Traffic Safety Basic Facts 2007

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 Heavy Goods Vehicles (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 presents the number of people killed in accidents involving HGVs in each of the EU-17 countries for each year for which the data are available over the last ten years. The total number killed in these accidents fell from 4.586 in 1996 to 3.350 in 2005[1], a fall of 27%.

Approximately 3.650 people died in road traffic accidents involving HGVs in 2005[1] (EU-14 plus Estonia, Hungary and Malta)

Table 1: Fatalities in accidents involving Heavy Goods Vehicles, 1996-2005[1] [2]

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	192	195	228	193	204	193	178	136	143	161
DK	102	93	88	86	97	78	80	69	65	79
EE										50
EL	245	242	277	268	205	220	219	217	181	158
ES	839	888	959	905	920	803	860	834	766	714
FR	1.155	1.113	1.164	1.090	1.051	1.057	988	758	727	726
IE	54	85	63	61	67	70	42	54	-	-
IT	484	476	421	562	582	411	359	358	336	-
LU	8	6	7	3	5	6	12	-	-	-
HU										248
MT										0
NL	209	177	140	175	168	169	129	158	-	-
AT	136	150	145	177	143	122	143	140	144	126
PT	365	356	219	296	284	197	214	213	187	163
FI	91	112	88	121	77	118	105	97	107	92
SE	100	97	117	93	119	118	135	92	59	61
UK	605	554	605	641	581	607	561	548	478	510
EU-14	4.586	4.544	4.521	4.671	4.503	4.169	4.026	3.686	3.417	3.350
Yearly change		-1%	-1%	3%	-4%	-7%	-3%	-8%	-7%	-2%

Source: CARE Database / EC
Date of query: November 2007

[1] Using latest available data i.e. 2005 for all countries except LU (2002), IE and NL (2003), IT(2004)
[2] See Table "Definition of EU-level and used Country abbreviations" on Page 12

Table 2 presents the number of people killed in each of the EU-17 countries over the last ten years in accidents involving Buses and Coaches. The number of people killed in these accidents fell from 888 in 1996 to 633 in 2005[1], a fall of 29%. The totals from this and the previous table are presented in Figure 1[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. National data for bus and coach accidents will not be presented in subsequent tables because of the relatively small numbers.

Approximately 700 people died in road traffic accidents involving Buses or Coaches in 2005[1]. (EU-14 plus Estonia, Hungary and Malta)

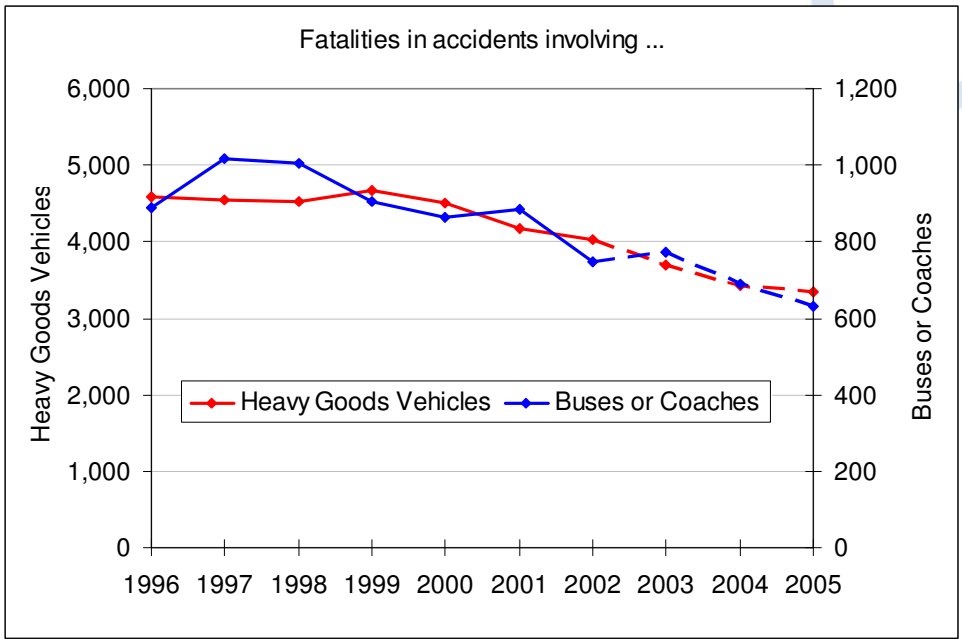
Table 2: Fatalities in accidents involving Buses or Coaches, 1996-2005[1]

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	37	37	47	23	28	29	31	29	31	19
DK	24	15	11	25	14	14	22	26	15	11
EE										7
EL	66	79	93	79	71	59	60	94	48	53
ES	154	180	184	163	144	135	109	126	80	108
FR	109	188	127	127	144	117	109	97	99	91
IE	15	11	16	14	12	9	8	2	-	-
IT	121	137	105	131	119	113	105	122	125	-
LU	5	3	0	0	4	6	4	-	-	-
HU										62
MT										1
NL	23	29	29	21	23	27	21	21	-	-
AT	18	25	14	41	36	33	17	20	24	10
PT	86	104	145	58	57	66	51	26	41	23
FI	12	20	22	18	18	28	17	13	29	13
SE	35	15	16	23	16	32	29	33	16	13
UK	184	174	198	182	176	215	165	160	154	140
EU-14	888	1.018	1.006	905	862	883	749	774	689	633
Yearly change		15%	-1%	-10%	-5%	2%	-15%	3%	-11%	-8%

Source: CARE Database / EC
Date of query: November 2007

The annual number of people killed in road traffic accidents involving HGVs, Buses or Coaches fell by more than one quarter between 1996 and 2005[1].

Figure 1: The number of fatalities in accidents involving Heavy Goods Vehicles and Buses or Coaches, EU-14, 1996-2005[1]



Source: CARE Database / EC
Date of query: November 2007

The risk of being killed in one of these accidents 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.

The risk of being killed in a road traffic accident involving an HGV varies by a factor of 5 across Europe.

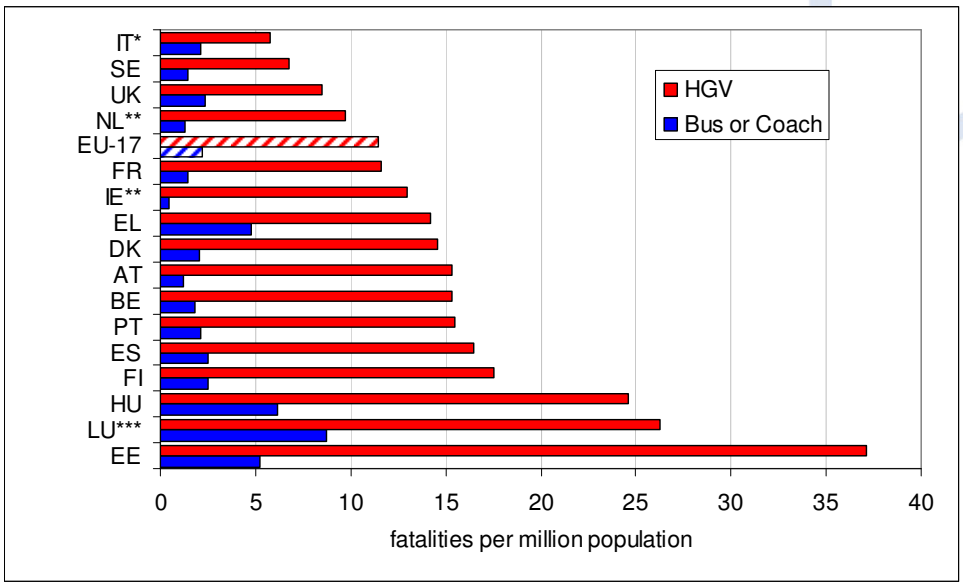
Table 3: The fatality rates per million population in accidents involving HGVs and Buses or Coaches, 2005 [1]

	HGV accidents	Bus or Coach accidents
BE	15,4	1,8
DK	14,6	2,0
EE	37,2	5,2
EL	14,2	4,8
ES	16,5	2,5
FR	11,6	1,5
IE**	13,0	0,5
IT*	5,7	2,1
LU***	26,2	8,7
HU	24,6	6,1
MT	0,0	2,5
NL**	9,7	1,3
AT	15,3	1,2
PT	15,5	2,2
FI	17,5	2,5
SE	6,8	1,4
UK	8,5	2,3
EU-17	11,5	2,2

* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

Figure 2: The fatality rates in accidents involving HGVs and Buses or Coaches, 2005[1]

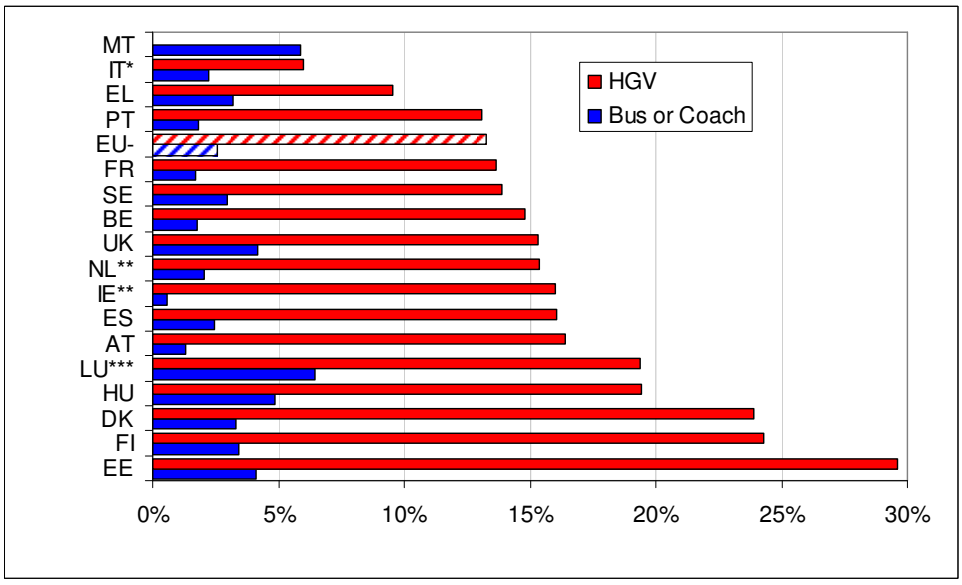


* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

The EU-17 average fatality rate in accidents involving HGVs is 11,5 per million population, and ranges from 5,7 in Italy to 37,2 in Estonia. For accidents involving Buses or Coaches, the EU-17 average fatality rate is 2,1 per million, and ranges from 0,5 in Ireland to 5,2 in Estonia (the high rate in Luxembourg is based on only 4 fatalities).

Figure 3: The proportion of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches, 2005[1]



* Data from 2004
** Data from 2003
*** Data from 2002

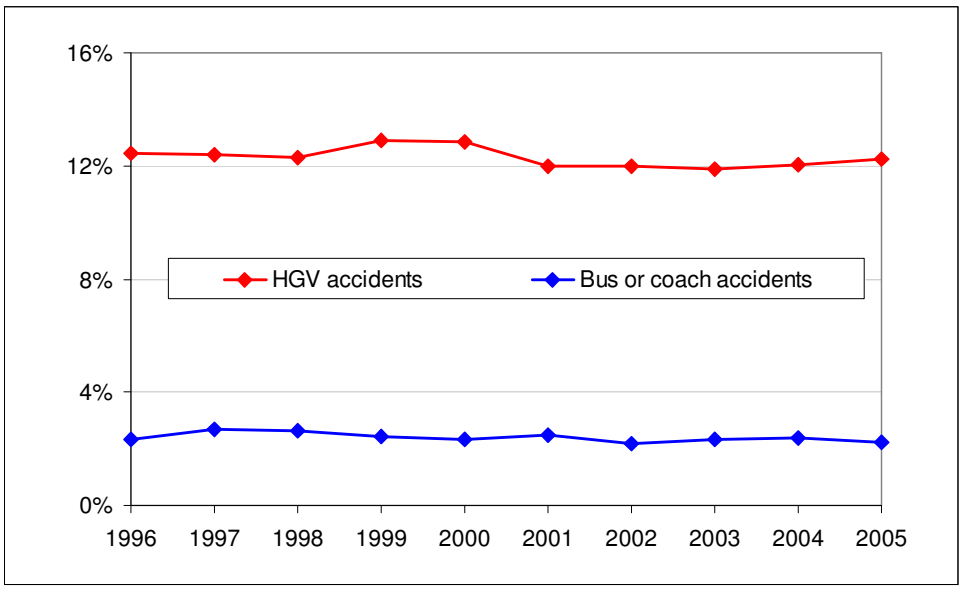
Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

One eighth of people who died in road traffic accidents in 2005[1] died in accidents that involved HGVs.

Averaged over the EU-17 countries, 13,3% of deaths occurred in 2005 in accidents involving Heavy Goods Vehicles, and 2,6% in accidents involving Buses or Coaches. Figure 3 shows considerable variation about these averages in individual countries.

Figure 1 showed that the number of deaths in accidents involving Heavy Goods Vehicles and in accidents involving Buses or Coaches fell between 1996 and 2005, but the EU-14 total number of deaths also fell over this period. Figure 4 shows that these numbers tended to fall as a proportion of the total.

Figure 4: The proportion of fatalities in accidents involving Heavy Goods Vehicles and Buses or Coaches, EU-14, 1996-2005[1]



Source: CARE Database / EC
Date of query: November 2007

The number of deaths in road traffic accidents that involved HGVs has tended to fall slightly faster than the total number of deaths.

Type of casualty injured

These accidents injured those outside the vehicles as well as their occupants. Across the EU-17, 12,9% of those killed in HGV accidents in 2005 were occupants of HGVs, and 15,3% of those killed in Bus or Coach accidents were occupants of Buses or Coaches. Table 4 lists those killed in these accidents in the latest year by road user type. The distributions are illustrated in Figure 5.

More than one half of those who died in 2005[1] in road traffic accidents that involved HGVs were travelling by car.

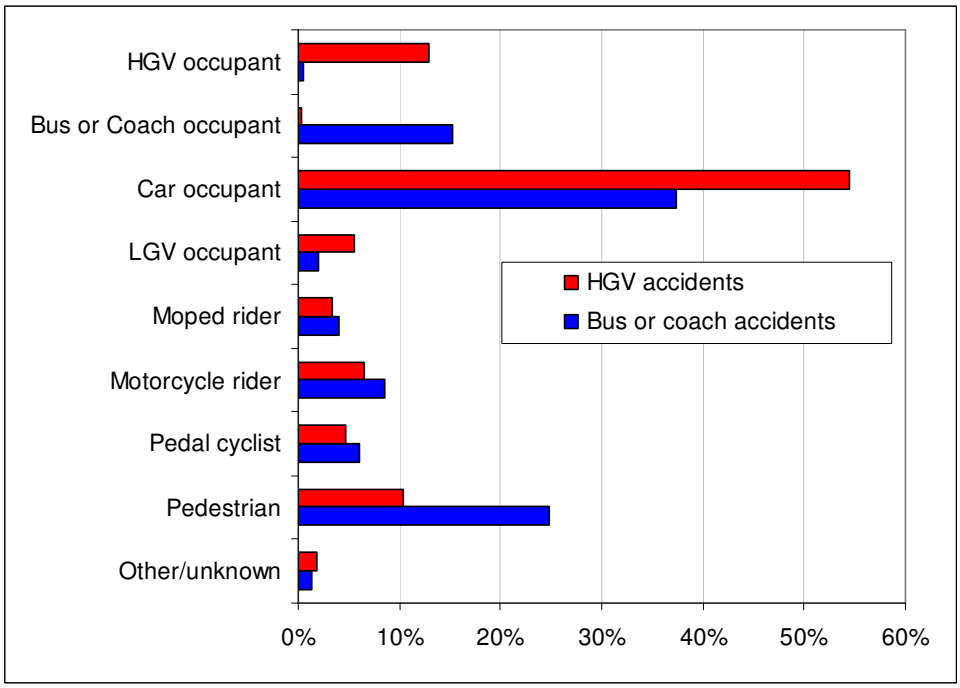
One third of those who died in 2005[1] in road traffic accidents that involved Buses or Coaches were travelling by car.

Table 4: Fatalities in accidents involving HGVs and in accidents involving Buses or Coaches, by road user type, EU-17, 2005[1]

accidents involving	HGVs		Buses or Coaches	
	fatalities		fatalities	
HGV occupant	**469**	**13%**	3	0%
Bus or Coach occupant	10	0%	**108**	**15%**
Car occupant	1.986	54%	262	37%
Light GV occupant	204	6%	14	2%
Moped rider	120	3%	28	4%
Motorcycle rider	238	7%	61	9%
Pedal cyclist	174	5%	42	6%
Pedestrian	377	10%	175	25%
Other/unknown	69	2%	10	1%
All	3.648	100%	703	100%

Source: CARE Database / EC
Date of query: November 2007

Figure 5: Distribution of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches, by road user type, EU-17, 2005[1]



Source: CARE Database / EC
Date of query: November 2007

Type of road

The CARE data show whether accidents occurred on motorways and, for non-motorway accidents, whether on urban or rural roads. Motorway accidents are not fully recorded in Greece and Finland, and there were no fatal HGV accidents in Malta. Table 5 shows the distribution in the remaining countries of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches. The results for the 14 EU countries in the latest year are illustrated in Figure 6.

Table 5: Distribution of fatalities in accidents involving HGVs by road type, 2005[1]

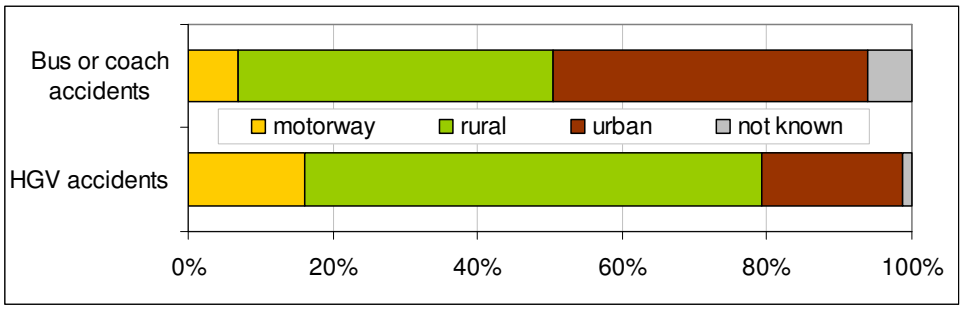
	motorway	non-motorway		not known
		rural	urban	
BE	35%	47%	18%	0%
DK	13%	52%	35%	0%
EE	0%	72%	28%	0%
ES	4%	89%	7%	0%
FR	14%	64%	22%	0%
IE**	4%	65%	31%	0%
IT*	39%	39%	22%	0%
LU***	58%	42%	0%	0%
HU	8%	67%	25%	0%
NL**	25%	48%	27%	0%
AT	25%	53%	22%	0%
PT	15%	61%	24%	0%
SE	8%	69%	21%	2%
UK	18%	54%	20%	8%
EU-14	16%	63%	19%	1%

* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

About one fifth of fatalities in HGV accidents in 2005[1] occurred in urban areas, compared with almost one half of fatalities in Bus or Coach accidents.

Figure 6: Distribution of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches by road type, EU-14, 2005[1]



Source: CARE Database / EC
Date of query: November 2007

Time of day

In order to examine the distribution of fatalities by time of day, the day has been divided into 6 4-hour periods beginning at midnight. Table 6 shows the distribution of fatalities in HGV accidents. The hourly rates are relatively high between 0800 and 2000 in all countries. Figure 7 illustrates the EU-14 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, 2005[1]

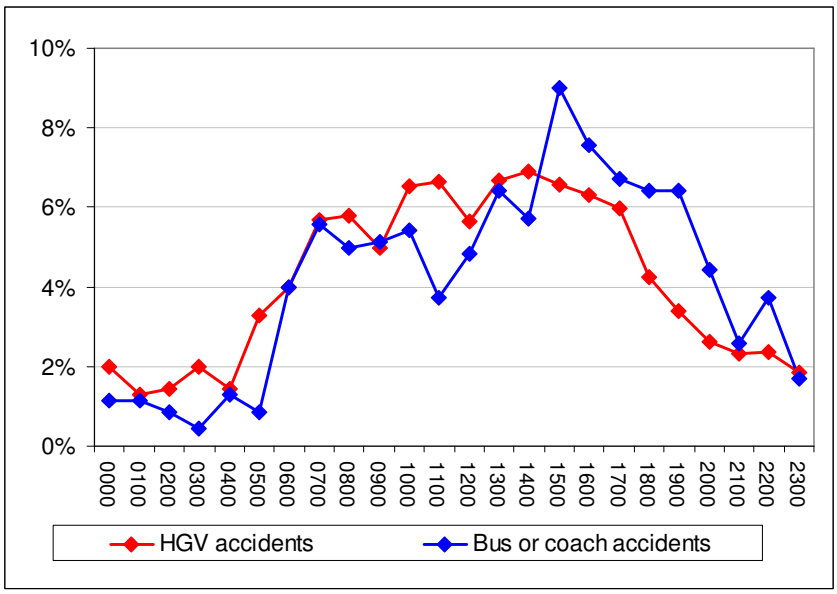
	0000 – 0400	0400 - 0800	0800 – 1200	1200 – 1600	1600-2000	2000-0000
BE	7%	14%	19%	27%	22%	11%
DK	3%	14%	25%	27%	18%	14%
EE	6%	2%	26%	20%	22%	24%
EL	9%	13%	21%	30%	18%	9%
ES	7%	12%	22%	25%	23%	11%
FR	4%	16%	27%	25%	21%	8%
IE**	15%	6%	22%	30%	20%	7%
IT*	11%	16%	20%	22%	20%	11%
LU***	8%	25%	17%	25%	17%	8%
HU	9%	19%	25%	24%	18%	5%
NL**	4%	15%	29%	28%	20%	4%
AT	3%	18%	25%	29%	16%	10%
PT	6%	15%	24%	27%	18%	8%
FI	3%	14%	17%	34%	21%	11%
SE	3%	8%	34%	28%	23%	3%
UK	8%	14%	25%	27%	16%	9%
EU-16	7%	14%	24%	26%	20%	9%

* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

The hourly fatality rate in road traffic accidents involving HGVs in 2005[1] was uniform between 7am and 6pm. The rate of accidents involving Buses or Coaches peaked between 3 and 4pm.

Figure 7: Distribution of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches by time of day, EU-16, 2005[1]



Source: CARE Database / EC
Date of query: November 2007

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-16 distribution for HGV accidents and Bus or Coach accidents, and shows the high proportion of fatalities in the latter accidents that occurred on Fridays and Saturdays.

The fatality rate in road traffic accidents involving HGVs in 2005[1] was much lower at the weekend than on weekdays.

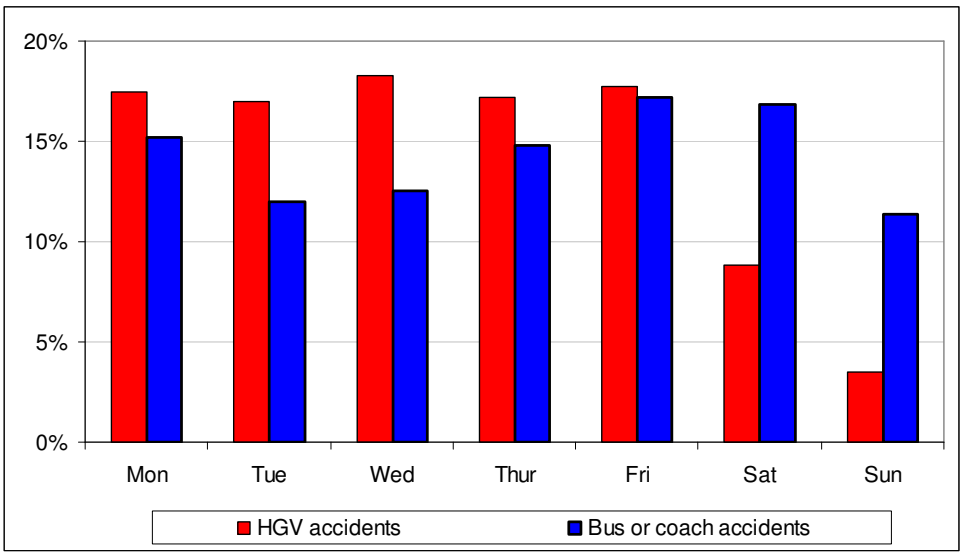
Table 7: Distribution of fatalities in accidents involving HGVs, by day of week, 2005[1]

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
BE	23%	14%	27%	12%	16%	7%	2%
DK	18%	19%	15%	15%	25%	4%	4%
EE	10%	12%	20%	18%	20%	8%	12%
EL	15%	20%	15%	18%	11%	16%	5%
ES	17%	17%	20%	15%	17%	9%	5%
FR	18%	18%	19%	18%	19%	7%	1%
IE**	17%	9%	13%	24%	22%	15%	0%
IT*	15%	15%	15%	21%	21%	9%	4%
LU***	8%	8%	42%	0%	17%	25%	0%
HU	17%	17%	13%	20%	13%	15%	6%
NL**	15%	19%	18%	16%	20%	7%	4%
AT	21%	20%	19%	13%	21%	6%	1%
PT	17%	15%	23%	16%	20%	8%	1%
FI	22%	14%	16%	27%	12%	5%	3%
SE	30%	10%	31%	11%	10%	5%	3%
UK	16%	19%	17%	18%	17%	9%	4%
EU-16	17%	17%	18%	17%	18%	9%	3%

* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

Figure 8: Distribution of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches by day of week, EU-16, 2005[1]



Source: CARE Database / EC
Date of query: November 2007

Part of year

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-16 is July-August. Figure 9 illustrates the EU-16 distribution. It includes the distribution for accidents involving Buses or Coaches, which peaks in March-April.

There was little variation through the year in the fatality rate in road traffic accidents involving HGVs in 2005[1].

Table 8: Distribution of fatalities in accidents involving HGVs by month, 2005[1]

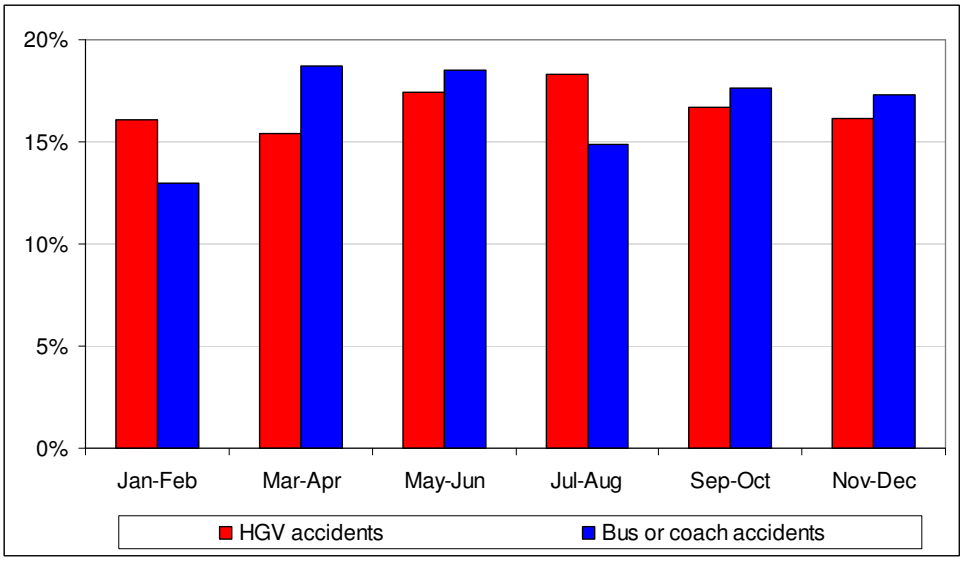
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec
BE	12%	16%	28%	18%	12%	13%
DK	15%	10%	13%	19%	27%	16%
EE	12%	14%	28%	14%	16%	16%
EL	20%	11%	15%	14%	17%	23%
ES	20%	16%	19%	14%	16%	15%
FR	15%	17%	17%	17%	18%	16%
IE**	4%	17%	37%	17%	9%	17%
IT*	13%	18%	15%	21%	18%	15%
LU***	17%	8%	0%	33%	8%	33%
HU	13%	12%	19%	22%	18%	17%
NL**	20%	11%	16%	25%	15%	13%
AT	13%	10%	10%	33%	15%	18%
PT	21%	16%	16%	17%	15%	14%
FI	25%	20%	12%	15%	11%	17%
SE	15%	18%	16%	15%	23%	13%
UK	16%	15%	16%	18%	16%	19%
EU-16	16%	15%	17%	18%	17%	16%

* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

The rate for accidents involving Buses or Coaches in 2005[1] peaked in March and April.

Figure 9: Distribution of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches by part of year, EU-14, 2005[1]



Source: CARE Database / EC
Date of query: November 2007

Age and Sex

Table 9 provides details of the age and sex of fatalities in accidents involving HGVs. Figure 10 illustrates the EU-14 age distribution, and also includes the distribution for accidents involving Buses or Coaches.

Relatively few children died in road traffic accidents involving HGVs in 2005[1], and almost three-fifths of fatalities were aged 26-60.

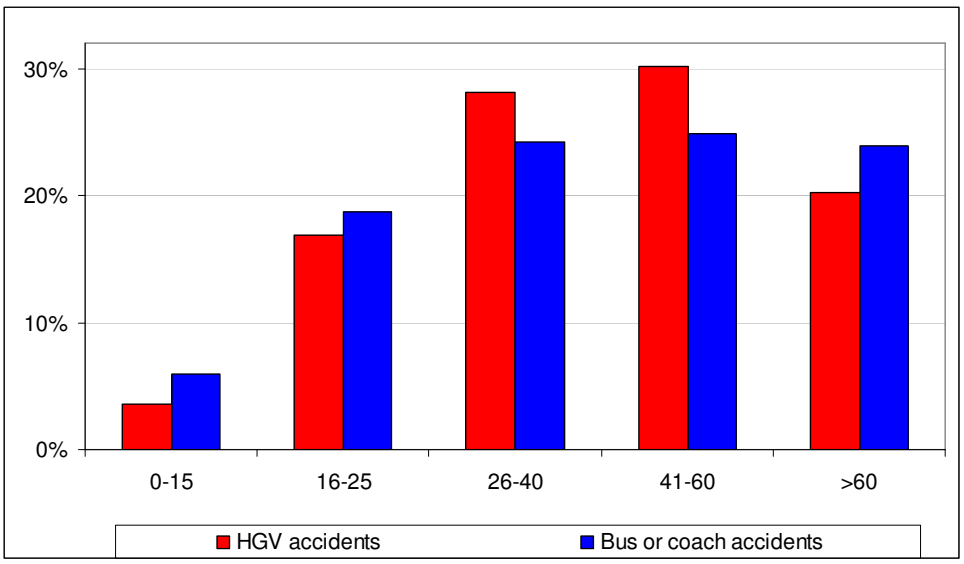
Table 9: Distribution of fatalities in accidents involving HGVs by sex and age, 2005[1]

	0-15	16-25	26-40	41-60	>60	male
BE	2%	16%	29%	30%	22%	1%
DK	9%	18%	32%	22%	20%	0%
EE	10%	14%	30%	32%	14%	0%
EL	4%	12%	30%	32%	21%	1%
ES	2%	14%	33%	30%	19%	2%
FR	2%	20%	24%	27%	27%	0%
IE**	9%	24%	19%	17%	28%	4%
IT*	2%	13%	32%	33%	17%	3%
LU***	8%	17%	50%	25%	0%	0%
HU	5%	18%	27%	38%	12%	0%
NL**	8%	22%	27%	23%	22%	0%
AT	3%	16%	25%	33%	23%	0%
PT	3%	19%	23%	31%	21%	2%
FI	8%	12%	29%	33%	18%	0%
SE	5%	13%	28%	31%	23%	0%
UK	3%	19%	28%	32%	17%	0%
EU-16	4%	17%	28%	30%	20%	1%

* Data from 2004
** Data from 2003
*** Data from 2002

Source: CARE Database / EC
Date of query: November 2007
Source of population data: EUROSTAT

Figure 10: Distribution of fatalities in accidents involving HGVs and in accidents involving Buses or Coaches by age, EU-16, 2005[1]



Source: CARE Database / EC
Date of query: November 2007

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 (see ec.europa.eu/transport/roadsafety/road_safety_observatory/care_reports_en.htm).

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

- Main Figures
- Children (Aged <16)
- Young People (Aged 16-24)
- The Elderly (Aged >64)
- Pedestrians
- Bicycles
- Motorcycle and Mopeds
- Car-Occupants
- Heavy Goods Vehicles
- Motorways
- Junctions
- Urban Areas

Definition of EU-level and used Country abbreviations

EU 14		**EU 16 = EU 14 +**	
BE	Belgium	EE	Estonia
DK	Denmark	HU	Hungary
EL	Greece		
ES	Spain	**EU 17 = EU 16 +**	
FR	France	MT	Malta
IE	Ireland		
IT	Italy	**EU 27 = EU 17 +**	
LU	Luxembourg	BG	Bulgaria
NL	Netherlands	CZ	Czech Republic
AT	Austria	CY	Cyprus
PT	Portugal	DE	Germany
FI	Finland	LV	Latvia
SE	Sweden	LT	Lithuania
UK	United Kingdom	PL	Poland
		RO	Romania
		SI	Slovenia
		SK	Slovakia

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.

All these reports and more information on the Integrated Project SafetyNet, co-financed by the European Commission, Directorate-General Energy and Transport are also available at the SafetyNet Website: www.erso.eu/.

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