

Traffic Safety Basic Facts 2010

The Elderly (Aged >64)

Due to their greater frailty, the elderly are more likely to be seriously injured in any given accident than younger people. In 2008, 7.486 elderly people were killed in road traffic accidents in the 23 Member States for which CARE are available, as shown in Table 1. This constitutes 20,1% of fatalities of all ages in 2008. Table 1 presents the annual data by country from 1999, with the totals for the 19 countries with CARE data available for most of the decade. This total is presented in Figure 1, it fell by 23% between 1999 and 2008.

Table 1: Number of elderly fatalities by country, 1999-2008¹

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
BE	233	238	264	210	240	201	186	193	170	149
CZ	219	243	241	211	231	247	202	173	201	186
DK	117	134	102	103	99	80	70	72	95	97
DE	-	1.311	1.283	1.236	1.329	1.201	1.162	1.154	1.153	1.066
EE	-	-	-	-	-	-	21	32	41	29
IE	71	44	47	60	53	61	56	66	58	47
EL	415	428	385	340	322	317	322	327	330	329
ES	910	849	867	835	817	746	719	671	604	544
FR	1.443	1.370	1.393	1.361	1.120	962	1.014	921	896	823
IT	1.391	1.437	1.369	1.461	1.379	1.293	1.199	1.220	1.105	1.100
LV	-	-	-	-	-	-	-	61	73	55
LU	7	10	7	5	6	14	8	3	7	4
HU	-	-	-	-	232	214	206	216	209	179
NL	242	235	222	213	221	199	188	209	181	174
AT	225	190	186	211	197	177	151	156	145	172
PL	-	-	910	976	885	965	931	888	945	962
PT	340	342	320	304	304	230	222	215	225	197
RO	396	406	417	458	417	483	491	504	617	570
SI	-	56	46	47	53	49	41	33	51	34
SK	-	-	-	-	-	-	77	95	97	72
FI	96	106	96	99	96	97	91	71	79	93
SE	173	154	147	139	118	139	104	95	105	102
UK	758	679	652	655	658	589	616	572	575	499
EU-19	9.312	9.142	8.955	8.924	8.546	8.050	7.773	7.543	7.542	7.149
Yearly reduction		1,8%	2,0%	0,3%	4,2%	5,8%	3,4%	3,0%	0,0%	5,2%

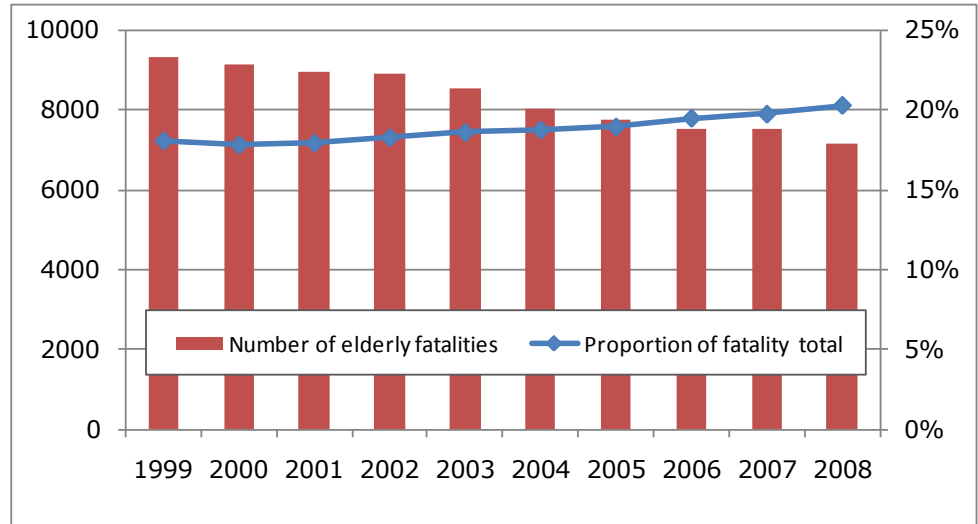
Source: CARE Database / EC
Date of query: October 2010

In 2008¹, almost 7.500 elderly people died in road traffic accidents in 23 European countries.

The number of elderly people who died fell by almost a quarter between 1999 and 2008.

¹ The country abbreviations and definition of EU level are shown on Page 16. Where a value 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.

Figure 1: Number of elderly fatalities and share of fatality total in EU-19, 1999-2008¹

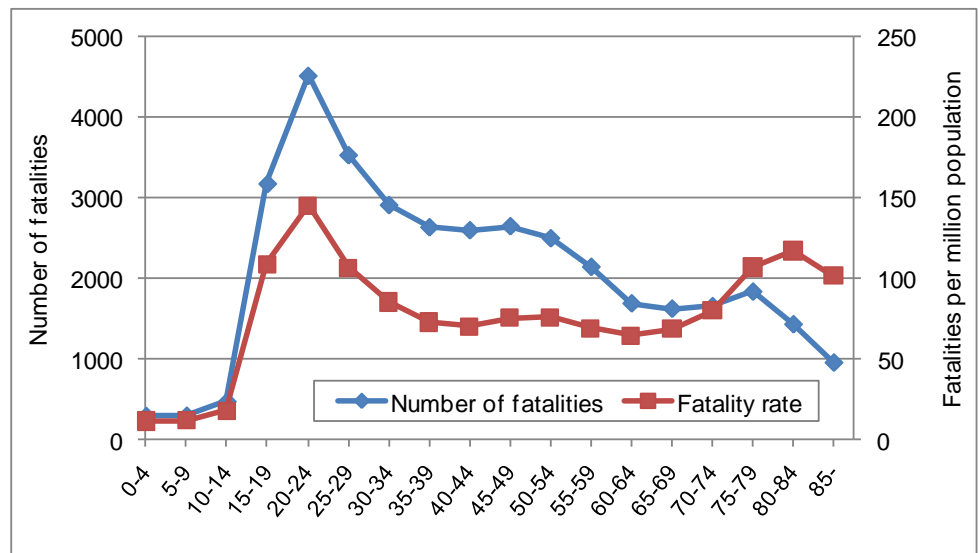


Source: CARE Database / EC
Date of query: October 2010

Although the number of elderly fatalities has decreased over the last decade, the total has fallen faster and the proportion of all fatalities who were elderly has tended to rise.

Figure 2 puts these figures for the elderly in a broader context. It shows the number of fatalities in 2008 in the EU-23 countries in 5-year age groups. The population of these age groups varies, so the figure also shows the number of fatalities per million population. The elderly suffered fewer fatalities than the younger adult groups, but their fatality rates were amongst the highest.

Figure 2: Number of fatalities and fatality rate in EU-23 by age group, 2008



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

By 2008, one fifth of road traffic fatalities was aged 65 or older.

The rate of road traffic fatalities begins to rise about the age of 65.

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

In most European countries, the elderly are at greater risk of being killed in a road accident than the overall population. Middle-aged people (age 45-64) are at a lower risk of being killed than the elderly.

Table 2 compares the fatality rates of elderly people and middle-aged people (45-64 years) with the fatality rate of the whole population. The ratios of elderly to middle-aged and of elderly to all fatalities clearly show that the risk of being killed in an accident is higher for the elderly than for the middle-aged and that the elderly have an above-average fatality risk in most of the EU-23 countries.

Table 2: Fatalities per million population for the middle-aged and elderly, by country, 2008

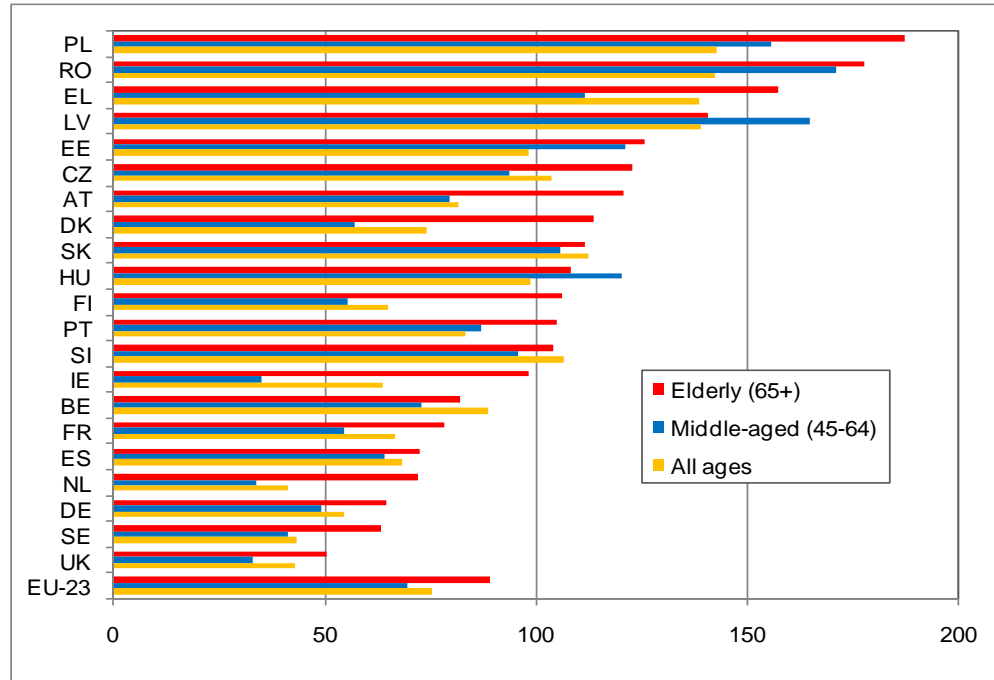
	Fatality rate			Comparisons	
	Middle-aged (45-64)	Elderly (65+)	All ages	Elderly Middle-aged	Elderly All ages
BE	73	82	88	1,12	0,93
CZ	94	123	104	1,31	1,19
DK	57	114	74	1,99	1,53
DE	49	65	54	1,31	1,19
EE	121	126	98	1,04	1,28
IE	35	98	64	2,80	1,54
EL	111	157	138	1,41	1,14
ES	64	72	68	1,13	1,06
FR	54	78	67	1,44	1,17
IT	63	92	79	1,45	1,16
LV	165	141	139	0,85	1,01
LU	91	59	72	0,65	0,81
HU	120	108	99	0,90	1,09
NL	34	72	41	2,14	1,75
AT	79	121	82	1,52	1,48
PL	156	187	143	1,21	1,31
PT	87	105	83	1,21	1,26
RO	171	178	142	1,04	1,25
SI	96	104	106	1,09	0,98
SK	106	111	112	1,05	0,99
FI	55	106	65	1,92	1,64
SE	41	63	43	1,53	1,47
UK	33	50	43	1,53	1,17
EU-23	69	89	75	1,29	1,18

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

Romania and Poland have the highest overall fatality rates, and they also have the highest rates for the elderly. The three sets of fatality rates are illustrated in Figure 3, with countries being sorted by the overall fatality rate for the elderly (Luxembourg is excluded because of the low number of fatalities).

- Main Figures
- Children (Aged < 15)
- Youngsters (Aged 15-17)
- Young People (Aged 18-24)
- The Elderly (Aged > 64)
- Pedestrians
- Cyclists
- Motorcycles & Mopeds
- Car occupants
- Heavy Goods Vehicles and Buses
- Motorways
- Junctions
- Urban areas
- Roads outside urban areas
- Seasonality
- Single vehicle accidents
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Figure 3: Fatalities per million population, 2008



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

Age and gender

Table 3 gives more details of the age groups and of the gender distribution of elderly fatalities, using three age ranges. Almost two thirds (62%) of elderly fatalities are men.

Table 3: Number of elderly fatalities by age group, gender and country, 2008

	Number by age			Number by gender		Total
	65-74	75-84	85+	male	female	
BE	68	61	20	95	54	149
CZ	98	69	19	108	78	186
DK	40	41	16	62	35	97
DE	456	482	128	624	442	1,066
EE	15	13	0	20	8	28
IE	20	22	4	27	19	46
EL	150	158	21	224	105	329
ES	237	245	60	351	192	543
FR	285	382	156	487	336	823
IT	487	467	146	784	316	1,100
LV	28	13	14	29	26	55
LU	2	2	0	3	1	4
HU	102	66	11	110	69	179
NL	67	87	20	101	73	174
AT	78	71	23	107	65	172
PL	451	402	109	542	420	962
PT	101	83	13	135	63	197
RO	289	233	48	343	227	570
SI	12	17	5	25	9	34
SK	39	27	6	49	23	72
FI	34	49	10	68	25	93
SE	41	42	19	62	40	102
UK	172	224	103	288	211	499
EU-23	3,273	3,257	951	4,643	2,837	7,480
Share	44%	44%	13%	62%	38%	

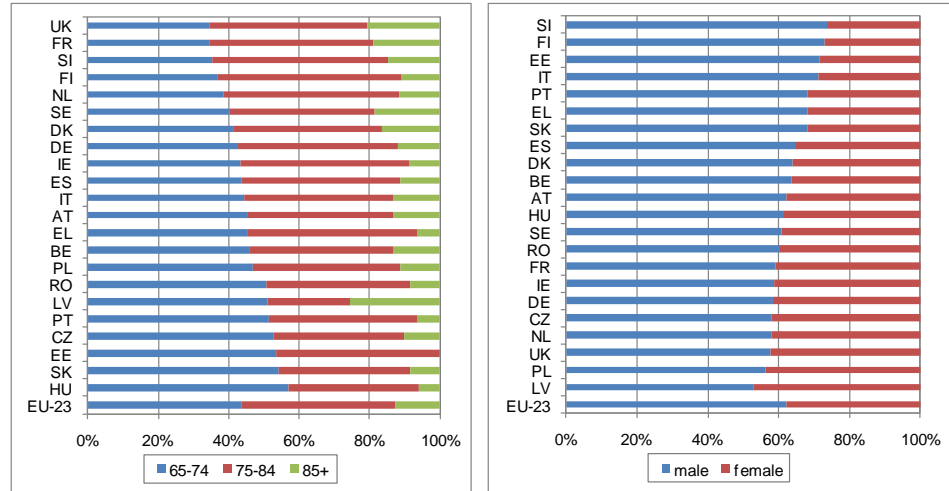
Source: CARE Database / EC
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Almost two thirds of the elderly people killed in road accidents are men.

- Main Figures
- Children (Aged < 15)
- Youngsters (Aged 15-17)
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- Pedestrians
- Cyclists
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- Junctions
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- Roads outside urban areas
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Women make up a higher proportion of fatalities among the elderly (38%) than within the whole population (24%). Figure 4 illustrates the results from Table 3 (Luxembourg is excluded because its low number of fatalities may mean that proportions are misleading). The highest proportions of female elderly fatalities occur in Latvia (47%) and Poland (44%). The highest proportions of elderly fatalities aged 65-74 occur in Hungary (57%) and Slovakia (54%).

Figure 4: Proportion of elderly fatalities by age group, gender and country, 2008



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

Table 4 calculates the rate of fatalities per million population for the three age groups in Table 3. The 75-84 age group has the highest fatality rate, averaged over the EU-23, while the 65-74 group has the lowest. These differences are probably influenced by the tendency for personal mobility to reduce with increasing age, and for frailty to increase. The table also shows that in most countries the fatality rate of elderly men is over twice the rate of elderly women.

The proportion of elderly people killed in road accidents who are at least 85 years old is highest in Latvia and the UK.

- Main Figures
- Children (Aged < 15)
- Youngsters (Aged 15-17)
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- The Elderly (Aged > 64)
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- Cyclists
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- Car occupants
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- Motorways
- Junctions
- Urban areas
- Roads outside urban areas
- Seasonality
- Single vehicle accidents
- Gender

Table 4: Fatality rates of the elderly by age group, gender and country, 2008

	Fatality rate by age			Fatality rate by gender		All elderly
	65-74	75-84	85+	Male	Female	
BE	75	87	95	125	51	82
CZ	117	125	152	180	85	123
DK	85	149	150	167	73	114
DE	48	92	76	90	46	65
EE	114	160	0	262	52	121
IE	75	139	76	127	72	96
EL	131	204	127	242	90	157
ES	63	87	66	110	44	72
FR	56	95	109	113	54	78
IT	78	108	102	157	45	92
LV	123	97	505	227	99	141
LU	56	80	0	106	25	59
HU	112	116	62	185	65	108
NL	51	105	73	97	53	72
AT	102	143	142	184	77	121
PL	159	213	264	280	131	187
PT	101	125	60	173	57	105
RO	152	210	252	263	120	178
SI	65	146	188	197	45	104
SK	105	119	118	203	57	111
FI	73	156	102	191	48	106
SE	51	75	79	88	44	63
UK	33	65	77	67	38	50
EU-23	74	111	102	135	58	90

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

The fatality rate for elderly men is more than twice the rate for elderly women.

Road user type

Table 5 shows the numbers of elderly fatalities by road user type. The percentages reflect the reduced mobility options and the higher frailty of elderly persons. 41% of elderly fatalities were pedestrians in the EU-23 countries. Among the larger countries, the percentage of elderly fatalities who were pedestrians is greatest in Romania (67%) and least in the Netherlands (13%). Conversely, the proportion of elderly fatalities who were car drivers ranged between 5% in Romania and 49% in Sweden. The results are illustrated in Figure 5 (sorted by the share of pedestrian fatalities, and excluding Luxembourg).

- Main Figures
- Children (Aged < 15)
- Youngsters (Aged 15-17)
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- Cyclists
- Motorcycles & Mopeds
- Car occupants
- Heavy Goods Vehicles and Buses
- Motorways
- Junctions
- Urban areas
- Roads outside urban areas
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- Single vehicle accidents
- Gender

Table 5: Number of elderly fatalities by road user type, 2008

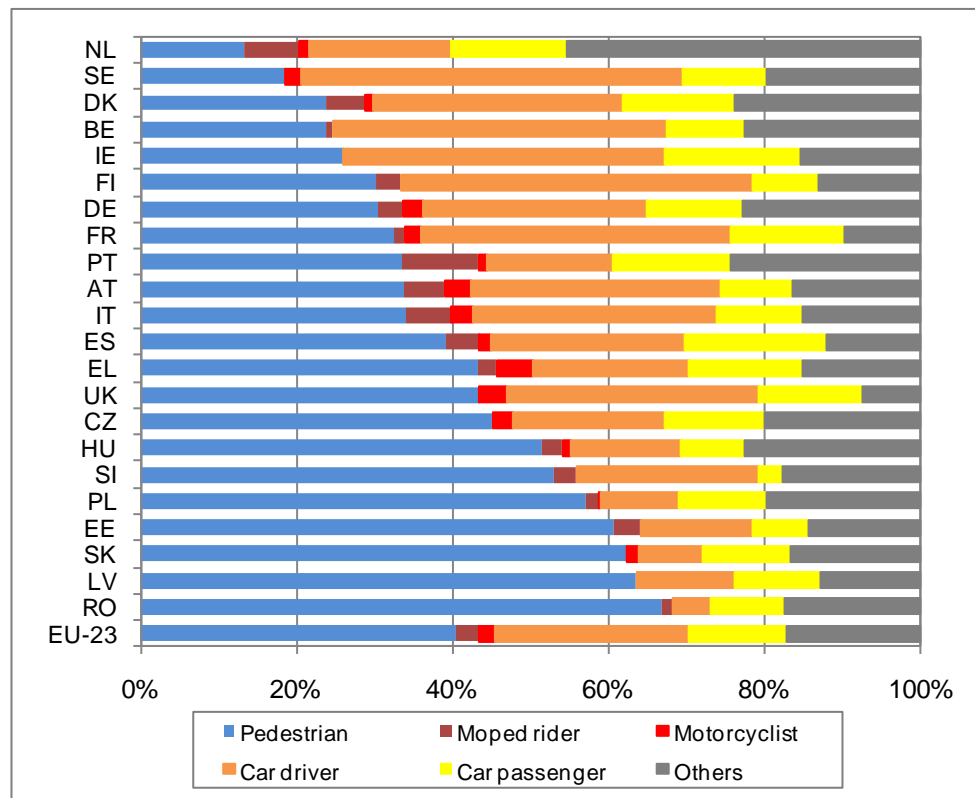
	Pedestrian	Moped rider	Motorcyclist	Car driver	Car passenger	Others	Total
BE	34	1	0	61	14	32	142
CZ	84	0	5	36	24	37	186
DK	23	5	1	31	14	23	97
DE	325	32	28	305	132	240	1.062
EE	17	1	0	4	2	4	28
IE	12	0	0	19	8	7	46
EL	142	8	15	66	48	49	328
ES	212	24	8	134	98	65	541
FR	268	11	18	326	120	80	823
IT	368	62	31	337	118	162	1.078
LV	35	0	0	7	6	7	55
LU	3	0	0	1	0	0	4
HU	92	5	2	25	15	40	179
NL	22	12	2	30	25	75	166
AT	58	9	6	55	16	28	172
PL	550	16	2	96	109	189	962
PT	66	19	2	32	30	48	197
RO	380	9	0	28	54	98	569
SI	18	1	0	8	1	6	34
SK	45	0	1	6	8	12	72
FI	28	3	0	42	8	12	93
SE	19	0	2	50	11	20	102
UK	217	0	17	162	66	37	499
EU-23	3.018	218	140	1.861	927	1.271	7.435
Share	41%	3%	2%	25%	12%	17%	100%

Excludes small number of fatalities with road user type unknown

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

About two fifths of elderly fatalities were pedestrians, and one quarter were car drivers.

Figure 5: Distribution of elderly fatalities by road user type, 2008



Excludes small number of fatalities with road user type unknown

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

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

About two fifths of pedestrian fatalities were elderly, compared with one seventh of car drivers.

Table 6 now shows the corresponding proportions of fatalities who were elderly so, for example, 34 of the 99 pedestrian fatalities in Belgium were elderly and $34/99=34\%$. Cases with less than 50 fatalities are excluded from Table 6 because percentages of relatively small totals may be misleading.

Table 6: Proportion of fatalities that are elderly, by road user type and country, 2008

	Pedestrian	Moped rider	Motor-cyclist	Car occupant	Others	Total
BE	34%		0%	16%	20%	16%
CZ	35%		4%	10%	26%	17%
DK	40%			23%	28%	24%
DE	50%	29%	4%	18%	35%	24%
EE				9%		22%
IE				17%		17%
EL	57%		4%	16%	30%	21%
ES	42%	13%	2%	16%	16%	18%
FR	49%	4%	2%	20%	20%	19%
IT	57%	21%	3%	22%	36%	23%
LV	33%			8%		18%
LU						
HU	37%		2%	9%	22%	18%
NL	39%	24%	3%	18%	39%	25%
AT	57%		7%	19%	30%	25%
PL	29%	18%	1%	8%	28%	18%
PT	43%	27%	2%	17%	26%	22%
RO	36%	6%	0%	6%	23%	19%
SI				11%		18%
SK	22%			5%	17%	12%
FI	53%			25%		27%
SE			4%	26%	36%	26%
UK	37%		3%	17%	16%	19%
EU-23	40%	15%	3%	15%	27%	20%

Percentages only for cells with at least 50 fatalities of all ages

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

Type of road

Table 7 and Figure 6 show the distribution of elderly fatalities by type of road, and compare it with the distribution for the middle-aged (countries with more than a quarter of cases “unknown” are excluded from the figure). By comparison with the middle-aged fatalities, there are fewer elderly fatalities on motorways and on rural roads, but more on urban roads. This is probably a result of the relatively high proportion of elderly fatalities who are pedestrians (most pedestrian fatalities occur on urban roads). The national distributions vary greatly between the member states.

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

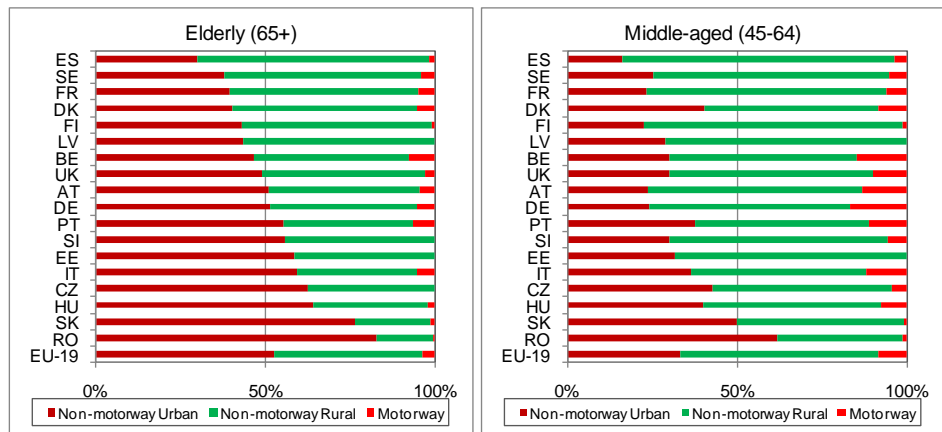
Table 7: Distribution of middle-aged and elderly fatalities by road type and country, 2008

	Elderly (65+)				Middle-aged (45-64)			
	Motorway	Non-motorway Rural	Non-motorway Urban	Unknown	Motorway	Non-motorway Rural	Non-motorway Urban	Unknown
BE	11	65	66	7	29	108	59	9
CZ	0	70	116	0	12	141	114	0
DK	5	53	39	0	7	43	34	0
DE	58	462	546	0	180	644	262	0
EE	0	12	17	0	0	28	13	0
IE	1	0	0	46	0	0	0	34
EL	12	33	12	272	26	46	12	234
ES	10	370	164	0	26	565	113	0
FR	39	459	325	0	54	626	208	0
IT	58	388	654	0	118	503	355	0
LV	0	30	23	2	0	67	27	1
LU	1	1	2	0	4	4	3	0
HU	4	60	115	0	24	170	129	0
NL	0	0	0	174	0	0	0	151
AT	8	76	88	0	22	108	40	0
PL	1	303	338	320	13	777	440	361
PT	13	75	109	0	26	120	88	0
RO	3	95	472	0	11	334	557	0
SI	0	15	19	0	3	34	16	0
SK	1	16	55	0	1	73	74	0
FI	1	52	40	0	1	64	19	0
SE	4	55	36	7	5	69	25	0
UK	12	193	198	96	44	269	135	60
EU-23	242	2.884	3.434	924	606	4.793	2.722	850
Share	3%	39%	46%	12%	7%	53%	30%	9%

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

Compared with the middle-aged, relatively many elderly were killed on urban roads, and relatively few on rural roads and motorways.

Figure 6: Distribution of middle-aged and elderly fatalities by road type, 2008



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

Day of week and time of day

Table 8 shows the distribution of elderly fatalities by time of day, dividing the day into eight 3-hour periods (DE is excluded as hour is unknown for all fatalities). More than 80% of all elderly fatalities occur between 8am and 8pm. While the number of elderly fatalities decreases after 8pm in many countries, it stays high during evening hours in southern countries (Greece and Spain), as well as Ireland.

Table 8: Proportion of elderly fatalities by time of day and country, 2008

	00:00-03:59	04:00-07:59	08:00-11:59	12:00-15:59	16:00-19:59	20:00-23:59	Total
BE	5%	2%	28%	32%	26%	7%	149
CZ	1%	13%	24%	29%	27%	6%	184
DK	3%	3%	27%	19%	39%	9%	97
EE	3%	7%	34%	10%	38%	7%	29
IE	4%	0%	19%	40%	19%	17%	47
EL	4%	6%	25%	24%	27%	14%	329
ES	2%	5%	24%	26%	29%	15%	544
FR	3%	4%	30%	26%	31%	6%	823
IT	2%	5%	29%	23%	31%	10%	1.087
LV	2%	2%	26%	17%	37%	17%	54
LU	0%	0%	25%	0%	50%	25%	4
HU	1%	13%	32%	18%	31%	3%	179
NL	1%	2%	23%	41%	25%	9%	174
AT	1%	6%	34%	21%	28%	11%	172
PL	2%	10%	25%	21%	34%	8%	962
PT	1%	4%	21%	26%	36%	12%	197
RO	2%	10%	25%	23%	28%	12%	570
SI	0%	9%	29%	15%	38%	9%	34
SK	0%	18%	24%	22%	25%	11%	72
FI	2%	4%	28%	33%	28%	4%	93
SE	3%	3%	21%	46%	25%	3%	102
UK	2%	4%	23%	35%	29%	8%	499
EU-22	2%	6%	26%	25%	30%	9%	6.418

Excludes small number of fatalities in CZ, IT and LV with hour unknown. DE is excluded as hour is unknown for all fatalities.

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

Table 9 presents the corresponding analysis by day of week.

Table 9: Proportion of elderly fatalities by day of week and country, 2008

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
BE	15%	12%	13%	21%	14%	13%	11%	149
CZ	15%	12%	13%	15%	20%	11%	14%	186
DK	15%	18%	18%	12%	18%	9%	10%	97
DE	17%	14%	14%	17%	17%	12%	9%	1.066
EE	14%	17%	10%	24%	7%	24%	3%	29
IE	19%	21%	4%	17%	15%	9%	15%	47
EL	18%	13%	9%	9%	16%	20%	15%	329
ES	14%	15%	16%	13%	17%	12%	14%	544
FR	13%	17%	15%	15%	16%	12%	12%	823
IT	13%	17%	15%	14%	15%	15%	11%	1.100
LV	18%	13%	11%	16%	24%	13%	5%	55
LU	25%	0%	25%	0%	50%	0%	0%	4
HU	9%	21%	17%	16%	15%	16%	6%	179
NL	17%	13%	16%	16%	19%	12%	8%	174
AT	10%	15%	12%	14%	20%	15%	13%	172
PL	14%	15%	13%	15%	16%	13%	13%	962
PT	15%	16%	14%	16%	14%	9%	16%	197
RO	15%	15%	10%	15%	16%	16%	13%	570
SI	12%	12%	12%	21%	26%	12%	6%	34
SK	11%	13%	14%	21%	19%	15%	7%	72
FI	20%	16%	11%	17%	14%	14%	8%	93
SE	14%	14%	24%	19%	13%	12%	6%	102
UK	12%	13%	18%	16%	20%	11%	10%	499
EU-23	14%	15%	14%	15%	17%	13%	11%	7.484

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

More than 80% of all elderly fatalities occur between 8am and 8pm.

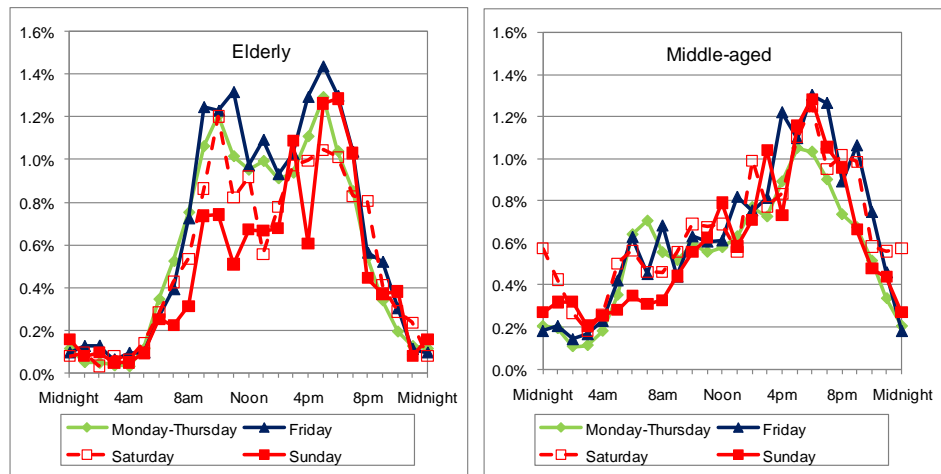
The greatest number of elderly fatalities are killed on Fridays, and the lowest on Sundays.

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

Figure 7 investigates whether the EU-22 distribution of fatalities by time of day varies with day of week for the elderly and for the middle-aged. The weekday distributions (Monday-Thursday) are similar, so have been combined in the figure. There are 168 hours per week, so on average 0,60% of fatalities occur in each hour through the week.

There are clear differences between middle-aged and elderly fatality distributions and limited but significant differences by day of week. Relatively few elderly people are killed in road accidents at night. The middle-aged distributions have clear daily peaks in the late afternoon, especially at the weekend. The elderly distributions have peaks slightly earlier in the afternoon, with additional peaks before noon.

Figure 7: Middle-aged and elderly fatalities by day of week and time of day in EU-22, 2008



Monday-Thursday values are the averages of the daily values from Monday to Thursday

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

The peak of the fatality distribution occurs earlier in the afternoon for the elderly than for middle-aged, with a secondary peak before noon.

Seasonality

Table 10 shows the distribution of elderly fatalities in each quarter of the year. Although the number of elderly fatalities peaks in the fourth quarter (October to December) in most countries, as in the EU-23, the peak in Spain and Greece occurs in the third quarter (July to September).

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

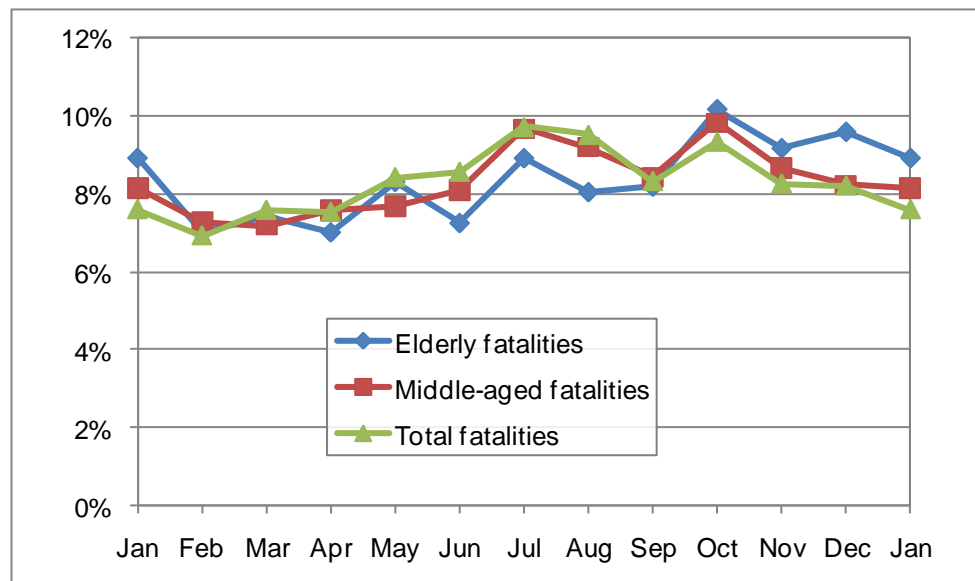
Table 10: Proportion of elderly fatalities by quarter of year and country, 2008

	January - March	April - June	July - September	October - December	Total
BE	23%	20%	26%	31%	149
CZ	26%	24%	24%	26%	186
DK	24%	19%	28%	30%	97
DE	23%	26%	25%	26%	1.066
EE	24%	24%	21%	31%	29
IE	21%	32%	26%	21%	47
EL	18%	23%	36%	23%	329
ES	24%	23%	28%	26%	544
FR	26%	21%	24%	29%	823
IT	26%	24%	24%	27%	1.100
LV	33%	15%	27%	25%	55
LU	25%	0%	0%	75%	4
HU	22%	23%	21%	34%	179
NL	21%	26%	26%	26%	174
AT	19%	27%	29%	24%	172
PL	22%	21%	22%	35%	962
PT	23%	18%	27%	32%	197
RO	18%	23%	26%	33%	570
SI	26%	21%	26%	26%	34
SK	31%	21%	21%	28%	72
FI	22%	23%	25%	31%	93
SE	21%	25%	28%	25%	102
UK	28%	18%	23%	31%	499
EU-23	23%	23%	25%	29%	7.484

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

Figure 8 compares the distribution by month of elderly and middle-aged fatalities with the overall distribution. For all three, the lowest number of fatalities occurs between February and April. The number of elderly fatalities rises relatively slowly to a peak in October, then declines relatively slowly.

Figure 8: Distribution of middle-aged, elderly and total fatalities by month in EU-23, 2008



There are relatively few elderly fatalities in the spring and summer, and relatively many during the winter.

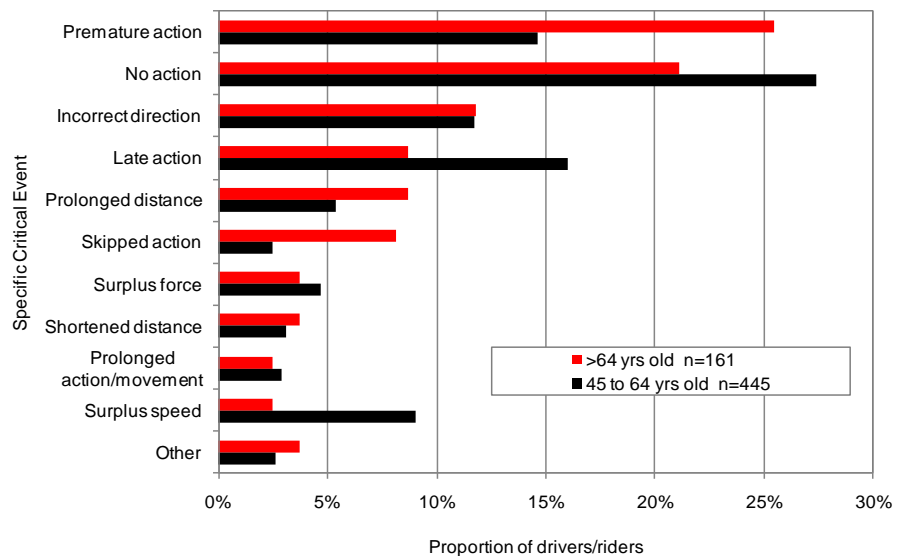
- Main Figures
- Children (Aged < 15)
- Youngsters (Aged 15-17)
- Young People Aged 18-24
- The Elderly (Aged > 64)
- Pedestrians
- Cyclists
- Motorcycles & Mopeds
- Car occupants
- Heavy Goods Vehicles and Buses
- Motorways
- Junctions
- Urban areas
- Roads outside urban areas
- Seasonality
- Single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

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^{2 3}. 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.

These data have been analysed to compare the causation recorded for elderly and middle-aged drivers and riders. Of the accidents in the database, 15% (155) involve an elderly driver or rider (aged > 64 years old). Males account for 79% of this group and 75% are drivers of passenger cars, followed by 15% who were bicycle riders. Figure 9 compares the distribution of specific critical events for elderly drivers/riders against the distribution for the middle-aged group (45 to 64 year olds).

Figure 9: Distribution of specific critical events – elderly and middle-aged drivers/riders



N=606

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

Specific critical events under the general category of ‘timing’, no action, premature action and late action, are important for both the elderly and middle-aged groups. 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. Premature action is recorded more frequently for the elderly group, whilst no action and late action are more frequent for

² SafetyNet D5.5, Glossary of Data Variables for Fatal and Accident Causation Databases
³ SafetyNet D5.8, In-Depth Accident Causation Database and Analysis Report

Specific critical events relating to ‘timing’ are recorded for 55% of elderly drivers and riders in the sample.

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

12% of the links between causes are observed to be between 'faulty diagnosis' and 'information failure'.

the middle-aged group. 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. Looking at other differences, prolonged distance and skipped action are more prevalent in the elderly group, whilst surplus (excess) speed is less prevalent. Prolonged distance is an action taken too far, such as entering a junction across a give way line, and skipped action is missing a part of the driving task, such as not looking before changing lane. Examples of incorrect direction, the third most frequent specific critical event for the elderly group, are making a manoeuvre in the wrong direction, turning left instead of right and going off the road instead of following the lane.

Table 11 gives the most frequent links between causes for elderly drivers/riders in the dataset. For this group there are 166 such links.

Table 11: Ten most frequent links between causes – elderly drivers/riders

Links between causes	Frequency
Faulty diagnosis - Information failure (between driver and traffic environment or driver and vehicle)	20
Observation missed - Permanent obstruction to view	17
Observation missed - Temporary obstruction to view	14
Observation missed - Faulty diagnosis	13
Observation missed - Distraction	7
Observation missed - Inattention	7
Observation missed - Inadequate plan	6
Faulty diagnosis - Communication failure	6
Faulty diagnosis - False observation	5
Faulty diagnosis - Cognitive bias	5
Others	66
Total	166

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

Faulty diagnosis is an incorrect or incomplete understanding of road conditions or another road user's actions. It is linked to information failure (for example, a driver 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). For this group it is also linked, although in lower numbers, to false observation (for example, incorrectly recognising a green traffic light as being red) and cognitive bias (taking in and processing information but with incorrect cognitive interpretation, for example, reading a green light for the next set of traffic lights further on). The causes leading to observation missed fall into two groups, physical 'obstruction to view' type causes (for example, parked cars at a junction) and human factors (for example, missing a red light due to distraction or inattention).

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

Disclaimer

The information in this document is provided as it is and no guarantee or warranty is given that the information is fit for any particular purpose. Therefore, the reader uses the information at their own risk and liability.

For more information

Further statistical information about fatalities is available from the CARE database at the Directorate General for Mobility and Transport of the European Commission, 28 Rue de Mot, B -1040 Brussels.

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

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

Main Figures

Children
(Aged < 15)

Youngsters
(Aged 15-17)

Young People
(Aged 18-24)

The Elderly
(Aged > 64)

Pedestrians

Cyclists

Motorcycles
& 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		EU-23= EU-19 +	
BE	Belgium	EE	Estonia
CZ	Czech Republic	HU	Hungary
DK	Denmark	LV	Latvia
DE	Germany	SK	Slovakia
IE	Ireland		
EL	Greece		
ES	Spain		
FR	France		
IT	Italy		
LU	Luxembourg		
NL	Netherlands		
AT	Austria		
PT	Portugal		
PL	Poland		
RO	Romania		
SI	Slovenia		
FI	Finland		
SE	Sweden		
UK	United Kingdom (GB+NI)		

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