The number of

young people killed

in road accidents

decreased by 40% between 1999 and

2008



Gender

# Traffic Safety Basic Facts 2010

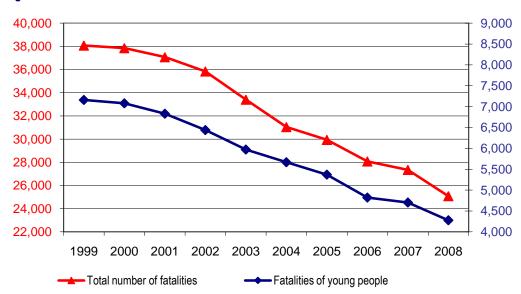
# Young People (Aged 18-24)

In this Basic Fact Sheet, 'young people' are defined as those who are between 18 and 24 years old. In general, young people worldwide are far more likely to be victims in road accidents than people in any other age group.

More than 58.000 persons aged 18-24 years old were killed in traffic accidents, in 16<sup>1</sup> European Union countries within the decade 1999 - 2008. This number represents almost a fifth of all traffic accident fatalities in those countries (18%).

The number of young people killed in road accidents in 2008, was 40% less than the respective number in 1999. The total number of fatalities also fell by 34% in the 16 European Union countries over the same period.

Figure 1: Distribution of road traffic fatalities in the EU-16<sup>1</sup> 1999-2008



Source: CARE Database / EC Date of query: November 2010

fatalities in those

countries

More than 58.000 persons aged 18-24 years old were killed in road accidents in the EU-16 between 1999 and 2008, almost a fifth of all road accident

<sup>&</sup>lt;sup>1</sup> See Table "Country abbreviations used and definition of EU-level" on page 16.

The most significant reduction in young fatalities between 1999 and 2008 occurred in Portugal (73%)



Main Figures

Youngsters (Aged 15-17)

In 2008, the number of young people killed in Slovenia was 41% less than in 2007, and the reduction in Finland was 33%. On the other hand, the number increased in Denmark (19%), Latvia (9%), Romania (9%), Slovakia (6%) and the Czech Republic (2%). The most significant reduction in young fatalities between 1999 and 2008 occurred in Portugal (73%).

Table 1: Fatalities aged 18-24 by country, 1999-2008<sup>2</sup>

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BE	287	328	281	262	241	240	196	195	215	177
CZ	267	258	236	222	243	219	223	183	190	193
DK	95	85	68	76	67	67	52	65	58	69
DE	-	1.736	1.606	1.550	1.392	1.269	1.076	1.011	971	887
EE	-	-	-	-	-	-	26	35	41	28
IE	101	117	114	79	82	96	110	95	76	75
EL	405	375	385	283	296	304	326	305	280	246
ES	1.078	1.082	971	935	972	793	733	601	550	469
FR	1.847	1.704	1.807	1.644	1.283	1.276	1.206	1.037	984	956
IT	1.133	1.225	1.088	1.109	989	956	919	825	723	637
LV	-	-	-	-	-	-	-	59	44	48
LU	11	16	16	10	10	8	9	8	8	8
HU	-	-	-	-	129	138	159	134	139	103
NL	193	227	162	205	179	154	122	112	134	107
AT	219	204	188	172	174	169	140	129	135	134
PL	-	-	894	958	908	851	933	895	953	948
PT	420	355	329	270	245	213	221	125	148	113
RO	328	305	311	274	267	293	294	293	402	437
SI	-	51	52	57	51	49	44	54	64	38
SK	-	-	-	-	-	-	83	100	87	92
FI	62	51	84	73	59	74	53	67	75	50
SE	73	102	100	100	93	78	67	75	86	64
UK	642	646	691	725	772	728	700	706	639	542
EU-16	7.161	7.080	6.831	6.439	5.972	5.668	5.371	4.821	4.703	4.277
EU-23	-	-	-	-	-	-	-	7.109	7.002	6.421
% yearly change (EU-16)	-	-1,1%	-3,5%	-5,7%	-7,3%	-5,1%	-5,2%	-10,2%	-2,5%	-9,1%
CH*	-	-	-	-	-	108	108	108	108	108

<sup>\*</sup> Data from 2004

Source: CARE Database / EC Date of query: November 2010

17% of people killed in road accidents in 2008 in the 23 European countries were aged 18-24. However, only 8,9% of the population falls within this age group. Young people were at almost twice the average risk of being killed in a road accident across the EU-23 countries in 2008 (this is the relative fatality rate, calculated as the % young people fatalities divided by % young people population).

2/16

Seasonality

<sup>&</sup>lt;sup>2</sup> Using latest data available, i.e. 2008 for all countries except for CH (2004).

Young people are at

almost twice the risk

of being killed in a

road accident as the

average member of

the population

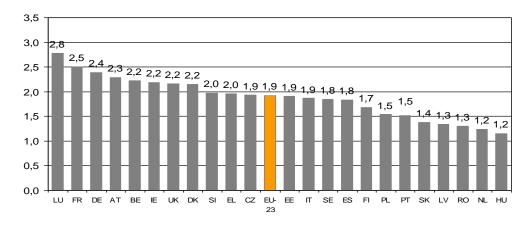
across the EU-23 countries as a whole

Cyclists

Gender

As shown in Figure 2, France has the highest relative rate (2,5) whereas Hungary has the lowest relative rate (1,2) among the 23 countries in 2008.

Figure 2: Relative rate for fatality proportions in young people, 2008<sup>2</sup>



Source: CARE Database / EC Date of query: November 2010 Source of population data: EUROSTAT

The number of fatalities amongst young people, expressed as a proportion of all fatalities, has been gradually reducing over the last ten years, although this is not the case in every country.

Table 2: Proportion of fatalities who were aged 18-24 by country, 1999-2008<sup>2</sup>

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BE	20,5%	22,3%	18,9%	20,1%	19,9%	20,7%	18,0%	18,2%	20,1%	18,8%
CZ	18,4%	17,4%	17,7%	15,5%	16,8%	15,9%	17,3%	17,2%	15,6%	17,9%
DK	18,5%	17,1%	15,8%	16,4%	15,5%	18,2%	15,7%	21,2%	14,3%	17,0%
DE	-	23,1%	23,0%	22,7%	21,1%	21,7%	20,1%	19,9%	19,6%	19,8%
EE	-	1	1	ı	ı	1	15,3%	17,2%	20,9%	21,2%
IE	24,4%	28,0%	27,7%	20,9%	24,3%	25,5%	27,5%	26,0%	22,5%	26,8%
EL	19,1%	18,4%	20,5%	17,3%	18,4%	18,2%	19,7%	18,4%	17,4%	15,8%
ES	18,8%	18,7%	17,6%	17,5%	18,0%	16,7%	16,5%	14,6%	14,4%	15,1%
FR	21,8%	21,1%	22,1%	21,5%	21,2%	23,1%	22,7%	22,0%	21,3%	22,4%
IT	16,9%	17,4%	15,3%	15,9%	15,1%	15,6%	15,8%	14,6%	14,1%	13,5%
LV	-	-	-	-	-	-	-	14,5%	10,5%	15,2%
LU	19,0%	21,1%	22,9%	16,1%	18,9%	16,0%	19,2%	18,6%	17,4%	22,9%
HU	-	1	1	ı	9,7%	10,7%	12,4%	10,3%	11,3%	10,3%
NL	17,7%	21,0%	16,3%	20,8%	17,4%	19,2%	16,3%	15,3%	18,9%	15,8%
AT	20,3%	20,9%	19,6%	18,0%	18,7%	19,3%	18,2%	17,7%	19,5%	19,7%
PL	-	-	16,2%	16,4%	16,1%	14,9%	17,1%	17,1%	17,1%	17,4%
PT	21,1%	19,1%	19,7%	16,1%	15,9%	16,5%	17,7%	12,9%	15,2%	12,8%
RO	13,3%	12,4%	12,7%	11,4%	12,0%	12,0%	11,2%	11,3%	14,4%	14,3%
SI	-	16,2%	18,7%	21,2%	21,1%	17,9%	17,1%	20,6%	21,8%	17,8%
SK	-	-	-	-	-	-	13,7%	16,3%	13,2%	15,2%
FI	14,4%	12,9%	19,4%	17,6%	15,6%	19,7%	14,0%	19,9%	19,7%	14,5%
SE	12,6%	17,3%	17,2%	17,9%	17,6%	16,3%	15,2%	16,9%	18,3%	16,1%
UK	18,0%	18,0%	19,2%	20,3%	21,1%	21,6%	21,0%	21,4%	20,9%	20,5%
EU-16	18,8%	18,7%	18,4%	18,0%	17,9%	18,3%	17,9%	17,2%	17,2%	17,1%
EU-23	-	-	-	-	-	-	-	17,3%	17,2%	17,2%
CH*	-	-	-	-	-	21,2%	21,2%	21,2%	21,2%	21,2%

<sup>\*</sup> Data from 2004

**Mobility & Transport** 

Source: CARE Database / EC Date of query: November 2010

In 2008, France has the highest relative rate (2,5) for fatality proportion whereas Hungary has the lowest relative rate (1,2) among the 23 countries In 2008, the majority of 18-24 year olds killed in road accidents in the EU-23 countries were drivers, while only 7% were pedestrians

Gender

# Age and Road user type

Table 3: Fatalities by age group for drivers3, passengers and pedestrians by country, 20082

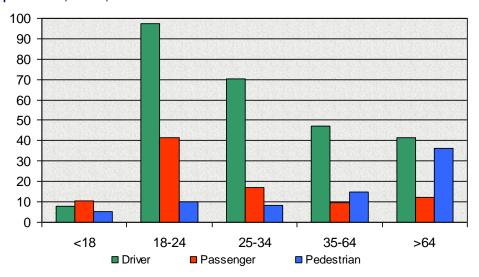
	Driver					Passenger				Pedestrian					
	<18	18-24	25-34	35-64	>64	<18	18-24	25-34	35-64	>64	<18	18-24	25-34	35-64	>64
BE	21	127	145	296	101	25	42	30	33	14	11	8	8	36	34
CZ	6	116	167	261	78	17	60	42	62	24	9	17	22	92	84
DK	12	45	47	124	60	11	17	7	8	14	6	7	3	18	23
DE	105	646	488	1.274	602	118	189	74	179	139	45	52	49	178	325
EE	1	15	8	26	10	5	10	6	7	2	1	3	2	18	17
IE	10	51	31	51	27	19	15	9	5	8	9	9	4	15	12
EL	32	186	284	378	132	26	57	46	95	55	13	3	14	62	142
ES	56	313	483	848	217	79	132	113	215	113	33	24	43	168	208
FR	95	684	610	1.164	424	101	238	107	166	131	45	34	34	165	268
IT	117	451	721	1.357	606	104	173	129	176	126	22	13	46	169	368
LV	8	20	27	61	14	9	26	14	26	6	6	2	8	53	35
LU	0	8	6	10	1	0	0	1	1	0	0	0	0	3	3
HU	12	58	124	273	70	27	34	47	76	17	14	11	13	111	92
NL	37	82	85	199	127	12	20	14	19	25	5	5	4	20	22
AT	15	104	53	210	98	14	25	16	25	16	8	5	9	22	58
PL	51	496	559	964	292	178	325	189	349	120	84	127	167	917	550
PT	1	75	139	255	91	24	33	19	49	41	7	5	6	67	66
RO	27	196	293	583	126	79	197	159	264	64	81	44	50	508	380
SI	5	28	31	67	15	6	9	4	8	1	3	1	1	16	18
SK	6	56	59	99	19	10	26	25	34	8	14	10	12	80	45
FI	13	38	33	87	57	16	12	11	15	8	4	0	2	19	28
SE	7	45	39	123	72	9	13	12	16	11	1	4	3	18	19
UK	87	348	301	648	209	95	136	63	86	73	77	58	62	173	217
EU-23	724	4.189	4.733	9.358	3.448	984	1.789	1.137	1.914	1.016	498	441	562	2.928	3.014
%	3,2%	18,7%	21,1%	41,7%	15,4%	14,4%	26,2%	16,6%	28,0%	14,9%	6,7%	5,9%	7,6%	39,3%	40,5%
CH*	18	80	60	133	52	13	27	11	9	12	10	1	5	20	59

<sup>\*</sup> Data from 2004

Source: CARE Database / EC Date of query: November 2010

The majority of the young people (18-24 years old) killed in road accidents in the 23 European countries were drivers (4.189, corresponding to 65% of all fatalities at that age group), whereas only 7% (441) were pedestrians in 2008.

Figure 3: Rate of fatalities per million population by age group for drivers, passengers and pedestrians, EU-231, 2008



Source: CARE Database / EC Date of query: November 2010 Source of population data: Eurostat

The driver and passenger fatality rates for 18-24 year olds are higher than those of other age groups

<sup>&</sup>lt;sup>3</sup> The 'driver' category includes all drivers of motor vehicles (including mopeds) and pedal cyclists.



Figure 3 compares the rate of fatalities per million population for 18-24 year olds with the rates of other age groups. The driver and passenger fatality rates are higher than those of the other age groups.

# **Mode of transport**

More than two-thirds of fatalities of young people across the European countries are in cars or taxis, with mopeds and motorcycles accounting for 20% in the EU-23 countries.

Table 4: Fatalities of young people by mode of transport, 2008<sup>2</sup>

	Car / taxi	Lorries	Two-wheelers	Pedestrian	Other	Total
BE	112	5	35	8	2	160
CZ	144	6	25	17	1	192
DK	45	2	14	7	1	68
DE	653	16	159	52	6	880
EE	21	0	4	3	0	28
IE	52	3	10	9	1	74
EL	134	5	101	3	3	243
ES	319	18	102	24	4	463
FR	594	24	295	34	6	947
IT	383	4	226	13	2	626
LV	39	0	5	2	1	46
LU	8	0	0	0	0	8
HU	68	3	20	11	1	102
NL	75	5	22	5	0	107
AT	100	5	24	5	0	134
PL	668	23	126	127	4	944
PT	57	16	33	5	2	111
RO	320	19	49	44	5	432
SI	18	0	11	1	1	30
SK	69	1	10	10	1	90
FI	41	1	7	0	1	49
SE	51	1	8	4	0	64
UK	370	10	100	58	4	538
EU-23	4.341	167	1.386	441	46	6.335
%	68,5%	2,6%	21,9%	7,0%	0,7%	100%
CH*	79	0	40	2	0	121

<sup>\*</sup> Data from 2004

Source: CARE Database / EC Date of query: November 2010

Figure 4 shows that the highest proportion among the 23 European countries of young people fatalities by mode of transport in 2008 was in Latvia (83% were travelling by car/taxi, 39 fatalities). The second highest proportion of young people fatalities by car/taxi was in Finland (82%). The lowest car/taxi proportion was in Portugal - 51% (57 fatalities).

41% of the 18-24 year old fatalities in Greece were riding two-wheelers, the highest proportion among the EU-23 countries

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Mobility & Transport

Youngsters Ch (Aged 15-17) (Age

Main Figures

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Young Peopl Aged 18-24

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Pedestrians

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Gender

Figures

Main

Pedestrians

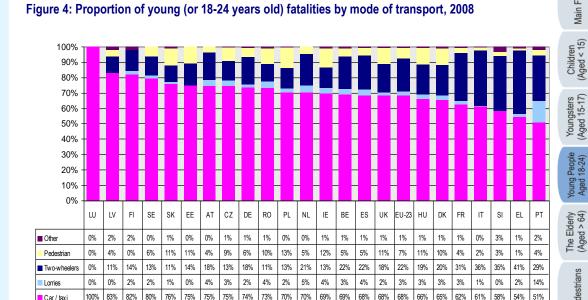
Cyclists

Car occupants

Motorways

Junctions

Seasonality



Source: CARE Database / EC Date of query: November 2010

58%

66%

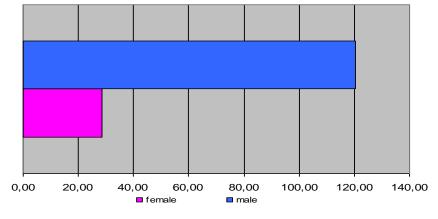
Figure 4 shows that as far as two-wheeler fatalities (users of motorcycles, mopeds or pedal cycles) are concerned, the lowest proportion was in Latvia (11%) and Slovakia (11%). Greece had the highest proportion of 18-24 year old two-wheeler fatalities (41%) among the 23 countries considered. Portugal had the highest proportion of young people fatalities in lorries (14%). Slovakia had the highest proportion of young pedestrian fatalities (11%) whereas Finland and Greece had the lowest (0% and 1% respectively).

#### Gender

Car / taxi

Males account for 81% of the overall fatalities among young people. Amongst young people, males have a significantly higher fatality rate per million population (121), compared to females (29). This may perhaps be attributed in part to young men tending to drive farther and faster than young women.

Figure 5: Young people fatality rates per million population, per gender in the EU-231, 2008



Source: CARE Database / EC Date of query: November 2010

81% of the fatalities among young people were men



58% of young fatalities in road accidents occurred in rural areas in 2008

Source: CARE Database / EC Date of query: November 2010

### **Area and Road type**

In the EU-23, the majority (58%) of young fatalities occurred outside urban areas (excluding motorways) in 2008 and only 5% occurred on motorways. The percentage of young people fatalities inside urban areas was 33% for the EU-23 countries.

Table 5: Distribution of fatalities amongst young people by area and road type, 2008<sup>2</sup>

	inside urban area	outside urban area						
	iliside dibali alea	motorway	non-motorway	not defined				
BE	28%	16%	56%	ı				
CZ	26%	3%	71%	1				
DK	32%	6%	62%	1				
DE	17%	7%	76%	1				
EE	32%	0%	68%	1				
IE	21%	0%	0%	79%				
EL	49%	8%	12%	32%				
ES	21%	4%	75%	I				
FR	27%	4%	68%	I				
IT	44%	8%	48%	I				
LV	33%	0%	67%	I				
LU	14%	0%	86%	I				
HU	37%	4%	59%	I				
NL	36%	0%	0%	64%				
AT	16%	8%	76%	I				
PL	38%	1%	57%	4%				
PT	54%	11%	34%	1				
RO	56%	0%	44%	ı				
SI	29%	11%	61%	ı				
SK	27%	4%	68%	1				
FI	32%	2%	66%	1				
SE	16%	3%	81%	1				
UK	40%	5%	51%	4%				
EU-23	33%	5%	58%	4%				
CH*	34%	0%	66%	_				

<sup>\*</sup> Data from 2004

Mobility & Transport

Austria had the

lowest percentage of

young people

fatalities inside urban

areas (15,7%)

whereas Romania

had the highest

amongst the EU-23

countries in 2008

) Main Figures

Children (Aged < 15)

Youngsters (Aged 15-17)

Young People Aged 18-24)

(Aged > 64)

Pedestrians

Motorcycles & Mopeds Cyclists

Car occupants

Vehicles and Buses

Motorways

Junctions

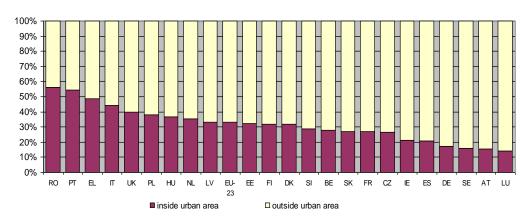
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Figure 6: Distribution of fatalities amongst young people by area type, 2008



Source: CARE Database / EC Date of query: November 2010

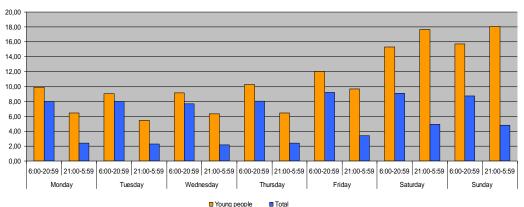
Figure 6 shows that in 2008 Austria had the lowest percentage of young people fatalities inside urban areas (16%) whereas Romania had the highest percentage (56%) amongst the EU-23 countries.

### Day of week and Time of day

Figure 7 shows that in 2008<sup>2</sup> fewer people aged 18-24 were killed between 06:00 and 20:59 on week-days in the EU-22 countries than between 21:00 and 5:59 (the night-time and early morning).

Relatively many young people were also killed between 06:00 and 20:59 on Saturdays and Sundays, when young people tend to stay out until late.





Source: CARE Database / EC Date of query: November 2010 Source of population data: Eurostat

On Saturdays and Sundays fatality rates for young people are higher than the rates for the population as a whole In 2008 in the EU-23 almost half (44%) of young people were killed on weekends

Ger

Table 6 shows that in 2008 in the EU-23 countries, almost half (44%) of young people killed died at the week-end. The proportions are lower between Monday and Thursday.

Table 6: Distribution of fatalities amongst young people by day of week, 2008<sup>2</sup>

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
BE	12,4%	6,8%	9,6%	9,6%	15,3%	23,7%	22,6%
CZ	10,4%	11,4%	10,9%	16,6%	14,0%	18,7%	18,1%
DK	5,8%	7,2%	4,3%	23,2%	11,6%	26,1%	21,7%
DE	10,3%	12,4%	10,4%	10,4%	16,8%	19,7%	20,1%
EE	10,7%	3,6%	10,7%	14,3%	25,0%	21,4%	14,3%
IE	10,7%	9,3%	9,3%	14,7%	9,3%	20,0%	26,7%
EL	14,6%	11,0%	9,3%	10,6%	13,8%	18,7%	22,0%
ES	10,6%	9,4%	9,8%	13,2%	14,9%	20,6%	21,5%
FR	8,2%	10,9%	10,3%	12,0%	15,3%	21,7%	21,8%
IT	10,2%	10,4%	11,5%	9,9%	14,4%	20,6%	23,1%
LV	6,3%	8,3%	12,5%	6,3%	22,9%	14,6%	29,2%
LU	12,5%	25,0%	12,5%	12,5%	0,0%	25,0%	12,5%
HU	11,7%	10,7%	13,6%	9,7%	16,5%	20,4%	17,5%
NL	8,4%	8,4%	13,1%	6,5%	20,6%	24,3%	18,7%
AT	10,4%	5,2%	11,2%	9,0%	11,2%	35,1%	17,9%
PL	13,4%	8,5%	9,8%	9,7%	14,1%	19,0%	25,4%
PT	9,7%	9,7%	11,5%	14,2%	7,1%	26,5%	21,2%
RO	10,1%	8,7%	10,1%	10,3%	11,7%	21,7%	27,5%
SI	15,8%	13,2%	5,3%	10,5%	10,5%	28,9%	15,8%
SK	27,2%	13,0%	6,5%	2,2%	13,0%	20,7%	17,4%
FI	4,0%	18,0%	12,0%	24,0%	16,0%	20,0%	6,0%
SE	6,3%	7,8%	6,3%	7,8%	20,3%	34,4%	17,2%
UK	10,3%	9,4%	10,7%	11,3%	13,8%	23,6%	20,8%
EU-16	9,9%	9,8%	10,4%	11,7%	14,1%	22,3%	21,9%
EU-23	10,8%	10,0%	10,3%	11,0%	14,6%	21,3%	22,0%
CH*	13,0%	8,3%	8,3%	13,0%	13,0%	28,7%	15,7%

<sup>\*</sup> Data from 2004

Source: CARE Database / EC Date of query: November 2010 In the EU-23, the peak period for fatalities is July/August (20%)



Single v

# Seasonality

Table 7 shows the distribution of road traffic fatalities amongst young people through the year, using pairs of months, with the totals displayed in Figure 8 on a monthly basis.

Table 7: Distribution of fatalities amongst young people by month, 2008<sup>2</sup>

	January/ February	March/ April	May/ June	July/ August	September/ October	November/ December
BE	18,6%	16,4%	15,8%	18,6%	15,3%	15,3%
CZ	10,9%	13,0%	20,7%	20,7%	17,1%	17,6%
DK	18,8%	18,8%	11,6%	10,1%	23,2%	17,4%
DE	13,4%	16,0%	17,7%	18,7%	19,1%	15,1%
EE	14,3%	17,9%	10,7%	21,4%	28,6%	7,1%
IE	18,7%	20,0%	16,0%	17,3%	14,7%	13,3%
EL	15,0%	15,0%	19,5%	22,8%	14,6%	13,0%
ES	14,5%	14,5%	15,2%	19,8%	16,7%	19,2%
FR	13,3%	15,1%	16,6%	20,9%	18,5%	15,6%
IT	14,3%	16,3%	17,0%	22,6%	16,3%	13,5%
LV	16,7%	14,6%	16,7%	31,3%	8,3%	12,5%
LU	0,0%	12,5%	25,0%	12,5%	37,5%	12,5%
HU	12,6%	8,7%	20,4%	20,4%	23,3%	14,6%
NL	12,1%	18,7%	17,8%	11,2%	16,8%	23,4%
AT	14,2%	13,4%	17,2%	19,4%	17,9%	17,9%
PL	10,3%	14,6%	18,6%	20,8%	19,6%	16,1%
PT	12,1%	31,3%	12,1%	17,2%	9,1%	18,2%
RO	8,5%	15,3%	16,2%	20,4%	19,9%	19,7%
SI	18,4%	18,4%	15,8%	15,8%	13,2%	18,4%
SK	7,6%	6,5%	15,2%	25,0%	21,7%	23,9%
FI	10,0%	18,0%	16,0%	16,0%	28,0%	12,0%
SE	9,4%	15,6%	26,6%	21,9%	10,9%	15,6%
UK	15,3%	14,8%	18,6%	19,0%	16,4%	15,9%
EU-23	13,0%	15,4%	17,3%	20,1%	17,9%	16,2%
CH*	10,2%	17,6%	16,7%	20,4%	21,3%	13,9%

<sup>\*</sup> Data from 2004

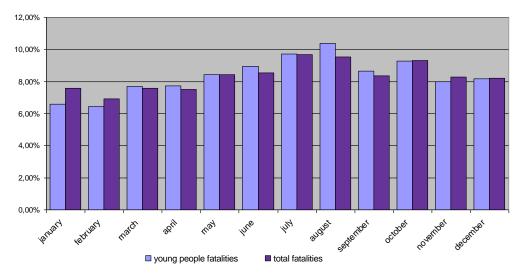
Source: CARE Database / EC Date of query: November 2010

The peak period for most of the countries is in July/August, though Portugal and Ireland have their peak in March/April, the peak in the Netherlands is in May/June, while for Denmark, Germany, Estonia, Hungary and Finland the peak is in September/October. Fewest fatalities occur in January/February.

The proportion of fatalities aged 18-24 is relatively high in July and August, and relatively low between January and April.

Fatalities amongst young people vary seasonally, with higher percentages in summer and lower percentages in winter

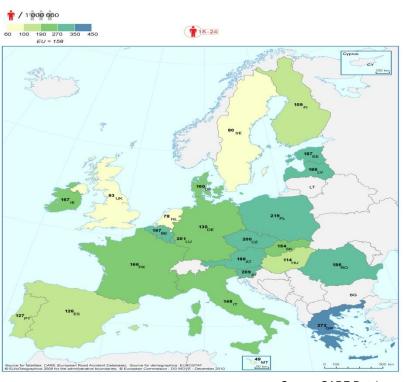




Source: CARE Database / EC Date of query: November 2010

Figure 8 shows that the highest proportion of young people fatalities in 2008 occurred in August (10,4%) in the EU-23 countries whereas the lowest proportion occurred in February (6,5%). As far as total fatalities are concerned, the highest proportion of total fatalities occurred in July (9,7%) and in August (9,5%) whereas the lowest proportion occurred in February (6,9%).

Figure 9: Fatality rate of young people per million population in the EU-231, 2008



Source: CARE Database / EC

Main Figure

Children (Aged < 15

> Youngsters (Aged 15-17)

Young People Aged 18-24)

s (Aged > 64)

Cyclists

& Mopeds

Car

Heavy Goods Vehicles and Ruses

Motorways

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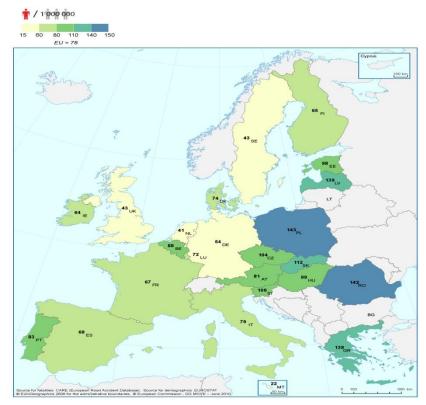
Roads out ity urban are

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Single vehicle accidents

Gend

Figure 10: Total fatality rate per million population in the EU-231, 2008



Source: CARE Database / EC

Main Figures

Children (Aged < 15)

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Young People Aged 18-24)

The Elderly (Aged > 64

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Main Figures

Youngsters (Aged 15-17)

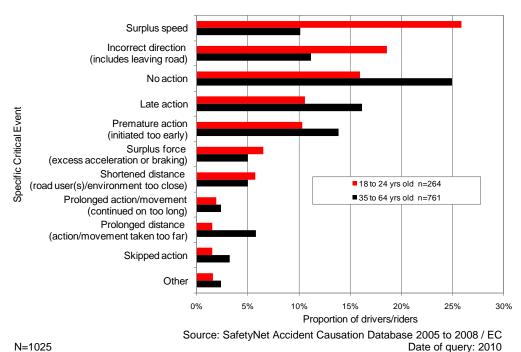
Pedestrians

#### **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 UK<sup>4 5</sup>. The SafetyNet Accident Causation Database was formed between 2005 and 2008, and contains details of 1.006 accidents covering all injury severities. 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, 25% (249) of the accidents involve a driver or rider between 18 and 24 years old. Males account for 75% of this group and 79% are drivers of passenger cars. Figure 11 compares the distribution of specific critical events for drivers and riders of young age against the distribution for 35 to 64 year olds.

Figure 11: Distribution of specific critical events - 18 to 24 yr and 35 to 64 yr old drivers/riders



The clearest difference between the two age groups relates to the specific critical event of surplus speed, attributed to just over one quarter of the young age group but only 10% of the older group. Surplus speed describes speed that is too high for the conditions or manoeuvre being carried out, travelling above the speed limit and also if the driver is travelling at a speed unexpected by other road users. Incorrect direction is also recorded more frequently for the younger age group. This refers to a manoeuvre being carried out in the wrong

<sup>5</sup> SafetyNet D5.8, In-Depth Accident Causation Database and Analysis Report



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Seasonality

<sup>&</sup>lt;sup>4</sup> SafetyNet D5.5, Glossary of Data Variables for Fatal and Accident Causation Databases



direction (for example, turning left instead of right) or leaving the road (not following the intended direction of the road). 'Loss of control' type accidents can fall into either critical event depending on the specific situation.

The specific critical events under the general category of 'timing', no action, premature action and late action, are the next three most frequently recorded events but each is recorded more frequently for the older group, especially no action. No action describes those drivers/riders who have not reacted at all (or at least in an effective time frame) to avoid a collision, for example, to avoid an oncoming vehicle. A premature action is one undertaken before a signal has been given or the required conditions are established, for example entering a junction before it is clear of other traffic.

Table 8 gives the most frequent links between causes for young drivers/riders. For this group there are 371 such links in total.

Table 8: Ten most frequent links between causes - young drivers/riders

Links between causes	Frequency
Inadequate plan - Insufficient knowledge	55
Faulty diagnosis - Information failure (driver/environment or driver/vehicle)	38
Observation missed - Distraction	25
Observation missed - Faulty diagnosis	21
Inadequate plan - Under the influence of substances	18
Observation missed - Temporary obstruction to view	17
Observation missed - Inadequate plan	15
Inadequate plan - Psychological stress	13
Observation missed - Permanent obstruction to view	12
Faulty diagnosis - Communication failure	12
Others	145
Total	371

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

Inadequate plan is 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. The causes leading to inadequate plan are lack of knowledge and impairment from substances and psychological stress.

Faulty diagnosis and observation missed then follow. Faulty diagnosis is an incorrect or incomplete understanding of road conditions or another road user's actions. It is linked to both information failure (for example, a driver/rider thinking another vehicle was moving when it was in fact stopped and colliding with it) and communication failure (for example, pulling out in the continuing path of a driver who has indicated for a turn too early). The causes leading to observation missed can be seen to fall into two groups, human factors (for example, not observing

15% of the links
between causes are
observed to be
between
'inadequate plan'
and 'insufficient
knowledge'.

Children (Aged < 15)

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> Young People Aged 18-24)

> > (Aged > 64

Pedestrians

& Mopeds

occupants

Vehicles ar Buses

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a red light due to distraction) and physical 'obstruction to view' type causes (for example, parked cars at a junction).

#### **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)</li>
- 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
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- Gender

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Children Aged < 15)

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oung People Aged 18-24)

(Aged > 64)

Pedestrians

Motorcycles & Mopeds

Car

Heavy Goods Vehicles and Buses

otorways

Junctions

Urban

Roads outside urban areas

Seasonality

Single vehicle accidents

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### Country abbreviations used and definition of EU-level

**EU - 16** 

BE	Belgium
CZ	Czech Republic
DK	Denmark
ΙE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
LU	Luxembourg
NL	Netherlands
АТ	Austria
PT	Portugal
RO	Romania

**Finland** 

Sweden

United Kingdom

EU-22 = EU-16 +

EU-23 = EU-22 +

L	EE	Estonia
ı	_V	Latvia
ı	PL	Poland
(	SI	Slovenia
(	SK	Slovakia
I	HU	Hungary

DE Germany

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.

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