

One in three Australian drivers fear driving in the rain because wet weather driving can be very dangerous. Rain can reduce visibility and road surface friction which results in an increased crash frequency and injury severity. Drivers can reduce the risk of a crash by reducing speeds, maintaining safe distance, and driving with more care and caution.^{1 3 4 7}

Safety can start before you drive with vehicle maintenance. You should prepare and frequently maintain your vehicle to make sure you will always be as safe as possible when driving in wet conditions.

Before driving in wet weather ensure:

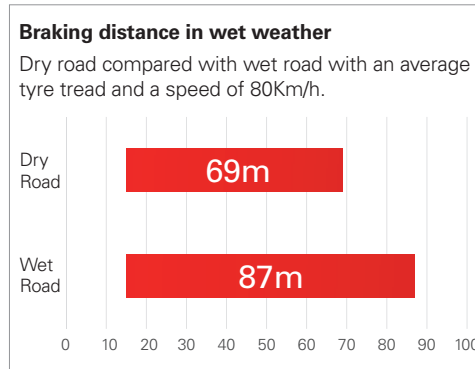
- ▼ your tyre tread is a minimum of 1.5mm deep across the whole tyre width
- ▼ all your vehicle lights are fully functioning
- ▼ your windscreen and lights are clean
- ▼ windscreen wipers clear glass in a single swipe and don't leave streaks (The average life span for wipers is 6-12 months)
- ▼ you check weather forecasts and plan your drive before taking long trips. This will help you to avoid driving in and around unsafe conditions.^{3 6}

Stopping distances in wet weather

Driving in wet weather increases overall vehicle stopping distance. If a vehicle in front brakes suddenly and you are too close, you are likely to crash. If you brake heavily during wet weather, you are likely to skid or aquaplane (slide uncontrollably on a wet surface). Always keep a safe enough distance so that you can stop in time.

| Vehicle Type | Minimum Distance between you and the vehicle in front (seconds) | |
|----------------------------|---|---|
| | Dry Road | Wet Road |
| Light Vehicle | 2 seconds | 4 seconds |
| Heavy Vehicle | 4 seconds | 8 seconds |
| Light Vehicle with Trailer | 2 seconds plus 1 second per 3m of trailer | 4 seconds plus 2 seconds for each 3m of trailer |

3 5 6



3 5 6

Aquaplaning

Aquaplaning is caused by a build-up of water between the road surface and the vehicle tyres, causing them to lose contact with the road surface completely and often results in loss of control of the vehicle. To reduce chances of aquaplaning, drivers should slow down, avoid harsh braking or turning sharply and drive in the tracks of the vehicle ahead. Also, it is important for motorists to allow ample stopping distance between cars by increasing the following distance from the vehicle in front and slowing down or stopping for intersections, turns and other traffic early.^{2 3 5 6}

Skidding

Wet surfaces can increase the risk of skidding. Skidding is when a vehicle's tyres slip, but there is still some traction on the road. If a vehicle starts to skid, it may become difficult to control. When you are driving in the wet, reduce your speed and ensure all tyres grip the road at all times.

To prevent skidding:

- ▼ accelerate smoothly
- ▼ brake smoothly
- ▼ corner smoothly.

If skidding occurs:

- ▼ continue to look and steer in the direction in which the driver wants the car to go
- ▼ avoid slamming on the brakes as this will further upset the vehicle's balance and make it harder to control.^{3 4 6}

Tips for staying safe

- ▼ drive slowly - slowing down is critical to reducing a vehicle's chance of aquaplaning. Be aware that the signed speed limit is the maximum safe speed in ideal driving conditions, therefore in wet weather you should drive 5 to 10km/h below the speed limit

- ▼ drive with your lights on low beam - rain significantly affects visibility so ensure drivers can see you and you can see them
- ▼ use your air conditioner or demister to keep your windscreen clear of condensation
- ▼ double the distance between you and the vehicle in front
- ▼ do not use cruise control - avoiding cruise control will allow the driver more options to choose from when responding to a potential loss-of-traction situation, thus maximizing your safety
- ▼ avoid braking suddenly or accelerating or turning quickly to eliminate skidding or aquaplaning
- ▼ do not drive on unsealed roads
- ▼ use road line markings to stay in the middle of your lane—in wet weather it is more important than ever to stay in the correct position on the road
- ▼ do not drive on roads covered with water, even partially covered roads
- ▼ watch out for landslides - heavy rain can cause layers of rock and soil to move
- ▼ steer clear of stagnant water by the side of the road.^{2 3 4 5 6}

References

1. Khattak, A, Kantor, P, Council, F. (2014). Role of Adverse Weather in Key Crash Types on Limited-Access: Roadways Implications for Advanced Weather Systems. *Transportation Research Record: Journal of the Transportation Research Board*. 1621 (1), 1621.
2. State Farm Mutual Automobile. (2017). *5 Tips to Remember for Driving Safely in the Rain*. Available: <https://www.statefarm.com/simple-insights/auto-and-vehicles/5-tips-to-remember-for-driving-safely-in-the-rain>. Last accessed 21/08/2017.
3. Queensland Government. (2013). *Road safety during wet weather*. Available: <https://www.qld.gov.au/transport/safety/road-safety/wet-weather>. Last accessed 21/08/2017.
4. Road and Maritime Services. (2016). *Driving safely in the wet*. Available: http://www.rms.nsw.gov.au/geared/your_driving_skills/driving_skills/slippery_business.html. Last accessed 21/08/2017.
5. Leanse, A. (2017). *How Not to Be an Idiot When Driving In the Rain*. Available: <http://www.popularmechanics.com/cars/g2985/driving-rain-tips/>. Last accessed 21/08/2017.
6. AAA Exchange. (2017). *Wet Weather Driving Tips*. Available: <http://exchange.aaa.com/safety/driving-advice/wet-weather-driving-tips/#.WZpWitEUmUl>. Last accessed 21/08/2017.
7. Australian Road Research Board. (2017). *Driving When its Raining*. Available: <http://www.nrsp.org.au/Resources/Details/1174>. Last accessed 21/08/2017.

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