

# DEATHS IN EMERGENCY LANES

 There were twenty-nine emergency lane deaths identified on NCIS (and at least an additional twelve deaths currently under investigation by a coroner).

• A majority of these deaths involved males.

2

3

6

8

- Instances included deceased persons sitting inside their vehicle parked in the emergency lane, or included those nearby the vehicle prior to impact.
- Heavy trucks were the most common counterpart vehicle

## This Issue

- Statistics
  De-identified case summaries
- Safety advice for motorists
- Conclusion and NCIS

This publication outlines information extracted from the NCIS database about deaths of persons in an emergency lane struck by another vehicle after their vehicle had stopped.

Basic frequencies and de-identified case studies are provided to raise awareness and assist with the development of preventive measures.

## General Summary

Between 1st July 2000<sup>\*</sup> and November 2010, there were twenty-nine (29) closed cases that had been reported to Australian coroners and identified on the NCIS where a person was struck in an emergency lane after their vehicle had stopped<sup>^</sup>. From additional searches of media reports and the NCIS database, it appears that there are at least an additional twelve (12) such deaths still under coronial investigation (open cases).

Most deceased persons were aged between 20 and 49 years of age and males predominated.

Heavy trucks were the most commonly reported counterpart vehicle (where the vehicle type was known), whilst passenger cars were the most commonly reported vehicle of the deceased. Instances included deceased persons sitting inside their vehicle parked in the emergency lane, whilst others were nearby the vehicle prior to impact.

A de-identified summary of each case is presented on the following pages.

- \* 1st January 2001 for Queensland data.
- ^ Searches for emergency lane on the NCIS database involved keyword searches of coronial findings and police investigations using the following terms: "emergency lane", "emergency-lane", "emergency stopping lane", "roadside", "road-side", "road side", "breakdown", "breakdown", "break down" or "broken down".



Safety advice for Australian motorists in the event of a breakdown is limited with respect to emergency lanes. However, the following agencies have some material available:

- Department of Transport (Western Australia)
- Department of Territory and Municipal Services (Australian Capital Territory)
- VicRoads
- Drive.com.au

The Safer Motoring web-site in the United Kingdom also has useful advice.

Excerpts of this material are provided later in this publication.

# Statistics about deaths in emergency lanes

Data is available on the NCIS database from 1st July 2000 (Queensland data available from 1st January 2001). Data for the purposes of this report was extracted during November 2010, and only closed cases were included.

NOTE: This dataset only includes deaths of those in an emergency lane subsequent to a vehicle stopping. It does not include pedestrians walking in the emergency lane, or deaths of those in vehicles which hit an object in an emergency lane.

Number of deaths, by gender

Female	6
Male	23

#### Number of deaths, by age group

0-9	<3
10-19	<3
20-29	7
30-39	7
40-49	7
50-59	4
60+	<3
TOTAL	29

#### Number of deaths, by counterpart vehicle

Prime mover / truck / semi-trailer	13
Passenger vehicles*	5
Utility ("ute")	2
Other	2
Unspecified	7
TOTAL	29

\* Includes passenger cars, station wagons and fourwheel drives

## Number of deaths, by vehicle of deceased person

Passenger vehicles*	15
Other ^	4
Passenger vans and mini-buses	2
Unspecified	8
TOTAL	29

\* Includes passenger cars, station wagons and fourwheel drives

^ Includes prime movers, utilities ("utes") and vehicles used in an official manner (e.g.: police duties, traffic management, etc.).

Number of deaths, by activity of deceased prior to incident

Walking/moving/standing outside the vehicle	13
Attempting repairs, changing a tyre or attempting to move / tow vehicle	6
Sitting in the rear of the vehicle	5
Sitting in the front of the vehicle	3
Unspecified	2
TOTAL	29

Number of deaths, by year of notification

An average of three such deaths per year is indicated by these figures (from July 2000 through to November 2010), with the highest frequency identified in 2001 (n=5) and four such fatalities in each of 2002, 2004, 2005 and 2009\*.

\* The frequency for 2009 is likely an underestimate since a proportion of deaths from this year are still open on the NCIS (43% open as at October 2010).

## Case summaries

#### Case 1:

The deceased was the driver of a passenger car that was parked in the emergency lane of a freeway. The counterpart vehicle was a prime mover laden with steel that collided with the rear of the deceased's vehicle. The location of the deceased was not specified in the available documentation.

### Case 2:

The deceased was located outside their vehicle in the emergency lane of a roadway whilst the vehicle was attended to by a mechanic for a flat tyre. The vehicle was positioned up to eight inches into the main traffic lane. Another vehicle collided with the rear of the deceased's vehicle, resulting in severe injuries to the deceased which, despite medical interventions, were eventually fatal several months later.

### Case 3, 4 and 5:

Three deceased persons were involved in this event and were located within their vehicle at the time of the incident. The driver and two rear passengers of a four wheel drive that was parked in the emergency lane of a freeway died when a semi-trailer collided into the rear of their vehicle, resulting in the deceased's vehicle catching fire. The use of seat belts by the deceased was not specified in the available documentation.

#### Case 6:

The deceased was the driver of a prime mover that had broken down at the side of a highway. After attempting to make a mobile phone call from the top of the trailer, the deceased was struck by another heavy vehicle whilst stepping back on to the highway. There is a possibility that the deceased may still have been using the mobile phone at the time of the incident.

#### Case 7:

The deceased was the driver of a vehicle that was parked in the emergency lane of a freeway. A semi-trailer collided with the deceased. The location of the deceased was not specified in the available documentation.

#### Case 8:

The deceased had been a passenger in a vehicle that was parked in the emergency lane of a roadway with hazard lights activated. Whilst looking under the bonnet of the vehicle with fellow passengers, the deceased was struck by a vehicle. The severe injuries sustained led to the death of the deceased several weeks later.

#### Case 9:

The deceased was the driver of a utility that was parked in the emergency lane of a highway (halfway on the grass and halfway in the emergency lane) with hazard lights activated. Whilst attending to the vehicle fault, the deceased was near the open driver side door when struck by a semi-trailer. The driver of the semi-trailer was found to be under the influence of methamphetamine and pseudoephedrine.

### Cases 10 and 11:

Two rear-seated occupants of a passenger car parked in the emergency lane of a freeway (with hazard lights activated) died when a utility collided with the rear of their vehicle. The use of seat belts by the deceased was not specified in the available documentation. The driver of the utility was found to be under the influence of alcohol.

#### Case 12:

The deceased was the driver of a vehicle that was parked in the emergency lane of a freeway. Whilst looking under the front end of the car, the deceased ventured into the main traffic lane. A four wheel drive (SUV) collided directly with the deceased.

#### Case 13:

The driver of a passenger car that was parked at the side of a roadway due to a flat tyre died when struck by another vehicle that was in the process of overtaking the left-hand side of a truck. The deceased had been standing behind their stationary vehicle prior to the incident.

#### Case 14:

The deceased had been a passenger of a station wagon that was parked at the side of a freeway whilst the occupants retrieved an item from the boot compartment. The vehicle was positioned off the bitumen and on the grass with the left indicator activated. Whilst standing behind their stationary vehicle, the deceased was directly struck by another vehicle when it collided with the rear of the station wagon.

#### Case 15:

Whilst intending to replace the driver of a passenger car during a long trip, the deceased inadvertently stepped into the path of a truck whilst walking from the rear of the vehicle to the driver side door.

#### Cases 16 and 17:

The driver and front passenger of a passenger car that was parked in the emergency lane of a freeway died when another passenger car collided into the rear of the vehicle. This resulted in the deceased's vehicle catching fire, incinerating both occupants. The use of seat belts by the deceased persons was not specified in the available documentation. The driver of the vehicle which hit the deceased was found to be speeding at the time of the incident and had recently used the drug 'ecstasy'.

#### Case 18:

A passenger car with activated hazard lights was parked in the emergency lane of a freeway. Whilst returning to their own vehicle, the driver of this vehicle was struck and killed by numerous other vehicles.

#### Case 19:

The deceased was a police officer that had intercepted a speeding vehicle on a highway. The police officer had positioned the police vehicle behind the offending vehicle, activating the police vehicle's light signals and used protective clothing. A vehicle struck the police officer from behind, leading to fatal injuries. It was determined that the driver of the vehicle which hit the deceased fell asleep whilst driving.

#### Case 20:

The driver of a vehicle had a flat battery and requested the assistance of a tow truck. Whilst towing the vehicle, the tow truck ran out of petrol and both the deceased's vehicle and the tow truck were parked in the emergency lane of a freeway. After obtaining a tin of petrol from a service station and emptying the contents into the tow truck, the petrol tin rolled onto the road. The deceased (who was the driver of the vehicle with the flat battery) was struck by a vehicle when efforts were made to retrieve the petrol tin.

#### Case 21:

The deceased was a passenger of a car that was parked in the emergency lane of a freeway. The vehicle was positioned at an angle with the right hand side of the vehicle positioned nearly a metre into the main traffic lane. Whilst phone calls were made by the vehicle occupants, a petrol tanker collided with the rear of the vehicle which caused fatal injuries to the deceased, who was sitting in the rear. The use of a seat belt by the deceased person was not specified in the available documentation.

#### Case 22:

The deceased was the driver of a mini-bus that was parked in the emergency lane of a highway. Whilst standing in front of the minibus with two work colleagues, a truck collided with the rear of the mini-bus, resulting in the mini-bus striking all three bystanders. The deceased received severe injuries and died later in hospital.

### Case 23:

The deceased was a passenger in a vehicle which pulled over into the emergency lane of a freeway. The deceased was heavily intoxicated and displaying erratic behaviour which continued outside the vehicle next to the driver side. The deceased was struck by a four wheel drive (SUV). The driver of the SUV was deemed to be under the influence of alcohol and was apparently distracted at the time of the incident.

### Case 24:

The deceased was connecting two passenger vans in an attempt to tow one of them. A truck collided with the rear side of the nearest van which crushed the deceased between the vehicles. The nearest van had been protruding into the main traffic lane prior to the incident.

#### Case 25:

The deceased was the driver of a vehicle that was parked in the emergency lane of a freeway. The deceased was attempting to retrieve cargo that had fallen from the roof of the vehicle. A Traffic Authority maintenance officer in the vicinity had noticed the fallen cargo and was reversing their vehicle in the emergency lane in order to retrieve it. The Traffic Authority vehicle struck the deceased. The investigating coroner made the following recommendation: "[Traffic Authority] consider routinely fitting their road maintenance vehicles with an externally audible alarm which operates when the vehicle is reversing."

#### Case 26:

The deceased was the driver of a passenger vehicle that was parked in the emergency lane of a highway with the bonnet up. Whilst attempting to flag down traffic to obtain assistance, the deceased was struck by a prime mover and received fatal injuries.

#### Case 27:

The deceased was the driver of a four-wheel drive that was parked in the emergency lane of a freeway. Whilst changing a tyre on the trailer attached to the vehicle, the deceased suffered fatal injuries when a truck entered the emergency lane and struck the deceased.

#### **Case 28:**

The deceased was the driver of a vehicle that had just been involved in a single vehicle rollover on a freeway. After escaping from the vehicle that lay on its side, the deceased contacted family members and spoke with a witness before a second incident between two other vehicles forced one of the vehicles to strike the deceased. The deceased was killed instantly whilst standing near their car.

#### Case 29:

The deceased was the driver of a road-works vehicle that attended a non-fatal incident where a vehicle had collided with the rear of a broken down vehicle in the emergency lane of a highway. After positioning the road-works vehicle behind the incident and warning oncoming traffic through the use of lighting and traffic cones, the road-works vehicle was struck from behind by a four-wheel drive. A courier van then collided with the rear of the four-wheel drive whilst the deceased was attempting to separate the vehicles. This resulted in the deceased being crushed between the fourwheel drive and the road-works vehicle.

## Safety advice for motorists

## Department of Transport (Government of W.A.) – "Drive Safe"

http://www.transport.wa.gov.au/mediaFiles/ LBU\_DL\_B\_DriveSafeFull.pdf

"If your vehicle breaks down on a freeway, pull into the emergency stopping lane or onto the nature strip. Switch on your hazard lights, stay well away from traffic lanes. Be very careful when you re-enter the traffic flow. Remember to give way to all traffic and indicate for at least 5 seconds before moving out onto the road."

"If your vehicle develops engine trouble and begins to slow, move to the left as far as possible from traffic.

If your vehicle breaks down on the road in an exposed position:

- activate the hazard warning lights immediately
- have passengers leave the vehicle when it is safe to do so and keep them well clear of traffic
- if possible, avoid working on the traffic side of your vehicle
- you may place a hazard warning triangle to the side of the road or a traffic lane. Within a 'built-up' area, place the triangle up to 50 metres away. Outside 'built-up' areas or on high-speed roads, place it up to 150 metres away. When walking to place the triangle, hold it in front of you to alert drivers to the hazard. Hold it behind you when you collect it and return to your vehicle. If you are driving a heavy vehicle (more than 12 tonnes), you must use these triangles if your vehicle is broken down at night on a road outside 'builtup' areas
- if you have a bright, reflective safety vest wear it
- during an on-road emergency use a CB radio 'road channel' to alert approaching traffic, particularly heavy vehicles

## Emergency assistance may sometimes be reached via the government allocated CB radio

'Emergency Channel' 9 (on HF) or 5 (on UHF). Try both simplex and duplex."

#### Department of Territory and Municipal Services – "ACT Road Rules Handbook" (Part D2)

http://www.tams.act.gov.au/move/driver\_ licence/Road\_Rules\_Handbook

"When a breakdown or accident occurs:

- try to move your vehicle off the road
- activate vehicle hazard warning lights to alert approaching traffic of potential danger. It is a good idea to carry a red light or a triangle of red reflective material. In an emergency place the warning sign on the road at least 50 metres before the obstruction on the same side of the road
- if you are attending a crash scene or a broken down vehicle at night or in fog etc, NEVER obscure the taillights
- in case of a crash, switch off the ignition of crashed vehicles to reduce the risk of fire"

## VicRoads — "How VicRoads keeps you moving"

http://www.vicroads.vic.gov.au/ Home/TrafficAndRoadConditions/ HowWeManageTraffic/ IncidentResponseService.htm

"If you breakdown or are involved in a crash you should:

- turn your hazard lights on
- move your vehicle to the nearest emergency lane or to the side of the road (if possible)
- call emergency services if required (remember the rules about mobile phones and driving)
- call 13 11 70 or use a freeway help phone if you can not move your vehicle off the road and it is blocking traffic

- only get out of your vehicle if it is safe to do so
- never try to cross a major road on foot
- stand as far from the road as possible when waiting or exchanging details, never in between or besides vehicles close to moving traffic
- always wear your seat belt when waiting for help in your car"

#### Safer Motoring (United Kingdom): "What to do if you breakdown"

http://www.safermotoring.co.uk/ breakdownwhattodo.html

- Pull over on the hard shoulder as far to the left as possible. Your wheels should be turned left.
- Stop near an emergency phone if possible.
- Switch on your sidelights and hazard lights to warn other vehicles.
- Call a breakdown company.
- Use the emergency telephone rather than a mobile to call for help [if available]. This will help a breakdown company to find you.
- All passengers should exit the vehicle by the left-hand side to avoid other vehicles on the motorway.
- Wear reflective jackets if you have them.
- Make sure passengers, especially children, don't wander towards cars on the motorway.
- Avoid trying to carry out any repairs. Leave this to an expert!
- Wait on the far side of your car, away from the motorway. If you can climb partway up the bank, it would be a good idea to move as far away from the traffic as possible but still staying close to your car.
- If you feel vulnerable standing on the hard shoulder, get back in your car via the left-hand side and lock the doors.

## Concluding remarks

Little published information is currently available in relation to fatalities in road-side emergency lanes. While this is not a common location for deaths in Australia, the cases presented (as well as the advice from motoring and roads authorities) indicate that risks exist when staying in the vehicle or remaining near the vehicle.

## National Coroners Information System (NCIS)

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#### The NCIS

The National Coroners Information System (NCIS) is managed by the Victorian Institute of Forensic Medicine (VIFM) on behalf of the NCIS Board of Management.

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- Australian Department of Health and Ageing
- Australian Institute of Criminology
- Safe Work Australia
- Australian Competition and Consumer Commission
- Australian Department of Infrastructure and Transport

Data is provided by each of the Coronial Offices around Australia, the Australian Bureau of Statistics (ABS) and Safe Work Australia.