## QuickSmarts Speeding

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## Speeding is one of the major killers on Queensland roads.

## On average, 56 people are killed and 317 seriously injured each year on Queensland roads as a result of speeding crashes. Many survivors will suffer from the effects of their injuries for the rest of their lives.'

'Speeding' refers to driving faster than the posted speed limit, and also means driving too fast for the prevailing conditions without considering the vehicle's condition and capabilities or the driver's skill and experience.

## The facts

- Around half of all serious speeding crashes happen at less than $10 \mathrm{~km} / \mathrm{h}$ above the speed limit.
- Just over $5 \mathrm{~km} / \mathrm{h}$ above the speed limit in urban areas (and $10 \mathrm{~km} / \mathrm{h}$ above in rural areas) is enough to double the risk of a casualty crash $^{3}$.
- More than half ( $56 \%$ ) of Queensland drivers admit to speeding on more than half of their road trips ${ }^{4}$.


## The faster you go, the harder you hit

The severity of injuries resulting from a crash, regardless of the cause, is directly related to the pre-crash speed of the vehicle. When any vehicle crashes, three collisions happen:

## 1. The object

The first collision is with the object, whether it's a pole or tree, another vehicle or person. As the vehicle crushes on impact, it absorbs some of the kinetic energy released, but not all.

Some of the kinetic energy (energy created by motion) is absorbed by the vehicle which is why the car is damaged, and some is transferred to the object hit.

## 2. The human

The second collision is when the human collides with the inside of the vehicle. At the moment of impact, passengers in the car are still travelling at the vehicle's pre-crash speed. When the car comes to a complete stop, the passengers continue to move forward until they come into contact with some part of the vehicle - the windscreen, the steering wheel, the doors or the seat in front.

## 3. The internal organs

The final collision is the 'internal' collision of the organs within the human body. Even after the passenger has come to a complete stop within the vehicle, the internal organs are still moving, colliding with other organs and the skeletal system.

## References:

1. Department of Transport and Main Roads Qld. Unpublished data extracted 21 March 2020 using road casualty statistics 2014-2019.
2. Kloeden CN, McLean AJ, Moore VM, Ponte G, 1997 Travelling Speed and the Risk of Crash Involvement Volume 1: Findings NHMRC Road Accident Research Unit The University of Adelaide.
3. Doecke, S., \& Kloeden, C.N. (2014). The accuracy of determining speeding directly from mass crash data and using the NSW Centre for Road Safety method. Journal of the Australasian College of Road Safety, 25(1), 35-41.
4. Footprints Market Research (2020). Department of Transport and Main Roads Driver Attitudes \& Behaviour State-wide Research.

## The faster you go, the greater your risk of a crash

The combined effects of reaction and braking times in both wet and dry conditions is illustrated below.
How long it takes to stop (driving an average family car)


Figure 1
You can also access this infographic information in text form: qld.gov.au/transport/safety/road-safety/driving-safely/stopping-distances/graph

## Tips to avoid speeding

Regularly check your speed to ensure you are travelling within the posted speed limit. It can also be hard to accurately judge speed after travelling at a high speed for a period of time.
You may need to travel below the speed limit and increase the distance between you and the vehicle in front if the weather, traffic or road conditions are poor. Leave sufficient distance between you and the vehicle in front (usually more than a car length), and when travelling at higher speeds, increase the distance to allow at least two-four seconds so you have enough time to react and brake.

## More information

Visit qld.gov.au/streetsmarts and search 'Speeding' for more information, including myth busters and references for all research and relevant content.

