Almost 130.000 persons in EU-19 -one third of all traffic accident fatalities-

were killed in single

vehicle accidents, within the decade 2001 -2010

Traffic Safety Basic Facts 2012

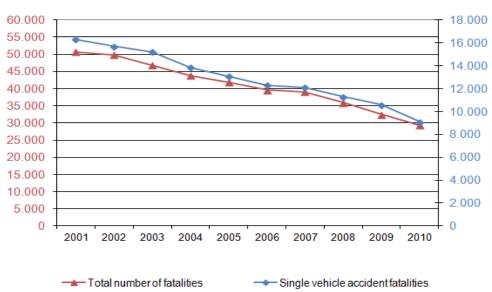
Single vehicle accidents

In this Basic Fact Sheet, 'single vehicle accident' or single vehicle collision is a type of road traffic accident in which only one vehicle and no other road user is involved. Run-off-road collisions, collisions with fallen rocks or debris in the road, rollover crashes within the roadway and collisions with animals are included in this category.

Almost 130.000 persons were killed in single vehicle accidents, in 19 European Union countries within the decade 2001 - 2010. This number represents almost one third of all traffic accident fatalities in those countries (32%).

The number of people killed in single vehicle accidents in 2010¹ was 44% less than the respective number in 2001. The total number of fatalities also fell by more than 42% in the 19 European Union countries over the same period.





Source: CARE Database / EC Date of query: October 2012

Mobility & Transport

See Table "Country abbreviations used and definition of EU-level" on page 25.

² Where a number is missing for an EU-19/23 country in a particular year, its contribution to the EU-19/23 total is estimated as the previous known value. For UK data is the sum of GB (2010) and NI (2009).





Main Figures

Youngsters Children (Aged 15-17) (Aged < 15)

The total number of fatalities in the EU-23 countries was 10% less in 2009 than in 2008, whereas the number of single vehicle accident fatalities was 6% less. The latter number, however, fell by 14% in 2010, whereas the fatality total fell by again by 10%.

Table 1 provides an overview of the evolution of single vehicle accident fatalities for the decade 2001-2010. Within the decade, the most significant reduction in single vehicle fatalities occurred in Spain (58%), and Austria (54%). In 2010, the number of these fatalities decreased Hungary (41%), Finland (26%), United Kingdom (25%). On the other hand, there was a considerable increase in 2010 only in Portugal (59%).

Table 1: Single vehicle accident fatalities per country 2001-2010²

Table 1. Si	ligie veli	icie acci	ueni iaid	illues pe	Country	2001-2010	J -			
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BE	615	524	519	567	482	470	464	420	422	355
CZ	398	448	499	423	402	343	427	326	326	250
DK	114	141	111	86	75	72	89	112	90	75
DE	2.273	2.289	2.255	1.905	1.763	1.638	1.566	1.390	1.372	1.119
EL	658	542	570	602	632	637	613	571	551	499
ES	2.000	1.892	1.907	1.713	1.558	1.451	1.327	1.129	1.009	842
FR	3.078	2.858	2.384	2.149	1.987	1.796	1.737	1.605	1.734	1.558
IT	2.050	1.851	1.990	1.690	1.681	1.650	1.445	1.295	1.261	1.207
LU	30	30	17	18	24	19	19	14	19	18
HU	-	-	307	293	304	322	295	244	228	134
NL	313	345	341	187	177	158	154	244	227	-
AT	425	352	325	324	282	268	243	242	239	195
PL	1.235	1.362	1.318	1.228	1.299	1.269	1.487	1.458	1.195	916
PT	601	572	536	456	494	396	390	378	235	373
RO	1.006	955	887	1.003	715	616	724	900	772	610
SI	59	62	48	61	47	57	65	43	36	31
FI	123	133	106	118	127	127	116	124	109	81
SE	205	189	195	190	186	157	169	153	149	-
UK	838	848	893	865	848	874	754	655	619	462
EU-19	16.327	15.700	15.207	13.877	13.082	12.320	12.084	11.303	10.593	9.101
% yearly reduction (EU-19)		-3,8%	-3,1%	-8,7%	-5,7%	-5,8%	-1,9%	-6,5%	-6,3%	-14,1%
EE	-	-	-	-	51	65	81	41	32	-
LV	-	-	-	145	118	116	99	119	83	72
MT	-	-	-	-	3	3	5	1	5	7
SK	-	-	-	-	190	161	188	170	117	92
EU-23	-	-	-	-	13.444	12.665	12.457	11.634	10.830	9.304
IS	24	16	11	10	9	14	7	6	8	3
								Source:	CARE Dat	ahasa / F

Within the decade 2001 - 2010, the most significant reduction in single vehicle accident fatalities is recorded in Spain (58%)

> Source: CARE Database / EC Date of query: October 2012

Junctions Moto

tside Koads in eas urban area

Roads outside urban areas

le vehicle Se cidents

Gender

Isation





Main Figures

Table 2 provides the percentage of fatalities that occurred in single vehicle accidents in the EU-19/23 for the decade 2001-2010. In 2010, this was 31% in the EU-23 countries, as shown in Table 2.

Table 2: Percentage of fatalities that occurred in single vehicle accidents in the EU -19/23¹, 2001-2010²

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BE	41%	40%	43%	49%	44%	44%	43%	44%	45%	42%
CZ	30%	31%	34%	31%	31%	32%	35%	30%	36%	31%
DK	26%	30%	26%	23%	23%	24%	22%	28%	30%	29%
DE	33%	33%	34%	33%	33%	32%	32%	31%	33%	31%
EL	35%	33%	36%	36%	38%	38%	38%	37%	38%	40%
ES	36%	35%	35%	36%	35%	35%	35%	36%	37%	34%
FR	38%	37%	39%	39%	37%	38%	38%	38%	41%	39%
IT	29%	27%	30%	28%	29%	29%	28%	27%	30%	30%
LU	43%	48%	32%	36%	51%	44%	41%	40%	40%	56%
HU	25%	21%	23%	23%	24%	25%	24%	24%	28%	18%
NL	32%	35%	33%	23%	24%	22%	22%	36%	35%	-
AT	44%	37%	35%	37%	37%	37%	35%	36%	38%	35%
PL	22%	23%	23%	21%	24%	24%	27%	27%	26%	23%
PT	36%	34%	35%	35%	40%	41%	40%	43%	28%	40%
RO	41%	40%	40%	41%	27%	24%	26%	29%	28%	26%
SI	21%	23%	20%	22%	18%	22%	22%	20%	21%	22%
FI	28%	32%	28%	31%	34%	38%	31%	36%	39%	30%
SE	35%	34%	37%	40%	42%	35%	36%	39%	42%	-
UK	23%	24%	24%	26%	25%	27%	25%	25%	26%	24%
EU-19	32,2%	31,5%	32,4%	31,7%	31,2%	31,1%	30,9%	31,5%	32,6%	31,1%
EE	-	-	-	-	30%	32%	41%	31%	33%	-
LV	-	-	-	28%	27%	29%	24%	38%	33%	33%
MT	-	-	-	-	18%	27%	42%	11%	33%	54%
SK	1	-	-	-	31%	26%	28%	28%	30%	25%
EU-23	1		-		31,2%	31,0%	30,9%	31,5%	32,6%	31,0%
IS	-	55%	48%	43%	47%	45%	47%	50%	47%	38%

Source: CARE Database / EC Date of query: October 2012

Even though in 2010 single vehicle accident fatalities constituted on average less than one third of the overall fatalities in the EU-23, the proportion was only 18% in Hungary. It was highest in Belgium (42%). Figure 2 shows that the number of single vehicle accident fatalities in the EU-19 reduced gradually from 2001 to 2010. The proportion of all fatalities that occurred in single vehicle accidents varied within a narrow range, and was relatively high in 2009.

The proportion of EU-23 fatalities occurring in single vehicle accidents slightly decreased in 2010 (31%) compared to the previous 2 years

Mobility & Transport

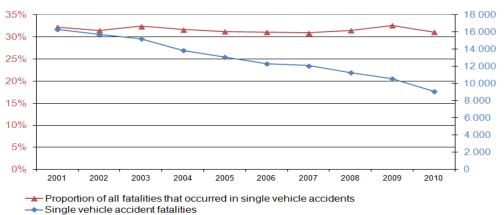
oads in Jur

ads outside ban areas

sonality L

e vehicle sidents





Source: CARE Database / EC
Date of query: October 2012

Table 3: Single vehicle accident fatalities per million inhabitants in the EU -19/231, 2001-20102

2006 2001 2002 2003 2004 2005 2007 2008 2009 2010 59,9 50,8 54,5 44,7 43,8 39,4 39,2 BE 50,1 46,1 32,7 CZ 38,8 43,9 48,9 41.4 39,3 33,5 41,5 31,4 31,1 23,8 DK 21,3 26,3 20,6 15,9 13,9 13,3 16,3 20,5 16,3 13,6 DE 27,6 27,8 27,3 23,1 21,4 19,9 19,0 16,9 16,7 13,7 60,2 49,4 57,0 57,3 54,9 50,9 EL 51,8 54,5 48,9 44,1 46,2 29,8 22,0 ES 49,4 45,8 40,4 36,2 33,2 24,9 18,3 FR 50,5 46,5 38,5 34,5 31,7 28,4 27,3 25,1 26,9 24,1 32,5 IT 36,0 34,7 29,2 28,8 28,1 24,4 21,7 21,0 20,0 LU 37,9 39,9 35,9 68,3 67,6 39,6 52,0 40,5 28,9 38,5 HU 30,1 30,2 30.3 29,0 30,1 32.0 29,3 24.3 22.7 13,4 NL 19,6 21,4 21,1 11,5 10,9 9,7 9.4 14.9 13,8 ΑT 53,0 43,7 40,1 39,8 34,4 32,5 29,3 29,1 28,6 23,3 PL 32,3 35,6 34,5 32,2 34,0 33,3 39,0 38,3 31,3 24,0 PT 51,5 37,4 35,6 58,6 55,4 43,5 46,9 36,8 22,1 35,1 RO 44,8 43,7 40,7 46,2 33,0 28,5 33,6 41,8 35,9 28,4 29,6 21,4 SI 31,1 24,1 30,6 23,5 28,5 32,3 17,7 15,1 FΙ 24,2 23,7 25,6 20,4 22,6 24,3 22,0 23,4 20,5 15,1 SE 21,2 21,8 21,2 23,1 20,6 17,4 18,5 16,7 16,1 UK 14,2 14,3 15,0 14,5 14,1 14,5 12,4 10,7 10,0 7,4 **EU-19** 34,2 33.0 26,3 25,7 23.9 35,6 30,0 28,1 22,3 19.1 37,8 48,3 60,3 30,6 23,9 EE LV 43.4 32.0 _ 62,5 51,2 50.6 52.4 36.7 MT _ _ 7,5 7,4 12,3 2,4 12,1 16,9 SK 35,3 29,9 34,9 31,5 21,6 17,0 _ _ _ _ **EU-23** 28,3 26,5 26,0 24,2 22,4 19,1 IS 55,8 38,1 34,4 30,7 46,7 22,8 19,0 25,0 9,4

Source: CARE Database / EC Date of query: October 2012

Although the number of single vehicle accident fatalities fell within the decade examined in EU-19 countries, the proportion of all fatalities that occurred in single vehicle accidents varied within a narrow range.

Mobility & Transport

dren Main Figures

Children (Agod 7.15)

e Youngsters (Aged 15-17)

Young People Aged 18-24)

The Elderly (Aged > 64)

strians (Ag

כומס

x Mopeds

occupants

Vehicles

Junctions

Roads in urban areas

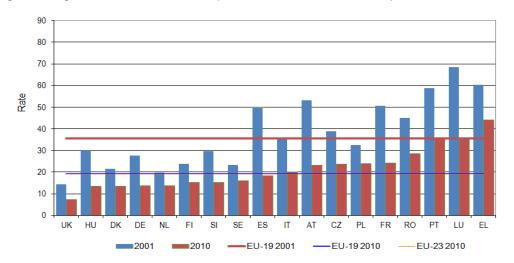
nality urban areas

gle vehicle S

Single

In 2010² the single vehicle fatality rate in Greece was more than twice the EU-23 average





Source: CARE Database / EC Date of query: October 2012 Source of population data: Eurostat

Figure 3 shows that the average fatality rate decreased by more than 46% between 2001 and 2010 in the EU-19 countries. The fatality rate for the EU-23 countries for 2010 is the same with the corresponding rate for the EU-19 countries as shown in Table 3 and Figure 3. Greece had the highest single vehicle fatality rate (44,1) in 2010, which is more than twice the average EU-23 rate, whereas the United Kingdom has the lowest rate (7,4).

The most significant reduction of the single vehicle accident fatality rate over the decade 2001-2010 occurred in Spain (63%) and only Greece had a fatality rate in 2010 that was higher than the EU-19 average for 2001.

The most significant reduction of the single vehicle accident fatality rate over the decade 2001-2010 occurred in Spain (63%)



Mobility & Transport



The ratio of young drivers (18-24 years old) killed in single vehicle accidents is almost twice the respective ratio for the non-single vehicle accidents



Age and Person Class

Table 4: Percentage of single and non-single vehicle accident fatalities of drivers by age group in the EU-23, 2010²

	"Sing	gle vehic	cle accid	lent" dri	ver fata	lities	"Non-s	single ve	hicle ac	cident" c	Iriver fat	alities
	<15	15-17	18-24	25-34	35-64	>64	<15	15-17	18-24	25-34	35-64	>64
BE	1%	2%	26%	49%	11%	10%	4%	3%	16%	35%	18%	24%
CZ	1%	3%	23%	47%	17%	9%	3%	2%	12%	38%	18%	27%
DK	3%	0%	28%	45%	15%	9%	4%	4%	12%	26%	21%	33%
DE	2%	3%	27%	35%	15%	18%	3%	3%	15%	33%	18%	28%
EE	0%	3%	38%	34%	13%	13%	6%	2%	14%	43%	14%	22%
EL	3%	4%	19%	46%	14%	14%	2%	3%	13%	40%	16%	27%
ES	3%	2%	17%	48%	17%	12%	3%	2%	10%	42%	16%	26%
FR	3%	4%	28%	42%	13%	11%	4%	4%	16%	36%	16%	25%
IT	2%	4%	19%	43%	16%	17%	2%	3%	11%	38%	16%	30%
LV	1%	3%	32%	35%	20%	8%	6%	0%	9%	36%	28%	22%
LU	0%	0%	50%	44%	6%	0%	0%	0%	7%	36%	36%	21%
HU	0%	1%	16%	54%	19%	10%	3%	1%	8%	38%	26%	22%
MT	0%	0%	43%	57%	0%	0%	17%	0%	17%	50%	17%	0%
NL	0%	3%	33%	36%	11%	17%	5%	5%	12%	26%	16%	36%
AT	1%	8%	31%	30%	14%	16%	2%	3%	11%	34%	19%	31%
PL	2%	5%	34%	42%	13%	4%	3%	3%	12%	35%	25%	21%
PT	2%	1%	11%	50%	16%	21%	2%	1%	8%	34%	20%	36%
RO	3%	3%	24%	44%	18%	9%	4%	2%	9%	33%	27%	25%
SI	0%	0%	26%	35%	29%	10%	2%	4%	10%	40%	19%	25%
SK	0%	3%	41%	39%	13%	5%	5%	2%	11%	40%	24%	18%
FI	0%	5%	21%	48%	15%	11%	4%	5%	16%	28%	18%	29%
SE	0%	12%	21%	32%	18%	16%		3%	13%	25%	22%	33%
UK	2%	8%	29%			10%		4%	17%	36%	18%	23%
EU-23	2,0%	3,7%	24,9%	42,3%		12,5%		2,7%	12,8%	35,6%		26,2%
IS	0%	0%	100%	0%	0%	0%		0%	0%	20%	40%	40%

Source: CARE Database / EC Date of query: October 2012

Table 4 shows that 42% of the drivers killed in single vehicle accidents are aged 25-34 years old. Moreover, the ratio of young drivers (18-24 years old) killed in single vehicle accidents is almost twice the respective ratio for the non-single vehicle accidents (25% compared with 13%).

Moreover Figure 4 shows the proportion of driver fatalities in single and non single vehicle accidents by age group. Almost half drivers aged 18-24 years old were killed in single vehicle road accidents.

Main Figure

Children \ged < 15)

Youngsters Aged 15-17)

Young People Aged 18-24)

(Aged > 64)

Isanau

& Mopeds

occupants

Heavy Goods Vehicles

torways

Junctions

urban areas

Koads outside urban areas

Seasonality

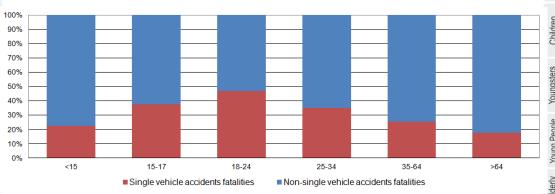
ngle venicle accidents

ender

sation







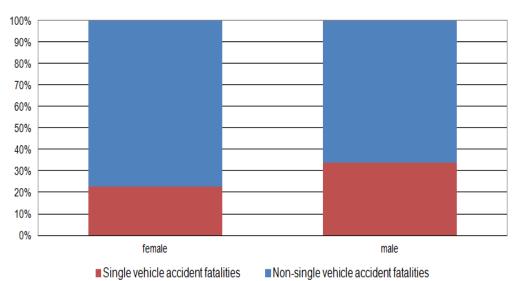
Source: CARE Database / EC Date of query: October 2012

Gender

Mobility & Transport

Males account for 73% of the single vehicle accident fatalities in the EU-23 countries in 2010². Figure 5 indicates that almost four fifths of all female fatalities occurred in single vehicle accidents, compared with two thirds of male fatalities.

Figure 5: Proportion of fatalities in single and non-single vehicle accidents by gender, EU-23, 2010²



Source: CARE Database / EC Date of query: October 2012

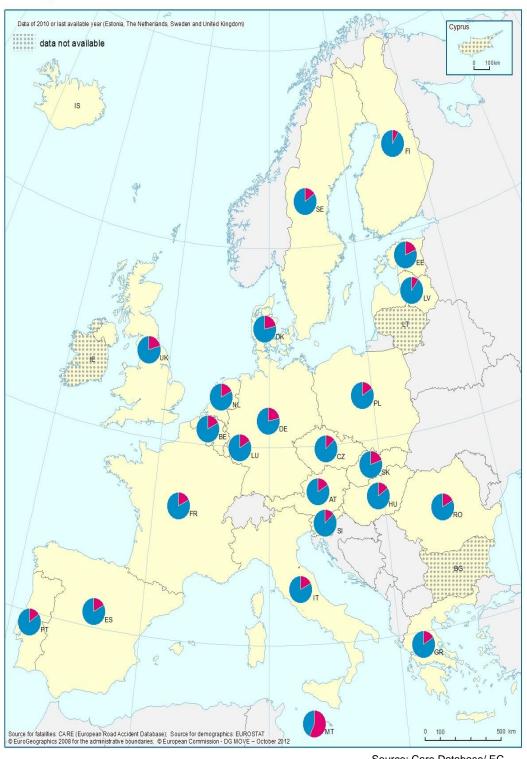
Males account for 73% of the overall single vehicle accidents fatalities in the EU-23 countries in 2010²





Map 1: Fatalities in single vehicle accidents by gender, 20102





Source: Care Database/ EC





Youngsters Children (Aged 15-17) (Aged < 15) (Aged < 15)

Mode of transport

Table 5 presents the distribution of single vehicle accident fatalities by mode of transport in 2010. In the EU-23 countries, the percentage of fatalities is highest for car/taxis (67%), with the two wheeler fatalities (mopeds, motorcycles and pedal cycles) accounting for 22% in 2010.

Table 5: Single vehicle accident fatalities by mode of transport, 2010²

	Car / taxi	Lorries	Two-wheelers	Other	Total
BE	69%	7%	13%	11%	355
CZ	66%	6%	26%	2%	250
DK	67%	13%	20%	0%	75
DE	67%	6%	25%	1%	1.119
EE	91%	9%	0%	0%	32
EL	57%	12%	30%	1%	499
ES	60%	11%	25%	3%	842
FR	66%	8%	23%	3%	1.558
IT	62%	8%	29%	1%	1.207
LV	60%	14%	24%	3%	72
LU	83%	11%	6%	0%	18
HU	63%	8%	25%	3%	134
MT	86%	0%	14%	0%	7
NL	70%	7%	22%	1%	227
AT	73%	8%	16%	3%	195
PL	80%	5%	13%	2%	916
PT	50%	21%	26%	3%	373
RO	70%	6%	16%	7%	610
SI	58%	6%	35%	0%	31
SK	82%	3%	12%	3%	92
FI	69%	7%	17%	6%	81
SE	75%	3%	18%	4%	149
UK	71%	6%	20%	2%	462
EU-23	67%	8%	22%	3%	9.304
IS	100%	0%	0%	0%	3

Source: CARE Database / EC Date of query: October 2012

Figure 6 shows that the proportion of car and taxi fatalities in single vehicle accidents among the 23 European countries is highest in Estonia (91%) and Slovakia (82%). On the other hand, the proportion is lowest in Portugal (50%).

In the EU-23, the highest percentage of fatalities is noticed in car/taxis (67%) with two wheelers' fatalities accounting for 22% in 2010



Mobility & Transport

0% 3 base / EC ober 2012

utside Ro

ality urbar

accidents Se

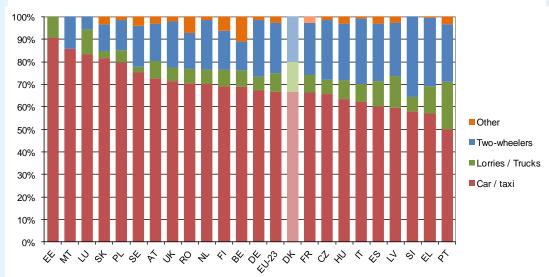
Single ve accide

usation

Youngsters Children (Aged 15-17) (Aged < 15)

In EU-23 the highest proportion of car and taxi fatalities in single vehicle accidents occurred in Estonia (91%) in 2010





Source: CARE Database / EC Date of query: October 2012

As far as two wheelers' fatalities (motorcycle, moped or pedal cycles) are concerned, the lowest proportion was in Slovakia (12%) and in Poland (13%) as shown in Figure 6. Slovenia has the highest proportion of two wheelers' fatalities (35%) among the EU-23 countries. Portugal has the highest percentage (21%) of fatalities in lorries among the other countries.

Area and Road type

Mobility & Transport

In Table 6 and Figure 7 the distribution of fatalities in single vehicle accidents by area and road type in the European countries is presented. In the EU-23 70% of the single vehicle accident fatalities occur outside urban areas, more than twice the respective percentage inside urban areas (30%).



Junctions

DaCoTA

In EU-23 single vehicle accident fatalities occurring outside urban areas account for more than twice the respective percentage inside urban areas

Romania has the highest percentage of single vehicle

accident fatalities

inside urban areas

(60%)

Mobility & Transport

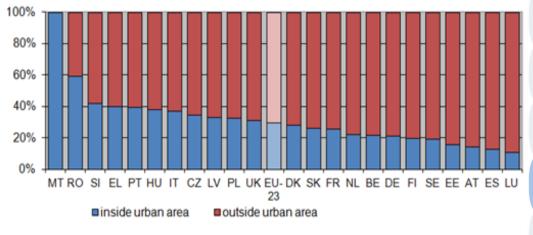
Table 6: Percentage of single vehicle accident fatalities by area and road type, 2010²

	inside urban area		utside urban area	
	iliside dibali alea	motorway	non-motorway	not defined
BE	22%	12%	66%	0%
CZ	35%	4%	61%	0%
DK	28%	19%	53%	0%
DE	21%	10%	69%	0%
EE	16%	0%	84%	0%
EL	40%	7%	53%	0%
ES	13%	22%	64%	0%
FR	26%	6%	69%	0%
IT	37%	11%	52%	0%
LV	33%	0%	67%	0%
LU	11%	89%	0%	0%
HU	38%	7%	55%	0%
MT	100%	0%	0%	0%
NL	22%	15%	63%	0%
AT	14%	13%	72%	0%
PL	33%	1%	66%	0%
PT	39%	17%	44%	0%
RO	60%	1%	39%	0%
SI	42%	13%	45%	0%
SK	26%	1%	73%	0%
FI	20%	1%	79%	0%
SE	19%	3%	74%	3%
UK	31%	6%	62%	0%
EU-23	30%	9%	61%	0%
IS	0%	67%	0%	33%

Source: CARE Database / EC Date of query: October 2012

Figure 7 shows that Romania has the highest percentage of single vehicle accident fatalities inside urban areas (60%), whereas Spain has the lowest (13%) amongst the EU-23 countries in 2010.

Figure 7: Percentage of single vehicle fatalities by area type, 2010²



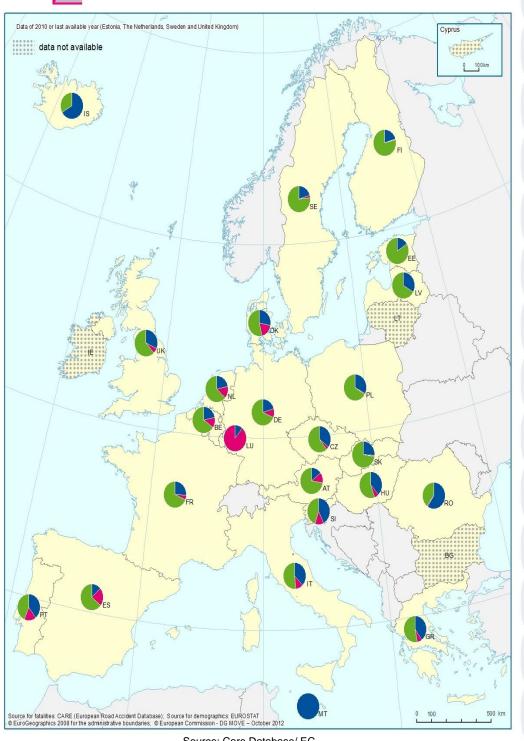
Source: CARE Database / EC Date of query: October 2012





Map 2: Fatalities in single vehicle accidents by area type, 2010²





Source: Care Database/ EC

Main Figures

The Elderly (Aged > 64)





Table 7 shows the percentage of fatalities that occurred in single vehicle accident by area and road type in 2010. More than one third of the fatalities outside urban areas on the non-motorway network occurred in single vehicle accidents, whereas one fourth of the fatalities occurred in single vehicle accidents inside urban areas.

Table 7: Percentage of fatalities that occurred in single vehicle accidents by area and road type, 2010²

			outside urban area	
	inside urban area	motorway	non-motorway	not defined
BE	32%	42%	48%	-
CZ	30%	36%	32%	-
DK	27%	54%	26%	-
DE	23%	27%	35%	-
EE	26%	-	34%	-
EL	34%	39%	46%	-
ES	20%	46%	36%	-
FR	35%	37%	41%	-
IT	26%	35%	32%	-
LV	31%	-	34%	-
LU	67%	55%	-	-
HU	19%	20%	17%	-
MT	54%	-	-	-
NL	22%	40%	43%	50%
AT	20%	44%	40%	-
PL	17%	46%	29%	-
PT	30%	57%	48%	ı
RO	24%	39%	28%	-
SI	22%	21%	24%	-
SK	15%	7%	34%	-
FI	25%	25%	31%	-
SE	33%	21%	46%	71%
UK	19%	26%	26%	-
EU-23	25%	37%	35%	67%
IS	0%	-	0%	-

Source: CARE Database / EC Date of query: October 2012

Manoeuvre type

Table 8 shows the fatalities that occurred in single vehicle accidents by manoeuvre type inside/outside urban areas in 2010. The vehicle manoeuvre most frequently associated with single vehicle accident fatalities is driving 'straight ahead' for both types of area (inside and outside urban areas). It is noted though that 34% (inside urban area) and 42% (outside urban area) of the single accident fatalities by manoeuvre type are not defined.

Youngsters Children (Aged 15-17) (Aged < 15)





Table 8: Distribution of single vehicle accident fatalities by manoeuvre type inside/outside urban areas, 2010²

		insid	le urban	area		outside urban area				
	over-taking	stopped / stopping	straight ahead	turning / u turn	other / not defined	over-taking	Stopped / stopping	straight ahead	turning / u turn	Other / not defined
BE	3%	0%	22%	1%	74%	7%	0%	8%	1%	84%
CZ	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
DK	0%	0%	86%	10%	5%	0%	0%	98%	2%	0%
DE	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
EE	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
EL	0%	2%	66%	7%	25%	0%	4%	53%	8%	36%
ES	3%	13%	61%	2%	22%	3%	6%	81%	1%	9%
FR	1%	0%	61%	20%	18%	3%	0%	62%	26%	9%
IT	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
LV	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
LU	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
HU	0%	0%	88%	0%	12%	0%	2%	88%	1%	8%
MT	0%	0%	71%	0%	29%	-	-	-	-	-
NL	0%	0%	86%	10%	4%	0%	0%	97%	2%	1%
AT	0%	0%	0%	0%	100%	0%	1%	0%	1%	98%
PL	0%	1%	0%	1%	99%	0%	0%	0%	0%	100%
PT	1%	1%	80%	1%	16%	1%	2%	88%	1%	8%
RO	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
SI	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
SK	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
FI	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
SE	0%	0%	0%	0%	100%	0%	0%	0%	0%	100%
UK	0%	1%	88%	4%	7%	0%	1%	96%	1%	3%
EU-23	12	23	815	112	1.822	76	67	2.299	340	3.691
%	0,4%	0,8%	29,3%	4,0%	65,4%	1,2%	1,0%	35,5%	5,2%	57,0%
IS	0%	0%	100%	0%	0%	0%	0%	0%	0%	100%

Source: CARE Database / EC Date of query: October 2012 Main Figures

Children

Youngsters \ged 15-17) (

Young People Aged 18-24)

The Elderly (Aged > 64)

Pedestrians

peds Bic)

cupants

Heavy Goods Vehicles

otorways

unctions

rban areas

ads outside oan areas u

onality url

ngle vehicle accidents

Sender

usatio

The vehicle manoeuvre most frequently associated with single vehicle accident fatalities is driving 'straight ahead'

Mobility & Transport





Lighting Conditions

Table 9 and Figure 8 show the percentage of single vehicle accident fatalities per total fatalities by lighting condition in 2010. More than one third of the fatalities that occurred when it was dark, concerned single vehicle accidents (37%).

Table 9: Distribution of single vehicle accident fatalities by lighting condition, 2010²

	darkness	daylight or twilight	not defined	Total
BE	49%	45%	5%	355
CZ	39%	61%	0%	250
DK	49%	51%	0%	75
DE	36%	64%	0%	1119
EE	56%	44%	0%	32
EL	48%	52%	0%	499
ES	40%	60%	0%	8412
FR	49%	51%	0%	1558
IT	0%	0%	100%	1207
LV	25%	74%	1%	72
LU	44%	33%	22%	18
HU	38%	62%	0%	134
MT	57%	29%	14%	7
NL	48%	52%	0%	227
AT	39%	61%	0%	195
PL	34%	66%	0%	916
PT	42%	58%	0%	373
RO	42%	58%	0%	610
SI	0%	0%	100%	31
SK	42%	57%	1%	92
FI	37%	63%	0%	81
SE	36%	56%	8%	149
UK	54%	46%	0%	462
EU-23	37,0%	49,3%	13,7%	9.304
IS	0%	67%	33%	3

In 2010, 37% of the single vehicle accident fatalities occurred when it was dark, in EU-23

> Source: CARE Database / EC Date of query: October 2012

Main Figures

Children Aged < 15)

> Youngsters (Aged 15-17)

Young People Aged 18-24)

S (Aged > 64

cles Pede

& Mopeds

occupants

неаvy Goods Vehicles

Motorways

Junctions

Roads In urban areas

Roads outside

Seasonality

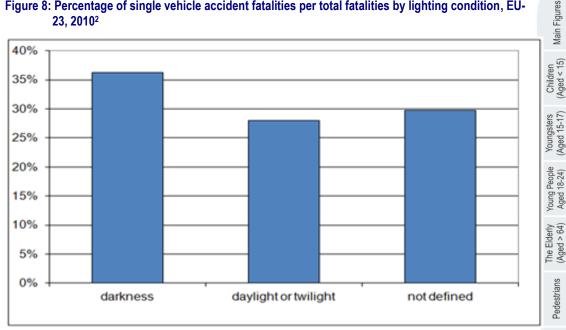
Single vehicle accidents

Gender

usatio



Figure 8: Percentage of single vehicle accident fatalities per total fatalities by lighting condition, EU-23, 2010²

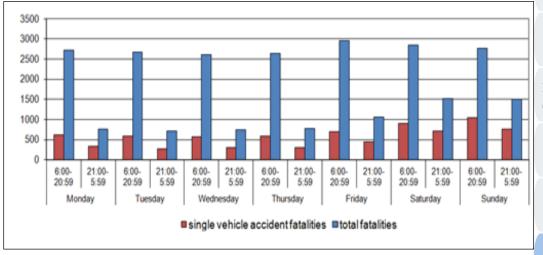


Source: CARE Database / EC Date of query: October 2012

Day of week and Time of day

Figure 9 shows the number of fatalities that occurred in single vehicle accidents and in total accidents in the EU-23 countries in 2010. 62% of all single vehicle accident fatalities occurred between 06:00 and 20:59 in the 23 EU countries in 2010. Sunday is the day of the week when the highest number of single vehicle accident fatalities occurred (13%).





Source: CARE Database / EC Date of query: October 2012 Seasonality

Motorways

Sunday is the day of the week when most single vehicle accident fatalities are recorded (13%)





Seasonality

Table 10 shows the percentage of single vehicle accident fatalities through the year, using pair of months for 2010.

Table 10: Percentage of all fatalities that occurred in single vehicle accident by months, 2010²

	January/ February	March/ April	May/ June	July/ August	September/ October	November/ December	Total
BE	17%	15%	20%	18%	19%	10%	355
CZ	4%	17%	20%	24%	25%	11%	250
DK	11%	9%	23%	28%	16%	13%	75
DE	10%	18%	20%	22%	19%	12%	1.119
EE	16%	13%	13%	41%	16%	3%	32
EL	14%	14%	16%	23%	17%	17%	499
ES	11%	14%	16%	23%	20%	16%	842
FR	12%	15%	20%	21%	18%	14%	1.558
IT	14%	16%	20%	20%	17%	13%	1.207
LV	4%	8%	39%	22%	17%	10%	72
LU	6%	6%	28%	11%	28%	22%	18
HU	17%	19%	20%	19%	16%	7%	134
MT	14%	29%	29%	14%	0%	14%	7
NL	14%	17%	22%	13%	16%	18%	227
AT	11%	16%	23%	21%	19%	11%	195
PL	6%	14%	22%	27%	20%	11%	916
PT	16%	11%	17%	24%	17%	15%	373
RO	9%	16%	18%	20%	22%	14%	610
SI	3%	13%	13%	23%	32%	16%	31
SK	8%	15%	18%	18%	24%	16%	92
FI	9%	14%	23%	31%	16%	7%	81
SE	9%	15%	21%	26%	12%	16%	149
UK	14%	16%	21%	20%	17%	12%	462
EU-23	11,3%	15,4%	19,6%	21,8%	18,7%	13,3%	9.304
IS	0%	100%	0%	0%	0%	0%	3

Source: CARE Database / EC Date of query: October 2012

In most of the EU-23 countries, the peak for single vehicle accident fatalities occurred in July/August (Estonia, Denmark, Germany, Greece, Spain, Malta, France, Poland, Portugal, Finland, Sweden) and May/June (Belgium, Latvia, Hungary, Netherlands, Austria, UK), while for Czech Republic, Romania, Slovenia and Slovakia the peak occurred in September/October. Fewer single vehicle accident fatalities occured in January/February (11%) and November/December (13%) in the EU-23.

Figure 10 displays the percentage of fatalities that occurred in single vehicle accidents per month in the EU-23 countries. Almost 37% of the fatalities in May occurred in single vehicle accidents, while the lowest proportion is occurred in November (25%).

The peak months of single vehicle

accident fatalities for most of the countries are July/August and May/June eople Your 8-24) (Aged

(Aged > 64)

Pedestrians

Bicycles

& Mopeds

occupants

Vehicles

Motorways

Junctio

Roads outside Rourban areas urba

onality ur

vehicle Ser

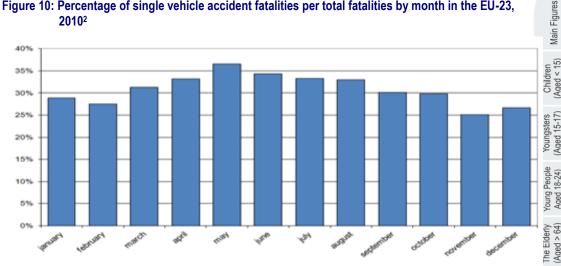
Single

ation

Only 25% of the fatalities recorded in November occur in single vehicle accidents

The highest percentage of single vehicle accident fatalities is observed in dry weather (78%)





Source: CARE Database / EC Date of query: October 2012

Weather conditions

Table 11 displays the fatalities in single vehicle accidents by weather conditions.

Table 11: Distribution of single vehicle accident fatalities by weather conditions, 2010²

	dry	rain	other	snow	not defined	Total
BE	72%	10%	0%	5%	13%	355
CZ	83%	10%	2%	5%	0%	250
DK	87%	8%	0%	0%	5%	75
DE	67%	4%	0%	9%	20%	1.119
EE	91%	9%	0%	0%	0%	32
EL	84%	12%	0%	4%	0%	499
ES	83%	11%	1%	5%	0%	842
FR	83%	11%	0%	6%	0%	1.558
IT	70%	13%	0%	17%	0%	1.207
LV	90%	0%	0%	10%	0%	72
LU	44%	17%	0%	17%	22%	18
HU	84%	10%	4%	3%	0%	134
MT	71%	0%	0%	14%	14%	7
NL	83%	11%	1%	1%	4%	227
AT	86%	10%	0%	4%	0%	195
PL	84%	11%	2%	3%	0%	916
PT	77%	20%	0%	2%	1%	373
RO	86%	8%	4%	2%	0%	610
SI	84%	6%	0%	6%	3%	31
SK	86%	10%	2%	1%	1%	92
FI	77%	6%	2%	4%	11%	81
SE	0%	0%	0%	0%	100%	149
UK	81%	9%	2%	5%	3%	462
EU-23	77,8%	10,1%	0,8%	6,4%	5,0%	9.304
IS	100%	0%	0%	0%	0%	3

Source: CARE Database / EC Date of query: October 2012





Table 11 shows that the great majority of single vehicle accident fatalities in the EU-23 countries occurred when the weather was dry (78%), while the percentage in snow was least (1%).

Table 12 indicates that in the EU-23 countries, 34% of the fatalities that occurred in snow involved a single vehicle, compared with 30% for rainy weather.

Table 12: Percentage of fatalities that occurred in single vehicle accidents by weather conditions, 2010²

	dry	rain	other	snow	not defined	Total
BE	39%	43%	ı	59%	74%	42%
CZ	32%	29%	20%	30%	-	31%
DK	31%	23%	-	0%	100%	29%
DE	30%	34%	-	38%	30%	31%
EE	36%	30%	-	0%	0%	33%
EL	39%	40%	-	64%	-	40%
ES	34%	34%	43%	37%	-	34%
FR	39%	40%	-	41%	-	39%
IT	29%	30%	-	34%	-	30%
LV	38%	-	-	15%	-	33%
LU	57%	75%	-	50%	50%	56%
HU	18%	15%	29%	19%	-	18%
MT	56%	-	-	100%	33%	54%
NL	33%	50%	67%	50%	82%	35%
AT	36%	33%	-	25%	-	35%
PL	25%	20%	12%	23%	-	23%
PT	40%	42%	-	32%	20%	40%
RO	27%	20%	23%	25%	-	26%
SI	23%	11%	-	25%	100%	22%
SK	27%	19%	13%	7%	33%	25%
FI	29%	42%	11%	33%	47%	30%
SE	-	-	-	-	42%	42%
UK	23%	20%	30%	29%	48%	24%
EU-23	30,8%	29,9%	19,5%	34,0%	37,0%	31,0%
IS	38%	0%	0%	0%	0%	38%

Source: CARE Database / EC Date of query: October 2012

34% of the fatalities that occurred in snow involved a single vehicle in the EU-

23

Main Figures

Youngsters (Aged 15-17)





Junction

Table 13 displays the fatalities in single vehicle accidents by junction. It is noticed that the highest number of fatalities is noted at no junction areas (corresponding to 87% of the single vehicle accident fatalities in the EU-23 countries).

Table 13: Single vehicle accident fatalities by junction, 2010²

	junction	no junction	not defined	Total
BE	8%	92%	0%	355
CZ	6%	94%	0%	250
DK	12%	88%	0%	75
DE	7%	52%	41%	1.119
EE	19%	75%	6%	32
EL	0%	93%	7%	499
ES	11%	89%	0%	842
FR	5%	95%	0%	1.558
IT	8%	92%	0%	1.207
LV	7%	93%	0%	72
LU	0%	94%	6%	18
HU	9%	91%	0%	134
MT	0%	0%	100%	7
NL	8%	92%	0%	227
AT	4%	96%	0%	195
PL	4%	96%	0%	916
PT	12%	85%	3%	373
RO	4%	96%	0%	610
SI	6%	94%	0%	31
SK	2%	97%	1%	92
FI	7%	93%	0%	81
SE	10%	90%	0%	149
UK	21%	79%	0%	462
EU-23	7,1%	87,3%	5,6%	9.304
IS	0%	100%	0%	3

Source: CARE Database / EC Date of query: October 2012

Figure 11 presents the percentage of fatalities that occurred in single vehicle accidents at and not at a junction in the EU-23. 36% of the fatalities that occurred not at junction involved a single vehicle, compared with 15% at a junction.

The highest number of single vehicle fatalities is recorded at no junction areas

Mobility & Transport

Main Figures

Children (Aged < 15)

Youngsters (Aged 15-17)

Young People Aged 18-24)

(Aged > 64)

edestrians (

cycles

& Mopeds

occupants

Vehicles

ons N

oan areas

ads outside ban areas

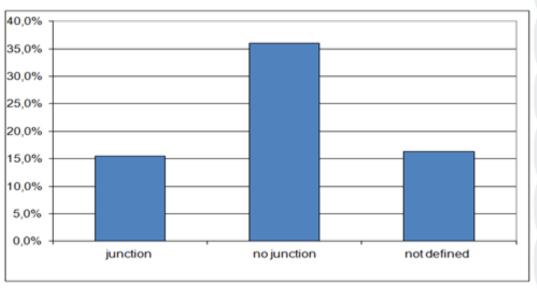
easonality

ngle vehicle accidents

Gender

Main Figures

Figure 11: Percentage of single vehicle accident fatalities per total fatalities by junction in the EU-23, 2010²



Source: CARE Database / EC Date of query: October 2012

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 UK³ ⁴. The SafetyNet Accident Causation Database was formed between 2005 and 2008, and contains details of 1.006 accidents covering all injury 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, 26% (263) of the accidents involve just one vehicle (no pedestrian). Male drivers/riders account for 77% of this group and 73% are drivers of passenger cars, 11% are PTW riders and 10% are HGV drivers.

Figure 12 compares the distribution of specific critical events for drivers/riders in single vehicle accidents against the distribution in multiple vehicle accidents (no pedestrian accidents).

DaCoTA | Project co-financed by the European Commission, Directorate-General for Mobility & Transport

Junctions

Seasonality

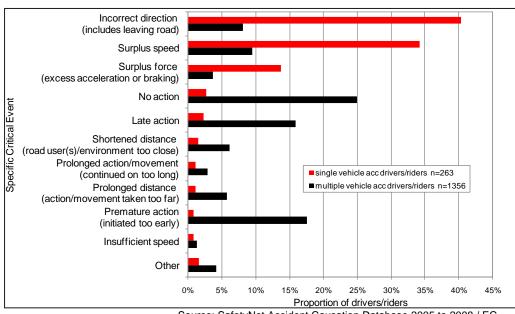
³ SafetyNet D5.5, Glossary of Data Variables for Fatal and Accident Causation Databases

⁴ SafetyNet D5.8, In-Depth Accident Causation Database and Analysis Report

N=1619

Main Figures

Figure 12: Distribution of specific critical events for drivers or riders in single vehicle and multiple vehicle accidents



Source: SafetyNet Accident Causation Database 2005 to 2008 / EC

The distributions are very different for all the most often recorded specific critical events. In single vehicle accidents, incorrect direction and surplus speed are dominant, followed by surplus force (excess acceleration or braking). Surplus speed describes speed that is too high for the conditions or manoeuvre being carried out, or travelling above the speed limit. 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 path of the road). 'Loss of control' type accidents can fall into any of these critical events depending on the specific situation. The 'timing' events (no action, premature action and late action), feature in high numbers for drivers/riders in multiple vehicle accidents as they often refer to interactions between road users (for example, initiating movement at a

Junctions

Links between causes	Frequency
Inadequate plan - Under the influence of substances	35
Inadequate plan - Insufficient knowledge	32
Inadequate plan - Psychological stress	24
Information failure (driver/environment or driver/vehicle) - State of road	24
Faulty diagnosis - Information failure (driver/environment or driver/vehicle)	21
Observation missed - Fatigue	20
Inadequate plan - Fatigue	16
Observation missed - Distraction	13
Inadequate plan - Distraction	12
Observation missed - Under the influence of substances	11
Others	153
Total Source: SafetyNet Assident Causation Database	361

Source: SafetyNet Accident Causation Database 2005 to 2008 / EC Date of query: 2010

Inadequate plan is by far the most frequently recorded cause and describes a lack of all the required details or that the driver's/rider's ideas do not correspond to reality. It is linked to impairment (substances, psychological stress and fatigue), insufficient knowledge and distraction. Except for stress, the same links can also be seen for observation missed.

State of the road refers to its current road-holding characteristics, and low friction due to ice or oil or dirt is sometimes not obvious, leading to information failure.

Faulty diagnosis is an incorrect or incomplete understanding of road conditions or another road user's actions and is linked with information failure (for example, a driver/rider thinking the road was straight, when in fact a bend was approaching).

10% of the links between causes are observed to be between 'inadequate plan' and 'under the influence of substances'.

Mobility & Transport





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 Mobility and Transport of the European Commission, 28 Rue de Mot, B -1040 Brussels.

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

- Main Figures
- Children (Aged <15)
- Youngsters (Aged 15-17)
- Young People (Aged 18-24)
- The Elderly (Aged >64)
- Pedestrians
- Cyclists
- Motorcycles and Mopeds
- Car occupants
- Heavy Goods Vehicles and Buses
- Motorways
- Junctions
- Urban areas
- Roads outside urban areas
- Seasonality
- Single vehicle accidents
- Gender

Main Figures

Children Aged < 15)

Youngsters (Aged 15-17)

Young People Aged 18-24)

The Elderly (Aged > 64)

Pedestria

Bicycle

& Mopeds

occupants

Vehicles

Aotorways

Junctions

s urban areas

ality urban a

gle vehicle S

Gender

usati







Country abbreviations used and definition of EU-level

EU - 19

EU-23 = EU-19 +

BE	Belgium
CZ	Czech Republic
DK	Denmark
DE	Germany
EL	Greece
ES	Spain
FR	France
ΙΤ	Italy
LU	Luxembourg
HU	Hungary
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
FI	Finland
SE	Sweden
UK	United Kingdom

EE	Estonia
LV	Latvia
MT	Malta
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.

More information on the DaCoTA Project, co-financed by the European Commission, Directorate-General for Mobility and Transport is available at the DaCoTA Website: http://www.dacota-project.eu/index.html.

Please refer to this report as follows:

Yannis G., et al. (2012) Basic Fact Sheet "Single Vehicle Accidents", Deliverable D3.9 of the EC FP7 project DaCoTA.

Authors

George Yannis, Petros Evgenikos, Panagiotis Papantoniou

NTUA, Greece

Jeremy Broughton, Jackie Knowles

KfV, Austria

TRL, UK

Nimmi Candappa, Michiel Christoph, Kirsten van

SWOV, The Netherlands

Duijvenvoorde, Martijn Vis

INTRAS-UVEG, Spain

Jean-François Pace, Carlos Martinez-Pérez, Jaime Sanmartín

Christian Brandstatter

IFSTTAR, France

Mouloud Haddak, Liacine Bouaoun, Emmanuelle Amoros

and the second of the Second Second

Alan Kirk

Mobility & Transport

Loughborough University, UK

