



Pedestrians

# Traffic Safety Basic Facts 2012

# Motorways

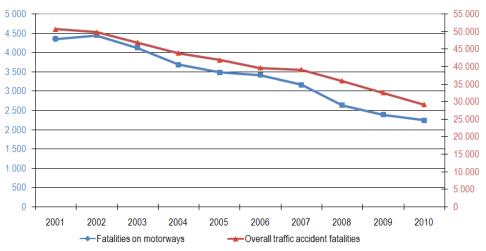
Almost 40.000 people were killed in traffic accidents on motorways in 19<sup>1</sup> European Union countries between 2001 and 2010<sup>2</sup>. This number corresponds to 8% of all traffic accident fatalities in those countries.

There were 4.354 traffic accident fatalities on motorways in 2001, and the number fell by more than 48% by 2010<sup>2</sup> (2.244). The total number of traffic accident fatalities in the 19 European Union countries also fell significantly over the same decade, by 42%.

Although the overall number of road accident fatalities decreased rather steadily, the trend for motorway fatalities has been more variable. The most significant reduction of the number of fatalities on motorways in the 19 countries occurred between 2007 - 2008.

Note that in five countries (Greece, Hungary, Netherlands, Poland and United Kingdom) a significant number of fatalities are recorded in the CARE data as being on non-specified road network type (it is not known whether or not they occurred on a motorway).

Figure 1: Fatalities evolution in the EU-191, 2001-20102



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

The number of people killed in traffic accidents on motorways fell by more than 48% in the decade from 2001 to 2010



<sup>&</sup>lt;sup>1</sup> See Table "Country abbreviations used and definition of EU-level" on page 20.

<sup>2</sup> Where a number is missing for an EU-19/20 country in a particular year, its contribution to the EU-19/20 total is estimated as the most recent known value. For UK data (2010) is the sum of GB (2010) and NI (2009).



Main Figures

Table 1 provides an overview of the changes in the number of fatalities on motorways split by country. The totals refer to the 19 countries with available data since 2001.

Table 1: Fatalities on motorways by country, EU-19, 2001-2010

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BE	196	172	140	125	161	164	153	139	150	106
CZ	43	53	48	58	45	37	48	30	25	28
DK	38	48	31	27	31	16	24	31	24	27
DE	770	857	811	694	662	645	602	495	475	430
EL	86	69	58	116	111	147	140	120	108	87
ES	1166	1115	1081	925	855	776	618	496	465	418
FR	487	521	439	316	323	296	273	233	225	238
IT	773	801	711	648	577	590	526	452	350	376
LU	7	15	8	7	4	6	11	6	3	7
HU	-	-	58	62	48	55	61	54	38	44
NL	124	123	151	•	-		-	1	83	•
AT	156	126	107	118	89	74	74	71	61	59
PL	57	41	37	42	33	55	53	35	43	28
PT	112	115	127	116	98	84	128	96	89	111
RO	10	27	20	19	37	50	41	21	25	18
SI	24	35	34	37	20	33	37	13	30	19
FI	11	16	7	17	10	17	14	9	12	4
SE	30	27	34	42	24	28	25	18	21	-
UK	206	228	220	166	206	189	185	160	132	118
EU-19	4.354	4.444	4.119	3.686	3.485	3.414	3.163	2.630	2.392	2.244
%		2,1%	-7,3%	-10,5%	-5,5%	-2,1%	-7,3%	-16,9%	-9,0%	-6,2%
SK	-	-	-	-	21	15	19	14	9	14
СН	-	-	-	51	-	-	-	27	34	23

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

Table 2 shows the rate of fatalities on motorways per million inhabitants between 2001 and 2010. The 2010 rate was higher in Portugal (10,4) and Belgium (9,8) than in the other European countries and hence higher than the average rate (4,7) of the EU-20 countries.

The reduction in motorway fatalities between 2001 and 2010 was highest in Spain and Finland (64%)



**Mobility & Transport** 

Junctions



Spain experienced a significant reduction (69%) in the fatality rate on its motorway network within the decade analysed

Table 2: Fatalities on motorways per million inhabitants in the EU-19/201, 2001-20102

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BE	19,1	16,7	13,5	12,0	15,4	15,6	14,5	13,0	13,9	9,8
CZ	4,2	5,2	4,7	5,7	4,4	3,6	4,7	2,9	2,4	2,7
DK	7,1	8,9	5,8	5,0	5,7	2,9	4,4	5,7	4,4	4,9
DE	9,4	10,4	9,8	8,4	8,0	7,8	7,3	6,0	5,8	5,3
EL	7,9	6,3	5,3	10,5	10,0	13,2	12,5	10,7	9,6	7,7
ES	28,8	27,2	25,9	21,8	19,9	17,7	13,9	11,0	10,1	9,1
FR	8,0	8,5	7,1	5,1	5,1	4,7	4,3	3,6	3,5	3,7
IT	13,6	14,1	12,4	11,2	9,9	10,0	8,9	7,6	5,8	6,2
LU	15,9	33,7	17,8	15,4	8,7	12,8	23,1	12,4	6,1	13,9
HU	5,7	5,7	5,7	6,1	4,8	5,5	6,1	5,4	3,8	4,4
NL	7,8	7,6	9,3	9,3	9,3	9,2	9,2	9,2	5,0	5,0
AT	19,4	15,6	13,2	14,5	10,9	9,0	8,9	8,5	7,3	7,0
PL	1,5	1,1	1,0	1,1	0,9	1,4	1,4	0,9	1,1	0,7
PT	10,9	11,1	12,2	11,1	9,3	8,0	12,0	9,0	8,4	10,4
RO	0,4	1,2	0,9	0,9	1,7	2,3	1,9	1,0	1,2	0,8
SI	12,1	17,6	17,0	18,5	10,0	16,5	18,4	6,5	14,8	9,3
FI	2,1	3,1	1,3	3,3	1,9	3,2	2,7	1,7	2,3	0,7
SE	3,4	3,0	3,8	4,7	2,7	3,1	2,7	2,0	2,3	2,2
UK	3,5	3,9	3,7	2,8	3,4	3,1	3,0	2,6	2,1	1,9
EU-19	9,5	9,7	8,9	8,0	7,5	7,3	6,7	5,6	5,0	4,7
SK	-	-	-	-	3,9	2,8	3,5	2,6	1,7	2,6
EU-20	-	-	-	-	7,4	7,2	6,7	5,5	5,0	4,7
СН	-	-	-	6,9	-	-	-	3,6	4,4	3,0

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

Figure 2 shows that the fatality rate on motorways decreased by almost 51% between 2001 and 2010, from 9,5 per million inhabitants in 2001 to 4,7 in 2010.

**Mobility & Transport** 

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

Main Figures

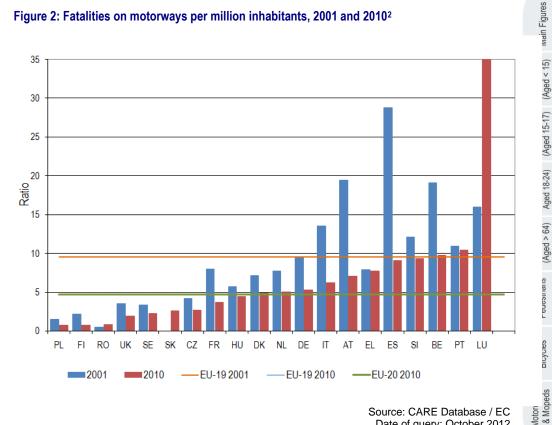
Junctions

Gender

3 / 20







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

A fairer comparison of the level of safety on motorways involves the fatality rate per thousand kilometers of motorway. Using this exposure measure (motorway network length), Table 3 and Figure 3 show that the motorway fatality rate in Poland decreased by 77% between 2001 and 2010. Furthermore, the average rate for EU-19 fell more than 57% between 2001 (79,7) and 2010 (33,8).

Mobility & Transport

Gender

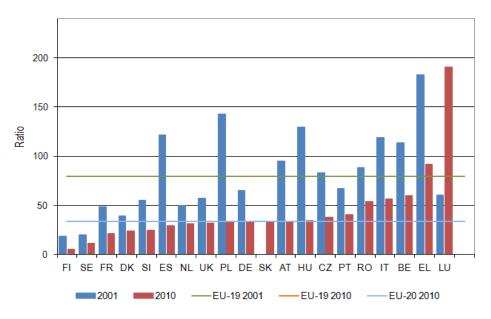
Junctions

#### Table 3: Fatalities on motorways per 1.000 km of motorways, 2001-2010<sup>2</sup>

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BE	113,5	99,5	81,0	71,6	92,2	93,0	86,8	78,8	85,1	60,1
CZ	83,1	102,4	92,7	106,2	79,8	58,5	73,1	43,4	34,3	38,1
DK	39,1	47,5	30,7	26,7	30,7	14,9	21,6	27,5	21,3	23,9
DE	65,3	71,2	67,3	57,0	53,5	51,5	47,8	39,1	37,1	33,5
EL	183,0	146,8	65,9	131,8	126,1	169,4	161,3	126,6	113,9	91,8
ES	121,8	114,5	104,9	86,1	74,8	64,3	47,5	36,7	33,2	29,3
FR	48,4	51,0	42,3	30,1	29,9	27,3	24,9	21,1	20,2	21,3
IT	119,3	123,5	109,6	99,2	88,2	90,0	79,8	68,2	52,5	56,4
LU	60,9	119,0	54,4	47,9	27,2	40,8	74,8	40,8	19,7	46,1
NL	49,6	48,9	59,4	58,4	58,1	58,0	58,5	57,3	31,5	31,5
HU	129,5	108,8	107,0	109,0	75,5	70,1	71,1	42,4	29,9	34,6
AT	94,8	76,6	64,1	70,4	53,1	44,1	43,6	41,9	36,0	34,3
PL	143,2	101,2	91,4	76,1	59,8	83,0	79,9	45,8	50,6	32,7
PT	67,3	62,7	-	-	-	33,1	48,9	35,8	32,9	40,6
RO	88,5	238,9	177,0	83,3	162,3	219,3	145,9	74,7	77,9	54,2
SI	55,2	76,8	71,3	76,6	35,1	57,0	63,9	18,7	40,2	24,6
FI	18,6	26,5	10,7	26,0	14,4	24,3	20,0	12,2	15,7	5,1
SE	19,9	17,5	21,4	24,9	14,3	16,1	13,8	9,7	11,1	11,1
UK	57,1	63,1	60,9	45,4	56,8	51,6	50,4	43,6	35,9	32,1
EU-19	79,7	79,9	74,8	65,4	60,4	55,3	50,1	40,6	36,3	33,8
SK	-	-	-	-	64,1	45,8	52,1	36,5	23,0	33,7
EU-20	-	-	-	-	60,4	55,3	50,1	40,6	36,2	33,8
СН	-	-	-	38,0	-	-	-	19,5	24,2	16,4

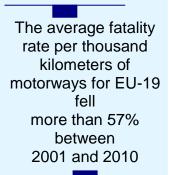
Source: CARE Database / EC Date of query: October 2012 Source of road length data: Eurostat

Figure 3: Fatalities on motorways per 1.000 km of motorways, 2001 and 2010<sup>2</sup>



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

The fatality rate on the Spanish motorways decreased by 77% between 2001 and 2010





Finland and Romania are the countries with the lowest proportion of fatalities occurring on motorways (1%)

Spain has the largest proportion of road accident fatalities on motorways (17%) for 2010 followed by Slovenia (14%) Greece and Belgium are the countries with the highest number of fatalities on motorways per thousand kilometres of motorway network in 2010. Conversely, the fatality rate in Finland in 2010 (5,1) is significantly lower than the average rate for EU-20 countries (33,8).

Table 4 shows the proportion of road accident fatalities that occurred on motorways by country. Spain had the largest proportion in 2010 in the EU-20 countries (17%), followed by Slovenia (14%). By contrast, the lowest proportion of fatalities occurring on motorways was in Finland and Romania (1%).

Table 4: Proportion of road accident fatality total that occurred on motorways, 2001-2010<sup>2</sup>

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
BE	13%	13%	12%	11%	15%	15%	14%	15%	16%	13%
CZ	3%	4%	3%	4%	3%	3%	4%	3%	3%	3%
DK	9%	10%	7%	7%	9%	5%	6%	8%	8%	11%
DE	11%	13%	12%	12%	12%	13%	12%	11%	11%	12%
EL	5%	4%	4%	7%	7%	9%	9%	8%	7%	7%
ES	21%	21%	20%	20%	19%	19%	16%	16%	17%	17%
FR	6%	7%	7%	6%	6%	6%	6%	5%	5%	6%
IT	11%	11%	11%	11%	10%	10%	10%	10%	8%	9%
LU	10%	24%	15%	14%	9%	14%	24%	17%	6%	22%
NL	12%	12%	15%	19%	20%	21%	21%	22%	13%	13%
HU	5%	4%	4%	5%	4%	4%	5%	5%	5%	6%
AT	16%	13%	11%	13%	12%	10%	11%	10%	10%	11%
PL	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
PT	7%	7%	8%	9%	8%	9%	13%	11%	11%	12%
RO	0%	1%	1%	1%	1%	2%	1%	1%	1%	1%
SI	9%	13%	14%	14%	8%	13%	13%	6%	18%	14%
FI	3%	4%	2%	5%	3%	5%	4%	3%	4%	1%
SE	5%	5%	6%	9%	5%	6%	5%	5%	6%	6%
UK	6%	6%	6%	5%	6%	6%	6%	6%	6%	6%
EU-19	9%	9%	9%	8%	8%	9%	8%	7%	7%	8%
SK	-	-	-	-	3%	2%	3%	2%	2%	4%
EU-20	-	-	-	-	8%	9%	8%	7%	7%	8%
СН	-	-	-	10%	-	-	-	8%	10%	7%

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

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Children (Aged < 15)

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Children (Aged < 15)

#### **Mode of transport**

Table 5 shows the number of fatalities on motorways in 2010 by mode of transport. 61% of fatalities on motorways across the European countries were car or taxi occupants and more than 11% of fatalities were users of two-wheelers.

Table 5: Percentage of fatalities on motorways by mode of transport, 2010<sup>2</sup>

	Car / taxi	Lorries	Two- wheelers	Pedestrian	Others	Total
BE	68%	13%	8%	2%	8%	106
CZ	39%	32%	14%	14%	0%	28
DK	59%	26%	11%	4%	0%	27
DE	58%	24%	10%	6%	1%	430
EL	55%	14%	18%	10%	2%	87
ES	59%	10%	13%	13%	4%	418
FR	67%	7%	12%	9%	5%	238
IT	65%	11%	12%	5%	7%	376
LU	86%	0%	0%	14%	3%	7
HU	55%	11%	2%	30%	2%	44
NL	78%	7%	8%	6%	0%	83
AT	53%	20%	12%	10%	5%	59
PL	75%	11%	0%	14%	0%	28
PT	62%	19%	14%	5%	0%	111
RO	56%	17%	6%	22%	0%	18
SI	58%	5%	0%	11%	26%	19
SK	71%	7%	7%	14%	0%	14
FI	100%	0%	0%	0%	0%	4
SE	67%	5%	14%	14%	0%	21
UK	49%	19%	12%	20%	0%	118
EU-20	1.313	316	247	197	80	2.154
% by mode of transport	61,0%	14,7%	11,5%	9,1%	3,7%	100%
СН	61%	9%	9%	22%	0%	23

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

61% of fatalities on motorways across the European countries were car or taxi occupants

Almost 12% of fatalities on motorways across the European countries were two-wheeler riders

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Figures

Main

Children (Aged < 15)

The Elderly (Aged > 64)

Pedestrians

Car

Heavy Goods

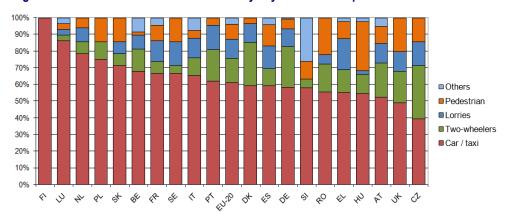
Junctions

Seasonality

Gender

Figure 4 shows that in 2010, 30% of fatalities on motorways in Hungary were pedestrians, the highest proportion among the 20 countries. Furthermore, Romania and UK have high proportions of pedestrian fatalities on motorways, 22% and 20% respectively.

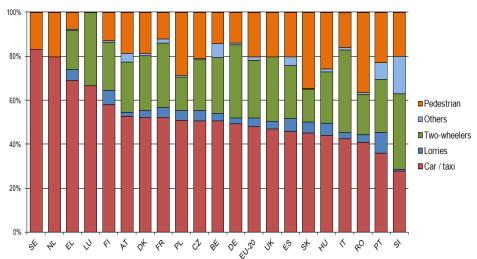
Figure 4: Distribution of fatalities on motorways by mode of transport in the EU-20<sup>1,</sup> 2010



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

It is worth noticing that in 2010 less than 12% of the fatalities occurring on motorways in the 20 countries were users of two wheeled vehicles (motorcycle, moped or pedal cycle users); Czech Republic (32%) and Germany (26%) had the largest percentage. By comparison, Figure 5 shows that 26% of fatalities on non-motorway roads were users of two wheeled vehicles with Italy having the largest percentage (37%).

Figure 5: Distribution of fatalities on non-motorway road network by mode of transport in the EU-201, 20102



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

Almost one third of fatalities on motorways in Hungary were pedestrians, the highest proportion in any of the 20 countries

Czech Republic (32%) and Germany (26%) had the largest percentage of the fatalities occurring on

motorways









Children (Aged < 15)

The Elderly (Aged > 64)

#### Manoeuvre Type

Table 6 shows that the vehicle manoeuvre most frequently associated with fatalities on motorways in all EU-20 countries is driving 'straight ahead'. About 33% of fatalities were occupants of vehicles, which were driving straight ahead and making no other manoeuvre. However, the corresponding percentage for this manoeuvre on non-motorway network is lower (22%), as shown in Table 7, maybe due to the large number of "not defined" manoeuvres. More specifically, in 9 countries (Czech Republic, Germany, Italy, Luxembourg, Austria, Romania, Slovakia, Finland and Sweden) over 90% of the manoeuvres on motorways and on non motorways are "not defined".

Table 6: Percentage of fatalities on motorways by manoeuvre type, 2010<sup>2</sup>

	changing		stopped	straight				not	
	lane	overtaking	stopping		turning	u turn	other	defined	Total
BE	0%	5%	4%	30%		0%	56%	5%	106
CZ	0%	0%	0%	0%		0%	0%	100%	28
DK	4%	0%	0%	93%		0%	0%	4%	27
DE	0%	0%	0%	0%	0%	0%	0%	100%	430
EL	7%	0%	7%	40%	1%	1%	17%	26%	87
ES	0%	5%	4%	68%		0%	8%	14%	418
FR	1%	9%	7%	48%	12%	1%	6%	16%	238
IT	0%	0%	0%	0%	0%	0%	0%	99%	376
LU	0%	0%	0%	0%		0%	0%	100%	7
HU	0%	0%	2%	64%		0%	5%	30%	44
NL	5%	0%	4%	82%		0%	1%	8%	83
AT	3%	0%	2%	0%		0%	14%	81%	59
PL	0%	0%	0%	0%	0%	0%	86%	14%	28
PT	2%	3%	1%	73%	1%	0%	20%	1%	111
RO	0%	0%	0%	0%		0%	0%	100%	18
SI	42%	0%	0%	0%		0%	21%	37%	19
SK	0%	0%	0%	0%	0%	0%	0%	100%	14
FI	0%	0%	0%	0%		0%	0%	100%	4
SE	0%	0%	0%	0%		0%	0%	100%	21
UK	3%	0%	8%	64%	0%	0%	5%	20%	118
EU-20	29	50	59	742	36	3	191	1.148	2.258
%	1,3%	2,2%	2,6%	32,9%	1,6%	0,1%	8,5%	50,8%	100%
CH	0	0	0	0	0	0	0	100%	23

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

The vehicle manoeuvre most frequently associated with fatalities on motorways in the EU-20 countries is driving 'straight ahead'

motorways than on the remaining road network

Table 7: Percentage of fatalities on non-motorway road network by manoeuvre type, 20102

	changing	over-	stopped	straight				not	
	lane		stopping	ahead	turning	u turn	other	defined	Total
BE	0%	7%	0%	22%	4%	1%	43%	23%	734
CZ	0%	0%	0%	0%	0%	0%	0%	100%	774
DK	1%	0%	1%	72%	7%	0%	0%	19%	228
DE	0%	0%	0%	0%	0%	0%	0%	100%	
GR	2%	0%	2%	27%	1%	1%	39%	29%	181
ES	0%	4%	10%	51%	1%	0%	8%	26%	
FR	1%	4%	0%	49%	25%	0%	4%	17%	
IT	0%	0%	0%	1%	1%	0%	0%	98%	
LU	0%	0%	0%	0%	0%	0%	0%	100%	
HU	3%	0%	1%	59%	0%	0%	12%	26%	
NL	1%	0%	1%	77%	7%	0%	2%	11%	549
AT	2%	0%	1%	0%	4%	1%	17%	75%	
PL	0%	0%	0%	0%	1%	0%	70%	29%	
PT	1%	2%	0%	57%	3%	0%	34%	3%	
RO	0%	0%	0%	0%	0%	0%	0%	100%	
SI	24%	0%	0%	0%	0%	0%	40%	35%	119
SK	0%	0%	0%	0%	0%	0%	0%	100%	
FI	0%	0%	0%	0%	0%	0%	0%	100%	
SE	0%	0%	0%	0%	0%	0%	0%	100%	
UK	1%	0%	1%	65%	4%	0%	7%	20%	1.576
EU-20	117	301	284	5.626	1.207	33	3.542	14.293	25.403
%	0,5%	1,2%	1,1%	22,1%	4,8%	0,1%	13,9%	56,3%	
CH	0	0	0	0	0	0	0	100%	304

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

# Age and Person class

Table 8 shows the number of fatalities on motorways in 2010 by person class and age in the EU-20 countries, while Table 9 shows the number on non-motorways. Table 8 shows that, of the age groups studied, the highest percentage of fatalities on motorways for drivers, passengers and pedestrians occurred in the 25-49 age group.

Table 9 shows that in the EU-20 countries, the highest percentage of fatalities on non-motorway roads was also in the 25-49 age group. As far as pedestrian fatalities on non-motorway roads are concerned, the highest percentage of fatalities occurred in Romania (37%) and Slovakia (35%).

The following maps 1 and 2 show the percentage of motorway fatalities by person class and age group across Europe.

Junctions

Seasonality



Main Figures

Table 8: Percentage of fatalities on motorways by person class and age, 2010<sup>2</sup>

		Person Clas	SS		Α	ge grou	)		
	Driver	Passenger	Pedestrian	<18	18-24	25-49	50-64	>64	Total
BE	75%	24%	2%	2%	15%	60%	13%	11%	106
CZ	68%	18%	14%	0%	11%	64%	7%	18%	28
DK	56%	41%	4%	0%	33%	41%	19%	7%	27
DE	62%	32%	6%	3%	14%	48%	21%	14%	430
EL	56%	33%	10%	7%	13%	55%	15%	10%	87
ES	58%	29%	13%	5%	13%	50%	22%	10%	418
FR	59%	32%	9%	7%	18%	43%	17%	15%	238
IT	60%	35%	5%	5%	14%	46%	21%	14%	376
LU	71%	28%	0%	0%	0%	57%	29%	14%	7
HU	32%	39%	30%	2%	7%	64%	20%	7%	44
NL	71%	23%	6%	1%	27%	40%	20%	12%	83
AT	61%	29%	10%	2%	10%	49%	24%	15%	59
PL	46%	39%	14%	0%	21%	39%	29%	11%	28
PT	58%	38%	5%	1%	14%	65%	13%	8%	111
RO	33%	44%	22%	0%	11%	44%	28%	17%	18
SI	63%	26%	11%	0%	21%	42%	5%	32%	19
SK	50%	36%	14%	0%	21%	50%	29%	0%	14
FI	75%	25%	0%	0%	25%	75%	0%	0%	4
SE	65%	20%	15%	0%	24%	24%	24%	29%	20
UK	55%	31%	14%	4%	17%	51%	20%	8%	132
EU-20	60%	32%	9%	4%	15%	49%	19%	12%	2.271
СН	61%	17%	22%	0%	22%	35%	35%	9%	23

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

Table 9: Percentage of fatalities on non-motorways by person class and age, 2010<sup>2</sup>

		Person Cla	SS		A	ge group	)		
	Driver	Passenger	Pedestrian	<18	18-24	25-49	50-64	>64	Total
BE	71%	15%	14%	6%	21%	38%	15%	19%	732
CZ	61%	17%	21%	4%	16%	40%	18%	22%	774
DK	63%	18%	19%	7%	14%	31%	19%	29%	228
DE	72%	14%	14%	6%	20%	31%	17%	26%	3.218
EL	62%	30%	8%	5%	14%	47%	20%	14%	181
ES	62%	18%	20%	5%	13%	43%	15%	24%	2.062
FR	72%	16%	12%	7%	21%	38%	15%	19%	3.750
IT	70%	14%	16%	5%	14%	38%	16%	28%	3.714
LU	80%	16%	4%	0%	40%	36%	16%	8%	25
HU	54%	21%	26%	4%	10%	40%	25%	21%	
NL	77%	13%	10%	9%	19%	28%	13%	31%	548
AT	69%	13%	19%	7%	19%	30%	16%	27%	493
PL	49%	22%	29%	6%	18%	38%	23%	16%	3.175
PT	59%	18%	23%	3%	9%	37%	19%	33%	821
RO	39%	24%	37%	6%	13%	36%	24%	21%	2.357
SI	65%	14%	20%	5%	13%	39%	24%	20%	118
SK	46%	20%	35%	6%	18%	39%	21%	16%	357
FI	70%	17%	13%	7%	18%	34%	18%	24%	268
SE	70%	17%	13%	10%	17%	28%	20%	25%	319
UK	61%	18%	21%	8%	20%	39%	14%	19%	1.892
EU-20	62%	17%	20%	6%	17%	37%	18%	23%	25.706
СН	65%	12%	23%	7%	10%	32%	19%	33%	304

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

Proportionately over twice as many pedestrians are killed on non-motorways as on motorways

Gender





Youngsters (Aged 15-17)

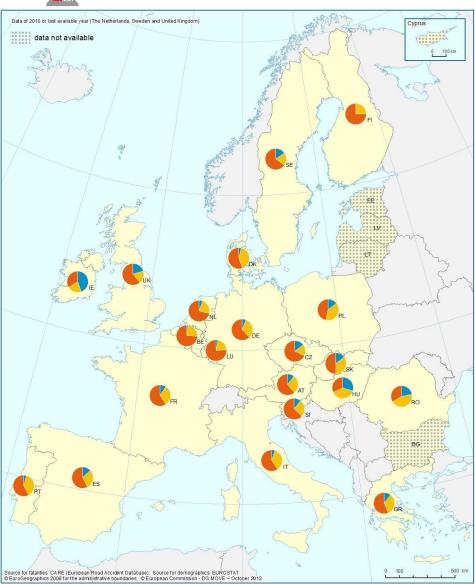
The Elderly (Aged > 64)

Car occupants

Junctions

Map 1: Percentage of fatalities on motorways by person class, 2010<sup>2</sup>





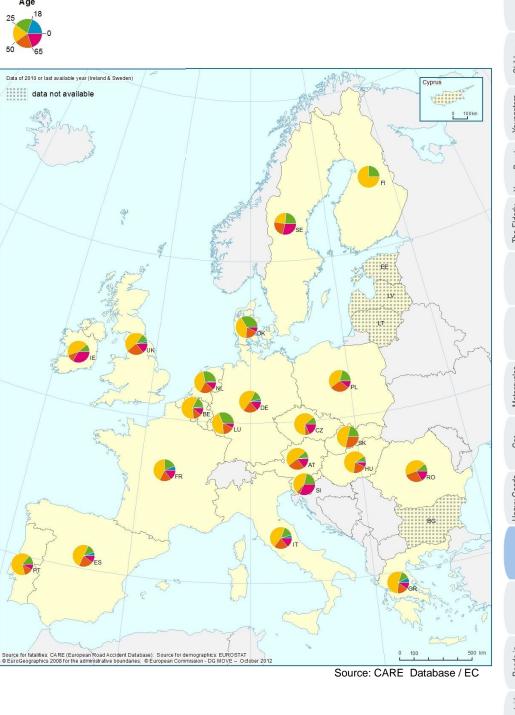
Source: CARE Database / EC

Gender

Seasonality

Map 2: Percentage of fatalities on motorways by age group, 2010<sup>2</sup>





ldren d < 15) Main Figures

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

rly Young People Young

The Elderly (Aged > 64)

Motorcycles Bicyc

Car occupants

Heavy Goods Vehicles

Motorways

areas Junctions

Koads outside K urban areas urb

Seasonality

single venicle accidents

Gender

Causatic

Figures

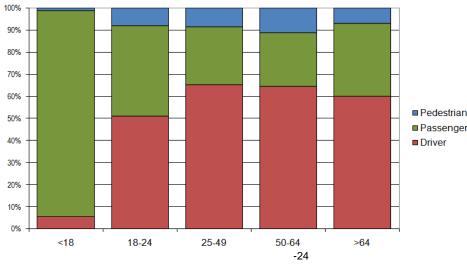
Main

Children (Aged < 15)

On motorways, the proportion of fatalities who are drivers is the same for the 25-49 and 50-64 age groups, whereas on the remaining road network it is highest for the 25-49 age group

Figure 6 shows the distribution of fatalities on motorways by age and person class in the EU-20 in 2010. Only a small percentage of fatalities were pedestrians (1% - 11%, depending on age group). The proportion of driver fatalities on motorways is almost the same for the 25 - 49 and the 50 - 64 age groups (65%).

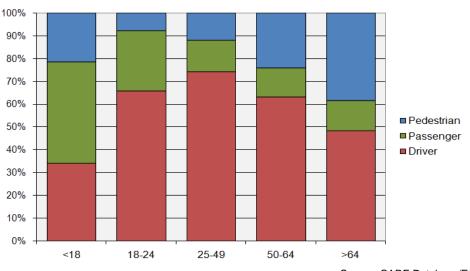
Figure 6: Fatalities on motorways by age and person class in the EU-201, 20102



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

Figure 7 shows the distribution for non-motorway roads that corresponds to the motorway distribution of Figure 8. On these roads, the proportion of drivers' fatalities is highest in the 25 - 49 age group (74%). Children (up to 18 years old) were mostly killed as passengers on non-motorway roads (683 fatalities). Figure 9 also shows that on non-motorway roads 21% of child fatalities and 38% of elderly fatalities (more than 64 years old) were pedestrians.

Figure 7: Fatalities on non-motorway road network by age and person class in the EU-201, 20102



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

**Mobility & Transport** 

Heavy Goods

Junctions

Seasonality



Children (Aged < 15)

Youngsters (Aged 15-17)

Young People Aged 18-24)

The Elderly (Aged > 64)

Heavy Goods

Motorways

Junctions

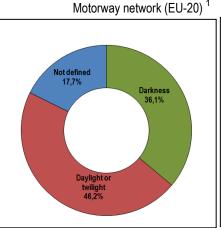
Seasonality

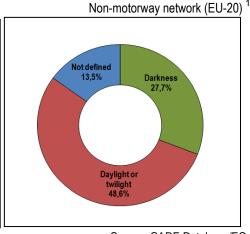
Gender

# **Lighting Conditions**

Figure 8 shows that, in 2010, 46% (1.050 persons) of the fatalities on motorways in the 20 European countries are killed in accidents during daylight or twilight. The respective percentage for the remaining road network in the 20 EU countries appears to be only slightly higher, almost 49% (corresponding to 13.910 people), as also indicated in Figure 10. Note that the high percentage of fatalities for which the lighting condition is "not defined" means that the actual percentages are rather higher.

Figure 8: Fatalities on motorways and non-motorway network by lighting conditions - 2010<sup>2</sup>





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

Furthermore, 36% of the fatalities on motorways occurred in darkness, whereas on non-motorway network, the respective percentage is smaller (28%). The percentage of "not defined" fatalities by lighting conditions is lower on non-motorway network (14%) than on motorways (18%).

# Day of week

**Mobility & Transport** 

Table 10 shows that in the EU-20 countries in 2010, there is only slight difference between the percentage of fatalities on motorways per fatalities on the remaining road network during the weekdays.

motorways in the 20 European countries were killed in accidents in the daylight or twilight

46% of the fatalities on



Main Figures

Motorways

Table 10: Number of fatalities on motorways as a percentage of fatalities on non motorways by day of week, 2010<sup>2</sup>

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
BE	21%	17%				11%	
CZ	2%	1%		3%		5%	7%
DK	6%	7%	3%	7%		23%	13%
DE	16%	16%	11%	13%	14%	10%	14%
EL	54%	55%	89%	48%	57%	50%	20%
ES	18%	22%	20%	21%	23%	20%	18%
FR	7%	5%	5%	7%	7%	7%	6%
IT	11%	11%	11%	9%	11%	9%	9%
LU	0%	0%	50%	67%	40%	25%	0%
HU	7%	1%	11%	5%	7%	4%	10%
NL	15%	14%	19%	9%	12%	24%	15%
AT	9%	8%	15%	13%	7%	11%	21%
PL	2%	0%	1%	0%	2%	0%	1%
PT	19%	23%	14%	10%	11%	9%	12%
RO	2%	1%	1%	1%	0%	1%	0%
SI	9%	9%	6%	17%	39%	13%	7%
SK	4%	8%	0%	0%	8%	3%	4%
FI	0%	5%	0%	0%	3%	0%	4%
SE	0%	4%	7%	8%	8%	11%	6%
UK	6%	8%	7%	7%	5%	8%	7%
EU-20	9%	9%	9%	8%	9%	8%	9%
СН	14%	7%	8%	2%	3%	4%	17%

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

# Seasonality

Table 11 shows that in the EU-20 countries, the peak period for fatalities on motorways is July/August (22%). However, the peak periods differ among countries, as the peak of motorway fatalities is in September/October in Greece (34%) and in May/June in the UK and France. Additionally, the peak value occurs in more than one pair of months in countries such as Slovenia and the Netherlands.

In the EU-20 there is only slight difference

only slight difference
between the
percentage of
fatalities on
motorways per
fatalities on the
remaining road
network during the
weekdays





Table 11: Percentage of fatalities on motorways by pair of months, 2010<sup>2</sup>

	January/ February	March/ April	May/ June	July/ August	September/ October	November/ December
BE	11%	20%	21%	14%	24%	10%
CZ	4%	4%	25%	29%	25%	14%
DK	19%	22%	7%	33%	4%	15%
DE	8%	18%	18%	23%	19%	13%
EL	11%	9%	11%	17%	34%	16%
ES	12%	13%	16%	25%	15%	19%
FR	12%	17%	21%	19%	19%	13%
IT	16%	13%	19%	22%	14%	15%
LU	14%	0%	0%	43%	14%	29%
HU	11%	7%	7%	32%	34%	9%
NL	14%	18%	24%	10%	10%	24%
AT	10%	20%	10%	25%	21%	15%
PL	4%	11%	14%	46%	18%	7%
PT	21%	14%	19%	24%	13%	9%
RO	11%	11%	22%	11%	33%	11%
SI	5%	5%	5%	32%	21%	32%
SK	14%	14%	14%	29%	7%	21%
FI	0%	0%	0%	100%	0%	0%
SE	24%	24%	10%	10%	29%	5%
UK	13%	20%	23%	15%	14%	14%
EU-20	12%	15%	18%	22%	18%	15%
СН	13%	9%	26%	22%	22%	9%

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

Table 12 shows that in 2010 for the EU-20 countries the highest percentage of fatalities on motorways per fatalities on non-motorways is 11% and is noticed in July, whereas the lowest respective percentage (7%) is noticed only in November. It should be noted that the unknown road network fatalities are not included.

In the EU-20, the peak period for fatalities on motorways is July/August (22%)





Main Figures

Table 12: Number of fatalities on motorways as a percentage of fatalities on non motorways per month, 2010<sup>2</sup>

	, _											
	January	February	March	April	Мау	June	۸۱n۲	August	September	October	November	December
BE	16%	7%	8%	24%	22%	11%	11%	11%	17%	22%	8%	18%
CZ	2%	0%	2%	0%	5%	5%	7%	1%	5%	3%	1%	8%
DK	22%	9%	12%	36%	0%	10%	15%	21%	0%	6%	4%	19%
DE	10%	11%	14%	15%	12%	14%	18%	13%	13%	13%	8%	20%
EL	56%	42%	50%	0%	31%	50%	40%	33%	80%	82%	42%	60%
ES	18%	15%	19%	17%	21%	19%	28%	24%	13%	18%	24%	24%
FR	5%	7%	6%	9%	6%	10%	7%	4%	8%	6%	3%	7%
IT	14%	10%	11%	6%	10%	12%	13%	8%	9%	8%	11%	9%
LU	-	-	-	-	-	-	200%	50%	25%	-	1	100%
HU	8%	0%	5%	2%	2%	3%	17%	8%	4%	18%	4%	3%
NL	13%	19%	11%	25%	22%	17%	4%	13%	9%	5%	20%	30%
AT	5%	10%	26%	12%	6%	6%	9%	15%	10%	17%	9%	11%
PL	1%	0%	1%	0%	0%	1%	2%	2%	1%	0%	0%	1%
PT	20%	17%	17%	9%	19%	17%	11%	20%	9%	11%	1%	12%
RO	0%		1%	1%	2%	0%	0%	1%	0%	2%	0%	0%
SI	33%	0%	0%	7%	8%	0%	28%	13%	8%	27%	27%	75%
SK	3%		11%	0%	0%	8%	11%	0%	0%	2%	2%	9%
FI	0%	0%	0%	0%	0%	0%	5%	8%	0%	0%	0%	0%
SE	24%	0%	8%	14%	3%	3%	3%	3%	23%	0%	4%	0%
UK	7%	4%	3%	14%	15%	5%	4%	7%	7%	6%	7%	6%
EU-20	9%	8%	9%	9%	10%	9%	11%	9%	8%	8%	7%	10%
СН	6%	11%	4%	3%	4%	14%	12%	9%	5%	13%	0%	7%

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

Although for 2010 the EU-20 average monthly percentage was between 7% and 11%, there were considerably higher percentages in some months in Greece and Slovenia. A very high percentage of motorway fatalities occurred in Spain in July (28%), whereas in Finland no motorway fatalities were recorded for 10 months in 2010.

The highest percentage of fatalities on motorways per fatalities on nonmotorways is 11% (July) in the EU-20 countries

Junctions





Children (Aged < 15)

The Elderly (Aged > 64)

#### **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 Energy 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
- Accident Causation





# Country abbreviations used and definition of EU-level

EU - 19 EU-20= EU-19 +
------------------------

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

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: <a href="http://www.dacota-project.eu/index.html">http://www.dacota-project.eu/index.html</a>,

Please refer to this report as follows:

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

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George Yannis, Petros Evgenikos, Panagiotis Papantoniou

NTUA, Greece

Jeremy Broughton

Christian Brandstatter

TRL, UK KfV, Austria Junctions

Seasonality

Gender

Nimmi Candappa, Michiel Christoph, Kirsten van

SWOV, The Netherlands

Nimmi Candappa, Michiel Christoph, Kirsten va Duijvenvoorde, Martijn Vis

INTRAS-UVEG, Spain

Jean-François Pace, María Teresa Tormo, Jaime Sanmartín

ICCTTAD France

Mouloud Haddak, Léa Pascal, Marie Lefèvre,

Pete Thomas, Alan Kirk, Laurie Brown

IFSTTAR, France

**Emmanuelle Amoros** 

Loughborough University, UK

