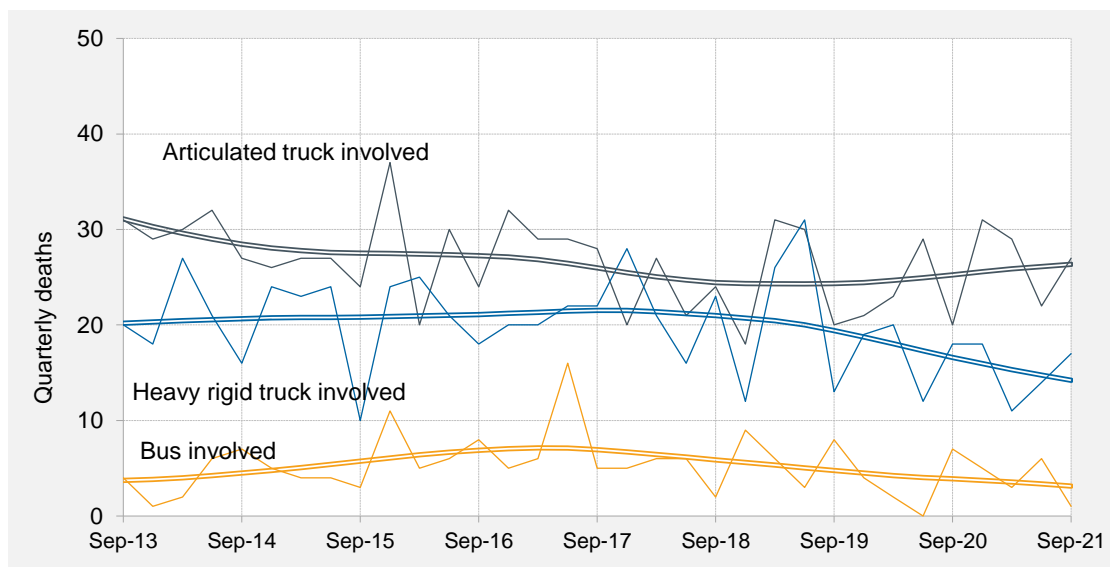




Quarterly counts of deaths in crashes involving heavy vehicles, Australia, with trends



Key features

- During the 12 months to the end of September 2021, 166 people died in crashes involving heavy trucks. These included 109 deaths in crashes involving articulated trucks and 60 deaths in crashes involving heavy rigid trucks.
- Fatalities in crashes involving heavy trucks:
 - increased by 4.4 per cent when compared with the corresponding 12-month period one year earlier;
 - decreased by an average of 1.9 per cent per year over the three years to September 2021.
- Fatalities in crashes involving articulated trucks:
 - increased by 17.2 per cent when compared with the corresponding period one year earlier;
 - increased by an average of 4.6 per cent per year over the three years to September 2021.
- Fatalities in crashes involving heavy rigid trucks:
 - decreased by 13.0 per cent compared with the corresponding period one year earlier;
 - decreased by an average of 12.4 per cent per year over the three years to September 2021.
- During the 12 months to September 2021, 15 people died in crashes involving buses.
- Counts of fatalities in crashes involving buses:
 - increased by 15.4 per cent compared with the corresponding 12-month period one year earlier;
 - decreased by an average of 13.1 per cent per year over the three years to September 2021.

ANNUAL TRENDS

Table 1 Deaths

	<i>Articulated Truck involved</i>	<i>Heavy Rigid Truck involved</i>	<i>Any heavy truck involved</i>	<i>Bus involved</i>	<i>All road crash deaths^a</i>
12 Months ended					
<i>September 2012</i>	143	81	220	23	1,301
<i>September 2013</i>	126	75	196	13	1,225
<i>September 2014</i>	118	82	198	16	1,162
<i>September 2015</i>	104	81	183	16	1,187
<i>September 2016</i>	111	88	194	30	1,271
<i>September 2017</i>	118	84	190	32	1,221
<i>September 2018</i>	92	88	170	19	1,200
<i>September 2019</i>	99	82	179	26	1,164
<i>September 2020</i>	93	69	159	13	1,088
<i>September 2021</i>	109	60	166	15	1,143
<i>Change last 12 months (%)</i>	17.2	-13.0	4.4	15.4	5.1
<i>Ave. trend change p.a.(%)</i>					
<i>- for last 10 years</i>	-3.4	-1.9	-2.8	-0.5	-1.2
<i>- for last 3 years</i>	4.6	-12.4	-1.9	-13.1	-2.1

Table 2 Fatal crashes

	<i>Articulated Truck involved</i>	<i>Heavy Rigid Truck involved</i>	<i>Any heavy truck involved</i>	<i>Bus involved</i>	<i>All fatal road crashes^b</i>
12 Months ended					
<i>September 2012</i>	126	65	187	22	1,184
<i>September 2013</i>	98	70	163	12	1,120
<i>September 2014</i>	106	73	177	15	1,065
<i>September 2015</i>	90	72	160	12	1,085
<i>September 2016</i>	98	76	171	27	1,176
<i>September 2017</i>	101	80	171	28	1,129
<i>September 2018</i>	83	78	153	18	1,112
<i>September 2019</i>	91	73	162	22	1,081
<i>September 2020</i>	79	65	141	12	987
<i>September 2021</i>	98	56	151	15	1,061
<i>Change last 12 months (%)</i>	24.1	-13.8	7.1	25.0	7.5
<i>Ave. trend change p.a.(%)</i>					
<i>- for last 10 years</i>	-2.8	-0.9	-2.1	-0.2	-1.1
<i>- for last 3 years</i>	3.6	-10.5	-1.8	-10.9	-2.3

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-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	6	8	6	1	1	1	0	0	23
Jun-20	11	8	8	1	0	1	0	0	29
Sep-20	9	0	7	1	3	0	0	0	20
Dec-20	2	7	14	1	6	0	1	0	31
Mar-21	5	5	14	3	2	0	0	0	29
Jun-21	5	2	8	2	5	0	0	0	22
Sep-21	10	3	10	1	1	2	0	0	27

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

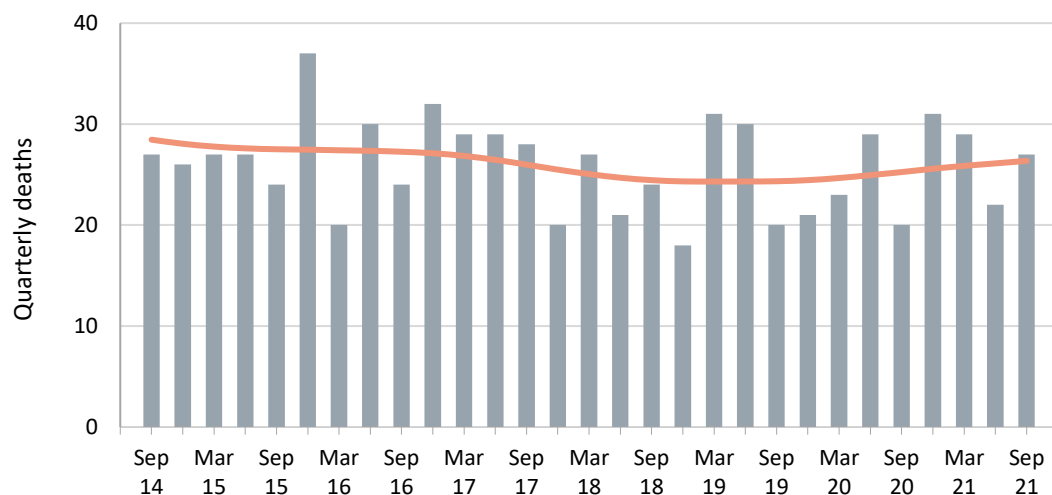


Table 4 Annual counts of deaths in crashes involving articulated trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
12 Months ended									
September 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	29	22	23	10	6	3	0	0	93
September 2021	22	17	46	7	14	2	1	0	109
Change last 12 months (%)	-24.1	-22.7	100.0	-30.0	133.3	-33.3	-	-	17.2
Average annual % change over 3 years^a	-5.2	7.0	19.2	4.3	-5.9	-11.5	-	-	4.6

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-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	11	4	3	0	2	0	0	0	20
Jun-20	4	3	3	0	2	0	0	0	12
Sep-20	6	2	2	4	3	1	0	0	18
Dec-20	8	3	3	1	3	0	0	0	18
Mar-21	3	3	3	0	1	1	0	0	11
Jun-21	7	4	1	0	1	0	1	0	14
Sep-21	4	2	3	3	4	1	0	0	17

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

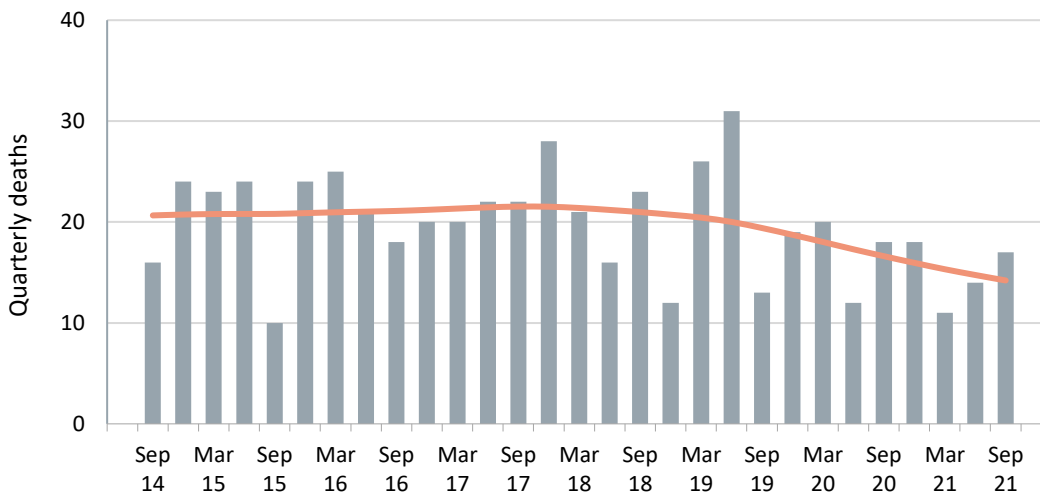


Table 6 Annual counts of deaths in crashes involving heavy rigid trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
12 Months ended									
September 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	27	15	12	6	8	1	0	0	69
September 2021	22	12	10	4	9	2	1	0	60
Change last 12 months (%)	-18.5	-20.0	-16.7	-33.3	12.5	100.0	-	-	-13.0
Average annual % change over 3 years ^a	-11.6	-10.9	-18.0	-7.8	-5.8	-24.0	-	-	-12.4

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-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	1	0	0	0	0	0	0	4
Mar-20	0	0	0	1	0	1	0	0	2
Jun-20	0	0	0	0	0	0	0	0	0
Sep-20	3	0	2	0	0	2	0	0	7
Dec-20	1	1	1	1	1	0	0	0	5
Mar-21	0	0	1	2	0	0	0	0	3
Jun-21	2	1	2	1	0	0	0	0	6
Sep-21	0	0	0	0	1	0	0	0	1

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

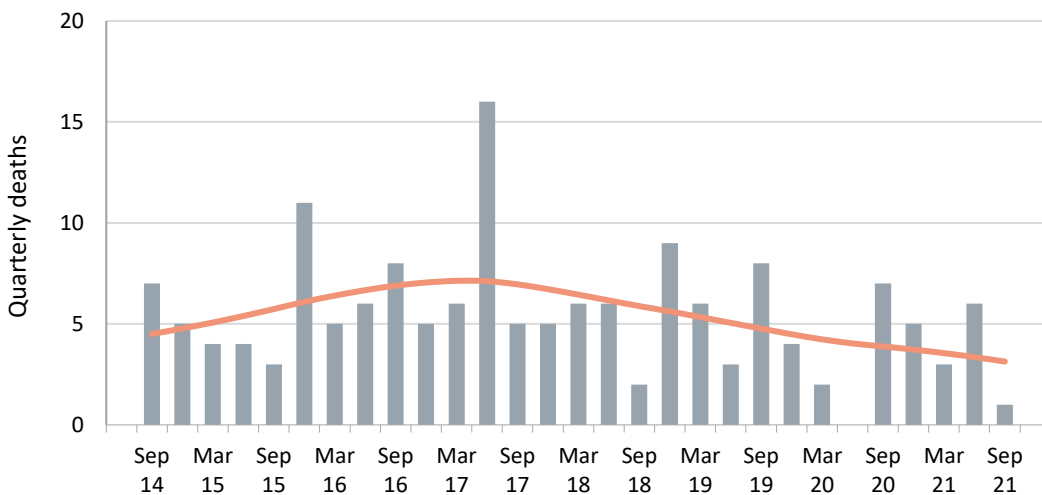


Table 8 Annual counts of deaths in crashes involving buses

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
12 Months ended									
September 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	6	1	2	1	0	3	0	0	13
September 2021	3	2	4	4	2	0	0	0	15
Change last 12 months (%)	-50.0	100.0	100.0	300.0	-	-100.0	-	-	15.4
Average annual % change over 3 years ^a	-21.1	-42.6	9.0	-	-	-	-	-	-13.1

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 80 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 >

Inquiries For further information about data in this bulletin, contact:

Bureau of Infrastructure and Transport Research Economics
Department of Infrastructure, Transport, Regional Development and Communications
GPO Box 501 Canberra ACT 2601

Email: roadsafety@infrastructure.gov.au

Internet: < <http://www.bitre.gov.au> >