



Traffic Safety Basic Facts 2006

Car Occupants

54% of all road fatalities in the EU-14 countries were car occupants.

In this fact sheet car drivers as well as car passengers are discussed. In case no distinction is made between drivers and passengers, the word occupants will be used.

Car occupant fatalities made up 54% of the total number of road accident fatalities in 2004¹, despite reductions achieved. In 2004¹, 9.829 car drivers and 4.630 car passengers were killed in traffic accidents in 14 European Union countries. This is 10,0% less than the 10.924 car driver fatalities reported in 2003² in the same countries. There was a reduction of 24,5% during 1995-2004 for the same countries. For passengers the reduction is 10,1% with respect to 2003² (5.151 car passenger reported) and 34,3% during 1995-2004.

Table 1 and Table 2 present the annual data by country since 1995, available from the CARE database. The numbers of car driver and passenger fatalities are very low in Luxembourg, so conclusions based on these low numbers should be considered with care.

Table 1: The number of car driver fatalities by country, 1995-2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	688	637	642	670	644	697	662	592	536	491
DK	190	174	194	193	186	146	168	170	167	135
EL	549	520	537	567	536	571	508	505	527	506
ES	1.873	1.802	1.827	2.047	1.981	2.032	1.971	1.919	2.044	1.688
FR	3.899	3.802	3.748	4.054	3.875	3.797	3.819	3.528	2.720	2.445
IE	115	146	131	157	157	173	139	133	110	-
IT	2.646	2.402	2.483	2.401	2.577	2.427	2.444	2.359	2.048	1.867
LU	40	37	34	36	38	40	36	38	-	-
NL	465	414	398	401	378	362	351	341	345	-
AT	515	437	486	395	421	406	417	373	371	368
PT	504	560	580	508	490	407	381	397	393	319
FI	155	158	163	157	179	159	181	183	150	151
SE	263	228	254	258	262	285	261	271	253	201
UK	1.124	1.198	1.217	1.176	1.138	1.169	1.217	1.199	1.222	1.164
EU-14	13.027	12.515	12.693	13.020	12.862	12.670	12.555	12.008	10.924 ²	9.829 ¹
Yearly change	-	-3,9%	1,4%	2,6%	-1,2%	-1,5%	-0,9%	-4,4%	-9,0%	-10,0%

A reduction of 25% in the number of car driver fatalities is observed during the last decade in the EU-14 countries.

Source: CARE Database / EC
Date of query: October 2006

¹ Using data of 2004 for all countries except LU (2002), NL and IE (2003).

² Using data of 2003 for alle countries except LU (2002).





Table 2: The number of car passenger fatalities by country, 1995-2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
BE	240	216	202	266	207	225	237	187	154	132
DK	100	92	65	70	85	89	73	76	69	51
EL	365	381	359	344	350	351	295	288	234	269
ES	1.327	1.199	1.165	1.237	1.212	1.256	1.172	1.185	1.167	1.003
FR	1.850	1.764	1.675	1.777	1.650	1.564	1.515	1.373	1.057	924
IE	78	72	89	96	79	89	92	69	64	-
IT	1.378	1.255	1.242	1.115	1.219	1.244	1.254	1.207	1.083	957
LU	12	14	12	7	11	14	15	14	-	-
NL	192	161	147	149	161	151	126	138	137	-
AT	193	187	180	170	194	143	153	151	153	112
PT	447	468	420	414	331	325	255	314	237	218
FI	76	69	84	75	72	65	81	84	67	70
SE	108	101	94	69	110	108	112	108	96	87
UK	685	679	642	603	625	601	599	633	619	593
EU-14	7.050	6.658	6.376	6.391	6.305	6.225	5.979	5.826	5.151 ²	4.630 ¹
Yearly change	-	-5,6%	-4,2%	0,2%	-1,3%	-1,3%	-4,0%	-2,6%	-11,6%	-10,1%

Source: CARE Database / EC
Date of query: October 2006

In order to allow for the differing size of these countries, Table 3 presents the car occupant fatality rates for 2004¹. The car occupant fatality rate of a country is defined as the number of car occupant fatalities per million inhabitants in that country. The rate varies between 30 per million in the United Kingdom and the Netherlands to 115 in Luxembourg (although the latter rate may give a misleading impression of the level of safety in Luxembourg because of the relatively large volume of foreign traffic in this small country).

Table 3: Car occupant fatality rates per country, 2004

	Drivers	Passengers	Occupants
BE	47,2	12,7	59,9
DK	25,0	9,4	34,5
EL	45,8	24,4	70,2
ES	39,9	23,7	63,6
FR	39,4	14,9	54,3
IE*	27,3	15,9	43,2
IT	32,3	16,5	48,8
LU**	84,1	31,0	115,1
NL*	21,2	8,4	29,7
AT	45,2	13,8	59,0
PT	30,5	20,8	51,3
FI	28,9	13,4	42,3
SE	22,4	9,7	32,1
UK	19,5	9,9	29,4
EU-14	32,5	15,3	47,8

* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006
Source of population data: EUROSTAT

A reduction of 34% in the number of car passenger fatalities is observed during the last decade in the EU-14 countries.

The rates of car drivers and passengers killed per million inhabitants are lowest in the United Kingdom and the Netherlands.





Table 4 presents the number of car occupant fatalities as a percentage of the total number of traffic fatalities in each country. One quarter of Portuguese killed in road accidents were car drivers. In Luxembourg, Belgium, France, Austria and Sweden this percentage is much higher.

Table 4: Car occupant fatalities as percentages of the total number of traffic fatalities by country, 2004

	Drivers	Passengers	All occupants
BE	42,3%	11,4%	53,6%
DK	36,6%	13,8%	50,4%
EL	30,3%	16,1%	46,4%
ES	35,6%	21,1%	56,8%
FR	44,2%	16,7%	60,9%
IE*	32,6%	19,0%	51,6%
IT	33,2%	17,0%	50,2%
LU**	61,3%	22,6%	83,9%
NL*	33,6%	13,3%	47,0%
AT	41,9%	12,8%	54,7%
PT	24,7%	16,8%	41,5%
FI	40,3%	18,7%	58,9%
SE	41,9%	18,1%	60,0%
UK	34,6%	17,6%	52,2%
EU-14	36,5%	17,2%	53,7%

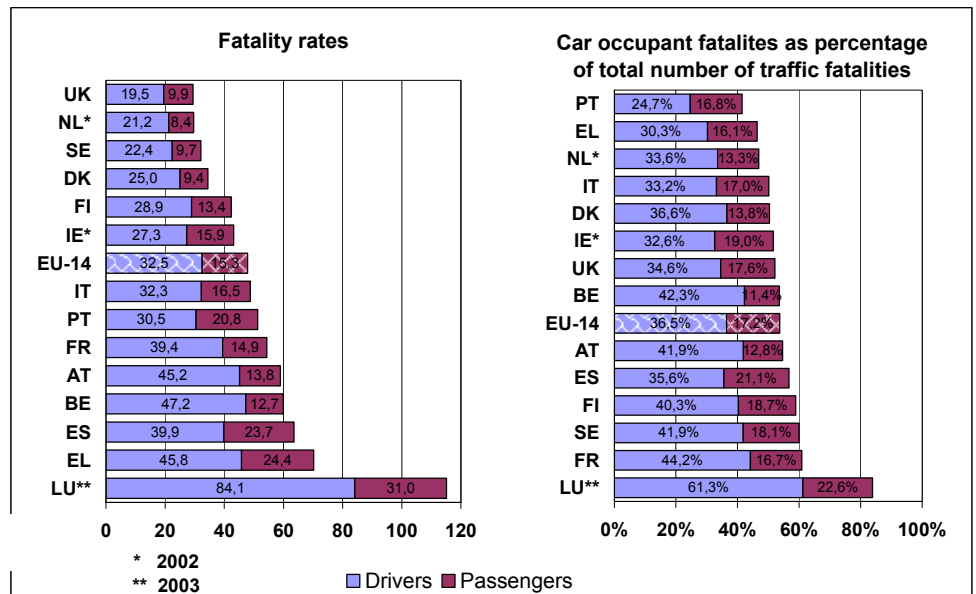
* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

Twice as many car drivers are killed in traffic accidents than car passengers.

The data from Table 3 and Table 4 are illustrated in Figure 1.

Figure 1: Car occupant fatalities per 1.000.000 inhabitants and as a percentage of the total number of traffic fatalities by country, 2004



* Data from 2003
** Data from 2002

Source: CARE Database / EC, EUROSTAT
Date of query: October 2006





Age and Gender of fatalities

Table 5 and Table 6 present the percentage of car driver and passenger fatalities per age group and gender. It can be derived from Table 5 that the proportion of all killed drivers who were female varies between 9% in Greece to 23% in France, Finland and the United Kingdom. The proportion of female car passengers varies between 29% in Luxembourg to 50% in Spain.

Table 5: Percentage of car driver fatalities by age and gender, 2004

Age group	15-24		25-39		40-59		60+		Unknown
	female	male	female	male	female	male	female	male	
BE	3,3	25,1	6,7	25,3	4,3	20,0	3,1	12,2	0,2
DK	3,7	21,5	5,2	22,2	6,7	18,5	6,7	15,6	0,0
EL	2,0	18,2	4,2	30,7	3,0	27,3	0,4	14,3	0,0
ES	2,4	16,9	6,1	31,9	4,7	22,8	0,9	13,4	0,9
FR	4,7	20,6	6,0	24,4	7,0	17,2	5,5	14,3	0,2
IE*	4,5	23,6	4,5	25,5	3,6	18,2	7,3	8,2	4,5
IT	2,4	15,8	5,8	26,8	3,5	19,6	2,1	22,1	2,0
LU**	2,6	10,5	7,9	44,7	2,6	26,3	2,6	2,6	0,0
NL*	4,1	22,6	4,6	27,5	4,6	19,7	3,5	13,3	0,0
AT	7,1	22,8	6,5	25,3	3,5	17,4	2,4	14,9	0,0
PT	2,5	16,8	5,0	34,3	2,9	22,2	1,1	14,3	0,9
FI	5,3	23,8	4,0	15,9	9,3	17,2	4,0	20,5	0,0
SE	3,0	17,5	2,5	21,0	7,0	18,5	3,0	27,5	0,0
UK	5,3	24,9	5,9	21,6	5,8	15,1	6,2	14,9	0,3
EU-14	3,7	19,7	5,7	26,5	5,1	19,4	3,4	15,8	0,7

* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

The share of females in killed drivers is lowest in Greece and highest in France, Finland and the United Kingdom

The distributions of driver fatalities over the age groups also vary between countries. Luxembourg has a high proportion of 25-39 year old car drivers and Sweden of drivers of 60 years and older. Low proportions are found in Luxembourg, Greece and Spain for 65+ car drivers, in Luxembourg for 15-24 old car drivers and in Finland and Sweden in the age group 25-39.



Table 6: Percentage of car passenger fatalities by age and gender, 2004

Age group	0-14		15-24		25-39		40-59		60+		Unknown
	fem.	male	fem.	male	fem.	male	fem.	male	fem.	male	
BE	6,1	1,5	11,4	25,0	10,6	16,7	8,3	6,1	9,8	3,8	0,8
DK	7,8	5,9	13,7	19,6	5,9	17,6	3,9	3,9	19,6	2,0	0,0
EL	3,3	2,6	10,8	18,6	13,0	14,1	11,5	8,2	12,3	5,2	0,4
ES	3,5	3,7	10,8	18,0	9,4	12,9	11,5	5,9	15,0	5,8	3,5
FR	5,3	5,4	11,8	25,9	4,7	12,4	7,3	5,0	15,9	6,3	0,1
IE*	6,3	3,1	17,2	26,6	4,7	15,6	4,7	3,1	10,9	1,6	6,3
IT	3,2	3,0	8,5	22,3	7,9	11,6	7,9	5,2	14,6	5,5	10,1
LU**	0,0	14,3	14,3	42,9	7,1	14,3	7,1	0,0	0,0	0,0	0,0
NL*	5,1	8,0	18,2	22,6	1,5	12,4	4,4	4,4	14,6	5,1	3,6
AT	4,5	2,7	9,8	24,1	8,9	5,4	8,9	12,5	13,4	8,9	0,9
PT	4,7	2,6	10,5	17,8	6,3	12,5	11,5	13,1	14,6	4,2	2,3
FI	2,9	8,6	11,4	25,7	1,4	5,7	10,0	10,0	20,0	4,3	0,0
SE	0,0	9,2	6,9	18,4	5,7	10,3	8,0	5,7	27,6	8,0	0,0
UK	2,9	4,4	15,2	33,9	6,4	11,1	4,7	2,9	14,3	3,9	0,3
EU-14	3,9	4,1	11,3	23,3	7,3	12,2	8,4	5,8	14,9	5,4	3,3

* Data from 2003

** Data from 2002

Source: CARE Database / EC

Date of query: October 2006

A relatively high share of fatalities is found for older car passengers (60+) in Sweden. Low proportions are found in Greece for 0-14 year old passengers, in Finland for 25-39, in Luxembourg and the United Kingdom for 40-59 and in Luxembourg for 60+ aged passengers.

Type of road

The CARE data show whether accidents occurred on motorways and, for non-motorway accidents, whether on urban or rural roads. Table 7 shows the number of car occupant fatalities by road and by area type.

Table 7: The number of car occupant fatalities by road type and area type, 2004

	Inside urban area	Outside urban area		Total
		Motorway	Non motorway	
BE	121	94	407	622
DK	30	19	137	186
EL	217	71	164	452
ES	226	201	2.264	2.691
FR	536	208	2.625	3.369
IE*	28	6	140	174
IT	785	438	1.601	2.824
LU**	15		25	40
NL*	78	108	297	483
AT	68	83	329	480
PT	164	74	299	537
FI	28	13	6	47
SE	41	26	215	282
UK	459	97	1.119	1.675
EU-14	2.796	1.438	9.628	13.862
%	20,2%	10,4%	69,5%	

* Data from 2003

** Data from 2002

Source: CARE Database / EC

Date of query: October 2006

The share of females in killed passengers is highest in Spain

The majority of car occupant fatalities occur outside urban areas on non-motorways.

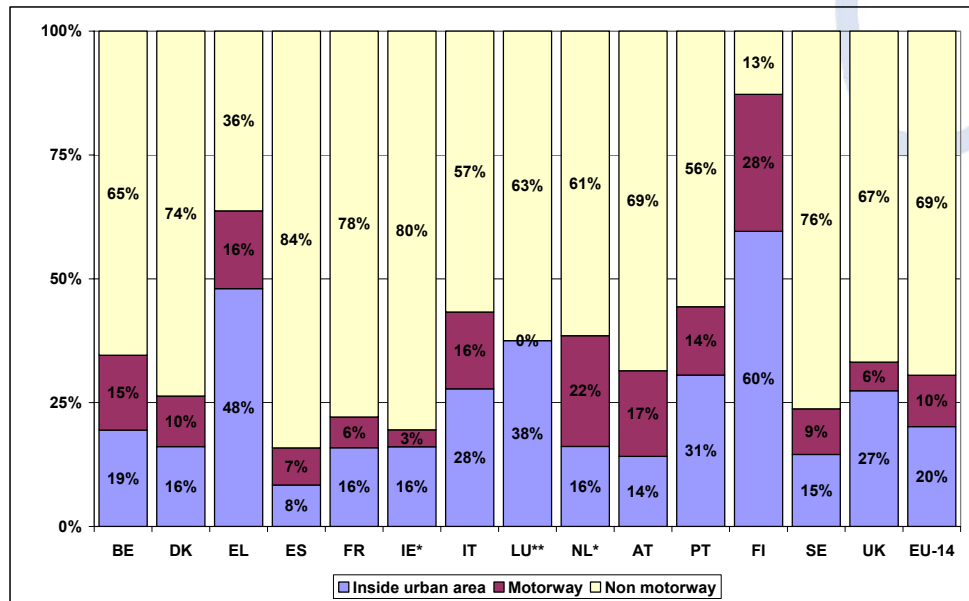


Main Figures
Children
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Bicycles
Motorcycles & Mopeds
Car Occupants
Heavy Goods Vehicles & Buses
Motorways
Junctions



The data from Table 7 are illustrated below.

Figure 2: The percentage of car occupant fatalities by road and area type in 2004



* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

Time of day and day of the week

The CARE database contains the time of day and day of the week for each accident. Table 8 divides the day into six equal segments of four hours to show how car occupant fatalities are distributed through the day. The number of car occupant fatalities occurring between midnight and 4am is relatively high in Luxembourg and Belgium, but fatalities are distributed more uniformly in Italy.

Table 8: The number of car occupant fatalities by time of day, 2004

	midnight – 4am	4am – 8am	8am - noon	noon – 4pm	4pm – 8pm	8pm - midnight
BE	127	128	69	73	113	113
DK	26	19	21	36	51	33
EL	112	165	95	138	148	117
ES	315	462	413	458	595	448
FR	395	549	532	598	731	563
IE*	35	23	13	23	40	35
IT	532	477	383	399	560	449
LU**	12	8	3	11	10	8
NL*	64	73	71	95	100	80
AT	60	112	58	87	88	75
PT	91	78	74	103	101	90
FI	27	38	26	54	47	29
SE	48	36	41	74	46	43
UK	283	215	224	302	346	387
EU-14	2.127	2.382	2.023	2.451	2.977	2.471
%	14,7%	16,5%	14,0%	16,9%	20,6%	17,1%

* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

The number of car occupant fatalities varies most by time of the day in Ireland and Luxembourg, but least in Italy.





Table 9 shows the number of car occupant fatalities by day of the week.

Table 9: The number of car occupant fatalities by day of week, 2004

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
BE	74	71	59	68	86	145	120
DK	25	27	22	27	21	41	23
EL	109	77	82	80	111	143	173
ES	325	310	298	314	422	467	555
FR	414	357	387	407	542	668	593
IE*	27	16	15	19	22	31	44
IT	327	301	270	344	393	564	625
LU**	7	3	8	6	9	15	4
NL*	68	50	50	64	71	97	83
AT	55	70	61	62	71	87	74
PT	75	62	57	50	71	109	113
FI	45	27	24	30	31	42	22
SE	40	35	40	40	42	46	45
UK	213	206	200	212	294	335	297
EU-14	1.804	1.612	1.573	1.723	2.186	2.790	2.771
%	12,5%	11,1%	10,9%	11,9%	15,1%	19,3%	19,2%

* Data from 2003
** Data from 2002

Source: CARE Database / EC
Date of query: October 2006

The proportion of car occupant fatalities occurring at the weekend is highest in Belgium and Ireland.

All countries have more fatalities per day at the weekend than on weekdays, and the weekend peak is more pronounced in Belgium and Ireland.

Table 10 shows the proportion of car occupant fatalities by time of day and day of the week for all 14 countries together in 2004¹. If the fatalities would be distributed equally over time of the day and day of the week, you may expect $100/84 = 1,19\%$ in each cell. Cells with 30% higher or lower values have been coloured. Weekend nights appear to have more fatalities than expected, as is also the case for the evening peak in traffic.

Table 10: Percentage of car occupant fatalities by day and hour, EU-14, 2004

	Mon	Tue	Wed	Th	Fri	Sat	Sun	Total
0 - 2	1,0%	0,6%	0,6%	0,8%	1,0%	1,9%	1,7%	7,5%
2 - 4	0,8%	0,4%	0,5%	0,5%	0,8%	2,0%	2,2%	7,2%
4 - 6	0,6%	0,6%	0,6%	0,7%	0,9%	2,1%	2,4%	7,8%
6 - 8	1,0%	0,9%	0,9%	0,9%	1,2%	1,8%	2,1%	8,7%
8 - 10	1,0%	0,9%	0,9%	0,9%	1,2%	1,2%	1,2%	7,3%
10 - 12	0,9%	1,0%	0,9%	1,1%	1,0%	1,1%	0,9%	6,8%
12 - 14	1,1%	0,9%	1,1%	0,8%	1,3%	1,2%	1,1%	7,4%
14 - 16	1,4%	1,2%	1,3%	1,4%	1,4%	1,5%	1,4%	9,6%
16 - 18	1,5%	1,2%	1,3%	1,4%	1,8%	1,8%	1,7%	10,7%
18 - 20	1,2%	1,4%	1,2%	1,2%	1,5%	1,7%	1,9%	10,0%
20 - 22	1,2%	1,0%	0,8%	1,1%	1,6%	1,5%	1,5%	8,7%
22 - 24	0,9%	1,0%	0,9%	1,2%	1,6%	1,6%	1,3%	8,5%
Total	12,5%	11,1%	10,9%	11,9%	15,1%	19,3%	19,1%	100,0%

>1,55 %
<0,92 %

Source: CARE Database / EC
Date of query: October 2006

During the weekend and during the evening peak in traffic, the number of fatalities is highest.





Month of year

Table 11 shows the number of car occupant fatalities for each month in 2004.

Table 11: The number of car occupant fatalities by month, 2004

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
BE	57	43	50	50	46	54	67	51	42	53	53	57	623
DK	16	17	14	12	17	13	16	13	9	10	26	23	186
EL	62	68	59	60	69	74	70	70	63	62	49	69	775
ES	215	205	203	220	219	235	262	268	184	265	181	233	2.691
FR	297	239	227	240	291	267	328	305	282	334	244	314	3.369
IE*	9	10	17	10	19	22	20	12	9	17	16	13	174
IT	247	203	180	227	250	214	277	257	199	228	276	266	2.824
LU**	1	5	1	3	3	5	6	6	6	6	5	5	52
NL*	56	39	37	39	31	33	47	45	25	45	50	36	483
AT	38	27	29	42	37	51	33	57	32	48	51	35	480
PT	50	39	30	47	47	36	47	70	36	60	34	41	537
FI	17	12	11	26	31	19	12	13	28	25	13	14	221
SE*	18	20	20	19	18	36	30	30	22	32	16	27	288
UK*	135	155	127	140	144	138	120	144	123	166	167	198	1.757
Drivers	871	765	711	746	816	817	870	813	728	939	821	931	9.829
Pass.	348	317	294	389	405	381	464	528	333	412	359	400	4.630
EU-14	1.219	1.082	1.005	1.135	1.221	1.198	1.334	1.341	1.061	1.352	1.181	1.331	14.460
%	8,4%	7,5%	7,0%	7,8%	8,4%	8,3%	9,2%	9,3%	7,3%	9,3%	8,2%	9,2%	

* Data from 2003

** Data from 2002

Source: CARE Database / EC

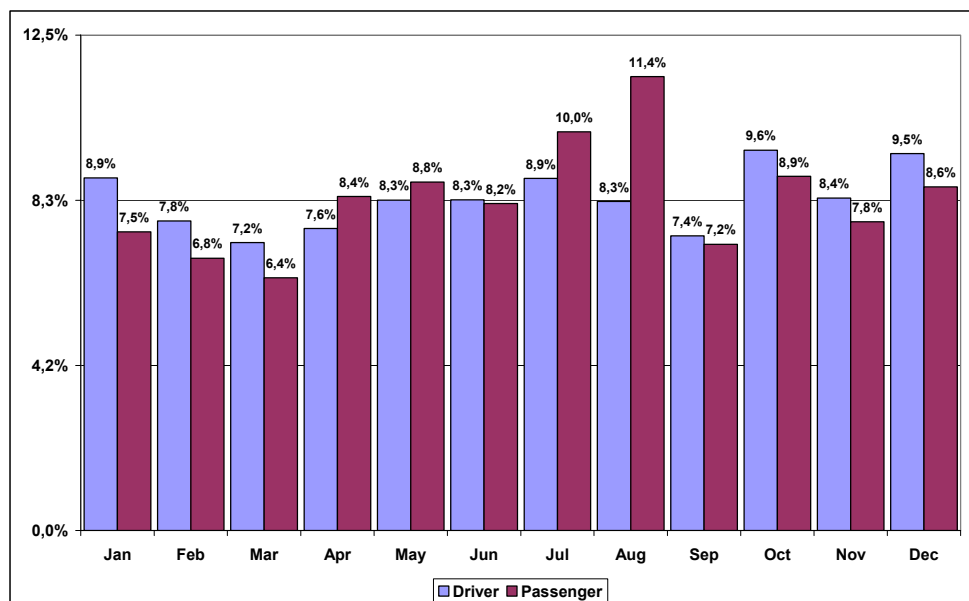
Date of query: October 2006

The number of car occupant fatalities is lowest in March and highest in August and October.

The proportion of car passenger fatalities is highest during the summer holidays.

For car drivers and passengers there is no obvious seasonal pattern, except that during the summer months – July and August – the number of passenger fatalities is relatively large.

Figure 3: Car occupant fatalities by month, EU-14 2004¹



Source: CARE Database / EC

Date of query: October 2006



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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, readers use 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 (see

ec.europa.eu/transport/roadsafety/road_safety_observatory/care_reports_en.htm).

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

- Main Figures
- Children (Aged <16)
- Young People (Aged 16-24)
- The Elderly (Aged >64)
- Pedestrians
- Bicycles
- Motorcycles and Mopeds
- Car Occupants
- Heavy Goods Vehicles & Buses
- Motorways
- Junctions

Detailed data on traffic accidents are published annually by the European Commission in the Annual Statistical Report. This includes country abbreviations and a glossary of definitions on all variables used.

All these reports and more information on the Integrated Project SafetyNet, co-financed by the European Commission, Directorate-General Energy and Transport are also available at the SafetyNet website: www.erso.eu.

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