

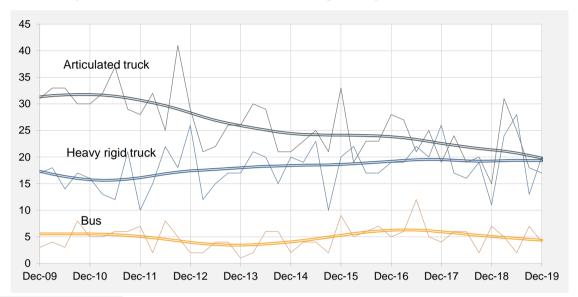
Australian Government

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

Fatal heavy vehicle crashes Australia quarterly bulletin

Oct - Dec 2019

Quarterly counts of fatal crashes involving heavy vehicles, Australia, with trends



Key features

- During the 12 months to the end of December 2019, 188 people died from 173 fatal crashes involving heavy trucks.
 These included 98 deaths from 91 crashes involving articulated trucks, 93 deaths from 85 crashes involving heavy rigid trucks and 3 deaths from 3 crashes involving both a heavy rigid truck and an articulated truck^a.
- Fatal crashes involving heavy trucks:
 - increased over the last 12 months by 27.2 per cent when compared with the corresponding 12-month period one year earlier (from 136 to 173 crashes)
 - decreased by an average of 0.6 per cent per year over the three years to December 2019.
 - Fatal crashes involving articulated trucks:
 - increased over the last 12 months by 16.7 per cent compared with the corresponding period one year earlier (from 78 to 91 crashes)
 - decreased by an average of 2.3 per cent per year over the three years to December 2019.
 - Fatal crashes involving heavy rigid trucks:
 - increased over the last 12 months by 34.9 per cent compared with the corresponding 12-month period one year earlier (from 63 to 85 crashes)
 - increased by an average of 0.5 per cent per year over the three years to December 2019.
- During the 12 months to December 2019, 20 people died in 18 fatal crashes involving buses.
- Fatal crashes involving buses:
 - decreased over the last 12 months by 14.3 per cent compared with the corresponding 12-month period one year earlier (from 21 to 18 crashes)
 - decreased by an average of 9.4 per cent per year over the three years to December 2019.
 - a Figures sum to more than the total because some crashes involved more than one type of heavy vehicle.
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ANNUAL TRENDS

Table I Fatal crashes

	Articulated Truck	Heavy Rigid	Any heavy	Bus involved	Any heavy vehicle
	involved	Truck involved	truck involved		involved
12 Months ended					
December 2009	121	75	187	25	212
December 2010	126	65	183	20	202
December 2011	126	56	177	24	200
December 2012	127	81	203	17	217
December 2013	95	61	151	11	162
December 2014	101	76	176	16	191
December 2015	102	72	170	19	187
December 2016	93	75	164	23	186
December 2017	92	87	170	27	194
December 2018	78	63	136	21	157
December 2019	91	85	173	18	189
Change last 12 months (%	6) 16.7	34.9	27.2	-14.3	20.4
Ave. trend change p.a.(%))				
- for last 10 years	-4.3	1.7	-1.8	0.1	-1.7
- for last 5 years	-3.7	0.9	-2.0	3.0	-1.5
- for last 3 years	-2.3	0.5	-0.6	-9.4	-1.6

Table 2Fatalities

	Articulated Truck	Heavy Rigid	Any heavy	Bus involved	Any heavy vehicle
	involved	Truck involved	truck involved		involved
12 Months ended					
December 2009	145	79	215	31	246
December 2010	146	78	214	21	234
December 2011	142	68	205	25	229
December 2012	153	91	239	18	254
December 2013	115	66	176	12	188
December 2014	115	88	202	20	221
December 2015	115	81	190	22	210
December 2016	106	84	185	24	208
December 2017	105	92	187	32	214
December 2018	90	72	155	23	178
December 2019	98	93	188	20	206
Change last 12 months (%	6) 8.9	29.2	21.3	-13.0	15.7
Ave. trend change p.a.(%))				
- for last 10 years	-4.9	1.3	-2.4	0.1	-2.2
- for last 5 years	-4.3	0.0	-2.7	1.2	-2.3
- for last 3 years	-3.8	0.6	-1.4	-8.4	-2.1

ARTICULATED TRUCK INVOLVEMENT

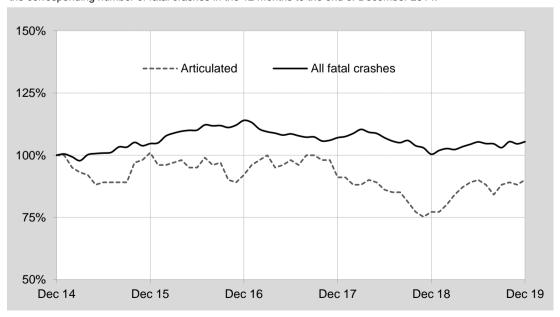
Table 3 Fatal crashes involving articulated trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2015	31	21	23	12	12	2	0	1	102
2016	22	20	23	10	10	3	4	1	93
2017	39	20	17	6	9	1	0	0	92
2018	23	13	25	5	9	2	1	0	78
2019	22	19	16	20	9	4	0	1	91
Quarters									
2017									
December	6	4	3	1	5	0	0	0	19
2018									
March	8	3	7	3	2	1	0	0	24
June	6	4	5	1	2	1	0	0	19
September	5	3	8	0	3	0	1	0	20
December	4	3	5	1	2	0	0	0	15
2019									
March	8	9	4	7	2	1	0	0	31
June	6	5	3	6	4	1	0	0	25
September	5	2	7	1	1	1	0	1	18
December	3	3	2	6	2	1	0	0	17
12 Months ended									
December 2018	23	13	25	5	9	2	1	0	78
December 2019	22	19	16	20	9	4	0	1	91
% change	-4.3	46.2	-36.0	300.0	0.0	100.0	-100.0	-	16.7
Average annual % change o	ver 3 years	a							
12 mths end Dec 2017	. ,								
to 12 mths end Dec 2019	-5.1	-5.7	-6.8	20.9	-3.1	16.8	-	-	-2.3

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Index of fatal crashes involving articulated trucks in Australia — five years ended December 2019

Each point shows the number of fatal crashes in the preceding 12 months expressed as a percentage of the corresponding number of fatal crashes in the 12 months to the end of December 2014.



ARTICULATED TRUCK INVOLVEMENT

Table 4 Deaths from crashes involving articulated trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2015	34	21	28	15	13	3	0	1	115
2016	26	22	25	11	11	5	5	1	106
2017	49	20	19	6	10	1	0	0	105
2018	26	14	29	6	11	2	2	0	90
2019	22	20	18	23	10	4	0	1	98
Quarters									
2017									
December	6	4	3	1	5	0	0	0	19
2018									
March	10	3	8	3	2	1	0	0	27
June	6	4	6	1	3	1	0	0	21
September	6	3	9	0	4	0	2	0	24
December	4	4	6	2	2	0	0	0	18
2019									
March	8	9	4	7	2	1	0	0	31
June	6	5	5	7	5	1	0	0	29
September	5	2	7	2	1	1	0	1	19
December	3	4	2	7	2	1	0	0	19
12 Months ended									
December 2018	26	14	29	6	11	2	2	0	90
December 2019	22	20	18	23	10	4	0	1	98
% change	-15.4	42.9	-37.9	283.3	-9.1	100.0	-100.0	-	8.9
Average annual % change of	ver 3 vears	a							
12 mths end Dec 2017	,								
to 12 mths end Dec 2019	-10.7	-6.2	-5.5	24.8	-1.9	0.2	-	-	-3.8

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Table 5 Deaths from crashes involving articulated trucks by State/Territory and road user — 12 months ended December 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Driver ^a	18	14	14	16	7	3	0	1	73
Passenger ^a	2	3	2	1	1	0	0	0	9
Pedestrian	1	1	0	2	2	0	0	0	6
Motorcyclist ^b	0	1	2	2	0	1	0	0	6
Pedal cyclist ^b	1	1	0	2	0	0	0	0	4
All road users ^c	22	20	18	23	10	4	0	1	98

a Includes drivers/passengers of light and heavy vehicles.

Table 6 Deaths from crashes involving articulated trucks by State/Territory and crash type — 12 months ended December 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Single vehicle crash	7	4	1	1	2	1	0	0	16
Multiple vehicle crash	14	15	17	20	6	3	0	1	76
Pedestrian crash	1	1	0	2	2	0	0	0	6
All crash types	22	20	18	23	10	4	0	1	98

b Includes pillion passengers.

c Includes road users not separately specified.

HEAVY RIGID TRUCK INVOLVEMENT

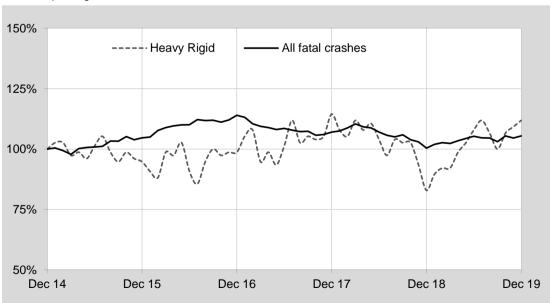
Table 7 Fatal crashes involving heavy rigid trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2015	22	18	15	2	9	5	1	0	72
2016	30	17	12	4	11	1	0	0	75
2017	31	19	11	5	16	5	0	0	87
2018	25	10	15	5	5	2	0	1	63
2019	33	22	15	5	7	2	1	0	85
Quarters									
2017									
December	6	7	1	2	7	3	0	0	26
2018									
March	7	2	5	1	1	1	0	0	17
June	5	4	4	2	1	0	0	0	16
September	8	2	4	1	2	1	0	1	19
December	5	2	2	1	1	0	0	0	11
2019									
March	10	7	4	1	1	1	0	0	24
June	12	8	4	0	3	1	0	0	28
September	3	2	3	2	2	0	1	0	13
December	8	5	4	2	1	0	0	0	20
12 Months ended									
December 2018	25	10	15	5	5	2	0	1	63
December 2019	33	22	15	5	7	2	1	0	85
% change	32.0	120.0	0.0	0.0	40.0	0.0	-	-100.0	34.9
Average annual % change over	er 3 years ^a								
12 mths end Dec 2017	-								
to 12 mths end Dec 2019	0.7	1.3	10.3	6.9	-22.3	12.3	-	-	0.5

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Index of fatal crashes involving heavy rigid trucks in Australia — five years ended December 2019

Each point shows the number of fatal crashes in the preceding 12 months expressed as a percentage of the corresponding number of fatal crashes in the 12 months to the end of December 2014.



HEAVY RIGID TRUCK INVOLVEMENT

Table 8 Deaths from crashes involving heavy rigid trucks by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2015	25	20	16	3	11	5	1	0	81
2016	32	19	13	7	12	1	0	0	84
2017	35	20	11	5	16	5	0	0	92
2018	29	10	20	5	5	2	0	1	72
2019	37	24	16	5	8	2	1	0	93
Quarters									
2017									
December	7	8	1	2	7	3	0	0	28
2018									
March	10	2	6	1	1	1	0	0	21
June	5	4	4	2	1	0	0	0	16
September	9	2	7	1	2	1	0	1	23
December	5	2	3	1	1	0	0	0	12
2019									
March	12	7	5	1	1	1	0	0	27
June	14	9	4	0	4	1	0	0	32
September	3	3	3	2	2	0	1	0	14
December	8	5	4	2	1	0	0	0	20
12 Months ended									
December 2018	29	10	20	5	5	2	0	1	72
December 2019	37	24	16	5	8	2	1	0	93
% change	27.6	140.0	-20.0	0.0	60.0	0.0	-	-100.0	29.2
Average annual % change of	ver 3 vears	s ^a							
12 mths end Dec 2017	,								
to 12 mths end Dec 2019	2.5	0.1	13.0	-9.6	-21.2	12.3	-	-	0.6

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Table 9 Deaths from crashes involving heavy rigid trucks by State/Territory and road user — 12 months ended December 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Driver ^a	21	12	9	1	5	2	1	0	51
Passenger ^a	6	6	1	2	0	0	0	0	15
Pedestrian	3	3	1	0	3	0	0	0	10
Motorcyclist ^b	4	1	5	1	0	0	0	0	11
Pedal cyclist ^b	3	2	0	1	0	0	0	0	6
All road users ^c	37	24	16	5	8	2	1	0	93

a Includes drivers/passengers of light and heavy vehicles.

Tabel 10 Deaths from crashes involving heavy rigid trucks by State/Territory and crash type — 12 months ended December 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Single vehicle crash	7	5	3	2	3	1	0	0	21
Multiple vehicle crash	27	16	12	3	2	1	1	0	62
Pedestrian crash	3	3	1	0	3	0	0	0	10
All crash types	37	24	16	5	8	2	1	0	93

b Includes pillion passengers.

c Includes road users not separately specified.

BUS INVOLVEMENT

Table 11 Fatal crashes involving buses by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2015	5	6	2	1	2	1	1	1	19
2016	10	2	3	3	3	1	1	0	23
2017	6	7	8	0	3	1	2	0	27
2018	7	5	5	0	2	1	0	1	21
2019	9	5	0	2	2	0	0	0	18
Quarters									
2017									
December	0	2	0	0	1	0	1	0	4
2018									
March	3	1	1	0	1	0	0	0	6
June	2	2	2	0	0	0	0	0	6
September	1	1	0	0	0	0	0	0	2
December	1	1	2	0	1	1	0	1	7
2019									
March	3	0	0	2	0	0	0	0	5
June	1	1	0	0	0	0	0	0	2
September	2	3	0	0	2	0	0	0	7
December	3	1	0	0	0	0	0	0	4
12 Months ended									
December 2018	7	5	5	0	2	1	0	1	21
December 2019	9	5	0	2	2	0	0	0	18
% change	28.6	0.0	-100.0	-	0.0	-100.0	-	-100.0	-14.3
Average annual % change or	ver 3 years ^a								
12 mths end Dec 2017 to 12 mths end Dec 2019	-1.6	27.3	-	-	-15.0	-	-	-	-9.4

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Index of fatal crashes involving buses in Australia — five years ended December 2019

Each point shows the number of fatal crashes in the preceding 12 months expressed as a percentage of the corresponding number of fatal crashes in the 12 months to the end of December 2014.

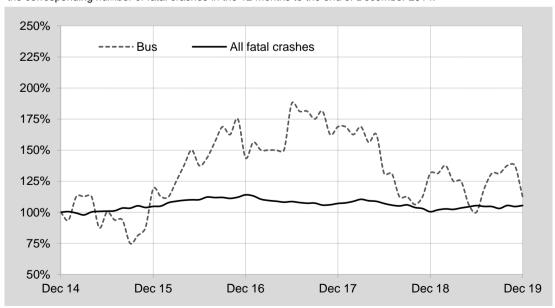


Table 12 Deaths from crashes involving buses by State/Territory

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Calendar Years									
2015	5	7	2	1	2	1	3	1	22
2016	10	2	3	3	3	1	2	0	24
2017	6	10	10	0	3	1	2	0	32
2018	7	5	5	0	4	1	0	1	23
2019	10	5	0	2	3	0	0	0	20
Quarters									
2017									
December	0	3	0	0	1	0	1	0	5
2018									
March	3	1	1	0	1	0	0	0	6
June	2	2	2	0	0	0	0	0	6
September	1	1	0	0	0	0	0	0	2
December	1	1	2	0	3	1	0	1	9
2019									
March	4	0	0	2	0	0	0	0	6
June	1	1	0	0	0	0	0	0	2
September	2	3	0	0	3	0	0	0	8
December	3	1	0	0	0	0	0	0	4
12 Months ended									
December 2018	7	5	5	0	4	1	0	1	23
December 2019	10	5	0	2	3	0	0	0	20
% change	42.9	0.0	-100.0	-	-25.0	-	-	-	-13.0
Average annual % change o	ver 3 vears	а							
12 mths end Dec 2017	,								
to 12 mths end Dec 2019	1.6	22.8	-	-	2.9	-	-	-	-8.4

a Average annual percentage change based on the exponential trend for the last three 12-month periods.

Table 13 Deaths from crashes involving buses by State/Territory by road user and road user — 12 months ended December 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Driver ^a	1	1	0	0	2	0	0	0	4
Passenger ^a	1	2	0	0	1	0	0	0	4
Pedestrian	4	2	0	2	0	0	0	0	8
Motorcyclist ^b	2	0	0	0	0	0	0	0	3
Pedal cyclist ^b	1	0	0	0	0	0	0	0	1
All road users ^c	10	5	0	2	3	0	0	0	20

a Includes drivers/passengers of light and heavy vehicles.

Table 14 Deaths from crashes involving buses by State/Territory by crash type
- 12 months ended December 2019

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
Single vehicle crash	0	0	0	0	0	0	0	0	0
Multiple vehicle crash	6	3	0	0	3	0	0	0	12
Pedestrian crash	4	2	0	2	0	0	0	0	8
All crash types	10	5	0	2	3	0	0	0	20

b Includes pillion passengers.

c Includes road users not separately specified.

APPENDIX

Glossary

<u>Note.</u> 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.

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.

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.

Gross Vehicle Mass (GVM) Tare weight (i.e. unladen weight) of the motor vehicle plus its maximum carrying capacity excluding 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.

Road Death or Fatality

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

Fatal crash

A crash for which there is at least one death.

Preliminary data

Data for recent months are preliminary and subject to revision.

Estimation of three year trends

In this bulletin, the figures for the 'Average annual per cent change over 3 years' are calculated by fitting an exponential trend line to the last four data points (years 0 to 3). The Excel function LOGEST performs the fit. The resulting trend line represents a constant annual percent change over the period. (Note: when fitted to a series containing small numbers, this may not be a reliable indicator of a stable trend.)

Smooth trend lines

Whittaker-Henderson smoothers are used with value of 80 for the smoothing parameter. The application R (package pracma) can be used for such trend lines.

Data Sources

The data presented here are obtained from the following sources:

- Transport for New South Wales;
- Department of Transport, Victoria;
- Queensland Department of Transport and Main Roads;
- Department of Planning, Transport and Infrastructure South Australia;
- Western Australian Police;
- Department of State Growth, Tasmania;
- Department of Transport, Northern Territory;
- Territory and Municipal Services Directorate, Australian Capital Territory;

An online version of the database used to produce this bulletin is available from:

< http://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx >

Inquiries

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