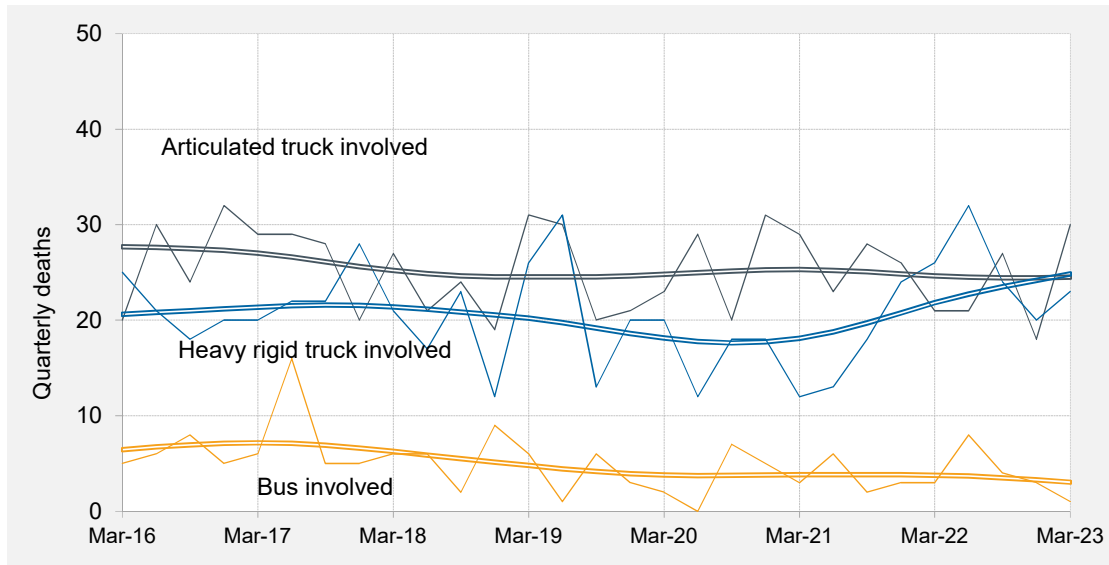




Road deaths in crashes involving heavy vehicles - quarterly bulletin, Jan-Mar 2023

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



Key features

- During the 12 months to the end of March 2023, 188 people died in crashes involving heavy trucks^a. These included 96 deaths in crashes involving articulated trucks and 99 deaths in crashes involving heavy rigid trucks.
- Fatalities in crashes involving heavy trucks:
 - increased by 6.8 per cent when compared with the corresponding 12-month period one year earlier;
 - increased by an average of 6.1 per cent per year over the three years to March 2023.
- Fatalities in crashes involving articulated trucks:
 - decreased by 2.0 per cent when compared with the corresponding period one year earlier;
 - decreased by an average of 6.2 per cent per year over the three years to March 2023.
- Fatalities in crashes involving heavy rigid trucks:
 - increased by 22.2 per cent when compared with the corresponding period one year earlier;
 - increased by an average of 28.5 per cent per year over the three years to March 2023.
- During the 12 months to March 2023, 16 people died in crashes involving buses.
- Counts of fatalities in crashes involving buses:
 - increased by 14.3 per cent when compared with the corresponding 12-month period one year earlier;
 - increased by an average of 3.3 per cent per year over the three years to March 2023.

^a Figures sum to more than the total because some crashes involved more than one type of heavy vehicle.

ANNUAL TRENDS

Table 1 Deaths

	<i>Articulated truck involved</i>	<i>Heavy rigid truck involved</i>	<i>Any heavy truck involved^a</i>	<i>Bus involved</i>	<i>All road crash deaths^b</i>
12 Months ended					
<i>March 2014</i>	120	81	195	11	1,178
<i>March 2015</i>	112	84	196	22	1,127
<i>March 2016</i>	108	83	185	23	1,250
<i>March 2017</i>	115	79	186	25	1,237
<i>March 2018</i>	104	93	187	32	1,263
<i>March 2019</i>	95	78	168	23	1,155
<i>March 2020</i>	94	84	175	12	1,143
<i>March 2021</i>	109	60	167	15	1,112
<i>March 2022</i>	98	81	176	14	1,137
<i>March 2023</i>	96	99	188	16	1,214
<i>Change last 12 months (%)</i>	-2.0	22.2	6.8	14.3	6.8
<i>Ave. trend change p.a. (%)</i>					
<i>- for last 10 years</i>	-2.2	0.0	-1.1	-2.7	-0.4
<i>- for last 3 years</i>	-6.2	28.5	6.1	3.3	4.5

Table 2 Fatal crashes

	<i>Articulated truck involved</i>	<i>Heavy rigid truck involved</i>	<i>Any heavy truck involved^a</i>	<i>Bus involved</i>	<i>All fatal road crashes^c</i>
12 Months ended					
<i>March 2014</i>	104	70	168	11	1,088
<i>March 2015</i>	94	74	168	18	1,026
<i>March 2016</i>	98	75	169	20	1,147
<i>March 2017</i>	101	72	167	24	1,153
<i>March 2018</i>	90	85	166	27	1,160
<i>March 2019</i>	86	70	152	20	1,069
<i>March 2020</i>	85	77	159	11	1,057
<i>March 2021</i>	92	56	146	14	1,020
<i>March 2022</i>	88	75	160	14	1,057
<i>March 2023</i>	85	90	169	16	1,131
<i>Change last 12 months (%)</i>	-3.4	20.0	5.6	14.3	7.0
<i>Ave. trend change p.a. (%)</i>					
<i>- for last 10 years</i>	-1.9	0.5	-0.8	-1.7	-0.2
<i>- for last 3 years</i>	-3.9	26.8	7.6	6.9	5.3

a Figures sum to more than the total because some crashes involved more than one type of heavy vehicle.

b All deaths, whether or not crash involved a heavy vehicle.

c 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									
June-20	11	8	8	1	0	1	0	0	29
September-20	9	0	7	1	3	0	0	0	20
December-20	2	7	14	1	6	0	1	0	31
March-21	5	5	14	3	2	0	0	0	29
June-21	6	2	8	2	5	0	0	0	23
September-21	9	5	10	1	1	2	0	0	28
December-21	7	6	8	4	0	0	1	0	26
March-22	7	2	9	0	1	0	2	0	21
June-22	5	1	9	2	4	0	0	0	21
September-22	5	9	6	3	2	0	2	0	27
December-22	6	4	5	1	2	0	0	0	18
March-23	12	4	6	3	2	2	1	0	30

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

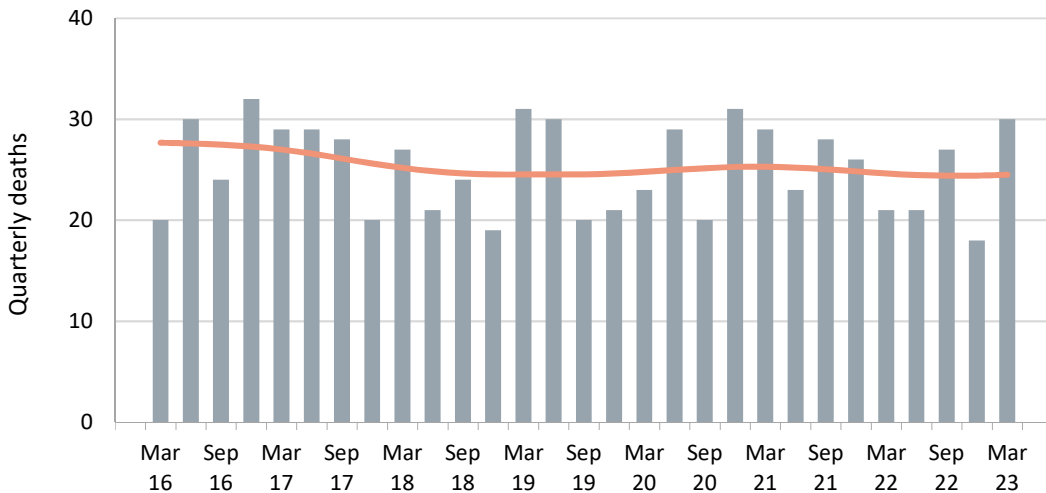


Table 4 Annual counts of deaths in crashes involving articulated trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
12 Months ended									
March 2019	24	20	25	10	12	2	2	0	95
March 2020	21	21	20	17	10	4	0	1	94
March 2021	27	20	43	6	11	1	1	0	109
March 2022	29	15	35	7	7	2	3	0	98
March 2023	28	18	26	9	10	2	3	0	96
Change last 12 months (%)	-3.4	20.0	-25.7	28.6	42.9	0.0	0.0	0.0	-2.0
Ave. trend change p.a.(%)	1.8	-5.1	-22.2	22.5	-4.7	41.4	73.2	-	-6.2
- for last 3 years^a									

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									
June-20	4	3	3	0	2	0	0	0	12
September-20	6	2	2	4	3	1	0	0	18
December-20	8	3	3	1	3	0	0	0	18
March-21	4	3	3	0	1	1	0	0	12
June-21	6	4	1	0	1	0	1	0	13
September-21	4	3	3	3	4	1	0	0	18
December-21	12	8	2	0	2	0	0	0	24
March-22	9	4	7	2	2	2	0	0	26
June-22	7	7	5	2	9	2	0	0	32
September-22	3	5	7	1	6	1	1	0	24
December-22	4	2	5	0	6	3	0	0	20
March-23	6	6	5	0	4	2	0	0	23

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

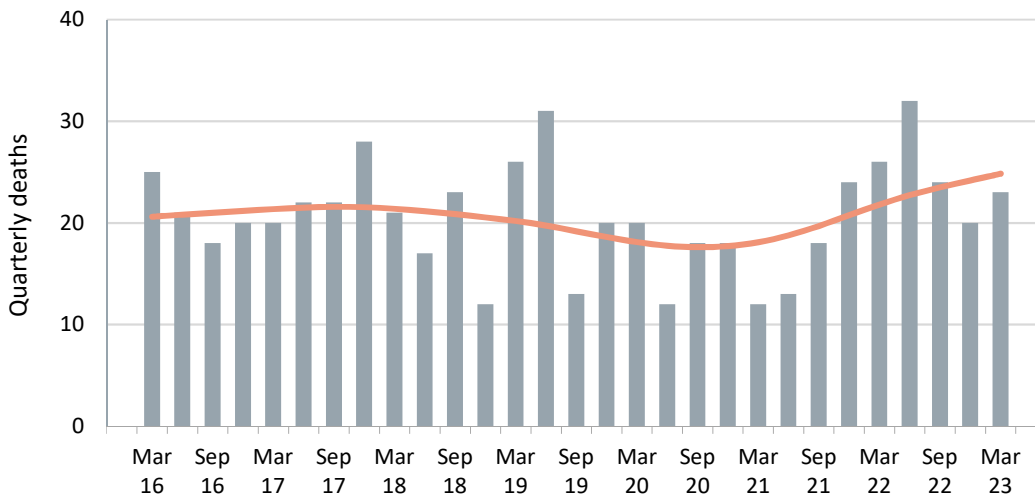


Table 6 Annual counts of deaths in crashes involving heavy rigid trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
12 Months ended									
March 2019	31	14	19	5	6	2	0	1	78
March 2020	33	22	14	4	10	0	1	0	84
March 2021	22	11	11	5	9	2	0	0	60
March 2022	31	19	13	5	9	3	1	0	81
March 2023	20	20	22	3	25	8	1	0	99
Change last 12 months (%)	-35.5	5.3	69.2	-40.0	177.8	166.7	0.0	0.0	22.2
Ave. trend change p.a.(%) - for last 3 years ^a	-4.7	34.8	41.4	-22.5	66.7	100.0	-	-	28.5

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									
June-20	0	0	0	0	0	0	0	0	0
September-20	3	0	2	0	0	2	0	0	7
December-20	1	1	1	1	1	0	0	0	5
March-21	0	0	1	2	0	0	0	0	3
June-21	2	1	2	1	0	0	0	0	6
September-21	0	0	0	0	2	0	0	0	2
December-21	1	0	0	0	1	0	1	0	3
March-22	2	0	1	0	0	0	0	0	3
June-22	3	1	2	0	1	0	1	0	8
September-22	2	0	1	0	1	0	0	0	4
December-22	2	0	0	0	0	0	1	0	3
March-23	1	0	0	0	0	0	0	0	1

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

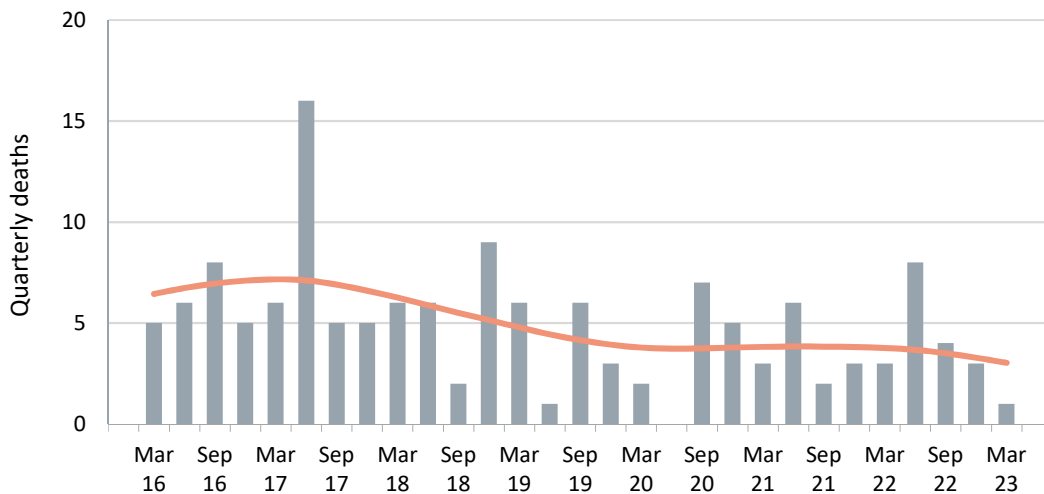


Table 8 Annual counts of deaths in crashes involving buses

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
12 Months ended									
March 2019	8	4	4	2	3	1	0	1	23
March 2020	6	1	0	1	3	1	0	0	12
March 2021	4	1	4	3	1	2	0	0	15
March 2022	5	1	3	1	3	0	1	0	14
March 2023	8	1	3	0	2	0	2	0	16
Change last 12 months (%)	60.0	0.0	0.0	-100.0	-33.3	0.0	100.0	0.0	14.3
Ave. trend change p.a.(%) - for last 3 years^a	41.4	0.0	-13.4	-	41.4	-	-	-	3.3

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

APPENDIX

Glossary	<p><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.</p>
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 three data points. 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	<p>The data presented here are obtained from the following sources:</p> <ul style="list-style-type: none">• 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; <p>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 ></p>
Inquiries	<p>For further information about data in this bulletin, contact:</p> <p>Bureau of Infrastructure and Transport Research Economics Department of Infrastructure, Transport, Regional Development, Communications and the Arts GPO Box 501 Canberra ACT 2601 Email: roadsafety@infrastructure.gov.au Internet: < http://www.bitre.gov.au ></p>