



Traffic Safety Basic Facts 2007

Junctions

More than 65.500 persons were killed in traffic accidents at junctions, in 13^{1,2} European Union countries between 1996 and 2005³ about 21% of all traffic accident fatalities in those countries.

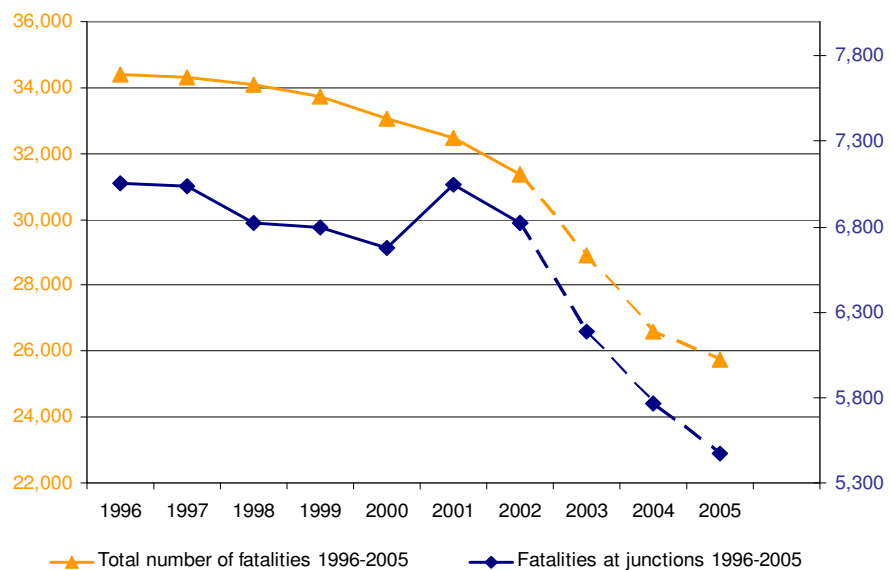
In these 13 countries there were 22,4% fewer traffic accident fatalities at junctions in 2005³ than in 1996, whereas the total number of fatalities fell by 25,3% over this period.

The number of traffic accident fatalities at junctions increased by 5,4% in 2001 compared to 2000, whereas the overall number of fatalities fell by 1,8%. The two fatality trends are similar after 2001, as indicated in Figure 1.

A decrease of 22,4% in traffic accident fatalities at junctions was observed during the period 1996-2005³.

The fatality trend at junctions did not follow the overall trend in 2001

Figure 1: Evolution of fatalities in the EU-13², 1996-2005³



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

¹ Statistics related to junction road accidents should be read carefully due to the presence of a high proportion of "unknown" entries in specific countries (AT, EE, IE, MT, PT, SE), which might affect the percentages presented. The highest proportions of "unknown" entries though are observed for IE and MT (79,1% and 100% respectively) therefore these countries are excluded from the following Tables and Figures.

² See Table "Definition of EU-level and used country abbreviations" on page 10.

³ Using latest available data, i.e. 2005 for all countries except LU (2002), NL (2003), IT (2004).





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

Table 1: Fatalities at junctions per country, 1996-2005

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	292	309	321	302	334	357	315	272	221	210
DK	176	149	163	155	150	122	130	128	122	94
EE	-	-	-	-	-	-	-	-	-	32
EL	123	118	133	162	141	148	168	139	122	118
ES	891	974	959	930	914	856	805	806	764	750
FR	1.529	1.496	1.519	1.444	1.375	1.364	1.238	971	822	664
IT*	1.511	1.413	1.329	1.354	1.416	1.896	1.921	1.699	1.641	1.641
LU***	7	5	5	2	11	8	8	8	8	8
HU	-	-	-	-	-	-	-	-	-	260
NL**	412	435	386	404	401	327	321	324	324	324
AT	164	189	149	189	153	146	167	161	145	148
PL	-	-	-	-	-	-	-	-	-	898
PT	309	281	253	251	225	236	196	187	213	196
FI	99	111	106	91	85	104	93	83	65	73
SE	140	164	165	171	155	155	171	115	125	98
UK	1.402	1.396	1.333	1.340	1.318	1.325	1.287	1.289	1.189	1.152
EU-13	7.056	7.039	6.821	6.795	6.678	7.043	6.820	6.183	5.761	5.476
% yearly change	-	-0,2%	-3,1%	-0,4%	-1,7%	5,5%	-3,2%	-9,3%	-6,8%	-5,0%

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

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

France shows the most significant decrease (57%) in road fatality rates at junctions within the examined period.

The fatality rate at junctions per million inhabitants, presented in Table 2, is higher in Hungary than in the other 15^{1,4} European countries (excluding countries where 2005 data are not available) and higher than the average rate of the European Union for 2005³ as a whole. Moreover, the respective rates for Belgium, Estonia, Poland and the United Kingdom are higher than the EU-16 average. The EU total fatality rate includes 13 EU countries up to 2004, while Estonia, Hungary and Poland are included for 2005³.

⁴ Due to small numbers, LU was not taken into account in comparisons.





Table 2: Fatalities at junctions per million inhabitants, 1996-2005⁴

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	28,7	30,3	31,5	29,5	32,6	34,7	30,5	26,2	21,2	20,0
DK	33,4	28,2	30,7	29,1	28,1	22,8	24,2	23,7	22,6	17,3
EE	-	-	-	-	-	-	-	-	-	23,8
EL	11,5	10,9	12,3	14,9	12,9	13,5	15,3	12,6	11,0	10,6
ES	22,6	24,6	24,1	23,3	22,7	21,0	19,5	19,2	17,9	17,3
FR	25,7	25,0	25,3	23,9	22,6	22,3	20,1	15,7	13,2	10,6
IT*	26,6	24,8	23,4	23,8	24,9	33,3	33,6	29,5	28,2	28,0
LU***	16,9	11,9	11,8	4,6	25,2	18,1	17,9	17,8	17,6	17,5
HU	-	-	-	-	-	-	-	-	-	25,8
NL**	26,5	27,9	24,6	25,6	25,2	20,4	19,9	20,0	19,9	19,9
AT	20,6	23,7	18,7	23,6	19,1	18,2	20,7	19,8	17,7	18,0
PL	-	-	-	-	-	-	-	-	-	23,5
PT	30,8	27,8	25,0	24,7	22,0	22,9	18,9	17,9	20,3	18,6
FI	19,3	21,6	20,6	17,6	16,4	20,0	17,9	15,9	12,4	13,9
SE	15,8	18,5	18,6	19,3	17,5	17,4	19,2	12,8	13,9	10,9
UK	24,1	23,9	22,8	22,8	22,4	22,4	21,7	21,6	19,9	19,1
EU-13 ^{1,2}	24,5	24,4	23,5	23,4	22,9	24,0	23,1	20,8	19,2	18,1
EU-16 ^{1,2}	-	-	-	-	-	-	-	-	-	19,0

* Data from 2004

** Data from 2003

*** Data from 2002

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

Figure 2 shows that the fatality rate at junctions decreased by 22,5% between 1996 and 2005³ in the 13 EU countries (from 24,5 in 1996 to 18,1 in 2005). France shows the most significant decrease by 58,7% in road fatality rates at junctions within the examined period.

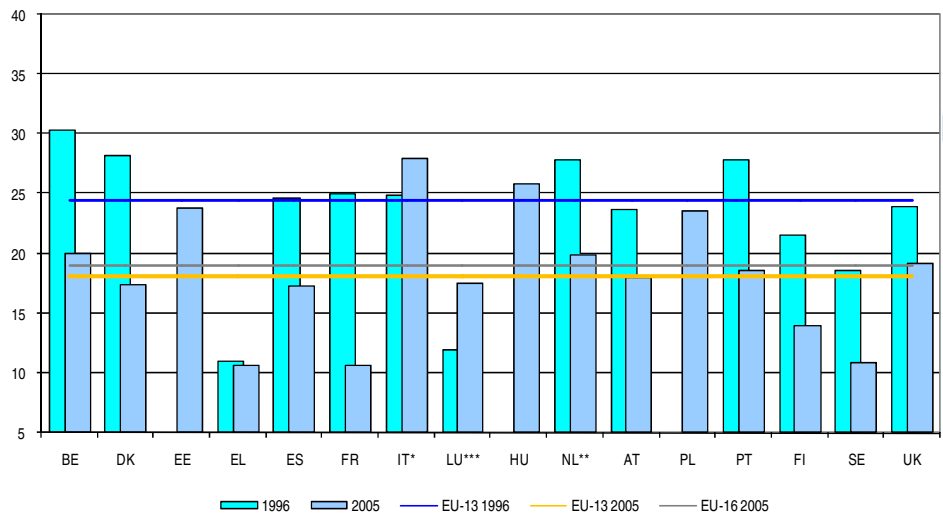
The fatality rate increased by 5,3% in Italy within the examined period. In 1996 the highest fatality rate was in Denmark (33,4), but by 2005 the Danish rate was below the EU average. Nine of the countries are lower than the average rate of all EU-16 countries for 2005³. The inclusion of data from three new Member States (Hungary, Estonia and Poland) increased the EU average for 2005 slightly (19,0 with the new countries, 18,1 without).

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





Figure 2: Fatalities at junctions per million inhabitants, 1996 versus 2005⁴



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

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

In the United Kingdom, more than one third of road accident fatalities in 2005 were killed at junctions

Table 3: Proportion of fatalities who were killed at junctions, 1996 - 2005⁴

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	21,5%	22,7%	21,4%	21,6%	22,7%	24,0%	24,1%	22,4%	19,0%	19,3%
DK	34,2%	30,5%	32,7%	30,2%	30,1%	28,3%	28,1%	29,6%	33,1%	28,4%
EE	-	-	-	-	-	-	-	-	-	18,9%
EL	5,7%	5,6%	6,1%	7,7%	6,9%	7,9%	10,3%	8,7%	7,3%	7,1%
ES	16,2%	17,4%	16,1%	16,2%	15,8%	15,5%	15,0%	14,9%	16,1%	16,9%
FR	17,9%	17,7%	17,0%	17,0%	17,0%	16,7%	16,2%	16,0%	14,9%	12,5%
IT*	22,6%	21,1%	21,1%	20,2%	21,3%	28,3%	28,5%	28,0%	29,2%	29,2%
LU***	9,9%	8,3%	8,8%	3,4%	14,5%	11,4%	12,9%	12,9%	12,9%	12,9%
HU	-	-	-	-	-	-	-	-	-	20,3%
NL**	34,9%	37,4%	36,2%	37,1%	37,1%	32,9%	32,5%	31,5%	31,5%	31,5%
AT	16,0%	17,1%	15,5%	17,5%	15,7%	15,2%	17,5%	17,3%	16,5%	19,3%
PL	-	-	-	-	-	-	-	-	-	16,5%
PT	11,3%	11,1%	11,9%	12,6%	12,1%	14,1%	11,7%	12,1%	16,5%	15,7%
FI	24,5%	25,3%	26,5%	21,1%	21,5%	24,0%	22,4%	21,9%	17,3%	19,3%
SE	26,1%	30,3%	31,1%	29,5%	26,2%	26,6%	30,5%	21,7%	26,0%	22,3%
UK	37,5%	37,3%	37,2%	37,6%	36,8%	36,8%	35,9%	35,2%	35,3%	34,5%
EU-13 ^{1,2}	20,5%	20,5%	20,0%	20,1%	20,2%	21,7%	21,7%	21,4%	21,7%	21,3%
EU-16 ^{1,2}	-	-	-	-	-	-	-	-	-	20,4%

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

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

In the United Kingdom, more than one third of the overall road accident fatalities in 2005 occurred at junctions (34,5%), whereas in Greece fatalities at junctions constitute a minority of the overall road accident fatalities (7,1%).





Table 3 shows that the overall percentage of fatalities at junctions increased between 1996 and 2005 in the 13 EU countries, although it tended to decrease in countries such as France and Denmark..

Area Type

Table 4: Fatalities at junctions inside urban area, 1996-2005⁴

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	111	121	105	108	139	133	122	113	79	76
DK	77	67	62	65	67	60	48	55	49	49
EE	-	-	-	-	-	-	-	-	-	11
EL	123	113	124	137	131	140	134	103	107	95
ES	380	423	409	357	361	313	287	300	278	279
FR	703	669	660	665	552	519	466	402	318	349
IT*	992	900	857	876	936	1.135	1.077	888	828	828
LU***	3	0	1	1	4	4	6	6	6	6
HU	-	-	-	-	-	-	-	-	-	171
NL**	213	213	204	184	200	171	172	168	168	168
AT	60	88	67	66	66	61	82	61	75	61
PL	-	-	-	-	-	-	-	-	-	592
PT	186	168	145	166	153	149	124	116	132	123
FI	45	56	48	38	41	48	42	43	27	34
SE	57	75	76	85	69	88	86	57	53	49
UK	842	838	780	813	815	774	772	793	724	670
EU-13	3.792	3.731	3.538	3.561	3.533	3.596	3.418	3.105	2.844	2.787
% EU-13 yearly change	-	-1,6%	-5,2%	0,7%	-0,8%	1,8%	-4,9%	-9,2%	-8,4%	-2,0%

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

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

Road accident fatalities at junctions occur mostly within urban areas in the 13 EU countries. However, the number of fatalities at junctions has fallen more quickly in recent years in urban than in rural areas. There was an exception in 2005³, when the reduction was 2,0% in urban areas and 7,8% in rural areas..

Over the 13 EU countries, the number of fatalities at junctions fell more in 2005 in rural than in urban areas.





Table 5: Fatalities at junctions outside urban area, 1996-2005⁴

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
BE	181	188	216	194	195	224	193	159	142	134
DK	99	82	101	90	83	62	82	73	73	45
EE	-	-	-	-	-	-	-	-	-	21
EL	0	5	9	25	10	8	34	36	15	23
ES	510	550	549	573	554	542	518	507	486	471
FR	827	827	859	779	823	845	772	570	504	315
IT*	520	513	472	478	480	761	844	811	813	813
LU***	4	3	3	0	6	3	2	2	2	2
HU	-	-	-	-	-	-	-	-	-	89
NL**	199	222	182	220	201	156	149	156	156	156
AT	104	101	82	123	87	85	85	100	70	87
PL	-	-	-	-	-	-	-	-	-	306
PT	124	113	108	84	72	87	72	71	81	73
FI	54	55	58	53	44	56	51	40	38	39
SE	83	89	89	86	86	67	85	56	69	48
UK	560	558	553	527	503	551	515	496	465	482
EU-13	3.264	3.306	3.282	3.233	3.144	3.447	3.401	3.076	2.914	2.688
% EU-13 yearly change	-	1,3%	-0,7%	-1,5%	-2,7%	9,6%	-1,3%	-9,6%	-5,3%	-7,8%

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

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

Main Figures

Children

Young People

The Elderly

Pedestrians

Bicycles

Motorcycles & Mopeds

Car Occupants

Heavy Goods Vehicles

Motorways

Junctions

Urban Areas





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, 2005⁴

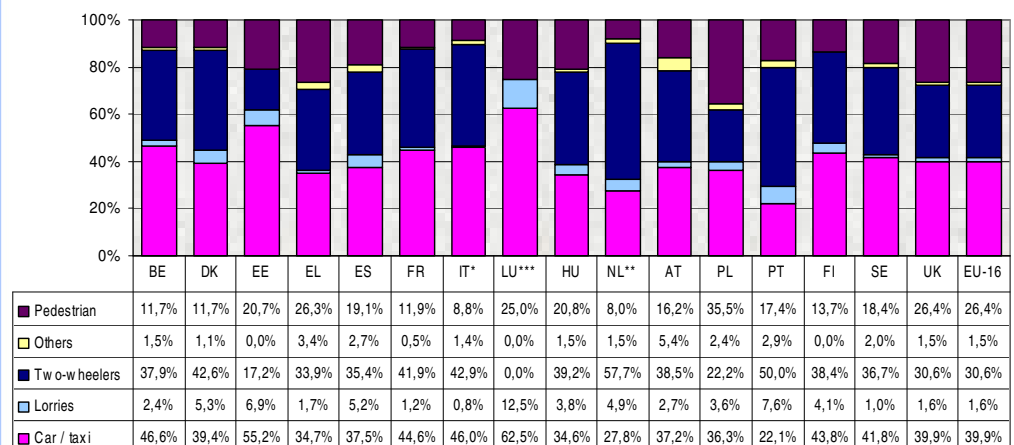
	agricultural tractor	bus or coach	car or taxi	heavy goods vehicle	lorry, under 3.5 tonnes	moped	motorcycle	other	pedal cycle	pedestrian	Total
BE	0	0	96	1	4	15	29	3	34	24	206
DK	0	1	37	0	5	11	6	0	23	11	94
EE	0	0	16	2	0	2	2	0	1	6	29
EL	0	2	41	0	2	3	37	2	0	31	118
ES	2	8	280	11	28	121	120	10	23	143	745
FR	0	2	296	3	5	71	171	1	36	79	664
IT*	3	9	745	1	12	161	392	11	141	143	1.618
LU***	0	0	5	1	0	0	0	0	0	2	8
HU	0	1	90	3	7	17	31	3	54	54	260
NL**	3	0	90	2	14	44	33	2	110	26	324
AT	3	2	55	1	3	16	22	3	19	24	148
PL	13	7	326	32	0	15	32	2	152	319	898
PT	3	2	43	1	14	34	49	0	15	34	196
FI	0	0	32	0	3	1	6	0	21	10	73
SE	0	1	41	1	0	3	16	1	17	18	98
UK	0	7	460	9	9	13	254	10	86	304	1.152
EU-16 ²	28	42	2.653	68	106	527	1.200	48	732	1.228	6.631
% by mode of transport	0,4%	0,6%	40,0%	1,0%	1,6%	7,9%	18,1%	0,7%	11,0%	18,5%	100,0%

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

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

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 15 countries.

Figure 3: Distribution of fatalities at junctions by mode of transport in the EU-16, 2005⁴



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

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

More than half (57,7%) of fatalities at junctions in the Netherlands are two-wheeler users, a higher proportion than in any of the other 15 countries.

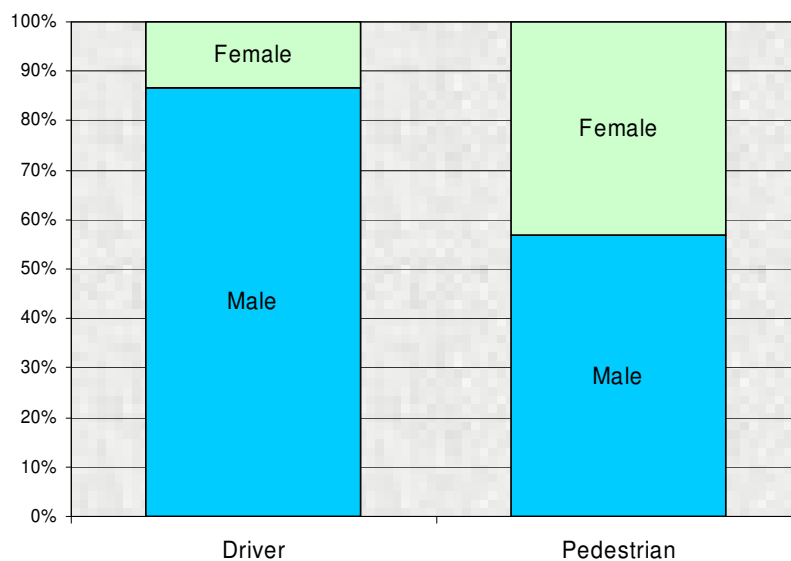


In Poland, the number of pedestrian fatalities at junctions is considerably higher than the EU-16 average (35,5% and 26,4% respectively).

Person class and gender

Figure 4 indicates that in 16 EU countries, accident involvement of female drivers at junctions is considerably lower than the involvement of male drivers (13% female fatalities at junctions and 87% of male respectively). This may be caused by the lower driving exposure of female drivers. Additionally, almost 60% of pedestrian fatalities at junctions are male and approximately 40% are female.

Figure 4: Fatalities at junctions by gender and person class in the EU-16, 2005³

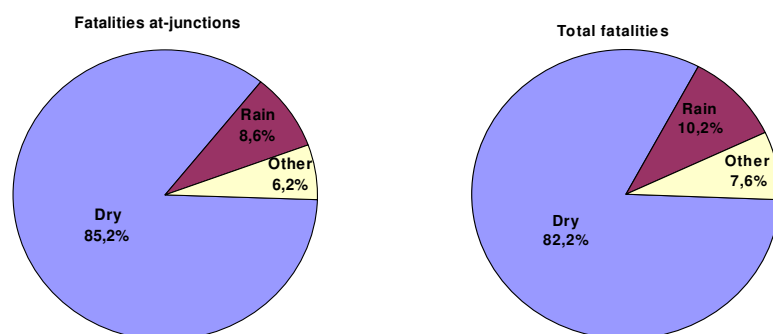


Source: CARE Database / EC
Date of query: December 2007

Weather conditions

As Figure 5 shows, weather conditions affect accident fatalities at junctions in a similar way to fatalities in accidents that occur away from junctions

Figure 5: Fatalities at junctions and total fatalities by weather conditions in the EU-16, 2005³



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

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.



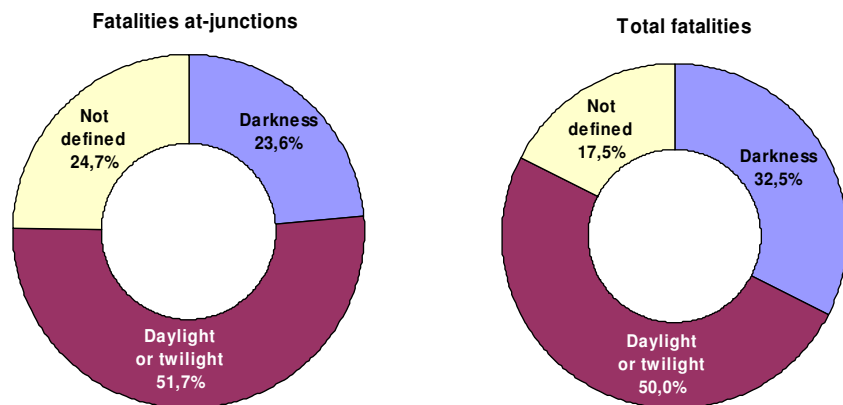


Lighting Conditions

As demonstrated in Figure 6, in 2005³, 23,6% (1.572 people) of the fatalities at junctions in 16 European countries occurred when it was dark. The distribution of all fatalities according to lighting conditions is different, as there is a somewhat larger share of fatalities occurring when it is dark (32,5%, corresponding to 10.612 people).

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

Figure 6: Fatalities at junctions and total fatalities by lighting conditions in the EU-16, 2005³



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

Almost half of all road accident fatalities (16.298 – 50%) occurred during daylight or twilight.



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
- Urban Areas

Definition of used Country abbreviations

EU 13

BE	Belgium
DK	Denmark
EL	Greece
ES	Spain
FR	France
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
FI	Finland
SE	Sweden
UK	United Kingdom

EU 16 = EU 13 +

EE	Estonia
HU	Hungary
PL	Poland

EU 27 = EU 17 +

BG	Bulgaria
CZ	Czech Republic
CY	Cyprus
DE	Germany
IE	Ireland
LV	Latvia
LT	Lithuania
MT	Malta
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 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, Petros Evgenikos and Antonis Chaziris

NTUA, Greece

Jeremy Broughton, Brian Lawton and Louise Walter

TRL, United Kingdom

Stefan Hoeglinger and Thomas Leitner

KfV, Austria

Niels Bos and Martine Reurings

SWOV, The Netherlands

Manuel Andreu, Jean-François Pace and Jaime Sanmartín

INTRAS-UEG, Spain

