Association Between Australasian New Car Assessment Program Pedestrian Ratings and Injury Severity in Real-Life Crashes in Different Speed Limit Areas

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Key Findings

- We analysed ratings for pedestrian safety from ANCAP assessments.
- Better rated vehicles had much improved pedestrian safety outcomes.
- As expected, lower speed limits also benefitted pedestrian safety.
- These benefits were much improved when the vehicle had a better rating.
- Both reduced speeds and well-designed vehicles are needed for pedestrian safety.

Abstract

Some New Car Assessment Programs (NCAPs) include pedestrian safety ratings based on crash tests. We compared 2,682 real-world Australasian pedestrian injury outcomes with pedestrian safety ratings provided by the Australasian NCAP within the speed limit areas where the collisions occurred. We found that the risk of a pedestrian fatal or severe (involving hospital treatment) injury was considerably reduced for the safest rated vehicles studied, but only in speed limit areas of 40km/h or less. From the perspective of promoting a safer system for pedestrians, these results imply that both lowered speed limits and a safer vehicle fleet are required.

Keywords

pedestrian; injury severity; New Car Assessment Program; speed limits

Glossary

AEB = Autonomous Emergency Braking
AIS = Abbreviated Injury Scale
ANCAP = Australasian New Car Assessment Program
BAS = Brake Assist System
Euro NCAP = The European New Car Assessment Programme
ISA = Intelligent Speed Adaptation
ICD = International Classification of Diseases
KSI = Killed and Seriously Injured
MAIS = Maximum Abbreviated Injury Scale
NCAP = New Car Assessment Program
OECD = Organisation for Economic Co-operation and Development

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Introduction

The road traffic safety system has been recently identified as failing pedestrians (Job, 2020), with an increase in fatalities of 12.9% from 2013 to 2016 compared to a 6.6% increase for other road users (World Health Organization, 2015, 2018). Notably, there has been a 41% increase in pedestrian deaths in the United States from 2008 to 2018 (Baker, 2019). In other western countries, pedestrian deaths are an increasing proportion of their road deaths over the period 2010 to 2016: in France, from 12% to 16%; in Germany from 13% to 15%; in Australia from 13% to 15% (World Health Organization, 2015, 2018).

Some of the most important technological road safety advances for vehicle occupants have been in the improved construction and equipment of vehicles, with impressive safety benefits over time (e.g. Keall, Newstead & Jones, 2007). Approaches to motivate vehicle-related safety improvements include regulations (that compel manufacturers to comply with certain standards) and vehicle rating systems (that indirectly influence manufacturers who wish to improve sales to safety-conscious consumers). Vehicle standards have been set in Japan and the European Union (United Nations Economic Commission for Europe, 2008) to regulate safer vehicle front-end structures that reduce injury severity for unprotected road users. New Car Assessment Programs (NCAP) have had an important role in improving road safety by improving vehicle-related safety via ratings of safety performance (World Health Organization, 2018). These ratings are derived from carefully designed protocols involving instrumented crash dummies to represent road users. Rather than using full-scale dummies for the pedestrian testing, headforms and legforms are used to assess potential head and leg injuries in 40km/h impacts. Assessment of injury liability for pedestrians is a more recent development that has been linked to improvements in pedestrian injury outcomes in Australasia (Keall, D'Elia, Newstead & Watson, 2018). Pedestrian protection tests have been included in New Car Assessment Programs from the year 2000 in Australasia (ANCAP), from 1997 in Europe (Euro NCAP) and from 2003 in Japan (JNCAP). The ANCAP Roadmap has recently specified a level of pedestrian protection for vehicles as a minimum to achieve five stars (in addition to occupant protection), and this requirement has been increased incrementally since then (ANCAP, 2018).

For the vehicles assessed in this study, which were manufactured and tested before 2015, ANCAP provided a score for the pedestrian rating, with scores labelled in ranges as: "Good" (27.5-36 points); "Acceptable" (18.5-27.49 points); "Marginal" (9.5-18.49 points); and, "Poor" (under 9.5 points) (Ponte, Van den Berg, Anderson & Linke, 2013). The protocol for pedestrian assessment studied in this paper was the Euro NCAP Pedestrian Testing Protocol Version 5.3 (Euro NCAP, 2011).

The testing protocols used in new car assessment programs need to represent the crash configurations and environments the vehicles will encounter once sold. Vehicle manufacturers "are encouraged to liaise with ANCAP and to observe the way cars are set up for testing" (ANCAP, 2018) so they can tailor their vehicles to perform optimally against the ratings protocol. Promotion of NCAP ratings is based on the rationale that vehicle manufacturing practices will reduce injury severity rates when they are oriented to score well in NCAP tests. It is therefore critical that the rating system is well-correlated to real-world outcomes.

Some studies have already looked at the associations between pedestrian injury severity and NCAP pedestrian ratings. Strandroth et al. (2011) compared pedestrian scores from Euro NCAP with injury outcomes in real-world pedestrian crashes occurring on roads with a speed limit up to 50km/h in Sweden during 2003 to 2010. They found significant associations in the direction expected, including that if a pedestrian was hit by a two star rated car, the pedestrian was 17% less likely to receive a moderate or more severe injury (MAIS2+) compared to a car that was rated one star. The analysis was updated by Strandroth et al. (2014) to include cyclist as well as pedestrian injuries recorded up to early 2014. They also widened the scope to include injuries in speed limit areas over 50km/h, finding an apparent association of a lower risk of the most severe injury outcomes for better rated vehicles, but no apparent association for lower severity outcomes in these higher speed limit areas. However, they did not provide a measure of statistical uncertainty for the associations.

Assessment of vehicle-related injury severity levels uses a variety of measures. One commonly used measure is the Abbreviated Injury Scale (AIS) that represents the threat to life associated with an injury (Civil & Schwab, 1988). Each of the body regions injured is given a score from 1 to 6: head, face, neck, thorax, abdomen, spine, upper extremity, lower extremity and unspecified. A summary score, MAIS, is the maximum AIS score for injuries across all regions. Road traffic injuries assessed from crash databases are generally rated "serious" when there are "fractures, concussions, internal lesions, crushing, severe cuts and laceration, severe general shock requiring medical treatment and any other serious lesions entailing detention in hospital" (OECD, 2020). Within Australasia, the Australian States and New Zealand use differently specified crash data collections that are generally in line with the OECD definition. Apart from New South Wales, the serious injury definition corresponds with the attending police officer considering a hospitalised injury as one when an injured person is taken to hospital. In New South Wales, serious injuries are defined by a match to hospital admissions records. A disadvantage of this definition is that it was affected by changes in emergency department admission policy during 2017–18 where episodes of care delivered entirely within a designated emergency

department or urgent care centre were no longer categorised as an admission. This narrowing of the criteria had the effect of reducing the number of admissions recorded from 2017 onwards.

There has been a growing realisation over the past two decades at least that ambitious safety goals, such as Vision Zero, require consideration of the whole system that forms the safety environment (Tingvall & Haworth, 1999), particularly where one feature of the system interacts with another feature, or there are limitations in the extent that a particular feature can yield safety benefits in isolation. One of the principal tenets of Vision Zero is that vehicle speeds must be constrained when other aspects of the safety system cannot moderate the forces inherent in a crash to the extent that a serious or fatal injury is always averted (Tingvall & Haworth, 1999).

The current study measured associations between ANCAP pedestrian scores and rates of fatal or serious injuries to a pedestrian using crash data from Australia and New Zealand, with a particular focus on differences by speed limit. This was to provide context for vehicle-related pedestrian safety in relation to other aspects of the road safety system.

Methods

Data consisted of 1,215 Australasian light passenger vehicles of 1982 to 2014 models in crashes with pedestrians reported to police in Victoria and New South Wales during 1987-2014, Queensland during 1991-2014, Western Australia and New Zealand during 1991-2014 and South Australia during 1995-2014. The analysis focused on a subset of these 1982-2014 model vehicles for which ANCAP pedestrian test results were available (see Appendix Table 3). Using data from this date or manufacture range ensured that the pedestrian test protocols were the same, equivalent Euro NCAP Test Protocol V5.3 (Euro NCAP, 2011), facilitating our comparison by the ratings.

A stepwise logistic procedure was used to include non-vehicle factors that may have influenced pedestrian injury severity. The dependent variable was the injury severity level for the pedestrian defined as 1 if the pedestrian was fatally or seriously injured (admitted to hospital) and 0 otherwise. Crashes involving pedestrians are generally only reported to police when the pedestrian is injured to some degree. Hence the 0 category represented pedestrians with only a minor injury. The model (1) included covariates: jurisdiction (each individual Australian State, or New Zealand) ('jurisdiction'); pedestrian age range ('age') and sex ('sex'), the year of the crash ('yearcrash'); and statistically significant first order interactions of these variables, whose levels are shown in Table 1. A key covariate was the interaction between crash speed zone ('speedlimit') and the vehicle ANCAP rating ('rating'), which formed nine combinations of speed zone with the ANCAP pedestrian rating ("acceptable", "marginal" and "poor" at each of 40km/h, 50km/h or 60km/h). Speed limit areas above 60km/h were not studied as pedestrian injuries are relatively rare in these areas. Interaction terms in the model are indicated by the asterisk '*' whilst other terms are main effects in the model.

Injury severity = age sex jurisdiction yearcrash speedlimit rating age*sex sex*yearcrash rating*jurisdiction speedlimit*age speedlimit*rating (1)

Results

Table 1 shows the data used in model (1) along with the crude rates of pedestrians killed or seriously injured (KSI) per injured pedestrian at each level of the variables used. These data show the viability of the analysis (in terms of adequate observations at the levels of the variables shown) and a crude measure of injury severity, provided by the last column. Although the KSI injury rates shown increased as expected with increasing speed limits, there appears to be little evidence of decreasing rates for better-rated vehicles, particularly if we ignore the data for the seven vehicles rated as "Good", which were too few to provide a basis for comparison.

The estimated parameters from model (1) are included in an Appendix (Table 2), along with the adjusted odds of pedestrian fatal or serious injury by speed limit area and ANCAP pedestrian rating, shown in Figure 1, using pedestrians age 25 and under as an example. The interactions between pedestrian age and speed limit mean the lines have a different proportional relationship for different ages, although the interaction remains the same – see Appendix (Table 2). The interaction between the levels of safety ratings and the speed limit areas is clearly shown in Figure 1 by the strong trend towards poorer injury outcomes for vehicles with poorer ratings shown in 40km/h areas, which is not present in the two higher speed limit areas.

Discussion

The current analysis is in general concurrence with the few studies that have examined associations between NCAP pedestrian safety ratings and pedestrian injury outcomes, showing increasing safety associated with higher rated vehicles. However, the current study provides an important perspective on the road safety system, particularly the relationship between the setting of speed limits and vehicle safety. By looking at the interaction between three levels of safety ratings and three different speed limit areas, we found that superior safety ratings only appeared to have an association with reduced severity of injuries when the speed limit was low (at or below 40km/h). In fact, for the set of vehicles with the best safety ratings ("acceptable"), the odds of a fatal or serious injury for the pedestrian

in 40km/h speed limit areas was only 27% of the odds in a 60km/h area. The corresponding proportions for vehicles rated "marginal" and "poor" were 61% and 79% respectively. These imply that lower speed limits do benefit pedestrian safety, as expected, but that the benefits are much higher for the vehicles with better ratings. These estimates have been modelled by an interaction term in the model fitted between the pedestrian safety rating and the speed limit area of the crash.

Table 1. Data used for model (1): numbers of pedestrians killed or seriously injured (KSI) and all injured pedestrians, with proportions who were fatally or seriously injured

Characteristic	KSI	All injuries	% KSI
Jurisdiction			
New South Wales	319	716	45%
Victoria	410	933	44%
Queensland	269	396	68%
Western Australia	102	209	49%
New Zealand	95	358	27%
South Australia	20	70	29%
Speed limit			
<=40	113	292	39%
50	608	1,453	42%
60	494	937	53%
ANCAP rating			
Good	2	5	40%
Acceptable	176	368	48%
Marginal	443	1,059	42%
Poor	594	1,250	48%
Pedestrian sex			
Female	572	1,297	44%
Male	643	1,385	46%
Pedestrian age			
25 years and under	446	1,037	43%
26-59 years	393	979	40%
60 years plus	376	666	56%
Total	1,215	2,682	45%

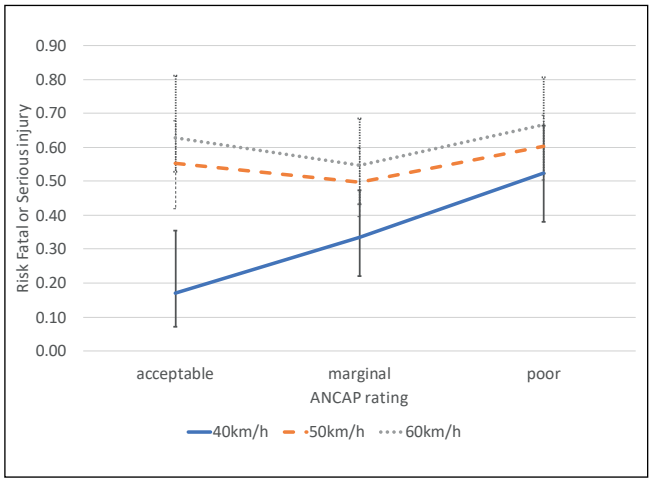

Figure 1. Adjusted odds of injured pedestrian (age 25 and under) KSI vs. minor injury by speed limit area and ANCAP pedestrian rating, with 95% Confidence Intervals)

The relationship between speed limit and pedestrian injury severity has been studied before under Australian conditions (Nishimoto, Kubota & Ponte, 2019). Using their coefficient for speed limit to model the adjusted odds of fatal or serious injury, on average the odds in a 40km/h area were 58% the odds in a 60km/h area, which is generally consistent with our analysis averaged across all vehicles at all levels of safety rating.

The modest sample size of observations studied is a limitation of our analysis, and also a limitation of all published analyses authors are aware of that have examined the relationship between pedestrian safety ratings and injury severity outcomes. The odds of a severe injury are clearly very significantly lower for the "acceptable" vehicles in the 40km/h speed limit areas than for any other combination of ratings and speed limits. But other 95% confidence intervals shown in Figure 1 overlap substantially, indicating a lack of power to detect differences generally with the data available. There is also a limitation that is always present in cross-sectional analyses: correlation does not imply causation. We attempted to include the most important likely confounders of the relationship between the vehicle safety ratings and the pedestrian injury outcomes, but there is always the possibility that vehicles with better pedestrian safety ratings could be driven differently (e.g. slower) than other vehicles. Such confounding could arise, for example, if drivers who were concerned about pedestrian safety chose a safer vehicle (for pedestrians) and also drove more slowly when sharing the road space with unprotected road users. However, if this were the case, we might have expected to have seen a larger safety effect in the 50km/h and 60km/h speed limit areas for the better-rated vehicles, which is not apparent in the data. A further limitation is that the most recently manufactured vehicles studied were from the year 2014, rated with old test protocols. More recent vehicles are currently assessed using higher standards. Improvements in pedestrian protection scores over time (Paine, Paine, van

den Berg & Ponte, 2019) are likely to be associated with improved real-world injury outcomes. The relationship between the new protocol and real-world pedestrian injury outcomes should be the focus of future research.

Our measure of injury severity is dependent partially on police judgement (related to whether an injured pedestrian was taken by ambulance to hospital) and partially on actual hospital admission (in the case of New South Wales data). To look at the relationship between the reporting of traffic crash injuries and actual hospital admissions, New Zealand road injuries have been linked to hospital admissions data, which also provided a measure based on the International Classification of Diseases (ICD) for threat to life (McDonald, Davie, & Langley 2009). Of the injured road users who were admitted to hospital, only around a half had been classified by the police as serious.

Around half of those admitted to hospital had an injury posing a significant threat to life (a ≥5.9% probability of death) based on the ICD-10 codes and the severity of the injuries as coded by the hospitals. Generally, pedestrians' injuries tended to be underrated in terms of their severity (McDonald et al., 2009). Strandroth et al. (2014) concluded that the risk of permanent medical impairment of 10% or more was lower for better rated vehicles even where the speed limit was greater than 50km/h but risk of permanent medical impairment of 1% or more had no relationship with pedestrian ratings in these higher speed limit areas. A limitation of their analysis is that they provided no estimate of statistical uncertainty, which limits its interpretation. Our analysis does not necessarily conflict with this finding, particularly if our measure of severe injury is closer to risk of permanent medical impairment of 1% or more. It is outside the scope of this paper to discuss the merits of different forms of injury severity definitions and thresholds, but Tingvall et al. (2013) noted that unprotected road users (specifically, cyclists) are likely to suffer significantly more serious and debilitating injuries than would be captured by the threat to life measure based on MAIS ≥3.

Finally, a number of technologies are becoming more prevalent in vehicles and have the potential to benefit pedestrian safety. Related to the findings of the current study regarding the importance of speed limits, Intelligent Speed Adaptation (ISA) helps drivers comply with speed limits by providing warnings or by actively slowing the vehicle. There is good evidence that Autonomous Emergency Braking (AEB) reduces collisions with other motor vehicles (Fildes et al., 2015) and with cyclists (Ohlin, Strandroth, & Tingvall, 2017), but there are insufficient data currently to show real-world benefits for pedestrians (Ohlin et al., 2017). Both Euro NCAP (e.g., VRU Test Protocol v3.0.4) and ANCAP (e.g., AEB / LSS Vulnerable Road User Systems v4.0) test the effectiveness of AEB systems in pedestrian and cyclist crash scenarios. The Brake Assist System (BAS) technology automatically employs maximum braking capacity when the driver applies the brakes abruptly, or releases the accelerator pedal (potentially a precursor to emergency braking), which primes the BAS braking system. Safety benefits were evaluated by Breuer et al. (2007), who estimated that severe pedestrian injuries were reduced by 13%. From 2013 onwards, ANCAP has not given the highest rating (five stars) to vehicles not equipped with BAS (ANCAP, 2018) and BAS fitment in passenger vehicles has been mandated in new Australian vehicles from November 2015 (Australian Design Rule, 2013). These technologies will often prevent a collision from occurring, an outcome that would not feature in the analysis we conducted, which focused on pedestrians in reported injury crashes.

Conclusions

This study shows the value of validating crash test ratings against real world injury outcomes and highlights the role of multiple elements of a safer system for reducing pedestrian injuries from collisions with vehicles. Our results were consistent with much improved safety outcomes for pedestrians struck by vehicles with better ANCAP pedestrian ratings, but only when the speed limit was 40km/h or less. For the set of vehicles analysed with the best safety ratings ("acceptable"), the odds of a fatal or serious injury for the pedestrian in 40km/h speed limit areas was only 27% of the odds in a 60km/h area. The corresponding proportions for vehicles rated "marginal" and "poor" were 61% and 79% respectively. These imply that lower speed limits do benefit pedestrian safety, as expected, but that the benefits are much higher for the vehicles with better ratings. Vehicles need to be configured to protect pedestrians, but such protection is considerably more effective in lower speed limit areas. So, both reduced speed limits and appropriately designed vehicles are needed for pedestrian safety.

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Author Contributions

The following contributions to the study were made by each author: Michael D. Keall: conception, design, analysis and manuscript preparation; Linda M. Watson: data preparation and analysis; Casey Rampollard: data acquisition and preparation and manuscript editing; Stuart V. Newstead: conception and manuscript review. All authors have read and agreed to the published version of the manuscript.

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Human Research Ethics Review

No human ethics review was required for this project.

Data Availability Statement

Data analysed for this study was provided on the basis of strict confidentiality and on the condition that it cannot be provided to third parties. Consequently, unit record data used for the analysis cannot be provided to interested parties. All other derivative data is included in the manuscript.

Conflicts of interest

The authors declare that there is no conflict of interest.

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Appendix

Table 2. Maximum likelihood estimates from logistic model fitting the odds that an injured pedestrian was fatally or seriously injured

Parameter	Level 1	Level 2	Referent level(s)	Estimate	Standard Error	Wald Chi Squared Statistic	Statistical Significance Level
intercept				-0.6675	8.5215	0.0061	0.9376
age	26-59 YEARS		60 +	-0.2764	0.0741	13.9136	0.0002
	25 AND UNDER		60 +	-0.3170	0.0756	17.5863	<.0001
sex	FEMALE		MALE	0.2939	8.5212	0.0012	0.9725
jurisdiction	NEW SOUTH WALES		SOUTH AUSTRALIA	0.0016	0.1434	0.0001	0.9911
	VICTORIA		SOUTH AUSTRALIA	-0.1259	0.1318	0.9114	0.3397
	QUEENSLAND		SOUTH AUSTRALIA	1.1753	0.1643	51.1661	<.0001
	WESTERN AUSTRALIA		SOUTH AUSTRALIA	-0.0069	0.1858	0.0014	0.9703
	NEW ZEALAND		SOUTH AUSTRALIA	-0.7563	0.1644	21.1518	<.0001
Year of crash	1999		2014	1.7966	8.6045	0.0436	0.8346

Parameter	Level 1	Level 2	Referent level(s)	Estimate	Standard Error	Wald Chi Squared Statistic	Statistical Significance Level
	2000		2014	-5.2606	127.80	0.0017	0.9672
	2001		2014	-0.0945	8.5645	0.0001	0.9912
	2002		2014	0.0112	8.5445	0.0000	0.9990
	2003		2014	0.6110	8.5295	0.0051	0.9429
	2004		2014	-0.5369	8.5356	0.0040	0.9498
	2005		2014	-0.2274	8.5292	0.0007	0.9787
	2006		2014	0.4712	8.5249	0.0031	0.9559
	2007		2014	0.5777	8.5240	0.0046	0.9460
	2008		2014	0.3195	8.5228	0.0014	0.9701
	2009		2014	0.3567	8.5224	0.0018	0.9666
	2010		2014	-0.0847	8.5223	0.0001	0.9921
	2011		2014	0.3545	8.5221	0.0017	0.9668
	2012		2014	0.3713	8.5219	0.0019	0.9652
	2013		2014	0.8021	8.5219	0.0089	0.9250
Speed limit	40 km/h		60 km/h	-0.3478	0.1224	8.0778	0.0045
	50 km/h		60 km/h	0.0199	0.0824	0.0582	0.8094
ANCAP rating	Acceptable		Poor	0.1865	0.2116	0.7764	0.3783
	Marginal		Poor	-0.4237	0.1487	8.1138	0.0044
age*sex	26-59 YEARS		60+	0.0586	0.0586	0.9992	0.3175
	25 AND UNDER		60+	-0.1372	0.0586	5.4735	0.0193
sex*year	1999		2014	-1.2393	8.5891	0.0208	0.8853
	2000		2014	5.3035	127.80	0.0017	0.9669
	2001		2014	-1.1257	8.5646	0.0173	0.8954
	2002		2014	0.9298	8.5450	0.0118	0.9133
	2003		2014	-0.7547	8.5295	0.0078	0.9295
	2004		2014	0.0082	8.5353	0	0.9992
	2005		2014	-0.4313	8.5290	0.0026	0.9597
	2006		2014	-0.1202	8.5248	0.0002	0.9887
	2007		2014	-0.4415	8.5238	0.0027	0.9587
	2008		2014	0.0171	8.5226	0	0.9984
	2009		2014	-0.5545	8.5221	0.0042	0.9481
	2010		2014	-0.5560	8.5220	0.0043	0.9480

Parameter	Level 1	Level 2	Referent level(s)	Estimate	Standard Error	Wald Chi Squared Statistic	Statistical Significance Level
	2011		2014	-0.1036	8.5218	0.0001	0.9903
	2012		2014	-0.1856	8.5217	0.0005	0.9826
	2013		2014	-0.448	8.5216	0.0028	0.9581
jurisdiction*ANCAP	NSW	Acceptable	Poor	-0.4099	0.2480	2.7315	0.0984
	NSW	Marginal	Poor	0.4894	0.1734	7.9666	0.0048
	VIC	Acceptable	Poor	-0.4541	0.2276	3.9820	0.0460
	VIC	Marginal	Poor	0.2717	0.1640	2.7439	0.0976
	QLD	Acceptable	Poor	-0.1176	0.2839	0.1716	0.6787
	QLD	Marginal	Poor	0.5214	0.2043	6.5150	0.0107
	WA	Acceptable	Poor	-0.7483	0.3205	5.4502	0.0196
	WA	Marginal	Poor	0.3501	0.2380	2.1634	0.1413
	NZ	Acceptable	Poor	-0.0173	0.2727	0.0040	0.9494
	NZ	Marginal	Poor	-0.0564	0.2211	0.0650	0.7988
age*speed limit	26-59 YEARS	40 km/h	60+, 60 km/h	0.00311	0.1290	0.0006	0.9808
	26-59 YEARS	50 km/h	60+, 60 km/h	0.0236	0.0873	0.0733	0.7866
	25 AND UNDER	40 km/h	60+, 60 km/h	-0.3588	0.1312	7.4851	0.0062
	25 AND UNDER	50 km/h	60+, 60 km/h	0.2028	0.0875	5.3762	0.0204
ANCAP*speed limit	Acceptable	40 km/h	Poor, 60 km/h	-0.5917	0.2100	7.9384	0.0048
	Acceptable	50 km/h	Poor, 60 km/h	0.2715	0.1407	3.7261	0.0536
	Marginal	40 km/h	Poor, 60 km/h	0.1913	0.1424	1.8049	0.1791
	Marginal	50 km/h	Poor, 60 km/h	-0.0648	0.1002	0.4177	0.5181

Table 3. Vehicles analysed with ANCAP ratings

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Alfa Romeo	**159**	**2006-2015**	**4 Dr Sedan 1.9L diesel**	Poor	8.98	4.28	2	2.70	0
Alfa Romeo	**Giulietta**	**2011-2015**	**Diesel variants**	Acceptable	22.62	10.99	2.50	3.14	6
Alfa Romeo	**Mito**	**2009-2015**	**2.2 litre diesel variants**	Marginal	17.57	6.51	1.48	3.58	6
Audi	**A1**	**2010-2015**	**All petrol variants**	Marginal	17.74	8.08	3.50	0.17	6
Audi	**A3**	**2013-2015**	**All variants**	Acceptable	26.59	12	7.55	1.04	6
Audi	**A4**	**2008-2015**	**All sedans**	Marginal	13.95	5.27	2.68	0	6
Audi	**A6**	**2011-2015**	**4 cylinder diesel variants**	Marginal	14.71	4.71	4	0	6
Audi	**Q3**	**2012-2015**	**All variants**	Acceptable	18.78	9.93	2.85	0	6
Audi	**Q5**	**2009-2015**	**Diesel**	Marginal	11.51	3.54	1.98	0	6
Audi	**Q7**	**2006-2015**	**VR6 3.6L V6**	Marginal	15.35	4	5.35	0	6
Audi	**TT**	**2003-2006**	**Roadster**	Poor	0	0	0	0	0
BMW	**1 series**	**2011-2015**	**1.6L petrol engine variants**	Acceptable	22.62	12	4.62	0	6
BMW	**2 series**	**2014-2015**	**Active Tourer 3 cylinder petrol variants**	Acceptable	21.74	14.86	14.86	2.02	4.86
BMW	**3 series**	**2012-2015**	**320d variant**	Good	27.92	11.92	4	6	6
BMW	**5 series**	**2010-2015**	**4 & 6 cylinder engine variants**	Good	28	12	10	0	6
BMW	**i3**	**2014-2015**	**All variants**	Acceptable	20.82	14.82	14.82	0	6
BMW	**X1**	**2010-2015**	**Diesel variants**	Acceptable	22.62	11.54	5.08	0	6
BMW	**X3**	**2011-2015**	**4 cylinder engine variants**	Acceptable	19.06	5.4	7.66	0	6
BMW	**X5**	**2003-2007**	**4 Dr Wagon 3L V6**	Poor	1.69	0.72	0.97	0	0
BMW	**Z4**	**2003-2009**	**Roadster 2.5L**	Marginal	12.61	3.49	3.12	6.00	0
Chery	**J1**	**2011-2015**	**5 door hatches**	Poor	8.60	0	7.50	1.1	0
Chery	**J11**	**2011-2015**	**2.0L variants**	Poor	0	0	0	0	0
Chrysler	**Voyager**	**2006-2008**	**Diesel variants**	Poor	0.35	0	0.35	0	0

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Citroen	**Berlingo**	**2009-2015**	**Variants with dual frontal airbags**	Marginal	9.83	3.11	0	1.84	4.88
Citroen	**C2**	**2004-2008**	**3 door hatch**	Marginal	12.27	5.67	4	2.6	0
Citroen	**C3**	**2010-2015**	**Diesel variants**	Marginal	11.80	1.8	4	0	6.00
Citroen	**C4**	**2011-2015**	**1.6L diesel engine variants**	Marginal	15.37	7.91	0	1.46	6.00
Citroen	C4 Grand Picasso	2014-2015	All variants	Acceptable	24.58	15.26	15.26	3.32	6.00
Citroen	**C5**	**2008-2015**	**Diesel variants**	Marginal	11.39	4.51	0.88	0	6.00
Citroen	**C6**	**2006-2015**	**Niv 3 - 3 litre**	Good	28.02	9.64	8.00	4.38	6.00
Citroen	**DS3**	**2010-2015**	**All petrol 3 door hatches**	Marginal	12.56	2.32	4.00	0.34	5.89
Citroen	**DS4**	**2012-2015**	**All petrol variants**	Marginal	15.50	7.53	0	1.97	6.00
Citroen	**DS5**	**2012-2015**	**All variants**	Marginal	14.50	6.35	0	2.16	6.00
Daewoo	**Kalos**	**2003-2004**	**5 door hatches**	Poor	8.40	0	5.00	3.40	0
Daihatsu	**Materia**	**2007-2010**	**Variants without side curtain airbags**	Marginal	15.58	1.49	8.00	0.09	6.00
Daihatsu	**Sirion**	**2005-2006**	**Sports 5 Dr Hatch 1.3L**	Marginal	14.99	7.00	5.74	0	2.25
Dodge	**Caliber**	**2007-2015**	**Diesel variants**	Poor	4.70	4.14	0.56	0	0
Fiat	**500**	**2007-2015**	**Pop 3 door hatch without ESC**	Marginal	13.58	4.76	3.25	0	5.57
Fiat	**500**	**2007-2015**	**Pop 3 door hatch with ESC**	Marginal	13.58	4.76	3.25	0	5.57
Fiat	Bravo / Ritmo	2008-2009	Variants fitted with ESC	Marginal	15.96	6.50	3.69	0.37	5.40
Fiat	**Freemont**	**2013-2015**	**Diesel variants**	Marginal	17.96	5.96	6.00	0	6.00
Fiat	**Panda**	**2013-2015**	**1.2L petrol engine variants**	Marginal	17.52	6.72	4.00	0.8	6.00
Fiat	Punto	2006-2009	Dynamic 3 Dr Hatch 1.2L	Acceptable	19.16	1.48	7.78	5.24	4.66
Ford	**Courier**	**1999-2006**	**GL 4x4 crew cab**	Poor	1.22	1.22	0	0	0
Ford	**Courier**	**1999-2006**	**GL 4x4 crew cab**	Poor	1.22	1.22	0	0	0
Ford	**EcoSport**	**2013-2015**	**All variants**	Acceptable	21.09	14.71	14.71	0.38	6.00
Ford	**Falcon**	**2014-2015**	**All sedans**	Marginal	10.95	7.25	2.10	0	1.60

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Ford	**Falcon Ute**	**2014-2015**	**All variants**	Marginal	10.95	7.25	2.10	0	1.60
Ford	**Fiesta**	**2013-2015**	**All variants**	Acceptable	23.32	8.53	3.64	5.15	6.00
Ford	**Focus**	**2015-2015**	**All variants**	Acceptable	25.96	15.96	15.96	6.00	4.00
Ford	Kuga	2013-2015	All variants	Acceptable	25.09	10.72	4.65	3.72	6.00
Ford	**Mondeo**	**2015-2015**	**All variants**	Acceptable	23.94	17.94	17.94	0	6.00
Ford	**Ranger**	**2014-2015**	**All variants**	Acceptable	22.98	10.02	8.96	4.00	0
Ford	**Territory**	**2014-2015**	**All variants**	Acceptable	18.93	7.00	5.93	0	6.00
Ford	**Transit**	**2006-2015**	**Short wheelbase, low roof, front-wheel-drive variants**	Poor	5.00	0	5.00	0	0
Great Wall Motors	**SA 220**	**2009-2010**	**Dual cab**	Poor	2.49	0	2.49	0	0
Great Wall Motors	**V240**	**2009-2015**	**4x2 dual cab**	Poor	0	0	0	0	0
Holden	**Astra**	**2015-2015**	**GTC, GTC Sport & VXR variants**	Marginal	18.00	12.00	12.00	0	6.00
Holden	Barina	2011-2015	All TM series variants	Acceptable	19.30	9.66	4.09	0.20	5.35
Holden	**Caprice**	**2013-2015**	**All variants**	Marginal	15.41	7.69	5.72	0	2.00
Holden	**Captiva**	**2006-2011**	**5 door wagon**	Marginal	16.77	6.27	4.50	0	6.00
Holden	**Captiva 5**	**2011-2015**	**All front-wheel-drive variants**	Marginal	17.33	10.00	3.99	0	3.34
Holden	**Captiva 7**	**2011-2015**	**All front-wheel-drive variants**	Marginal	17.33	10.00	3.99	0	3.34
Holden	**Colorado**	**2012-2015**	**All single and space cab variants**	Acceptable	21.75	7.48	8.27	0	6.00
Holden	**Colorado**	**2012-2015**	**All dual cab variants**	Acceptable	21.75	7.48	8.27	0	6.00
Holden	**Colorado 7**	**2012-2015**	**All variants**	Acceptable	21.75	7.48	8.27	0	6.00
Holden	Commodore	2013-2015	All variants (VF)	Marginal	15.41	7.69	5.72	0	2.00
Holden	**Commodore Ute**	**2013-2015**	**All variants (VF)**	Marginal	15.41	7.69	5.72	0	2.00
Holden	**Cruze**	**2009-2015**	**All variants**	Marginal	13.61	9.51	4.10	0	0

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Holden	**Epica**	**2008-2015**	**Series II CDX sedan 2.5L**	Marginal	13.8	5.54	2.50	0	5.76
Holden	**Malibu**	**2013-2015**	**All variants**	Acceptable	20.47	10.79	3.88	1.80	4.00
Holden	**Monaro**	**2004-2007**	**CV8 Coupe**	Poor	1.98	0	0	1.98	0
Holden	**Rodeo**	**2003-2007**	**LX Crew Cab 4X4**	Poor	7.67	0	7.67	0	0
Holden	Statesman / Caprice	2009-2013	All variants (WM)	Poor	8.98	5.98	3.00	0	0
Holden	**Trax**	**2013-2015**	**All variants**	Acceptable	23.11	10	7.11	0	6
Holden	**Vectra**	**2003-2007**	**1.8 litre sedan**	Poor	4.69	1.08	3.60	0	0
Holden	**Viva**	**2005-2009**	**5 door hatches**	Marginal	10.11	2.54	5.77	0	1.80
Holden	**Volt**	**2012-2015**	**All variants**	Marginal	14.9	8.78	0.13	0	6.00
Honda	**Accord**	**2014-2015**	**All variants**	Acceptable	20.35	8.82	7.52	0	4.00
Honda	**Accord Euro**	**2008-2015**	**ES-GT 2.2L diesel**	Acceptable	19.29	8.79	4.50	0	6.00
Honda	**City**	**2014-2015**	**All variants**	Acceptable	23.15	8.41	8.24	0.50	6.00
Honda	**Civic**	**2012-2015**	**All hatch variants**	Acceptable	24.92	7.58	5.34	6.00	6.00
Honda	**Civic**	**2012-2015**	**All petrol sedan variants**	Good	27.54	9.54	8.00	6.00	4.00
Honda	**CR-V**	**2012-2015**	**All variants**	Marginal	16.71	7.31	5.40	0	4.00
Honda	**CR-Z**	**2011-2015**	**1.5L variants**	Acceptable	25.46	8.00	7.46	6.00	4.00
Honda	**Insight**	**2010-2015**	**5 door hatch 1.3L hybrid**	Acceptable	27.37	8.90	6.47	6.00	6.00
Honda	**Jazz**	**2014-2015**	**All variants**	Acceptable	24.29	7.49	8.80	2.00	6.00
Honda	**Legend**	**2006-2008**	**4 Dr Sedan 3.5L V6**	Acceptable	21.53	8.43	4.24	2.86	6.00
Honda	**Odyssey**	**2014-2015**	**All variants**	Acceptable	23.54	7.97	7.84	1.73	6.00
Hyundai	**Accent**	**2011-2015**	**All sedan and hatch variants**	Acceptable	21.21	9.36	4.00	3.85	6.00
Hyundai	**Elantra**	**2011-2015**	**1.8L GSL variant**	Acceptable	20.93	8.55	5.02	2.00	5.36
Hyundai	**Genesis**	**2014-2015**	**All variants**	Acceptable	22.70	16.70	16.70	0	6.00

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Hyundai	**Getz**	**2008-2015**	New Zealand variants with driver seat belt reminder	Poor	4.96	0.96	4.00	0	0
Hyundai	**i20**	**2011-2015**	**All variants**	Acceptable	23.01	8.00	4.00	5.22	5.79
Hyundai	**i30**	**2015-2015**	**All variants**	Acceptable	24.26	14.26	14.26	4.00	6.00
Hyundai	**i40**	**2015-2015**	**All variants**	Marginal	15.53	8.06	8.06	1.47	6.00
Hyundai	**i45**	**2010-2015**	**All variants**	Marginal	14.20	8.00	4.00	0	2.20
Hyundai	**iLOAD**	**2009-2015**	**Petrol and diesel variants**	Poor	2.00	0	2.00	0	0
Hyundai	**iMax**	**2009-2015**	**Petrol and diesel variants**	Poor	2.00	0	2.00	0	0
Hyundai	**ix35**	**2010-2015**	**4X4 and 4X2 variants**	Acceptable	19.52	8.91	5.05	0	5.56
Hyundai	**Santa Fe**	**2012-2015**	**4 cylinder engine AWD variants**	Marginal	14.32	7.08	3.00	Pending	4.24
Hyundai	**Sonata**	**2015-2015**	**Petrol variants**	Acceptable	21.73	9.31	6.42	0	6
Hyundai	**Tucson**	**2006-2010**	**Elite variant**	Poor	4.00	0	4.00	0	0
Hyundai	**Veloster**	**2015-2015**	**All variants**	Marginal	17.74	7.34	7.34	4.45	5.96
Infiniti	**FX**	**2012-2015**	**FX37 variant**	Marginal	15.94	1.36	8.83	1.60	4.15
Infiniti	**Q50**	**2014-2015**	**All 2WD variants**	Acceptable	24.24	19.11	19.11	0	5.13
Isuzu	**D-Max**	**2012-2015**	All variants except 4X4 crew cab and 4X2 high ride crew cabs (4x4 single cabs; 4x4 space cabs; 4x2 crew cabs low ride; 4x2 single cabs high ride; 4x2 single cabs low ride.)	Marginal	18.37	6.23	6.14	0	6.00
Isuzu	**D-Max**	**2013-2015**	**4X4 crew cab**	Marginal	18.37	6.23	6.14	0	6.00
Isuzu	**D-Max**	**2014-2015**	**4X2 high ride crew cabs**	Marginal	18.37	6.23	6.14	0	6.00
Isuzu	**MU-X**	**2013-2015**	**All variants**	Marginal	18.37	6.23	6.14	0	6.00
Jaguar	**XF**	**2010-2015**	**Diesel variants**	Marginal	15.64	3.91	5.73	0	6.00
Jeep	**Cherokee**	**2014-2015**	**2 litre diesel AWD variants**	Acceptable	24.47	16.87	16.87	1.60	6.00
Jeep	**Compass**	**2012-2015**	**4X4 variants**	Poor	8.36	7.86	0.50	0	0

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Jeep	**Grand Cherokee**	**2013-2015**	**V6 variants**	Marginal	16.06	10.06	10.06	0	6.00
Jeep	**Wrangler**	**2012-2015**	**3.6L V6 2 door variants**	Poor	5.23	1.23	4.00	0	0
Kia	**Carnival**	**2015-2015**	**V6 petrol variants**	Acceptable	24.67	15.63	15.63	3.04	6.00
Kia	**Cerato**	**2013-2015**	**All Koup variants**	Acceptable	21.36	8.95	4.81	1.60	6.00
Kia	**Cerato**	**2013-2015**	**All variants**	Acceptable	21.36	8.95	4.81	1.60	6.00
Kia	**Magentis**	**2006-2009**	**GL 2.4L**	Poor	2.87	2.87	0	0	0
Kia	**Picanto**	**2011-2015**	**All New Zealand variants**	Marginal	16.76	3.96	5.25	1.54	6.00
Kia	**pro_cee'd**	**2014-2015**	**All variants**	Acceptable	22.00	7.89	4.74	3.61	5.77
Kia	**Rio**	**2011-2015**	**All variants**	Marginal	16.72	7.31	4.00	0	5.41
Kia	Rondo / Carens	2013-2015	All variants	Acceptable	23.17	9.44	6.00	1.73	6.00
Kia	**Sorento**	**2015-2015**	**All variants**	Acceptable	24.24	18.35	18.35	0	5.89
Kia	**Soul**	**2009-2010**	**All Australian variants**	Marginal	13.89	5.00	3.00	0	5.89
Kia	**Soul**	**2009-2014**	**All New Zealand variants**	Marginal	13.89	5.00	3.00	0	5.89
Kia	**Soul**	**2010-2014**	**All variants**	Marginal	13.89	5.00	3.00	0	5.89
Kia	**Sportage**	**2010-2015**	**All variants**	Marginal	17.69	8.08	3.50	1.20	4.91
Land Rover	Discovery 3	2004-2009	All diesel variants	Poor	8.12	2.50	5.62	0	0
Land Rover	**Discovery Sport**	**2015-2015**	**2.2L diesel variants**	Acceptable	25.15	19.20	19.20	0	5.94
Land Rover	**Freelander 2**	**2007-2015**	**All diesel variants**	Poor	7.18	2.68	4.50	0	0
Land Rover	**Range Rover**	**2013-2015**	**TDV6 variants only**	Acceptable	22.62	7.07	9.55	0	6.00
Land Rover	**Range Rover Evoque**	**2011-2015**	**5 door diesel variants**	Marginal	14.75	4.50	4.25	0	6.00
Lexus	**CT200h**	**2013-2015**	**All variants**	Acceptable	19.71	9.00	4.52	0.19	6.00
Lexus	**GS 300**	**2005-2011**	**4 Dr Sedan 3L V6**	Marginal	17.66	6.92	4.44	1.80	4.50

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Lexus	**IS**	**2013-2015**	**Lexus IS 250, IS 350 and 300h variants**	Good	28.93	16.93	16.93	6.00	6.00
Lexus	NX	2014-2015	All variants	Acceptable	24.96	18.84	18.84	0.12	6.00
Lexus	**RX330**	**2003-2005**	**Sports Wagon**	Poor	4.30	1.00	3.30	0	0
Mahindra	**Pik-Up**	**2012-2015**	**All 4x4 dual cab variants**	Poor	6.89	0.32	6.57	0	0
Mahindra	**XUV500**	**2012-2015**	**AWD variants**	Marginal	10.06	3.23	2.15	0	4.68
Maserati	**Ghibli**	**2014-2015**	**All variants**	Acceptable	26.84	14.84	0	6	6
Mazda	**2**	**2003-2007**	**Maxx and Neo variants**	Marginal	10.11	6.11	4.00	0	0
Mazda	**2**	**2008-2011**	**Variants with two air bags**	Marginal	18.49	7.66	4.00	2.38	4.45
Mazda	**2**	**2008-2011**	**All variants with ESC and 6 air bags**	Marginal	18.49	7.66	4.00	2.38	4.45
Mazda	2	2011-2014	All variants	Marginal	18.49	7.66	4.00	2.38	4.45
Mazda	**3**	**2014-2015**	**All petrol variants**	Acceptable	23.67	17.13	17.13	0.54	6.00
Mazda	**6**	**2012-2015**	**All variants**	Acceptable	23.76	8.80	8.97	0	6.00
Mazda	**CX-5**	**2012-2015**	**All variants**	Acceptable	23.19	9.02	8.00	0.18	6.00
Mazda	**CX-7**	**2006-2015**	**Classic 2.3L turbo petrol**	Poor	5.62	3.00	2.62	0	0
Mazda	**Tribute**	**2001-2004**	**Variants with dual frontal airbags**	Poor	4.07	2.07	0	0	2.00
Mazda	**Tribute**	**2004-2008**	**Variants with side airbags**	Poor	4.07	2.07	0	0	2.00
Mercedes-Benz	**A-Class**	**2013-2015**	**All variants**	Acceptable	24.00	12.00	6.00	0	6.00
Mercedes-Benz	B-Class	2012-2015	All variants	Acceptable	20.12	11.56	2.56	0	6.00
Mercedes-Benz	**C-Class**	**2011-2015**	**Coupe variants with 4 cylinder diesel engine**	Acceptable	20.65	8.64	6.00	0.01	6.00
Mercedes-Benz	**C-Class**	**2014-2015**	C220 BlueTEC, C250 BlueTEC, C200, and C250 variants	Good	27.73	21.00	21.00	0.80	5.93
Mercedes-Benz	**CLA Class**	**2013-2015**	**All coupe/sedan variants**	Acceptable	26.95	10.00	6.95	4.00	6.00

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Mercedes-Benz	**E-Class**	**2009-2015**	**All variants except E63 AMG**	Acceptable	21.02	9.02	6.00	0	6.00
Mercedes-Benz	**M-Class**	**2008-2015**	**All diesel variants**	Poor	6.12	0.69	5.43	0	0
Mercedes-Benz	**M-Class**	**2011-2015**	**ML350 3.5L petrol V6 variants**	Acceptable	21.42	5.42	12.00	0	4.00
Mercedes-Benz	**Valente**	**2012-2015**	**4 cylinder engine variants**	Poor	0.92	0	0.92	0	0
Mercedes-Benz	**Viano**	**2006-2015**	**4 cylinder variants with side curtain airbags**	Poor	0.92	0	0.92	0	0
Mercedes-Benz	**Vito**	**2009-2015**	4 cylinder Vitos fitted with bucket front seats, front passenger airbag and head-protecting side curtains	Poor	0.92	0	0.92	0	0
MG	**6**	**2012-2015**	**All variants**	Marginal	14.99	5.97	3.02	0	6.00
MG Rover	**MG TF**	**2002-2005**	**Roadster**	Acceptable	19.34	2.50	5.00	6.00	5.84
Mini	**Cooper**	**2014-2015**	**3 door hatch**	Acceptable	24.05	18.05	18.05	0	6.00
Mini	**Countryman**	**2011-2015**	**Front-wheel-drive diesel variants**	Acceptable	22.81	12.00	3.27	1.54	6.00
Mitsubishi	**380**	**2005-2008**	**4 Dr Sedan 3.8L**	Poor	1.81	1.81	0	0	0
Mitsubishi	**ASX**	**2010-2015**	**All variants**	Acceptable	21.57	9.07	8.50	0	4.00
Mitsubishi	**Challenger**	**2009-2015**	**All variants**	Poor	3.27	0.31	0.96	0	2.00
Mitsubishi	**Colt**	**2006-2011**	**Variants with CVT**	Poor	7.67	2.67	5.00	0	0
Mitsubishi	Express / L300	2003-2015	Short wheelbase van	Poor	9.00	0	9.00	0	0
Mitsubishi	**i-MiEV**	**2011-2015**	**5 door hatches**	Marginal	17.18	3.18	8.00	0	6.00
Mitsubishi	**Lancer**	**2010-2015**	**All variants**	Marginal	15.62	6.37	3.81	0	5.44
Mitsubishi	**Magna**	**2003-2005**	**ES sedan**	Poor	3.76	1.76	0	0	2.00
Mitsubishi	**Mirage**	**2013-2015**	**All variants**	Acceptable	24.85	11.20	7.65	0	6.00

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Mitsubishi	**Outlander**	**2015-2015**	**All variants**	Acceptable	22.90	16.90	16.90	0	6.00
Mitsubishi	**Pajero**	**2013-2015**	**All variants**	Poor	2.00	0	0	0	2.00
Mitsubishi	**Triton**	**2006-2015**	**All variants**	Poor	3.27	0.31	0.96	0	2.00
Mitsubishi	**Triton**	**2015-2015**	**All variants**	Acceptable	21.02	14.16	14.16	0.86	6.00
Nissan	**Altima**	**2013-2015**	**All variants**	Acceptable	21.35	10.55	5.00	0	5.8
Nissan	**Dualis**	**2007-2014**	**Variants with side & curtain airbags**	Marginal	18.12	4.12	8.00	0	6.00
Nissan	**Dualis**	**2007-2014**	**Variants with dual frontal airbags**	Marginal	18.12	4.12	8.00	0	6.00
Nissan	**Juke**	**2012-2015**	**Front-wheel-drive variants with H16 engine**	Marginal	14.69	9.34	0.15	0.79	4.42
Nissan	**Leaf**	**2011-2015**	**5 door hatches**	Acceptable	23.38	8.24	6.99	3.00	5.14
Nissan	**Maxima**	**2006-2009**	**Ti model variants**	Marginal	9.77	7.81	1.2	0.76	0
Nissan	**Micra**	**2011-2015**	**All variants with a 1.2L or 1.5L engine**	Acceptable	21.01	9.43	4.00	1.58	6.00
Nissan	**Navara**	**2015-2015**	**All king cab variants**	Marginal	18.38	14.48	14.48	1.33	2.57
Nissan	**Navara**	**2015-2015**	**All single cab variants**	Marginal	18.38	14.48	14.48	1.33	2.57
Nissan	**Navara**	**2015-2015**	**All dual cab variants**	Marginal	18.38	14.48	14.48	1.33	2.57
Nissan	**Pathfinder**	**2013-2015**	**All variants**	Marginal	15.47	8.74	6.11	0.62	0
Nissan	**Patrol**	**2004-2015**	**Y61 series with 3 litre diesel engine**	Marginal	8.21	0	7.33	0.88	0
Nissan	**Patrol**	**2004-2015**	**Y61 series with 3 litre diesel engine**	Marginal	8.21	0	7.33	0.88	0
Nissan	Patrol Cab Chassis	2008-2015	Variants with dual frontal airbags	Poor	6.78	0	6.78	0	0
Nissan	**Pulsar**	**2013-2015**	**All 1.8L hatch variants**	Acceptable	22.77	10.00	4.61	2.16	6.00
Nissan	**Pulsar**	**2013-2015**	**All 1.8L sedan variants**	Acceptable	22.77	10.00	4.61	2.16	6.00
Nissan	**Qashqai**	**2014-2015**	**All variants**	Acceptable	24.87	15.77	15.77	3.11	6.00
Nissan	**Tiida**	**2006-2012**	**Variants with 2 airbags**	Marginal	12.37	5.57	6.00	0	0.80
Nissan	**X-Trail**	**2014-2015**	**All variants**	Acceptable	27.28	15.44	15.44	5.84	6.00

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Opel	**Astra**	**2012-2014**	**All wagons and 5 door hatches**	Marginal	16.43	10.43	0	0	6.00
Opel	**Astra**	**2012-2014**	**Astra GTC**	Marginal	18.00	12.00	0	0	6.00
Opel	**Corsa**	**2012-2015**	**3 door hatches with 1.4L engine**	Acceptable	18.74	8.63	5.13	0	4.98
Opel	**Insignia**	**2012-2015**	**All variants**	Marginal	14.28	5.62	2.66	0	6.00
Peugeot	**207**	**2006-2012**	**4 door hatch with side and curtain airbags**	Acceptable	18.55	4.37	4.00	4.18	6.00
Peugeot	**208**	**2012-2015**	**5 door hatches with 4 cylinder engine**	Acceptable	21.98	8.52	4.00	3.46	6.00
Peugeot	**307**	**2001-2009**	**5 door hatch**	Marginal	14.04	7.95	6.00	0.09	0
Peugeot	**308**	**2014-2015**	**Diesel variants**	Acceptable	23.39	12.18	12.18	5.22	6.00
Peugeot	**407**	**2004-2011**	**Sedan variants**	Marginal	14.87	6.96	0	3.03	4.88
Peugeot	**407**	**2006-2011**	**2 door coupe**	Marginal	14.74	6.08	0.54	5.43	2.69
Peugeot	**508**	**2011-2015**	**1.6L diesel sedans**	Marginal	14.81	8.70	0.60	1.50	4.00
Peugeot	**2008**	**2013-2015**	**All variants**	Acceptable	26.20	16.02	16.02	4.20	6.00
Peugeot	**3008**	**2010-2015**	**Diesel variants**	Marginal	11.13	3.00	0	2.13	6.00
Peugeot	**5008**	**2013-2015**	**All variants**	Marginal	13.41	3.28	4.13	0	6.00
Peugeot	**207 CC**	**2007-2015**	**Sport 1.6L**	Marginal	15.99	5.37	4.00	0.62	6.00
Peugeot	**307 CC**	**2003-2009**	**CC Convertible 2 litre**	Marginal	9.66	5.66	4.00	0	0
Peugeot	**308 CC**	**2009-2015**	**1.6 SPORTPACK**	Marginal	11.77	4.85	0.08	0.84	6.00
Proton	**Exora**	**2013-2015**	**All variants**	Marginal	12.57	6.50	6.07	0	0
Proton	**Jumbuck**	**2003-2010**	**Gli 1.5L**	Marginal	11.00	2.00	5.00	4.00	0
Proton	**Preve**	**2013-2015**	**All variants**	Marginal	14.37	7.30	2.35	0	4.72
Proton	**S16**	**2010-2015**	**Variants with dual frontal airbags**	Marginal	13.60	7.90	5.00	0.70	0
Proton	**S16**	**2010-2015**	**Variants with dual frontal airbags**	Marginal	13.60	7.90	5.00	0.70	0
Proton	**Suprima S**	**2013-2015**	**All variants**	Marginal	14.37	7.30	2.35	0	4.72

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Renault	**Captur**	**2015-2015**	**3 cylinder petrol variants**	Acceptable	22.10	13.40	13.40	2.70	6.00
Renault	**Clio**	**2013-2015**	**All variants**	Acceptable	23.70	6.27	5.56	5.87	6.00
Renault	**Kangoo**	**2011-2015**	**Variants with dual frontal airbags**	Marginal	14.38	3.38	5.00	0	6.00
Renault	**Koleos**	**2008-2015**	**Diesel variants**	Marginal	14.01	4.16	4.35	0	5.50
Renault	**Laguna**	**2001-2003**	**Series II 5 Dr Hatch**	Marginal	11.85	6.66	4.86	0.33	0
Renault	**Laguna**	**2008-2011**	**Series III 5 dr hatch - diesel**	Marginal	9.92	3.39	0.81	0	5.72
Renault	**Megane**	**2011-2015**	**DCi Expression (diesel)**	Marginal	10.62	1.62	3.34	0	5.66
Renault	**Megane CC**	**2004-2008**	**2 door coupe/cabriolet**	Marginal	11.00	0	7.00	4.00	0
Renault	**Scenic**	**2003-2009**	**Series II 5 Dr Hatch**	Marginal	10.75	5.75	5.00	0	0
Saab	**9-3**	**2003-2005**	Convertible variants with advanced seat belt reminders	Poor	6.76	4.29	2.36	0.11	0
Saab	**9-3**	**2004-2007**	Sedan variants with advanced seat belt reminders	Poor	6.76	2.36	4.29	0.11	0
Skoda	**Fabia**	**2015-2015**	5 door hatch & wagon variants (Australia only)	Acceptable	25.00	14.63	14.63	4.37	6.00
Skoda	**Octavia**	**2013-2015**	**All front-wheel-drive variants**	Acceptable	24.10	8.48	8.00	1.62	6.00
Skoda	**Rapid**	**2014-2015**	**4 cylinder petrol engine variants**	Acceptable	24.70	11.64	5.00	2.05	6.00
Skoda	**Roomster**	**2007-2015**	**Diesel variants**	Marginal	13.58	4.64	2.94	0	6.00
Skoda	**Superb**	**2009-2015**	**Ambition - diesel**	Marginal	18.00	8.00	4.00	0	6.00
Skoda	**Yeti**	**2011-2015**	**AWD diesel variants**	Marginal	16.72	7.72	3.00	0	6.00
Smart	**Forfour**	**2003-2006**	**Variants with side airbags**	Poor	6.78	0	4.78	2.00	0
Smart	**Fortwo**	**2008-2009**	**3 dr hatch**	Marginal	10.01	4.00	0.01	0	6.00
Ssangyong	**Actyon Sports**	**2008-2015**	**Tradie 4X2**	Poor	3.00	3.00	0	0	0
Ssangyong	**Actyon Sports**	**2008-2015**	**Tradie 4X2**	Poor	3.00	3.00	0	0	0

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Ssangyong	**Stavic**	**2013-2015**	**2WD variants only**	Poor	0	0	0	0	0
Subaru	**BRZ**	**2012-2015**	**All variants**	Acceptable	25.89	9.34	5.59	6.00	4.96
Subaru	**Forester**	**2013-2015**	**All variants**	Acceptable	26.33	10.69	9.64	0	6.00
Subaru	**Impreza**	**2012-2015**	**All sedan and hatch variants**	Acceptable	25.14	11.60	6.36	1.18	6.00
Subaru	Liberty / Legacy	2015-2015	All variants	Acceptable	25.32	18.92	18.92	0.4	6.00
Subaru	**Outback**	**2015-2015**	**All variants**	Acceptable	25.32	18.92	18.92	0.40	6.00
Subaru	**Tribeca**	**2006-2015**	**Wagon variants - 3 litre V6**	Marginal	0	0	0	0	0
Subaru	**WRX**	**2014-2015**	**All variants**	Good	28.31	9.99	8.26	4.06	6.00
Subaru	**XV**	**2012-2015**	**All variants**	Acceptable	22.93	11.04	5.89	0	6.00
Suzuki	**Alto**	**2009-2015**	**5 door hatch**	Marginal	12.78	4.21	5.29	0	3.28
Suzuki	**APV**	**2007-2015**	**Van variants**	Marginal	12.00	0	5	1.00	6.00
Suzuki	**Celerio**	**2015-2015**	**All variants**	Acceptable	24.84	10.00	8.05	0.79	6.00
Suzuki	**Grand Vitara**	**2006-2015**	**Variants with side & curtain airbags**	Acceptable	18.86	7.34	5.52	0	6.00
Suzuki	**Grand Vitara**	**2006-2015**	**Variants with side & curtain airbags**	Acceptable	18.86	7.34	5.52	0	6.00
Suzuki	**Kizashi**	**2011-2015**	**XLS**	Marginal	15.00	9.00	0	0	6.00
Suzuki	**Splash**	**2011-2015**	**New Zealand variants - GLS 5dr hatch**	Acceptable	18.55	5.71	6.84	0	6.00
Suzuki	**Swift**	**2011-2015**	**All variants - GL**	Acceptable	22.41	11.26	7.15	0	4.00
Suzuki	**SX4**	**2007-2015**	**5 door hatch**	Acceptable	21.53	8.21	6.77	0.55	6.00
Suzuki	**SX4 S-Cross**	**2013-2015**	**Petrol front-wheel-drive variants**	Acceptable	26.22	10.22	10.00	0	6.00
Tesla	**Model S**	**2014-2015**	**All variants built from 22 September 2014**	Acceptable	23.80	13.92	13.92	4.07	5.82
Toyota	**86**	**2012-2015**	**All variants**	Acceptable	25.89	9.34	5.59	6.00	4.96
Toyota	**Aurion**	**2015-2015**	**All variants**	Acceptable	20.92	19.00	19.00	0	1.92

Make	Model	Years of manufacture	Model variants tested by ANCAP	Pedestrian protection rating	Pedestrian protection total (out of 36)	Child head impacts	Adult head impacts	Upper leg impacts	Lower leg impacts
Toyota	**Camry**	**2015-2015**	**All variants**	Marginal	12.00	12.00	12.00	0	0
Toyota	**Corolla**	**2012-2015**	**Hatch variants**	Acceptable	24.57	10.32	6.77	1.48	6.00
Toyota	**Corolla**	**2014-2015**	**Sedan variants**	Acceptable	22.89	7.52	8.02	1.35	6.00
Toyota	**Echo**	**2000-2005**	**3 door hatch with dual frontal airbags**	Marginal	12.84	5.31	6.00	1.54	0
Toyota	**Echo**	**2003-2005**	**3 door hatch with driver airbag**	Poor	8.60	4.60	4.00	0	0
Toyota	**Hiace**	**2011-2015**	**LWB van sold in New Zealand**	Poor	6.53	1.53	5.00	0	0
Toyota	**Hiace**	**2011-2015**	**LWB van**	Poor	6.53	1.53	5.00	0	0
Toyota	**Hilux**	**2013-2015**	**All 4x4 dual cab variants**	Poor	5.01	0.79	4.22	0	0
Toyota	**Hilux**	**2013-2015**	**All 4x4 single and extra cab variants**	Poor	5.01	0.79	4.22	0	0
Toyota	Kluger / Highlander	2014-2015	All variants	Marginal	17.04	6.15	8.65	0	2.24
Toyota	**Landcruiser**	**2013-2015**	**All variants**	Marginal	11.61	3.71	7.90	0	0
Toyota	**Landcruiser Cab Chassis**	**2007-2015**	**Variants with dual frontal airbags**	Poor	3.84	0	3.84	0	0
Toyota	Prado	2013-2015	All variants	Marginal	13.00	4.00	9.00	0	0
Toyota	**Prius**	**2009-2015**	**5 door hatch**	Acceptable	24.43	8.43	6.43	4.32	5.25
Toyota	**Prius C**	**2012-2015**	**All variants**	Acceptable	20.86	8.59	6.27	0	6.00
Toyota	**Prius V**	**2012-2015**	**All variants**	Good	27.65	15.65	15.65	6.00	6.00
Toyota	**RAV4**	**2013-2015**	**All variants**	Acceptable	23.99	9.00	8.99	0	6.00
Toyota	**Rukus**	**2010-2015**	**All variants**	Acceptable	20.50	12.00	8.50	0	0
Toyota	**Tarago**	**2010-2015**	**All variants**	Marginal	16.33	8.00	7.57	0.76	0
Toyota	**Yaris**	**2011-2015**	**All hatch variants**	Acceptable	21.43	7.81	7.50	0.12	6.00
Volkswagen	Amarok	2011-2015	New Zealand 4x4 dual cabs with dual frontal airbags	Marginal	16.96	2.61	8.36	0	6.00
Volkswagen	**Amarok**	**2011-2015**	4x4 dual cab with head-protecting side airbags	Marginal	16.96	2.61	8.36	0	6.00

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Volkswagen	**Beetle**	**2013-2015**	**All variants**	Acceptable	18.99	11.99	3.00	0	4.00
Volkswagen	**Caddy**	**2007-2015**	**Short wheelbase van**	Marginal	12.50	4.80	7.7	0	0
Volkswagen	**Caddy**	**2007-2015**	**Life variants**	Marginal	12.50	4.80	7.7	0	0
Volkswagen	**Eos**	**2006-2015**	**Ambiente 1.6 litre Sports**	Marginal	13.34	5.93	2.00	0	5.41
Volkswagen	**Golf**	**2013-2015**	**All petrol hatches**	Acceptable	23.51	8.75	6.00	2.76	6.00
Volkswagen	**Golf Cabriolet**	**2011-2015**	**1.4L petrol engine**	Acceptable	19.00	7.90	3.37	3.88	3.85
Volkswagen	**Jetta**	**2011-2015**	**1.2L and 1.4L petrol variants only**	Acceptable	20.25	8.73	2.99	2.53	6.00
Volkswagen	**Passat**	**2006-2015**	**Diesel sedan and wagon**	Marginal	16.52	7.46	3.06	0	6.00
Volkswagen	**Polo**	**2014-2015**	**All petrol variants**	Marginal	14.90	7.73	0.74	2.43	4.00
Volkswagen	**Tiguan**	**2008-2015**	**2 litre diesel Trend**	Marginal	17.20	5.28	5.92	0	6.00
Volkswagen	**Touareg**	**2005-2011**	**2.5 litre diesel Wagon**	Poor	7.13	2.48	4.66	0	0
Volkswagen	**Transporter**	**2008-2015**	**Van variants**	Poor	3.21	1.33	1.88	0	0
Volkswagen	**up!**	**2012-2014**	**All variants**	Marginal	16.60	5.00	6.65	0	4.95
Volvo	**C30**	**2007-2015**	**3 Dr Hatch**	Poor	9.24	5.09	0.15	0	4.00
Volvo	**S40**	**2004-2010**	**4 Dr Sedan**	Marginal	17.80	8.71	5.00	3.73	0.36
Volvo	**S60**	**2011-2015**	Front-wheel-drive variants with 5 cylinder diesel engine	Acceptable	23.16	9.74	5.00	2.75	5.67
Volvo	**V40**	**2013-2015**	**D2 variants**	Good	31.76	12.00	12.00	2.00	5.76
Volvo	**V60**	**2011-2015**	Front-wheel-drive variants with 5 cylinder diesel engine	Acceptable	23.16	9.74	5.00	2.75	5.67
Volvo	**V70**	**2008-2015**	**Kinetic 2.4L diesel**	Marginal	15.63	7.63	2.00	0	6.00
Volvo	**XC60**	**2009-2015**	**Momentum 2.4L diesel**	Marginal	17.27	8.00	3.27	0	6.00
Volvo	**XC90**	**2003-2015**	**Wagon 2.4L diesel**	Marginal	9.74	4.76	4.98	0	0