

# Fitness to drive

## QFleet driver safety fact sheet

### Alcohol consumption

Alcohol is a contributing factor in about a third of all fatal crashes and the risk of death as a result of an alcohol related crash can be four times greater in rural and remote areas of Queensland.

Alcohol limits a driver's ability to drive safely because it:

- impairs a driver's ability to concentrate on driving
- slows reaction times
- reduces a driver's ability to do more than one thing at a time
- affects vision and hearing
- makes drivers feel more confident, which may lead to increased risk taking
- relaxes drivers, increasing their chances of falling asleep at the wheel
- makes simple tasks more difficult.

### Blood alcohol concentration (BAC)

BAC is a measurement of the amount of alcohol in the body. Blood alcohol concentration:

- is measured in grams of alcohol per 100 millilitres of blood
- measured at 0.05 means the body contains 50 milligrams of alcohol per 100 millilitres of blood
- begins to rise as soon as drinking starts
- takes 30 to 60 minutes after drinking has stopped to reach its highest concentration.

### Legal blood alcohol concentration

The holder of an open driver's licence must maintain a BAC of less than 0.05 per cent when driving. Drivers with a learner's permit, provisional licence holders under the age of 25, truck, bus and taxi drivers must maintain a zero BAC when driving.

### Factors affecting BAC

Alcohol affects people differently and can depend on:

- how much alcohol a person drinks and the regularity of consumption
- the time period over which a person consumes alcohol
- how much a person weighs
- the amount of food consumed and the time frame since consumed
- a person's level of fitness
- liver function and health
- a person's mood
- gender
- the type of alcoholic drinks consumed.

### Understanding a standard drink

People may often underestimate the amount of alcohol they have consumed.

Many drivers unknowingly exceed the legal BAC limit for driving because they do not understand what constitutes a standard drink. A standard drink is a term used as a guide for people to assess the amount of alcohol they may have consumed during a particular period of time.

Because of the amount of alcohol varies significantly with different beverages, the amount that comprises a standard drink can also vary depending of the type of alcoholic beverage. For example, 285 millilitres (a pot glass) of full-strength beer and 30 millilitres (one nip) of spirits both equal approximately one standard drink.

Alcohol packaging provides consumer information on equivalent of standard drinks. However, the person drinking the alcohol is responsible for knowing how much they have consumed, particularly if they intend to drive a vehicle afterwards.

*Remember! If unsure, err on the side of caution and don't mix drinking and driving.*

### Wine wisdom

When wine is served by the glass, it can be particularly difficult to quantify. Restaurants, bars and private homes use wine glasses of varying sizes and the number of standard drinks per serve can vary from one venue to the next.

Drivers who consume wine must be aware that 100 millilitres of a typical table wine equals one standard drink. This amount of wine is equivalent to four cooking tablespoons of wine. If the wine is served responsibly, only 100 millilitres of wine will be served in a wine glass even though the glass may be large and capable of holding 250 millilitres or more.

If the wine is served more generously, the same glass may be filled to the point where it may contain 200 or 250 millilitres of wine, which actually equates to 2 or 2.5 standard drinks per glass consumed.

If a driver consumed two glasses of wine which had been overfilled, they may have actually consumed the equivalent of 4 or 5 standard drinks, believing that they had only consumed two standard drinks.

Wine and spirits, like beer, can have varying percentages of alcohol content. One 100 millilitre serving of one type of wine or one 30 millilitre nip of one type of spirit, can be quite different from another.



### Drink limits advice

To stay below 0.05 BAC, as a guide, drivers are advised to limit their drinking to:

- for **men**: no more than two standard drinks in the first hour and no more than one every hour after that
- for **women**: no more than one standard drink in the first hour and no more than one every hour after that.

Please note that this is only an estimate designed to act as a guide and minimise the risk of exceeding the legal BAC limit to drive. However, everyone is different – some people will need to consume less alcohol to maintain a BAC level below the legal limit.

The only thing that will reduce the blood alcohol concentration level is time. It takes the liver about one hour to process the alcohol from one standard drink. If numerous drinks are consumed over an extended timeframe, it is quite possible for a person to be over 0.05% the next morning after drinking alcohol the night before. Coffee, cold showers, vomiting or exercise will not reduce the blood alcohol concentration.

### The best advice

Do not drive if there is any doubt. Make alternative arrangements: call a taxi, catch a bus, get a lift with someone who has not been drinking or stay overnight.

More information about drink driving and standard drinks can be found on the Queensland Government [website](#).

## Illegal drugs

Safe driving requires coordination, clear judgement, good concentration and the ability to react quickly to what happens on the road.

Driving under the influence of illegal drugs is dangerous and is an increasing road safety problem. There is a strong association between illegal drug use and crash involvement. Drugs can limit a person's ability to drive safely by:

- slowing reaction times
- dulling the thinking process making it difficult to concentrate on the driving task
- causing a distorted perception of speed and distance
- reducing the ability to drive safely and identify driving hazards
- stimulating the nervous system leading to:
  - reduced attention span
  - over-confidence
  - aggressive and dangerous driving
  - the sudden onset of fatigue as the stimulant effects wear off
  - lack of awareness of how much driving ability is impaired.

Mixing drugs with alcohol can seriously affect the ability to drive safely. Some drugs may make a person not feel intoxicated, when in fact they could be over the legal BAC limit. Never drive after taking drugs.

There is zero tolerance to driving with illegal drugs in a person's system. Police officers now have the authority to conduct random roadside drug testing in Queensland.

Further information about the effects of prescription and other drugs can be found on the Queensland Government's [website](#).

## Medication

Safe driving requires good coordination and mental alertness. Prescription and non-prescription medication may affect a person's ability to drive safely by:

- causing drowsiness
- slowing reaction times
- reducing concentration

- increasing aggression
- blurring vision.

Common medications that may affect driving ability include:

- slimming pills
- sleeping pills
- painkillers
- cough and cold preparations
- allergy, anxiety, diabetes and blood pressure medications
- antihistamines
- travel sickness medication.

Drivers have a responsibility to be aware of how prescription drugs can affect their driving performance. If prescription medication is taken, even if taken strictly in accordance with the prescription and a person's driving skills are impaired by the drug, they are committing an offence.

Drivers can avoid the consequences of driving while affected by prescription drugs by asking their doctor or pharmacist:

- to explain the effects (if any) of the prescribed medication on driving
- about the effects of new medications or how new medications may react with existing medications
- for an alternative medication
- if it is safe to consume alcohol while taking the prescribed medication
- adhering to the directions and warnings on the medication packaging
- only taking the prescribed dosage
- not driving if they have missed a dose of a medicine which controls symptoms which affect their driving
- not taking another person's medication
- pulling off the road to a safe location if they feel any detrimental effects of medication while driving.

## Medical conditions

To drive a vehicle safely, a driver must perform a range of physical and mental activities competently. The driver must have the physical

capability to operate and control the vehicle, and the mental capacity to perceive, assess and react to the changing road environment.

There are a number of medical conditions and treatments which may impair a driver's ability to drive a motor vehicle safely. It is mandatory for driver licence holders to report to Queensland Transport any long term or permanent medical condition that may affect their ability to drive safely. This must be done as soon as there is an adverse change to an existing condition and not when their licence is due for renewal.

Drivers who fail to report a medical condition may receive a fine or be disqualified from driving for a certain period.

Some medical conditions which are recognised by law as having the potential to affect driving ability are:

- diabetes
- epilepsy
- heart disease
- stroke
- arthritis and other joint problems
- eye problems (for example, cataracts)
- hearing disorders
- sleep disorders
- Parkinson's disease and other neurological disorders
- dementia and Alzheimer's disease
- depression and other mental-health problems
- lung disease
- injuries and disabilities.

The *QFleet Road Safety Manual* also provides reference to the issue of employer and employee obligations regarding reporting of medical conditions.

For more information regarding reportable medical conditions, refer to the Queensland Transport [website](#).

## Seating posture and backache

A driver must be capable of carrying out many complex muscular movements in order to control a vehicle properly. Drivers must have adequate strength and an adequate range of movement in

their hips, knees, ankles, shoulders, elbows, wrists and fingers. They must also be able to rotate their head sufficiently to permit them to scan the driving environment.

Vehicle seats are usually ergonomically designed to suit a range of 'standard' sized drivers. Not all drivers are a 'standard' size and because individual drivers' heights and weights vary, they will need to adjust their seat to provide a comfortable driving position which still allows them to control the vehicle.

## Seating and posture advice

A good driving posture is characterised by:

- a comfortable, relaxed and well supported seating position
- firm back support
- controls within easy reach
- unobstructed vision
- minimal static muscle work.

A good, safe driving posture can be achieved by:

- Raising the seat as high as is comfortable to improve vision of the road. It is preferable to be able to see over the steering wheel while still being able to see the instrument panel.
- Moving the seat forward until the brake and accelerator pedals can be easily and fully depressed. The balls of the feet should reach the centre of the brake and accelerator pedals with the chest approximately 30 cm from the steering wheel hub (and airbag).
- Tilting the seat cushion so that the thighs are supported along the length of the cushion. The knees should be slightly higher than the hips when seated in the vehicle; the leading edge of the seat should not contact the rear of the knees.
- Adjusting the backrest to provide continuous support along the full length of the back and contact up to shoulder height. Avoid reclining the seat too far as this can cause excessive forward bending of the head and neck.
- Adjusting the lumbar support to give even pressure along the width of the backrest. Ensure lumbar support fits the back and is comfortable, with no pressure points or gaps.



- Adjusting the steering wheel rearwards and downwards for easy reach.
- Gripping the steering wheel with the elbows slightly bent with the hands at either the 10 to two, or quarter to three position. Elbows should be close to the body and not protruding or resting on the console or the arm rest on the door.
- Adjusting rear vision mirrors so that traffic to the rear and sides of the vehicle can be clearly viewed without having to lean or bend.
- The head restraint adjusted so that the top of the restraint is level with the top of the head; the restraint is very close to the centre of the head and not the neck.

Drivers with a pre-existing back condition may find that sitting in one position and driving for several hours aggravates their condition.

Backache can be relieved by:

- maintaining a good seating posture
- taking a break from driving every two hours; stand, stretch and walk around the vehicle
- changing posture from time to time e.g. wriggling around in the seat, when it is safe to do so
- rotating drivers.

Drivers with a severe back condition may find that they lack the required strength, flexibility and mobility to safely operate a vehicle. This is a condition which is recognised by law as having the potential to affect driving ability and they will need to consult their doctor prior to driving (see Medical Conditions above).

There are a range of aids, including cushions and beaded and lambswool seat covers which are available from pharmacies and other suppliers that claim to help support backache sufferers while driving. Drivers with back problems should seek advice about the selection and use of their aids from their treating medical professional or from an occupational therapist.



## Driver vision

There is a strong relationship between good driver vision and road safety. Most of the critical decisions a driver makes are based on sight. Twenty per cent of drivers have a vision defect which could affect driver safety without good optometric care.

There are seven vision skills which are vital for safe driving:

1. **Distance acuity** is the ability to focus and see clearly for long distances. It enables drivers to see things and react with enough time to avoid dangerous situations. Distance acuity decreases as speed increases.
2. **Depth perception** provides the ability to judge distances between moving objects. Good depth perception is particularly important when overtaking. It diminishes as speed increases.
3. **Field of vision** is the ability to see things out of the corner of the eye. Good field of vision allows a driver to see traffic approaching from side roads, or pedestrian beside the road, without looking away from the road ahead. Field of vision is normally 180 degrees but decreases to 40 degrees at 100 kilometres per hour.
4. **Good muscle balance** ensures that both eyes are pointed simultaneously at the same object. It complements depth perception and field of vision. Tiredness, alcohol and drugs can upset muscle balance.
5. **Accommodation** is the ability to quickly change focus from a distant object to a close object; for example from the road ahead to the vehicle's dashboard and back to the road ahead.

6. **Night vision** is the ability to see in low light conditions, such as beyond the range of the vehicle's headlights, and to recover quickly from the glare of oncoming headlights. Night vision deteriorates rapidly in drivers over 40 years of age.
7. **Colour vision** allows a driver to recognise a variety of colours, enabling the driver to distinguish traffic light signals.

Road safety can be improved and good vision maintained by:

- having regular vision examinations
- wearing prescribed spectacles when driving if required
- not driving at night if night vision is poor
- using properly adjusted and larger rear vision mirrors or blind spot mirrors to compensate for reduced field of vision
- exercising extra care when overtaking if depth perception is a problem
- ensuring that windscreen and window glass is clean and free of defects
- replacing unserviceable windscreen wiper blades
- ensuring that headlights are clean, serviceable and correctly aimed
- driving at reduced speed to suit the conditions and visibility
- protecting your eyes from Ultraviolet Radiation Exposure. See our fact sheet *Eye protection from ultraviolet radiation when driving* for more information.



For the full suite of QFleet  
Driver Safety Fact sheets  
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