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## Traffic Safety Basic Facts 2010

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#### EU road safety targets

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

Since these papers were published, much progress has been achieved; fatalities in the EU-23 fell by 28,7% between 2001 and 2008.

Despite this reduction, there is still a difference between the actual result and the target of halving the number of deaths on the roads by 2010. If the trend continues at the same rate, according to the EC's Mid-Term Review 33.500 people will die from road accidents in 2010. The goal of 25.000 deaths in 2010 will thus not be achieved if the present trend continues (see Figure 1). Recent figures for 2009, however, show a slightly more positive outlook.

Figure 1: Evolution of road accident fatalities in the EU-25, 1999-2008 related to the 2010 objective



Source: CARE Database Date of Query: October 2010

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





Road accident

fatalities in the EU-23 decreased about 30 %

between 1998 and 2008.

#### **Traffic Safety Basic Facts 2010**

#### Road accident fatalities in Europe

Table 1 shows that 36.721 people were killed in road traffic accidents throughout the EU-23 in 2008, a reduction of almost one third since 1999 (30%). Only in Romania was the number of fatalities higher in 2008 than in 1999. Figure 2 shows the relative change in fatality numbers between 1999 and 2008 by country.

#### Table 1: Fatalities in Europe by country, 1999-2008 1

Table 1: Fatalities in Europe by country, 1999-2008 1									Youngsters Aged 15-17)		
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	e (
BE	1.397	1.470	1.486	1.306	1.213	1.162	1.089	1.069	1.071	944	Peopl 18-24
CZ	1.332	1.357	1.225	1.322	1.324	1.228	1.138	958	1.126	1.000	, pegv
DK	514	478	400	416	432	369	331	306	406	406	× ∢
DE*	7.503	7.503	6.977	6.842	6.613	5.842	5.361	5.091	4.949	4.477	derly > 64)
EE*	170	170	170	170	170	170	170	204	196	132	te Elo ged :
IE	414	418	412	378	337	376	398	365	338	280	T (A
EL	2.116	2.037	1.880	1.634	1.605	1.670	1.658	1.657	1.612	1.553	ans
ES	4.948	5.087	4.864	4.707	4.757	4.199	3.895	3.571	3.335	2.678	lestri
FR	8.487	8.079	8.160	7.655	6.058	5.530	5.318	4.709	4.620	4.275	Ped
IT	6.688	7.061	7.096	6.980	6.563	6.122	5.818	5.669	5.131	4.731	
LV*	407	407	407	407	407	407	407	407	419	316	clists
LU	58	76	70	62	53	50	47	43	46	35	C
HU*	1.326	1.326	1.326	1.326	1.326	1.296	1.278	1.303	1.231	995	S. IS
NL	1.090	1.082	993	987	1.028	804	750	730	709	677	cycle
AT	1.079	976	958	956	931	878	768	730	691	679	Motor & Mc
PL*	5.534	5.534	5.534	5.826	5.642	5.712	5.444	5.243	5.583	5.437	
PT	1.995	1.857	1.671	1.675	1.546	1.294	1.247	969	974	885	r ants
RO	2.468	2.466	2.450	2.409	2.229	2.441	2.629	2.587	2.800	3.061	Ca
SI*	314	314	278	269	242	274	258	262	293	214	0
SK*	569	569	569	569	569	569	569	586	630	560	ods
FI	431	396	433	415	379	375	379	336	380	344	vy Go icles a
SE	580	591	583	560	529	480	440	445	471	397	Heav Vehi
UK	3.564	3.580	3.598	3.581	3.658	3.368	3.336	3.298	3.059	2.645	S
EU-23	52.983	52.834	51.540	50.451	47.611	44.616	42.728	40.538	40.070	36.721	(ava)
Yearly Change	-	-0,3	-2,4	-2,1	-5,6	-6,3	-4,2	-5,1	-1,2	-8,4	Moto

\* Grey indicates that next known value has been used

Source: CARE Database Date of Query: October 2010

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<sup>1</sup> The country abbreviations are shown on Page 16.





The number of

fatalities fell by more

than one half in

Portugal between

1999 and 2008, and

rose by nearly a

quarter in Romania.

#### **Traffic Safety Basic Facts 2010**



Figure 2: Change in number (%) of fatalities between 1999 and 2008



used data nearest to 1999

Source: CARE Database Date of Query: October 2010

Figure 3 shows the rate of fatalities per million inhabitants in each EU-23 country in 1999 and 2008. The coloured bars show the change in rate, blue denoting reductions and red denoting increases between 1999 and 2008. The largest reduction occurred in Portugal and there was an increase only in Romania.

#### Figure 3: Fatalities per million inhabitants by country, 1999 versus 2008



used data nearest to 1999

Source: CARE Database Date of Query: October 2010

Fatality rates decreased between 1999 and 2008 in all EU-23 countries except Romania Cyclists

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Table 2 shows the fatality rates per country from 1999 to 2008.

#### Table 2: Fatalities per million inhabitants by country, 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BE	137	144	145	127	117	112	104	102	101	88
CZ	129	132	119	130	130	120	111	93	109	96
DK	97	90	75	77	80	68	61	56	75	74
DE*	91	91	85	83	80	71	65	62	60	54
EE*	123	124	124	125	125	126	126	152	146	98
IE	111	111	107	97	85	93	97	87	78	64
EL	195	187	172	149	146	151	150	149	144	138
ES	124	127	120	115	114	99	90	82	75	59
FR	141	133	134	125	98	89	85	75	73	67
IT	118	124	125	122	114	106	100	96	87	79
LV*	170	171	172	174	175	175	176	177	184	139
LU	136	175	159	140	118	110	102	92	97	72
HU*	129	130	130	130	131	128	127	129	122	99
NL	69	68	62	61	63	49	46	45	43	41
AT	135	122	119	119	115	108	94	88	83	82
PL*	143	143	145	152	148	150	143	137	146	143
PT	197	182	163	162	149	124	118	92	92	83
RO	110	110	109	110	102	112	121	120	130	142
SI*	159	158	140	135	121	137	129	131	146	106
SK*	105	105	106	106	106	106	106	109	117	104
FI	84	77	84	80	73	72	72	64	72	65
SE	66	67	66	63	59	53	49	49	52	43
UK	61	61	61	60	62	56	56	55	50	43
EU (23)	113	112	109	107	100	94	89	84	83	76

rate in 2008 was 76 fatalities per million inhabitants. The Portuguese fatality rate fell by more than half between 1999 and 2008.

The EU-25 average

\* used data nearest to 1999

Source: CARE Database Date of Query: October 2010



## Mobility & Transport



The geographical representation of fatality rates in Figure 4 shows a tendency for rates to be lower in the north than in the south and lower in the west than in the east, which is probably the result of different historical backgrounds and traffic policies.

#### Figure 4: Fatality rates: Fatalities in Europe per million inhabitants, 2008



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



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#### Age and gender

Figure 5 compares the number of fatalities per age group in 1999 and 2008. The distribution remained broadly the same, with the highest fatality numbers for those between 18 and 35 years of age. The relative decrease in fatality numbers was highest for children (aged 0-14) with a reduction of 55%. The reduction was less in the older age groups: 40% for 15-24 year olds, 31% for 25-59 year olds and 29% for the elderly (at least 60 years old). The reduction was smallest for those aged at least 80 - 9%.

#### Figure 5: Fatalities by age group EU-16, 1999 and 2008



Countries included: FR, BE, AT, CZ, DK, ES, FI, EL, IE, IT, LU, NL, PT, RO, SE, UK

Source: CARE Database Date of Query: October 2010





Mobility & Transport



The male fatality rate

in the EU-23 is almost three times

the female rate.

76% of all road

accident fatalities in

2008 were male.

#### **Traffic Safety Basic Facts 2010**

Figure 6 shows the clear difference between male and female fatality rates: less than one quarter of all fatalities were female.

#### Figure 6: The distribution of fatalities and fatality rates by gender of EU-23, 2008



Countries included: BE, CZ, DK, DE, EE, IE, GR, ES, FR, IT, LV, LU, HU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK

Source: CARE Database Date of Query: October 2010

Far more males than females are killed in road accidents. Figure 7 shows that about four fifths of 15-54 year old fatalities in 2008 were men. 76% of fatalities of all ages were male and 24% were female.

#### Figure 7: Distribution of fatalities by gender in each age group, EU-23, 2008



Countries included: BE, CZ, DK, DE, EE, IE, EL, ES, FR, IT, LV, LU, HU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK

Source: CARE Database Date of Query: October 2010

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The proportion of

fatalities who were

car passengers is

higher for females

than for males.

#### **Traffic Safety Basic Facts 2010**

Figure 8 shows that the male and female distributions of fatalities by road user type differ. While almost two thirds of male fatalities were drivers (71%), less than one third of female fatalities were drivers of motorised vehicles (28%). Nearly two third of female fatalities were car passengers (31%) or pedestrians (31%) while only 12% of male fatalities were car passengers and 17% pedestrians.





Countries included: BE, CZ, DK, DE, EE, IE, EL, ES, FR, IT, LV, LU, HU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK

Source: CARE Database Date of Query: October 2010

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### Type of road

In EU-23, only 6% of road accident fatalities in 2008 died in accidents on motorways (see Figure 9), and 56% died in accidents on nonmotorway rural roads.



Countries included: BE, CZ, DK, DE, EE, IE, GR, ES, FR, IT, LV, LU, HU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UK



half of all fatalities roads.

In EU-23 more than happened on rural



The fatality rate per 1,000 km of motorways varies across the EU from 0 in Netherlands up to 79 fatalities per 1,000 km motorway network length in Belgium (see Figure 10). The EU average is 29. In Malta and Estonia there are no fatalities on motorways (mainly because of a short (EE) or not existing (MT) motorway network).

#### Figure 10: Fatalities on motorways by road network length and country, 2008



Source: CARE Database Eurostat for motorway length Date of Query: October 2010





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## **Mobility & Transport**





#### Mode of transport and road user type

Car drivers are the largest road user group among road accident fatalities in all EU-23 countries; together with car passengers they account for 50% of all fatalities (see Figure 11).

#### Figure 11: Fatalities by road user type and country, 2008



Source: CARE Database Date of Query: October 2010

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The proportion of fatalities by road user type varies with type of road, and is influenced by the modes of transport used typically on each type of road (see Figure 12). The percentages in the bars show the proportion of fatalities on the three road types. The bars itself show the proportion of the road user types.

#### Figure 12: Distribution of fatalities by road user type on three types of road, EU-23, 2008



More than half of all road fatalities (51%) are car occupants. On motorways this proportion increases to two thirds

> Source: CARE Database Date of Query: October 2010

On motorways, where cars are the prevailing mode of transport, half of all fatalities were car occupants. There is more non motorized traffic on urban roads, however; about 40% of fatalities on these roads were pedestrians and cyclists and another third were car occupants.

72% of car driver fatalities and 66% of car passenger fatalities died on rural roads. 54% of motorcycle fatalities died on rural roads, 41% in urban areas, only 4% on motorways.

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Table 3 shows the trends in fatalities by vehicle type in the period 1999-2008. The number of fatalities decreased by 34% in the EU-16 countries over this period. About 65% of the overall reduction (8.544 fatalities) is accounted for by car occupants, and the number of car occupant fatalities fell by 42%.

The number of fatalities increased from 1999 to 2008 for only one vehicle type. Figure 13 shows that motorcycle fatality numbers rose by 7%, demonstrating the continuing importance of motorcycle safety measures in the future.

Table 3: Evolution of fatalities by vehicle type in EU-16, 1999-2008

Year	Car	Moped	Motor cycle	Pedal Cycle	Pedest- rian	Other	Total
1999	20414	2146	3678	1882	6437	275	34.832
2000	20352	2083	3840	1797	6319	275	34.666
2001	19930	1907	4039	1742	6131	244	33.993
2002	19164	1635	4081	1620	6152	236	32.888
2003	17521	1715	4045	1587	5260	245	30.373
2004	16087	1496	4063	1423	5000	245	28.314
2005	15139	1359	4153	1505	4841	309	27.306
2006	13756	1314	4051	1456	4657	312	25.546
2007	12944	1255	4425	1441	4608	284	24.957
2008	11870	1166	3950	1330	4334	259	22.909
Total Change	-42%	-46%	7%	-29%	-33%	-6%	-34%

Countries included: BE, CZ, DK, IE, EL, ES, FR, IT, LU, NL, AT, PT, RO, FI, SE, UK

Source: CARE Database Date of Query: October 2010



Figure 13: Trends for motorcycle fatalities and all fatalities, EU-16, 1999- 2008

Countries included: BE, CZ, DK, IE, GR, ES, FR, IT, LU, NL, AT, PT, RO, FI, SE, UK

Source: CARE Database Date of Query: October 2010

The number of motorcycle fatalities increased by 7% between 1999 and 2008, whereas it decreased for all other vehicle groups. Cyclists

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#### Seasonality

The overall distribution of fatalities by month did not change appreciably between 1998 and 2008. The monthly peak remained in the summer, between June and August. Pedestrian fatalities have a different distribution with the peak in winter, as can be seen from Figure 14. This is likely to be because pedestrians are at a greater risk of being killed in darkness.

Figure 14: Total fatalities and pedestrian fatalities by month in EU (23), 2008



Countries included: BE, CZ, DK, IE, EL, ES, FR, IT, LU, NL, AT, PT, RO, FI, SE, UK

Source: CARE Database Date of Query: October 2010

The overall number of fatalities is greatest between June and August. The number of pedestrian fatalities is greatest in the winter.









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#### Day of week and time of day

The fatality distribution by time of day is similar from Monday to Thursday, with a daily afternoon peak and fewer during the night (see Figure 15). The high number of fatalities during the early on Saturdays and Sundays are also notable.

#### Figure 15: Fatalities in EU (23) by day of week and time of day, 2008



Countries included: BE, CZ, DK, EE, IE, EL, ES, FR, IT, LV, LU,Source: CARE DatabaseHU, NL, AT, PL, PT, RO, SI, SK, FI, SE, UKDate of Query: October 2010

Both the absolute numbers of fatalities and their distribution by time of day at the weekend differ from weekdays. 64% of all fatalities occurred between 8am and 8pm. Fatality numbers are higher in the afternoon with a peek at 6pm.

There are more nighttime fatalities on Fridays and Saturdays than on other days of the week.







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#### Road accident fatalities' share in mortality

In the EU-19, road accidents account for 0,96% of all deaths, ranging from the largest proportion of 1,44% of all deaths in Greece to only 0,43% in Sweden (see Figure 16).

#### Figure 16: Road accident fatalities as a share of all deaths by country, 2008



Number for all death for Belgium 2005, Denmark 2006 Italy 2007 and Sweden 2006.

Source: CARE Database Eurostat for all Deaths Date of Query: October 2010

The proportion of fatalities attributable to traffic accidents strongly varies with age (see Figure 17). Road accidents account for a large proportion of fatalities for teenagers and people in their twenties and early thirties. There is a peak for 18 to 20-year olds: Over 18% of the deaths result from road accidents.

#### Figure 17: Road accident fatalities as a proportion of deaths by age groups in EU 23, 2008



Source: CARE Database Date of Query: October 2010

Road accidents account for 0.79% of all deaths in EU-23 countries.

Road accidents account for up to one fifth of all deaths among young people.



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#### 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:

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# Country abbreviations used and definition of EU-level EU - 16 EU-21= EU-16 + EU-23 = EU-21 + BE Belgium DE Germany EE Estonia

	- J -
CZ	Czech Republic
DK	Denmark
IE	Ireland
GR	Greece
ES	Spain
FR	France
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PT	Portugal
RO	Romania
FI	Finland
SE	Sweden
UK	United Kingdom (GB+NI)

		_		
DE	Germany		EE	Estoni
HU	Hungary		LV	Latvia
PL	Poland			
SI	Slovenia			
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: <u>http://www.dacota-project.eu/index.html</u>.

Authors	
Christian Brandstaetter	KfV, Austria
George Yannis, Petros Evgenikos, Efi Argyropoulou, Panagiotis Papantoniou	NTUA, Greece
Jeremy Broughton, Jackie Knowles	TRL, UK
Martine Reurings, Martijn Vis	SWOV, The Netherlands
Jean-François Pace, Elena López-de-Cozar, Patricia Pérez-Fuster and Jaime Sanmartín	INTRAS-UVEG, Spain
Nouloud Haddak, Elodie Moutengou	IFSTTAR, France
Alan Kirk	Loughborough University, UK

