# **Serious Injury and Fatal Motor Vehicle Collisions**





### Information for students and teachers

Prepared by the NSW Police Metropolitan Crash Investigation Unit



## **Crash investigation unit.**



#### Something to think about

If you are the driver involved in a collision that injures or kills someone and you have a high range PCA (drink driving) you can be convicted of Aggravated Dangerous Driving and sentenced up to 14 years imprisonment.

Dangerous driving can be something as 'simple' as changing the radio station, answering a mobile phone or disobeying a stop sign while driving.

Up to 10 years imprisonment if you injure or kill someone.

Not so long ago there was a unit within the police called 'AIS', the accident investigation squad. The unit still operates but under a different name, 'CIU', Crash Investigation Unit. Our name was changed as attitudes and understanding of the work that we investigate has changed.

In most cases, a car crash is not 'just an accident'. In almost all cases there is something that someone has done, or failed to do, that caused a collision. If the CIU attend to investigate, it's because that collision resulted in the serious injury or death of a person or persons.

## Some of the offences investigated by the CIU and their penalties include:

Manslaughter - 25 years imprisonment

Aggravated Dangerous driving causing death - 14 years imprisonment

Aggravated Dangerous driving causing grievous bodily harm - 11 years imprisonment.

Dangerous driving causing Death - 10 years imprisonment

Dangerous driving causing grievous bodily harm - 7 years imprisonment

All of these offences are found in the Crimes Act. Conviction of these offences results in a criminal record which can affect not only your liberty but future prospects as well.

## The following offences are found in Road Transport Legislation.

Negligent Driving causing Death - 18 months imprisonment

Negligent Driving causing GBH - 9 months imprisonment

Traffic and Licence offences - Community Service Orders, Good Behaviour Bonds, Fines, Licence Disqualifications

### Something to think about

The most common Neg Drive offence is that of one car running into the back of another.

If your actions result in someone suffering a GBH injury or death you can be looking at up to 18mnth prison sentence.

Driver negligence is still the highest associated factor in relation to fatal crashes.

# The most common causes of injury and fatal crashes

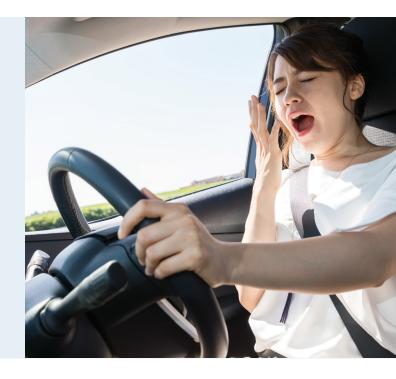
#### **Fatigue**

Driver fatigue causes almost 20 per cent of the annual NSW road toll, that's 1 in 5 fatal collisions being fatigue related. Fatigue symptoms can include but are not limited to:

- Yawning Poor concentration Tired or sore eyes
- Restlessness Slow reactions Boredom
- Feeling irritable Missing road signs Micro sleeps
- Making fewer and larger steering corrections
- Having difficulty staying in the lane

#### For motorcyclists

- Running wide on corners Rough gear changes
- Stiff joints (neck, knees and wrists) Day dreaming
- Dry mouth



#### **Drink Driving**

You don't have to be drunk to be affected by alcohol.

#### **Alcohol**

- Slows brain functions so that you can't respond to situations, make decisions or react quickly. It is a depressant and affects most areas of the brain.
- Reduces your ability to judge how fast you are moving or your distance from other cars, people or objects.
- Gives you false confidence you may take greater risks because you think your driving is better than it really is.
- Makes it harder to do more than one thing at a time while you concentrate on steering, you could miss seeing a red light, cars entering from side streets or pedestrians.
- Makes you feel sleepy or fatigued.

Mixing alcohol with other illegal and some prescription drugs has a multiplying effect and dramatically increases the risk of crashing, even if only small amounts have been taken.

## The Blood Alcohol Concentration (BAC) limit for all Learner and Provisional 1 & 2 is ZERO.

Estimating your BAC is often inaccurate because:

- The alcohol concentration of drinks vary from 2.5 percent (eg light beer) to over 40 percent (eg vodka, whisky).
- Beer may be served in pints, schooners or middies.
  Wine glasses may vary in size from 100 to 280mls.
  Many other drinks come in non-standard sizes.
- Factors such as your gender, size, weight fitness, health and liver function will all affect your BAC.
   Also, the rate at which alcohol is eliminated from your system varies from person to person.

#### And Remember:

- Your BAC will rise for up to 2 hours after you stop drinking.
- If you go out drinking and have a big night you may still be over the limit the next day.
- Getting back to zero (sobering up), takes a long time. No amount of coffee, food, physical activity or sleep will speed up the process.

## Speeding.



Research has shown that the risk of a crash causing death or injury increases rapidly, even with small increases above an appropriately set speed limit.

In a 60 km/h speed limit area, the risk of involvement in a casualty crash doubles with each 5 km/h increase in travelling speed above 60 km/h.

## Small differences in speeds mean differences in time to collision and ability to avoid a crash.

Even if a vehicle cannot be stopped in the available distance, the collision can still sometimes be avoided. When a driver is speeding there is less time for both that driver and any other road user (either a pedestrian or another driver) to recognise danger, decide on an evasive action (brake, swerve) and complete the evasive action. Furthermore, a vehicle travelling at a higher speed is more difficult to manoeuvre.

## Small differences in vehicle speeds, before braking begins, can result in large differences in impact speeds.

A key issue in speeding related crashes is the fact that most motorists underestimate the distance needed to stop...consider two cars travelling side by side at a given instant, one car travelling at 50 km/h and the other overtaking at 60 km/h. Suppose that a child runs onto the road at a point just beyond that at which the car travelling at 50 km/h can stop. The other car will still be travelling at 44 km/h at that point.

## Even small differences in impact speed make a large difference to the probability of serious injury.

The reason for this difference is that the force of the crash varies with the square of the impact speed. For example, a 70 km/h collision has about twice the force of a 50 km/h collision.

In a 60 km/h speed limit area, the risk of involvement in a casualty crash doubles with each 5 km/h increase in travelling speed above 60 km/h.

## Inattention.



Crashes often occur as a result of only a moment's inattention! Here are some of the worst driver distractions...

#### Mobile phones (talking and texting)

Using a mobile while driving can increase the risk of a collision by four times, according to several studies. Sending a text message is even worse. A hands-free device can also be a distraction, so your best bet is to just turn it off. No conversation is worth a whopping fine, demerit points and possibly a crash.

#### Other occupants (human and animal!)

The stats tell us there's more chance of causing a fatal crash when you have two or more friends in the car, especially male passengers. However, the risk is reduced when carrying an adult or a child, compared with carrying no passengers.

#### Eating, drinking and smoking

Aside from the obvious dangers of drink-driving, even sipping on a non-alcoholic drink takes your focus off the road. An American study has found that eating a cheeseburger can be more distracting than talking on a mobile. And the risk of causing a crash is just one more reason not to smoke!

#### **External distractions**

As if there wasn't enough happening inside the car, there are lots of things outside too. You have to look out for other drivers and pedestrians, while trying to block out the roadside billboards, shops and all sorts of unexpected or interesting things going on in the streets.

#### Adjusting vehicle settings

This is the most common bad driving habit, because many people don't realise it's dangerous to fiddle with the radio, air-conditioning or windows.

## You can make a difference!



Have you heard the saying, 'one man CAN make a difference'. Usually stated to make a positive point, it is used here as a negative. Your action (or inaction) CAN and WILL have effect, on you, your family, friends, witnesses to the collision, others involved, their families and friends, your local community and the entire Australian population.

## **Don't let luck** dictate your day.

# Think about your actions and their consequences.

**Act responsibly** and **be responsible** for your actions.

- Pain / injury/ death / grief / guilt / depression
- · Loss of life
- Personal injury / emotional distress
- Property damage
- Long term care of permanently injured people
- Job loss
- Gaol time / loss of licence / fines
- Road closures and traffic disruptions
- Police, Fire and Ambulance resources
- · Hospital resources
- Cost of investigations
- · Cost of insurance and registration



