Traffic Safety Basic Facts 2006

Main Figures

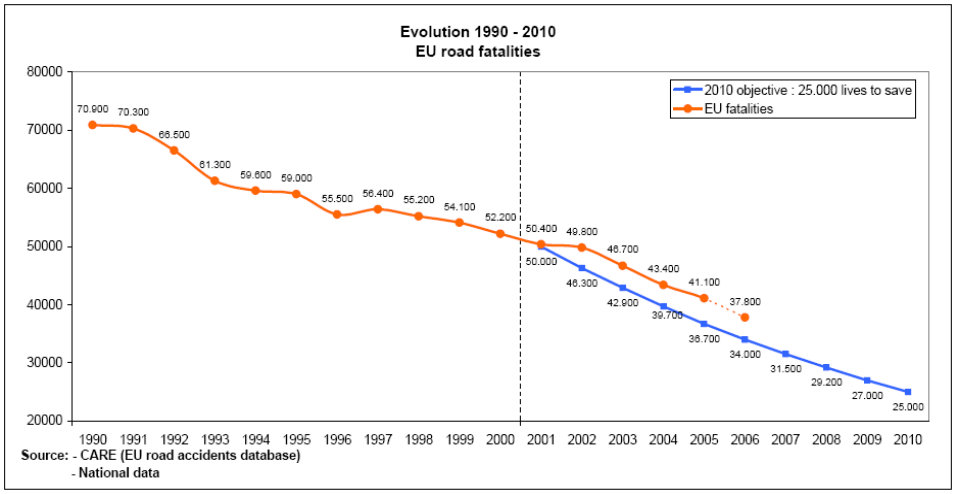
EU road safety targets

The European Commission set the ambitious aim of halving the number of road traffic fatalities by 2010 in its White Paper "European transport policy for 2010: time to decide" of 2001. The European Road Safety Action Programme of 2003 underlines the fact that this target is a "shared responsibility" and can thus only be achieved with the joint effort of all stakeholders.

Since these papers were published, much progress has been achieved; according to the EC's Mid-Term Review of the Road Safety Action Programme (published in February 2006) fatalities in the EU-25 were reduced by 17,5% between 2001 and 2004.

Despite this reduction, there is still a difference between the actual result and the target of halving the number of deaths on the roads by 2010. If the trend continues at the same rate, according to the EC's Mid-Term Review 32.500 people will die from road accidents in 2010. The goal of 25.000 deaths in 2010 will thus not be achieved if the present trend continues (see Figure 1). Recent figures show a slightly more positive outlook though.

Figure 1: Evolution of road accident fatalities in the EU-25, 1990-2010



Source: http://ec.europa.eu/transport/roadsafety/road_safety_observatory/doc/historical_evol.pdf

If the trend continues at the same rate, the EC's goal of reducing fatalities by 50% by 2010 will not be achieved.

Road accident fatalities in Europe

In 2004, 43.401 were killed in road traffic accidents throughout the EU-25 (see Table 1), a reduction of around one quarter in the last decade (-26,4%). Only in one country, Lithuania did the number of fatalities increase between 1995 and 2004. The relative changes in fatality numbers from 1995 to 2004 are shown in Figure 2.

Road accident fatalities in the EU-25 decreased by 26% between 1995 and 2004.

Table 1: Fatalities in Europe by country, 1995-2004

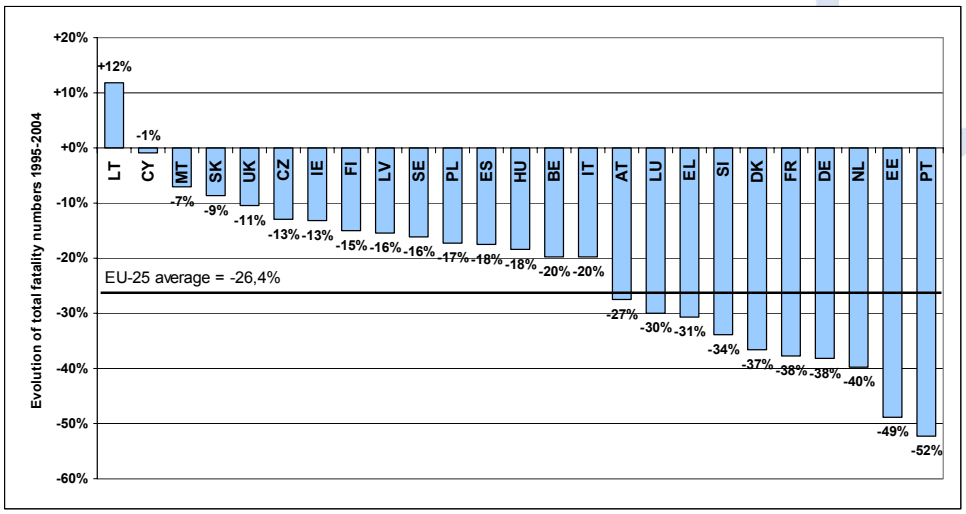
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	1.449	1.356	1.364	1.500	1.397	1.470	1.486	1.306	1.214	1.162
CZ	1.588	1.562	1.597	1.360	1.455	1.486	1.334	1.431	1.447	1.382
DK	582	514	489	499	514	498	431	463	432	369
DE	9.454	8.758	8.549	7.792	7.772	7.503	6.977	6.842	6.613	5.842
EE	332	213	280	284	232	204	199	223	164	170
EL	2.411	2.157	2.105	2.182	2.116	2.037	1.880	1.634	1.605	1.670
ES	5.749	5.482	5.604	5.957	5.738	5.777	5.516	5.347	5.400	4.741
FR	8.891	8.541	8.444	8.918	8.487	8.079	8.160	7.655	6.058	5.530
IE	437	453	473	458	414	418	412	378	337	379
IT	7.020	6.676	6.713	6.314	6.688	6.649	6.691	6.739	6.065	5.625
CY	118	128	115	111	113	111	98	94	97	117
LV	611	550	525	627	604	588	517	518	532	516
LT	672	667	725	829	748	641	706	697	709	752
LU	70	71	60	57	58	76	70	62	53	49
HU	1.589	1.370	1.391	1.371	1.306	1.200	1.239	1.429	1.326	1.296
MT	14	19	18	17	4	15	16	16	16	13
NL	1.334	1.180	1.163	1.066	1.090	1.082	993	987	1.028	804
AT	1.210	1.027	1.105	963	1.079	976	958	956	931	878
PL	6.900	6.359	7.310	7.080	6.730	6.294	5.534	5.827	5.640	5.712
PT	2.711	2.730	2.521	2.126	1.995	1.857	1.671	1.675	1.546	1.294
SI	415	389	357	309	334	313	278	269	242	274
SK	660	616	788	819	647	628	614	610	645	603
FI	441	404	438	400	431	396	433	415	379	375
SE	572	537	541	531	580	591	583	560	529	480
UK	3.765	3.740	3.743	3.581	3.564	3.580	3.598	3.581	3.658	3.368
EU-25	58.995	55.499	56.418	55.151	54.096	52.469	50.394	49.714	46.665	43.401
Yearly change	-	-5,9%	1,7%	-2,2%	-1,9%	-3,0%	-4,0%	-1,4%	-6,1%	-7,0%

Source: CARE Database / EC and national publications
Date of query: October 2006

The reduction in fatality numbers in the last decade varied a great deal across the EU; the best-performing countries saw reductions of around 50%, and one country, Lithuania, even experienced an increase in the number of fatalities.

In the last decade, fatality rates decreased in all EU-25 countries except Lithuania.

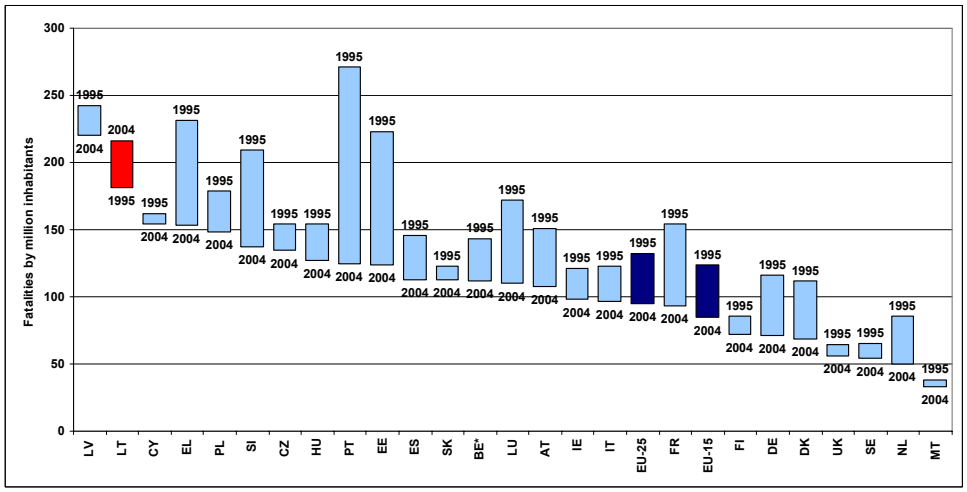
Figure 2: Evolution of fatalities, 1995 versus 2004[1]



Source: CARE Database / EC and national publications
Date of query: October 2006

Figure 3 shows the change in the fatality rate in each of the EU-25 from 1995 to 2004. The largest reductions were achieved in Estonia and Portugal.

Figure 3: Fatalities per million inhabitants by country, 1995 versus 2004



* *BE comparison 1995-2002

Source: CARE Database / EC and national publications
Date of query: October 2006

Table 2 shows the change in fatality rates per country from 1995 to 2004.

[1] Using latest data available, i.e. 2004 for all countries except LU (2002), IE and NL (2003).

The fatality rates in Estonia and Portugal have halved in the last decade, while the average reduction in the EU-25 was 28%.

Fatality rates show both a north-south divide and an east-west divide across Europe.

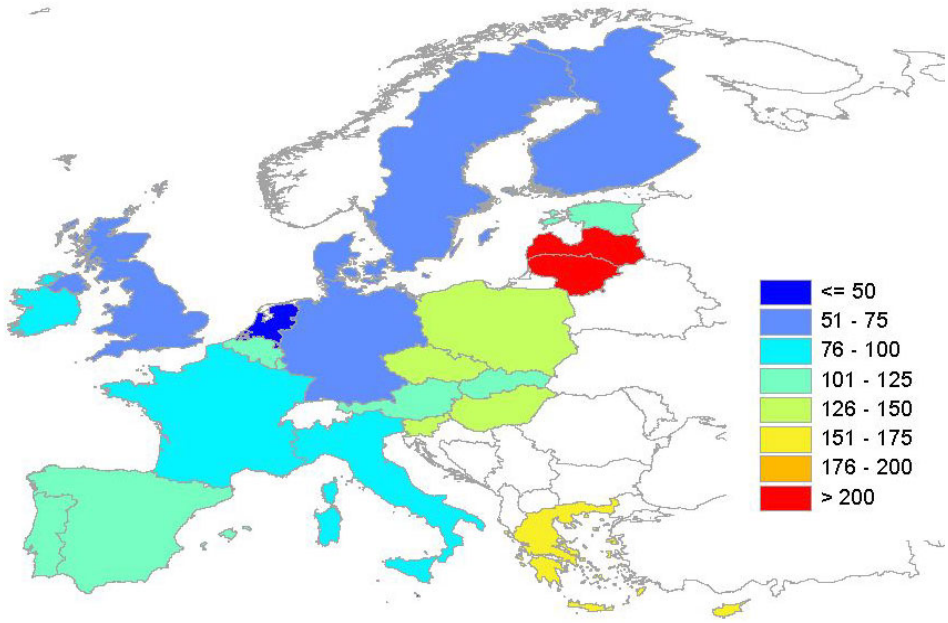
Table 2: Fatalities per million inhabitants by country, 1995-2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	143	134	134	147	137	144	145	122	117	112
CZ	154	151	155	132	141	145	130	139	141	135
DK	112	98	93	94	97	93	81	86	80	69
DE	116	107	104	95	95	91	85	83	80	71
EE	223	144	192	195	160	149	146	163	120	124
EL	231	206	201	208	201	193	178	149	146	153
ES	146	139	142	150	144	143	135	129	128	113
FR	154	147	145	153	145	138	138	129	102	93
IE	121	125	130	124	111	111	108	97	87	98
IT	123	116	117	110	115	115	116	117	105	97
CY	162	174	155	149	150	147	129	124	128	154
LV	242	220	212	255	248	247	219	221	227	220
LT	181	180	196	224	202	173	203	201	204	216
LU	172	172	143	135	135	174	159	140	119	110
HU	154	133	135	133	127	117	121	140	130	127
MT	38	51	48	45	11	39	41	41	41	33
NL	86	76	75	68	69	68	62	61	64	50
AT	151	128	137	119	133	120	118	117	114	108
PL	179	165	189	183	174	163	143	151	147	148
PT	271	272	250	210	200	184	163	160	149	125
SI	209	195	180	156	169	157	140	135	121	137
SK	123	115	146	152	120	116	114	116	120	113
FI	86	79	85	78	84	77	84	80	73	72
SE	65	61	61	60	66	67	66	63	59	54
UK	64	64	64	61	60	60	60	60	62	56
EU-25	132	124	126	123	120	117	112	110	103	95

Source: National publications
Source of population data: EUROSTAT

The geographical representation of fatality rates highlights both a north-south and an east-west divide, which is the result of different historical backgrounds (see Figure 4).

Figure 4: Fatality rates: Fatalities in Europe per million inhabitants, 2004



Source: National publications
Source of population data: EUROSTAT

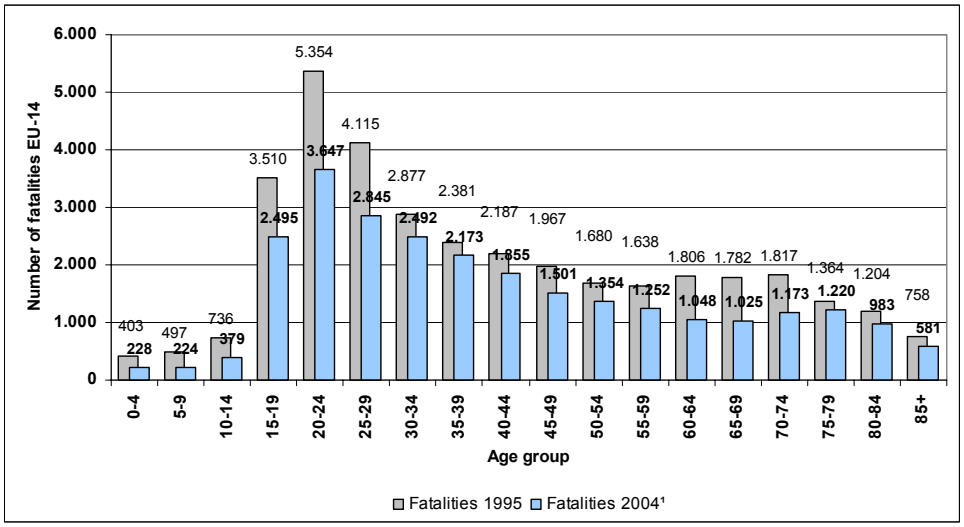
Age and gender

The following displayed data are now restricted to the EU-14 countries (= EU-15 without Germany) since disaggregated data for the others are not available.

The distribution curve for age groups (see Figure 5) remained broadly of the same structure over the last 10 years, with the highest fatality numbers for those between 18 and 35 years of age. The relative decrease in fatality numbers was highest for children (aged 0-14) with a reduction of 49% and for elderly people (age 65-74) with a reduction of 39%; however the strongest reduction in absolute fatality numbers was for the 15 to 24 year olds (-2.722 fatalities).

Fatalities in the EU-14 decreased by 27% between 1995 and 2004. Child fatalities almost halved in the last decade.

Figure 5: Fatalities by age group for EU-14, 1995 versus 2004[1]



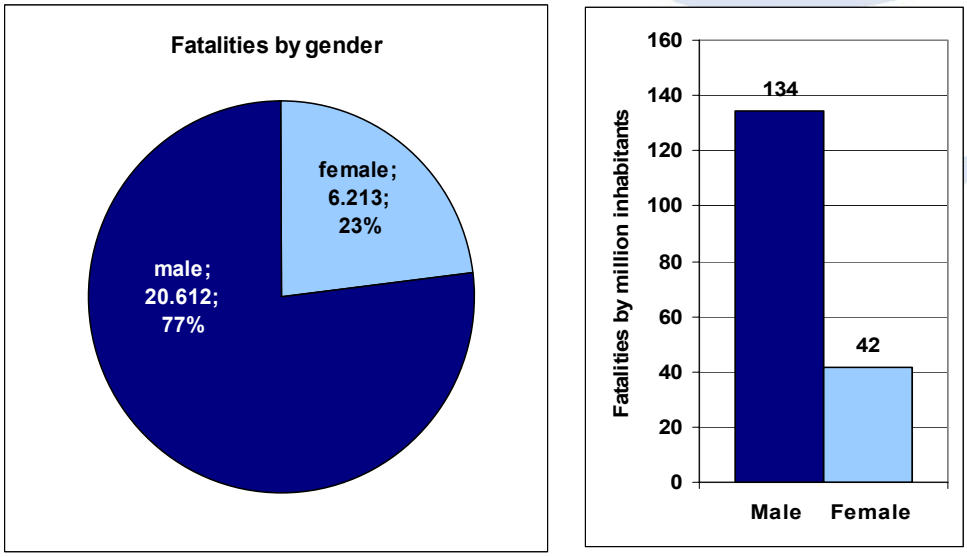
Source: CARE Database / EC
Date of query: October 2006

When comparing the fatality rates of men and women, clear differences are discernible (see Figure 6). During the last ten years, the fatality rate of women was consistently around a third of that of men.

The fatality rate of men is three times higher than that of women.

77% of all road accident fatalities are male.

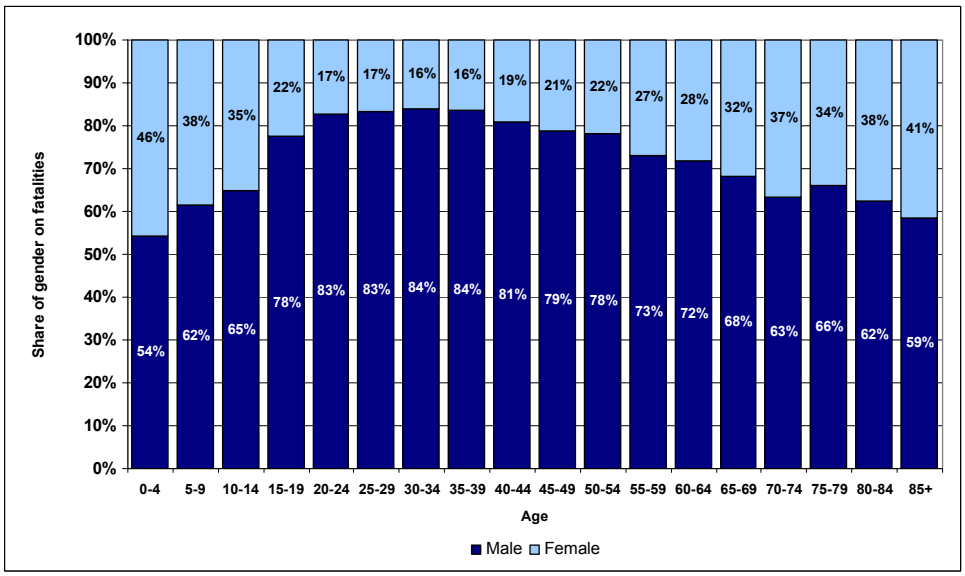
Figure 6: Fatalities and fatality rates by gender of EU-14, 2004[1]



Source: CARE Database / EC
Date of query: October 2006
Source of population data: EUROSTAT

Road accident fatalities are a much larger problem for males than for females, especially in the age group 15 to 54 years, where around four out of five fatalities are men (see Figure 7). The average proportion of road accident fatalities over all age groups is 77% for men and 23% for women.

Figure 7: Distribution of fatalities by gender and age group in EU-14, 2004[1]

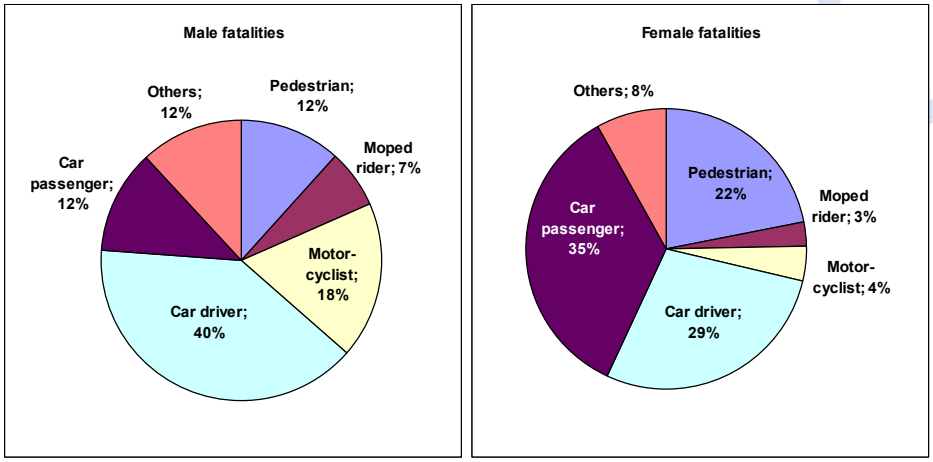


Source: CARE Database / EC
Date of query: October 2006

The road user pattern of road accident fatalities shows clear differences by gender as well (see Figure 8). While men mostly die in road accidents as drivers or passengers of motorised vehicles (84%), about one quarter of female fatalities were pedestrians or

pedal cyclists (26%). Furthermore, female fatalities form a much larger share of car passengers.

Figure 8: Distribution of fatalities by gender and mode of transport in EU-14, 2004[1]



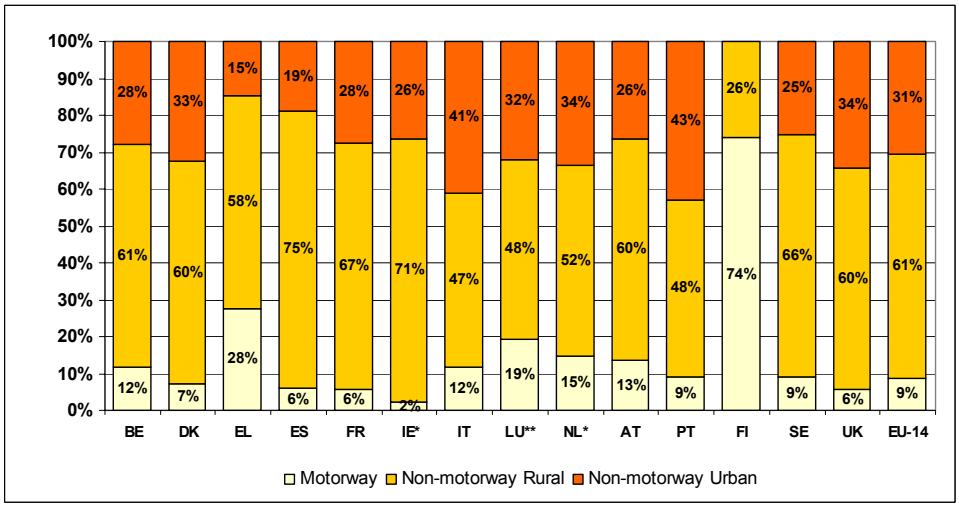
Source: CARE Database / EC
Date of query: October 2006

Female fatalities form a much larger share of car passengers and pedestrians than do male fatalities.

Type of road

Most road accident victims die in accidents on roads that are not motorways (91%), of which two thirds are on rural roads; motorways only account for 9% of fatalities (see Figure 9).

Figure 9: Distribution of fatalities by type of road[2] in EU-14, 2004



Three out of five fatalities were on rural roads.

* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

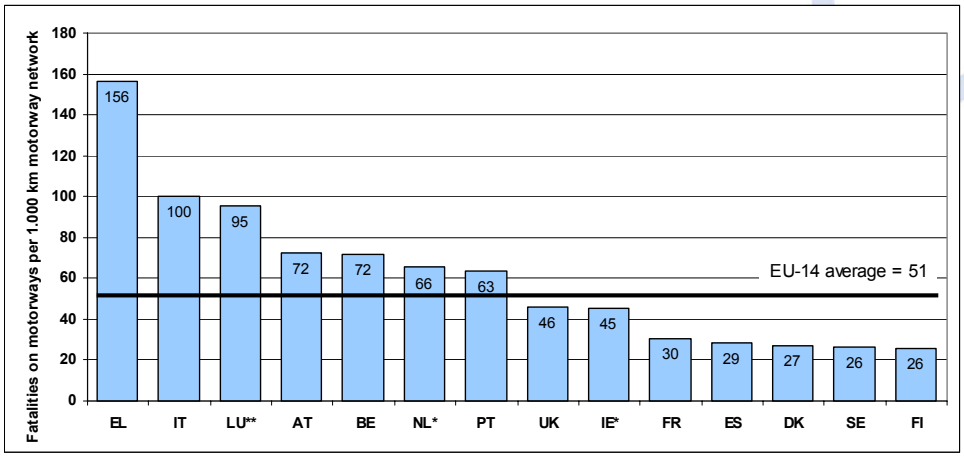
Motorway fatality rates, in terms of motorway network length, show large differences throughout the EU-14 with a range from 30 fatalities and less per 1.000 km motorway network length in Finland, Sweden, Denmark, Spain, and France up to 156 fatalities per 1.000

[2] Road type unknown for 1.251 fatalities in EL, 494 in the UK, 352 in FI, 106 in BE and 11 in SE.

km motorway network length in Greece (see Figure 10). The EU-average lies at 51.

The rate of motorway fatalities per 1.000 km motorway network length ranges from less than 30 up to more than 150.

Figure 10: Fatalities on motorways by road network length and country in EU-14, 2004



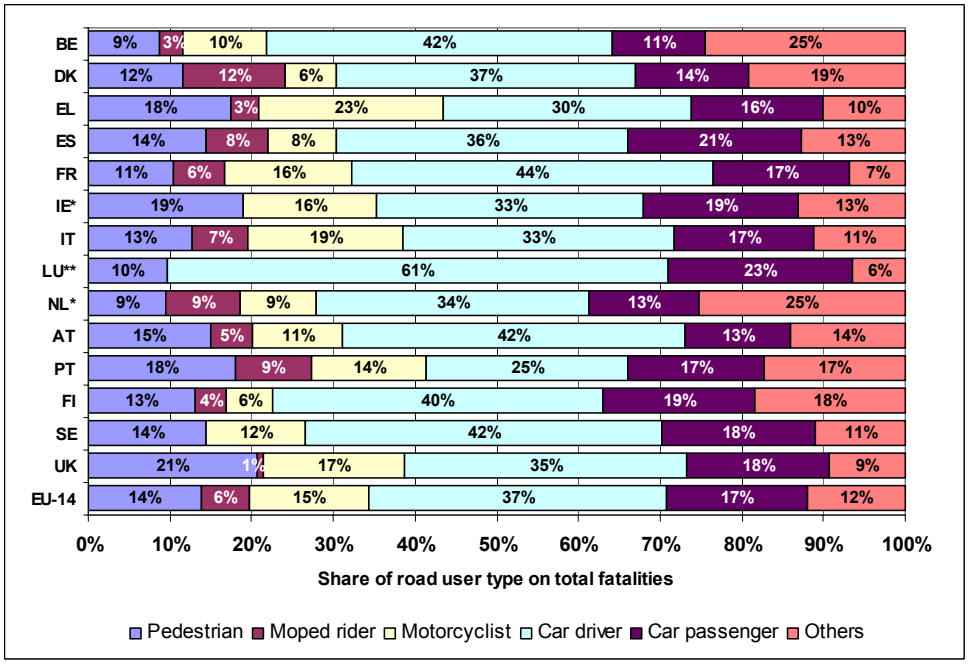
* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006
Source of road network data: EC Pocket Book "Energy and Transport in Figures 2005"

Mode of transport and road user type

Car drivers are the largest road user group among road accident fatalities in all EU-14 countries; together with car passengers they account for 54% of all fatalities (see Figure 11).

Figure 11: Fatalities by road user type and country, 2004

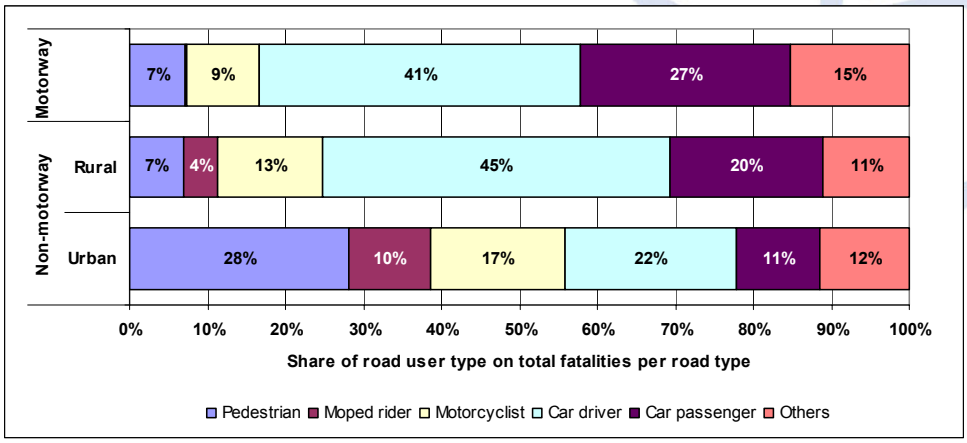


* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

The proportion of fatalities of different road user types depends on the type of road where the accidents happen and the modes of transport used on each type of road (see Figure 12).

Figure 12: Fatalities by road user type and type of road in EU-14, 2004[1]



Source: CARE Database / EC
Date of query: October 2006

More than half of all road fatalities (54%) are car occupants. On motorways and rural roads, this proportion increases to more than two thirds.

On motorways and rural roads, where cars are the prevailing mode of transport, car occupant fatalities form more than two thirds of all fatalities, whereas on urban roads, where there is more non-motorised traffic, the percentage of fatalities that are pedestrians is nearly as large as the percentage that are car occupants.

Table 3 shows the trends in fatalities by vehicle type in the period 1994-2004. On average, in the last decade fatalities decreased by 26,5%. Nearly 60% of this reduction (5.617 fatalities) is accounted for by car occupants; the largest proportional reductions were in moped, pedestrian and pedal cycle fatalities.

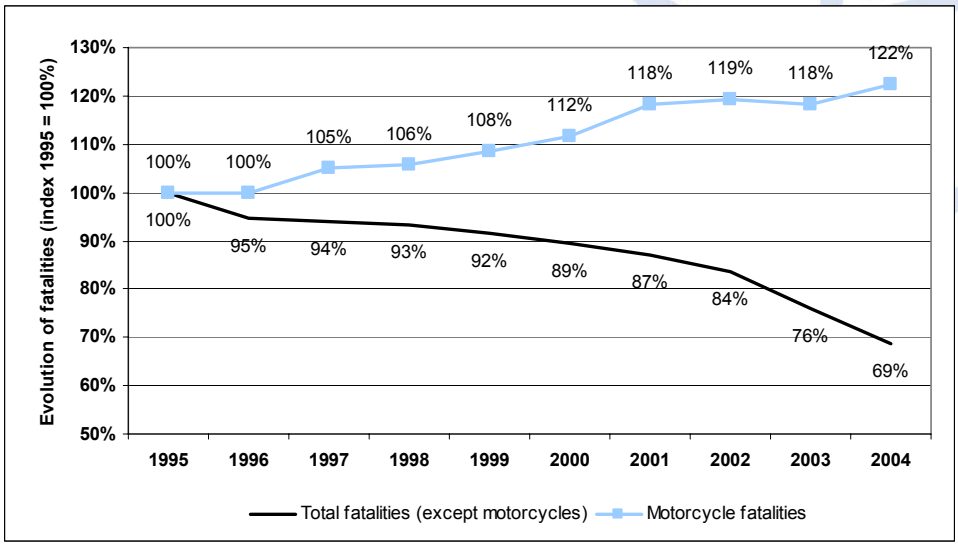
Only for one vehicle type the number of fatalities consistently increased from 1995 to 2004 (see Figure 13): Motorcycle fatality numbers rose by 22% (718 fatalities), which suggests that motorcycle safety measures are a very important topic for the future, as stated in the EC's 2006 Mid-Term Review of the European Road Safety Action Programme.

Table 3: Evolution of fatalities by vehicle type in EU-14, 1995-2004[1]

	Car	Moped	Motor cycle	Pedal cycle	Pede-strian	Others	Total
1995	20.077	2.607	3.228	1.940	6.068	2.722	36.642
1996	19.176	2.402	3.228	1.755	5.830	2.477	34.868
1997	19.069	2.422	3.391	1.779	5.592	2.509	34.763
1998	19.412	2.279	3.418	1.626	5.411	2.406	34.552
1999	19.168	2.201	3.501	1.618	5.163	2.500	34.151
2000	18.896	2.039	3.601	1.481	5.000	2.470	33.486
2001	18.535	1.890	3.811	1.436	4.813	2.397	32.882
2002	17.834	1.647	3.853	1.343	4.868	2.212	31.758
2003[2]	16.076	1.690	3.811	1.275	4.108	2.284	29.243
2004[2]	14.460	1.539	3.945	1.209	3.753	2.013	26.919
Total Change	-28,0%	-41,0%	+22,2%	-37,7%	-38,2%	-26,0%	-26,5%

Source: CARE Database / EC
Date of query: October 2006

Figure 13: Evolution of total fatalities and of motorcycle fatalities in EU-14, 1995 – 2004[1]



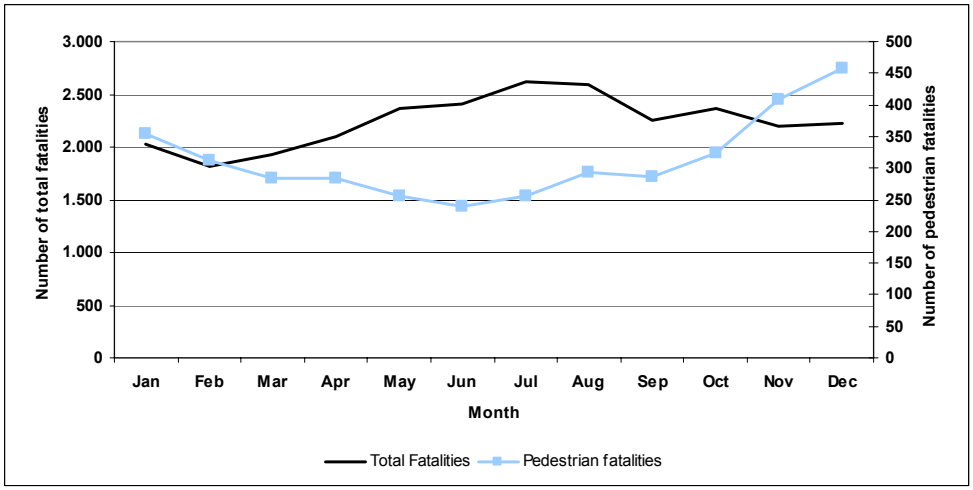
Source: CARE Database / EC
Date of query: October 2006

The number of motorcycle fatalities increased by 22% in the last 10 years, contrary to all other vehicle groups, which all decreased.

Seasonality

The distribution of total fatalities throughout the year does not appear to have changed over time. There are most fatalities in summer, with the highest fatality numbers in July and August. Pedestrian fatalities, on the contrary, have a different distribution over the year, as can be seen from Figure 14, with the peak in winter. This is likely to be because pedestrians are at a greater risk of being killed in darkness and thus have higher fatality numbers during winter.

Figure 14: Total fatalities and pedestrian fatalities by month in EU-14, 2004[1]



Source: CARE Database / EC
Date of query: October 2006

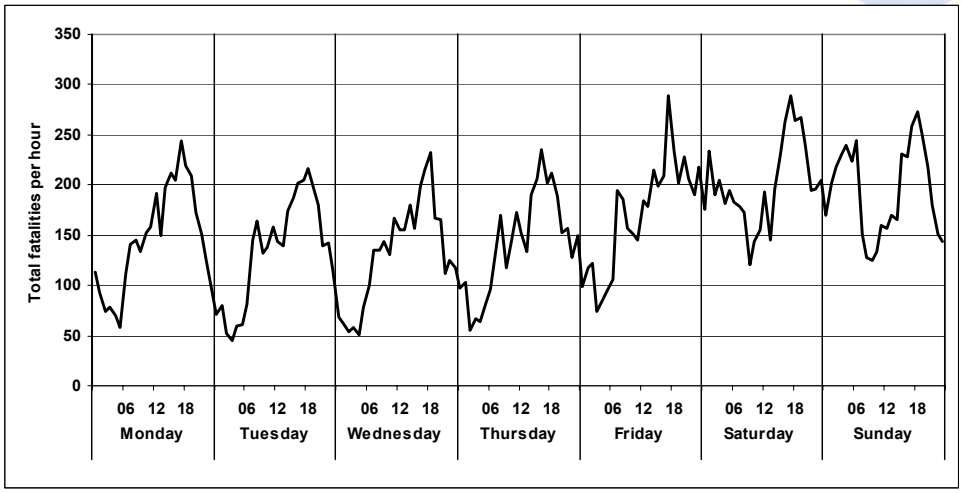
Fatalities are greatest in July and August. Pedestrians are killed most frequently in winter.

Day of week and time of day

The fatality distribution by time of day is similar on each day from Monday to Thursday, with a daily afternoon peak and fewer during the night (see Figure 15).

Perhaps due to the activities undertaken at these times, there are many more fatalities on Friday and Saturday nights.

Figure 15: Fatalities in EU-14 by day of week and time of day, 2004[1]



Source: CARE Database / EC
Date of query: October 2006

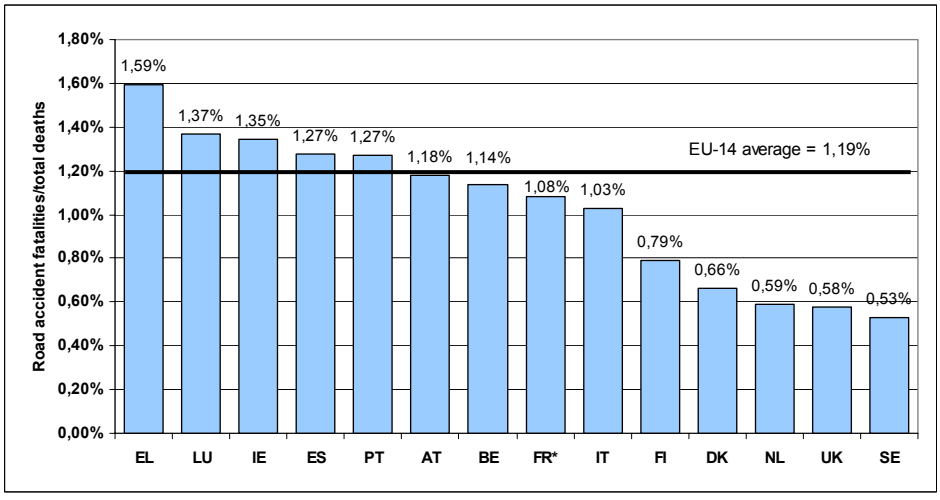
Both the absolute numbers and the distribution across the day are very different at the weekends, where fatality numbers are larger in the afternoon and there are significantly more fatalities at night. On average, 58% of all fatalities occur between 8am and 8pm.

Road accident fatalities' share in mortality

In the EU-14, road accidents account for 1,2% of all deaths, ranging from the largest proportion, 1,6% of all deaths, in Greece to only 0,6% in The Netherlands and the UK, and 0,5% in Sweden (see Figure 16).

Road accidents account for 1,2% of all deaths in EU-14 countries.

Figure 16: Road accident fatalities as a share of all deaths by country, 2004[1]



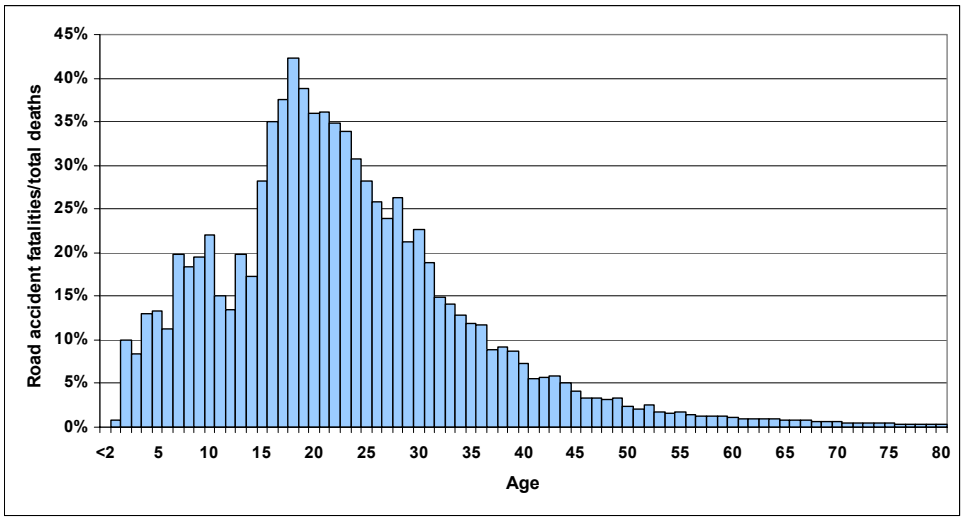
* Deaths 2003

Source: CARE Database / EC and national publications, EUROSTAT
Date of query: October 2006

The proportion of fatalities attributable to traffic accidents strongly varies with age (see Figure 17). Road accidents account for a large proportion of fatalities for teenagers and people in their twenties and early thirties. There is a peak for 18-year olds: over 40% of the deaths result from road accidents.

Road accidents account for up to two fifths of all deaths among young people.

Figure 17: Road accident fatalities as a proportion of deaths by age group[3], 2004[1]



Source: CARE Database / EC, EUROSTAT
Date of query: October 2006

[3] Using data from 10 European countries: DK, EL, ES, IE, LU, NL, AT, PT, FI, and SE

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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, readers use 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
- Motorcycles and Mopeds
- Car Occupants
- Heavy Goods Vehicles & Buses
- Motorways
- Junctions

Detailed data on traffic accidents are published annually by the European Commission in the Annual Statistical Report. This includes country abbreviations and 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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