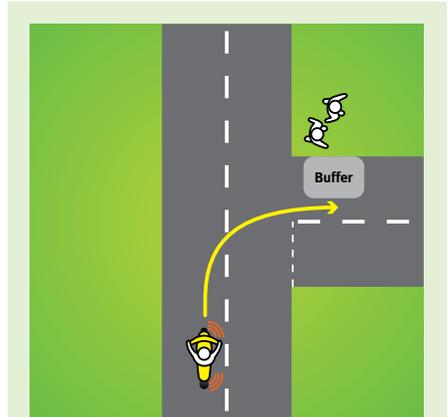
*When a vehicle could turn across your path or move into your lane, slow down and create space from the vehicle and its possible path of travel.*



*When multiple vehicles could turn across your path, slow down and create space from both vehicles.*



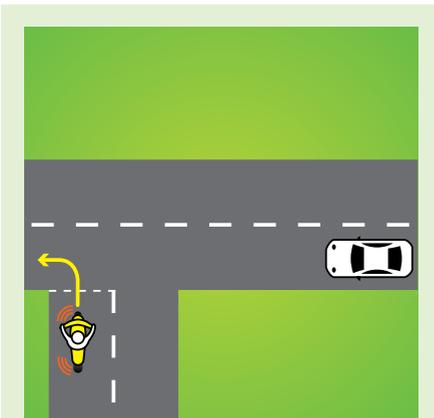
*When approaching a blind intersection, anticipate the other driver's line of sight and move to where they can see you.*



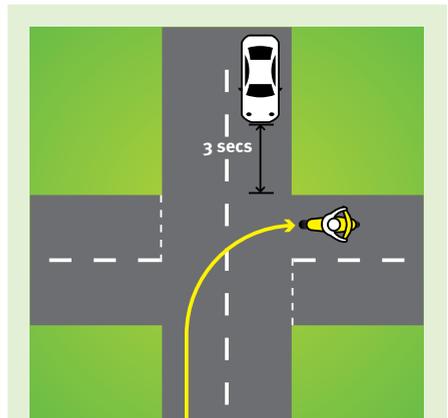
*When turning at an intersection, choose a road position that creates space from potential hazards.*

## Gap selection

Gap selection is very important at intersections where the chance of a crash with another vehicle is high if the gap you select is too small. A safe gap is one that enables you to turn or cross an intersection without affecting your crash avoidance space or the crash avoidance space of other motorists.



*Choose a gap that allows you to enter the lane without forcing other motorists to change speed or road position.*

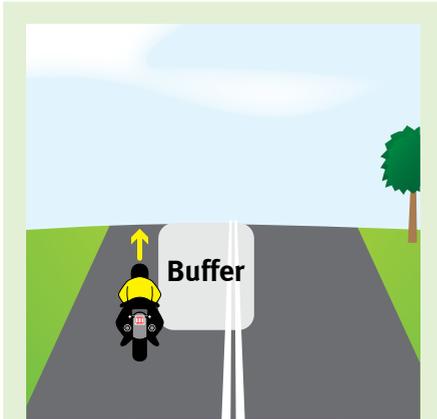


*Choose a gap that allows you to be clear of the intersection 3 seconds before another vehicle arrives.*

## Blind crests

Blind crests, like any situation where you can't see the road ahead are potentially hazardous — take care and be prepared to take action.

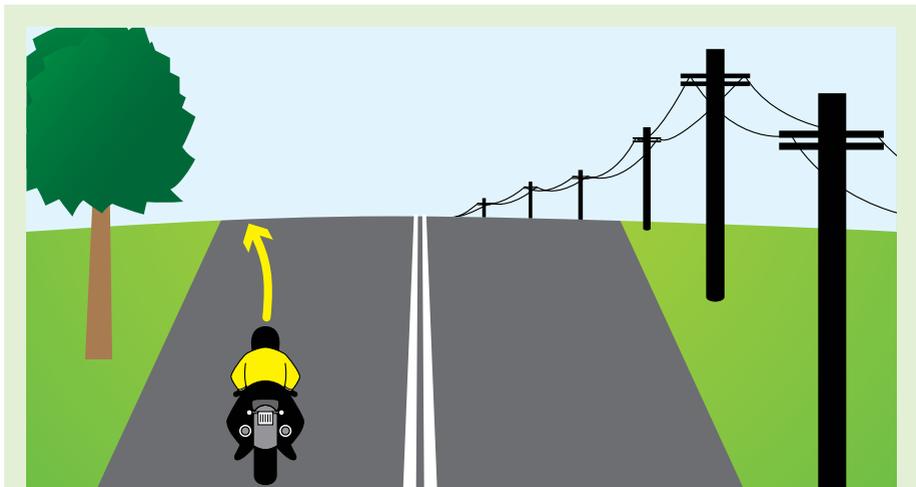
As you approach a blind crest, slow down and choose a road position to create space from known and potential hazards. This position should also increase your ability to see hazards and be seen early by other motorists.



*When approaching blind crests, create a space from possible oncoming traffic.*



*When there is a possibility of multiple hazards slow down and create space on both sides.*



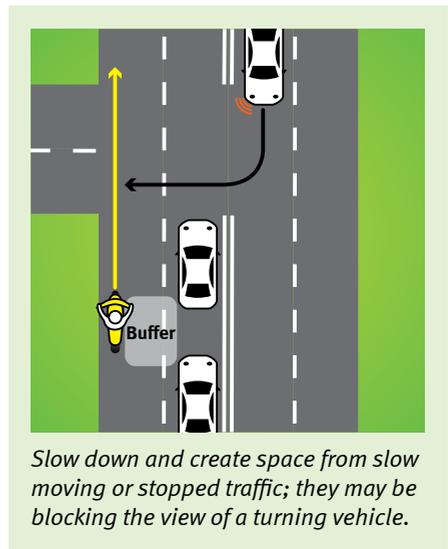
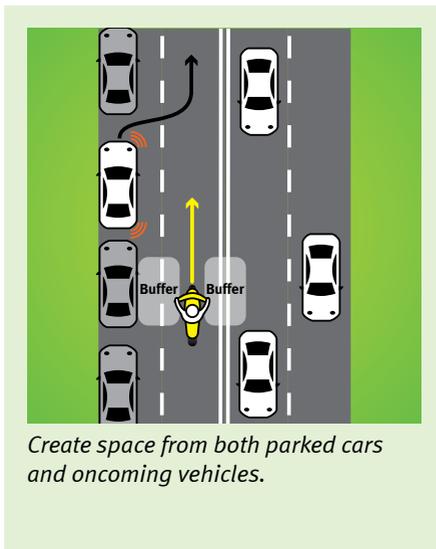
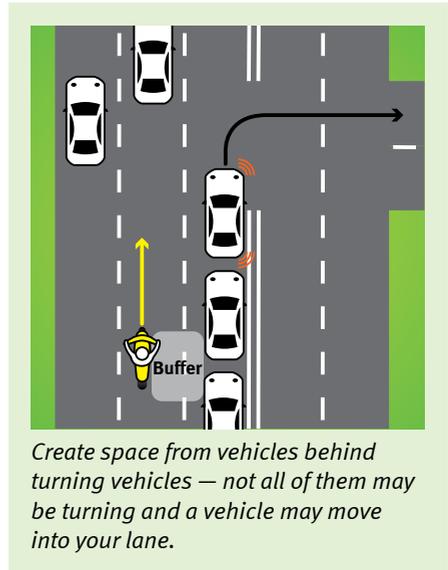
*When approaching blind crests, look for clues as to where the road goes. Slow down and select a road position to suit.*

## Multi-laned roads

Multi-laned roads increase your risk of potential hazards and collisions on the road – vehicles moving between lanes, and potentially into your path, or stopping suddenly are the biggest dangers.

Motorists may change lanes without checking for other traffic, or even if they do look they may fail to see you. There are no guarantees other motorists will see you – if another vehicle can enter your path, assume it will.

When riding on multi-laned roads be extra vigilant – choose a road position to create space from other vehicles and slow down to maintain a 3 second crash avoidance space.



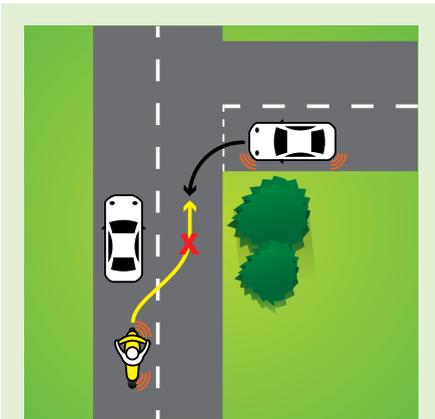
## Overtaking

Overtaking other vehicles is potentially hazardous — take care and never speed when overtaking. Where possible use overtaking lanes that allow you to overtake safely.

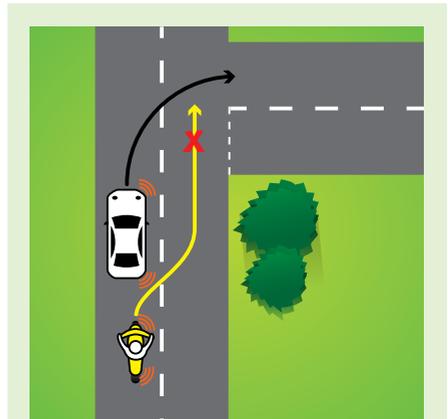
Before you start overtaking ensure you have clear vision of the road ahead and sufficient time to complete the manoeuvre. When overtaking create space between yourself and the vehicle you are overtaking.



*When overtaking, create space from the vehicle you are passing.*



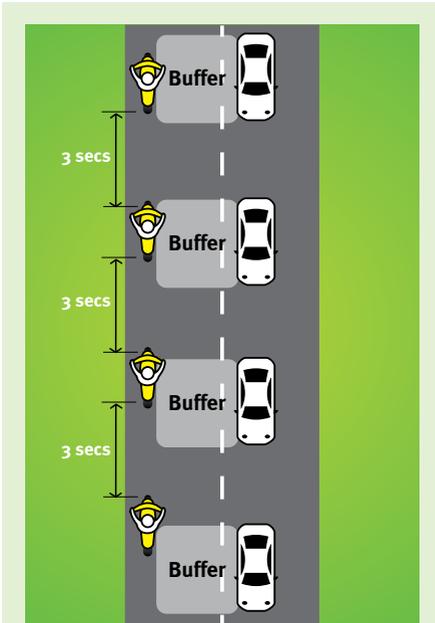
*Before overtaking check for side streets and concealed driveways particularly in country areas.*



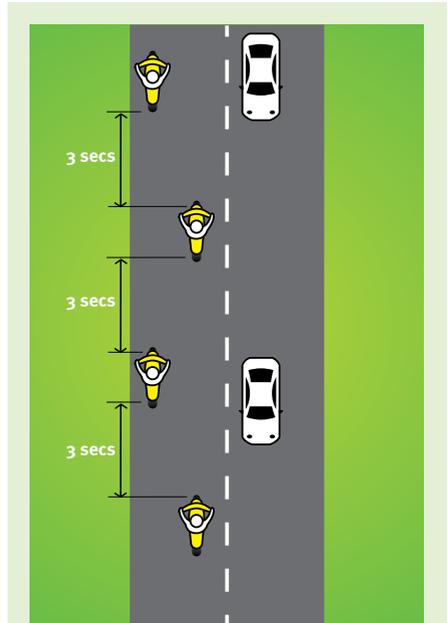
*Before overtaking a slow vehicle check that the vehicle is not turning into a side road.*

## Group riding

When riding in a group choose a position that allows you the best vision of oncoming traffic and hazards.



*When you are new to group riding start by riding in single file, this formation allows every rider to create space from hazards.*



*If you're an experienced group rider you can ride in a staggered formation to allow a clear view of the road ahead.*

# Risk factors

Your beliefs and choices you make will affect how safe you are on the road. Riding requires your full concentration — your survival depends on awareness, anticipation and judgement.

Factors that can increase your risk when riding include:

- Attitude.
- Behavioural factors.
- Physical factors.
- Social context.
- Riding environment.

## Attitude

How you think and feel is reflected in how you act and interact with others — the right riding attitude can help to keep you safe on the road.

Riding defensively, anticipating potential hazards and planning your response, is your first line of defence. You must be focussed on the task of riding — continually evaluating the riding environment and looking for clues about potential hazards. Anticipating other road users' actions and dangers in the riding environment means you will be ready to respond.

**Expect that other road users will make mistakes — be patient and treat other road users with respect.**

As much as you can control your own attitude and behaviour, you can't control the behaviours of other road users.

If you are the target of aggression or inappropriate behaviour don't succumb to the behaviours of others. Remain calm and create space between you and the other motorist. Reacting to aggressive behaviour with shouting or offensive gestures may further fuel the aggression and lead to a more unsafe situation.

# Behavioural factors

## Alcohol and drugs

Don't drink and ride — drinking alcohol impairs your ability to ride safely. Alcohol affects your vision, hearing, reflexes, coordination, balance, mood, judgement and response time. Even a small amount of alcohol increases your risk due to your reduced riding capability.

You need to remember that it is not just your mistakes that become dangerous. If you have been drinking you may not be able to respond quickly to others' mistakes.

**Learner riders must have a zero breath alcohol concentration (BAC), this means nothing to drink.**

**You must also have a zero BAC for the first year after you get your RE provisional or open licence.**

Many drugs can also impair your ability to ride safely. This includes prescription drugs and over the counter drugs, such as cold or allergy tablets, as well as illegal drugs. These drugs can leave you weak, dizzy, drowsy or slow to respond.

Drugs affect your vision, reflexes, coordination, balance, mood, judgement and response time, increasing your risk of a crash.

Make sure you know the effects of any medication you're taking before you ride — check with your doctor and read the label. If it has an effect on your riding, you must not ride.

You must not have any trace of prescribed or illegal drugs in your system when riding — you may be randomly tested for these drugs. There is no set time for drugs to clear your system so if you have taken drugs don't ride.

## Thrill seeking and riding aggressively

Riding can be fun and give you a sense of freedom, but you need to remember that you are also vulnerable — you have little protection if things go wrong. Thrill seeking, speeding and riding aggressively all increase your risk of crashing. Ride to survive by making choices that minimise your risk.

# Physical factors

## Mood

You act and respond differently when you are angry, stressed or unhappy. Your concentration, judgement and ability to make good riding decisions can be impaired by a bad mood and you are prone to make mistakes. Improve your safety by not riding when you are angry, stressed or unhappy.

## Fatigue

Riding is more physically demanding and tiring than driving a car — riding can tire you much more quickly. Fatigue makes it difficult to exercise good judgement and riding smoothly and safely is almost impossible when you are tired. Fatigue affects your vision, concentration and balance, all critical for safe riding.

Many people think fatigue involves going to sleep, but for riders the real problem is a lapse in concentration, even for a moment.

You may be fatigued if you:

- Arrive at a curve more quickly than you expected.
- Run a bit wide on a curve.
- Make a couple of rough gear changes.
- Don't see a sign.
- Have a dry mouth, or stiff joints (neck, knees and wrists).
- Yawn.

If you have any signs of fatigue, stop when it's safe and rest. Even if you aren't tired, stop and rest every 1.5 hours or 150 kilometres, whichever is first. Help avoid fatigue by:

- Getting enough sleep before you get on the road.
- Drinking plenty of water.
- Avoiding too much coffee or sweet soft drinks.
- Eating small amounts frequently — simple foods like fruit, nuts, a muesli bar or a little chocolate.
- Avoiding fatty foods and large meals.
- Not making yourself too warm — it's good to be a little cool.

## Dehydration

It's surprising how quickly you can become dehydrated when riding. This is particularly true when riding long distances. Dehydration can increase fatigue, impede your judgement and slow your response times. Help avoid dehydration by:

- Stopping and having a drink of water every 1.5 hours, or more frequently in hot weather.
- Wearing gear that allows your body to 'breathe'.
- Using a hydro-pack.

## Social context

### Groups

Riding with a group can be fun, but it also brings pressure to conform with attitudes and behaviours of the group. Who you ride with can affect your behaviour and attitude toward risk — positively or negatively, depending on the group.

When you are new to group riding it's easy to get pushed into situations that are beyond your comfort zone or ability. Improve your safety by either not riding in a group, or by only riding with people you trust, who share your motivations and attitudes to riding and will respect your experience level.

Help avoid the potential pitfalls of group riding by:

- Choosing a group that respects and protects its members — riding to the least experienced rider's ability.
- Planning ahead to ensure you know where the group is heading and some meeting points for if you get separated.
- Riding to your ability and not taking risks to keep up with the group.

### Passengers

A pillion passenger can significantly affect your motorcycle's handling and stability — it will not accelerate or brake as quickly and will handle differently around turns and curves, and over bumps. A pillion passenger is also a potential source of distraction, and an inexperienced pillion passenger can be unpredictable — sudden or unexpected movements can significantly affect your ability to control the motorcycle.

Improve your safety by either not carrying a pillion passenger, or by only riding with experienced pillion passengers who you trust. If you are going to ride with a pillion passenger:

- Consider adjusting the pre-load suspension or increasing your tyre pressure to accommodate the extra weight.
- Increase your crash avoidance space and leave more time to speed up and slow down.

- Make changes in direction, speed and braking smooth and easy to predict to help your passenger respond.
- Brief your passenger on how to mount and dismount, where to hang on, and how to move with the motorcycle. Passengers should follow your lead when leaning.

For rules about who is able to carry a pillion passenger, see page 10.

**Carrying a pillion passenger means accepting responsibility for their safety as well as your own.**

## Riding environment

### Night

Riding at night is considerably more dangerous for riders. Riding at night reduces your vision and makes it harder for other motorists to see you.

The risks of you hitting an animal, misjudging a curve or not seeing a hazard on the road surface are greatly increased at night when your vision is reduced. Other motorists' vision is also lower and other lights may make it difficult for them to see your headlight or tail light. They may also have difficulty judging the distance and speed of your motorcycle because of the single headlight.

When riding at night take extra care and apply strategies to:

- Ensure you can be seen — check that your lights and indicators are working properly, and wear reflective or fluorescent clothing.
- Maximise your vision — avoid wearing dark, tinted or scratched eye protection, travel on well-lit roads, and use high beam (except within 200 metres of another vehicle).
- Give yourself time to respond — slow down to maintain at least 6 seconds of vision, and increase your crash avoidance space — you must be able to stop within the distance you can see.

### Heavy traffic

Riding in heavy traffic increases your risk of a crash due to reduced visibility, more vehicles turning and changing lanes, increased frustration levels, and exposure to fumes.

Heavy traffic makes it harder for you to see and be seen among the other vehicles, and exposes you to potentially poor decisions from fatigued, frustrated and impatient motorists. When riding in heavy traffic apply strategies to:

- Ensure you can be seen — wear reflective or bright clothing.
- Maximise the predictability of your riding — avoid unnecessary lane changes.

- Give yourself time to respond — slow down and increase your crash avoidance space.

You are also vulnerable to exhaust fumes when riding in heavy traffic. Over-exposure to exhaust fumes can lead to fatigue and headaches, impeding your concentration and judgement.

Reduce your exposure to fumes by:

- Avoiding riding in heavy or congested traffic.
- Stopping and resting, away from the road, every 1.5 hours.

## Exposure

Being cold is stressful and tiring — you become less alert and your response time slows. A drop in your core temperature can even affect your brain's function. Cold riders can become anxious, irritable or detached from the task at hand.

Insulated, windproof gear helps maintain your core temperature — the insulation keeps a layer of warm air between your body and the shell. Avoid gear that is baggy or too big, as flapping and buffeting may force the warm air out. Pay particular attention to keeping your neck, face, hands and feet dry and warm.

## Weather hazards

Weather conditions can vary and change quickly. When riding you should be prepared for a variety of conditions on the road. Below are some conditions you may encounter when riding and hints and tips on how to manage them safely:

- Bright sunshine may cause significant dazzle — be aware that motorists in front of you may have difficulty seeing you before they overtake or change lanes.
- Sunrise or sunset will make it hard for you to be seen by other motorists — exercise extreme caution when riding at these times.
- Heat haze can hide approaching vehicles from you — take extra care to ensure the path is clear before you overtake other vehicles.
- Fog reduces visibility and your perception of speed — slow down and increase your crash avoidance space to allow yourself more time to respond. Avoid the temptation to closely follow another vehicle to see its lights and path of travel.
- Rain can significantly reduce visibility, and water on the road will affect your braking — slow down and increase your crash avoidance space to allow yourself more time to respond. Remember that after a long dry spell the road can become slippery, increasing your stopping distance.
- If spray from other vehicles makes it difficult to see, slow down and drop back until you can see clearly.

- Avoid painted arrows and road markings as they can be very slippery when wet.
- If you have to ride through a deep puddle ride slowly in low gear and after you are clear of the water, test your brakes.
- High winds can cause strong gusts when entering or emerging from under bridges or riding into open country, and can cause vehicles, especially high sided ones, to veer suddenly — keep your speed down and create space from other vehicles as wind buffeting can affect the handling of your motorcycle.

Riding in unfavourable weather conditions is tiring, so watch for the signs of fatigue, and rest if necessary.

## Animals

Animals on the road can pose a significant risk for riders. Animals are more active around dusk and dawn and are often confused by the sound of a vehicle, running towards it instead of away.

The most effective way to keep the local wildlife and yourself safe is to try to avoid travelling at the high-risk times of dawn and dusk, and if you have to travel reduce your speed and be aware of the unpredictable nature of animals.

Even if an animal appears stationary near the edge of the road or is moving away, slow down, give them plenty of room and be alert – animals are easily startled and can run in front of your motorcycle. If a large animal, such as a kangaroo or cow, suddenly appears on the road in front of you, brake firmly. Do not try to swerve (unless it is unavoidable) around the animal as you are likely to run onto the gravel verge and lose control.



# Managing problems while riding

## Wobbles

Motorcycle wobbles are usually related to stability problems caused by excessive or unevenly distributed weight, or mechanical problems such as worn or loose bearings or worn or under inflated tyres.

If the motorcycle wobbles:

- Keep a firm grip of the handlebars without locking your arms or fighting the steering.
- Gradually roll off the throttle to slow down.
- Gradually apply the brakes and move to the roadside.

Work out what was causing the wobble and fix the problem before you continue riding.

## Skidding

Skidding is generally caused by changing course or speed too harshly for the conditions, resulting in one or both tyres losing grip on the road. Skidding can be dangerous so it's important to know how to avoid a skid or how to control it if it happens.

You can minimise the risk of skidding by:

- Riding to the conditions – don't suddenly or forcibly brake, accelerate or change direction.
- Avoiding, or slowing down on, slippery surfaces such as gravel, road paint, oil, water and metal plates.
- Ensuring your tyres are in good condition with sufficient tread, and are inflated to the correct pressure.

If a skid develops immediately remove the cause:

- If excessive braking is causing the wheel to lock up, ease off the brake and allow the wheel to rotate. When stability is regained apply the brake more smoothly.
- If excessive speed or harsh acceleration is causing the skid, ease off the throttle and slow down. When stability is regained apply the throttle more smoothly.

## Tyre blow-outs

You can't always hear a tyre blow, but you should be able to detect a flat tyre from how the motorcycle handles. If the front tyre goes flat, the steering will feel heavy. If the rear tyre goes flat, the back of the motorcycle will weave from side-to-side.

If you experience a puncture or blow-out:

- Keep a firm grip on the handlebars and try to keep going in a straight line.
- Try not to use the brakes. If braking is necessary use the brake on the ‘good’ tyre — braking on the ‘bad’ tyre may result in the tyre separating from the rim.
- If the front tyre goes flat move your weight back to shift the load off the front tyre. If the rear tyre goes flat move your weight forward.
- Gradually roll off the throttle to slow down.
- When you get your speed down, move off to the roadside and coast to a stop.

**Routinely check the condition of your tyres and the tyre pressure to minimise the chance of a flat.**

## Broken clutch cable

If the clutch cable breaks your clutch will remain fully engaged. If you are stopped, keep the brakes firmly applied to stall the engine. If you are riding, slow down, gradually downshifting the gears when speed permits and shifting to neutral before you come to a complete stop.

## Stuck throttle

If the throttle sticks you should immediately:

- Pull the clutch in.
- Gradually apply the brakes and move off to the side of the road.
- Apply the engine stop switch and turn off the ignition.

## Broken chain

If the chain breaks your motorcycle will either freewheel because there is no drive to the rear wheel, or skid because the rear wheel is locked up.

If the chain breaks and doesn’t lock up the back wheel:

- Roll off the throttle.
- Gradually apply the brakes and move off to the roadside.

If the chain breaks and locks up the back wheel:

- Steer into the skid.
- Roll off the throttle.
- When you get your speed down, move off to the roadside and coast to a stop.

## Seized engine

There is usually some warning before your engine locks or freezes, giving you time to respond. The first symptom may be a loss of engine power or a change in the engine's sound.

If the engine starts to seize:

- Pull the clutch in, disengaging the engine power from the rear wheel.
- Gradually apply the brakes and move off to the roadside.
- Turn off the ignition.

Let the engine cool and add oil or coolant if either is low.

## Exiting the road in an emergency

When exiting the road in an emergency you should always ensure that your path is clear and that you make your exit at an appropriate speed.

If you have to exit the road:

- Check the surface on the side of the road before you move onto it. Try to avoid riding into mud or sand, and be careful of steep drop offs and the edge of bitumen.
- Check your mirrors and do a head check to make sure it's safe to move off and indicate to let other motorists know what you are doing.
- Stop away from the edge of the road. A motorcycle on the side of the road can be difficult to see, so create some space to ensure you are not hit by a car.

# Motorcycle crashes

## Reduce crash consequences

You should always ride low risk to minimise the potential for being involved in a crash. However, if a crash becomes inevitable there are some things you can do to help reduce the consequences.

- Stay upright for as long as possible and reduce your speed. Tyres and brakes are designed to stop your motorcycle, plastic and metal components on the side of your motorcycle aren't. Staying upright allows you to most effectively slow down — hitting the ground at 30km/hr a bit further down the road is better than hitting it at 60km/hr.
- Keep control of your motorcycle for as long as possible and steer towards the least hazardous area. Try to avoid a head on crash, sliding into an immovable object or ending up in the path of oncoming traffic.

If you have fallen from your motorcycle:

- Try to relax and slide to reduce your risk of injury — sliding on your back, feet first is the best position. Avoid tucking into a ball and tumbling as this will increase your risk of broken bones. Wearing the right protective gear is vital in a crash.
- Let go of your motorcycle – it's likely to travel further than you in a slide so holding on will mean you also travel further.

## Actions if first on the scene

If you are the first on the scene of a motorcycle crash there are some key actions you can take to help those involved while keeping yourself safe.

- Assess the scene to make sure there are no sources of danger to yourself or others. Look for fire, fallen power lines, petrol on the road and dangerous traffic conditions.
- Protect the scene by getting someone up-road and down-road to alert traffic (if people are available), and establish a safety circle around the immediate crash site to direct traffic and point out any hazards.
- Establish the seriousness of any injuries and apply first aid.
- If the rider is breathing leave their helmet on.
- Always assume a spinal injury and limit movement — only move them if they are in immediate danger.
- Call for an ambulance and provide the details of the crash.



## Returning riders

If you have not ridden for a period of time you can be at a greater crash risk due to a potential reduction in your riding skills. If you are considering getting back on your motorcycle after a break, take the time to familiarise yourself with your motorcycle and rebuild your riding skills.

A lot may have changed since you last rode and to avoid injuring yourself or others, here are some tips on how to make a safe return to riding.

### Check your motorcycle

It may have been a while since you've ridden your motorcycle, so it's important that you check its condition. If you have any concerns regarding the condition or operation of your motorcycle you should consult the owner's manual or seek advice from a qualified motorcycle mechanic.

### New motorcycle

Motorcycles vary greatly in size, weight and performance. When purchasing a motorcycle you should consider safety features, as well as whether it suits your needs and is comfortable to ride.

New motorcycles are increasingly being fitted with safety features such as anti-lock braking and electronic brake force distribution. Keep in mind that advancements in technology can mean newer motorcycles operate differently and are more responsive than older models. You may need to adjust your riding style.

If you purchase a new motorcycle take the time to familiarise yourself with its handling and capabilities as this is critical to your safety when riding.

## Check your gear

Protective gear can help prevent or reduce the severity of injuries. When returning to ride remember to check your protective gear to ensure:

- There are no holes, rips or tears in the material.
- The seams are intact.
- There are no scratches, dents, loose padding or frayed straps on your helmet.

If it's been a while you should consider updating your gear. Advancements in materials and construction methods mean that new gear may provide better protection.

## Check yourself

If you are considering returning to ride, you will need to reassess your skills. Start riding in low risk situations. Be aware that when you return to riding you may experience tiredness and discomfort from long stretches on your motorcycle. It's a good idea to start off with short journeys and make sure you take regular breaks. Take the time to rebuild your skills.

Think about doing a refresher or advanced safe riding course. Accredited rider trainers offer tailored programs that allow you to practise riding skills and techniques, prior to heading back out on the road.

## Motorcycle registration

Motorcycles must be registered before they can be ridden on Queensland roads.

Registration supports the safety and security of Queensland's road transport, allowing common safety standards to be applied and enforced. Registration also enables identification and management of registered operators, and provides an efficient system to prevent the re-registration of stolen vehicles.

Registration fees provide essential funding for the development and maintenance of our road network. Registration also includes the cost of Compulsory Third Party (CTP) insurance, which covers the motorcycle owner and rider for legal liability arising from personal injury to another person in the event of a crash. CTP does not cover property damage.

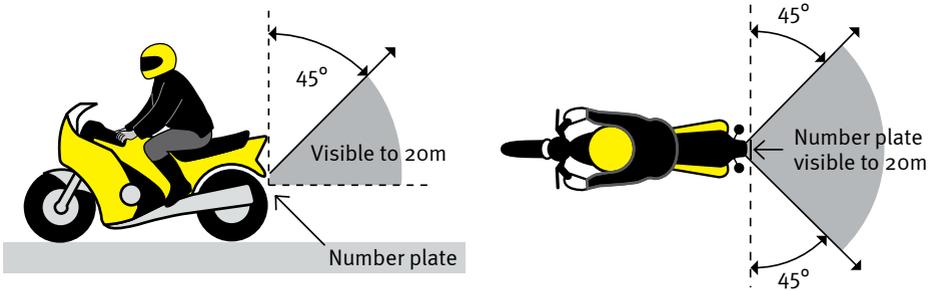
For information about registering an unregistered motorcycle, or to check if your motorcycle is registered visit [www.qld.gov.au](http://www.qld.gov.au) and search 'registration check'. You can also use the RegoCheck app to ensure that the registration is current.

**If your motorcycle is unregistered or your registration has expired DO NOT ride your motorcycle. You could be fined for using an unregistered vehicle, and if you are involved in a crash you may not be insured.**

# Number plates

Your motorcycle must be fitted with an official number plate if you want to ride on Queensland roads. The number plate must be:

- Issued by the Department of Transport and Main Roads.
- Mounted at the rear of the motorcycle, no more than 1.3 metres above ground level, in an upright position parallel to the motorcycle's axle.
- Able to be read clearly from 20 metres away at any point within a 45 degree arc of the motorcycle's centreline (see diagrams).
- Clean and in good condition.
- Free of any characteristic preventing it from being read
- Illuminated so it is clearly visible at night.



## It is an offence to:

- **Alter a number plate in any way.**
- **Attach a number plate to any vehicle other than the one to which it is registered.**
- **Use a cover that is not flat, clear, clean and untinted.**
- **Have an obscured number plate.**







Course  
activities

# Unique aspects of motorcycling

Discussion cards	Motorcycle or car	Notes on discussion points
Low petrol consumption		
Low running costs		
Feeling of freedom		
Vision of traffic environment		
Being seen by others		
Crash protection		
Best cornering performance		
Stops quicker		
Accelerates quicker		
Transporting things		
Reduce risk by positioning		
Fun		

# Making choices

Discussion cards	My thoughts
'The crash wasn't my fault, the car in front stopped suddenly.'	
'I've only had one beer, it won't affect me.'	
'I want to be a safe rider and I know fatigue causes crashes but I really need to get home.'	
'My friends have been riding for years, and they ride outside my comfort zone, but I need to keep up.'	
'They are facing a stop sign, they have to give way to me.'	

# Riding strategies

Risk factors and situations	Recognise	Eliminate	Reduce
Night			
Heavy or congested traffic			
Inexperience			
Bad weather and poor lighting			
Unfamiliar area			
Group riding			
Rural roads			

# Roadcraft tactics

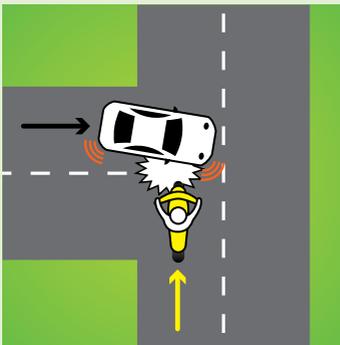
## Common motorcycle crashes



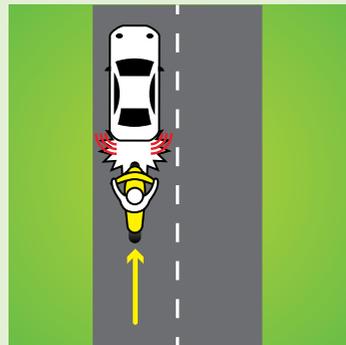
*Loss of control (straight)*



*Loss of control (curve)*



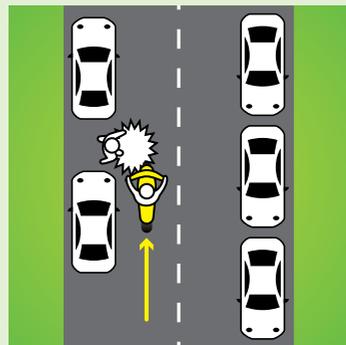
*Intersections*



*Rear end*



*Sideswipe*



*Hit pedestrian/animal/object*









# Key sequences

Activity	Components
<b>Mounting</b>	<b>Front brake</b> — apply the front brake. <b>Head check</b> — check around you. <b>Stand</b> — retract the stand.
<b>Dismounting</b>	<b>Front brake</b> — apply the front brake. <b>Head check</b> — check around you. <b>Stand</b> — put the stand down.
<b>Starting up</b>	<b>Mirrors</b> — check around you. <b>Brakes</b> — apply the rear brake. <b>Gears</b> — pull the clutch in.
<b>Shutting down</b>	<b>Mirrors</b> — check around you. <b>Brakes</b> — apply the rear brake. <b>Gears</b> — put the motorcycle in first gear.
<b>Moving off</b>	<b>Ready</b> — adopt the ready position. <b>Set</b> — hold friction point and fast idle. <b>Check</b> — mirrors and head check.
<b>Slowing down</b>	<b>Mirrors</b> — check around you. <b>Brakes</b> — front then rear (set up, squeeze). <b>Gears</b> — change down to first.
<b>Turning</b>	<b>Look</b> — look ahead and plan your path. <b>Mirrors</b> — check around you. <b>Turn your head</b> — point your chin where you want to go.
<b>Changing gears</b>	<b>Mirrors</b> — check around you. <b>Clutch</b> — smoothly pull the clutch in. <b>Gears</b> — select the appropriate gear.
<b>Roadcraft tactics</b>	<b>Look</b> — look for hazards. <b>Slow down</b> — prepare to stop for hazards. <b>Move away</b> — create space from hazards.
<b>Riding curves</b>	<b>Look</b> — look ahead and plan your path. <b>Slow down</b> — mirrors, brakes, gears. <b>Move away</b> — start wide, buffer, finish tight.
<b>Steering</b>	<b>Look</b> — look in the direction of travel. <b>Push</b> — push the handlebar in the direction of travel. <b>Go</b> — move in the direction of travel.
<b>Braking</b>	<b>Mirrors</b> — check around you. <b>Brakes</b> — front then rear (set up, squeeze). <b>Gears</b> — change down to first.



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