Traffic Safety Basic Facts 2010

Urban areas

In 2008, 13.502 people were killed in traffic accidents on urban roads in the EU-19[1]. This is 38% of all traffic accident fatalities in 2008. In the last decade, urban road fatalities have reduced by a quarter (25,7%), while the total number of fatalities has reduced by almost a third (31,5%).

Fatalities on urban roads were reduced by 26% between 1999 and 2008.

In 2008, about 13.500 people died in traffic accidents on urban roads in the EU-19. This corresponds to 38% of all road traffic fatalities.

Table 1: Urban road fatalities by country by year in EU-19[1,2], 1999-2008

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BE	409	403	453	353	350	295	255	265	275	274
CZ	584	613	525	570	556	525	503	427	442	444
DK	170	181	125	126	114	120	95	101	129	129
DE	*1.829*	1.829	1.726	1.684	1.646	1.484	1.471	1.384	1.335	1.261
EE	-	-	-	-	-	-	46	46	63	41
IE	118	126	104	104	89	108	80	62	77	62
EL	748	694	830	718	716	766	758	774	724	744
ES	1.030	1.071	973	912	919	900	790	736	740	634
FR	2.530	2.259	2.277	2.056	1.667	1.534	1.664	1.346	1.359	1.235
IT	2.798	3.167	3.351	3.083	2.746	2.596	2.588	2.494	2.269	2.076
LV	-	-	-	-	-	142	125	148	165	97
LU	9	20	17	20	16	17	13	8	9	9
HU	-	-	-	-	478	476	502	508	505	419
NL	357	374	335	348	346	252	254	283	270	243
AT	260	217	216	265	223	232	202	200	173	189
PL	*2.528*	*2.528*	2.528	2.761	2.653	2.755	2.495	2.349	2.549	2.499
PT	865	723	720	699	659	556	537	448	389	417
RO	2.100	1.997	1.841	1.767	1.506	1.697	1.895	1.638	1.780	1.919
SI	*101*	101	91	81	72	83	81	92	94	73
SK	-	-	-	-	-	-	277	291	298	280
FI	102	103	113	105	101	82	101	93	81	108
SE	184	162	180	146	134	125	110	106	127	99
UK	1.440	1.461	1.448	1.421	1.439	1.349	1.302	1.326	1.178	1.087
EU-19[2]	18.162	18.029	17.853	17.219	15.952	15.476	15.194	14.132	14.000	13.502
Yearly Change		-0,7%	-1,0%	-3,6%	-7,4%	-3,0%	-1,8%	-7,0%	-0,9%	-3,6%
CH	-	-	-	-	-	191	-	-	-	-

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

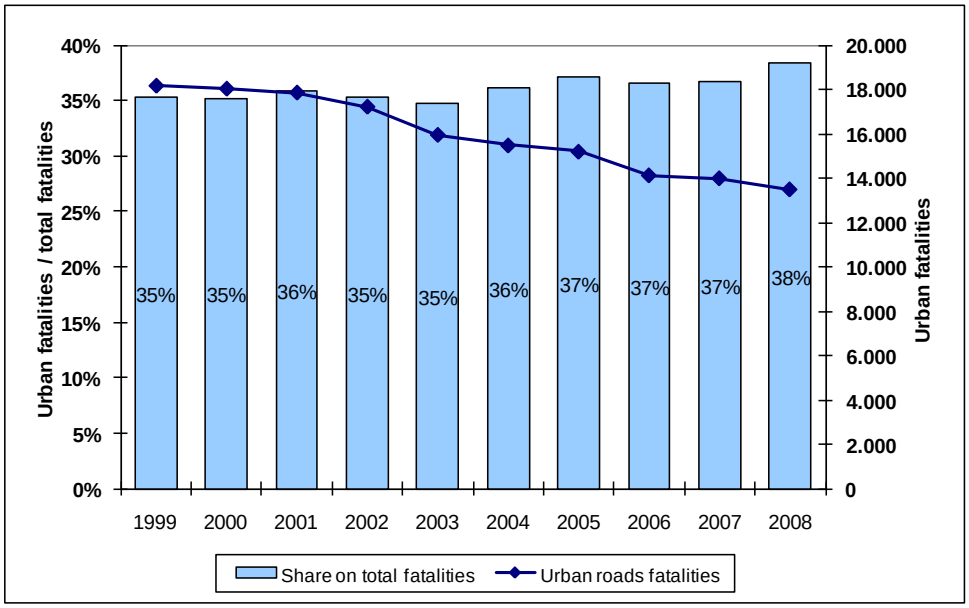
Table 1 presents the number of fatalities in accidents on urban roads by country from 1999 to 2008.

[1] See table "Definition of EU-level and used Country abbreviations" on page 13.
[2] Where a number is missing for an EU-19 country in a particular year, its contribution to the EU-19 total is estimated as the next known value.

Data for Estonia, Latvia, Hungary, and Slovakia are not available for all the decade and these countries have not been included in the EU totals. In addition data from Bulgaria, Cyprus, Malta and Lithuania are missing. Figure 1 shows the total number of fatalities within urban areas each year and the proportion of all fatalities that occurred within urban areas. Although the number of fatalities within urban areas has fallen, the proportion has hardly changed.

The number of fatalities in urban road accidents has fallen since 1999. The percentage of all fatalities that occurred within urban areas, however, has increased slightly to 38%.

Figure 1: Number of urban road fatalities and proportion on total fatalities in EU-19[2], 1999-2008



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

To compare the urban fatality data of the different countries, the respective population size has been taken into account (see Table 2). In 2008, 89 persons per million inhabitants died in urban road accidents in Romania, this rate is more than eight times the Swedish rate of 10,8 (see Figure 2).

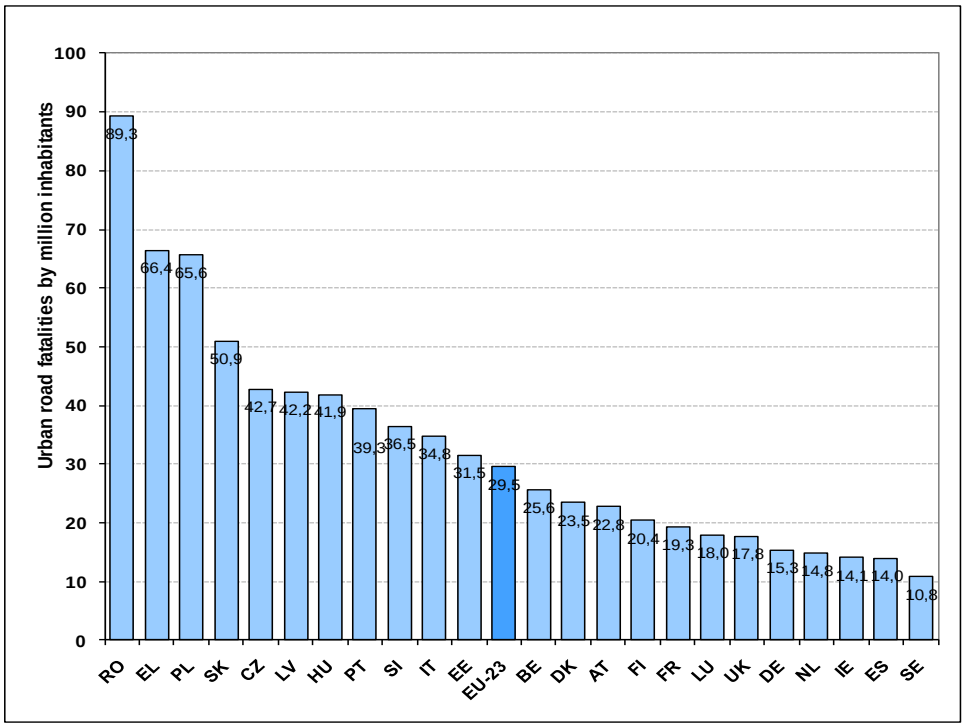
Table 2: Urban road fatalities per million inhabitants by country in EU-23, 2008

	Urban road fatalities	Population [million]	Urban road fatalities by million inhabitants
BE	274	10,7	25,6
CZ	444	10,4	42,7
DK	129	5,5	23,5
DE	1.261	82,2	15,3
EE	41	1,3	31,5
IE	62	4,4	14,1
EL	744	11,2	66,4
ES	634	45,3	14,0
FR	1.235	64,0	19,3
IT	2.076	59,6	34,8
LV	97	2,3	42,2
LU	9	0,5	18,0
HU	419	10,0	41,9
NL	243	16,4	14,8
AT	189	8,3	22,8
PL	2.499	38,1	65,6
PT	417	10,6	39,3
RO	1.919	21,5	89,3
SI	73	2,0	36,5
SK	280	5,4	51,9
FI	108	5,3	20,5
SE	99	9,2	10,8
UK	1.087	61,2	17,8
EU-23	14.339	485,4	29,5

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

The rate of urban road accident fatalities per million inhabitants is highest in Romania.

Figure 2: Urban road fatalities per million inhabitants by country in EU-23, 2008



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

The proportion of the total number of fatalities in 2008 that occurred within urban areas is shown for each country of the EU-23 in Table 3. This proportion varies from 20,5% in Spain to 63% in Romania. Greece, Poland, Portugal and Slovakia also show a high proportion of urban road fatalities (more than 45%).

From all the EU-23 countries, Spain has the lowest proportion of urban road fatalities with respect to the total number of fatalities.

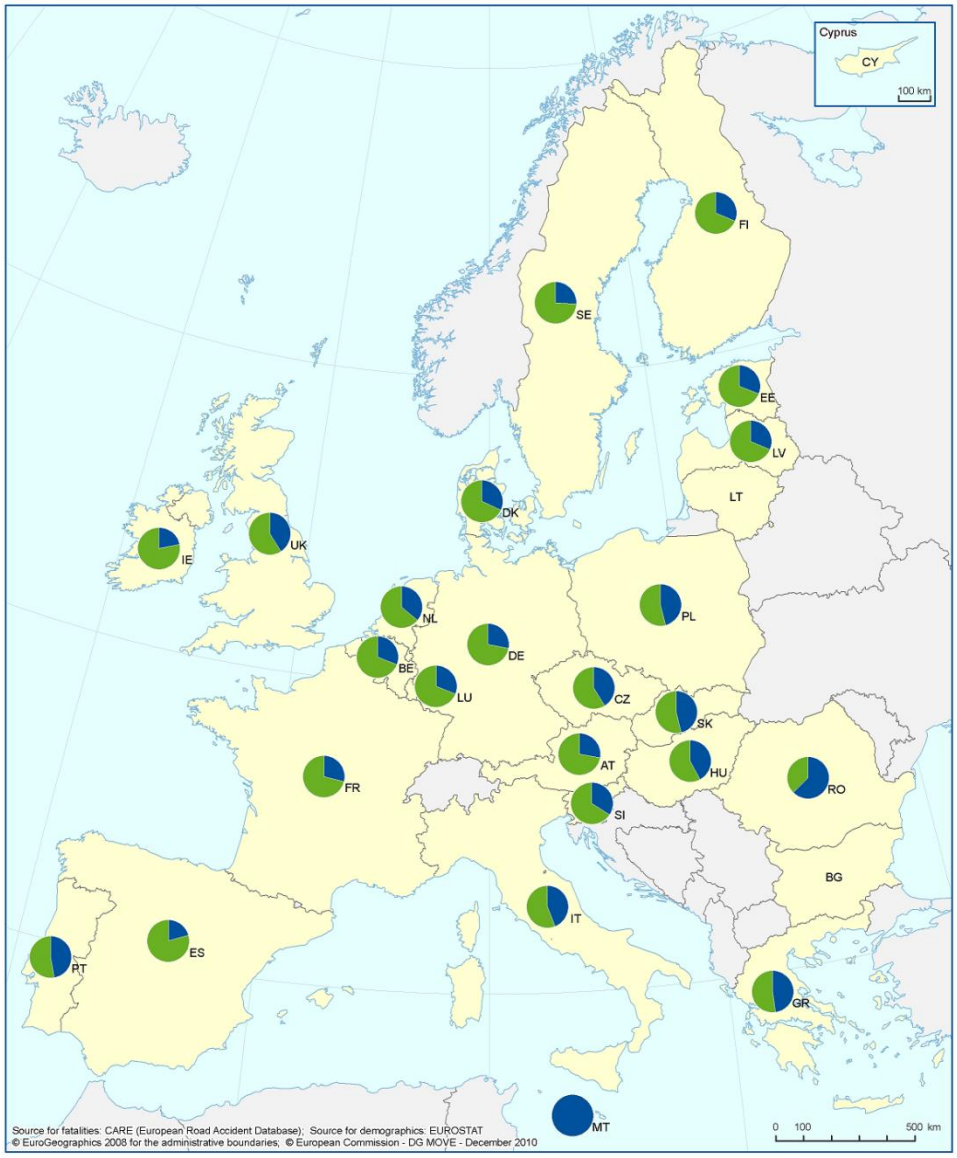
In Romania more than 62% of fatalities took place inside urban areas.

Table 3: Urban road fatalities as a percentage of total fatalities in EU-23, 2008

	Urban road fatalities	Total fatalities	Percentage
BE	274	944	29,0%
CZ	444	1.076	41,3%
DK	129	406	31,8%
DE	1.261	4.477	28,2%
EE	41	132	31,1%
IE	62	280	22,1%
EL	744	1.553	47,9%
ES	634	3.099	20,5%
FR	1.235	4.275	28,9%
IT	2.076	4.731	43,9%
LV	97	316	30,7%
LU	9	35	25,7%
HU	419	996	42,1%
NL	243	677	35,9%
AT	189	679	27,8%
PL	2.499	5.437	46,0%
PT	417	885	47,1%
RO	1.919	3.061	62,7%
SI	73	214	34,1%
SK	280	606	46,2%
FI	108	344	31,4%
SE	99	397	24,9%
UK	1.087	2.645	41,1%
EU-23	14.339	37.265	38,5%

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

Map 1: The proportion of fatalities Inside/outside urban areas in the EU-23, 2008

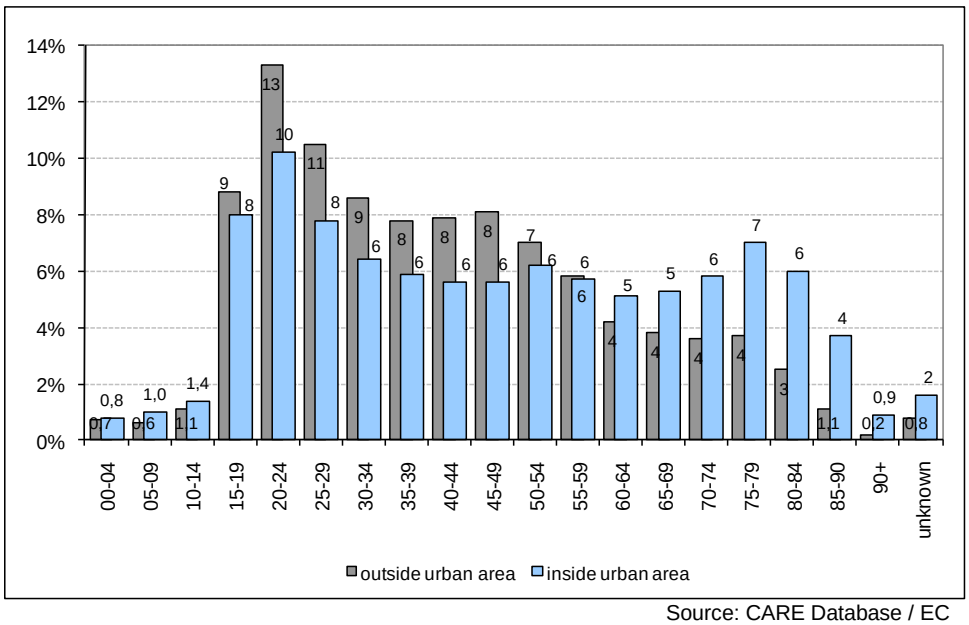


Age and gender

The percentage of the elderly fatalities in road accidents in 2008 is much higher inside urban areas than outside, shown in Figure 3. A possible explanation may be that trips made by the elderly are usually short and mostly done as pedestrians, and because they do not often travel outside urban areas. This trend is inverted for the age groups between 15 and 54 where the percentage of fatalities is higher outside urban areas.

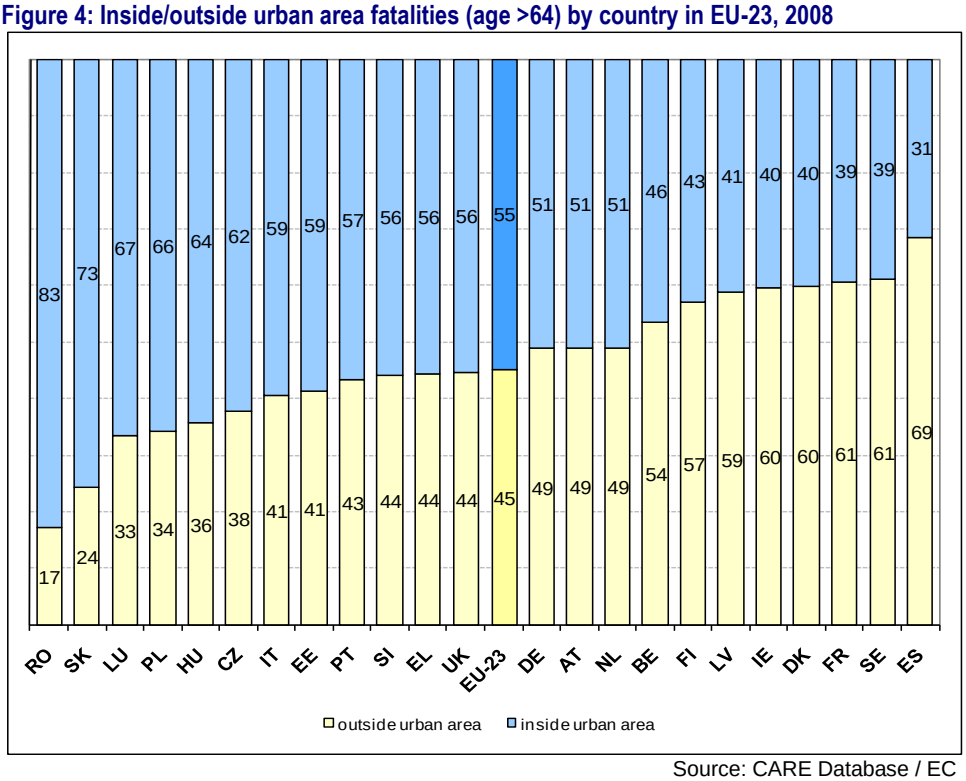
The proportions of elderly fatalities are much higher inside urban areas than outside.

Figure 3: Inside/outside urban area fatality percentage by age group in EU-23, 2008



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

Figure 4: Inside/outside urban area fatalities (age >64) by country in EU-23, 2008



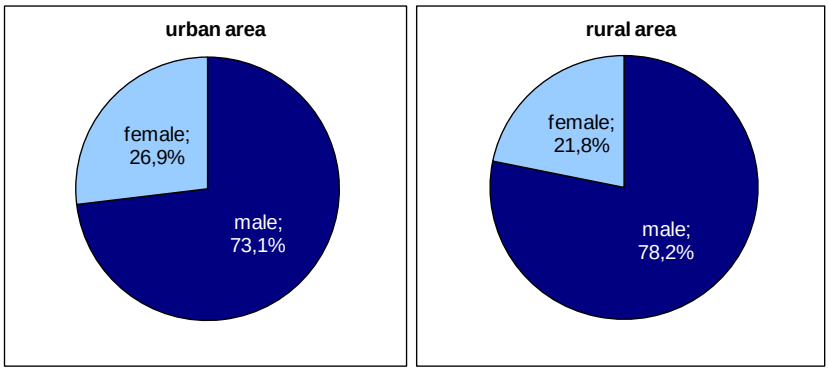
Source: CARE Database / EC
Date of query: November 2010

Under a third of the elderly fatalities in Spain in 2008 died in accidents inside urban areas.

In 2008 more than 60% of the elderly fatalities in Poland, Hungary and the Czech Republic took place inside urban areas. In Romania and Slovakia the figure is over 70%. In contrast, in Spain, under a third of the elderly died on roads inside urban areas (see Figure 4). Due to small numbers, Luxembourg has not been taken into account in the interpretation of the data.

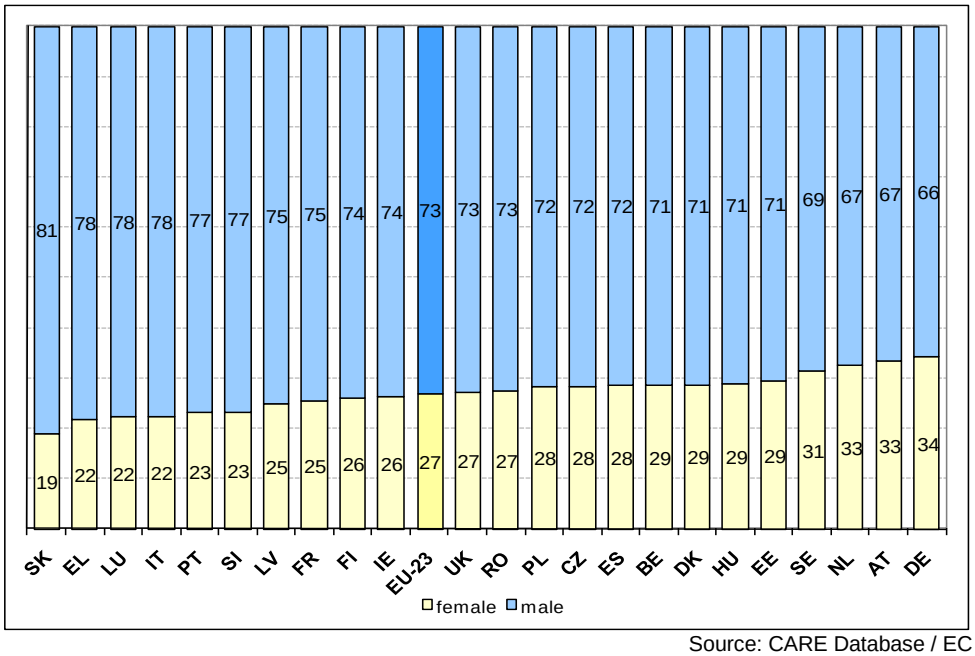
Figure 5 compares the proportion of fatalities by gender in urban and rural areas. A higher proportion of females died in urban areas compared to rural areas. Slovakia is the country with the lowest percentage of females that died on roads in urban areas (see Figure 6).

Figure 5: Share of gender for urban and rural fatalities in EU-23, 2008



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

Figure 6: Distribution of urban fatalities by gender in EU-23, 2008



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

Of the EU-23 countries, Germany has the highest percentage of urban fatalities that are female.

Type of road user

Table 4 shows the distribution of the fatalities by type of road user inside and outside urban areas in 2008 by country as well as the EU-23 average. Inside urban areas, 50% of the fatalities are drivers and 37% are pedestrians. Outside urban areas, these percentages are 67% for the drivers and under 10% for pedestrians.

Inside urban areas, 37% of the fatalities are pedestrians compared with under 10% outside urban areas.

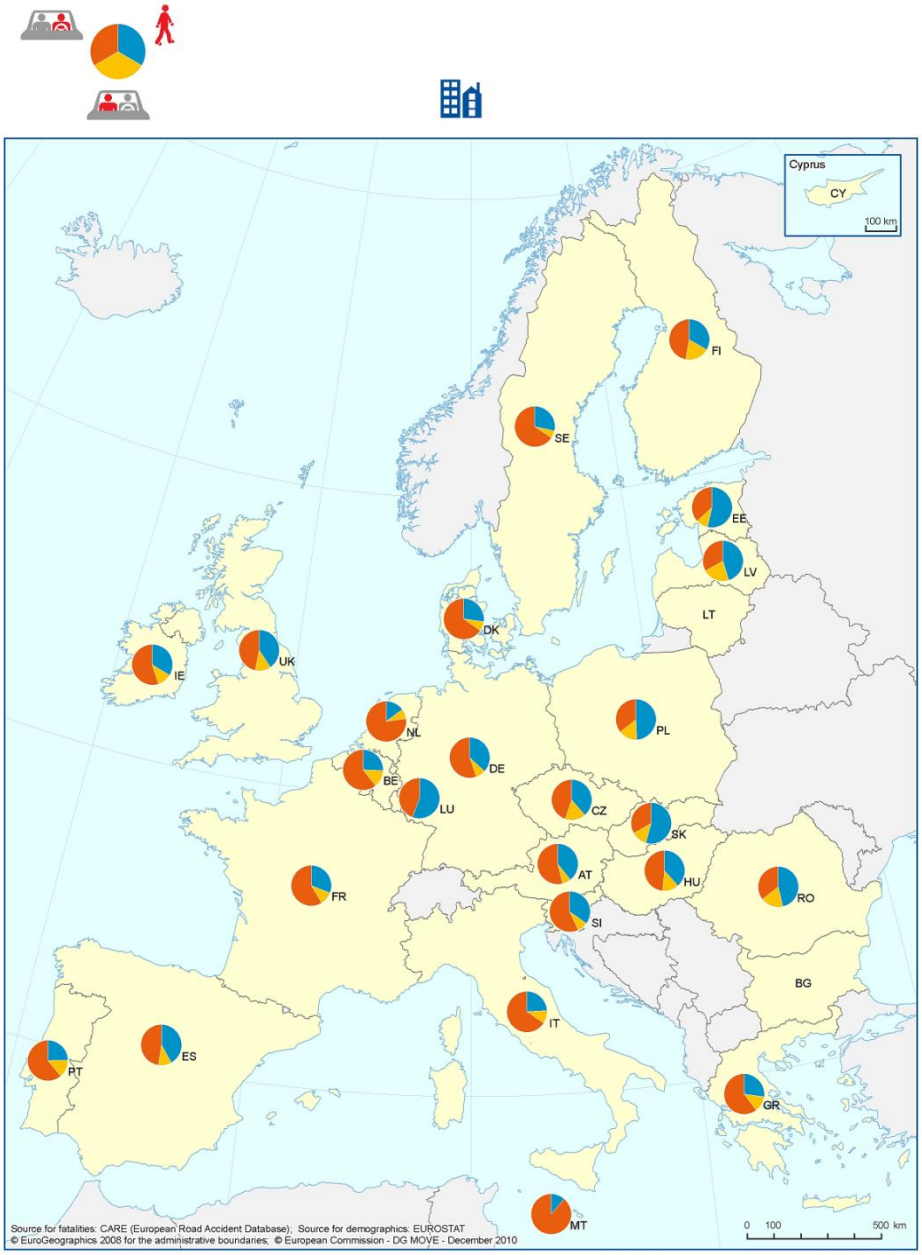
Table 4: Inside/outside urban area fatalities by type of road user and by country in EU-23, 2008

	Inside urban area			Outside urban area		
	Driver	Passenger	Pedestrian	Driver	Passenger	Pedestrian
BE	165	38	70	474	109	29
CZ	201	72	171	428	137	67
DK	84	10	35	204	50	23
DE	697	97	467	2422	608	186
EE	15	4	22	45	26	19
IE	34	7	21	137	53	28
EL	449	92	203	571	193	45
ES	303	65	266	1626	604	236
FR	722	132	381	2255	618	167
IT	1363	214	495	1934	565	153
LV	32	21	44	96	57	59
LU	4	0	5	18	1	1
HU	203	55	161	339	148	90
NL	187	20	36	341	70	20
AT	102	13	74	378	84	28
PL	896	369	1234	1476	814	648
PT	254	60	103	307	108	52
RO	683	346	890	543	422	175
SI	41	6	25	105	22	14
SK	93	35	152	189	85	52
FI	51	21	36	177	42	17
SE	65	6	28	211	55	16
UK	512	133	442	1082	327	149
EU-23	7156	1816	5361	15358	5198	2274
Share	49,9%	12,7%	37,4%	67,3%	23,5%	9,6%

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

Map 2 shows the urban fatalities by type of road user for the EU-23 countries. The Netherlands has the highest percentage of driver fatalities (77%) followed by Italy (66%), Sweden (66%) and Denmark (65%) compared with the EU-23 average (50%). Latvia (22%) and Finland (19%) have the highest percentage of passenger fatalities and Slovakia (54%) and Estonia (54%) have the highest percentage of pedestrians fatalities compared to the EU-23 average (13% and 37% respectively). In contrast, Slovakia (33%) and Latvia (33%) have the lowest proportions of driver fatalities, Sweden (6%) the lowest proportion of passenger fatalities and the Netherlands (15%) the lowest proportion of pedestrian fatalities.

Map 2: Urban fatalities by type of road user and by country in EU-23, 2008



In Slovakia, 54% of the urban road fatalities are pedestrians.

Junction

Table 5 shows that in the EU-23[3] countries, there are more fatalities at urban junctions than at non-urban junctions. This is caused because most of the junctions are inside urban areas. Germany, Ireland, Slovenia and Sweden have been removed from the table because the percentage of "unknown" is too high to be taken into account in the analysis.

Table 5: Fatalities in junction/no junction inside/outside urban areas by country in EU-23[3], 2008

	Inside urban area			Outside urban area		
	Junction	No junction	Unknown	Junction	No junction	Unknown
BE	83	191	0	84	529	0
CZ	135	307	2	103	529	0
DK	58	71	0	68	208	1
EE	13	27	1	25	64	2
EL	98	646	0	49	760	0
ES	232	402	0	345	2121	0
FR	270	965	0	205	2835	0
IT	760	1316	0	612	2043	0
LV	14	79	4	6	206	0
LU	4	5	0	2	18	0
HU	157	262	0	89	488	0
NL	122	121	0	105	326	0
AT	53	99	37	62	311	117
PL	565	1934	0	269	2669	0
PT	105	298	15	35	415	17
RO	218	1701	0	51	1091	0
SK	44	233	3	26	295	5
FI	32	75	1	40	196	0
UK	561	526	0	346	1212	0
EU-23[3]	3.524	9.258	63	2.522	16.316	142
Share	27,4%	72,1%	0,5%	13,3%	86,0%	0,7%

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

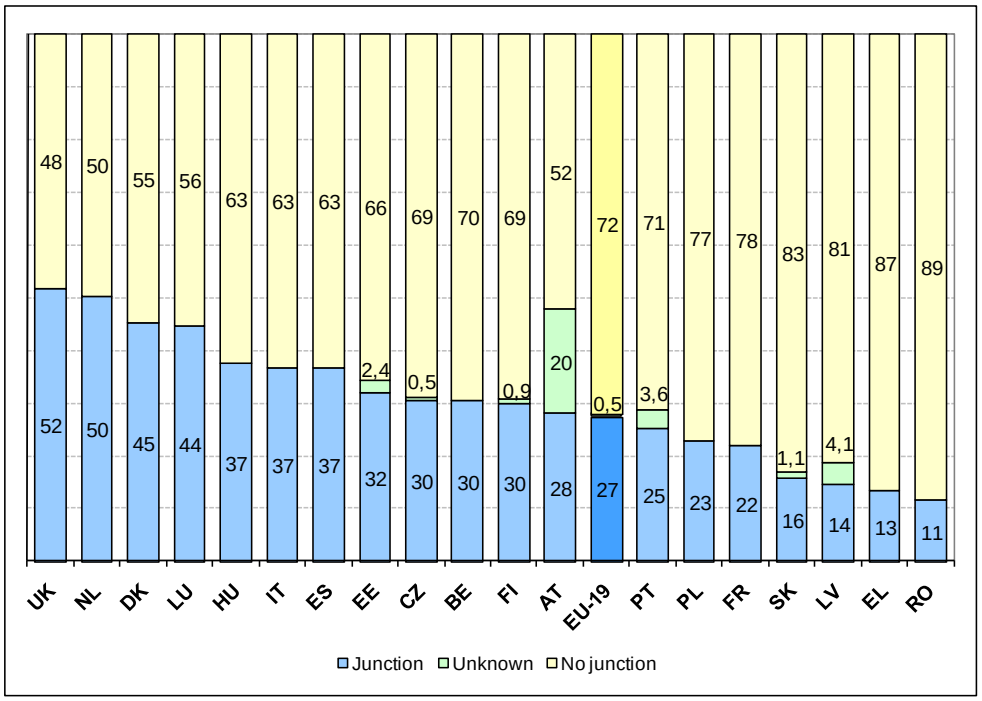
The proportion of fatalities at junctions inside urban areas is double the proportion of fatalities at junctions outside urban areas.

Inside urban areas, Romania has the lowest percentage of junction fatalities (11%) followed by Greece (13%), Latvia (14%) and Slovakia (16%). In comparison, around a half of the fatalities in the United Kingdom and the Netherlands occur at junctions (see Figure 7).

[3] EU-23 countries except Germany, Ireland, Slovenia and Sweden, because the percentage of "unknown" they have is too high to be taken into account in the analysis.

In the United Kingdom and in the Netherlands, around a half of urban fatalities occur at junctions.

Figure 7: Urban fatalities in junction/no junction by country in EU-19, 2008



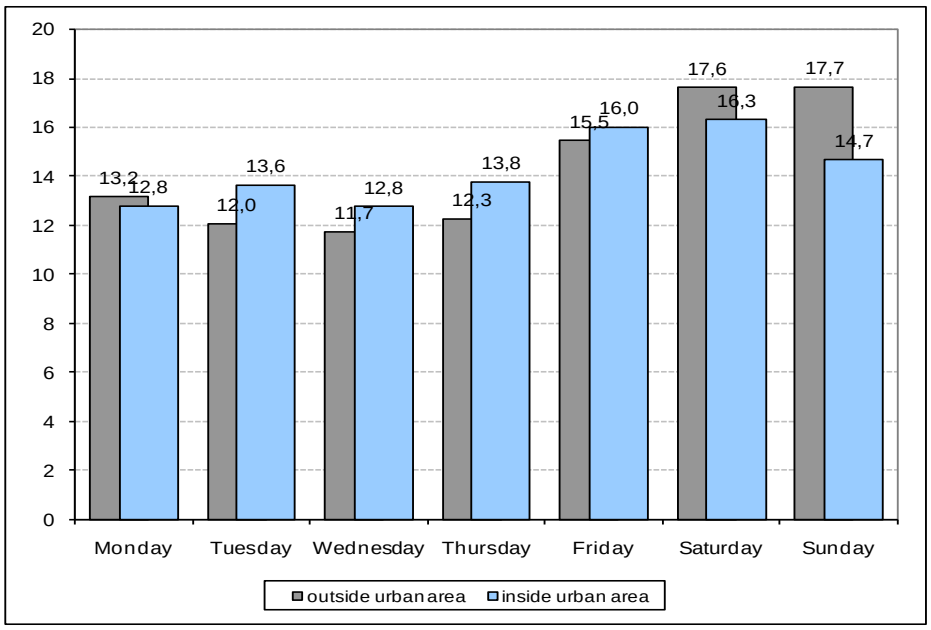
Source: CARE Database / EC
Date of query: November 2010

Day and Month

The distribution of the fatalities inside and outside urban areas by day of the week is shown for the EU-23 countries in Figure 8. On working days (except Mondays), the percentage of fatalities is slightly higher inside urban areas than outside urban areas, while the reverse is true at the weekend.

During the weekends, the percentage of fatalities outside urban areas increases.

Figure 8: Distribution of fatalities by day of week inside and outside urban areas in the EU-23, 2008

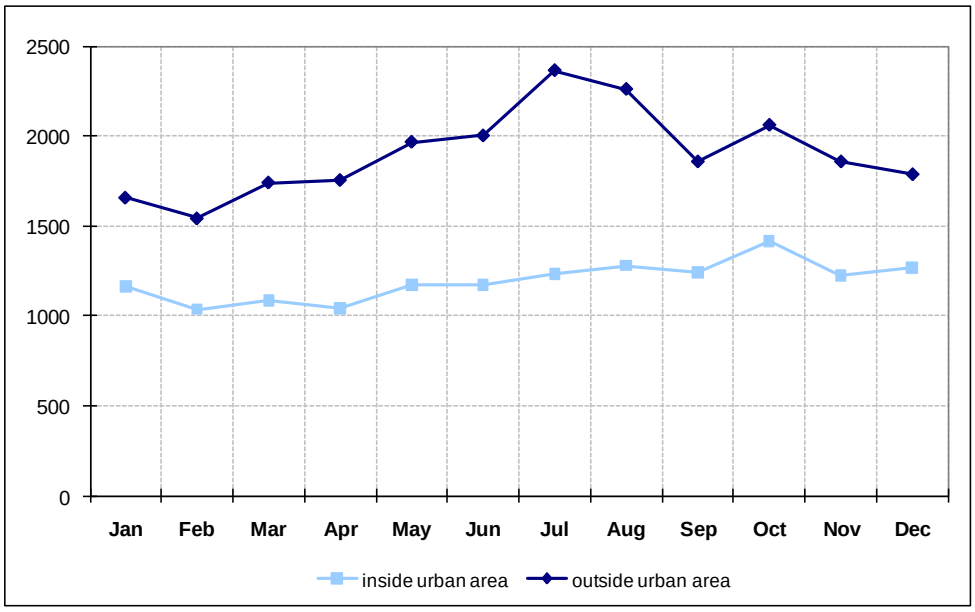


Source: CARE Database / EC
Date of query: November 2010

Figure 9 shows a comparison of the numbers of fatalities per month inside and outside urban areas. The number of fatalities per month in 2008 has a similar pattern inside and outside urban areas (with the highest values outside urban areas), except during the summer months when the number of fatalities is higher outside urban areas. A possible reason could be that more people take holidays in the summer which increases traffic flows outside urban areas. Figure 9 also shows that the lowest number of fatalities in urban areas occurs in February and April, followed by March.

The number of fatalities outside urban areas peaks during summer time.

Figure 9: Inside/outside urban area fatalities by month in EU-23, 2008



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

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

Country abbreviations used and definition of EU-level

EU-19	
BE	Belgium
CZ	Czech Republic
DE	Germany
DK	Denmark
IE	Ireland
EL	Greece
ES	Spain
FR	France
IT	Italy
LU	Luxembourg
NL	Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
FI	Finland
SE	Sweden
UK	United Kingdom (GB+NI)

EU-23 = EU-19 +	
EE	Estonia
LV	Latvia
HU	Hungary
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.

Authors

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