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Additional information
Enquiries relating to crash statistics may be directed to the Ministry of Transport, PO Box 3175, Wellington, or by email on info@transport.govt.nz. For more information about road safety, visit the Ministry of Transport website at www.transport.govt.nz.

A selection of fact sheets is available via the research section of the Ministry of Transport website.

These include:

Crash fact sheets
▶ Alcohol and drugs
▶ Cyclists
▶ Diverted attention
▶ Fatigue
▶ Motorcyclists
▶ Overseas drivers
▶ Pedestrians
▶ Speed
▶ Trucks
▶ Young drivers

Travel survey fact sheets
▶ Comparing travel modes
▶ Cycling
▶ Driver travel
▶ Motorcycling
▶ Public transport
▶ Risk on the road
▶ Introduction and mode comparison
▶ Drivers and their passengers
▶ Pedestrians, cyclists and motorcyclists
▶ Walking
Contents

Contents .............................................................................................................................................. 3
Key facts .............................................................................................................................................. 4
Safety levels improving ........................................................................................................................ 4
Time series .......................................................................................................................................... 5
Who was at fault? ................................................................................................................................ 6
Types of crash ..................................................................................................................................... 8
Where do crashes happen? ................................................................................................................ 9
When do crashes happen? .................................................................................................................. 9
Types of truck rig involved in crashes ............................................................................................... 10
Types of road users who die, or are injured, in truck crashes ........................................................... 11
Terminology ....................................................................................................................................... 12
Key facts

In 2016, 75 people died and a further 850 were injured in road crashes involving trucks. This was 23 percent of all deaths and 7 percent of all reported injuries on our roads.

Because of their large mass, trucks tend to be over-represented in serious crashes. Deaths from crashes involving trucks make up around 20 percent of the total road toll (5 year average), while just over 6 percent of the total distance travelled on New Zealand roads is travelled by trucks.

In crashes involving trucks, most of the people who die (87 percent in 2016) are not truck occupants, but the other road users involved. This reflects the fact that, in a collision between a heavy vehicle and a light vehicle or vulnerable road user, there is a much higher probability of death or serious injury than in a collision involving only light vehicles.

This is not to say that the fault lies primarily with the heavy vehicles or their drivers. As shown in a later section, truck drivers have the primary responsibility\(^1\) for only about a third (32 percent) of the fatal crashes in which they are involved.

Safety levels improving

The number of fatal crashes that involve a truck for every 100 million kilometres driven by trucks has dropped by about a third since the early 2000s. There has been little change since 2008.

Figure 1: Fatal truck crashes per 100 million kilometres travelled by trucks

![Graph showing the decrease in fatal truck crashes per 100 million kilometres travelled by trucks from 2001 to 2016.](image)

Note: Truck km travelled based on odometer readings at time of WoF

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\(^{1}\) Primary responsibility (fault) for a crash is based on the crash movements and crash cause factors assigned in the Crash Analysis System. It is not based on legal liability or court conviction. Fault/responsibility here only considers driver and rider factors contributing to the crash. There may also be road or system factors that contributed to the crash.
# Time series

Table 1: Deaths and injuries in crashes involving trucks (1980–2016)

<table>
<thead>
<tr>
<th>Year</th>
<th>Deaths</th>
<th></th>
<th></th>
<th>Injuries</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Truck occupants</td>
<td>Other road users</td>
<td>Total</td>
<td>% of road toll</td>
<td>Truck occupants</td>
<td>Other road users</td>
</tr>
<tr>
<td>1980</td>
<td>15</td>
<td>53</td>
<td>68</td>
<td>12%</td>
<td>190</td>
<td>693</td>
</tr>
<tr>
<td>1981</td>
<td>16</td>
<td>75</td>
<td>91</td>
<td>15%</td>
<td>186</td>
<td>712</td>
</tr>
<tr>
<td>1982</td>
<td>12</td>
<td>89</td>
<td>101</td>
<td>15%</td>
<td>246</td>
<td>670</td>
</tr>
<tr>
<td>1983</td>
<td>4</td>
<td>80</td>
<td>84</td>
<td>12%</td>
<td>203</td>
<td>675</td>
</tr>
<tr>
<td>1984</td>
<td>13</td>
<td>86</td>
<td>99</td>
<td>15%</td>
<td>237</td>
<td>820</td>
</tr>
<tr>
<td>1985</td>
<td>15</td>
<td>99</td>
<td>114</td>
<td>17%</td>
<td>271</td>
<td>905</td>
</tr>
<tr>
<td>1986</td>
<td>15</td>
<td>84</td>
<td>99</td>
<td>13%</td>
<td>274</td>
<td>903</td>
</tr>
<tr>
<td>1987</td>
<td>16</td>
<td>95</td>
<td>111</td>
<td>14%</td>
<td>309</td>
<td>859</td>
</tr>
<tr>
<td>1988</td>
<td>11</td>
<td>83</td>
<td>94</td>
<td>12%</td>
<td>307</td>
<td>786</td>
</tr>
<tr>
<td>1989</td>
<td>14</td>
<td>122</td>
<td>136</td>
<td>19%</td>
<td>272</td>
<td>795</td>
</tr>
<tr>
<td>1990</td>
<td>7</td>
<td>96</td>
<td>103</td>
<td>14%</td>
<td>280</td>
<td>893</td>
</tr>
<tr>
<td>1991</td>
<td>15</td>
<td>82</td>
<td>97</td>
<td>13%</td>
<td>291</td>
<td>681</td>
</tr>
<tr>
<td>1992</td>
<td>6</td>
<td>93</td>
<td>99</td>
<td>15%</td>
<td>258</td>
<td>736</td>
</tr>
<tr>
<td>1993</td>
<td>12</td>
<td>94</td>
<td>106</td>
<td>16%</td>
<td>297</td>
<td>783</td>
</tr>
<tr>
<td>1994</td>
<td>24</td>
<td>97</td>
<td>121</td>
<td>20%</td>
<td>331</td>
<td>851</td>
</tr>
<tr>
<td>1995</td>
<td>13</td>
<td>105</td>
<td>118</td>
<td>20%</td>
<td>380</td>
<td>890</td>
</tr>
<tr>
<td>1996</td>
<td>26</td>
<td>68</td>
<td>94</td>
<td>16%</td>
<td>359</td>
<td>784</td>
</tr>
<tr>
<td>1997</td>
<td>12</td>
<td>86</td>
<td>98</td>
<td>19%</td>
<td>308</td>
<td>720</td>
</tr>
<tr>
<td>1998</td>
<td>11</td>
<td>76</td>
<td>87</td>
<td>16%</td>
<td>282</td>
<td>702</td>
</tr>
<tr>
<td>1999</td>
<td>17</td>
<td>100</td>
<td>117</td>
<td>23%</td>
<td>288</td>
<td>637</td>
</tr>
<tr>
<td>2000</td>
<td>16</td>
<td>78</td>
<td>94</td>
<td>18%</td>
<td>241</td>
<td>519</td>
</tr>
<tr>
<td>2001</td>
<td>13</td>
<td>77</td>
<td>90</td>
<td>19%</td>
<td>284</td>
<td>634</td>
</tr>
<tr>
<td>2002</td>
<td>13</td>
<td>59</td>
<td>72</td>
<td>16%</td>
<td>337</td>
<td>687</td>
</tr>
<tr>
<td>2003</td>
<td>16</td>
<td>58</td>
<td>74</td>
<td>18%</td>
<td>349</td>
<td>650</td>
</tr>
<tr>
<td>2004</td>
<td>19</td>
<td>70</td>
<td>89</td>
<td>19%</td>
<td>401</td>
<td>724</td>
</tr>
<tr>
<td>2005</td>
<td>21</td>
<td>71</td>
<td>92</td>
<td>21%</td>
<td>367</td>
<td>766</td>
</tr>
<tr>
<td>2006</td>
<td>15</td>
<td>71</td>
<td>86</td>
<td>21%</td>
<td>375</td>
<td>766</td>
</tr>
<tr>
<td>2007</td>
<td>10</td>
<td>64</td>
<td>74</td>
<td>18%</td>
<td>396</td>
<td>780</td>
</tr>
<tr>
<td>2008</td>
<td>7</td>
<td>51</td>
<td>58</td>
<td>16%</td>
<td>373</td>
<td>788</td>
</tr>
<tr>
<td>2009</td>
<td>7</td>
<td>51</td>
<td>58</td>
<td>15%</td>
<td>279</td>
<td>615</td>
</tr>
<tr>
<td>2010</td>
<td>16</td>
<td>41</td>
<td>57</td>
<td>15%</td>
<td>278</td>
<td>593</td>
</tr>
<tr>
<td>2011</td>
<td>12</td>
<td>38</td>
<td>50</td>
<td>18%</td>
<td>247</td>
<td>646</td>
</tr>
<tr>
<td>2012</td>
<td>10</td>
<td>42</td>
<td>52</td>
<td>17%</td>
<td>246</td>
<td>534</td>
</tr>
<tr>
<td>2013</td>
<td>7</td>
<td>40</td>
<td>47</td>
<td>19%</td>
<td>241</td>
<td>506</td>
</tr>
<tr>
<td>2014</td>
<td>13</td>
<td>54</td>
<td>67</td>
<td>23%</td>
<td>246</td>
<td>526</td>
</tr>
<tr>
<td>2015</td>
<td>10</td>
<td>48</td>
<td>58</td>
<td>18%</td>
<td>226</td>
<td>582</td>
</tr>
<tr>
<td>2016</td>
<td>10</td>
<td>65</td>
<td>75</td>
<td>23%</td>
<td>274</td>
<td>576</td>
</tr>
</tbody>
</table>
Figure 2: Deaths in crashes involving trucks

Who was at fault?

Figure 3: Truck driver fault in fatal crashes (2012–2016)

Note: In this section a ‘single-vehicle’ crash is a crash in which there was only one truck, and no other road users were involved. A ‘multi-vehicle’ or ‘multi-road user’ crash involves a truck and at least one other road user.
Table 2: Truck crashes (2012–2016)

<table>
<thead>
<tr>
<th>Crash severity</th>
<th>Single vehicle truck crashes</th>
<th>Crashes involving another road user</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Truck primary responsibility</td>
</tr>
<tr>
<td></td>
<td>Percent of fatal truck crashes</td>
<td>Truck partial responsibility</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No truck fault</td>
</tr>
<tr>
<td>Fatal</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>12%</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td></td>
<td>58%</td>
</tr>
<tr>
<td>Injury</td>
<td>631</td>
<td>1,044</td>
</tr>
<tr>
<td></td>
<td>21%</td>
<td>116</td>
</tr>
<tr>
<td></td>
<td></td>
<td>38%</td>
</tr>
</tbody>
</table>

Figure 4: Percentage of truck crashes in which a truck driver had the primary responsibility for the crash (2012–2016)

The more serious the crash, the less likely it is for the truck driver to have the primary responsibility for the crash. The truck driver had the primary responsibility for about a third (32 percent) of fatal crashes, compared with over half (57 percent) of minor injury crashes.

For fatal crashes that involved a truck and another road user, the truck driver had the primary responsibility for about one-quarter (24 percent) of the crashes. For minor injury crashes this figure was 48 percent.
Types of crash

Table 3: Type of crash by speed limit area and crash severity (2012–2016)

<table>
<thead>
<tr>
<th>Movement type</th>
<th>Speed limit area</th>
<th></th>
<th>All truck crashes</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Open road</td>
<td>Urban (70km/h or less)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fatal Injury</td>
<td>Fatal Injury</td>
<td>Number %</td>
<td>Number %</td>
</tr>
<tr>
<td>Overtaking/lane change</td>
<td>16 185</td>
<td>1 99</td>
<td>17 7%</td>
<td>284 9%</td>
</tr>
<tr>
<td>Head on</td>
<td>94 255</td>
<td>5 97</td>
<td>99 38%</td>
<td>352 12%</td>
</tr>
<tr>
<td>Lost control/run off road</td>
<td>26 550</td>
<td>4 147</td>
<td>30 12%</td>
<td>697 23%</td>
</tr>
<tr>
<td>Rear end/obstruction</td>
<td>12 351</td>
<td>6 310</td>
<td>18 7%</td>
<td>661 22%</td>
</tr>
<tr>
<td>Intersection</td>
<td>31 290</td>
<td>15 443</td>
<td>46 18%</td>
<td>733 24%</td>
</tr>
<tr>
<td>Manoeuvring/miscellaneous</td>
<td>19 92</td>
<td>4 112</td>
<td>23 9%</td>
<td>204 7%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>14 16</td>
<td>12 112</td>
<td>26 10%</td>
<td>128 4%</td>
</tr>
<tr>
<td>Total</td>
<td>212 1,739</td>
<td>47 1,320</td>
<td>259 100%</td>
<td>3,059 100%</td>
</tr>
</tbody>
</table>

Figure 5: Percentage of truck crashes where the truck driver has the primary responsibility for the crash (2012–2016)
Where do crashes happen?

Figure 6: Urban roads (speed limit of 70km/h or less) and open roads (2012–2016)

<table>
<thead>
<tr>
<th>Type of road</th>
<th>Fatal crashes</th>
<th>Injury crashes</th>
<th>Total crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>47</td>
<td>1,320</td>
<td>1,367</td>
</tr>
<tr>
<td>Open road</td>
<td>212</td>
<td>1,739</td>
<td>1,951</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td>3,059</td>
<td>3,318</td>
</tr>
</tbody>
</table>

Eighty-two percent of fatal truck crashes and 57 percent of injury crashes occur on the open road.

When do crashes happen?

Figure 7: Fatal and injury crashes (2012–2016)

Note: Crashes in 4 hour blocks beginning 00:00 Monday

The peak times for truck accidents are during the main working hours between 8am and 4pm on weekdays.
Types of truck rig involved in crashes

Figure 8: Trucks involved in fatal crashes (2012–2016)

![Pie chart showing the types of truck rigs involved in crashes: Rigid truck 52%, Truck and trailer 29%, Semi trailer 10%, A and B trains 9%]

**Note:**
- A Train: A towing vehicle with a semi-trailer followed by a full trailer.
- B Train: A towing vehicle with two semi-trailers attached.

Table 4: Heavy combination rigs as a percentage of all trucks involved in crashes, by crash severity and road type (2012–2016)

<table>
<thead>
<tr>
<th>Type of road</th>
<th>Fatal crashes</th>
<th>Serious injury crashes</th>
<th>Minor injury crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>43%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Open road</td>
<td>49%</td>
<td>36%</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>48%</td>
<td>31%</td>
<td>26%</td>
</tr>
</tbody>
</table>

**Note:** Combinations include: truck and trailer; semi-trailer; and A or B train.

The bigger combination rigs feature more in open road crashes than urban crashes. For all areas, the bigger rigs feature more in fatal crashes than injury crashes.
Types of road users who die, or are injured, in truck crashes

Figure 9: Types of road users who die or are injured in truck crashes, by injury severity (2012–2016)

Fewer than one in five deaths in truck crashes are truck drivers or passengers. Sixty-two percent are car or van drivers or passengers. The other 21 percent are the less well-protected road users — pedestrians (9 percent), motorcyclists (8 percent) and cyclists (4 percent). For non-fatal injuries from truck crashes, the pattern changes to: 57 percent car occupants; 31 percent truck occupants; and 12 percent for other road users.

Most of the truck occupant casualties from road crashes (82 percent of the deaths and 63 percent of the injuries) die, or are injured, in crashes that involve only trucks.

In collisions that involve only one car and one truck, 98 percent of the deaths, 89 percent of the serious injuries and 83 percent of the minor injuries are car occupants. These numbers reflect the fact that, in collisions between large vehicles and small vehicles (or unprotected road users), the occupants of the smaller vehicles are more likely to be seriously injured than the occupants of the larger vehicles.
Terminology

Fatal injuries: injuries that result in death within 30 days of the crash.

Serious injuries: fractures, concussions, internal injuries, crushings, severe cuts and lacerations, severe general shock necessitating medical treatment and any other injury involving removal to and detention in hospital.

Minor injuries: injuries of a minor nature such as sprains and bruises.

Social cost: a measure of the total cost of road crashes to the nation. It includes: loss of life and life quality; loss of productivity; and medical, legal, court, and property damage costs.

Trucks: includes light trucks.

Vulnerable road users: road users not inside motor vehicles such as pedestrians, cyclists and motorcyclists.

Crash fault/responsibility: Primary responsibility (at-fault) for a crash is based on the crash movements and crash cause factors assigned in the Crash Analysis System. It is not based on legal liability or court conviction. Fault/responsibility here only considers driver and rider factors contributing to the crash. There may also be road or system factors that contributed to the crash.