



ROAD SAFETY INFORMATION SHEET

OVERTURN AND RUN-OFF ROAD CRASHES

Information Sheet 9
2019



Overturn & Run-Off Road Crashes

The Road Traffic Authority (RTA) has prepared this Road Safety Information Sheet with respect to overturn and run-off road type crashes. It is based on the most recently available crash and casualty data contained in its road crash database (2010 to 2014)¹, along with scientific fact and research from overseas that is applicable to PNG. The intent of this Information Sheet is to highlight the key road safety issues related to crashes involving a vehicle overturning and/or running-off the road and hitting a roadside object, and to identify possible ways to reduce the number of such crashes in PNG.

Between 2010 and 2014, over 530 people died in a road crash where the vehicle either over-turned or ran-off the road and hit an object by the side of the road. Typically, such crash types involved drivers losing control of their vehicle, travelling at high speed, being tired and/or drink-driving. Other factors that can contribute to such crashes include poor road/roadside design as well as vehicle defects such as brake, steering and tyre problems, in particular, brake failure on trucks.



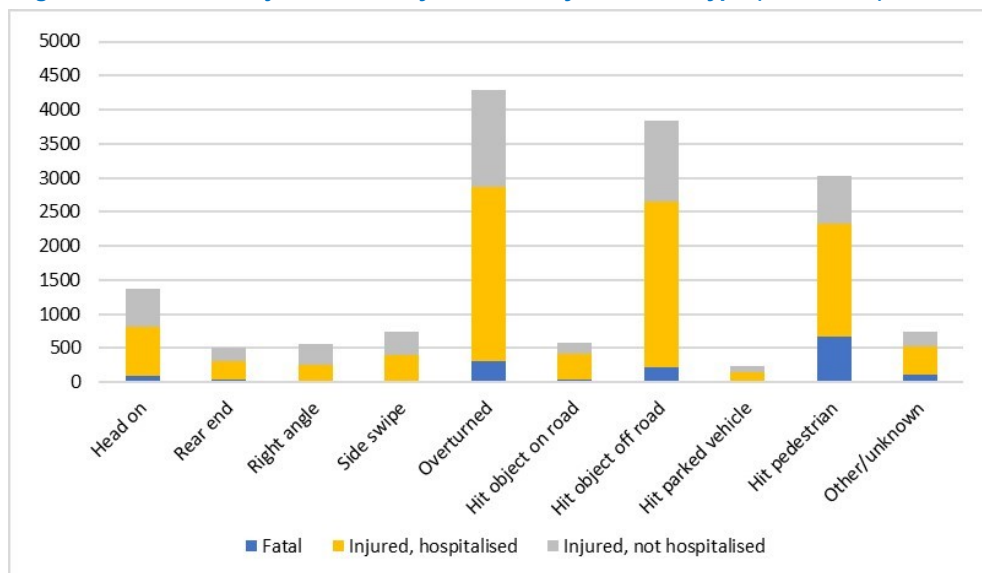
Vehicles that run-off the road and then hit a road side object such as a tree or power pole can result in extremely serious injuries to the vehicle occupants due to the forces involved in the vehicle suddenly stopping.

Similarly, vehicles that overturn can have fatal consequences, particularly for passengers in the rear tray of utility vehicles (utes) who have no means of restraint and often get ejected from the vehicle resulting in more serious injuries than if they were inside a vehicle.

2010 to 2014 Overturn and Run-Off Road Crash Data at a Glance

- 32% of all fatal and casualty crashes involved vehicles either overturning or running off the road and hitting a roadside object.
- 3,372 overturn and run-off the road type collisions (all severities) resulted in approximately 8,140 reported deaths and casualties. Of these, passengers formed the major (90%) fatality and casualty group rather than drivers.
- Speed and loss of control were the main driver errors involved in overturn and run-off road crashes.
- 20% of overturn and run-off road crashes involving a death or injury involved one or more drivers that was suspected of drinking and driving.
- 59% of overturn and run-off road type fatal or injury crashes occurred on a curve and/or on an incline.
- 46% of rural fatal and injury crashes involved a vehicle overturning or running-off the road. This compares to 16% of urban fatal and injury crashes.
- Both trucks and utility vehicles (utes) were the most common types of vehicles involved in overturn and run-off road type crashes.

Figure 1.1 Fatal and Injured Casualty Numbers by Collision Type (2010-2014)



Source: RTA. 2010 - 2014 Road Safety Data Report. Papua New Guinea. 2019.

1. The database is consistently being updated with more recent crash information. Data reports with more updated information will be prepared as and when more recent data has been entered and each year's records finalised.



Overtake and Run-Off Road in PNG

2010 - 2014 crash data for PNG shows the following Provinces with the highest number of reported overturn (OT) or run-off road (ROR) type fatal and serious injury crashes:

- Eastern Highlands - 249 crashes (118 OT; 131 ROR)
- Western Highlands (inc. Jiwaka) - 206 crashes (93 OT; 113 ROR)
- Enga - 180 crashes (73 OT; 107 ROR)
- Morobe - 131 crashes (73 OT; 58 ROR)
- Central - 117 crashes (61 OT; 56 ROR)
- National Capital District - 113 crashes (43 OT; 70 ROR)



Recommendations and Safety Tips

The following road safety considerations should be read in conjunction with other RTA Road Safety Information Sheets such as Information Sheets 2 and 8 regarding Speeding and Loss of Control respectively.

Road safety engineering treatments are highly effective and the most sustainable way of reducing run-off road and overturn crashes in terms of assisting drivers stay on the road, warning drivers they are about to leave the road and/or providing drivers with the chance of recovering control of the vehicle and reducing crash severity if the vehicle does leave the road.

Roads and Road Signs

Some road design features such as poorly maintained roads and edges of roads, narrow shoulders and unexpected bends can lead to run-off road and overturn crashes.

Road signs and pavement markings are low cost measures that can help reduce the number of vehicles running off the road. Typical road signs used where vehicles are in danger of overturning and or running off the road include the following:

Advance Curve Warning sign - used to denote a bend in the road ahead that may require a driver to slow down.



Slippery Road Surface Warning sign - used to indicate that a section of road has poor skid resistance. Drivers should take particular care and should slow down.



Chevron Alignment Marker - used around curves to delineate the extent of the curve and highlight the direction of the curve. Chevrons can be used in conjunction with other signs and pavement markings.



Road signs should be obeyed and shouldn't be defaced or removed/stolen - they're put there for our safety.

Roads and Roadside Treatments

Road controlling authorities should ensure that the roadside is free of hazards, so that errant vehicles leaving the road don't hit dangerous objects such as trees and power poles. Where they can't be removed, crash barriers should be considered. Edge posts (such as that shown in the photograph) and edge lines should be installed along rural roads to help guide drivers.



Good skid resistance will also help keep vehicles on the road.

Driver/Passenger Awareness and Behaviour

Drivers should not drink and drive, drive whilst tired and should travel at a speed appropriate to the conditions and slow down where necessary. Passengers should encourage drivers to slow down. Where possible, passengers should try and sit inside a vehicle and should wear seatbelts.

Enforcement

Traffic Police need to carry out proactive drink-driving and speed enforcement to ensure drivers aren't impaired by alcohol or drugs, and don't exceed the speed limit and/or that drivers don't travel at inappropriate or excessive speeds.



Our vision:

Road transport in PNG that is customer oriented, safe, efficient and environment friendly within an efficient and sustainable system

Be our partner ...

The RTA is a regulatory statutory authority and is bound by the Road Traffic Act, which established the Authority and defines its functions as well as providing for regulations and rules for road traffic. This Information Sheet forms part of a series of background road safety documents aimed at improving road user awareness in PNG.

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