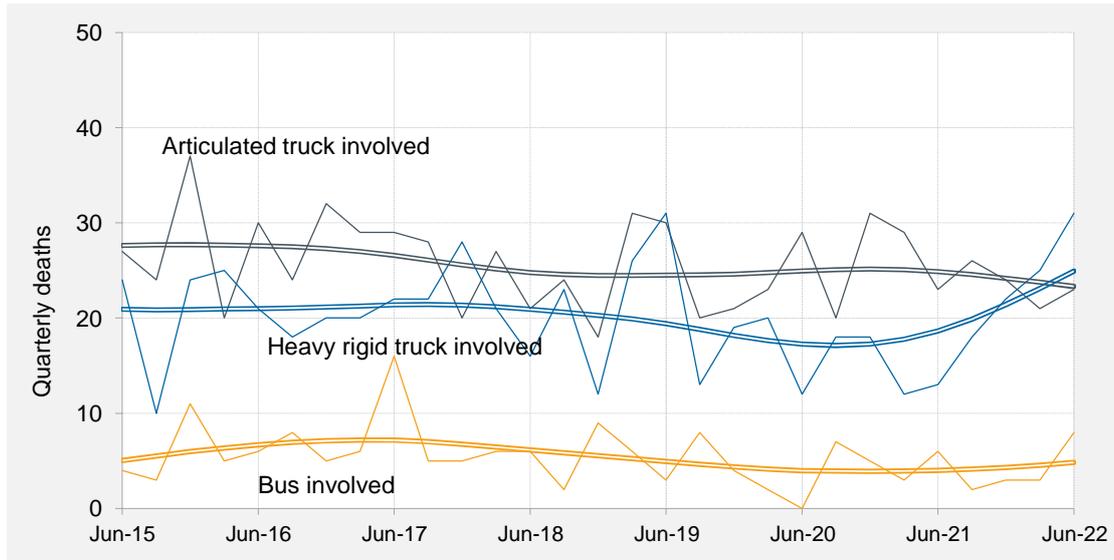




## Quarterly counts of deaths in crashes involving heavy vehicles, Australia, with trends



### Key features

- During the 12 months to the end of June 2022, 187 people died in crashes involving heavy trucks. These included 94 deaths in crashes involving articulated trucks and 96 deaths in crashes involving heavy rigid trucks.
- Fatalities in crashes involving heavy trucks:
  - increased by 16.1 per cent when compared with the corresponding 12-month period one year earlier;
  - increased by an average of 9.8 per cent per year over the three years to June 2022.
- Fatalities in crashes involving articulated trucks:
  - decreased by 8.7 per cent when compared with the corresponding period one year earlier;
  - increased by an average of 0.5 per cent per year over the three years to June 2022.
- Fatalities in crashes involving heavy rigid trucks:
  - increased by 57.4 per cent when compared with the corresponding period one year earlier;
  - increased by an average of 22.5 per cent per year over the three years to June 2022.
- During the 12 months to June 2022, 16 people died in crashes involving buses.
- Counts of fatalities in crashes involving buses:
  - decreased by 23.8 per cent when compared with the corresponding 12-month period one year earlier;
  - increased by an average of 6.9 per cent per year over the three years to June 2022.

## ANNUAL TRENDS

**Table 1 Deaths**

|                                  | <i>Articulated Truck<br/>involved</i> | <i>Heavy Rigid<br/>Truck involved</i> | <i>Any heavy<br/>truck involved</i> | <i>Bus involved</i> | <i>All road crash<br/>deaths<sup>a</sup></i> |
|----------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|---------------------|--|
| <b>12 Months ended</b>           |                                       |                                       |                                     |                     |  |
| <i>June 2013</i>                 | 143                                   | 79                                    | 219                                 | 15                  | 1,263  |
| <i>June 2014</i>                 | 122                                   | 86                                    | 204                                 | 13                  | 1,155  |
| <i>June 2015</i>                 | 107                                   | 87                                    | 192                                 | 20                  | 1,170  |
| <i>June 2016</i>                 | 111                                   | 80                                    | 186                                 | 25                  | 1,259  |
| <i>June 2017</i>                 | 114                                   | 80                                    | 185                                 | 35                  | 1,223  |
| <i>June 2018</i>                 | 96                                    | 87                                    | 173                                 | 22                  | 1,213  |
| <i>June 2019</i>                 | 103                                   | 92                                    | 191                                 | 20                  | 1,196  |
| <i>June 2020</i>                 | 93                                    | 64                                    | 155                                 | 14                  | 1,090  |
| <i>June 2021</i>                 | 103                                   | 61                                    | 161                                 | 21                  | 1,130  |
| <i>June 2022</i>                 | 94                                    | 96                                    | 187                                 | 16                  | 1,179  |
| <i>Change last 12 months (%)</i> | -8.7                                  | 57.4                                  | 16.1                                | -23.8               | 4.3  |
| <i>Ave. trend change p.a.(%)</i> |                                       |                                       |                                     |                     |  |
| <i>- for last 10 years</i>       | -3.6                                  | -1.0                                  | -2.5                                | 0.6                 | -0.8   |
| <i>- for last 3 years</i>        | 0.5                                   | 22.5                                  | 9.8                                 | 6.9                 | 4.0  |

**Table 2 Fatal crashes**

|                                  | <i>Articulated Truck<br/>involved</i> | <i>Heavy Rigid<br/>Truck involved</i> | <i>Any heavy<br/>truck involved</i> | <i>Bus involved</i> | <i>All fatal road<br/>crashes<sup>b</sup></i> |
|----------------------------------|---------------------------------------|---------------------------------------|-------------------------------------|---------------------|---|
| <b>12 Months ended</b>           |                                       |                                       |                                     |                     |   |
| <i>June 2013</i>                 | 113                                   | 71                                    | 181                                 | 13                  | 1,150   |
| <i>June 2014</i>                 | 111                                   | 75                                    | 182                                 | 13                  | 1,068   |
| <i>June 2015</i>                 | 90                                    | 77                                    | 165                                 | 16                  | 1,060   |
| <i>June 2016</i>                 | 96                                    | 69                                    | 162                                 | 22                  | 1,157   |
| <i>June 2017</i>                 | 99                                    | 77                                    | 169                                 | 30                  | 1,142   |
| <i>June 2018</i>                 | 88                                    | 79                                    | 158                                 | 21                  | 1,124   |
| <i>June 2019</i>                 | 92                                    | 80                                    | 169                                 | 17                  | 1,103   |
| <i>June 2020</i>                 | 80                                    | 60                                    | 138                                 | 13                  | 997   |
| <i>June 2021</i>                 | 94                                    | 57                                    | 148                                 | 20                  | 1,055   |
| <i>June 2022</i>                 | 82                                    | 87                                    | 166                                 | 16                  | 1,090   |
| <i>Change last 12 months (%)</i> | -12.8                                 | 52.6                                  | 12.2                                | -20.0               | 3.3   |
| <i>Ave. trend change p.a.(%)</i> |                                       |                                       |                                     |                     |   |
| <i>- for last 10 years</i>       | -2.9                                  | -0.5                                  | -1.8                                | 1.7                 | -0.6  |
| <i>- for last 3 years</i>        | 1.2                                   | 20.4                                  | 9.7                                 | 10.9                | 4.6   |

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

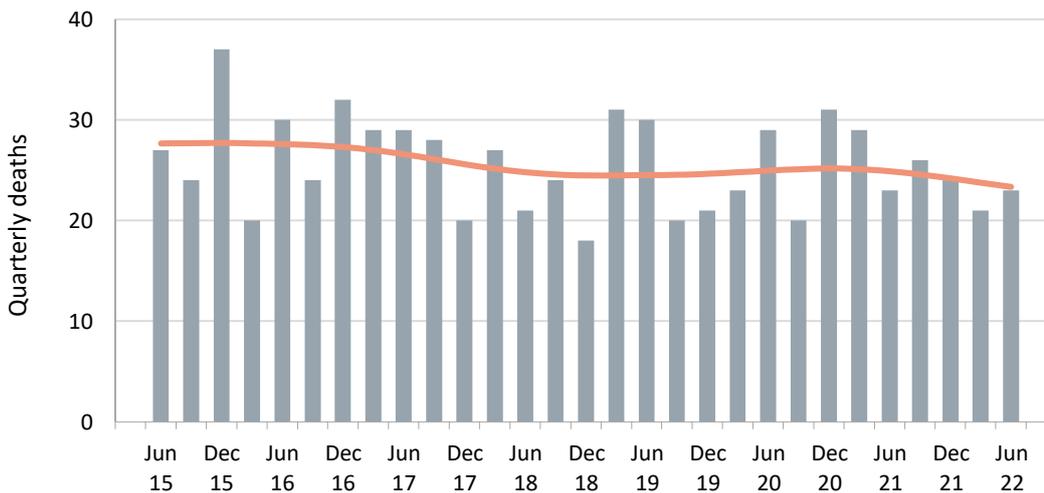
b All fatal road crashes, whether or not involving a heavy vehicle.

## ARTICULATED TRUCK INVOLVEMENT

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

|                      | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | Australia |
|----------------------|-----|-----|-----|----|----|-----|----|-----|-----------|
| <b>Quarter ended</b> |     |     |     |    |    |     |    |     |           |
| 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               | 6   | 2   | 8   | 2  | 5  | 0   | 0  | 0   | 23        |
| Sep-21               | 9   | 3   | 10  | 1  | 1  | 2   | 0  | 0   | 26        |
| Dec-21               | 7   | 4   | 8   | 4  | 0  | 0   | 1  | 0   | 24        |
| Mar-22               | 7   | 2   | 9   | 0  | 1  | 0   | 2  | 0   | 21        |
| Jun-22               | 6   | 2   | 9   | 2  | 4  | 0   | 0  | 0   | 23        |

**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>                                  |      |       |       |       |       |     |       |     |           |
| June 2018   | 36   | 17    | 22    | 7     | 11    | 3   | 0     | 0   | 96        |
| June 2019   | 24   | 21    | 24    | 16    | 14    | 2   | 2     | 0   | 103       |
| June 2020   | 26   | 24    | 23    | 11    | 4     | 4   | 0     | 1   | 93        |
| June 2021   | 22   | 14    | 43    | 7     | 16    | 0   | 1     | 0   | 103       |
| June 2022   | 29   | 11    | 36    | 7     | 6     | 2   | 3     | 0   | 94        |
| <b>Change last 12 months (%)</b>                        | 31.8 | -21.4 | -16.3 | 0.0   | -62.5 | -   | 200.0 | -   | -8.7      |
| <b>Average annual % change over 3 years<sup>a</sup></b> | 5.6  | -32.3 | 25.1  | -20.2 | 22.5  | -   | -     | -   | 0.5       |

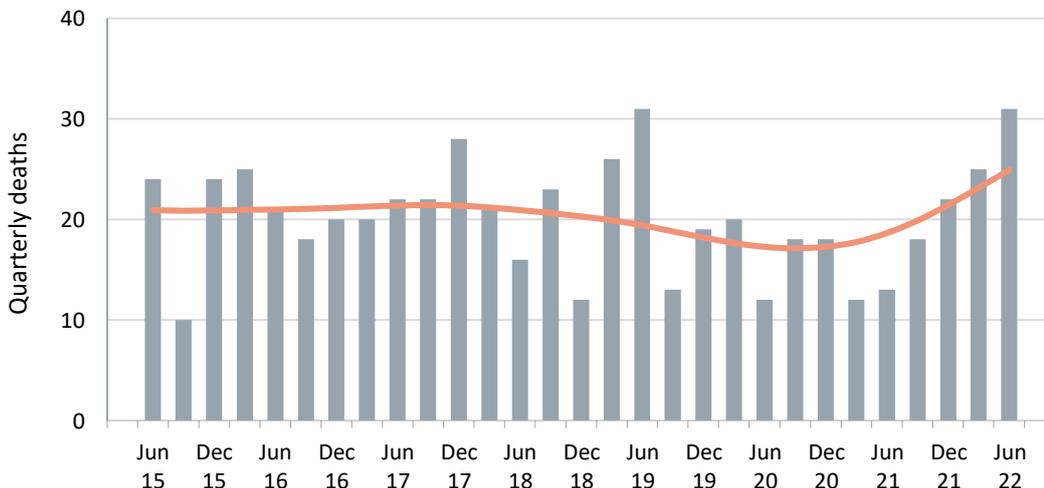
a Average annual percentage change based on the exponential trend for the last four 12-month periods.

## 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> |     |     |     |    |    |     |    |     |           |
| 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               | 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  | 6   | 2   | 0  | 2  | 0   | 0  | 0   | 22        |
| Mar-22               | 9   | 3   | 7   | 2  | 2  | 2   | 0  | 0   | 25        |
| Jun-22               | 7   | 6   | 5   | 2  | 9  | 2   | 0  | 0   | 31        |

**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>                            |      |      |      |      |       |       |        |     |           |
| June 2018   | 33   | 19   | 13   | 6    | 12    | 4     | 0      | 0   | 87        |
| June 2019   | 40   | 19   | 19   | 3    | 8     | 2     | 0      | 1   | 92        |
| June 2020   | 23   | 16   | 13   | 4    | 7     | 0     | 1      | 0   | 64        |
| June 2021   | 24   | 12   | 9    | 5    | 8     | 2     | 1      | 0   | 61        |
| June 2022   | 32   | 18   | 17   | 7    | 17    | 5     | 0      | 0   | 96        |
| Change last 12 months (%)                         | 33.3 | 50.0 | 88.9 | 40.0 | 112.5 | 150.0 | -100.0 | -   | 57.4      |
| Average annual % change over 3 years <sup>a</sup> | 18.0 | 6.1  | 14.4 | 32.3 | 55.8  | -     | -      | -   | 22.5      |

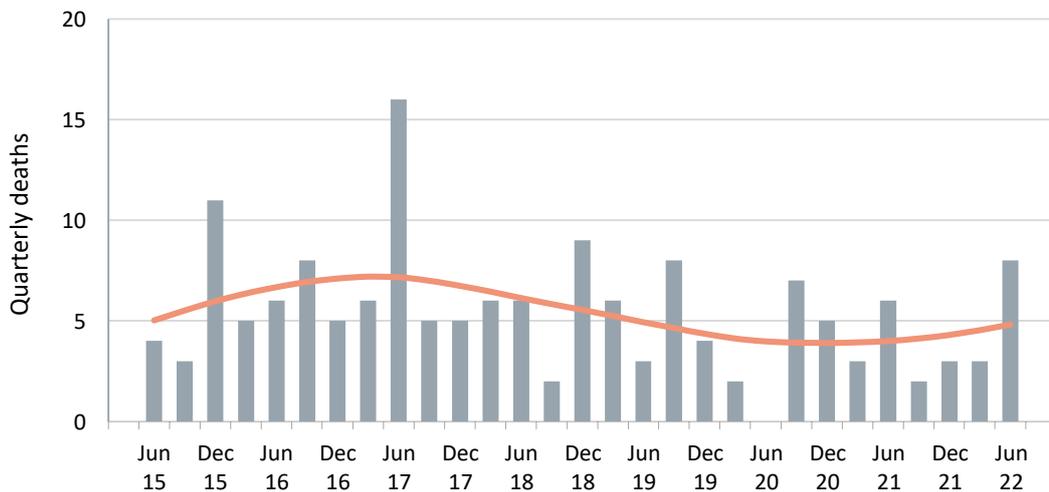
a Average annual percentage change based on the exponential trend for the last four 12-month periods.

## BUS INVOLVEMENT

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

|                      | NSW | Vic | Qld | SA | WA | Tas | NT | ACT | Australia |
|----------------------|-----|-----|-----|----|----|-----|----|-----|-----------|
| <b>Quarter ended</b> |     |     |     |    |    |     |    |     |           |
| 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  | 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   | 2   | 2   | 0  | 1  | 0   | 0  | 0   | 8         |

**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>                                  |     |       |       |        |       |        |    |     |           |
| June 2018   | 5   | 9     | 4     | 0      | 3     | 0      | 1  | 0   | 22        |
| June 2019   | 7   | 4     | 2     | 2      | 3     | 1      | 0  | 1   | 20        |
| June 2020   | 5   | 4     | 0     | 1      | 3     | 1      | 0  | 0   | 14        |
| June 2021   | 6   | 2     | 6     | 4      | 1     | 2      | 0  | 0   | 21        |
| June 2022   | 6   | 2     | 3     | 0      | 4     | 0      | 1  | 0   | 16        |
| <b>Change last 12 months (%)</b>                        | 0.0 | 0.0   | -50.0 | -100.0 | 300.0 | -100.0 | -  | -   | -23.8     |
| <b>Average annual % change over 3 years<sup>a</sup></b> | 9.5 | -29.3 | -     | -      | 15.5  | -      | -  | -   | 6.9       |

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:<br/>&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<br/>Department of Infrastructure, Transport, Regional Development, Communications and the Arts<br/>GPO Box 501 Canberra ACT 2601<br/>Email: <a href="mailto:roadsafety@infrastructure.gov.au">roadsafety@infrastructure.gov.au</a><br/>Internet: &lt; <a href="http://www.bitre.gov.au">http://www.bitre.gov.au</a> &gt;</p>   |