



Traffic Safety Basic Facts 2018



Heavy Goods Vehicles and Buses

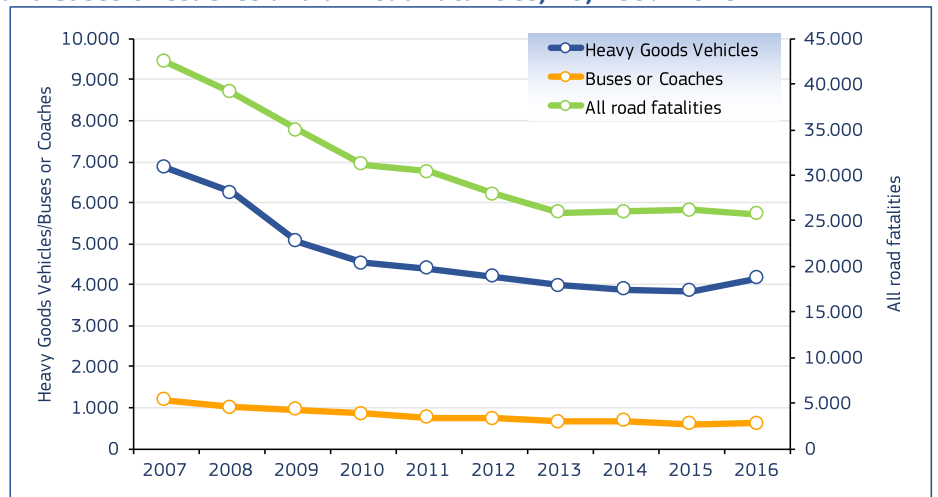


General

Heavy Goods Vehicles (HGVs) are defined as goods vehicles of over 3,5 tons maximum permissible gross weight. Road accidents involving HGVs tend to be more severe than other accidents because of the mass of these vehicles. Buses and coaches are included here because they too are normally relatively large, although minibuses are categorized as buses in some countries.

Figure 1 shows that the number of deaths in accidents involving HGVs and in accidents involving buses or coaches fell between 2007 and 2016 (although the number of deaths in accidents involving HGVs slightly increased lately), but the EU total number of deaths also fell over this period.

Figure 1: Number of fatalities in accidents involving Heavy Goods Vehicles and buses or coaches and all road fatalities, EU, 2007-2016



Source: CARE database, data available in May 2018

The annual number of people killed in road accidents involving HGVs and buses or coaches fell by 40% between 2007 and 2016 in the EU.

About 4.000 people died in road accidents involving HGVs in 2016.

Since 2007, the total number of fatalities involving HGVs in the EU fell by almost 40%, however it slightly increased lately (Table 1).

Table 1: Number of fatalities in accidents involving Heavy Goods Vehicles by country, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BE	156	122	117	111	116	111	100	130	106	109
BG	-	200	179	121	90	93	109	91	121	-
CZ	220	169	163	175	159	139	124	138	145	136
DK	66	62	35	36	33	29	32	24	17	47
DE	687	625	536	534	564	812	759	601	604	620
EE	35	32	21	3	6	7	7	4	2	-
IE	40	44	22	13	20	12	22	17	-	-
EL	141	138	113	127	91	58	74	73	69	79
ES	528	452	353	333	297	245	217	262	262	284
FR	658	596	504	552	576	485	463	474	473	493
HR	104	119	77	44	37	29	41	39	38	39
IT	1.017	977	785	358	337	280	267	272	252	403
CY	1	0	0	1	0	1	3	0	0	3
LV	97	46	38	41	21	36	37	38	38	29
LT	-	-	-	-	-	-	42	33	45	-
LU	7	2	2	9	3	3	8	5	6	4
HU	218	173	118	144	101	118	106	112	109	93
MT	0	1	0	1	-	-	-	-	1	1
NL	123	107	95	80	76	73	83	71	73	76
AT	89	111	81	97	70	77	50	51	66	74
PL	1.246	1.155	952	947	1.018	816	748	708	649	783
PT	145	112	120	95	107	77	80	78	68	59
RO	271	296	252	191	169	169	139	147	146	96
SI	20	7	12	7	6	3	7	23	25	31
SK	144	141	69	106	-	-	-	-	-	-
FI	97	106	70	92	85	98	70	59	64	73
SE	92	72	45	41	46	41	30	55	40	46
UK	449	380	287	269	265	278	264	279	300	284
EU	6.707	6.104	4.977	4.422	4.294	4.091	3.841	3.752	3.691	4.002
Yearly Change		-9,0%	-18,5%	-11,2%	-2,9%	-4,7%	-6,1%	-2,3%	-1,6%	8,4%
IS	4	4	3	1	2	1	1	4	2	2
LI	-	-	-	-	-	-	-	-	-	-
NO	59	53	56	71	55	35	48	33	28	36
CH	34	39	45	29	33	35	31	25	34	27

Source: CARE database, data available in May 2018

Totals for EU include latest available data (Data for Lithuania and Slovakia not included in totals)

Table 2 presents the number of people killed over the last ten years in accidents involving buses and coaches. The number of people killed in these accidents in the EU fell from almost 1.148 in 2007 to 594 in 2016, a fall of almost 50%. 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.

About 600 people died in road accidents involving buses or coaches in 2016.

Table 2: Number of fatalities in accidents involving buses or coaches by country, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
BE	30	23	22	17	23	31	23	19	17	14
BG	-	35	58	28	34	18	21	15	19	-
CZ	35	27	28	20	26	21	21	18	19	17
DK	20	10	9	13	-	-	-	-	-	-
DE	94	75	66	91	64	53	70	50	50	40
EE	7	4	4	21	22	21	18	18	15	-
IE	7	10	7	7	2	10	7	3	-	-
EL	35	33	33	31	29	23	22	18	18	12
ES	73	81	69	51	48	40	37	54	31	64
FR	110	80	66	60	49	61	45	58	22	38
HR	20	38	11	6	8	16	12	6	13	-
IT	91	102	71	50	22	23	14	17	18	19
CY	0	0	0	0	0	1	0	0	1	3
LV	16	10	8	11	10	-	-	7	3	5
LT	-	-	-	-	-	-	3	6	3	-
LU	0	1	2	1	0	1	2	0	0	0
HU	48	33	39	41	50	26	25	39	28	26
MT	1	3	0	1	0	0	0	0	1	0
NL	15	14	14	11	11	7	10	13	9	13
AT	17	9	15	17	1	12	8	9	6	8
PL	148	142	128	119	97	107	88	89	80	75
PT	33	21	15	-	-	-	-	-	-	-
RO	132	100	123	89	77	73	48	61	86	63
SI	2	4	8	3	-	-	0	-	-	-
SK	39	15	35	18	-	-	-	-	-	-
FI	13	13	8	9	10	-	-	-	-	-
SE	15	13	17	16	16	18	11	12	4	7
UK	151	121	102	-	-	-	-	-	-	-
EU	1.148	1.001	922	830	732	712	629	646	583	594
Yearly Change		-12,8%	-7,9%	-10,1%	-11,8%	-2,6%	-11,7%	2,7%	-9,8%	1,9%
IS	-	-	-	-	-	-	-	-	-	-
LI	-	-	-	-	-	-	-	-	-	-
NO	15	8	4	6	4	6	8	6	2	3
CH	6	11	3	4	6	37	1	3	2	1

Source: CARE database, data available in May 2018

Totals for EU include latest available data (Data for Lithuania and Slovakia not included in totals)

Traffic Safety Basic Facts 2018 – HGVs and Buses

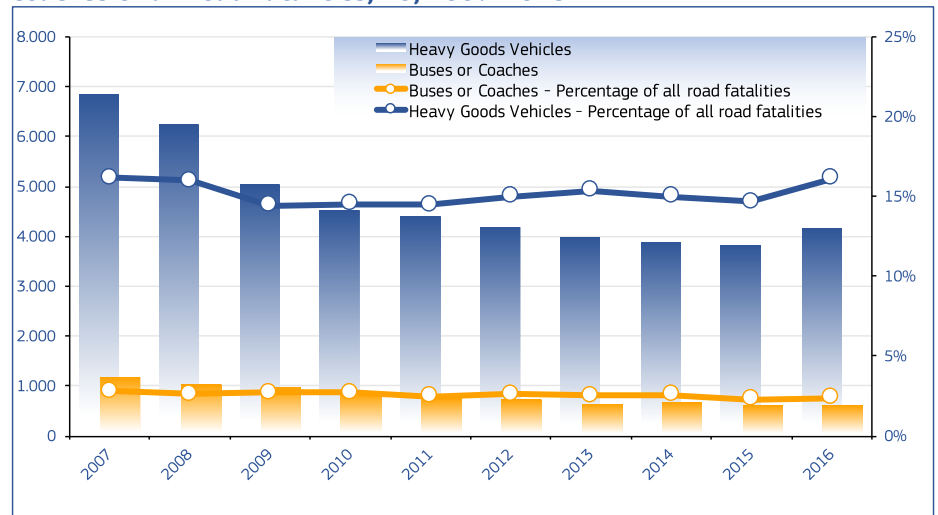
Table 3 and Figure 2 present the percentage of fatalities in accidents involving HGVs and buses or coaches of all road fatalities. Whereas the number of fatalities in accidents involving HGVs and buses or coaches fell by about 40% between 2007 and 2016, the percentage of fatalities in accidents involving HGVs and buses or coaches did not decrease considerably and moreover slightly increased for fatalities in accidents involving HGVs lately.

Table 3: Percentage of fatalities in accidents involving HGVs and buses or coaches of all road fatalities, EU, 2007-2016

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Heavy Goods Vehicles	16%	16%	14%	15%	14%	15%	15%	15%	15%	16%
Buses or Coaches	3%	3%	3%	3%	2%	3%	3%	3%	2%	2%

Source: CARE database, data available in May 2018

Figure 2: Percentage of fatalities in accidents involving HGVs and buses or coaches of all road fatalities, EU, 2007-2016



Source: CARE database, data available in May 2018

Whereas the number of fatalities in accidents involving HGVs and buses or coaches fell by about 40% between 2007 and 2016, the percentage of fatalities in accidents involving HGVs and buses or coaches didn't decrease considerably.

The EU-average fatality rate in accidents involving HGVs is 8,1 per million population. For accidents involving buses or coaches, the EU-average fatality rate is 1,2 per million population.

The risk of being killed in an accident involving HGVs and Buses can be compared for each Member State using the rate of deaths per million population. These rates are shown in Table 4 and Figure 3.

Table 4: Fatality rates per million population in accidents involving HGVs and buses or coaches by country, 2016 or latest available year

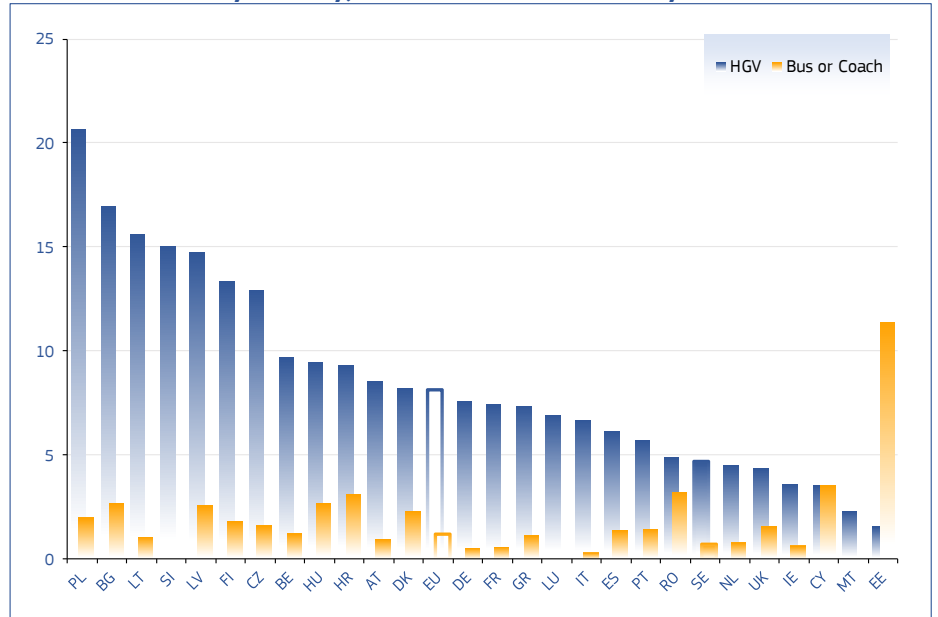
	HGVs accidents	Bus or Coach accidents
BE	9,6	1,2
BG	16,9	2,7
CZ	12,9	1,6
DK	8,2	2,3
DE	7,5	0,5
EE	1,5	11,4
IE	3,6	0,6
EL	7,3	1,1
ES	6,1	1,4
FR	7,4	0,6
HR	9,3	3,1
IT	6,6	0,3
CY	3,5	3,5
LV	14,7	2,5
LT	15,6	1,0
LU	6,9	0,0
HU	9,5	2,6
MT	2,3	0,0
NL	4,5	0,8
AT	8,5	0,9
PL	20,6	2,0
PT	5,7	1,5
RO	4,9	3,2
SI	15,0	0,0
SK	19,5	3,3
FI	13,3	1,8
SE	4,7	0,7
UK	4,3	1,6
EU	8,1	1,2
IS	6,0	-
LI	-	-
NO	6,9	0,6
CH	3,2	0,1

Sources: CARE database (EUROSTAT for population data), data available in May 2018

The EU-average fatality rate in accidents involving HGVs is 8,1 per million population and ranges from around 1,5 in Estonia to 20,6 in Poland. For accidents involving buses or coaches, the EU-average fatality rate is 1,2 per million population.

The risk of being killed in a road accident involving a HGV is highest in Poland.

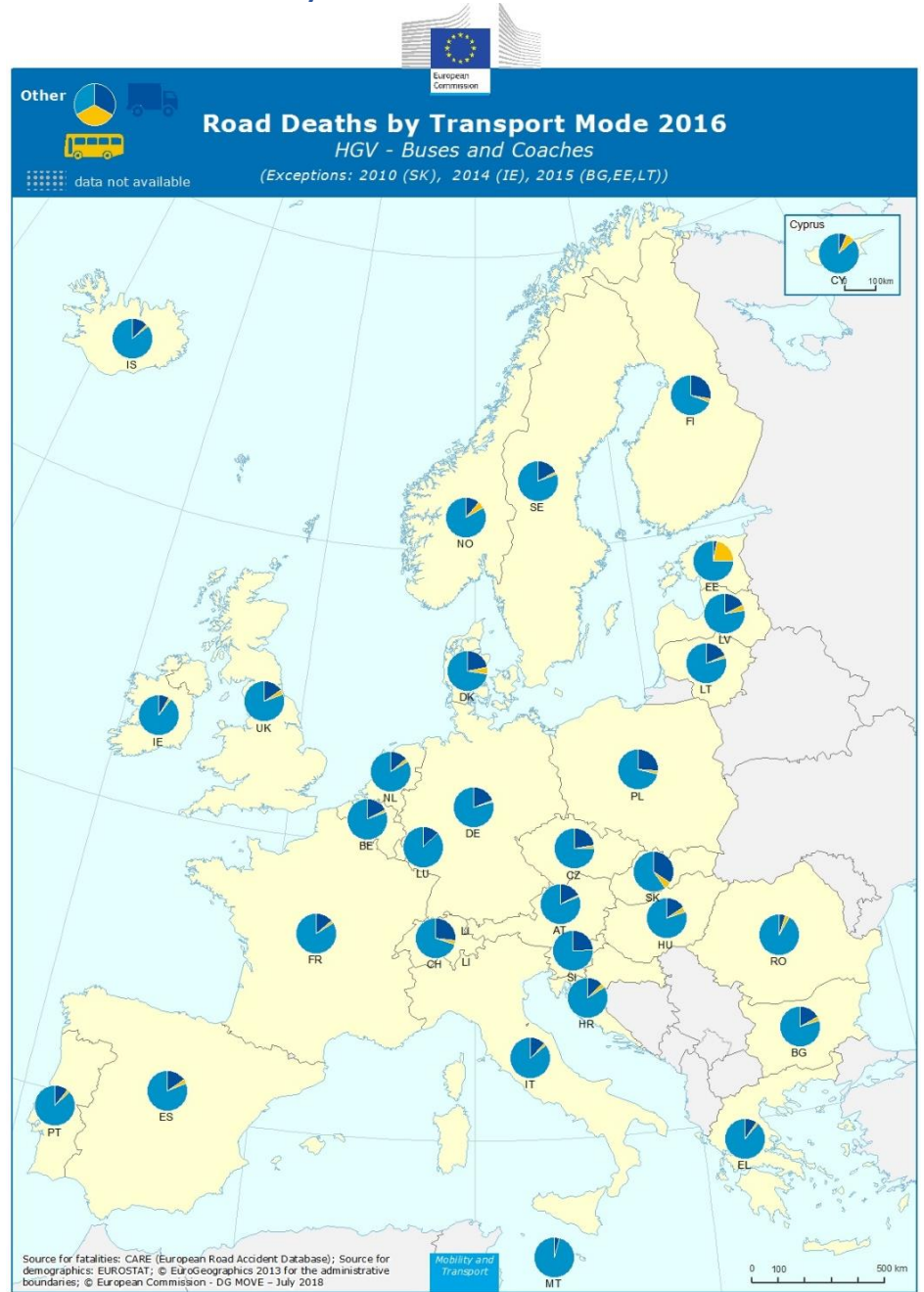
Figure 3: Fatality rates per million population in accidents involving HGVs and buses or coaches by country, 2016 or latest available year



Sources: CARE database (EUROSTAT for population data), data available in May 2018

Traffic Safety Basic Facts 2018 – HGVs and Buses

Map 1: Distribution of road fatalities by country and mode of transport, 2016 or latest available year



In the following tables and figures, the CARE data for 2016 are analysed in greater detail. It should be noted that the latest available data are used, meaning 2010 data for SK, 2014 data for IE and 2015 data for BG, EE and LT for fatalities in accidents involving HGVs. For fatalities in accidents involving buses, 2009 data for RO and UK, 2010 data for DK and SK, 2011 data for FI, 2013 data for SI, 2014 data for IE and 2015 data for BG, EE, HR and LT are used.

Age group and gender

Table 5 provides details of the age of fatalities in accidents involving HGVs.

Table 5: Total number and distribution of fatalities in accidents involving HGVs by country and age group, 2016 or latest available year

	0-14	15-17	18-24	25-49	50-64	65+	Unknown	Total
BE	3%	1%	10%	39%	21%	24%	2%	109
BG	4%	1%	8%	38%	25%	23%	1%	121
CZ	1%	1%	15%	36%	23%	24%	0%	136
DK	2%	2%	17%	30%	19%	30%	0%	47
DE	2%	2%	12%	29%	26%	29%	0%	620
EE	0%	0%	0%	100%	0%	0%	0%	2
IE	6%	6%	6%	41%	12%	29%	0%	17
EL	3%	4%	10%	39%	14%	30%	0%	79
ES	1%	1%	6%	45%	26%	21%	1%	284
FR	3%	3%	15%	36%	20%	22%	0%	493
HR	0%	0%	3%	51%	26%	21%	0%	39
IT	2%	1%	8%	41%	25%	20%	1%	403
CY	0%	0%	0%	0%	0%	0%	0%	3
LV	0%	3%	7%	28%	34%	21%	7%	29
LT	0%	0%	11%	49%	16%	24%	0%	45
LU	50%	0%	25%	0%	0%	25%	0%	4
HU	0%	0%	8%	42%	33%	17%	0%	93
MT	0%	0%	0%	0%	0%	100%	0%	1
NL	3%	1%	5%	34%	26%	30%	0%	76
AT	1%	3%	7%	38%	24%	27%	0%	74
PL	2%	1%	13%	40%	23%	20%	0%	783
PT	0%	0%	3%	22%	39%	36%	0%	59
RO	4%	2%	7%	50%	24%	13%	0%	96
SI	6%	0%	6%	26%	39%	23%	0%	31
SK	5%	2%	10%	46%	15%	9%	12%	106
FI	4%	1%	18%	44%	12%	21%	0%	73
SE	0%	0%	11%	28%	26%	35%	0%	46
UK	3%	2%	13%	43%	19%	21%	0%	284
EU	3%	2%	11%	38%	23%	23%	1%	4.153
IS	0%	0%	0%	50%	50%	0%	0%	2
LI	-	-	-	-	-	-	-	-
NO	3%	0%	11%	33%	22%	31%	0%	36
CH	7%	0%	11%	37%	22%	22%	0%	27

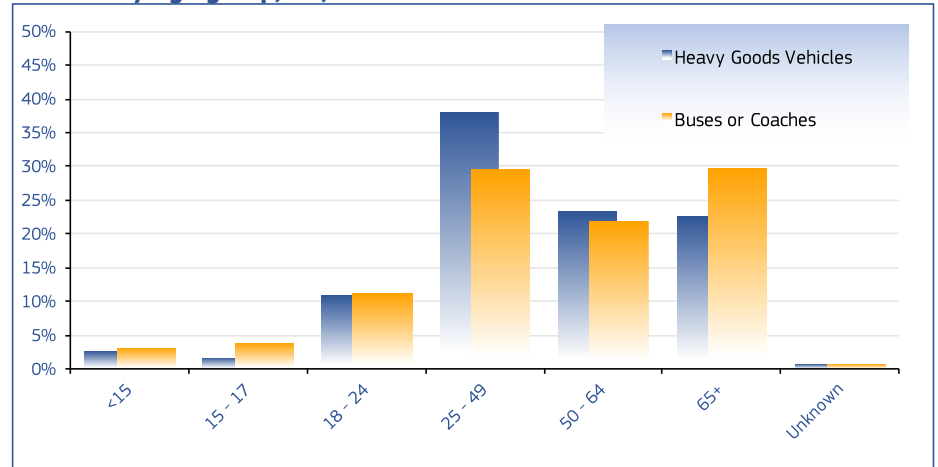
Source: CARE database, data available in May 2018

Relatively few children died in road accidents involving HGVs in 2016 and nearly 40% of fatalities were aged 25-49.

Traffic Safety Basic Facts 2018 – HGVs and Buses

Figure 4 illustrates the EU age distribution, and also includes the distribution for accidents involving buses or coaches.

Figure 4: Distribution of fatalities in accidents involving HGVs and buses or coaches by age group, EU, 2016



Source: CARE database, data available in May 2018

Table 6 provides gender details of fatalities in accidents involving HGVs.

Table 6: Total number and distribution of fatalities in accidents involving HGVs by country and gender, 2016 or latest available year

	Female	Male	Unknown	Total
BE	21%	76%	3%	109
BG	0%	0%	100%	121
CZ	21%	77%	1%	136
DK	28%	72%	0%	47
DE	32%	68%	0%	620
EE	50%	50%	0%	2
IE	35%	65%	0%	17
EL	27%	73%	0%	79
ES	20%	80%	0%	284
FR	25%	75%	0%	493
HR	21%	79%	0%	39
IT	20%	80%	0%	403
CY	0%	100%	0%	3
LV	17%	83%	0%	29
LT	22%	78%	0%	45
LU	25%	75%	0%	4
HU	24%	76%	0%	93
MT	100%	0%	0%	1
NL	37%	63%	0%	76
AT	28%	72%	0%	74
PL	23%	77%	0%	783
PT	25%	75%	0%	59
RO	27%	73%	0%	96
SI	29%	71%	0%	31
SK	18%	82%	0%	106
FI	15%	85%	0%	73
SE	28%	72%	0%	46
UK	26%	74%	0%	284
EU	24%	73%	3%	4.153
IS	0%	100%	0%	2
LI	-	-	-	-
NO	33%	67%	0%	36
CH	30%	70%	0%	27

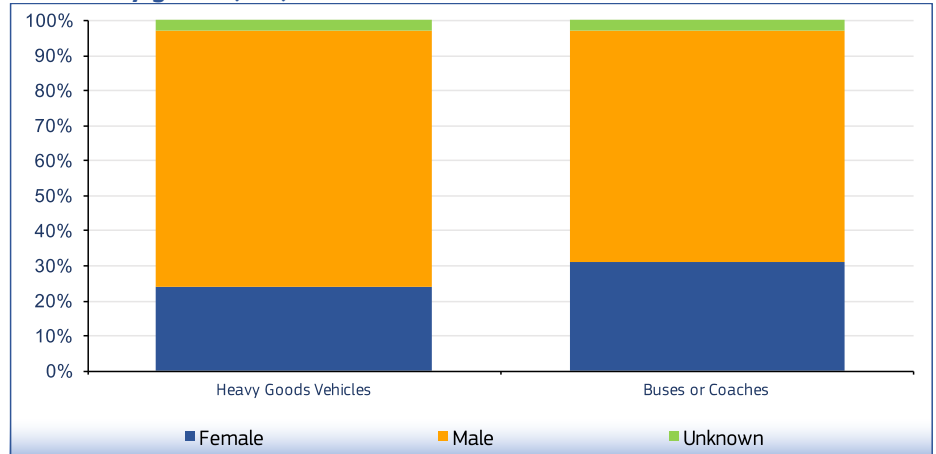
Source: CARE database, data available in May 2018

Nearly three quarters of the fatalities in accidents involving HGVs were male.

Figure 5 illustrates the EU 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.

Figure 5: Distribution of fatalities in accidents involving HGVs and buses or coaches by gender, EU, 2016

The percentage of female fatalities in accidents involving Buses or Coaches is higher than in the HGVs ones.



Source: CARE database, data available in May 2018

Almost 50% of those who died in 2016 in road accidents that involved HGVs were travelling by car.

31% of those who died in 2016 in road accidents that involved buses or coaches were pedestrians.

Type of casualties

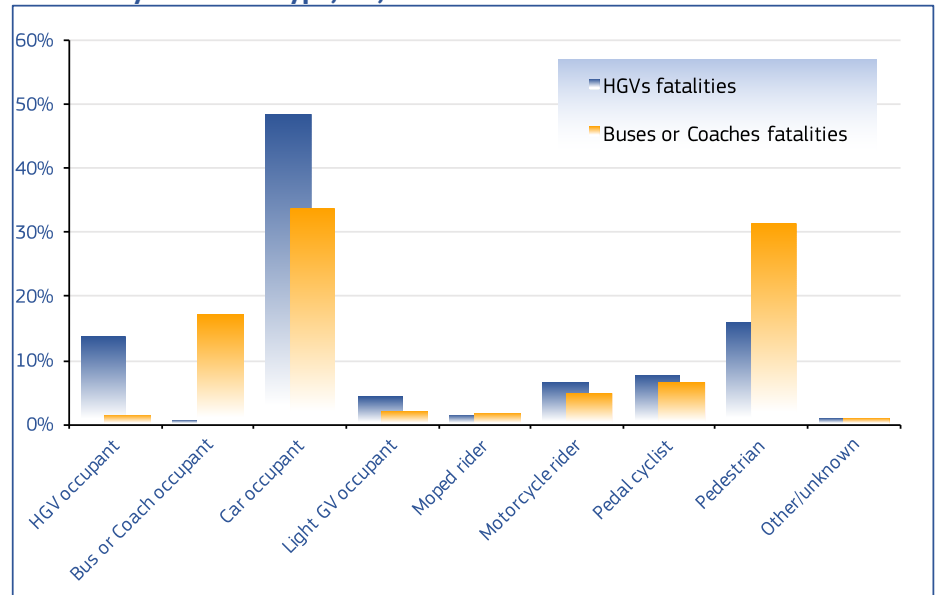
Accidents involving HGVs and buses or coaches injured those outside the vehicles as well as their occupants. Across the EU, 14% of those killed in HGV accidents in 2016 were occupants of HGVs, and 17% of those killed in bus or coach accidents were occupants of buses or coaches. Table 7 lists those killed in these accidents by road user type. The distributions are illustrated in Figure 6.

Table 7: Number and distribution of fatalities in accidents involving HGVs and buses or coaches by road user type, EU, 2016

	Accidents involving			
	HGVs fatalities	%	Buses or Coaches fatalities	%
HGV occupant	570	14%	9	1%
Bus or Coach occupant	26	1%	106	17%
Car occupant	2018	49%	206	34%
Light GV occupant	184	4%	13	2%
Moped rider	56	1%	11	2%
Motorcycle rider	274	7%	30	5%
Pedal cyclist	322	8%	41	7%
Pedestrian	662	16%	193	31%
Other/unknown	41	1%	6	1%
EU	4.153	100%	615	100%

Source: CARE database, data available in May 2018

Figure 6: Distribution of fatalities in accidents involving HGVs and buses or coaches by road user type, EU, 2016



Source: CARE database, data available in May 2018

Area and Road type

The CARE data show whether accidents occurred on motorways and, for non-motorway accidents, whether on urban or rural roads. Table 8 shows the distribution of fatalities in accidents involving HGVs. The results for the EU countries are illustrated in Figure 6 for HGV accidents and for Bus or Coach accidents.

Table 8: Distribution of fatalities in accidents involving HGVs by country and road type, 2016 or latest available year

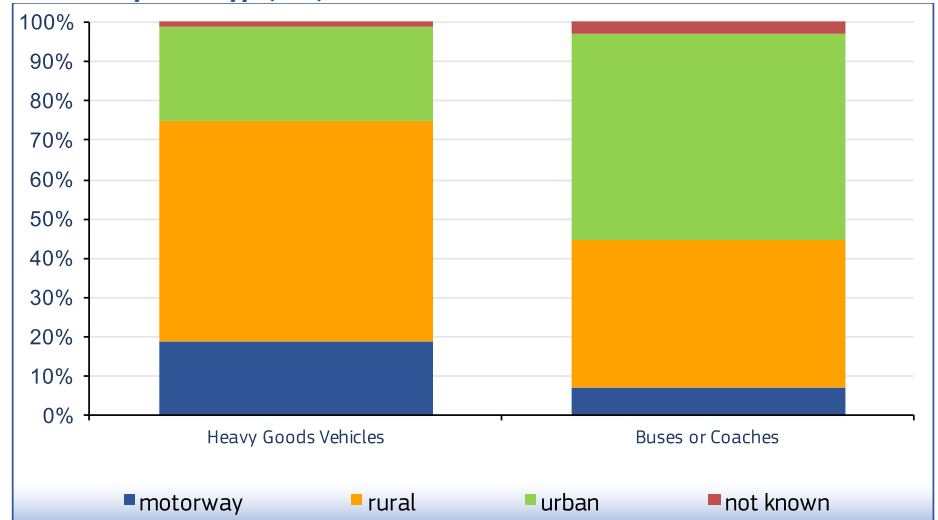
	motorway	non-motorway		not known	Total
		rural	urban		
BE	38%	41%	21%		109
BG	10%	60%	31%		121
CZ	14%	63%	23%		136
DK	11%	57%	32%		47
DE	30%	46%	24%		620
EE	0%	0%	0%	100%	2
IE	0%	59%	41%		17
EL	23%	51%	27%		79
ES	35%	56%	10%		284
FR	18%	63%	19%		493
HR	21%	38%	41%		39
IT	37%	47%	16%		403
CY	0%	0%	100%		3
LV	0%	90%	10%		29
LT	0%	0%	0%	100%	45
LU	25%	25%	50%		4
HU	15%	68%	17%		93
MT	0%	0%	100%		1
NL	30%	46%	22%	1%	76
AT	24%	47%	28%		74
PL	4%	66%	31%		783
PT	10%	46%	44%		59
RO	3%	52%	45%		96
SI	42%	45%	13%		31
SK	8%	56%	36%		106
FI	3%	89%	8%		73
SE	13%	67%	20%		46
UK	10%	64%	26%		284
EU	19%	56%	24%	1%	4.153
IS	0%	50%	50%		2
LI	-	-	-	-	-
NO	0%	97%	3%		36
CH	26%	48%	26%		27

Source: CARE database, data available in May 2018

56% of fatalities in HGV accidents in 2016 occurred in rural areas; in Latvia, this percentage is 90%.

52% of fatalities in Bus or Coach accidents occurred in urban areas.

Figure 7: Distribution of fatalities in accidents involving HGVs and buses or coaches by road type, EU, 2016



Source: CARE database, data available in May 2018

Day of the week and Time of the day

The distribution of fatalities by time of the day was examined by dividing the day into six 4-hour periods. This is shown for HGV accidents in Table 9. The hourly rates are relatively high between 08:00 and 20:00 in all countries.

Table 9: Total number and distribution of fatalities in accidents involving HGVs by country and time of day, 2016 or latest available year

	00-04	04-08	08-12	12-16	16-20	20-24	Total
BE	6%	17%	34%	24%	14%	6%	109
BG	6%	16%	21%	28%	20%	9%	121
CZ	4%	13%	31%	23%	21%	10%	136
DK	0%	15%	38%	23%	19%	4%	47
DE	5%	15%	26%	31%	15%	7%	620
EE	0%	0%	50%	0%	50%	0%	2
IE	0%	18%	41%	29%	12%	0%	17
EL	4%	14%	25%	20%	23%	14%	79
ES	7%	11%	25%	25%	23%	10%	284
FR	5%	17%	26%	23%	19%	10%	493
HR	0%	21%	31%	18%	21%	10%	39
IT	6%	15%	22%	21%	26%	10%	403
CY	0%	0%	0%	0%	0%	0%	3
LV	4%	21%	11%	21%	21%	21%	28
LT	11%	9%	22%	18%	33%	7%	45
LU	0%	25%	0%	0%	50%	25%	4
HU	10%	15%	31%	22%	15%	8%	93
MT	0%	0%	100%	0%	0%	0%	1
NL	4%	7%	38%	26%	20%	5%	76
AT	5%	24%	30%	27%	9%	4%	74
PL	7%	17%	24%	21%	20%	10%	783
PT	2%	17%	27%	31%	19%	5%	59
RO	6%	10%	13%	24%	30%	17%	96
SI	0%	13%	23%	35%	23%	6%	31
SK	4%	24%	24%	26%	14%	8%	106
FI	11%	14%	19%	29%	18%	10%	73
SE	2%	13%	17%	28%	33%	7%	46
UK	11%	16%	25%	27%	14%	7%	284
EU	6%	16%	25%	25%	20%	9%	4.153
IS	0%	50%	0%	50%	0%	0%	2
NO	8%	6%	14%	42%	19%	11%	36
CH	0%	7%	48%	22%	22%	0%	27

Source: CARE database, data available in May 2018

The hourly fatality rate in road accidents involving HGVs in 2016 in the EU is high between 8am and 16pm.

The fatality rate in road accidents involving HGVs in 2016 was much lower at the weekend than on weekdays.

Table 10: Total number and distribution of fatalities in accidents involving HGVs by country and day of the week, 2016 or latest available year

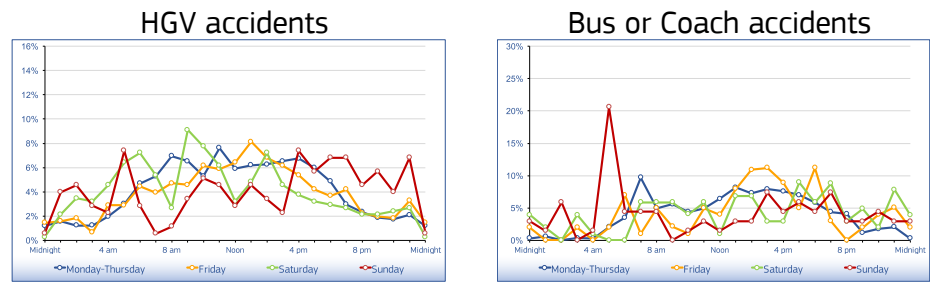
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
BE	17%	16%	27%	18%	13%	4%	6%	109
BG	14%	15%	10%	16%	13%	21%	12%	121
CZ	22%	17%	21%	10%	21%	5%	3%	136
DK	26%	19%	13%	26%	11%	6%	0%	47
DE	18%	22%	19%	15%	19%	5%	2%	620
EE	0%	50%	0%	0%	50%	0%	0%	2
IE	18%	12%	24%	24%	18%	6%	0%	17
EL	9%	25%	18%	15%	14%	10%	9%	79
ES	20%	19%	19%	17%	11%	7%	6%	284
FR	21%	18%	16%	18%	17%	8%	1%	493
HR	23%	15%	13%	18%	15%	10%	5%	39
IT	17%	17%	17%	13%	20%	11%	4%	403
CY	0%	0%	0%	0%	0%	0%	0%	3
LV	14%	17%	21%	14%	14%	10%	10%	29
LT	13%	22%	16%	22%	9%	11%	7%	45
LU	25%	25%	0%	25%	25%	0%	0%	4
HU	17%	24%	17%	13%	16%	9%	4%	93
MT	0%	0%	0%	100%	0%	0%	0%	1
NL	22%	21%	13%	22%	14%	7%	0%	76
AT	23%	23%	14%	14%	22%	5%	0%	74
PL	19%	15%	16%	16%	17%	11%	5%	783
PT	19%	8%	29%	24%	8%	8%	3%	59
RO	14%	22%	10%	14%	29%	4%	7%	96
SI	26%	6%	3%	26%	16%	16%	6%	31
SK	14%	16%	15%	16%	20%	18%	1%	106
FI	8%	19%	8%	11%	18%	23%	12%	73
SE	28%	22%	28%	7%	7%	4%	4%	46
UK	15%	14%	17%	19%	22%	8%	5%	284
EU	18%	18%	17%	16%	18%	9%	4%	4.153
IS	50%	0%	0%	50%	0%	0%	0%	2
NO	47%	3%	6%	17%	22%	0%	6%	36
CH	7%	30%	15%	30%	15%	4%	0%	27

Source: CARE database, data available in May 2018

Figure 8 illustrates the EU distribution of fatalities in accidents involving HGVs and buses or coaches by day of the week and time of the day. For HGVs most accidents occurred between 08:00 and 12:00 on Monday to Thursday. For buses and coaches, accidents occurred especially in the afternoon and at night on Saturday and in the early morning on Sundays.

For buses and coaches accidents occurred especially in the early morning on Sundays.

Figure 8: Distribution of fatalities in accidents involving HGVs and buses or coaches by day of the week and time of the day, EU, 2016 or latest available year



Source: CARE database, data available in May 2018

Seasonality

Table 11 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 is July-August and September-October.

Table 11: Total number and distribution of fatalities in accidents involving HGVs by country and month, 2016 or latest available year

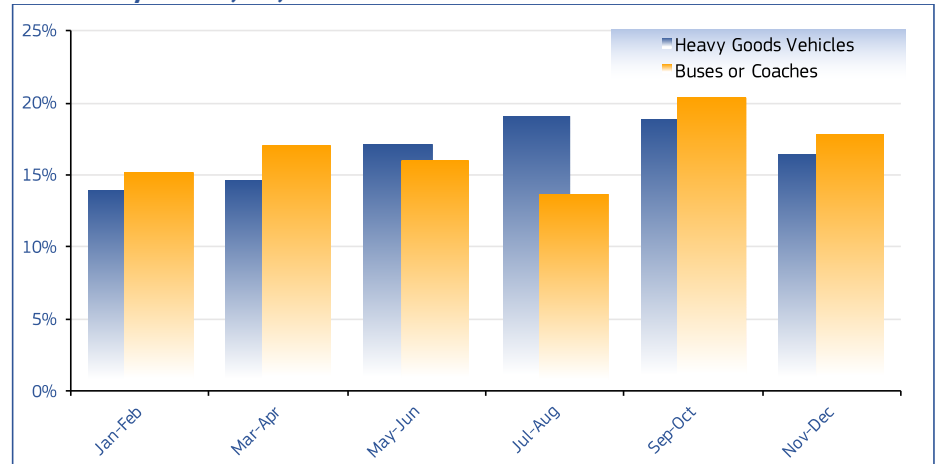
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total
BE	19%	16%	14%	19%	16%	17%	109
BG	7%	14%	24%	15%	30%	10%	121
CZ	12%	18%	15%	18%	18%	19%	136
DK	13%	19%	17%	11%	21%	19%	47
DE	13%	15%	19%	22%	19%	13%	620
EE	0%	0%	50%	50%	0%	0%	2
IE	18%	12%	6%	29%	12%	24%	17
EL	13%	14%	19%	10%	22%	23%	79
ES	13%	12%	18%	26%	15%	16%	284
FR	16%	17%	19%	15%	16%	18%	493
HR	15%	8%	5%	13%	41%	18%	39
IT	12%	15%	17%	23%	15%	18%	403
CY	0%	0%	0%	0%	0%	0%	3
LV	28%	17%	7%	28%	14%	7%	29
LT	13%	16%	18%	11%	20%	22%	45
LU	0%	25%	0%	25%	25%	25%	4
HU	17%	13%	12%	15%	25%	18%	93
MT	0%	0%	0%	0%	100%	0%	1
NL	17%	12%	17%	14%	25%	14%	76
AT	15%	27%	9%	16%	12%	20%	74
PL	12%	14%	18%	19%	22%	15%	783
PT	19%	7%	12%	20%	14%	29%	59
RO	17%	5%	20%	14%	25%	20%	96
SI	26%	19%	13%	13%	16%	13%	31
SK	16%	8%	13%	25%	16%	22%	106
FI	23%	12%	14%	23%	12%	15%	73
SE	9%	13%	24%	17%	30%	7%	46
UK	15%	18%	14%	19%	17%	17%	284
EU	14%	15%	17%	19%	19%	16%	4.153
IS	0%	0%	50%	50%	0%	0%	2
LI	-	-	-	-	-	-	-
NO	22%	14%	14%	22%	14%	14%	36
CH	4%	19%	33%	19%	11%	15%	27

Source: CARE database, data available in May 2018

There was little variation through the year in the fatality rate in road accidents involving HGVs in 2016; the peak months are July-October.

Figure 9 illustrates the monthly EU distribution. It includes the distribution for accidents involving buses or coaches, which peaks in September-October.

Figure 9: Distribution of fatalities in accidents involving HGVs and buses or coaches by month, EU, 2016



Source: CARE database, data available in May 2018

The rate for accidents involving buses or coaches in 2016 peaked in September and October.

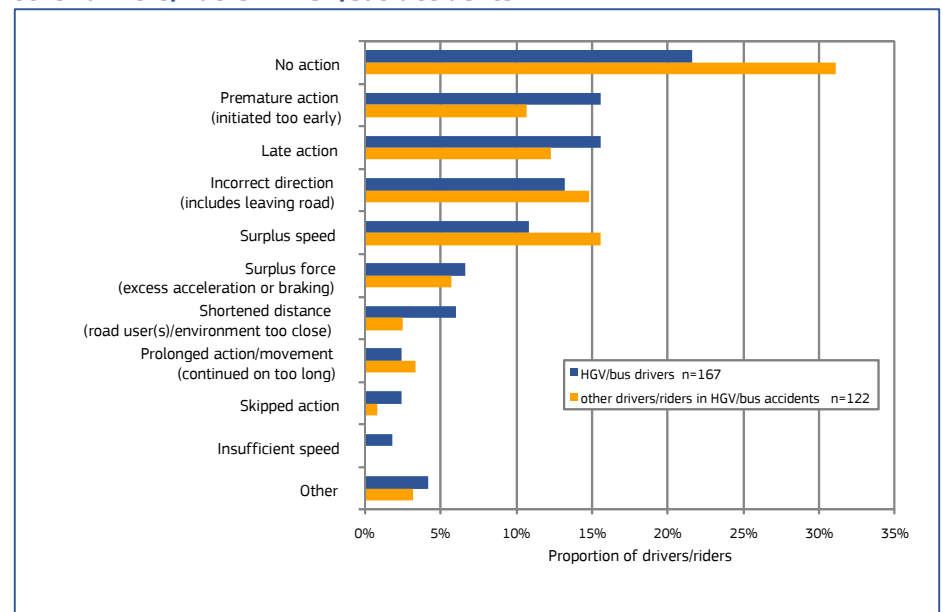
Specific critical events relating to 'timing' are recorded for 52% of HGV or bus drivers in the sample.

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 UK¹². 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 10 compares the distributions of specific critical events for HGV or bus drivers and other drivers or riders in HGV/bus accidents.

Figure 10: Distribution of specific critical events - HGV or bus drivers and other drivers/riders in HGV/bus accidents



Source: SafetyNet Accident Causation Database 2005 to 2008 / EC; N=289; 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.

¹ SafetyNet D5.5, Glossary of Data Variables for Fatal and Accident Causation Databases

² SafetyNet D5.8, In-Depth Accident Causation Database and Analysis Report

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 12 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, 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 12: 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

Notes

1. Country abbreviations

	Belgium	BE		Italy	IT		Romania	RO
	Bulgaria	BG		Cyprus	CY		Slovenia	SI
	Czech Republic	CZ		Latvia	LV		Slovakia	SK
	Denmark	DK		Lithuania	LT		Finland	FI
	Germany	DE		Luxembourg	LU		Sweden	SE
	Estonia	EE		Hungary	HU		United Kingdom	UK
	Ireland	IE		Malta	MT			
	Greece	EL		Netherlands	NL		Iceland	IS
	Spain	ES		Austria	AT		Liechtenstein	LI
	France	FR		Poland	PL		Norway	NO
	Croatia	HR		Portugal	PT		Switzerland	CH

2. Sources: CARE (Community database on road accidents)

The full glossary of definitions of variables used in this Report is available at:
http://ec.europa.eu/transport/road_safety/pdf/statistics/cadas_glossary.pdf

3. Data available in May 2018.

4. Data refer to 2016 and when not available the latest available data are used (2010 data for SK, 2014 data for IE and 2015 data for BG, EE and LT for fatalities in accidents involving HGVs and 2009 data for RO and UK, 2010 data for DK and SK, 2011 data for FI, 2013 data for SI, 2014 data for IE and 2015 data for BG, EE, HR and LT for fatalities in accidents involving buses). Totals and related average percentages for EU also include latest available data.

5. Data for Lithuania and Slovakia are not included in the totals of data comparing the years 2007-2016.

6. At the commenting of the tables and figures, countries with small figures are omitted.

7. This 2018 edition of Traffic Safety Basic Facts updates the previous versions produced within the EU co-funded research projects SafetyNet and DaCoTA.

8. Disclaimer

This report has been produced by the National Technical University of Athens ([NTUA](#)), the Austrian Road Safety Board ([KFV](#)) and the European Union Road Federation ([ERF](#)) under a contract with the [European Commission](#). Whilst every effort has been made to ensure that the matter presented in this report is relevant, accurate and up-to-date, the Partners cannot accept any liability for any error or omission, or reliance on part or all of the content in another context.

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9. Please refer to this Report as follows:

European Commission, Traffic Safety Basic Facts on Heavy Goods Vehicles and Buses, European Commission, Directorate General for Transport, June 2018.

