ISSN 1835-0240

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

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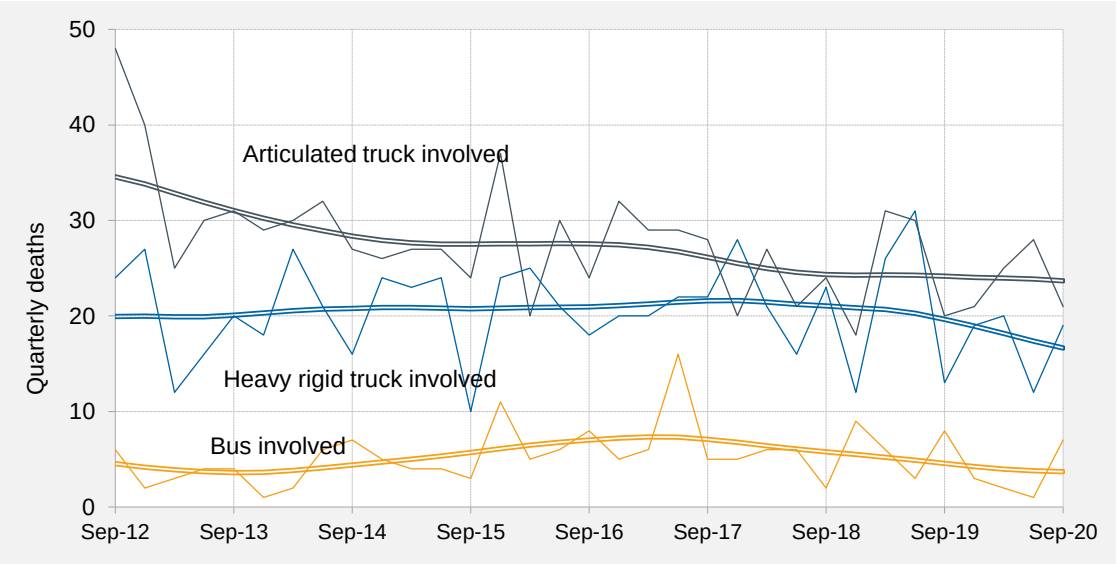
Fatal heavy vehicle crashes Australia quarterly bulletin Jul – Sep 2020

Quarterly counts of deaths in crashes involving heavy vehicles, Australia, with trends



Key features

- During the 12 months to the end of September 2020, 162 people died in crashes involving heavy trucks. These included 95 deaths in crashes involving articulated trucks and 70 deaths in crashes involving heavy rigid trucks.
- Fatalities in crashes involving heavy trucks:
  - decreased by 9.5 per cent when compared with the corresponding 12-month period one year earlier;
  - decreased by an average of 4.2 per cent per year over the three years to September 2020.
- Fatalities in crashes involving articulated trucks:
  - decreased by 4.0 per cent when compared with the corresponding period one year earlier;
  - decreased by an average of 5.6 per cent per year over the three years to September 2020.
- Fatalities in crashes involving heavy rigid trucks:
  - decreased by 14.6 per cent compared with the corresponding period one year earlier;
  - decreased by an average of 6.0 per cent per year over the three years to September 2020.
- During the 12 months to September 2020, 13 people died in crashes involving buses.
- Counts of fatalities in crashes involving buses:
  - decreased by 50.0 per cent compared with the corresponding 12-month period one year earlier;
  - decreased by an average of 21.2 per cent per year over the three years to September 2020.

ANNUAL TRENDS

Table 1 Deaths

	Articulated Truck involved	*Heavy Rigid Truck involved*	*Any heavy truck involved*	*Bus involved*	*All road crash deaths* [a]
12 Months ended					
September 2011	148	67	205	23	1,289
September 2012	143	81	220	23	1,301
September 2013	126	75	196	13	1,225
September 2014	118	82	198	16	1,162
September 2015	104	81	183	16	1,187
September 2016	111	88	194	30	1,271
September 2017	118	84	190	32	1,221
September 2018	92	88	170	19	1,200
September 2019	99	82	179	26	1,164
September 2020	95	70	162	13	1,106
Change last 12 months (%)	-4.0	-14.6	-9.5	-50.0	-5.0
Ave. trend change p.a.(%)					
- for last 10 years	-4.8	0.9	-2.6	0.2	-1.2
- for last 3 years	-5.6	-6.0	-4.2	-21.2	-3.2

Table 2 Fatal crashes

	Articulated Truck involved	*Heavy Rigid Truck involved*	*Any heavy truck involved*	*Bus involved*	*All fatal road crashes* [b]
12 Months ended					
September 2011	128	62	180	22	1,177
September 2012	126	65	187	22	1,184
September 2013	98	70	163	12	1,120
September 2014	106	73	177	15	1,065
September 2015	90	72	160	12	1,085
September 2016	98	76	171	27	1,176
September 2017	101	80	171	28	1,129
September 2018	83	78	153	18	1,112
September 2019	91	73	162	22	1,081
September 2020	81	66	144	12	1,003
Change last 12 months (%)	-11.0	-9.6	-11.1	-45.5	-7.2
Ave. trend change p.a.(%)					
- for last 10 years	-4.3	1.4	-2.0	-0.5	-1.1
- for last 3 years	-5.5	-6.2	-4.5	-20.9	-3.8

a All deaths, whether or not crash involved a heavy vehicle.
b All fatal road crashes, whether or not involving a heavy vehicle.

ARTICULATED TRUCK INVOLVEMENT

Table 3 Quarterly counts of deaths in crashes involving articulated trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Quarter ended									
Dec-17	6	4	3	1	5	1	0	0	20
Mar-18	10	3	8	3	2	1	0	0	27
Jun-18	6	4	6	1	3	1	0	0	21
Sep-18	6	3	9	0	4	0	2	0	24
Dec-18	4	4	6	2	2	0	0	0	18
Mar-19	8	9	4	7	2	1	0	0	31
Jun-19	6	5	5	7	6	1	0	0	30
Sep-19	6	2	7	2	1	1	0	1	20
Dec-19	3	6	2	7	2	1	0	0	21
Mar-20	8	8	6	1	1	1	0	0	25
Jun-20	11	6	9	1	0	1	0	0	28
Sep-20	10	0	6	2	3	0	0	0	21

Figure 1 Quarterly counts of deaths in crashes involving articulated trucks, with trend

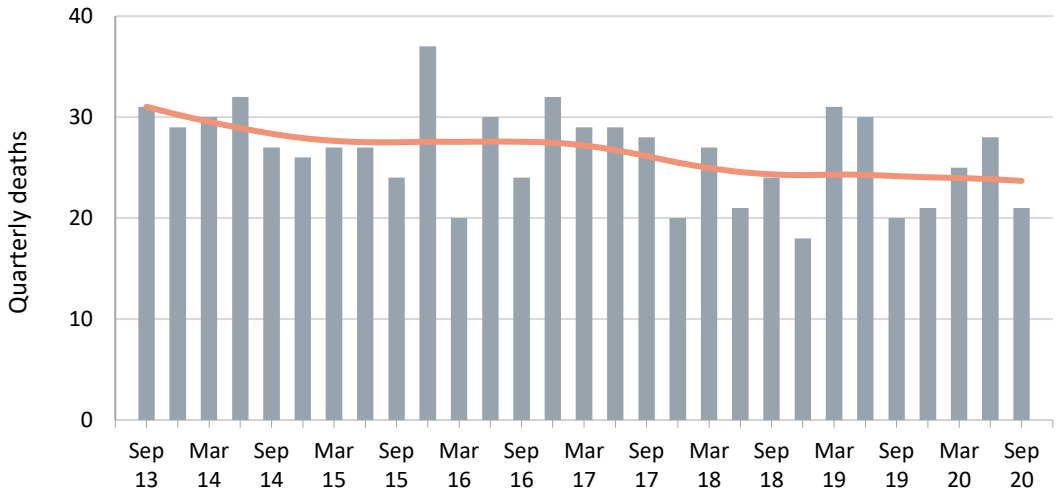


Table 4 Annual counts of deaths in crashes involving articulated trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
12 Months ended									
September 2016	29	22	27	13	13	5	1	1	111
September 2017	51	22	22	8	10	1	4	0	118
September 2018	28	14	26	5	14	3	2	0	92
September 2019	24	20	22	18	11	3	0	1	99
September 2020	32	20	23	11	6	3	0	0	95
Change last 12 months (%)	33.3	0.0	4.5	-38.9	-45.5	0.0	-	-100.0	-4.0
Average annual % change over 3 years [a]	-14.4	0.7	-0.3	25.1	-16.3	39.0	-	-	-5.6

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

HEAVY RIGID TRUCK INVOLVEMENT

Table 5 Quarterly counts of deaths in crashes involving heavy rigid trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Quarter ended									
Dec-17	7	8	1	2	7	3	0	0	28
Mar-18	10	2	6	1	1	1	0	0	21
Jun-18	5	4	4	2	1	0	0	0	16
Sep-18	9	2	7	1	2	1	0	1	23
Dec-18	5	2	3	1	1	0	0	0	12
Mar-19	12	6	5	1	1	1	0	0	26
Jun-19	14	9	4	0	4	0	0	0	31
Sep-19	2	3	3	2	2	0	1	0	13
Dec-19	6	6	4	2	1	0	0	0	19
Mar-20	12	3	3	0	2	0	0	0	20
Jun-20	4	3	3	0	2	0	0	0	12
Sep-20	7	2	2	4	3	1	0	0	19

Figure 2 Quarterly counts of deaths in crashes involving heavy rigid trucks, with trend

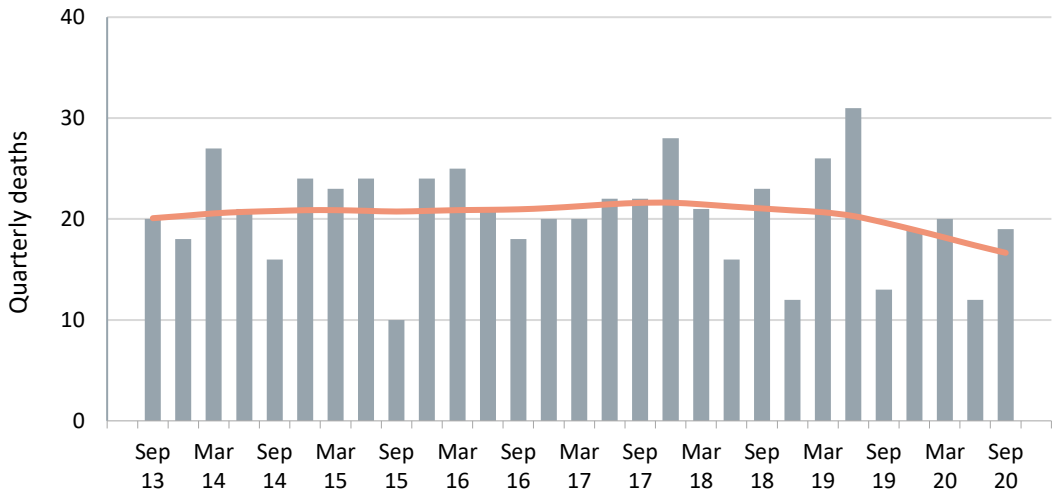


Table 6 Annual counts of deaths in crashes involving heavy rigid trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
12 Months ended									
September 2016	32	20	15	6	12	3	0	0	88
September 2017	35	17	14	4	12	2	0	0	84
September 2018	31	16	18	6	11	5	0	1	88
September 2019	33	20	15	4	8	1	1	0	82
September 2020	29	14	12	6	8	1	0	0	70
Change last 12 months (%)	-12.1	-30.0	-20.0	50.0	0.0	0.0	-100.0	-	-14.6
Average annual % change over 3 years [a]	-4.9	-3.5	-6.2	8.4	-14.2	-30.8	-	-	-6.0

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

BUS INVOLVEMENT

Table 7 Quarterly counts of deaths in crashes involving buses

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
Quarter ended									
Dec-17	0	3	0	0	1	0	1	0	5
Mar-18	3	1	1	0	1	0	0	0	6
Jun-18	2	2	2	0	0	0	0	0	6
Sep-18	1	1	0	0	0	0	0	0	2
Dec-18	1	1	2	0	3	1	0	1	9
Mar-19	4	0	0	2	0	0	0	0	6
Jun-19	1	2	0	0	0	0	0	0	3
Sep-19	2	3	0	0	3	0	0	0	8
Dec-19	3	0	0	0	0	0	0	0	3
Mar-20	0	0	0	1	0	1	0	0	2
Jun-20	1	0	0	0	0	0	0	0	1
Sep-20	3	0	2	0	0	2	0	0	7

Figure 3 Quarterly counts of deaths in crashes involving buses, with trend

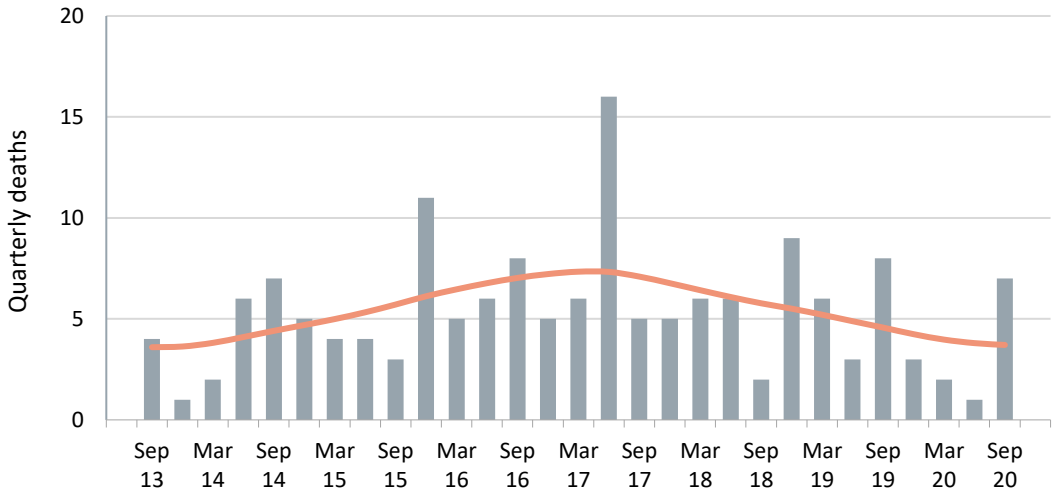


Table 8 Annual counts of deaths in crashes involving buses

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	**Australia**
12 Months ended									
September 2016	10	5	4	1	4	1	5	0	30
September 2017	7	8	11	2	2	1	1	0	32
September 2018	6	7	3	0	2	0	1	0	19
September 2019	8	6	2	2	6	1	0	1	26
September 2020	7	0	2	1	0	3	0	0	13
Change last 12 months (%)	-12.5	-100.0	0.0	-50.0	-100.0	200.0	-	-100.0	-50.0
Average annual % change over 3 years [a]	2.9	-	-42.4	-	-	-	-	-	-21.2

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

APPENDIX

Glossary

Note. 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 with a value of 40 for the smoothing parameter.
The application R (package pracma) is used.

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;
- Transport Canberra and City 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 >

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