Rural and remote driving

QFleet driver safety fact sheet

Road safety research indicates that there is a significantly higher risk of death or injury due to crashes on rural or remote roads.

Key risk factors involved in driving on rural or remote roads are:

- unfamiliar driving conditions
- driver inexperience
- excessive speed for the road conditions
- long travel distances
- monotony
- driver fatigue
- extreme weather events
- alcohol
- narrow and unsealed roads
- differing/inconsistent road surfaces
- irregular and poorly maintained road shoulders
- riskier overtaking
- animals on the road
- farm machinery and other slow moving vehicles on the road.

Other factors that have an impact on the safety of remote area travel are:

- restricted communication networks
- limited ambulance and medical services
- longer response times by emergency services in the event of a crash.

Safety tips for minimising the risks of driving on rural and remote roads

The risks associated with driving on rural and remote roads can be minimised with planning and preparation. Consider the safety tips below.

- Plan the journey in detail.
- Allow adequate travel time to avoid the urge to exceed safe travel speeds.
- Obtain a map and place it in the vehicle.
- Learn about the road and traffic conditions via:
 - the Queensland Government's traffic and travel information website 13 19 40
 - RACQ's road conditions website.
- Consult weather forecasts and observe weather warnings.
- Pre-plan refuelling stops.
- Pre-plan and book overnight accommodation.
- Select the most appropriate vehicle for the conditions e.g. 4WD.
- Check the safety and serviceability of the vehicle before departure, including inflation pressures of the tyres and the spare tyre.
- Ensure the vehicle has a jack and a wheel brace and practice wheel changing.
- Do not start a trip after a full working day.

Safety advice for drivers

Drivers should take special care when driving on rural or remote roads. They must know their capabilities and limitations.



Here is some safety advice for drivers.

- Rest well before starting the trip.
- Start the trip early and avoid driving at dusk or after dark.
- Do not drive at the time of night when sleep would normally be occurring.
- Share the driving task.
- Refrain from driving more than 10 hours in any 24 hour period. Stop for a 15 minute rest break every two hours.
- Observe speed limits and reduce speed to suit the road conditions.
- Stay alert for animals, slow moving vehicles, oncoming vehicles and vehicles entering the road from farms or side roads
- Avoid road shoulders.
- Allow ample road space when overtaking.
- Avoid undue risks such as driving across flooded creeks.
- Know the limitations of the vehicle e.g. a 4WD cannot go everywhere; do not drive 2WD vehicles where safety signs recommend 4WD.
- Observe all safety signs e.g. "do not cross flooded creek".

When travelling in **very** remote locations, take the following additional measures prior to departure.

- Prepare an itinerary complete with route details, departure and arrival times and contact numbers.
- Ensure that supervisors and colleagues have a copy of the itinerary before departing.
- Plan fuel stops and book accommodation.
- Check and note the availability and contact details of emergency facilities.
- If mobile phone coverage is inadequate, organise, fit, test and learn how to use alternative communication technology, e.g. satellite phone.
- Thoroughly check the vehicle's condition.
- Attend a first aid course.
- Be competent in the operation of the vehicle;
 e.g. know how to engage 4WD and operate the winch (if fitted).

- Secure a spare key in a discreet location outside the vehicle. Remember to protect it from theft, damage, water, and dust.
- Equip the vehicle with safety gear and other emergency material including:
 - appropriate communications equipment
 - additional food and drinking water
 - appropriate clothing
 - a comprehensive tool kit
 - extra oil, fuel and water
 - basic spare parts including engine drive belts and radiator hoses
 - a well-stocked first aid kit
 - a Global Positioning System (GPS)
 - an Electronic Position Indicator Radio Beacon (EPIRB).



During the trip:

 Constantly update knowledge about the road and weather conditions, by consulting with the locals and other travellers.

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- Before leaving town check the vehicle and fuel. Find out the distance to the next fuel and services.
- Share the driving or travel with a buddy vehicle if possible.
- Avoid driver fatigue. Start each leg of the journey well rested.
- Remember the limitations of both driver and vehicle.
- Take extra care when moving off the road to make way for larger vehicles. Road shoulders can be dangerous. Reduce speed when passing other vehicles on gravel roads.
- Avoid high risk activities. Do not attempt anything which could disable the vehicle e.g. flooded creeks and boggy ground.
- Heed roadside signs e.g. "Impassable in the wet".
- Let someone know if the itinerary changes.
- Advise supervisors and colleagues on arrival at destination.
- In the event of an emergency, stay with the vehicle until help arrives. Vehicles are easier to find than people.

Driving in harsh/hazardous terrain

Driving in harsh/hazardous terrain can be very difficult and increases the risk of vehicle damage and personal injury.

Vehicles driven in harsh and hazardous conditions will require additional maintenance to keep them in a safe and reliable operating condition. Refer to the owner's handbook or contact QFleet's maintenance control team for more detail about these requirements.

Crossing creeks

It is preferable not to cross a creek at all, but if it must be done, drivers must follow the safety tips below:

- Walk the crossing and assess the depth of the water (with due regard for dangerous wild life).
- Check for obstacles and hidden hazards.
- Ensure the vehicle can safely negotiate the creek entry and exit.

- Select the appropriate low gear.
- Cross at a steady speed.
- Do not stop or change gear, because water may enter the clutch and the vehicle will become stuck.
- Cross with the vehicle's windows wound down for ease of escape if required.
- When the crossing is complete, drive slowly with steady brake pressure to dry the brakes.
- Do not let the engine's fan to come into contact with water because the fan blades can deform and damage the radiator.
- Water may enter the axle and transmission breathers. They should be checked and serviced frequently to avoid expensive failures.

Do not cross a creek if the water is flowing rapidly or if the depth is greater than the fording depth recommended for the vehicle in the owner's handbook, or if authorities have erected signs saying not to cross.



Remember: If It's Flooded. Forget It.

floodwatersafety.initiatives.qld.gov.au

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Driving on sand

Drivers may encounter sand in both inland and coastal areas. Driving on sand in coastal areas can be very challenging because of the added risks associated with tidal fluctuations, constantly changing surfaces and the vehicle harm caused by sand and salt water corrosion.

Some tips to aid driving on sand:

- Drive at a constant speed; the speed should be sufficient to maintain vehicle momentum and have the vehicle travelling comfortably across the top of the sand surface in preference to ploughing through it.
- Drive in a straight line and avoid unnecessary sharp turns.
- Avoid rapid acceleration or deceleration which will promote a loss of traction.
- Be aware of other vehicles and obey the road rules.
- Drive on the firmer sand between the water line and the high tide mark.
- Drive in existing firm tyre tracks if available.
- Avoid driving in salt water.
- · Look out for other beach users.
- Look out for obstacles such as rocks, wash outs, pools and debris.
- Be extra careful when crossing creeks on a beach.
- Avoid parking on the wet section of the beach. Vehicles can sink.
- Sand driving can be helped by partially deflating the vehicle's tyres. The reduced tyre pressure increases the tyres' footprint, reducing the tyres' tendency to cut through the sand surface and bog the vehicle. When driving on partially deflated tyres:
 - Do not exceed 60 kph.
 - Avoid making sharp turns, as the tyre could separate from the rim.
 - Be prepared and equipped to inflate the tyres when the sand has been crossed.
 - Avoid driving with deflated tyres on bitumen.
 - Limit speed on bitumen to 50 kph if forced to drive on deflated tyres.

- It is usually safest to travel when the tide is low. The tidal risks can be managed by:
 - using a tide chart; be aware of the tidal conditions
 - knowing when the high tide is due
 - assessing how the tide will affect the planned driving route
 - planning to drive within two hours either side of low tide.



Driving in mud

It is preferable to avoid driving in mud. If it cannot be avoided the following will minimise the risk:

- Stop and walk across the area to determine the best route.
- Look for obvious obstacles which may impede progress.
- Do not change gears. Select an appropriate gear and drive at a constant, steady speed.
- Avoid revving the engine if traction is lost.
- Do not try to use excessive wheel spin to get out if the vehicle becomes bogged. Accept that the vehicle is bogged and arrange recovery.
- Do not change from forward to reverse gear while the wheels are spinning, particularly in vehicles with an automatic transmission.
 Harsh gear changes will cause transmission damage.

Mud can damage the vehicle brakes and oil seals in the driveline. Clean the vehicle thoroughly, check the operation of the brakes and look for any obvious under body damage.

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Driving in poor weather conditions

Rain, strong winds and fog make driving more difficult, especially at night.

The risks associated with driving in bad weather conditions can be minimised by:

- driving at a speed appropriate for the conditions
- ensuring that the windscreen is clean and the windscreen wipers are operational
- ensuring that the windscreen wiper blades are in good condition
- using the air conditioner or demister to keep the windscreen clear
- ensuring that all vehicle and trailer lights are serviceable
- using low beam headlights in fog and using rear fog lights (if fitted) only in heavy fog or very hazardous weather conditions
- using hazard lights when travelling very slowly
- driving at very reduced speeds where there is water over the road to reduce the risk of aquaplaning
- avoiding sudden or harsh braking or steering actions
- not attempting to overtake other vehicles (unless on a double carriageway)
- · postponing trips on wet, unsealed roads.

Bulldust

Bulldust is a very fine dust that is common on outback Australian tracks. It is particularly prevalent in the far north where the tracks are boggy in the wet season and very dry in the dry season. Bulldust forms when traffic breaks up the track surface.

Bulldust conceals dangerous potholes which can cause significant tyre and suspension damage. Fine dust can also cause engine damage.

Dust which is raised by other vehicles limits driver vision. It can contribute to serious vehicle damage and crashes with objects or other vehicles.

Extreme dust is also a hazard for the engine's air intake system. If a vehicle must be operated in

bulldust it is recommended that the vehicle is fitted with an air intake snorkel and that it undergoes additional engine and air filter maintenance. Drivers should monitor the condition of the engine's air filter and remove excessive dust build up. This can be achieved by tapping the filter. Refer to the vehicle's owner's handbook.

When driving through extreme dust the risk can be minimised by:

- travelling at greatly reduced speed
- stopping and waiting for the dust to settle to regain visibility
- turning on headlights to make the vehicle visible to others
- frequent inspection and cleaning of the engine's air filter element
- more frequent vehicle 'extreme duty' servicing (see service manual or contact QFleet Maintenance Control team).



Bushfires

Travelling during a bushfire is extremely dangerous and should be avoided. The safest option is to plan to avoid bushfire prone areas during times of high fire danger. If drivers do come across a bushfire, and it is possible to turn around, do so and drive to safety.

If travel must occur in areas of high bushfire danger, the following precautions should be observed:

- · carry plenty of drinking water
- wear long cotton or woollen clothing which covers the skin
- avoid synthetic clothing; it melts easily

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- wear boots or other quality protective footwear
- · carry woollen blankets in the vehicle
- monitor the local bushfire warning system e.g. local radio
- drivers should let someone know of their location.

Never drive through heavy smoke. Heavy smoke will obscure a driver's vision of emergency vehicles, other vehicles and road hazards. However, if a vehicle must be driven through smoke, the risk can be minimised by:

- · remaining calm and not panicking
- switching on the headlights so that the vehicle may be visible to other road users.
- winding up the windows
- switching off fans and air conditioning to keep smoke out
- driving at a speed to suit the prevailing conditions.

Trapped in a vehicle in a bushfire. If a driver becomes trapped in a vehicle in a bushfire, they should observe the following precautions.

- Remain calm, do not panic.
- Stay in the vehicle; it provides the best protection from the heat.
- If possible, stop in an area clear of vegetation and sheltered by natural structures such as a road embankment or large rocks.
- If time permits, dump any portable flammable materials such as gas cylinders and spare fuel containers away from the vehicle.
- Avoid the tops of hills or ridges if possible; fire intensity is greater there.
- Clear ground fuel from under the vehicle.
- Park with the front of the vehicle facing the approaching fire front with headlights on and the engine running.
- Tightly close windows and doors and vents and turn off fans and air conditioning to keep smoke out.
- Lie low on the floor of the vehicle and cover up with woollen blankets, and any other available materials such as floor mats and spare clothing.

- Be aware that the temperature inside the vehicle will increase and there will be fumes and smoke entering the vehicle. A moist cloth can be used to cover the nose and mouth to minimise smoke inhalation.
- Be aware that some parts of the vehicle such as tyres and plastic trim will catch fire.
- Remain covered until the fire front has passed. When the fire front has passed cautiously exit the vehicle being aware that parts of the vehicle will be extremely hot.
- Stay covered with blankets, and drink water while waiting for assistance to arrive.



Sources and references:

- The Queensland Government traffic and travel information website 131940
- RACQ road conditions website
- Department of Transport and Main Roads website
- If It's Flooded. Forget It.

For the full suite of QFleet Driver Safety Fact sheets visit qfleet.qld.gov.au

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