

Traffic Safety Basic Facts 2010

Heavy Goods Vehicles and Buses

Heavy Goods Vehicles (HGVs) are defined as goods vehicles of over 3,5 tons maximum permissible gross vehicle weight. Road traffic accidents involving HGVs tend to be more severe than other accidents because of the great size and mass of these vehicles. Buses and coaches are included in this Basic Fact Sheet because they too are normally relatively large, although minibuses are categorized as buses in some countries. Note that coaches are grouped with buses in the CARE database.

Table 1: Fatalities in accidents involving Heavy Goods Vehicles, 1999-2008

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BE | 193 | 204 | 193 | 178 | 136 | 143 | 161 | 133 | 156 | 122 |
| CZ | 220 | 247 | 222 | 234 | 241 | 257 | 240 | 215 | 220 | 169 |
| DK | 86 | 97 | 78 | 80 | 69 | 65 | 79 | 49 | 66 | 62 |
| DE | 974 | 974 | 824 | 836 | 815 | 738 | 684 | 719 | 687 | 625 |
| EE | - | - | - | - | - | - | 50 | 37 | 35 | 32 |
| IE | 61 | 67 | 70 | 42 | 54 | 55 | 51 | 57 | 40 | 44 |
| EL | 268 | 205 | 220 | 219 | 217 | 181 | 158 | 167 | 141 | 138 |
| ES | 905 | 920 | 803 | 860 | 834 | 766 | 714 | 659 | 528 | 452 |
| FR | 1.090 | 1.051 | 1.057 | 988 | 758 | 727 | 726 | 683 | 658 | 596 |
| IT | 562 | 588 | 418 | 365 | 369 | 356 | 320 | 338 | 308 | 280 |
| LV | - | - | - | - | - | - | - | 81 | 97 | 55 |
| LU | 3 | 5 | 6 | 12 | 9 | 6 | 4 | 7 | 7 | 2 |
| HU | - | - | - | - | 115 | 264 | 251 | 239 | 218 | 173 |
| NL | 175 | 168 | 169 | 129 | 158 | 137 | 103 | 129 | 123 | 107 |
| AT | 177 | 143 | 122 | 143 | 140 | 144 | 126 | 120 | 89 | 111 |
| PL | 1.443 | 1.443 | 1.443 | 1.474 | 1.462 | 1.487 | 1.425 | 1.374 | 1.246 | 1.155 |
| PT | 296 | 284 | 197 | 214 | 213 | 187 | 163 | 130 | 145 | 112 |
| RO | 240 | 203 | 193 | 191 | 224 | 207 | 297 | 263 | 271 | 292 |
| SI | 11 | 11 | 15 | 19 | 11 | 21 | 21 | 4 | 20 | 7 |
| SK | - | - | - | - | - | - | 134 | 122 | 220 | 196 |
| FI | 121 | 77 | 118 | 105 | 97 | 107 | 92 | 82 | 97 | 106 |
| SE | 93 | 119 | 118 | 135 | 92 | 59 | 61 | 83 | 92 | 72 |
| UK | 641 | 581 | 607 | 561 | 548 | 478 | 510 | 434 | 449 | 380 |
| EU-19 ² | 7.559 | 7.387 | 6.873 | 6.785 | 6.447 | 6.121 | 5.935 | 5.646 | 5.343 | 4.832 |
| Yearly Change | | -2,3% | -7,0% | -1,3% | -5,0% | -5,1% | -3,0% | -4,9% | -5,4% | -9,6% |
| CH | - | - | - | - | - | 56 | - | - | - | 45 |

Source: CARE Database / EC
Date of query: November 2010

Table 1 presents the number of people killed in accidents involving HGVs in each of the EU-23¹ countries and Switzerland for each year for which the data are available over the last ten years.

¹ See Table "Definition of EU-level and used Country abbreviations" on Page 14

More than 5200 people died in road traffic accidents involving HGVs in 2008 (EU-23¹).

The total number killed in these accidents in EU-19² fell from 7.559 in 1999 to 4.832 in 2008, a fall of 36,1%.

Table 2 presents the number of people killed in each of the EU-23 countries and Switzerland over the last ten years in accidents involving buses and coaches. The number of people killed in these accidents in EU-19² fell from 1.429 in 1999 to 879 in 2008, a fall of 38,5%. The totals from this and the previous table are presented in Figure 1. They have fallen in parallel, with approximately five times as many people killed per year in accidents involving HGVs as in accidents involving buses or coaches.

Table 2: Fatalities in accidents involving buses or coaches, 1999-2008

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|--------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|
| BE | 23 | 28 | 29 | 31 | 29 | 31 | 19 | 31 | 30 | 23 |
| CZ | 51 | 32 | 44 | 42 | 68 | 49 | 31 | 34 | 35 | 27 |
| DK | 25 | 14 | 14 | 22 | 26 | 15 | 11 | 14 | 20 | 10 |
| DE | 138 | 138 | 137 | 117 | 110 | 105 | 108 | 86 | 94 | 75 |
| EE | - | - | - | - | - | - | 7 | 13 | 7 | 4 |
| IE | 14 | 12 | 9 | 8 | 2 | 17 | 11 | 11 | 7 | 10 |
| EL | 79 | 71 | 59 | 60 | 94 | 48 | 53 | 36 | 35 | 33 |
| ES | 163 | 144 | 135 | 109 | 126 | 80 | 108 | 102 | 73 | 81 |
| FR | 127 | 144 | 117 | 109 | 97 | 99 | 91 | 76 | 110 | 80 |
| IT | 131 | 129 | 122 | 107 | 131 | 136 | 108 | 116 | 91 | 102 |
| LV | - | - | - | - | - | - | - | 16 | 16 | 15 |
| LU | 0 | 4 | 6 | 4 | 1 | 2 | 2 | 0 | 0 | 1 |
| HU | - | - | - | - | 71 | 58 | 62 | 64 | 48 | 33 |
| NL | 21 | 23 | 27 | 21 | 21 | 15 | 18 | 14 | 15 | 14 |
| AT | 41 | 36 | 33 | 17 | 20 | 24 | 10 | 19 | 17 | 9 |
| PL | 251 | 251 | 251 | 216 | 246 | 247 | 252 | 174 | 148 | 142 |
| PT | 58 | 57 | 66 | 51 | 26 | 41 | 23 | 13 | 33 | 21 |
| RO | 72 | 71 | 52 | 113 | 86 | 102 | 120 | 117 | 132 | 100 |
| SI | 12 | 12 | 6 | 4 | 12 | 12 | 8 | 2 | 2 | 4 |
| SK | - | - | - | - | - | - | 35 | 35 | 50 | 29 |
| FI | 18 | 18 | 28 | 17 | 13 | 29 | 13 | 19 | 13 | 13 |
| SE | 23 | 16 | 32 | 29 | 33 | 16 | 13 | 36 | 15 | 13 |
| UK | 182 | 176 | 215 | 165 | 160 | 154 | 140 | 164 | 151 | 121 |
| EU-19² | 1.429 | 1.376 | 1.382 | 1.242 | 1.301 | 1.222 | 1.139 | 1.064 | 1.021 | 879 |
| Yearly Change | | -3,7% | 0,4% | -10,1% | 4,8% | -6,1% | -6,8% | -6,6% | -4,0% | -13,9% |
| CH | - | - | - | - | - | 10 | - | - | - | 17 |

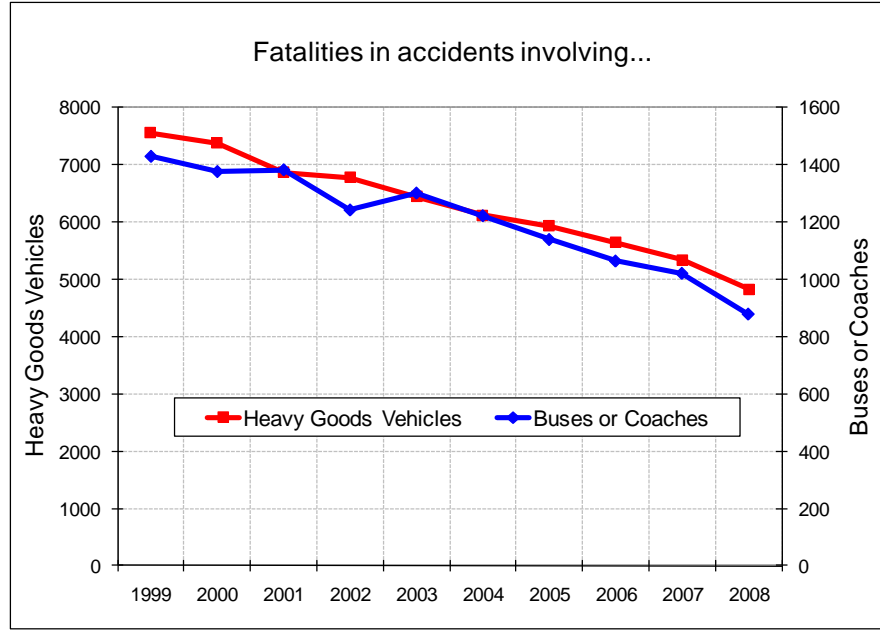
Source: CARE Database / EC

Date of query: November 2010

More than 950 people died in road traffic accidents involving buses or coaches in 2008. (EU-23)

² Where a number is missing for an EU-19 country in a particular year, its contribution to the EU-19 total is estimated as the next known value

Figure 1: The number of fatalities in accidents involving Heavy Goods Vehicles and buses or coaches, EU-19², 1999-2008



Source: CARE Database / EC
Date of query: November 2010

The risk of being killed in such an accident can be compared for each Member State using the rate of deaths per million population. These rates are shown in Table 3 and Figure 2.

Table 3: The fatality rates per million population in accidents involving HGVs and buses or coaches, 2008

| | HGVs accidents | Bus or coach accidents |
|-------|----------------|------------------------|
| BE | 11,4 | 2,1 |
| CZ | 16,3 | 2,6 |
| DK | 11,3 | 1,8 |
| DE | 7,6 | 0,9 |
| EE | 24,6 | 3,1 |
| IE | 10,0 | 2,3 |
| EL | 12,3 | 2,9 |
| ES | 10,0 | 1,8 |
| FR | 9,3 | 1,3 |
| IT | 4,7 | 1,7 |
| LV | 23,9 | 6,5 |
| LU | 4,0 | 2,0 |
| HU | 17,3 | 3,3 |
| NL | 6,5 | 0,9 |
| AT | 13,4 | 1,1 |
| PL | 30,3 | 3,7 |
| PT | 10,6 | 2,0 |
| RO | 13,6 | 4,7 |
| SI | 3,5 | 2,0 |
| SK | 36,3 | 5,4 |
| FI | 20,1 | 2,5 |
| SE | 7,8 | 1,4 |
| UK | 6,2 | 2,0 |
| EU-23 | 10,9 | 2,0 |
| CH | 5,9 | 2,2 |

Source of population data: EUROSTAT

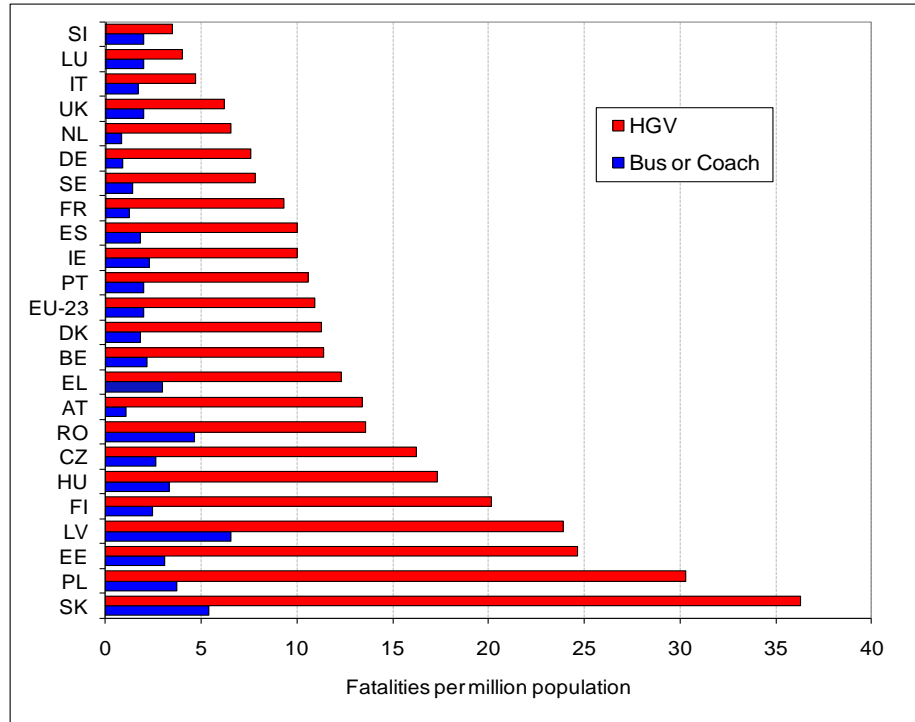
Source: CARE Database / EC
Date of query: November 2010

The annual number of people killed in road traffic accidents involving HGVs, buses or coaches fell by almost 40% between 1999 and 2008 in EU-19.

The risk of being killed in a road traffic accident involving an HGV is more than ten times higher in Slovakia than in Slovenia.

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- Roads outside urban areas
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- Single vehicle accidents
- Gender

Figure 2: The fatality rates in accidents involving HGVs and buses or coaches, 2008



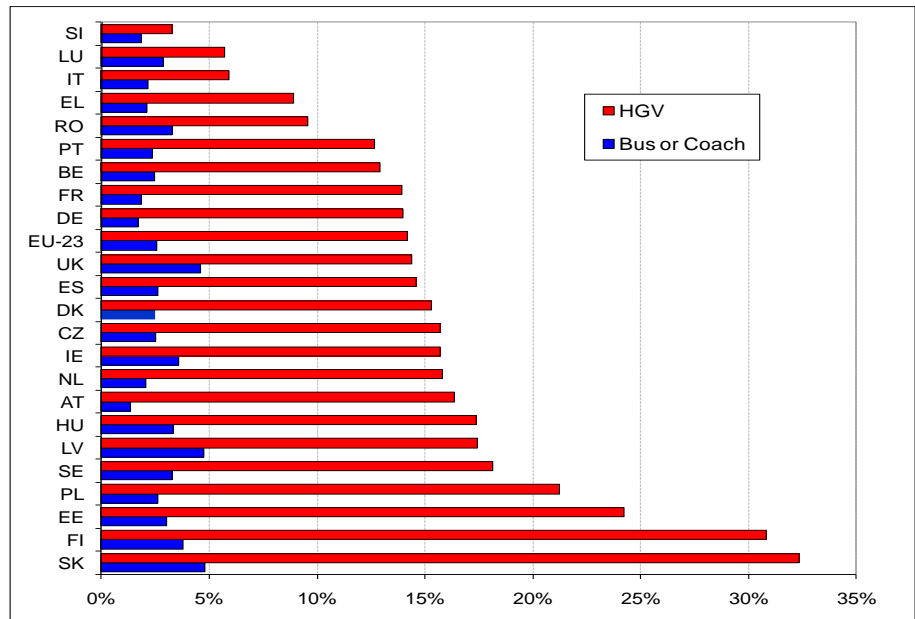
Source of population data: EUROSTAT

Source: CARE Database / EC
Date of query: November 2010

One seventh of people who died in road traffic accidents in 2008 died in accidents that involved HGVs.

The EU-23 average fatality rate in accidents involving HGVs is 10,9 per million population, and ranges from 3,5 in Slovenia to 36,3 in Slovakia. For accidents involving buses or coaches, the EU-23 average fatality rate is 2 per million, and ranges from 0,9 in Germany and the Netherlands to 6,5 in Latvia.

Figure 3: The proportion of fatalities in accidents involving HGVs and in accidents involving buses or coaches, 2008



Source of population data: EUROSTAT

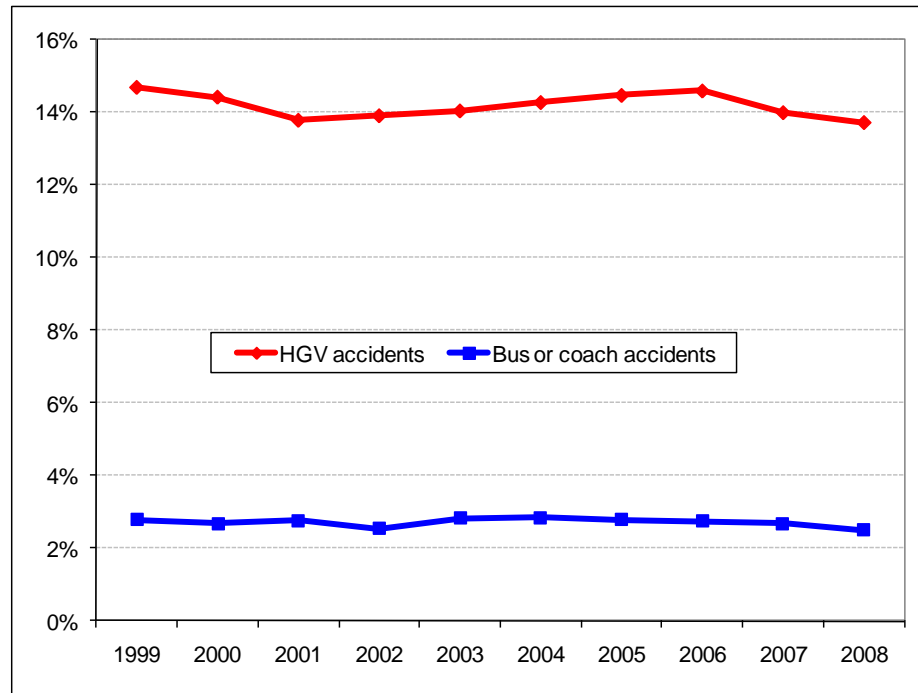
Source: CARE Database / EC
Date of query: November 2010

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Averaged over the EU-23 countries, 14,2% of deaths occurred in 2008 in accidents involving HGVs, and 2,6% in accidents involving buses or coaches. Figure 3 shows considerable variation around these averages in individual countries.

Figure 1 shows that the number of deaths in accidents involving HGVs and in accidents involving buses or coaches fell between 1999 and 2008, but the EU-19² total number of deaths also fell over this period. Figure 4 shows the proportion of fatalities in accidents involving HGVs and buses or coaches.

Figure 4: The proportion of fatalities in accidents involving Heavy Goods Vehicles and buses or coaches, EU-19², 1999-2008



Source: CARE Database / EC
Date of query: November 2010

The number of deaths in road traffic accidents that involved HGVs has tended to fall together with the total number of deaths.

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Type of casualties

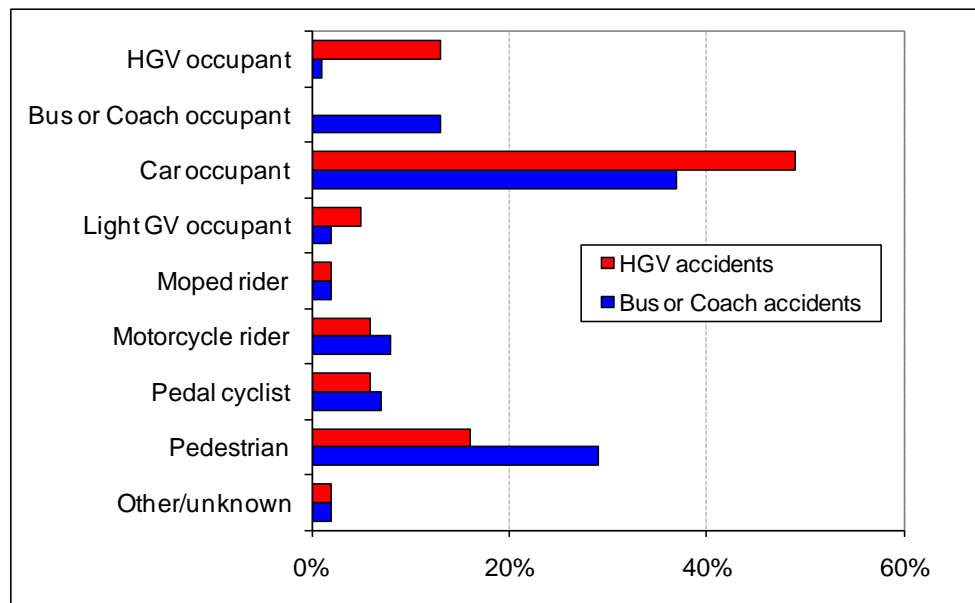
These accidents injured those outside the vehicles as well as their occupants. Across the EU-23, 13% of those killed in HGV accidents in 2008 were occupants of HGVs, and also 13% of those killed in bus or coach accidents were occupants of buses or coaches. Table 4 lists those killed in these accidents by road user type. The distributions are illustrated in Figure 5.

Table 4: Fatalities in accidents involving HGVs and in accidents involving buses or coaches, by road user type, EU-23, 2008

| accidents involving | HGVs | | Buses or coaches | |
|-----------------------|------------|------|------------------|------|
| | fatalities | % | fatalities | % |
| HGV occupant | 676 | 13% | 7 | 1% |
| Bus or Coach occupant | 16 | 0% | 121 | 13% |
| Car occupant | 2.604 | 49% | 359 | 37% |
| Light GV occupant | 271 | 5% | 21 | 2% |
| Moped rider | 119 | 2% | 20 | 2% |
| Motorcycle rider | 322 | 6% | 76 | 8% |
| Pedal cyclist | 325 | 6% | 65 | 7% |
| Pedestrian | 865 | 16% | 275 | 29% |
| Other/unknown | 90 | 2% | 15 | 2% |
| All | 5.288 | 100% | 959 | 100% |

Source: CARE Database / EC
Date of query: November 2010

Figure 5: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches, by road user type, EU-23, 2008



Source: CARE Database / EC
Date of query: November 2010

Half of those who died in 2008 in road traffic accidents that involved HGVs were travelling by car.

Almost 30% of those who died in 2008 in road traffic accidents that involved buses or coaches were pedestrians.

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Type of road

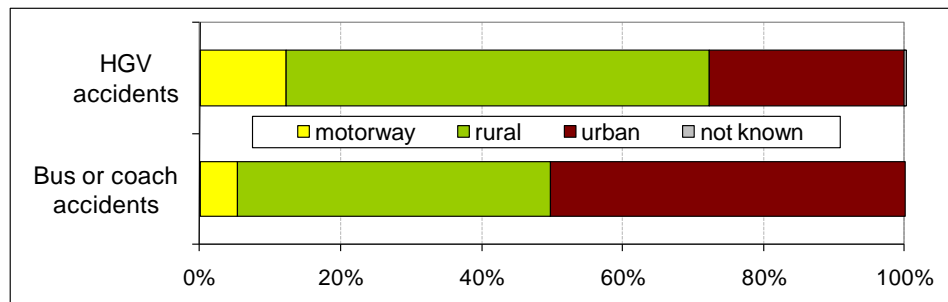
The CARE data show whether accidents occurred on motorways and, for non-motorway accidents, whether on urban or rural roads. Table 5 shows the distribution of fatalities in accidents involving HGVs. The results for these 23 EU countries are illustrated in Figure 6 for HGV accidents and for Bus or Coach accidents.

Table 5: Distribution of fatalities in accidents involving HGVs by road type, EU-23, 2008

| | motorway | non-motorway | | not known |
|-------|----------|--------------|-------|-----------|
| | | rural | urban | |
| BE | 56% | 36% | 8% | 0% |
| CZ | 28% | 44% | 28% | 0% |
| DK | 0% | 100% | 0% | 0% |
| DE | 76% | 19% | 5% | 0% |
| EE | 0% | 100% | 0% | 0% |
| IE | 0% | 0% | 0% | 100% |
| EL | 26% | 47% | 0% | 26% |
| ES | 2% | 98% | 0% | 0% |
| FR | 25% | 64% | 11% | 0% |
| IT | 60% | 31% | 9% | 0% |
| LV | 0% | 100% | 0% | 0% |
| LU | 0% | 0% | 0% | 0% |
| HU | 18% | 59% | 23% | 0% |
| NL | 0% | 0% | 0% | 100% |
| AT | 33% | 33% | 33% | 0% |
| PL | 3% | 70% | 18% | 10% |
| PT | 28% | 44% | 28% | 0% |
| RO | 8% | 38% | 54% | 0% |
| SI | 0% | 0% | 0% | 0% |
| SK | 11% | 72% | 17% | 0% |
| FI | 0% | 100% | 0% | 0% |
| SE | 60% | 20% | 20% | 0% |
| UK | 42% | 50% | 8% | 0% |
| EU-23 | 26% | 56% | 13% | 5% |
| CH | 75% | 0% | 25% | 0% |

Source: CARE Database / EC
Date of query: November 2010

Figure 6: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches by road type, EU-23, 2008



Source: CARE Database / EC
Date of query: November 2010

60% of fatalities in HGV accidents in 2008 occurred in rural areas, while 50% of fatalities in Bus or Coach accidents occurred in urban areas.

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Time of day

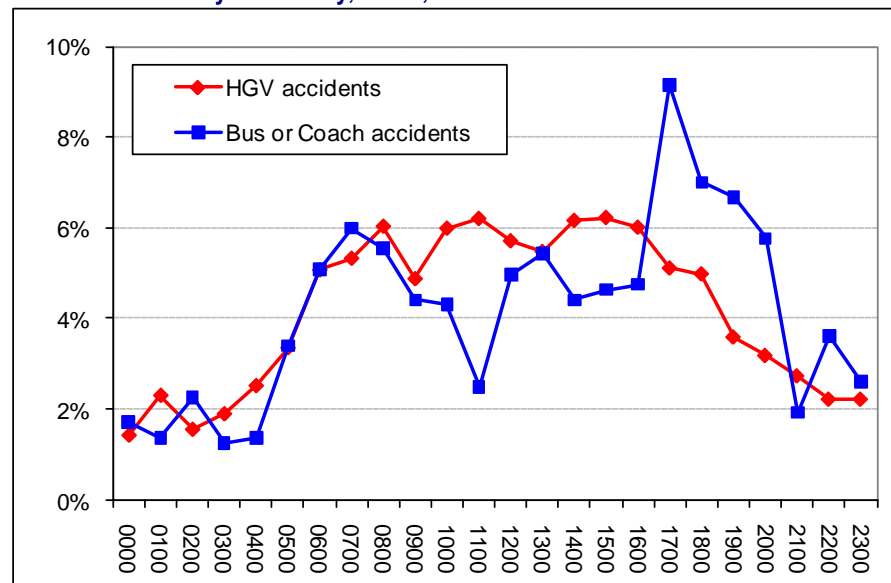
The distribution of fatalities by time of day was examined by dividing the day into six 4-hour periods. This is shown for HGV accidents in Table 6. The hourly rates are relatively high between 0800 and 2000 in all countries. Figure 7 illustrates the EU-22³ distribution for HGV accidents and for bus or coach accidents by hour of day.

Table 6: Distribution of fatalities by in accidents involving HGVs, by time of day, 2008

| | 0000-0400 | 0400-0800 | 0800-1200 | 1200-1600 | 1600-2000 | 2000-0000 |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|
| BE | 9% | 15% | 33% | 20% | 16% | 7% |
| CZ | 6% | 15% | 27% | 28% | 17% | 7% |
| DK | 5% | 15% | 29% | 40% | 8% | 3% |
| EE | 6% | 0% | 31% | 28% | 22% | 13% |
| IE | 5% | 9% | 27% | 36% | 16% | 7% |
| EL | 12% | 16% | 16% | 28% | 20% | 8% |
| ES | 3% | 15% | 24% | 21% | 26% | 11% |
| FR | 5% | 20% | 25% | 22% | 20% | 9% |
| IT | 6% | 15% | 21% | 29% | 21% | 7% |
| LV | 7% | 5% | 33% | 22% | 20% | 13% |
| LU | 0% | 50% | 0% | 0% | 50% | 0% |
| HU | 12% | 19% | 22% | 16% | 18% | 13% |
| NL | 3% | 12% | 29% | 30% | 22% | 4% |
| AT | 6% | 19% | 30% | 29% | 14% | 3% |
| PL | 8% | 18% | 20% | 21% | 20% | 13% |
| PT | 5% | 15% | 26% | 29% | 19% | 5% |
| RO | 14% | 13% | 21% | 17% | 22% | 13% |
| SI | 0% | 14% | 0% | 43% | 29% | 14% |
| SK | 7% | 15% | 18% | 22% | 26% | 12% |
| FI | 3% | 13% | 27% | 26% | 13% | 17% |
| SE | 4% | 8% | 22% | 43% | 11% | 11% |
| UK | 9% | 16% | 25% | 26% | 14% | 9% |
| EU-22 | 7% | 16% | 23% | 24% | 20% | 10% |
| CH | 0% | 12% | 16% | 42% | 30% | 5% |

Source: CARE Database / EC
Date of query: November 2010

Figure 7: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches by time of day, EU-22, 2008



Source: CARE Database / EC
Date of query: November 2010

³ Due to the high number of “unknown” cases, Germany has not been taken into account in this analysis.

The hourly fatality rate in road traffic accidents involving HGVs in 2008 was uniform between 6am and 6pm. The rate of accidents involving buses or coaches peaked in the morning hours and also between 5 and 6pm.

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Day of week

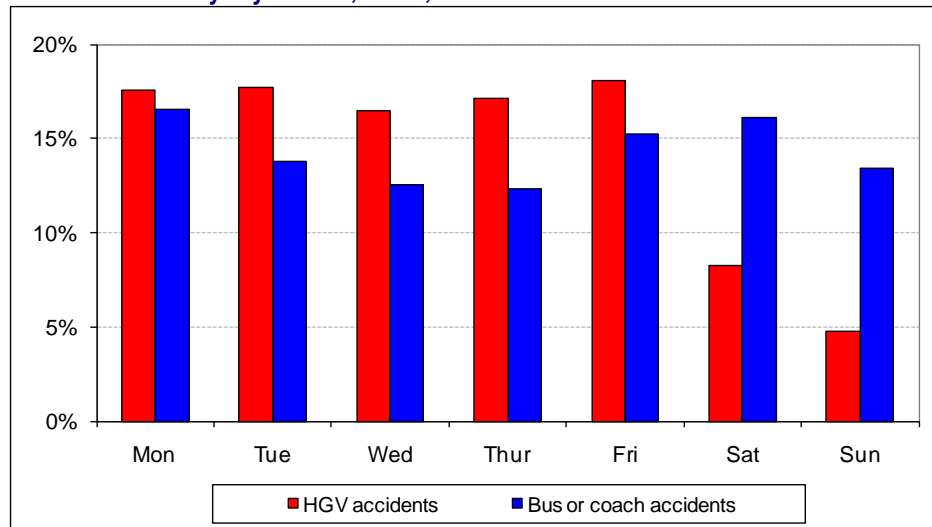
Table 7 shows the distribution of HGV accidents by day of week. The rates are generally much higher on weekdays than at the weekend. Figure 8 illustrates the EU-23 distribution for HGV accidents and bus or coach accidents, and shows the high proportion of fatalities in the accidents that occurred on Mondays.

Table 7: Distribution of fatalities in accidents involving HGVs, by day of week, 2008

| | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|-------|--------|---------|-----------|----------|--------|----------|--------|
| BE | 15% | 18% | 18% | 15% | 22% | 8% | 4% |
| CZ | 20% | 20% | 20% | 20% | 12% | 7% | 2% |
| DK | 35% | 15% | 15% | 19% | 13% | 3% | 0% |
| DE | 21% | 19% | 16% | 17% | 18% | 7% | 2% |
| EE | 22% | 19% | 6% | 28% | 9% | 16% | 0% |
| IE | 9% | 23% | 11% | 30% | 20% | 7% | 0% |
| EL | 16% | 20% | 16% | 10% | 14% | 17% | 7% |
| ES | 18% | 17% | 16% | 22% | 15% | 6% | 5% |
| FR | 14% | 22% | 18% | 16% | 20% | 7% | 2% |
| IT | 16% | 18% | 21% | 19% | 21% | 4% | 2% |
| LV | 9% | 15% | 15% | 15% | 24% | 13% | 11% |
| LU | 0% | 50% | 0% | 0% | 0% | 50% | 0% |
| HU | 24% | 17% | 17% | 10% | 20% | 6% | 6% |
| NL | 23% | 16% | 24% | 22% | 9% | 4% | 1% |
| AT | 20% | 13% | 17% | 24% | 15% | 11% | 0% |
| PL | 18% | 15% | 15% | 15% | 19% | 9% | 8% |
| PT | 21% | 21% | 12% | 17% | 16% | 7% | 6% |
| RO | 11% | 16% | 17% | 14% | 20% | 13% | 9% |
| SI | 14% | 0% | 14% | 14% | 29% | 29% | 0% |
| SK | 11% | 19% | 17% | 15% | 19% | 15% | 4% |
| FI | 15% | 16% | 12% | 19% | 23% | 9% | 6% |
| SE | 18% | 14% | 21% | 25% | 11% | 8% | 3% |
| UK | 17% | 17% | 15% | 18% | 19% | 9% | 4% |
| EU-23 | 18% | 18% | 16% | 17% | 18% | 8% | 5% |
| CH | 29% | 22% | 18% | 0% | 22% | 7% | 2% |

Source: CARE Database / EC
Date of query: November 2010

Figure 8: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches by day of week, EU-23, 2008



Source: CARE Database / EC
Date of query: November 2010

The fatality rate in road traffic accidents involving HGVs in 2008 was much lower at the weekend than on weekdays.

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Seasonality

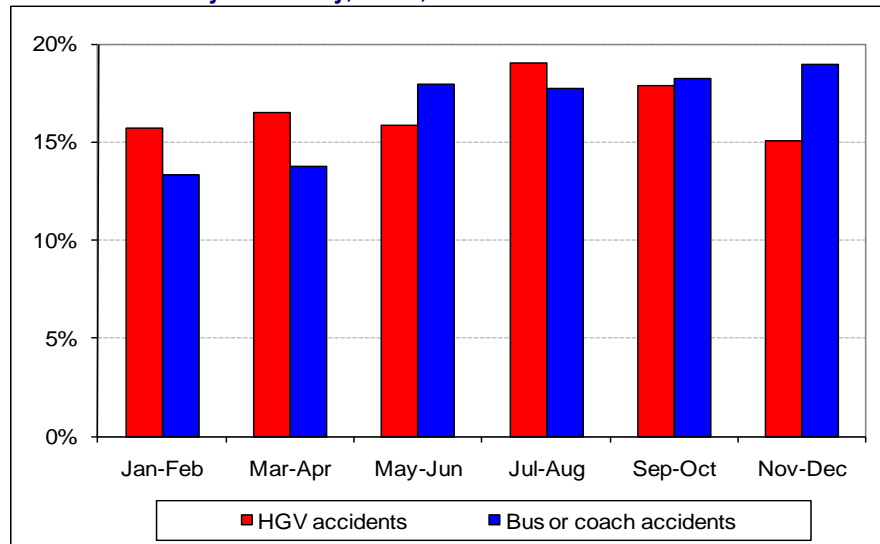
Table 8 shows the distribution of fatalities in accidents involving HGVs through the year, using pairs of months. The peak period varies between countries, and for the EU-23 is July-August. Figure 9 illustrates the EU-23 distribution. It includes the distribution for accidents involving buses or coaches, which peaks in November-December.

Table 8: Distribution of fatalities in accidents involving HGVs by month, 2008

| | Jan-Feb | Mar-Apr | May-Jun | Jul-Aug | Sep-Oct | Nov-Dec |
|-------|---------|---------|---------|---------|---------|---------|
| BE | 16% | 18% | 14% | 19% | 16% | 16% |
| CZ | 15% | 20% | 15% | 24% | 17% | 10% |
| DK | 18% | 10% | 8% | 27% | 32% | 5% |
| DE | 17% | 16% | 18% | 19% | 17% | 13% |
| EE | 28% | 9% | 16% | 16% | 16% | 16% |
| IE | 16% | 9% | 2% | 30% | 14% | 30% |
| EL | 17% | 15% | 18% | 19% | 15% | 15% |
| ES | 14% | 20% | 16% | 21% | 16% | 12% |
| FR | 16% | 18% | 14% | 17% | 18% | 17% |
| IT | 18% | 16% | 21% | 21% | 14% | 11% |
| LV | 22% | 13% | 5% | 24% | 16% | 20% |
| LU | 0% | 50% | 0% | 0% | 50% | 0% |
| HU | 10% | 12% | 16% | 24% | 17% | 20% |
| NL | 13% | 17% | 21% | 9% | 21% | 20% |
| AT | 14% | 13% | 18% | 14% | 24% | 17% |
| PL | 13% | 18% | 16% | 17% | 19% | 17% |
| PT | 19% | 19% | 13% | 15% | 20% | 14% |
| RO | 16% | 15% | 20% | 21% | 15% | 12% |
| SI | 0% | 43% | 57% | 0% | 0% | 0% |
| SK | 14% | 14% | 14% | 18% | 18% | 22% |
| FI | 16% | 13% | 15% | 10% | 27% | 18% |
| SE | 18% | 15% | 10% | 28% | 15% | 14% |
| UK | 20% | 14% | 14% | 21% | 18% | 13% |
| EU-23 | 16% | 17% | 16% | 19% | 18% | 15% |
| CH | 7% | 20% | 24% | 16% | 18% | 16% |

Source: CARE Database / EC
Date of query: November 2010

Figure 9: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches by seasonality, EU-23, 2008



Source: CARE Database / EC
Date of query: November 2010

There was little variation through the year in the fatality rate in road traffic accidents involving HGVs in 2008.

The rate for accidents involving buses or coaches in 2008 peaked in November and December.

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Age

Table 9 provides details of the age of fatalities in accidents involving HGVs. Figure 10 illustrates the EU-23 age distribution, and also includes the distribution for accidents involving buses or coaches.

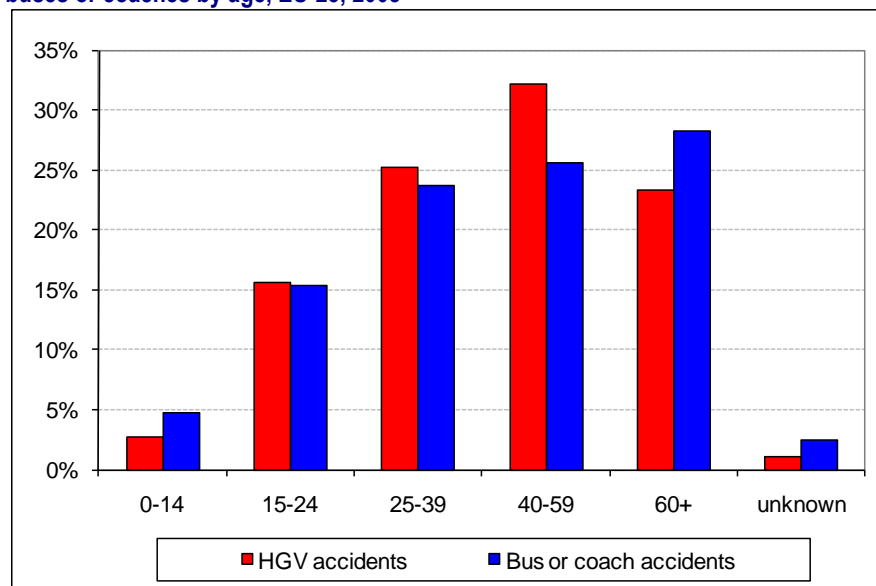
Relatively few children died in road traffic accidents involving HGVs in 2008, and almost three-fifths of fatalities were aged 25-59.

Table 9: Distribution of fatalities in accidents involving HGVs by age, 2008

| | 0-14 | 15-24 | 25-39 | 40-59 | 60+ | unknown |
|-------|------|-------|-------|-------|-----|---------|
| BE | 3% | 9% | 36% | 30% | 21% | - |
| CZ | 3% | 12% | 28% | 34% | 23% | 1% |
| DK | 6% | 11% | 27% | 26% | 29% | - |
| DE | 2% | 16% | 23% | 34% | 25% | - |
| EE | 9% | 22% | 16% | 25% | 28% | - |
| IE | 7% | 23% | 20% | 18% | 27% | 5% |
| EL | 4% | 11% | 30% | 23% | 30% | 2% |
| ES | 1% | 13% | 28% | 36% | 21% | 1% |
| FR | 2% | 19% | 25% | 29% | 25% | - |
| IT | 1% | 10% | 32% | 34% | 21% | 3% |
| LV | 2% | 20% | 20% | 31% | 27% | - |
| LU | - | 100% | - | - | - | - |
| HU | 3% | 12% | 31% | 35% | 18% | 1% |
| NL | 3% | 15% | 18% | 29% | 36% | - |
| AT | - | 24% | 23% | 26% | 26% | - |
| PL | 3% | 17% | 23% | 36% | 21% | 1% |
| PT | 3% | 8% | 30% | 29% | 30% | 1% |
| RO | 5% | 15% | 26% | 36% | 18% | - |
| SI | - | 29% | - | 43% | 29% | - |
| SK | 4% | 11% | 23% | 24% | 23% | 16% |
| FI | 4% | 23% | 20% | 34% | 20% | - |
| SE | 1% | 13% | 13% | 28% | 46% | - |
| UK | 3% | 20% | 26% | 27% | 22% | - |
| EU-23 | 3% | 16% | 25% | 32% | 23% | 1% |
| CH | 9% | 13% | 18% | 29% | 31% | - |

Source: CARE Database / EC
Date of query: November 2010

Figure 10: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches by age, EU-23, 2008



Source: CARE Database / EC
Date of query: November 2010

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Gender

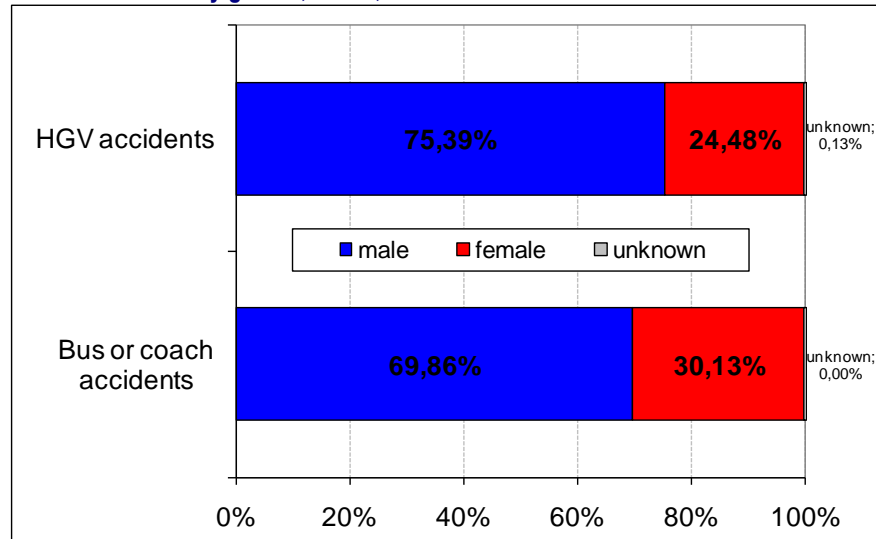
Table 10 provides gender details of fatalities in accidents involving HGVs. Figure 11 illustrates the EU-23 distribution, and also includes the distribution for accidents involving buses or coaches. The percentage of female fatalities in the latter accidents is higher than in the HGVs ones.

Table 10: Distribution of fatalities in accidents involving HGVs by gender, 2008

| | male | female | unknown |
|-------|------|--------|---------|
| BE | 76% | 24% | - |
| CZ | 80% | 20% | - |
| DK | 71% | 29% | - |
| DE | 74% | 26% | - |
| EE | 81% | 19% | - |
| IE | 73% | 23% | 5% |
| EL | 76% | 24% | - |
| ES | 81% | 19% | - |
| FR | 71% | 29% | - |
| IT | 81% | 19% | - |
| LV | 75% | 25% | - |
| LU | 50% | 50% | - |
| HU | 79% | 21% | - |
| NL | 74% | 26% | - |
| AT | 73% | 27% | - |
| PL | 76% | 24% | - |
| PT | 76% | 23% | 1% |
| RO | 74% | 26% | - |
| SI | 57% | 43% | - |
| SK | 81% | 19% | - |
| FI | 70% | 30% | - |
| SE | 67% | 33% | - |
| UK | 72% | 28% | - |
| EU-23 | 75% | 24% | 0% |
| CH | 78% | 22% | - |

Source: CARE Database / EC
Date of query: November 2010

Figure 11: Distribution of fatalities in accidents involving HGVs and in accidents involving buses or coaches by gender, EU-23, 2008



Source: CARE Database / EC
Date of query: November 2010

Three quarters of the fatalities in accidents involving HGVs are male.

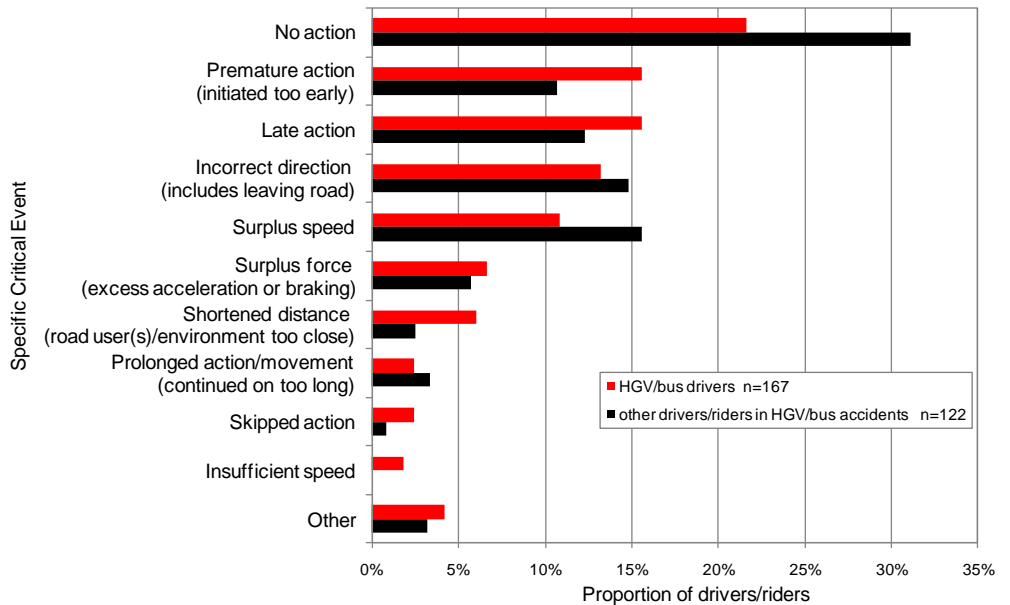
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Accident Causation

During the EC SafetyNet project, in-depth data were collected using a common methodology for samples of accidents that occurred in Germany, Italy, The Netherlands, Finland, Sweden and the UK^{4 5}. The SafetyNet Accident Causation Database was formed between 2005 and 2008, and contains details of 1.006 accidents covering all injury severities. A detailed process for recording causation (SafetyNet Accident Causation System – SNACS) attributes one specific critical event to each driver, rider or pedestrian. Links then form chains between the critical event and the causes that led to it. For example, the critical event of late action could be linked to the cause observation missed, which was a consequence of fatigue, itself a consequence of an extensive driving spell.

In the database, 16% (158) of the accidents involve HGV or bus drivers. Minibuses are included in the bus category in the database. HGV drivers account for 79% of this group and bus drivers 21%, with 94% being male. Figure 12 compares the distributions of specific critical events for HGV or bus drivers and other drivers or riders in HGV/bus accidents.

Figure 12: Distribution of specific critical events - HGV or bus drivers and other drivers/riders in HGV/bus accidents



N=1317

Source: SafetyNet Accident Causation Database 2005 to 2008 / EC
Date of query: 2010

Of the specific critical events under the general category of ‘timing’, premature action and late action are both more frequent for HGV and bus drivers, with no action higher for the other drivers/riders. A premature action is one undertaken before a signal has been given or the required conditions are established, for example entering a junction before it is clear of other traffic.

⁴ SafetyNet D5.5, Glossary of Data Variables for Fatal and Accident Causation Databases
⁵ SafetyNet D5.8, In-Depth Accident Causation Database and Analysis Report

Specific critical events relating to ‘timing’ are recorded for 52% of HGV or bus drivers in the sample.

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22% of the links between causes are observed to be between 'faulty diagnosis' and 'information failure'.

The next two specific critical events of incorrect direction and surplus speed are both higher for the other drivers/riders, although only slightly more for incorrect direction. Incorrect direction refers to a manoeuvre being carried out in the wrong direction (for example, turning left instead of right) or leaving the road (not following the intended direction of the road). Surplus speed describes speed that is too high for the conditions or manoeuvre being carried out, travelling above the speed limit and also if the driver is travelling at a speed unexpected by other road users.

Table 11 gives the most frequent links between causes for HGV or bus drivers/riders. For this group there are 195 such links in total. Like the car driver group (Traffic Safety Basic Facts: Car occupants), faulty diagnosis and observation missed are the two dominant causes. Faulty diagnosis is an incorrect or incomplete understanding of road conditions or another road user's actions. It is linked to both information failure (for example, a driver thinking another vehicle was moving when it was in fact stopped and colliding with it) and communication failure (for example, pulling out in the continuing path of a driver who has indicated for a turn too early). Unlike the car driver group, the most frequent cause leading to observation missed is permanent sight obstruction. This refers to vehicle blind spots on these larger vehicles, where drivers cannot see part of the road infrastructure or other road users. Also observed for these larger vehicles are causes leading to equipment failure, both unpredictable system functions/characteristics (covering problems with vehicle load) and poor maintenance.

Table 11: Ten most frequent links between causes – HGV or bus drivers

| Links between causes | Frequency |
|---|------------|
| Faulty diagnosis - Information failure (between driver and traffic environment or driver and vehicle) | 43 |
| Observation missed - Permanent sight obstruction | 23 |
| Observation missed - Distraction | 13 |
| Equipment failure - Unpredictable system functions/characteristics | 10 |
| Observation missed - Faulty diagnosis | 8 |
| Observation missed - Permanent obstruction to view | 7 |
| Observation missed - Inadequate plan | 6 |
| Equipment failure - Maintenance failure – condition of vehicle | 6 |
| Observation missed - Inattention | 5 |
| Observation missed - Temporary obstruction to view | 5 |
| Others | 69 |
| Total | 195 |

Source: SafetyNet Accident Causation Database 2005 to 2008 / EC
Date of query: 2010

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Disclaimer

The information in this document is provided as it is and no guarantee or warranty is given that the information is fit for any particular purpose. Therefore, the reader uses the information at their own risk and liability.

For more information

Further statistical information about fatalities is available from the CARE database at the Directorate General for Energy and Transport of the European Commission, 28 Rue de Mot, B -1040 Brussels.

Traffic Safety Basic Fact Sheets available from the European Commission concern:

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Country abbreviations used and definition of EU-level

| EU-19 | | EU-23 = EU-19 + | |
|-------|------------------------|-----------------|----------|
| BE | Belgium | EE | Estonia |
| CZ | Czech Republic | LV | Latvia |
| DE | Germany | HU | Hungary |
| DK | Denmark | SK | Slovakia |
| IE | Ireland | | |
| EL | Greece | | |
| ES | Spain | | |
| FR | France | | |
| IT | Italy | | |
| LU | Luxembourg | | |
| NL | Netherlands | | |
| AT | Austria | | |
| PL | Poland | | |
| PT | Portugal | | |
| RO | Romania | | |
| SI | Slovenia | | |
| FI | Finland | | |
| SE | Sweden | | |
| UK | United Kingdom (GB+NI) | | |

Detailed data on traffic accidents are published annually by the European Commission in the Annual Statistical Report. This includes a glossary of definitions on all variables used.

More information on the DaCoTA Project, co-financed by the European Commission, Directorate-General for Mobility and Transport is available at the DaCoTA Website: <http://www.dacota-project.eu/index.html>.

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