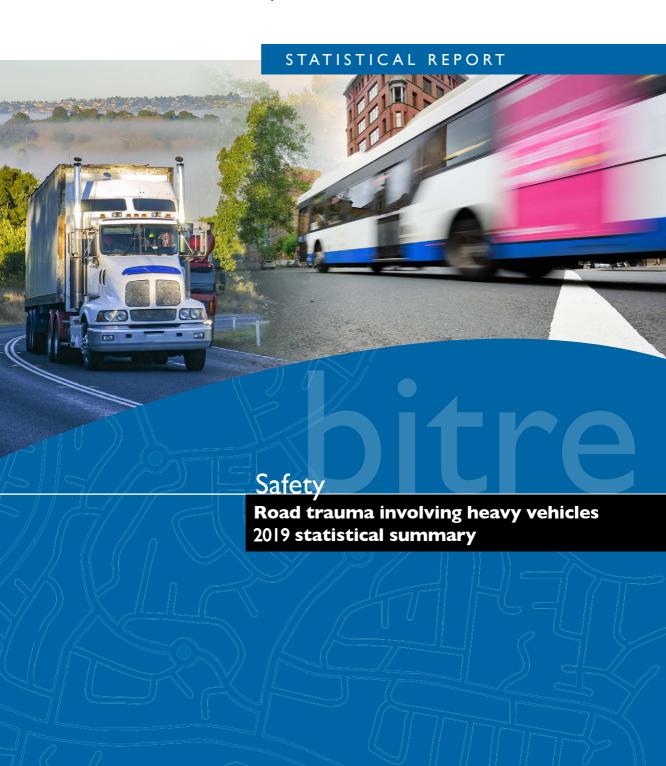


#### **Australian Government**

**Department of Infrastructure, Transport, Regional Development and Communications**Bureau of Infrastructure and Transport Research Economics



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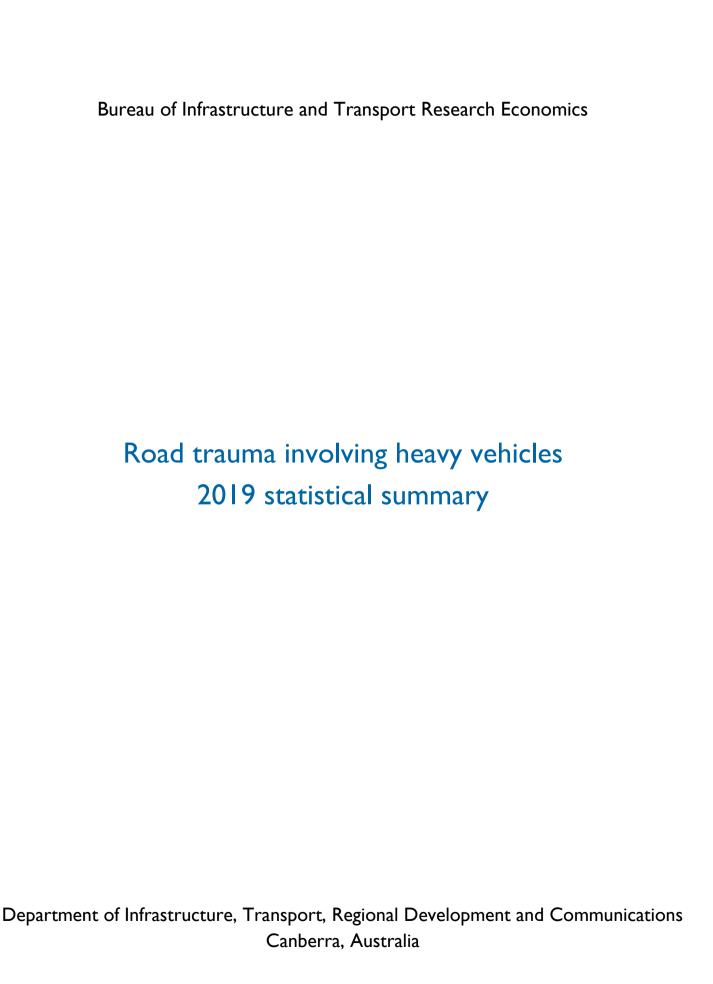
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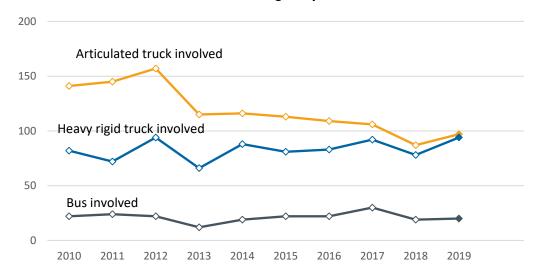
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## At a glance

This report presents counts and rates of fatalities, fatal crashes and hospitalised injuries from road crashes in which one or more heavy vehicles (heavy trucks or buses) were involved. Tabulations include counts by road user type, crash and vehicle type, geographic region, road type and speed zone. The data is current to 2019.

### Annual counts of fatalities in crashes involving heavy vehicles, 2010–2019



## Heavy trucks - 2019

- A total of 188 people were killed in crashes involving heavy trucks. This is an increase of 19.7 per cent compared with the total in 2018 (Table 1.1).
- Articulated truck involved fatalities increased by 11.5 per cent when compared with 2018. The 10year fatality trend is a reduction of 5.4 per cent per year. (Table 1.1)
- For fatalities involving a heavy rigid truck, 2019 saw an increase of 20.5 per cent over 2018, and over the last ten years the trend was an increase of 1.4 per cent per year (Table 1.1).
- Vulnerable road users (pedestrians, pedal cyclists or motorcyclists) account for 33 per cent of all road crash deaths. When a heavy truck is involved, these road users account for approximately 20 per cent of deaths (Table 1.3).
- Light vehicle occupants account for approximately 47 per cent of the total fatalities involving heavy trucks. Heavy truck occupants account for about 29 per cent (Table 1.3).
- Of total single vehicle crashes over the last 3 years, 5.3 per cent of the fatalities involved heavy trucks. In multiple vehicle crashes, heavy truck involvement accounted for 18.3 per cent of the total fatalities (Table 1.4).

- The two major crash type sub-groups for single vehicle crash fatal crashes involving a heavy truck are 'non-collision (curve)' and 'non-collision (straight)'. In multiple vehicle fatal crashes, the major crash type sub-groups are 'opposing directions' and 'same directions'. (Figure 1.6, 1.7 and 1.8).
- Over the last 5 years, 81 percent of fatalities in crashes involving an articulated truck occurred in an ABS Regional or Remote area. For heavy rigid truck involved fatalities, this proportion is 58 per cent (Table 1.6).
- By road type, national or state highways were the dominant road type for both articulated truck and heavy rigid truck involved fatalities. The respective proportions were 72 per cent and 49 per cent (Table 1.7).
- Approximately 70 per cent of fatalities in crashes involving articulated trucks occur in speed zones
  of 100 km/h or above. Fatal crashes involving heavy rigid trucks are more skewed towards lower
  speed limits, but almost 50 per cent still occur at high speed zones. These proportions have not
  changed appreciably over the last decade (Table 1.5).
- The latest hospitalisation data (2018) shows that approximately 510 heavy truck occupants are hospitalised from road crashes each year. High threat to life injuries comprises around 34 per cent of the total (Table 1.8).
- Over the decade, registrations of articulated trucks increased by an average of 2.4 per cent per year. Heavy rigid truck registrations increased by 1.2 per cent per year (Table 3.1).

#### Buses - 2019

- There was a total of 20 people were killed in crashes involving buses. The trend over the last 10 years was a slight annual increase of 0.6 per cent (Table 2.1).
- Over the last 10 years, bus involved crashes accounted for 0.4 per cent of the total single vehicle crash fatalities. In multiple vehicles crashes, bus involved crashes accounted for 0.3 per cent of the total (Table 2.3).
- By ABS Remoteness Area, the category of Major Cities was dominant for fatalities in crashes involving buses. This proportion over the last 5 years was 65 per cent of the total. Outer Regional accounted for 19 per cent and Inner Regional accounted for 14 per cent. (Table 2.5).
- Approximately 260 bus occupants are hospitalised (2013-2018) from crashes each year. Of these, around 22 per cent were categorised with high threat to life injuries (Table 2.6).
- Of single vehicle fatal crashes involving buses, the two major common crash type sub-groups are 'non-collision (curve)' and 'pedestrian'. In multiple vehicle fatal crashes, 'pedestrian' is also the major common crash type sub-group followed by 'opposing directions' (Figure 2.4, 2.5 and 2.6).
- Over the decade, registrations of buses increased by an average of 2.4 per cent per year (Table 3.1).

## **Data Sources**

Crash data in this report are sourced from the National Crash Database. This database is collated by BITRE using data from the states' and territories' road safety agencies. The scope is both fatal and injury crashes, and at present it covers the years 2010 to 2019. It is updated annually. Only fatal crash data is utilized in this report.

Non-fatal road traffic crash casualty data (referred to here as 'hospitalised injury') is collated from the Australian Institute of Health and Welfare (AIHW).

Vehicle registrations and vehicle kilometres travelled are sourced from The Australian Bureau of Statistics and BITRE respectively.

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Department of State Growth, Tasmania

Department of Infrastructure, Planning and Logistics, Northern Territory

Transport Canberra and City Services Directorate, Australian Capital Territory

National Injury Surveillance Unit, Flinders University

Australian Institute of Health and Welfare

Australian Bureau of Statistics

## Contents

At a glance		iii
Data Sources	S	V
Acknowledge	ements	v
Section I	Heavy trucks	1
Section 2	Bus	15
Section 3	Exposure	25
Glossary		28
References		30

# **HEAVY TRUCKS**

## **Tables**

Table I.I	Deaths from crashes involving heavy trucks2
Table 1.2	Deaths from crashes involving heavy trucks by state/territory3
Table 1.3	Deaths from crashes involving heavy trucks by road user4
Table 1.4	Deaths by crash type and vehicle type involved – heavy trucks5
Table 1.5	Distribution of deaths (%) across posted speed zones – crashes involving heavy trucks
Table 1.6	Distribution of deaths (%) across Remoteness Areas – crashes involving heavy trucks
Table 1.7	Distribution of deaths (%) across road type – crashes involving heavy trucks
Table 1.8	Deaths, hospitalised injuries and high threat to life injuries of heavy truck occupants9
Table 1.9	Fatal crashes involving heavy trucks by state/territory
Table 1.10	Annual fatal crashes per 10,000 heavy truck registrations
Table 1.11	Annual fatal crashes per billion heavy truck vehicle kilometres travelled (VKT)
Figures	
Figure 1.1	Deaths in crashes involving heavy trucks – with trends2
Figure 1.2	Distribution of deaths (%) across posted speed zones – crashes involving heavy trucks (5 years combined to 2019)6
Figure 1.3	Distribution of deaths (%) across Remoteness Areas – crashes involving heavy trucks (5 years combined to 2019)7
Figure 1.4	Distribution of deaths (%) across road type – crashes involving heavy trucks (5 years combined to 2019)8
Figure 1.5	Deaths, hospitalised injuries and high threat to life injuries of heavy truck occupants9
Figure 1.6	occupanto
	Common crash type (sub-groups) for fatal crashes involving a heavy truck 2017-2019
Figure 1.7	Common crash type (sub-groups) for fatal crashes involving a heavy truck

# BUS

# **Tables**

Table 2.1	Deaths from crashes involving a bus by state/territory
Table 2.2	Deaths from crashes involving a bus by road user
Table 2.3	Deaths by crash type and vehicle type involved – bus
Table 2.4	Distribution of deaths (%) across posted speed zones – crashes involving buses
Table 2.5	Distribution of deaths (%) across Remoteness Areas – crashes involving buses
Table 2.6	Deaths, hospitalised injuries and high threat to life injuries of bus occupants
Table 2.7	Fatal crashes involving a bus by state/territory
Table 2.8	Annual fatal crashes rates – bus involved
Figures	
Figure 2.1	Deaths in crashes involving a bus – with trend
Figure 2.2	Distribution of deaths (%) across Remoteness Areas – crashes involving buses (5 years combined to 2019)
Figure 2.3	Deaths, hospitalised injuries and high threat to life injuries of bus occupants
Figure 2.4	Common crash type (sub-groups) for fatal crashes involving a bus 2017-2019
Figure 2.5	Deaths in single vehicle crashes involving a bus – common crash types 2017-201922
Figure 2.6	Deaths in multiple vehicle crashes involving a bus – common crash types 2017-2019

# **EXPOSURE**

# Tables

Table 3.1	Motor vehicles on register – by state/territory	26
Table 3.2	Vehicle kilometres travelled (millions) by state/territory.	27

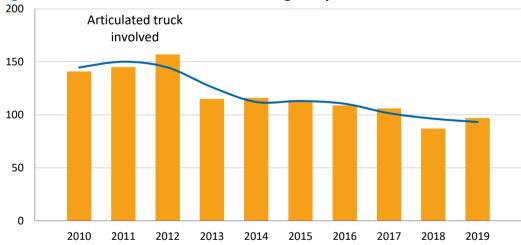
# Section I HEAVY TRUCKS

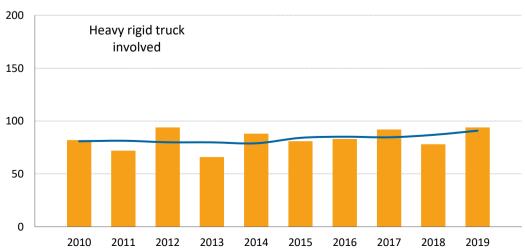
Table 1.1 Deaths from crashes involving heavy trucks<sup>a</sup>

	Any heavy truck	Articulated truck	Heavy rigid truck	All crashes <sup>c</sup>
	involved <sup>b</sup>	involved	involved	
2010	215	141	82	1,350
2011	213	145	72	1,277
2012	246	157	94	1,299
2013	177	115	66	1,185
2014	203	116	88	1,150
2015	191	113	81	1,205
2016	187	109	83	1,295
2017	189	106	92	1,223
2018	157	87	78	1,135
2019	188	97	94	1,184
Change last 12 months (%) Ave. trend change p.a.(%)	19.7	11.5	20.5	4.3
- for last 10 calendar year	rs -2.7	-5.4	1.4	-1.2
- for last 3 calendar years	-0.3	-4.3	1.1	-1.6

a Crashes involving a heavy truck may also involve other vehicles and vehicle types.

Figure 1.1 Deaths in crashes involving heavy trucks – with trends





b Crash involves either an articulated truck or a heavy rigid truck (or both).

All road crash deaths—whether or not involving a heavy truck.

Table 1.2 Deaths from crashes involving heavy trucks by state/territory

Table 1.2 Deaths i				-		by state			
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved									
2010	74	57	39	8	26	8	1	2	215
2011	63	42	52	19	24	5	7	1	213
2012	72	45	70	17	31	6	3	2	246
2013	53	28	48	15	27	2	4	0	177
2014	51	56	39	27	22	6	0	2	203
2015	57	41	43	18	22	8	1	1	191
2016	56	40	38	18	22	7	5	1	187
2017	79	38	29	11	24	7	1	0	189
2018	52	24	46	10	19	4	0	2	157
2019	55	45	34	28	18	5	1	2	188
Change last 12 months (%) Ave. trend change p.a.(%)	5.8	87.5	-26.1	180.0	-5.3	25.0	-	0.0	19.7
- for last 10 calendar years	-2.0	-3.6	-4.2	2.9	-4.1	-0.6	-	-	-2.7
- for last 3 calendar years	-16.6	8.8	8.3	59.5	-13.4	-15.5	-	-	-0.3
Articulated truck involved	I								
2010	51	37	29	7	12	3	1	1	141
2011	47	23	39	13	18	2	3	0	145
2012	50	30	45	10	17	3	2	0	157
2013	32	15	35	11	16	2	4	0	115
2014	31	27	31	12	10	3	0	2	116
2015	34	21	28	15	11	3	0	1	113
2016	26	22	25	11	13	6	5	1	109
2017	49	20	19	6	11	1	0	0	106
2018	26	14	29	6	12	0	0	0	87
2019	23	22	18	23	10	0	0	1	97
Change last 12 months (%) Ave. trend change p.a.(%)	-11.5	57.1	-37.9	283.3	-16.7	0.0	0.0	-	11.5
- for last 10 calendar years	-7.0	-5.5	-6.9	1.8	-4.3	-	-	-	-5.4
- for last 3 calendar years	-31.5	4.9	-2.7	95.8	-4.7	-	-	-	-4.3
Heavy rigid truck involved	1								
2010	24	22	14	2	14	5	0	1	82
2011	17	20	14	6	6	4	4	1	72
2012	23	15	27	7	15	4	1	2	94
2013	24	13	13	4	12	0	0	0	66
2014	21	29	8	15	12	3	0	0	88
2015	25	20	16	3	11	5	1	0	81
2016	32	19	13	7	10	2	0	0	83
2017	33	20	11	5	16	6	1	0	92
2018	29	10	20	5	8	4	0	2	78
2019	34	24	16	5	8	5	1	1	94
Change last 12 months (%) Ave. trend change p.a.(%)	17.2	140.0	-20.0	0.0	0.0	25.0	-	-50.0	20.5
- for last 10 calendar years	6.1	-1.1	-0.1	3.3	-2.0	-	-	-	1.4
- for last 3 calendar years	1.5	9.5	20.6	0.0	-29.3	-8.7	-	-	1.1

Table 1.3 Deaths from crashes involving heavy trucks by road user

	Heavy truck occupant	Light vehicle occupant	Pedestrian	Motor- cyclist	Pedal cyclist	Total <sup>a</sup>
Any heavy truck involved	•	•				
2010	34	134	19	16	11	215
2011	35	128	32	12	6	213
2012	43	147	31	20	3	246
2013	25	103	26	12	8	177
2014	36	117	20	21	7	203
2015	35	119	16	12	9	191
2016	36	114	13	17	6	187
2017	35	107	24	17	4	189
2018	36	86	13	11	10	157
2019	54	89	17	17	10	188
Change last 12 months (%) Ave. trend change p.a.(%)	50.0	3.5	30.8	54.5	0.0	19.7
- for last 10 calendar years	2.7	-4.6	-6.4	-0.2	2.2	-2.7
- for last 3 calendar years	24.2	-8.8	-15.8	0.0	58.1	-0.3
Articulated truck involved						
2010	24	89	14	7	6	141
2011	27	90	20	6	2	145
2012	37	93	18	8	0	157
2013	21	70	13	6	2	115
2014	25	68	9	9	3	116
2015	29	67	9	5	3	113
2016	23	68	6	7	4	109
2017	22	67	10	5	1	106
2018	25	51	3	4	3	87
2019	31	49	5	7	4	97
Change last 12 months (%) Ave. trend change p.a.(%)	24.0	-3.9	66.7	75.0	33.3	11.5
- for last 10 calendar years	-0.3	-6.5	-15.5	-3.2	-	-5.4
- for last 3 calendar years	18.7	-14.5	-29.3	18.3	100.0	-4.3
Heavy rigid truck involved						
2010	12	49	7	9	5	82
2011	9	40	13	6	4	72
2012	8	56	14	12	3	94
2013	7	34	13	6	6	66
2014	11	50	11	12	4	88
2015	9	52	7	7	6	81
2016	17	47	7	10	2	83
2017	16	44	15	13	3	92
2018	17	37	10	7	7	78
2019	26	40	12	10	6	94
Change last 12 months (%) Ave. trend change p.a.(%)	52.9	8.1	20.0	42.9	-14.3	20.5
- for last 10 calendar years - for last 3 calendar years	11.1 27.5	-1.5 -4.7	0.6 -10.6	2.1 -12.3	1.6 41.4	1.4 1.1

Table 1.4 Deaths by crash type and vehicle type involved - heavy trucks

	Single vehicle crash					
Artic	ulated	Heavy rigid	Non-heavy truck	Total		
	truck	truck	involved fatalities <sup>a</sup>			
2010	15	6	562	583		
2011	21	6	527	554		
2012	23	3	525	551		
2013	8	3	536	547		
2014	18	6	475	499		
2015	18	7	502	527		
2016	13	9	551	573		
2017	13	12	522	547		
2018	12	10	479	501		
2019	18	20	520	558		
Change last 12 months (%) Ave. trend change p.a.(%)	50.0	100.0	8.6	11.4		
- for last 10 calendar years	-2.2	16.2	-0.8	-0.6		
- for last 3 calendar years	17.7	29.1	-0.2	1.0		

a Includes passenger car, van, motorcycle, pedal cycle, bus and crashes where vehilcel type was not recorded or of a type not listed.

	Multiple vehicle crash								
Art	iculated	Heavy rigid	Heavy trucks	Non-heavy truck	Total <sup>b</sup>				
	truck	truck & light	only	involved fatalities a					
& light 4-1	vheeled	4-wheeled							
,	vehicles	vehicles							
2010	91	47	22	512	767				
2011	90	41	32	463	723				
2012	96	56	37	465	748				
2013	72	34	36	420	638				
2014	70	50	29	423	651				
2015	71	52	20	463	678				
2016	70	49	19	519	722				
2017	64	40	24	454	676				
2018	53	38	20	450	634				
2019	51	38	27	426	626				
Change last 12 months (% Ave. trend change p.a.(%)	) -3.8	0.0	35.0	-5.3	-1.3				
- for last 10 calendar yéa	rs -6.5	-1.8	-3.5	-0.8	-1.7				
- for last 3 calendar year	s -10.7	-2.5	6.1	-3.1	-3.8				

a Includes light 4-wheeled vehicles only, bus & light 4-wheeled vehicles, light 4-wheeled vehicles & motorcycle and crashes where vehicle type was not recorded or of a type not listed.

b Comprises multi-vehicle crashes with other combinations of vehicle types involved.

Examples include 4W vehicles plus pedal cycles and heavy vehicles plus motorcycles.

Table 1.5 Distribution of deaths (%) across posted speed zones – crashes involving heavy trucks

2	:40 km/h	50 km/h	60 km/h	70 to 90 km/h	100 km/h	≥110 km/h
Articulated truck involved	1					
2010	0.7	2.8	12.8	18.4	51.1	13.5
2011	1.4	4.1	8.3	21.4	42.8	21.4
2012	1.3	1.9	9.6	17.2	45.2	24.8
2013	0.9	1.7	10.4	22.6	40.9	23.5
2014	0.0	0.9	10.3	13.8	50.9	22.4
2015	0.9	2.7	11.5	15.0	46.9	21.2
2016	0.9	3.7	4.6	19.3	43.1	27.5
2017	2.8	4.7	6.6	17.0	40.6	28.3
2018	0.0	2.3	9.2	14.9	47.1	26.4
2019	1.0	3.1	4.1	15.5	38.1	37.1
Change last 12 months (%)	-	34.5	-55.2	3.5	-19.1	40.4
Heavy rigid truck involved	d					
2010	0.0	8.5	15.9	25.6	36.6	11.0
2011	2.8	8.3	15.3	29.2	34.7	8.3
2012	5.3	9.6	20.2	14.9	30.9	16.0
2013	0.0	6.1	28.8	21.2	39.4	4.5
2014	1.1	4.5	22.7	20.5	31.8	19.3
2015	2.5	4.9	16.0	27.2	39.5	7.4
2016	1.2	4.8	12.0	36.1	32.5	13.3
2017	3.3	14.1	12.0	23.9	32.6	13.0
2018	1.3	6.4	21.8	19.2	32.1	15.4
2019	1.1	10.6	10.6	21.3	38.3	17.0
Change last 12 months (%)	-17.0	66.0	-51.2	10.6	19.5	10.6

Figure 1.2 Distribution of deaths (%) across posted speed zones – crashes involving heavy trucks (5 years combined to 2019)

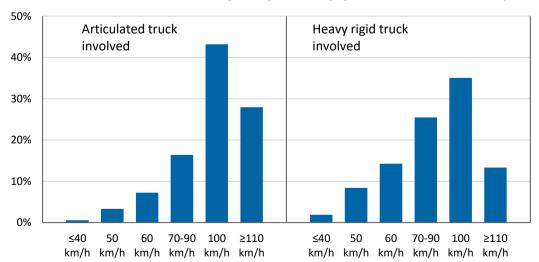


Table 1.6 Distribution of deaths (%) across Remoteness Areas - crashes involving heavy trucks

	Major	Inner	Outer	Remote	Very
	Cities	Regional	Regional		Remote
Articulated truck involve	d				
2010	19.9	38.3	33.3	5.7	2.8
2011	26.9	37.2	27.6	4.1	4.1
2012	16.6	40.1	31.8	7.0	4.5
2013	19.1	42.6	22.6	9.6	6.1
2014	15.5	44.8	31.0	4.3	4.3
2015	15.9	41.6	31.0	7.1	4.4
2016	20.2	30.3	38.5	5.5	5.5
2017	22.6	32.1	38.7	1.9	4.7
2018	14.9	36.8	39.1	5.7	3.4
2019	18.6	35.1	30.9	8.2	7.2
Change last 12 months (%)	24.2	-4.7	-20.9	43.5	109.3
Heavy rigid truck involve	ed				
2010	41.5	40.2	15.9	1.2	1.2
2011	29.2	38.9	26.4	4.2	1.4
2012	29.8	31.9	28.7	2.1	5.3
2013	56.1	22.7	18.2	1.5	1.5
2014	39.8	34.1	23.9	1.1	1.1
2015	40.7	27.2	24.7	6.2	1.2
2016	44.6	33.7	16.9	1.2	3.6
2017	42.4	29.3	19.6	6.5	2.2
2018	44.9	23.1	26.9	2.6	2.6
2019	39.4	33.0	18.1	5.3	4.3
Change last 12 months (%)	-12.3	42.9	-32.8	107.4	66.0

'Remoteness Areas' are classified as per Australian Statistical Geography Standard (ASGS) - 2016 edition.

Figure 1.3 Distribution of deaths (%) across Remoteness Areas – crashes involving heavy trucks (5 years combined to 2019)

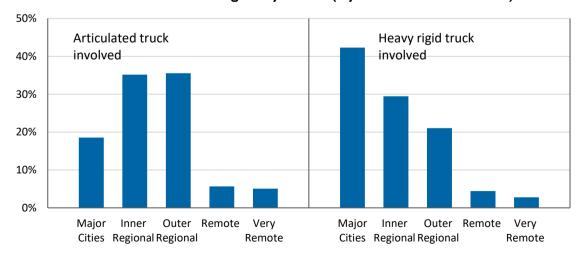


Table 1.7 Distribution of deaths (%) across road type – crashes involving heavy trucks

	National or	Arterial	Sub-arterial	Collector	Local	Other <sup>b</sup>
	State highway					
Articulated truck involve	d					
2010	60.3	15.6	9.9	1.4	12.1	0.0
2011	64.8	16.6	10.3	0.7	5.5	1.4
2012	71.3	14.0	5.1	2.5	6.4	0.6
2013	61.7	20.9	5.2	4.3	7.0	0.9
2014	65.5	17.2	11.2	3.4	1.7	0.9
2015	63.7	19.5	8.8	2.7	5.3	0.0
2016	58.7	20.2	9.2	4.6	6.4	0.9
2017	62.3	18.9	4.7	2.8	11.3	0.0
2018	64.4	10.3	8.0	4.6	12.6	0.0
2019	72.2	10.3	9.3	2.1	6.2	0.0
Change last 12 months (%)	12.1	-0.3	15.3	-55.2	-51.1	-
Heavy rigid truck involve	ed					
2010	52	23	6	9	10	0
2011	29	28	21	4	18	0
2012	41	20	12	5	19	0
2013	48	23	14	5	8	2
2014	31	38	15	6	11	0
2015	38	26	12	10	14	0
2016	39	31	14	5	11	0
2017	37	28	13	2	17	2
2018	38	27	9	9	13	3
2019	49	16	13	0	21	1
Change last 12 months (%)	27.2	-40.7	42.2	-100.0	66.0	-58.5

a Geoscape Australia.b Includes Access road, Path, Busway and Pedestrian thoroughfare.

Figure 1.4 Distribution of deaths (%) across road type – crashes involving heavy trucks (5 years combined to 2019)

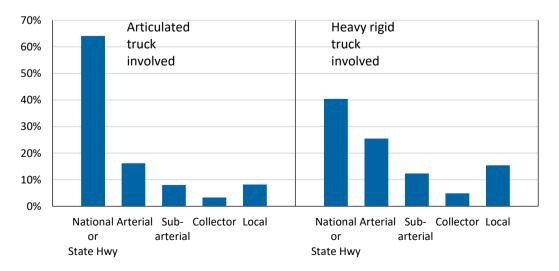


Table 1.8 Deaths, hospitalised injuries and high threat to life injuries of heavy truck occupants

Calendar year	Deaths	Hospitalised Injury (HI)	High threat to life (HTTL) Injury
2010	34	473	-
2011	35	562	-
2012	43	511	-
2013	25	485	166
2014	36	479	168
2015	35	510	160
2016	36	485	166
2017	35	528	176
2018	36	552	185
2019	54	-	

Note

There were breaks in the injury series in 2012 and 2017. These were due to changes in admissions criteria ar the net result were reductions in annual counts of between 3%-5%.

Sources

AIHW Unpublished 2021

Figure 1.5 Deaths, hospitalised injuries and high threat to life injuries of heavy truck occupants

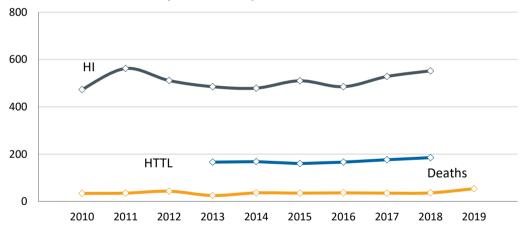
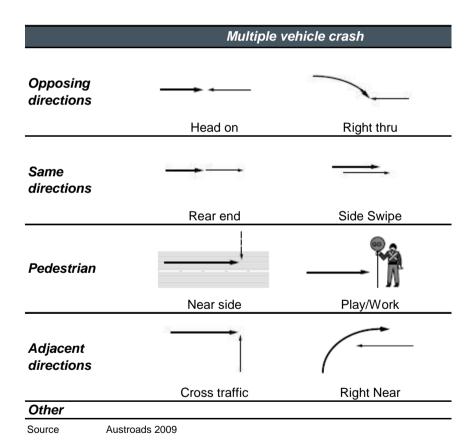


Table 1.9 Fatal crashes involving heavy trucks by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved									
2010	60	49	34	8	23	7	1	2	184
2011	57	34	44	18	21	5	5	1	185
2012	60	43	56	15	26	4	3	2	209
2013	49	25	37	12	24	2	3	0	152
2014	48	48	33	20	20	5	0	2	176
2015	52	39	37	14	20	7	1	1	171
2016	51	36	35	14	20	5	4	1	166
2017	66	37	27	11	23	7	1	0	172
2018	46	23	38	9	17	4	0	2	139
2019	51	42	31	25	16	5	1	2	173
Change last 12 months (%)	10.9	82.6	-18.4	177.8	-5.9	25.0	-	0.0	24.5
Ave. trend change p.a.(%)									
- for last 10 calendar years	-1.4	-2.4	-3.3	2.4	-3.5	0.8	-	-	-2.0
- for last 3 calendar years	-12.1	6.5	7.2	50.8	-16.6	-15.5	-	-	0.3
Articulated truck involved									
2010	41	32	25	7	12	3	1	1	122
2011	43	21	32	12	16	2	3	0	129
2012	39	29	35	9	13	3	2	0	130
2013	30	13	26	8	13	2	3	0	95
2014	28	25	25	10	9	2	0	2	101
2015	31	21	23	12	11	2	0	1	101
2016	22	20	23	10	11	4	4	1	95
2017	39	20	17	6	10	1	0	0	93
2018	23	13	25	5	10	0	0	0	76
2019	23	21	16	20	9	0	0	1	90
Change last 12 months (%)	0.0	61.5	-36.0	300.0	-10.0	0.0	0.0	-	18.4
Ave. trend change p.a.(%)									
- for last 10 calendar years	-6.1	-4.7	-5.8	1.3	-4.4	-	-	-	-4.8
- for last 3 calendar years	-23.2	2.5	-3.0	82.6	-	-	-	-	-1.6
Heavy rigid truck involved	ı								
2010	20	19	11	2	11	4	0	1	68
2011	15	14	13	6	5	4	2	1	60
2012	22	14	23	6	14	2	1	2	84
2013	22	12	11	4	12	0	0	0	61
2014	21	23	8	10	11	3	0	0	76
2015	22	18	15	2	9	5	1	0	72
2016	30	17	12	4	10	2	0	0	75
2017	29	19	11	5	16	6	1	0	87
2018	25	10	15	5	8	4	0	2	69
2019	30	22	15	5	7	5	1	1	86
Change last 12 months (%) Ave. trend change p.a.(%)	20.0	120.0	0.0	0.0	-12.5	25.0	-	-50.0	24.6
- for last 10 calendar years	6.0	0.8	0.6	2.7	_	_	_	-	2.4
- for last 3 calendar years	1.7	7.6	16.8	0.0	-33.9	-8.7	_	_	-0.6
ioi ladi o dalondar yours	1.7	7.0	.0.0	0.0	55.5	5.1		_	0.0

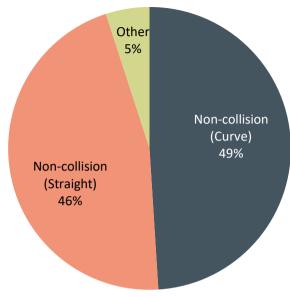
Figure 1.6 Common crash type (sub-groups) for fatal crashes involving a heavy truck 2017-2019

Main Crash Type	Sub-group						
	Single vehicle crash						
Non-collision (Curve)	or Off Car/way at left bend	or Off Car/way at right bend					
Non-collision (Straight)	981	- Por					
	Off Left	Off Right					
Other							



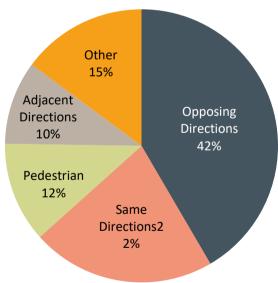
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Figure 1.7 Deaths in single vehicle crashes involving a heavy truck – common crash types 2017-2019



Source Austroads 2009

Figure 1.8 Deaths in multiple vehicle crashes involving a heavy truck – common crash types 2017-2019



Note The data in Figure 1.6, 1.7 and 1.8 are based on state and territory Road User Movement (RUM) and DCA Definitions for

Coding Accidents (DCA) codes. Data from each jurisdiction has been collated into a national system using the diagrams in (Austroads 2009). In these coding systems there are 10 main crash type groups; within each main group there are several

sub-groups.

Total % includes other subgroups.

Source Austroads 2009

Table 1.10 Annual fatal crashes per 10,000 heavy truck registrations

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved									
2010	6.0	4.8	3.8	2.6	3.8	7.0	2.0	10.6	4.6
2011	5.5	3.3	5.0	5.7	3.4	4.9	9.6	5.2	4.6
2012	5.8	4.2	6.2	4.7	4.1	3.9	5.7	10.4	5.1
2013	4.7	2.4	4.0	3.8	3.6	1.9	5.4	0.0	3.6
2014	4.5	4.6	3.5	6.4	2.9	4.9	0.0	10.8	4.2
2015	4.7	3.7	4.0	4.5	2.9	6.7	1.7	5.6	4.0
2016	4.5	3.4	3.8	4.5	2.9	4.7	6.7	5.6	3.9
2017	5.6	3.4	2.9	3.5	3.3	6.5	1.7	0.0	3.9
2018	3.8	2.1	4.0	2.8	2.5	3.6	0.0	11.2	3.1
2019	4.1	3.6	3.2	7.9	2.3	4.3	1.7	10.9	3.8
Change last 12 months (%)	8.3	76.9	-20.0	177.7	-6.3	20.7	-	-3.1	22.0
Ave. trend change p.a.(%)									
- for last 10 calendar years	-3.6	-3.6	-4.3	2.2	-5.0	-	-	-	-3.4
- for last 3 calendar years	-14.3	3.6	4.8	50.8	-16.5	-18.3	-	-	-1.7
Articulated truck involved	1								
2010	24.3	13.1	13.4	9.6	9.8	18.3	9.7	51.0	14.8
2011	23.1	8.4	16.9	15.3	12.7	11.9	28.1	0.0	15.0
2012	20.5	11.5	17.9	11.2	9.8	18.5	18.2	0.0	14.8
2013	15.4	5.1	12.5	10.0	9.1	12.8	25.4	0.0	10.5
2014	14.1	9.6	11.6	12.0	6.0	12.6	0.0	136.1	10.8
2015	15.0	8.0	10.9	14.2	7.0	12.1	0.0	69.9	10.6
2016	10.3	7.5	11.1	11.9	7.0	23.2	31.8	62.5	9.9
2017	17.4	7.3	8.0	6.9	6.6	5.5	0.0	0.0	9.5
2018	10.1	4.6	11.3	5.7	6.5	0.0	0.0	0.0	7.5
2019	10.0	7.2	7.1	22.5	5.7	0.0	0.0	54.3	8.7
Change last 12 months (%) Ave. trend change p.a.(%)	-1.3	57.5	-37.6	295.7	-12.6	0.0	0.0	-	15.7
- for last 10 calendar years	-9.1	-6.4	-7.6	-0.6	-7.2	_	_	_	-7.0
- for last 3 calendar years	-24.2	-0.6	-6.2	79.9	-6.9	-	-	-	-4.0
Heavy rigid truck involved									
2010	<b>.</b> 2.4	2.5	1.6	0.9	2.3	4.8	0.0	5.9	2.2
2011	1.8	1.8	1.9	2.5	1.0	4.7	4.9	5.8	1.9
2012	2.6	1.8	3.3	2.5	2.8	2.3	2.4	11.5	2.6
2013	2.6	1.5	1.5	1.7	2.3	0.0	0.0	0.0	1.9
2014	2.4	2.9	1.1	4.3	2.0	3.4	0.0	0.0	2.3
2015			2.1						
2016	2.5 3.3	2.3 2.1	2.1 1.7	0.9 1.7	1.7 1.8	5.7 2.3	2.2 0.0	0.0	2.2 2.2
2017	3.3 3.1	2.1	1.7	2.2	3.0	2.3 6.7	2.2	0.0	
2017	3.1 2.6	2.3 1.2	2.0	2.2	3.0 1.5	4.3	0.0	12.4	2.5 2.0
2019	3.0	2.6	2.0	2.2	1.3	4.3 5.3	2.2	6.1	2.0
Change last 12 months (%)	16.9	112.7	-1.8	0.4	-12.3	21.9	-	-51.2	22.2
Ave. trend change p.a.(%)									
- for last 10 calendar years	3.8	-0.3	-0.2	3.1	-1.7	_	_	_	1.1
- IUI Iast IU Calellual yeals	5.0								
- for last 3 calendar years	-1.2	4.7	14.7	0.6	-33.4	-11.2	-	_	-2.4

Table I.II Annual fatal crashes per billion heavy truck vehicle kilometres travelled (VKT)

Ci av oii	CG (110	•••							
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Any heavy truck involved	1								
2010	10.7	9.8	14.7	9.7	14.2	27.5	12.8	22.8	12.2
2011	12.1	13.3	9.6	6.9	12.5	19.1	6.3	22.7	11.7
2012	11.1	9.0	12.0	15.1	10.9	13.4	31.3	10.9	11.3
2013	11.5	11.0	14.6	12.2	13.1	10.8	18.5	21.2	12.4
2014	9.5	6.3	9.3	9.7	11.5	5.4	18.1	0.0	8.9
2015	8.9	11.9	8.1	16.0	9.2	13.5	0.0	20.6	10.0
2016	9.2	9.5	9.0	11.2	9.1	18.5	5.8	10.0	9.5
2017	8.8	8.6	8.4	11.0	9.0	12.9	23.2	9.7	9.1
2018	11.5	8.6	6.3	8.5	10.3	17.8	5.7	0.0	9.3
2019	8.0	5.2	8.7	7.0	7.6	9.9	0.0	18.1	7.4
Change last 12 months (%)	-30.7	-39.6	37.2	-18.5	-26.1	-44.3	-100.0	-	-20.5
Ave. trend change p.a.(%)									
- for last 10 calendar years	-2.9	-5.2	-6.5	-1.7	-5.5	-4.4	-	-	-4.6
- for last 3 calendar years	-4.8	-22.0	1.9	-20.6	-8.1	-12.3	-	-	-9.5
Articulated truck involved	d								
2010	14.6	10.7	24.9	15.2	15.3	54.3	28.2	0.0	17.0
2011	18.0	19.8	17.0	11.7	16.1	20.2	13.9	63.2	17.6
2012	18.3	12.6	20.9	19.2	20.1	13.2	41.4	0.0	17.9
2013	16.3	16.9	21.7	13.9	15.3	20.0	27.1	0.0	17.4
2014	12.3	7.5	15.4	12.2	14.4	13.5	39.5	0.0	12.4
2015	11.3	14.1	14.4	15.1	9.5	13.5	0.0	116.1	12.9
2016	12.0	11.7	13.3	18.2	11.6	13.0	0.0	55.7	12.7
2017	8.5	11.0	13.2	14.8	11.7	25.4	50.7	53.3	11.8
2018	14.8	10.9	9.6	8.8	10.6	6.2	0.0	0.0	11.4
2019	8.7	7.0	14.0	7.2	10.4	12.2	0.0	0.0	9.5
Change last 12 months (%) Ave. trend change p.a.(%)	-41.3	-35.9	45.1	-17.6	-1.9	95.6	0.0	0.0	-17.1
- for last 10 calendar years	-6.4	-5.5	-7.6	-5.3	_	-11.3	_	_	-6.6
- for last 3 calendar years	1.4	-20.4	3.0	-30.2	-5.8	-30.7	_	-	-10.4
Heavy rigid truck involve 2010	<b>d</b> 9.4	10.1	7.9	3.7	14.3	9.3	0.0	27.8	8.8
	9. <del>4</del> 7.8	9.2	5.3	3. <i>1</i> 3.6	10.0	9.3 18.4	0.0	13.8	9.0
2011	7.0 5.5	9.2 6.6	5.3 6.1	10.5	4.4	18.1	23.0	13.0	9.0
2012 2013	5.5 7.9	6.4						25.7	
2014	7.9 8.1	5.4	10.3 4.8	10.3	12.3	9.1 0.0	11.3		9.4
				6.9	10.1		0.0	0.0	9.6
2015 2016	7.3 7.1	10.1 7.8	3.4 6.3	17.0 3.4	8.9 7.2	13.5 22.2	0.0 10.7	0.0	9.8 10.0
2017	7.1 9.4	7.8 7.1	6.3 4.9	3.4 6.7	7.2 7.8	22.2 8.7	0.0	0.0	10.0
2018	9. <del>4</del> 9.5	7.1 7.8	4.9 4.4	8.3	7.6 12.4	25.8	10.5	0.0	10.5
2019	8.0	3.9	5.8	8.3	6.3	8.4	0.0	22.1	10.8
Change last 12 months (%)	-15.4	-49.4	31.9	0.6	-49.4	-67.6	-100.0		3.4
Ave. trend change p.a.(%)			0110	0.0	.0	51.10			0.1
- for last 10 calendar years	1.4	-4.8	-4.2	5.3	-2.9	-	-	-	2.4
- for last 3 calendar years	-7.6	-25.8	8.6	11.2	-10.3	-2.0	-	-	3.0
Source BITRE Unpublishe									
•									

# Section 2 BUS

Table 2.1 Deaths from crashes involving a bus<sup>a</sup> by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Bus involved									
2010	9	2	4	3	1	1	1	1	22
2011	11	4	8	0	1	0	0	0	24
2012	6	3	7	1	5	0	0	0	22
2013	2	3	6	0	0	0	1	0	12
2014	6	4	1	1	6	0	0	1	19
2015	5	7	2	1	2	1	3	1	22
2016	10	2	3	3	2	0	2	0	22
2017	6	10	10	0	2	0	2	0	30
2018	7	5	5	0	1	0	0	1	19
2019	10	6	0	2	2	0	0	0	20
Change last 12 months (%) Ave. trend change p.a.(%)	42.9	20.0	-100.0	-	100.0	0.0	0.0	-	5.3
- for last 10 calendar years - for last 3 calendar years	1.5 29.1	10.7 -22.5	-	-	0.0	-	-	-	0.6 -18.4

a Crashes involving a bus may involve other vehicles and vehicle types.

Figure 2.1 Deaths in crashes involving a bus – with trend

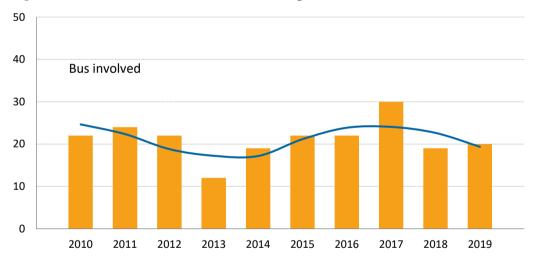


Table 2.2 Deaths from crashes involving a bus by road user

оссир	Bus pant	Light vehicle occupant	Pedestrian	Motor- cyclist	Pedal cyclist	Total <sup>a</sup>
2010	3	6	3	8	1	22
2011	2	5	13	2	2	24
2012	5	9	6	2	0	22
2013	0	6	1	2	3	12
2014	5	5	5	1	3	19
2015	4	13	2	3	0	22
2016	3	8	8	3	0	22
2017	12	5	11	1	1	30
2018	0	6	9	2	2	19
2019	2	6	8	3	1	20
Change last 12 months (%) Ave. trend change p.a.(%)	-	0.0	-11.1	50.0	-50.0	5.3
- for last 10 calendar years - for last 3 calendar years	-	0.1 9.5	9.3 -14.7	-5.9 73.2	0.0	0.6 -18.4

a Total includes unknown.

Table 2.3 Deaths by crash type and vehicle type involved - bus

	Single vehicle crash						
·	Bus	Non-bus	Total				
		involved fatalities <sup>a</sup>					
2010	3	580	583				
2011	1	553	554				
2012	2	549	551				
2013	0	547	547				
2014	4	495	499				
2015	1	526	527				
2016	2	571	573				
2017	7	540	547				
2018	0	501	501				
2019	0	558	558				
Change last 12 months (%) Ave. trend change p.a.(%)	0.0	11.4	11.4				
- for last 10 calendar years	-	-0.6	-0.6				
- for last 3 calendar years	-	1.7	1.0				

a Includes passenger car, van, articulated truck, heavy rigid truck, motorcycle, pedal cycle and crashes where vehicle type was not recorded or of a type not listed.

Table 2.3 Deaths by crash type and vehicle type involved - bus (continued)

	Multiple vehicle crash						
	Bus &	Non-bus	Total <sup>b</sup>				
Heavy	truck	involved fatalities <sup>a</sup>					
2010	1	766	767				
2011	1	722	723				
2012	6	742	748				
2013	0	638	638				
2014	1	650	651				
2015	2	676	678				
2016	1	721	722				
2017	5	671	676				
2018	0	634	634				
2019	2	624	626				
Change last 12 months (%) Ave. trend change p.a.(%)	-	-1.6	-1.3				
- for last 10 calendar years	-	-1.7	-1.7				
- for last 3 calendar years	-	-3.6	-3.8				

a Includes light 4-wheeled vehicles only, articulated truck & light 4-wheeled vehicles, heavy rigid truck & light 4-wheeled vehicles, light 4-wheeled vehicles, light 4-wheeled vehicles & motorcycle and crashes where vehicle type was not recorded or of a type not listed. b Comprises multi-vehicle crashes with other combinations of vehicle types involved.

Table 2.4 Distribution of deaths (%) across posted speed zones – crashes involving buses

	≤40 km/h	50 km/h	60 km/h	70 to 90 km/h	100 km/h	≥110 km/h
2010	0.0	9.1	45.5	27.3	13.6	0.0
2011	12.5	37.5	25.0	8.3	16.7	0.0
2012	4.5	13.6	40.9	18.2	4.5	18.2
2013	8.3	8.3	50.0	0.0	16.7	16.7
2014	0.0	10.5	31.6	10.5	15.8	26.3
2015	4.5	0.0	40.9	13.6	22.7	13.6
2016	4.5	22.7	50.0	4.5	9.1	9.1
2017	10.0	20.0	20.0	16.7	33.3	0.0
2018	10.5	21.1	15.8	15.8	21.1	5.3
2019	10.0	20.0	20.0	25.0	10.0	15.0
Change last 12 months (%	<i>6)</i> -5.0	-5.0	26.7	58.3	-52.5	185.0

Examples include 4W vehicles plus pedal cycles and heavy vehicles plus motorcycles.

Table 2.5 Distribution of deaths (%) across Remoteness Areas – crashes involving buses

	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote
2010	59.1	27.3	13.6	0.0	0.0
2011	79.2	12.5	4.2	4.2	0.0
2012	68.2	4.5	9.1	13.6	4.5
2013	50.0	25.0	16.7	0.0	8.3
2014	47.4	0.0	26.3	0.0	26.3
2015	45.5	18.2	36.4	0.0	0.0
2016	77.3	4.5	9.1	0.0	9.1
2017	60.0	16.7	16.7	3.3	3.3
2018	63.2	15.8	15.8	5.3	0.0
2019	65.0	15.0	20.0	0.0	0.0
Change last 12 months (%)	2.9	-5.0	26.7	-100.0	0.0

a 'Remoteness Areas' are classified as per Australian Statistical Geography Standard (ASGS) - 2016 edition.

Figure 2.2 Distribution of deaths (%) across Remoteness Areas – crashes involving buses (5 years combined to 2019)

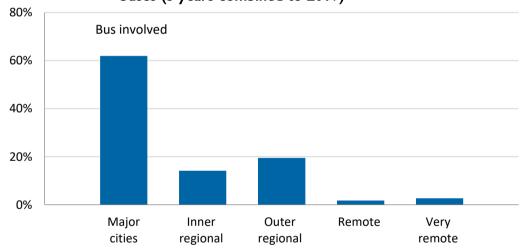


Table 2.6 Deaths, hospitalised injuries and high threat to life injuries of bus occupants

Calendar year	Deaths	Hospitalised Injury	High threat to life (HTTL) Injury
2010	3	247	-
2011	2	215	-
2012	5	219	
2013	0	227	56
2014	5	292	66
2015	4	246	38
2016	3	284	67
2017	12	266	56
2018	0	248	54
2019	2		

Note

There were breaks in the injury series in 2012 and 2017. These were due to changes in admissions criteria and the net result were reductions in annual counts of between 3%-5%.

Sources

AIHW Unpublished 2021

Figure 2.3 Deaths, hospitalised injuries and high threat to life injuries of bus occupants

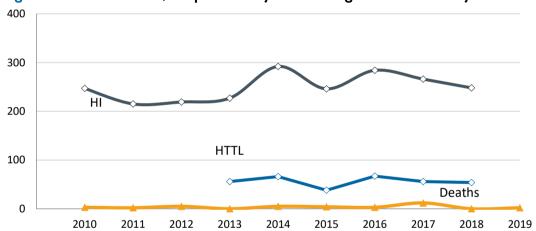
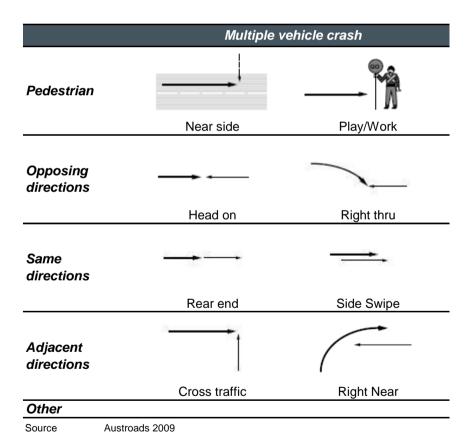


Table 2.7 Fatal crashes involving a bus by state/territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
2010	9	2	3	3	1	1	1	1	21
2011	11	4	7	0	1	0	0	0	23
2012	6	3	6	1	3	0	0	0	19
2013	2	3	5	0	0	0	1	0	11
2014	6	3	1	1	3	0	0	1	15
2015	5	6	2	1	2	1	1	1	19
2016	10	2	3	3	2	0	1	0	21
2017	6	7	8	0	2	0	2	0	25
2018	7	5	5	0	1	0	0	1	19
2019	9	6	0	2	1	0	0	0	18
Change last 12 months (%) Ave. trend change p.a.(%)	28.6	20.0	-100.0	-	0.0	-	-	-100.0	-5.3
- for last 10 calendar years	0.9	9.6	-	-	-	-	-	-	0.5
- for last 3 calendar years	22.5	-7.4	-	-	-29.3	-	-	-	-15.1

Figure 2.4 Common crash type (sub-groups) for fatal crashes involving a bus 2017–2019

Main Crash Type	Sub-group								
	Single vehicle crash								
Non-collision (Curve)	or Off Car/way at left bend	or Off Car/way at right bend							
Pedestrian									
	Near side	Play/Work							
Miscellaneous									



• 21 •

Figure 2.5 Deaths in single vehicle crashes involving a bus – common crash types 2017-2019

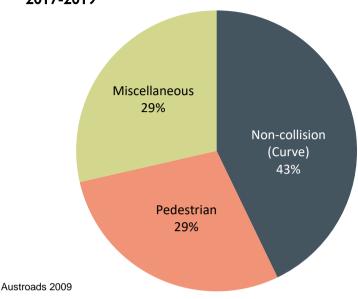
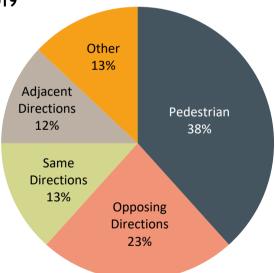


Figure 2.6 Deaths in multiple vehicle crashes involving a bus – common crash types 2017-2019



Note The data in Figure 2.4, 2.5 and 2.6 are based on state and territory Road User Movement (RUM) and DCA Definitions for

Coding Accidents (DCA) codes. Data from each jurisdiction has been collated into a national system using the diagrams in (Austroads 2009). In these coding systems there are 10 main crash type groups; within each main group there are several

sub-groups.

Total % includes other subgroups.

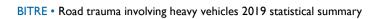
Source Austroads 2009

Source

Table 2.8 Annual fatal crashes rates – bus involved

F	Per 10,000 bus registrations	Per billion bus VKT
2010	2.4	9.5
2011	2.6	10.1
2012	2.1	8.1
2013	1.2	4.6
2014	1.6	6.1
2015	2.0	7.7
2016	2.2	8.5
2017	2.6	10.0
2018	1.9	7.6
2019	1.8	7.1
Change last 12 months (%	-6.0	-5.6

Change last 12 months (%)
Source ABS 2020 and BITRE Unpublished 2020.



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# Section 3 EXPOSURE

Table 3.1 Motor vehicles on register – by state/territory

			•		•				
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Articulated truck									
2010	16,907	24,476	18,648	7,310	12,229	1,637	1,033	196	82,436
2011	18,578	25,134	18,899	7,835	12,590	1,677	1,069	183	85,965
2012	19,009	25,265	19,595	8,016	13,217	1,625	1,099	169	87,995
2013	19,505	25,560	20,720	7,988	14,226	1,563	1,181	161	90,904
2014	19,906	26,107	21,496	8,326	15,054	1,584	1,233	147	93,853
2015	20,622	26,160	21,060	8,429	15,680	1,652	1,229	143	94,975
2016	21,450	26,779	20,784	8,423	15,609	1,721	1,259	160	96,185
2017	22,472	27,472	21,162	8,638	15,242	1,808	1,145	169	98,108
2018	22,795	28,456	22,061	8,797	15,368	1,900	1,149	168	100,694
2019	23,084	29,192	22,633	8,892	15,833	2,057	1,163	184	103,038
Change last 12 months (%) Ave. trend change p.a.(%)	1.3	2.6	2.6	1.1	3.0	8.3	1.2	9.5	2.3
- for last 10 calendar years	3.3	1.8	2.0	1.9	2.9	2.3	1.2	-0.7	2.4
- for last 3 calendar years	1.4	3.1	3.4	1.5	1.9	6.7	0.8	4.3	2.5
Heavy rigid truck									
2010	83,267	76,604	70,000	23,241	48,352	8,385	3,888	1,698	315,435
2011	84,401	77,339	69,262	23,692	49,089	8,597	4,116	1,727	318,223
2012	85,087	78,324	70,124		50,483	8,578	4,207	1,746	322,115
2013	85,807	78,490	71,366	23,326	52,218	8,720	4,359	1,712	325,998
2014	86,973	78,376	72,362		53,739	8,698	4,478	1,704	329,464
2015	88,977	78,446	71,911	22,982	54,366	8,773	4,600	1,644	331,699
2016	91,242	79,506	71,776	22,886	54,219	8,838	4,724	1,621	334,812
2017	94,933	81,460	72,544	23,096	53,899	8,999	4,633	1,614	341,179
2018	97,953	83,233	73,896	22,918	53,367	9,271	4,718	1,610	346,966
2019	100,546	86,103	75,255	22,828	53,228	9,510	4,638	1,651	353,759
Change last 12 months (%) Ave. trend change p.a.(%)	2.6	3.4	1.8	-0.4	-0.3	2.6	-1.7	2.5	2.0
- for last 10 calendar years	2.1	1.1	0.8	-0.3	1.2	1.2	2.0	-0.8	1.2
- for last 3 calendar years	2.9	2.8	1.9	-0.6	-0.6	2.8	0.1	1.1	1.8
Bus									
2010	22,865	18,407	19,403	5,118	13,418	2,548	3,577	1,031	86,367
2011	23,390	18,817	19,542	5,271	13,597	2,594	3,592	1,080	87,883
2012	23,762	19,354	20,220	5,462	14,371	2,701	3,660	1,069	90,599
2013	24,210	19,509	21,026	5,529	15,133	2,744	3,810	1,073	93,034
2014	24,617	19,623	21,337	5,622	15,322	2,667	3,882	1,061	94,131
2015	25,249	19,832	21,432	5,554	15,463	2,690	3,888	1,041	95,149
2016	25,939	20,302	21,455	5,691	15,362	2,818	3,964	1,051	96,582
2017	26,761	20,626	21,361	5,766	14,746	2,859	3,768	1,043	96,930
2018	27,166	21,063	21,831	5,947	14,661	2,906	3,911	1,080	98,565
2019	27,605	21,432	21,944	5,909	14,698	3,008	3,647	1,136	99,379
Change last 12 months (%) Ave. trend change p.a.(%)	1.6	1.8	0.5	-0.6	0.3	3.5	-6.8	5.2	0.8
- for last 10 calendar years	2.2	1.6	1.4	1.5	0.9	1.6	0.6	0.4	1.5
- for last 3 calendar years	1.6	1.9	1.4	1.2	-0.2	2.6	-1.6	4.4	1.3
Source ABS 2020									

Table 3.2 Vehicle kilometres travelled (millions) by state/territory

Table 3.2 Venicle kilometres travelled (millions) by state/territory										
	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia	
Articulated truck										
2010	2,284	1,613	1,473	600	745	148	72	16	6,950	
2011	2,346	1,664	1,531	624	797	151	72	16	7,202	
2012	2,386	1,714	1,613	649	850	150	74	16	7,452	
2013	2,432	1,731	1,692	656	901	148	76	17	7,652	
2014	2,478	1,773	1,741	663	945	148	78	17	7,843	
2015	2,575	1,790	1,725	658	945	154	80	18	7,945	
2016	2,598	1,820	1,743	675	940	158	79	19	8,031	
2017	2,630	1,842	1,763	685	945	160	79	19	8,123	
2018	2,644	1,868	1,786	693	963	164	79	20	8,217	
2019	2,663	1,895	1,811	698	969	168	80	20	8,305	
Change last 12 months (%) Ave. trend change p.a.(%)	0.7	1.4	1.4	0.7	0.7	2.5	0.5	1.9	1.1	
- for last 10 calendar years	1.8	1.7	2.1	1.5	2.7	1.4	1.2	2.9	1.9	
- for last 3 calendar years	0.6	1.4	1.4	0.9	1.3	2.4	0.5	2.1	1.1	
Divid two le										
Rigid truck 2010	2,834	2,063	2,066	553	1,099	217	87	72	8,991	
2011	2,883	2,111	2,135	569	1,129	221	87	76	9,211	
2012	2,923	2,111	2,133	580	1,141	220	89	78	9,447	
2012	2,923	2,165	2,233	581	1,141	222	90	78	9,447	
2013				587			92	80		
	3,008	2,269	2,351		1,234	222			9,843	
2015	3,094	2,310	2,388	587	1,254	225	94	82	10,033	
2016	3,186	2,379	2,449	594	1,285	230	93	85	10,300	
2017	3,265	2,446	2,511	603	1,294	233	95	86	10,535	
2018	3,362	2,544	2,597	600	1,278	239	97	91	10,807	
2019	3,452	2,623	2,666	603	1,284	246	98	94	11,064	
Change last 12 months (%) Ave. trend change p.a.(%)	2.7	3.1	2.7	0.4	0.4	2.7	0.9	3.6	2.4	
- for last 10 calendar years	2.2	2.6	2.7	0.9	1.9	1.3	1.4	2.7	2.3	
- for last 3 calendar years	2.8	3.6	3.0	-0.1	-0.4	2.8	1.2	4.3	2.5	
Bus										
2010	584	428	539	156	330	49	86	31	2,203	
2011	598	451	560	157	338	50	88	33	2,274	
2012	616	482	583	159	348	50	89	34	2,360	
2013	622	472	607	159	365	49	92	35	2,400	
2014	628	473	620	159	382	50	94	36	2,441	
2015	637	476	616	161	383	51	95	35	2,456	
2016	646	482	620	163	385	52	97	36	2,480	
2017	656	489	617	164	384	52	96	36	2,494	
2018	666	497	615	164	385	53	96	37	2,514	
2019	669	499	616	165	386	53	96	37	2,522	
Change last 12 months (%)	0.4	0.3	0.2	0.4	0.3	0.3	0.2	0.4	0.3	
Ave. trend change p.a.(%)	<b>.</b>	3.0	٠.ــ	J	3.0	0.0		J	0.0	
- for last 10 calendar years	1.5	1.3	1.3	0.7	1.8	1.0	1.3	1.5	1.4	
- for last 3 calendar years	1.0	1.0	0.0	0.2	0.3	1.1	-0.2	1.6	0.5	
Source BITRE Unpublishe										

## **Glossary**

The following definitions are general explanations only. The precise definitions vary across the organisations that provide the source data. These differences may result in minor inconsistencies between jurisdictions for some variables.

Road deaths from recent months are preliminary and subject to revision.

Articulated truck A motor vehicle primarily for load carrying, consisting of a prime mover that

has no significant load carrying area but with a turntable device which can be

linked to one or more trailers.

Bus A motor vehicle constructed for the carriage of passengers which has at least

10 seats, including the driver's seat.

Crash Any apparently unpremeditated event reported to police, or other relevant

authority, and resulting in death, injury or property damage attributable to the

movement of a road vehicle on a public road.

Fatal crash A crash for which there is at least one death.

Gross Vehicle Mass

(GVM)

Tare weight (i.e. unladen weight) of the motor vehicle plus its maximum

carrying capacity excluding trailers.

Heavy rigid truck A motor vehicle of GVM greater than 4.5 tonnes constructed with a load

carrying area. Includes a rigid truck with a tow bar, draw bar or other non-

articulated coupling on the rear of the vehicle.

Heavy truck A heavy rigid truck or an articulated truck

High threat to life

injury

'High threat to life' hospitalised injury cases are a subset of all hospitalised injury cases, referred to also as 'life-threatening' injuries. They are selected on the

basis of having an ICD Injury Severity Score (ICISS) of less than 0.941. See

Henley G & Harrison JE 2015 for definition and discussion.

Hospitalised injury A person admitted to hospital from a crash occurring in 'traffic', which is defined

here as excluding off-road and unknown locations.

Light vehicle A light vehicle is a four-wheeled vehicle under 4.5 tonnes, most commonly

passenger cars, but including vans and light commercial vehicles as well.

Motorcyclist A motorcyclist is a rider of a two-wheeled motor vehicle. In this report,

'motorcyclist' includes pillion passengers.

Occupant A driver or passenger of a four-wheeled motor vehicle.

Pedal cyclist A pedal cyclist is a rider of a bicycle, which is a vehicle with 2 or more wheels

that is built to be propelled by human power. In this report, 'pedal cyclist'

includes pillion passengers.

Road death or fatality

A person who dies within 30 days of a crash as a result of injuries received in that crash.

Trend per cent changes

In this report, the figures for the 'average trend change p.a.(%)' are calculated by fitting an exponential trend line to the set of data points. The Excel function LOGEST performs the fit. The resulting trend line represents a constant annual percent change over the period. Notes: (i) The occurrence of a *zero* in the original series precludes trend estimation by this method; (ii) When fitted to a series containing small numbers, the result may not be a reliable indicator of a stable trend.

Trend estimation

Trend lines presented are designed to track long-term trends and turning points in the raw data. Whittaker- Henderson smoothers have been used with value of 2 for the smoothing parameter. The application R (package pracma) can be used for such trend lines.

## References

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