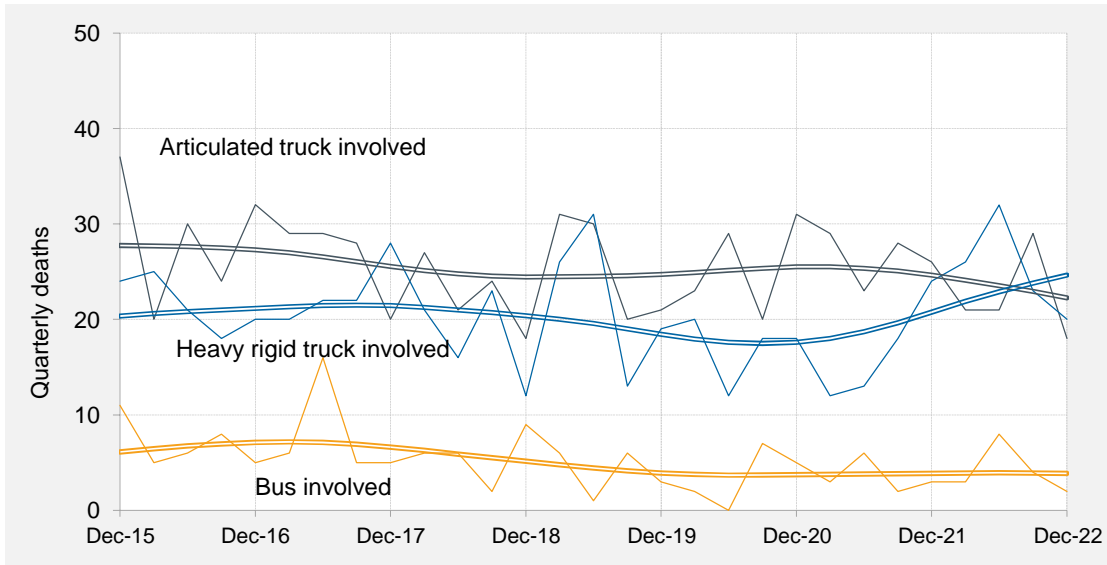




## Road deaths in crashes involving heavy vehicles - quarterly bulletin, Oct-Dec 2022

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



#### Key features

- During the 12 months to the end of December 2022, 185 people died in crashes involving heavy trucks<sup>a</sup>. These included 89 deaths in crashes involving articulated trucks and 101 deaths in crashes involving heavy rigid trucks.
- Fatalities in crashes involving heavy trucks:
  - increased by 8.8 per cent when compared with the corresponding 12-month period one year earlier;
  - increased by an average of 4.6 per cent per year over the three years to December 2022.
- Fatalities in crashes involving articulated trucks:
  - decreased by 16.0 per cent when compared with the corresponding period one year earlier;
  - decreased by an average of 7.0 per cent per year over the three years to December 2022.
- Fatalities in crashes involving heavy rigid trucks:
  - increased by 50.7 per cent when compared with the corresponding period one year earlier;
  - increased by an average of 21.9 per cent per year over the three years to December 2022.
- During the 12 months to December 2022, 17 people died in crashes involving buses.
- Counts of fatalities in crashes involving buses:
  - increased by 21.4 per cent when compared with the corresponding 12-month period one year earlier;
  - increased by an average of 10.2 per cent per year over the three years to December 2022.

<sup>a</sup> 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<sup>a</sup></i>	<i>Bus involved</i>	<i>All road crash deaths<sup>b</sup></i>
<b>12 Months ended</b>					
<i>December 2013</i>	115	66	176	12	1,187
<i>December 2014</i>	115	88	202	20	1,151
<i>December 2015</i>	115	81	190	22	1,204
<i>December 2016</i>	106	84	185	24	1,292
<i>December 2017</i>	106	92	187	32	1,222
<i>December 2018</i>	90	72	155	23	1,134
<i>December 2019</i>	102	89	188	16	1,186
<i>December 2020</i>	103	68	169	14	1,096
<i>December 2021</i>	106	67	170	14	1,129
<i>December 2022</i>	89	101	185	17	1,193
<i>Change last 12 months (%)</i>	-16.0	50.7	8.8	21.4	5.7
<i>Ave. trend change p.a.(%)</i>					
<i>- for last 10 years</i>	-2.2	0.6	-0.9	-1.9	-0.5
<i>- for last 3 years</i>	-7.0	21.9	4.6	10.2	4.3

**Table 2 Fatal crashes**

	<i>Articulated truck involved</i>	<i>Heavy rigid truck involved</i>	<i>Any heavy truck involved<sup>a</sup></i>	<i>Bus involved</i>	<i>All fatal road crashes<sup>c</sup></i>
<b>12 Months ended</b>					
<i>December 2013</i>	95	61	151	11	1,101
<i>December 2014</i>	101	76	176	16	1,051
<i>December 2015</i>	102	72	170	19	1,100
<i>December 2016</i>	93	75	164	23	1,198
<i>December 2017</i>	93	87	170	27	1,126
<i>December 2018</i>	78	63	136	21	1,054
<i>December 2019</i>	95	81	173	14	1,100
<i>December 2020</i>	86	63	147	13	997
<i>December 2021</i>	96	63	156	14	1,049
<i>December 2022</i>	80	90	166	17	1,118
<i>Change last 12 months (%)</i>	-16.7	42.9	6.4	21.4	6.6
<i>Ave. trend change p.a.(%)</i>					
<i>- for last 10 years</i>	-1.7	0.9	-0.5	-0.4	-0.4
<i>- for last 3 years</i>	-3.6	19.5	6.3	14.4	5.9

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.

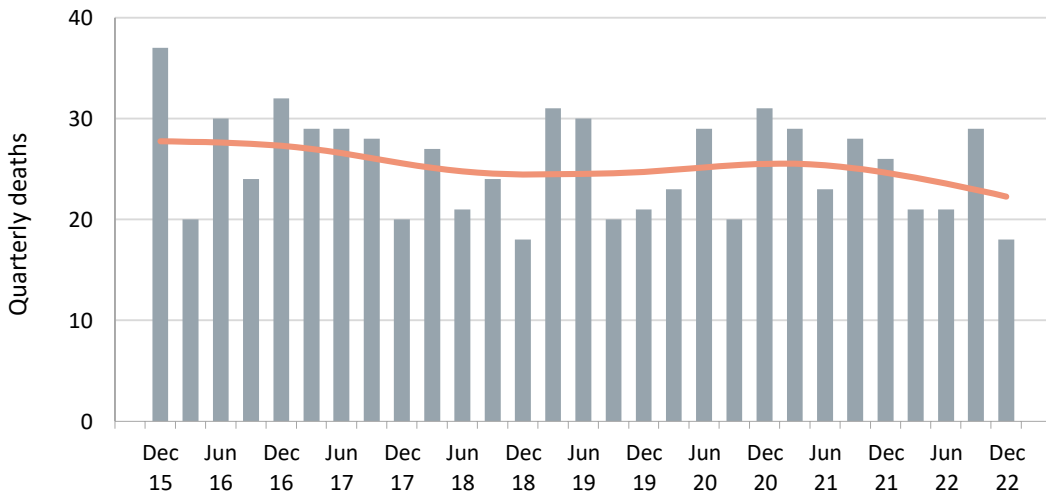
c All fatal road crashes, whether or not involving a heavy vehicle.

## ARTICULATED TRUCK INVOLVEMENT

**Table 3** Quarterly counts of deaths in crashes involving articulated trucks

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
<b>Quarter ended</b>									
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	6	2	8	2	5	0	0	0	23
Sep-21	9	5	10	1	1	2	0	0	28
Dec-21	7	6	8	4	0	0	1	0	26
Mar-22	7	2	9	0	1	0	2	0	21
Jun-22	5	1	9	2	4	0	0	0	21
Sep-22	8	7	7	3	2	0	2	0	29
Dec-22	6	4	5	1	2	0	0	0	18

**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
<b>12 Months ended</b>									
December 2018	26	14	29	6	11	2	2	0	90
December 2019	23	22	18	23	11	4	0	1	102
December 2020	28	23	35	4	10	2	1	0	103
December 2021	27	18	40	10	8	2	1	0	106
December 2022	26	14	30	6	9	0	4	0	89
<b>Change last 12 months (%)</b>	-3.7	-22.2	-25.0	-40.0	12.5	-100.0	300.0	0.0	-16.0
<b>Average annual % change over 3 years<sup>a</sup></b>	-3.6	-22.0	-7.4	22.5	-5.1	-	100.0	-	-7.0

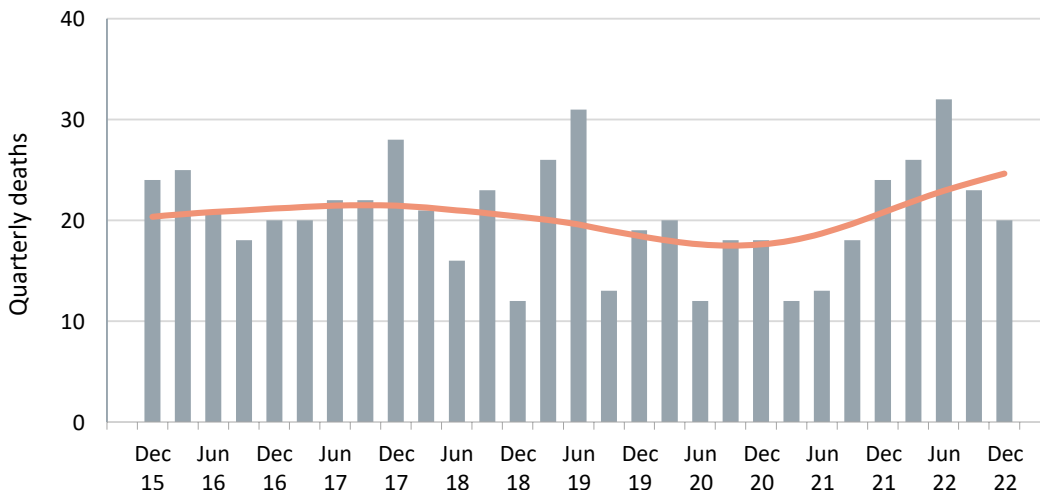
a Average annual percentage change based on the exponential trend for the last four 12-month periods.

## 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
<b>Quarter ended</b>									
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	4	3	3	0	1	1	0	0	12
Jun-21	6	4	1	0	1	0	1	0	13
Sep-21	4	3	3	3	4	1	0	0	18
Dec-21	12	8	2	0	2	0	0	0	24
Mar-22	9	4	7	2	2	2	0	0	26
Jun-22	7	7	5	2	9	2	0	0	32
Sep-22	2	5	7	1	6	1	1	0	23
Dec-22	4	2	5	0	6	3	0	0	20

**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
<b>12 Months ended</b>									
December 2018	29	10	20	5	5	2	0	1	72
December 2019	34	24	16	5	8	1	1	0	89
December 2020	29	12	11	5	10	1	0	0	68
December 2021	26	18	9	3	8	2	1	0	67
December 2022	22	18	24	5	23	8	1	0	101
Change last 12 months (%)	-15.4	0.0	166.7	66.7	187.5	300.0	0.0	0.0	50.7
Average annual % change over 3 years <sup>a</sup>	-12.9	22.5	47.7	0.0	51.7	182.8	-	-	21.9

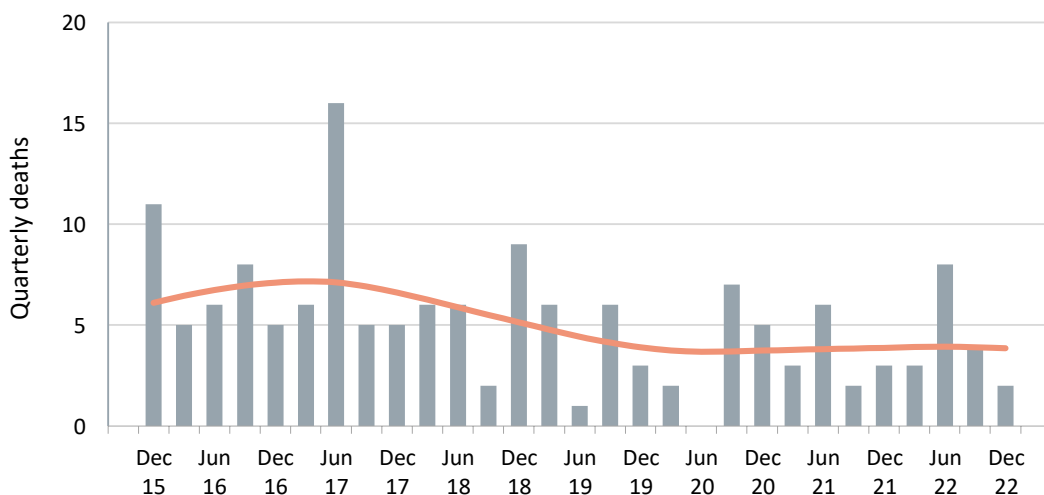
a Average annual percentage change based on the exponential trend for the last four 12-month periods.

## BUS INVOLVEMENT

**Table 7** Quarterly counts of deaths in crashes involving buses

	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Australia
<b>Quarter ended</b>									
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	2	0	0	0	2
Dec-21	1	0	0	0	1	0	1	0	3
Mar-22	2	0	1	0	0	0	0	0	3
Jun-22	3	1	2	0	1	0	1	0	8
Sep-22	2	0	1	0	1	0	0	0	4
Dec-22	1	0	0	0	0	0	1	0	2

**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
<b>12 Months ended</b>									
December 2018	7	5	5	0	4	1	0	1	23
December 2019	10	1	0	2	3	0	0	0	16
December 2020	4	1	3	2	1	3	0	0	14
December 2021	3	1	3	3	3	0	1	0	14
December 2022	8	1	4	0	2	0	2	0	17
<b>Change last 12 months (%)</b>	166.7	0.0	33.3	-100.0	-33.3	0.0	100.0	0.0	21.4
<b>Average annual % change over 3 years<sup>a</sup></b>	41.4	0.0	15.5	-	41.4	-	-	-	10.2

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

## APPENDIX

<b>Glossary</b>	<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>
<b>Articulated truck</b>	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.
<b>Heavy rigid truck</b>	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.
<b>Gross Vehicle Mass (GVM)</b>	Tare weight (i.e. unladen weight) of the motor vehicle plus its maximum carrying capacity excluding trailers.
<b>Bus</b>	A motor vehicle constructed for the carriage of passengers which has at least 10 seats, including the driver's seat.
<b>Crash</b>	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.
<b>Road death or Fatality</b>	A person who dies within 30 days of a crash as a result of injuries received in that crash.
<b>Fatal crash</b>	A crash for which there is at least one death.
<b>Preliminary data</b>	Data for recent months are preliminary and subject to revision.
<b>Estimation of three year trends</b>	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.)
<b>Smooth trend lines</b>	Whittaker-Henderson smoothers with a value of 80 for the smoothing parameter. The application R (package pracma) is used.
<b>Data sources</b>	<p>The data presented here are obtained from the following sources:</p> <ul style="list-style-type: none"><li>• Transport for New South Wales;</li><li>• Department of Transport, Victoria;</li><li>• Queensland Department of Transport and Main Roads;</li><li>• Department of Planning, Transport and Infrastructure South Australia;</li><li>• Western Australian Police;</li><li>• Department of State Growth, Tasmania;</li><li>• Department of Transport, Northern Territory;</li><li>• Transport Canberra and City Services Directorate, Australian Capital Territory;</li></ul> <p>An online version of the database used to produce this bulletin is available from: &lt; <a href="http://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx">http://www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx</a> &gt;</p>
<b>Inquiries</b>	<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: <a href="mailto:roadsafety@infrastructure.gov.au">roadsafety@infrastructure.gov.au</a> Internet: &lt; <a href="http://www.bitre.gov.au">http://www.bitre.gov.au</a> &gt;</p>