



Traffic Safety Basic Facts 2006

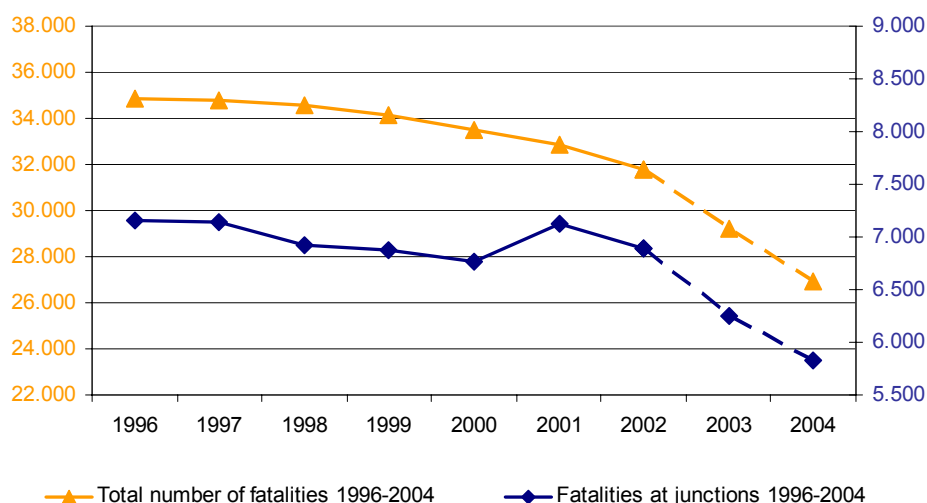
Junctions

Almost 61.000 persons were killed in traffic accidents at junctions, in 14 European Union countries within the years 1996-2004. This number represents about 21% of all traffic accident fatalities in those countries¹.

A decrease of 18,5% in traffic accident fatalities at junctions is recorded in 2004² compared to the 7.159 respective fatalities in 1996, whereas the total traffic accident fatalities were also significantly reduced by almost 23% in the 14 European Union countries within the same period.

In 2001 an increase of 5,4% in traffic accident fatalities occurring at junctions was recorded compared to 2000, whereas within the same year a decrease of 1,8% in the overall number of road fatalities was observed. After 2001 both road fatality trends are similar, as indicated in Figure 1.

Figure 1: EU-14 Fatalities evolution, 1996-2004²



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

Table 1 provides an overall view of the evolution of fatalities at junctions split by country.

¹ Statistics related to junction road accidents should be read carefully due to the presence of around 25% of "not defined" entries, which might affect the percentages presented.

² Using latest available data, i.e. 2004 for all countries except LU (2002), IE and NL (2003).

A decrease of 18,5% in traffic accident fatalities at junctions is observed during the period 1996-2004².

Between 2000 and 2001 the fatality trend at junctions does not follow the related overall road fatality trend.





Table 1: Fatalities at junctions per country, 1996-2004²

	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	292	309	321	302	334	357	315	272	221
DK	176	149	163	155	150	122	130	128	122
EL	123	118	133	162	141	148	168	139	122
ES	891	974	959	930	914	856	805	806	764
FR	1.529	1.496	1.519	1.444	1.375	1.364	1.238	971	822
IE	104	106	99	80	83	82	72	73	-
IT	1.511	1.413	1.329	1.354	1.416	1.896	1.921	1.699	1.641
LU	7	5	5	2	11	8	-	-	-
NL	412	435	386	404	401	327	321	324	-
AT	164	189	149	189	153	146	167	161	145
PT	309	281	253	251	225	236	196	187	213
FI	99	111	106	91	85	104	93	83	65
SE	140	164	165	171	155	155	171	115	125
UK	1.402	1.396	1.333	1.340	1.318	1.325	1.287	1.289	1.189
EU-14	7.159	7.146	6.920	6.875	6.761	7.126	6.892	6.255	5.834
% yearly change	-	-0,2%	-3,2%	-0,7%	-1,7%	5,4%	-3,3%	-9,2%	-6,7%

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

The fatality rate at junctions per million inhabitants in Italy is much higher than the respective rates in the other 13 European countries, and the average rate of the European Union for 2004² as a whole.

Table 2: Fatalities at junctions per million inhabitants, 1996-2004²

	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	28,8	30,4	31,5	29,6	32,6	34,8	30,6	26,3	21,3
DK	33,5	28,2	30,8	29,2	28,1	22,8	24,2	23,8	22,6
EL	11,5	11,0	12,3	14,9	12,9	13,5	15,3	12,6	11,0
ES	22,6	24,7	24,2	23,4	22,9	21,2	19,7	19,4	18,0
FR	26,4	25,7	26,1	24,7	23,4	23,1	20,9	16,3	13,7
IE	28,7	29,0	26,8	21,4	22,0	21,4	18,5	18,4	18,1
IT	26,6	24,8	23,4	23,8	24,9	33,3	33,7	29,6	28,3
LU	17,0	12,0	11,8	4,7	25,4	18,2	18,0	17,8	17,7
NL	26,6	27,9	24,7	25,6	25,3	20,5	19,9	20,0	19,9
AT	20,6	23,7	18,7	23,7	19,1	18,2	20,8	19,9	17,8
PT	30,8	27,9	25,0	24,7	22,1	23,0	19,0	18,0	20,3
FI	19,3	21,6	20,6	17,6	16,4	20,1	17,9	15,9	12,5
SE	15,8	18,5	18,6	19,3	17,5	17,4	19,2	12,9	13,9
UK	23,9	23,7	22,6	22,6	22,1	22,1	21,8	21,7	19,9
EU-14	24,7	24,5	23,7	23,5	23,0	24,1	23,3	21,0	19,4

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

Figure 2 indicates that between 1996 and 2004² the fatality rate of people killed at junctions significantly decreased by 21,2% (from 24,7 in 1996 to 19,4 in 2004²). France shows the most significant

France shows the most significant decrease (48%) in road fatality rates at junctions within the examined period.



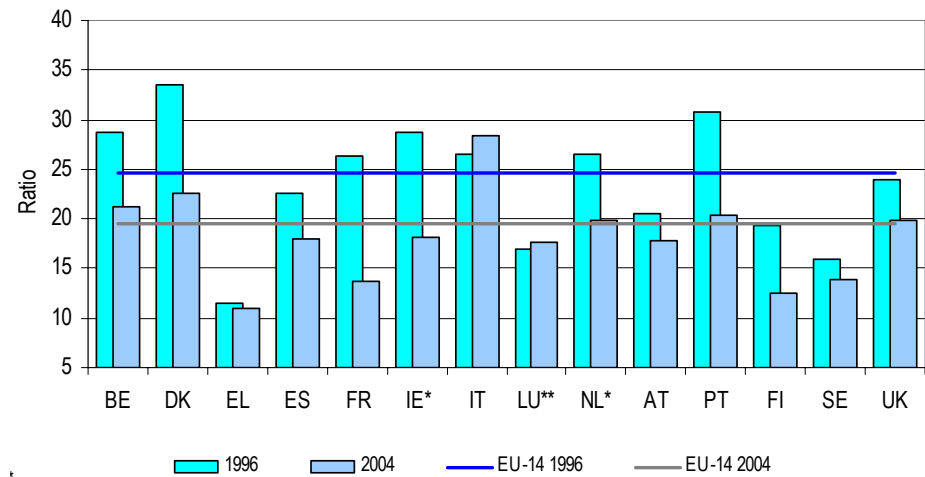
Main Figures
Children
Young People
The Elderly
Pedestrians
Bicycles
Motorcycles & Mopeds
Car Occupants
Heavy Goods Vehicles & Buses
Motorways
Junctions



decrease (48%) in road fatality rates at junctions within the examined period.

Italy and Luxemburg are the only countries in which the fatality rates increased within the examined period (6,6% and 4,2% increase respectively). In 1996 Denmark had the highest fatality rate (33,5%), whereas eight of the countries are lower than the average rate of all EU-14 countries for 2004².

Figure 2: Fatalities at junctions per million inhabitants, 1996 versus 2004



* Data from 2003
** Data from 2002

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

Table 3: Distribution of fatalities at junctions by the total number of road accident fatalities, 1996 - 2004²

	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	21,5%	22,7%	21,4%	21,6%	22,7%	24,0%	24,1%	22,4%	19,0%
DK	34,2%	30,5%	32,7%	30,2%	30,1%	28,3%	28,1%	29,6%	33,1%
EL	5,7%	5,6%	6,1%	7,7%	6,9%	7,9%	10,3%	8,7%	7,3%
ES	16,3%	17,4%	16,1%	16,2%	15,8%	15,5%	15,1%	14,9%	16,1%
FR	17,9%	17,7%	17,0%	17,0%	17,0%	16,7%	16,2%	16,0%	14,9%
IE	23,0%	22,4%	21,6%	19,3%	19,9%	19,9%	19,0%	21,7%	-
IT	22,6%	21,0%	21,0%	20,2%	21,3%	28,3%	28,5%	28,0%	29,2%
LU	9,9%	8,3%	8,8%	3,4%	14,5%	11,4%	12,9%	-	-
NL	34,9%	37,4%	36,2%	37,1%	37,1%	32,9%	32,5%	31,5%	-
AT	16,0%	17,1%	15,5%	17,5%	15,7%	15,2%	17,5%	17,3%	16,5%
PT	11,3%	11,1%	11,9%	12,6%	12,1%	14,1%	11,7%	12,1%	16,5%
FI	24,5%	25,3%	26,5%	21,1%	21,5%	24,0%	22,4%	21,9%	17,3%
SE	26,1%	30,3%	31,1%	29,5%	26,2%	26,6%	30,5%	21,7%	26,0%
UK	37,5%	37,3%	37,2%	37,6%	36,8%	36,8%	35,9%	35,2%	35,3%
EU-14	20,5%	20,6%	20,0%	20,1%	20,2%	21,7%	21,7%	21,4%	21,7%

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

In the United Kingdom, more than one third of the overall road accident fatalities in 2004 occurred at junctions (35,3%), whereas in Greece fatalities at junctions constitute a minority of the overall road accident fatalities. As shown in Table 3, the ratio of fatalities at junctions has increased since 1996 in only four EU countries. Yet, it has overall increased because the increase was recorded in the countries with the highest number of fatalities.

In the United Kingdom, more than one third of the overall road accident fatalities in 2004 occurred at junctions (35,3%)





Area Type

Table 4: Fatalities at junctions inside urban area, 1996-2004²

	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	111	121	105	108	139	133	122	113	79
DK	77	67	62	65	67	60	48	55	49
EL	123	113	124	137	131	140	134	103	107
ES	380	423	409	357	361	313	287	300	278
FR	703	669	660	665	552	519	466	402	318
IE	49	56	51	37	41	39	30	37	37
IT	992	900	857	876	936	1135	1077	888	828
LU	3	0	1	1	4	4	6	6	6
NL	213	213	204	184	200	171	172	168	168
AT	60	88	67	66	66	61	82	61	75
PT	186	168	145	166	153	149	124	116	132
FI	45	56	48	38	41	48	42	43	27
SE	57	75	76	85	69	88	86	57	53
UK	842	838	780	813	815	774	772	793	724
EU-14	3.841	3.787	3.589	3.598	3.575	3.634	3.448	3.142	2.844
% yearly change	-	-1,4%	-5,2%	0,3%	-0,6%	1,7%	-5,1%	-8,9%	-9,5%

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

Road accident fatalities at junctions mostly occur inside urban areas. However, during recent years, the number of at junction fatalities inside urban areas has been decreasing more quickly than has the number of at junction fatalities in rural areas. This could be attributed to both driver behaviour improvement and less speeding in urban areas, due to the increased number of vehicles.

Table 5: Fatalities at junctions outside urban area, 1996-2004²

	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	181	188	216	194	195	224	193	159	142
DK	99	82	101	90	83	62	82	73	73
EL	0	5	9	25	10	8	34	36	15
ES	510	550	549	573	554	542	518	507	486
FR	827	827	859	779	823	845	772	570	504
IE	54	47	48	43	42	43	42	36	36
IT	520	513	472	478	480	761	844	811	813
LU	4	3	3	0	6	3	2	2	2
NL	199	222	182	220	201	156	149	156	156
AT	104	101	82	123	87	85	85	100	70
PT	124	113	108	84	72	87	72	71	81
FI	54	55	58	53	44	56	51	40	38
SE	83	89	89	86	86	67	85	56	69
UK	560	558	553	527	503	551	515	496	465
EU-14	3.319	3.353	3.329	3.275	3.186	3.490	3.444	3.113	2.950
% yearly change	-	1,0%	-0,7%	-1,6%	-2,7%	9,5%	-1,3%	-9,6%	-5,2%

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

The higher decrease of at-junction fatalities inside urban areas, comparing to the respective decrease at rural areas can be attributed to both driver behaviour improvement and less speeding in urban areas, due to the increased number of vehicles





Mode of transport

Fewer than half of the fatalities at junctions across the European countries are car or taxi occupants, as demonstrated in Table 6.

Table 6: Fatalities at junctions by mode of transport, 2004

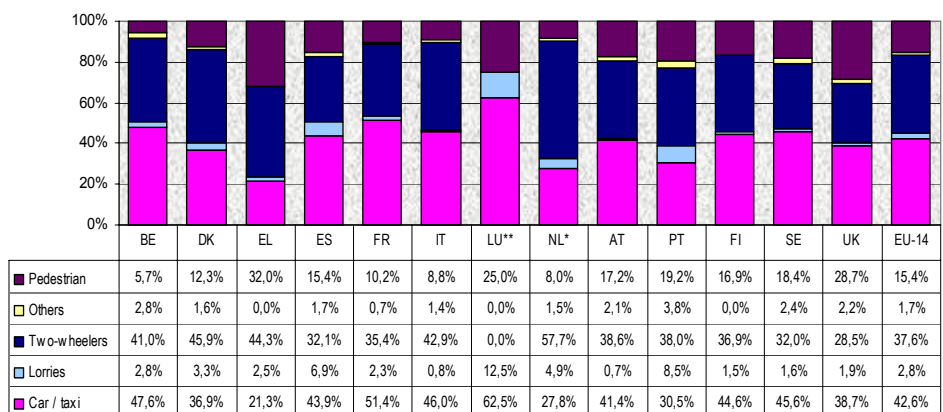
	agricultural tractor	bus or coach	car or taxi	heavy goods vehicle	lorry, under 3.5 tonnes	moped	motorcycle	other	pedal cycle	pedestrian	Total
BE	1	0	101	1	5	10	38	5	39	12	212
DK	0	1	45	2	2	17	10	1	29	15	122
EL	0	0	26	2	1	5	49	0	0	39	122
ES	5	3	336	14	39	142	77	5	27	118	766
FR	2	0	423	8	11	75	166	4	50	84	823
IT	3	9	745	1	12	161	392	11	141	143	1,618
LU**	0	0	5	1		0	0	0	0	2	8
NL*	3	0	90	2	14	44	33	2	110	26	324
AT	1	0	60	0	1	16	18	2	22	25	145
PT	7	0	65	2	16	32	39	1	10	41	213
FI	0	0	29	0	1	3	8	0	13	11	65
SE	1	1	57	1	1	7	17	1	16	23	125
UK	3	14	460	7	16	17	243	9	79	341	1,189
EU-13	26	28	2,442	41	119	529	1,090	41	536	880	5,732
% by mode of transport	0,5%	0,5%	42,6%	0,7%	2,1%	9,2%	19,0%	0,7%	9,4%	15,4%	100%

* Data from 2003
** Data from 2002

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

As displayed in Figure 3, in the Netherlands more than half (57,7%) of the overall fatalities at junctions are two-wheeler users (motorcycle, moped and bicycle users), a higher proportion than any of the other 12 countries (Ireland is not included due to large number of "not defined" fatalities).

Figure 3: Distribution of fatalities at junctions by mode of transport, 2004



* Data from 2003
** Data from 2002

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

In the Netherlands more than half (57,7%) of the overall fatalities at junctions are two-wheeler occupants, a higher proportion than any of the other 13 countries.

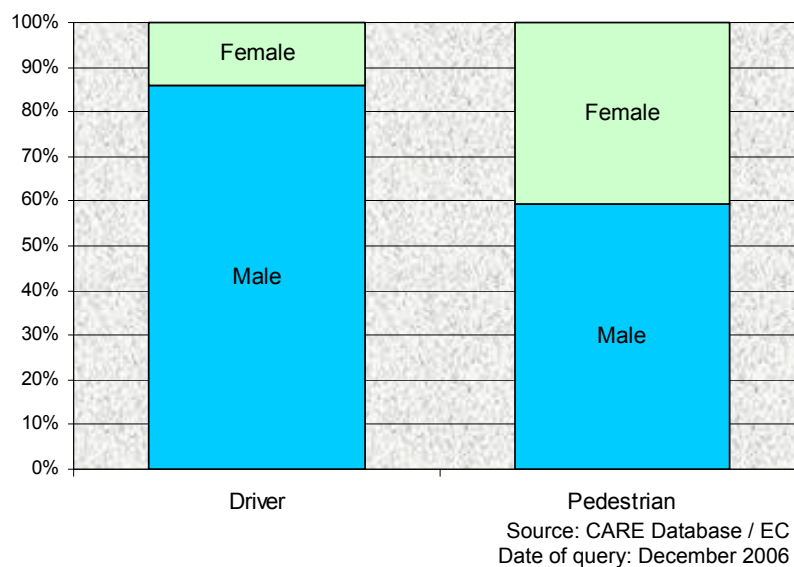


In Greece, the number of pedestrian fatalities at junctions is considerably higher, compared to the EU-13 average (32% and 15,4% respectively).

Person class and gender

Figure 4 indicates that accident involvement of female drivers at junctions is considerably lower than the involvement of male drivers (14% female fatalities at junctions and 86% of male respectively), possibly also due to higher driving exposure of male drivers. Additionally, almost 60% of the pedestrian fatalities at junctions are male, whereas female constitute approximately 40% of the fatalities.

Figure 4: Fatalities at junctions by gender and person class, 2004²

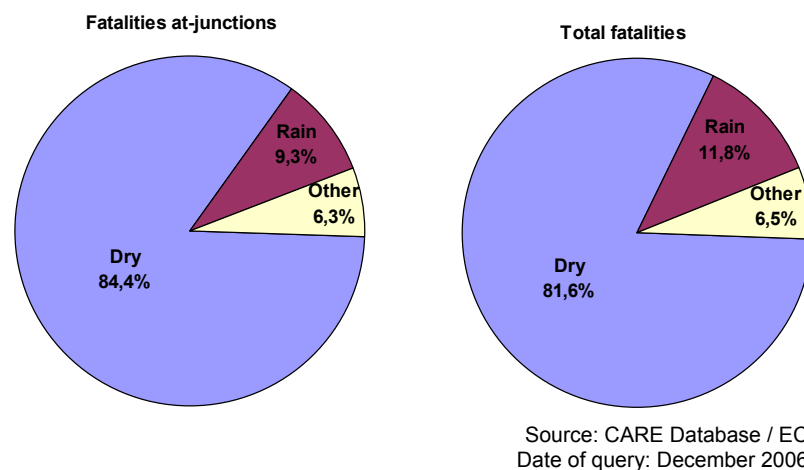


Accident involvement of female drivers at junctions is considerably lower than the involvement of male drivers, possibly due to a higher exposure of male driver.

Weather conditions

As Figure 5 shows, weather conditions do not affect accident fatalities at junctions in a different way than the overall accident fatalities.

Figure 5: Fatalities at junctions and total fatalities by weather conditions EU-14, 2004²



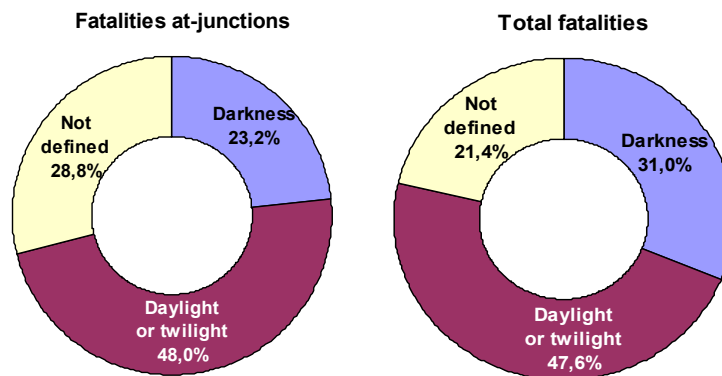


Lighting Conditions

As demonstrated in

Figure 6, in 2004², 23,2% (1.338 people) of the fatalities at junctions in the 14 European countries occurred when it was dark. The distribution of all fatalities according to lighting conditions is only slightly different, as there is a somewhat larger share of fatalities occurring when it is dark (31%, corresponding to 8.358 people).

Figure 6: Fatalities at junctions and total fatalities by lighting conditions, 2004¹



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

Almost half of all road accident fatalities (12.813 – 47,6%) occurred during daylight or twilight.

Almost a quarter of the fatalities at junctions occurred during night time



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, 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.

Authors

George Yannis and Petros Evgenikos	NTUA, Greece
Jeremy Broughton, Brian Lawton and Louise Walter	TRL, United Kingdom
Stefan Hoeglinger, Andrea Angermann and Veronika Weiss	KfV, Austria
Niels Bos and Martine Reurings	SWOV, The Netherlands