



Traffic Safety Basic Facts 2005

Children (Aged <16)

In this Basic Fact Sheet, 'children' are defined as those who are aged below 16 years. (The age at which people are allowed to drive a motor vehicle varies across the EU, but 14 and 15 year olds appear, on the whole, to fit into this group rather than with 'young people'.) Children tend to be thought of as innocent victims of road accidents more often than is the case for adults.

The number of children killed in road traffic accidents fell from 2.067 in 1994 to 1.223 in 2003¹, a fall of more than 40%. Table 1 presents the number of children killed in each of the EU-14 countries for each year for which the data are available over the last ten years, with the totals presented in Figure 1¹.

Table 1: Fatalities aged <16 per country, 1994-2003

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
BE	76	93	63	61	99	72	67	71	-	-
DK	27	35	45	28	22	43	30	29	16	25
EL	101	84	85	84	74	66	54	56	51	59
ES	292	269	236	223	260	258	228	208	189	189
FR	505	498	469	493	455	421	414	347	288	244
IE	33	31	31	34	40	26	24	33	23	17
IT	284	247	240	217	189	-	-	-	-	-
LU	2	1	2	3	2	2	3	6	3	-
NL	104	100	86	79	56	82	66	61	55	71
AT	65	64	57	43	48	51	35	34	33	45
PT	172	163	139	139	152	96	89	65	72	63
FI	44	39	40	36	24	33	23	24	20	24
SE	39	35	29	32	33	44	24	25	27	-
UK	323	289	285	268	224	239	204	229	192	-
EU-14	2.067	1.948	1.807	1.740	1.678	1.621	1.449	1.376	1.226	1.223

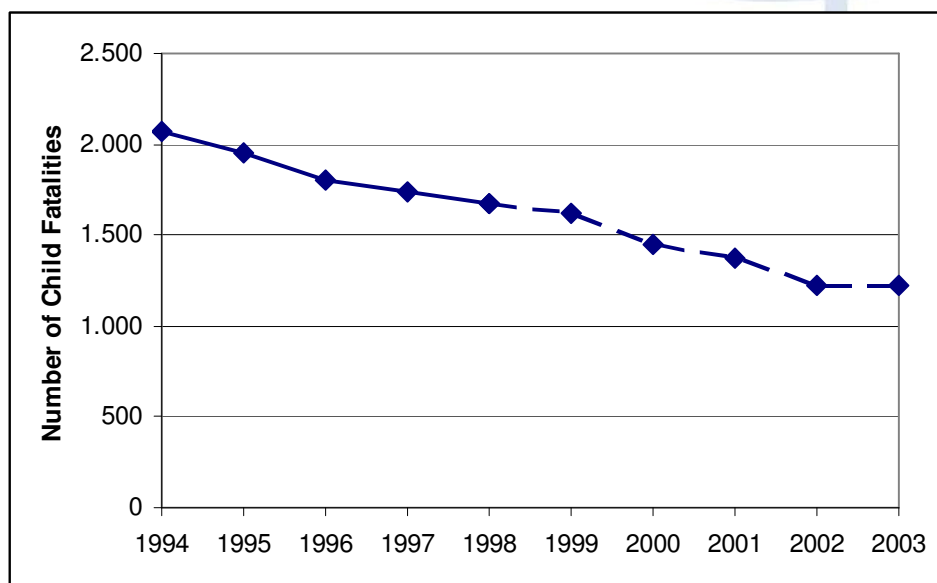
Source: CARE Database / EC
Date of query: September 2005

¹ Where the data for a particular country was not available for a particular year (ie. after 1998), the data for the most recent year for which it was available was used for calculating totals, averages etc.: IT (1998), BE (2001), LU, SE and UK (2002).

Well over 1.000
children died in road
traffic accidents in
2003¹



Figure 1: The number of child fatalities in the EU-14, 1994-2003¹



Source: CARE Database / EC
Date of query: September 2005

The annual number of children killed in road traffic accidents fell by more than two-fifths from 1994 to 2003¹

Table 2 shows the percentage of the national fatality totals accounted for by children and the percentage of each nation's population who are children. Where the fatality percentage is higher than the population percentage, children are at greater risk than the overall population, and *vice versa*. This comparison is made more precisely by:

$$\begin{aligned} \text{relative rate} &= \frac{\text{fatalities aged below 16} / \text{million population aged below 16}}{\text{fatalities of all ages} / \text{million population of all ages}} \\ &= \frac{\text{percentage of fatalities aged below 16}}{\text{percentage of population aged below 16}} \end{aligned}$$

Children (Aged < 16)

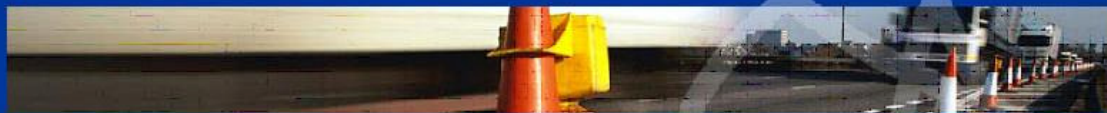


Table 2: Child fatality proportions per country, 2003¹

	% of fatalities	% of population	relative rate
BE**	4,78	18,73	0,26
DK	5,79	19,91	0,29
EL	3,68	16,38	0,22
ES	3,50	15,53	0,23
FR	4,04	19,95	0,20
IE	5,04	22,44	0,22
IT***	3,00	15,54	0,19
LU*	4,84	19,82	0,24
NL	6,91	19,80	0,35
AT	4,83	17,62	0,27
PT	4,08	16,85	0,24
FI	6,33	18,99	0,33
SE*	4,82	19,41	0,25
UK*	5,36	19,86	0,27
EU-14	4,11	18,11	0,23

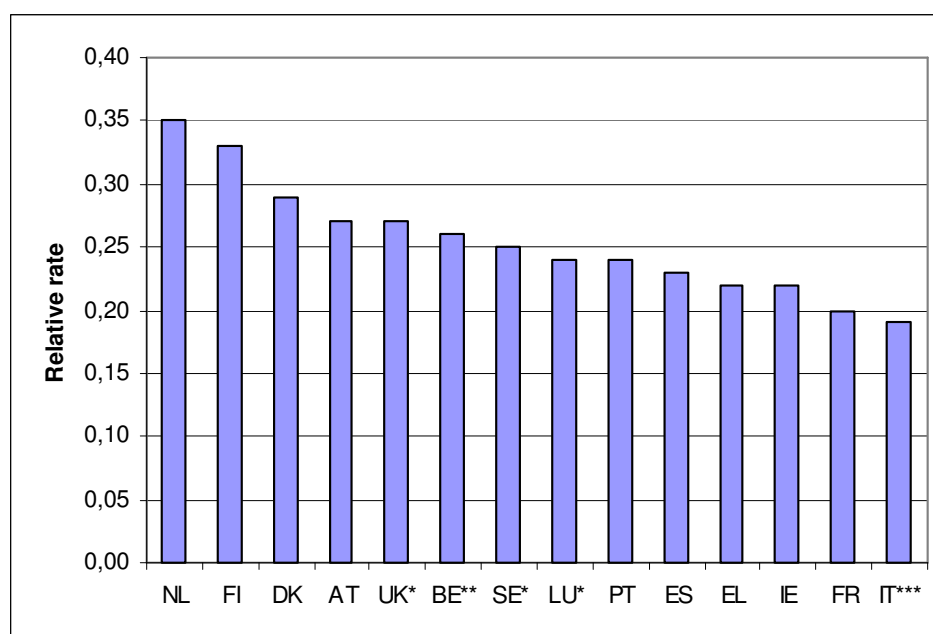
* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005
 Source of Population Data: IRTAD Database

Children are, on average, at less than a quarter of the risk of dying in a road traffic accident than the average person

Fewer than one in twenty fatalities in road traffic accidents is a child, although children make up almost one in five of the population. They are at less than a quarter of the risk of the average member of the population across the EU-14 as a whole. This varies from less than a fifth in Italy to more than a third in the Netherlands, as shown in Figure 2.

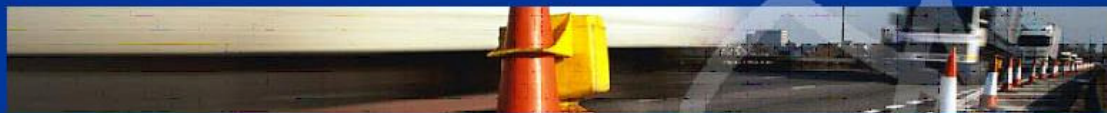
Figure 2: Relative rates for fatality proportions in children, 2003¹



* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005
 Source of Population database: IRTAD

Children (Aged < 16)



The number of child fatalities, as a proportion of all fatalities, has been gradually reducing over the last ten years. Table 3 shows the trend in the proportion in each country over the last decade.

Table 3: Fatalities aged <16 as a proportion of all fatalities per country, 1994-2003¹

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
BE	4,5%	6,4%	4,6%	4,5%	6,6%	5,2%	4,6%	4,8%	-	-
DK	4,9%	6,0%	8,8%	5,7%	4,4%	8,4%	6,0%	6,7%	3,5%	5,8%
EL	4,5%	3,5%	3,9%	4,0%	3,4%	3,1%	2,7%	3,0%	3,1%	3,7%
ES	5,2%	4,7%	4,3%	4,0%	4,4%	4,5%	3,9%	3,8%	3,5%	3,5%
FR	5,6%	5,6%	5,5%	5,8%	5,1%	5,0%	5,1%	4,3%	3,8%	4,0%
IE	8,2%	7,1%	6,8%	7,2%	8,7%	6,3%	5,7%	8,0%	6,1%	5,0%
IT	4,0%	3,5%	3,6%	3,2%	3,0%	-	-	-	-	-
LU	3,1%	1,4%	2,8%	5,0%	3,5%	3,4%	3,9%	8,6%	4,8%	-
NL	8,0%	7,5%	7,3%	6,8%	5,3%	7,5%	6,1%	6,1%	5,6%	6,9%
AT	4,9%	5,3%	5,6%	3,9%	5,0%	4,7%	3,6%	3,5%	3,5%	4,8%
PT	6,9%	6,0%	5,1%	5,5%	7,1%	4,8%	4,8%	3,9%	4,3%	4,1%
FI	9,2%	8,8%	9,9%	8,2%	6,0%	7,7%	5,8%	5,5%	4,8%	6,3%
SE	6,6%	6,1%	5,4%	5,9%	6,2%	7,6%	4,1%	4,3%	4,8%	-
UK	8,5%	7,7%	7,6%	7,2%	6,3%	6,7%	5,7%	6,4%	5,4%	-
EU-14	5,6%	5,3%	5,2%	5,0%	4,9%	4,8%	4,4%	4,2%	3,9%	4,1%

Source: CARE Database / EC
Date of query: September 2005

The proportion of fatalities that were children fell from 6% to 4% between 1994 and 2003¹

Age and Gender

Table 4 provides more detail about child fatalities, whilst Figure 3 presents the proportions of fatalities in each country split by gender. Whilst females account for approximately two-fifths of fatalities aged below ten years old, the proportion falls above this age, accounting for only a quarter of fifteen year olds killed in road traffic accidents.

However, in the case of both genders, more people in the 10 to 14 age group are killed than in either the under five or the 5 to 9 age groups, with the risk even higher for 15 year olds.

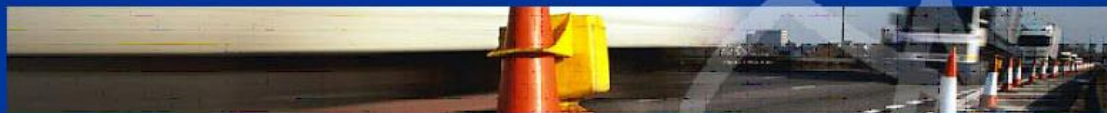


Table 4: Fatalities by gender, age and by country, 2003¹

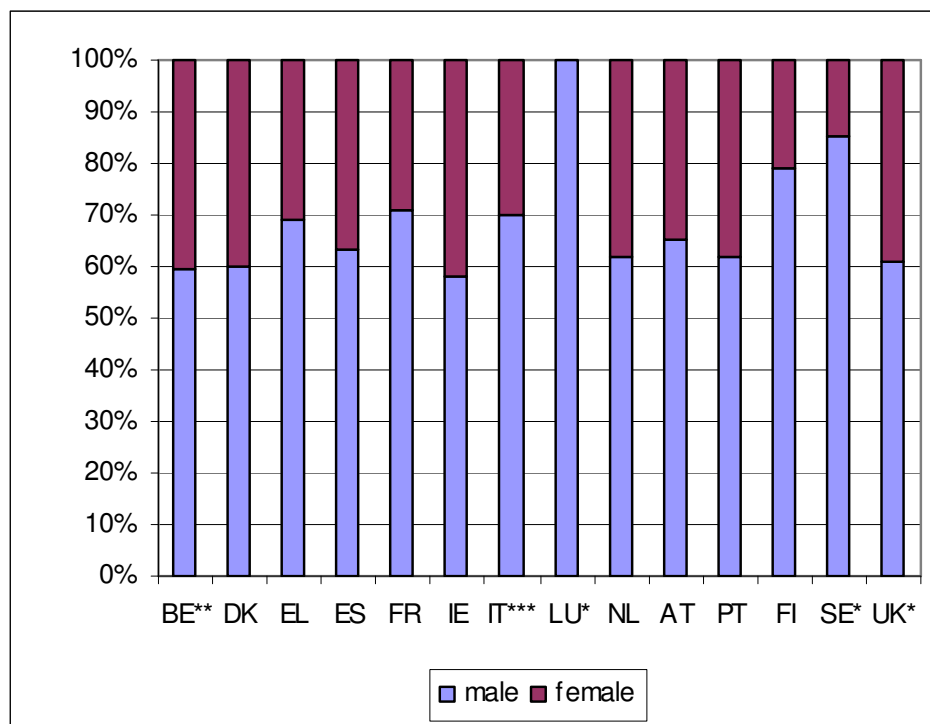
	Female					Male					Total
	<5	5-9	10-14	15	All Ages	<5	5-9	10-14	15	All Ages	
BE**	10	8	10	1	384	8	15	12	7	1.102	1.486
DK	4	3	3	0	122	3	2	7	3	310	432
EL	3	6	7	5	289	11	9	9	9	1.313	1.605
ES	22	22	24	8	1.246	24	27	36	26	4.060	5.397
FR	20	21	27	11	1.437	38	30	67	31	4.621	6.058
IE	3	2	2	0	79	4	3	2	0	246	337
IT***	19	13	25	9	1.480	20	22	45	36	4.830	6.310
LU*	0	0	0	0	12	2	0	1	0	50	62
NL	2	7	15	3	262	11	13	16	4	758	1.028
AT	5	0	8	3	251	5	7	12	5	680	931
PT	10	5	11	2	304	8	7	14	6	1.240	1.544
FI	3	0	2	0	107	7	1	9	2	272	379
SE*	1	2	0	1	137	3	3	9	8	423	560
UK*	13	20	33	10	915	25	20	49	22	2.662	3.581
EU-14	115	109	167	53	7.025	169	159	288	159	22.567	29.710
% by gender	40	41	37	25	24	60	59	63	75	76	100

* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005

In the case of both genders, more people in the 10-14 age group are killed than in either the under five or the 5-9 age groups

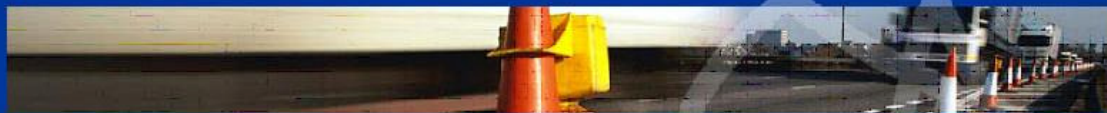
Figure 3: Distribution of fatalities amongst children by gender, 2003¹



* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005

Males account for approximately three-fifths of road traffic accident fatalities amongst children



Mode of Transport

Table 5 shows the distribution of child fatalities by mode of transport. Almost half of child fatalities are car or taxi occupants, with pedestrians accounting for more than a quarter. Ireland and the U.K. have the highest proportion of child pedestrian fatalities. Mopeds and pedal cycles each account for more than a tenth of child fatalities, with the proportions highest in Italy and the Netherlands respectively.

Table 5: Child fatalities by mode of transport and by country, 2003¹

	pedestrians	pedal cycle	moped	motor cycle	car or taxi	lorry, under 3.5 tonnes	heavy goods vehicle	bus or coach	agricultural tractor	other
BE**	24%	20%	1%	0%	48%	3%	3%	1%	0%	0%
DK	12%	12%	16%	0%	60%	0%	0%	0%	0%	0%
EL	17%	5%	0%	14%	47%	7%	0%	7%	3%	0%
ES	23%	3%	13%	0%	54%	6%	1%	1%	0%	0%
FR	21%	9%	17%	1%	51%	0%	0%	0%	0%	0%
IE	47%	18%	0%	0%	35%	0%	0%	0%	0%	0%
IT***	22%	9%	25%	1%	43%	0%	0%	1%	1%	0%
LU*	33%	0%	0%	0%	67%	0%	0%	0%	0%	0%
NL	24%	35%	4%	0%	28%	4%	0%	0%	4%	0%
AT	18%	11%	9%	0%	51%	0%	2%	0%	4%	4%
PT	35%	10%	0%	2%	49%	3%	0%	0%	2%	0%
FI	29%	13%	17%	4%	38%	0%	0%	0%	0%	0%
SE*	15%	7%	15%	4%	48%	0%	4%	7%	0%	0%
UK*	43%	13%	0%	2%	41%	0%	0%	2%	0%	0%
EU-14	26%	11%	11%	1%	46%	2%	0%	1%	1%	0%

* Data from 2002

** Data from 2001

*** Data from 1998

Source: CARE Database / EC
Date of query: September 2005

Children in cars or taxis account for almost half of child fatalities, whilst child pedestrians account for just over a quarter

As Table 6 and Figure 4 show, more than half of child fatalities are passengers, more than twice as many as there are child pedestrian fatalities. More than one in five child fatalities is a driver, though 'drivers' include those in charge of a pedal cycle, for example.



Table 6: Child fatality proportions per country, 2003¹

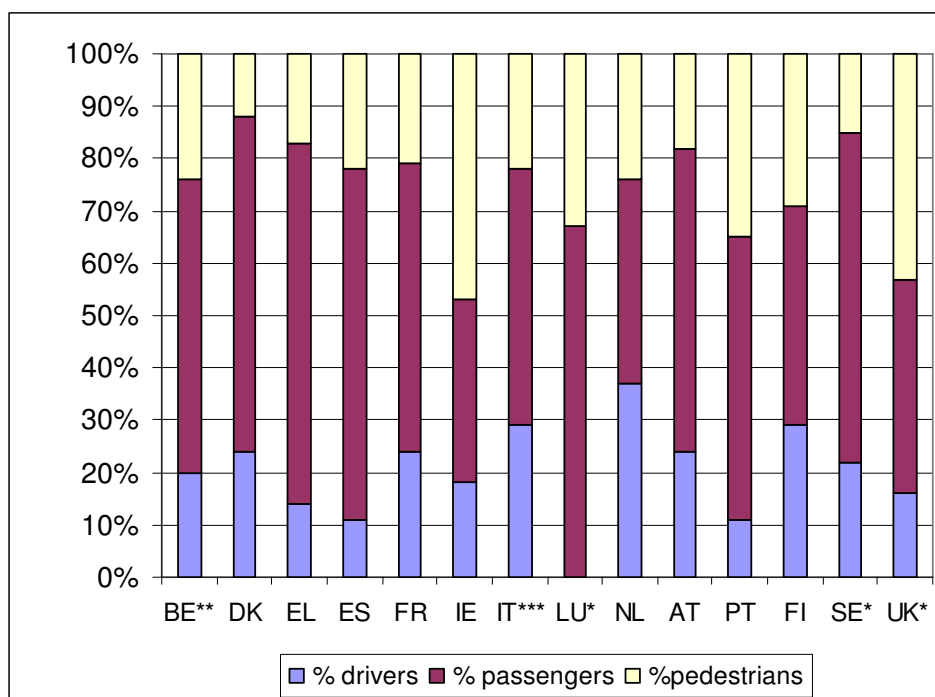
	% drivers	% passengers	%pedestrians
BE**	20%	56%	24%
DK	24%	64%	12%
EL	14%	69%	17%
ES	11%	67%	22%
FR	24%	55%	21%
IE	18%	35%	47%
IT***	29%	49%	22%
LU*	0%	67%	33%
NL	37%	39%	24%
AT	24%	58%	18%
PT	11%	54%	35%
FI	29%	42%	29%
SE*	22%	63%	15%
UK*	16%	41%	43%
EU-14	21%	54%	26%

* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005

More than one in five child fatalities is a 'driver'

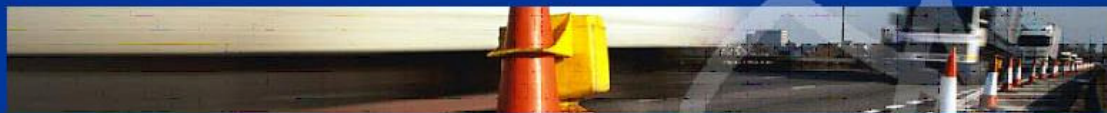
Figure 4: Distribution of drivers, passenger and pedestrians, in 2003¹



* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005

Children (Aged < 16)



Type of Road

The CARE data show whether each accident occurs on a motorway or not, and, if not, whether each occurs in an urban or a rural area. Table 7 shows the distribution of child fatalities for the twelve relevant countries, with the totals displayed in Figure 5. Fewer than one in ten child fatalities is on a motorway, with more than half not on a motorway and in a rural area. Italy, Portugal and the U.K. are the only countries with more than half of child fatalities in an urban area, not on a motorway. (It should, however, be noted that the data are only 78% complete for UK and 32% complete for Greece.)

Table 7: Distribution of child fatalities by road type, 2003¹

	motorway		non-motorway	
		rural	urban	
BE**	13%	48%	39%	
DK	12%	72%	16%	
EL	11%	89%	0%	
ES	9%	68%	23%	
FR	6%	59%	35%	
IE	0%	65%	35%	
IT***	12%	37%	51%	
LU*	33%	0%	67%	
NL	10%	46%	44%	
AT	16%	56%	29%	
PT	8%	36%	56%	
FI	0%	75%	25%	
SE*	4%	74%	22%	
UK*	6%	42%	52%	
EU-12	9%	54%	37%	

* Data from 2002

** Data from 2001

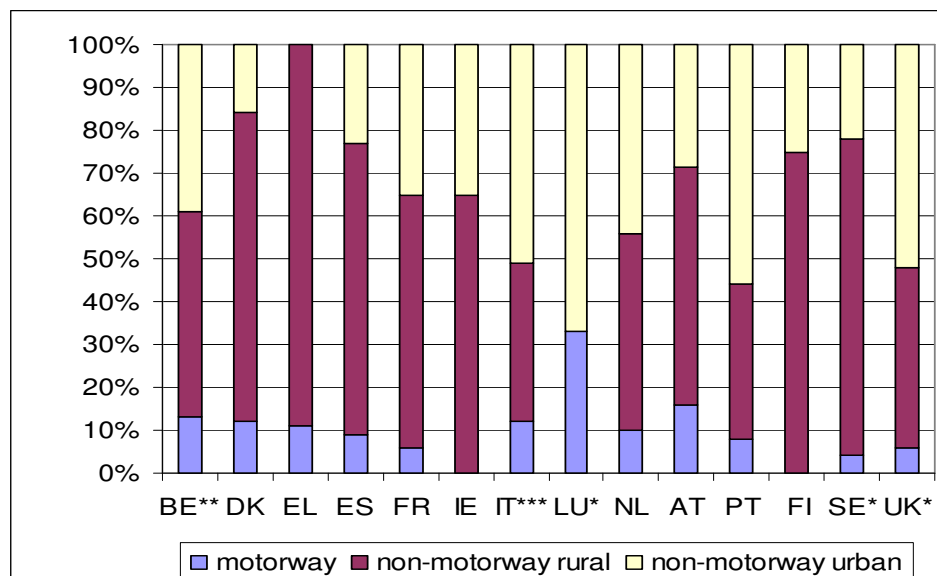
*** Data from 1998

Source: CARE Database / EC

Date of query: September 2005

Fewer than one in ten child fatalities is on a motorway

Figure 5: Distribution of child fatalities by road type, 2003¹



* Data from 2002

** Data from 2001

*** Data from 1998

Source: CARE Database / EC

Date of query: September 2005



Time of Day

In order to examine the distribution of child fatalities by time of day, the day has been divided into six four-hour periods beginning at midnight. Table 8 and Figure 6 show that more than a third of fatalities occur between 4pm and 8pm, with a quarter occurring between noon and 4pm. Denmark and Ireland have a particularly large proportion between 8am and noon, whilst Greece and Spain have a particularly large proportion between 8pm and midnight.

Table 8: Distribution of child fatalities by time of day, 2003¹

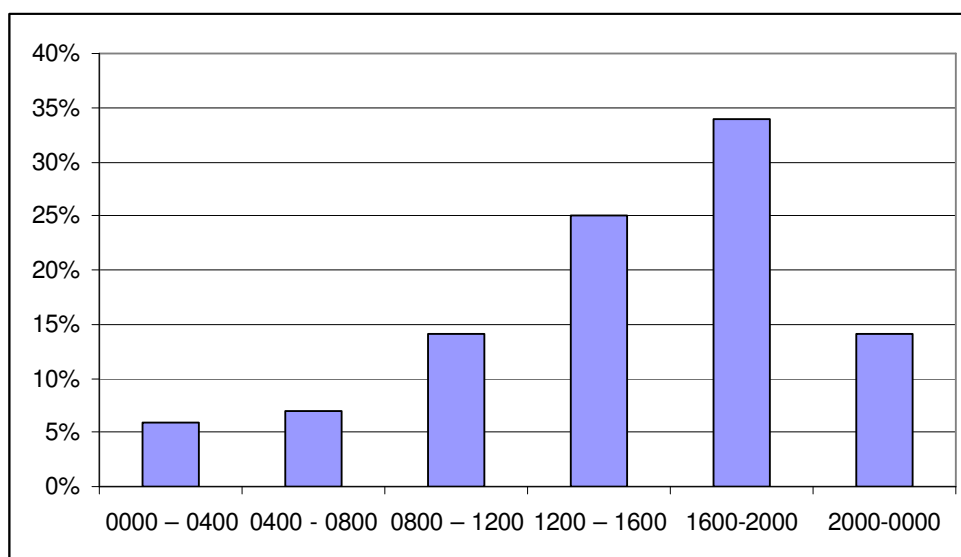
	0000 – 0400	0400 - 0800	0800 – 1200	1200 – 1600	1600-2000	2000-0000
BE**	6%	14%	11%	25%	33%	11%
DK	10%	10%	24%	21%	24%	10%
EL	10%	1%	10%	19%	36%	23%
ES	7%	6%	11%	22%	33%	21%
FR	4%	9%	16%	24%	36%	10%
IE	0%	0%	25%	33%	33%	8%
IT***	9%	4%	13%	28%	30%	16%
LU*	0%	0%	0%	67%	0%	33%
NL	2%	13%	18%	23%	32%	11%
AT	4%	7%	6%	37%	31%	15%
PT	3%	9%	17%	20%	44%	8%
FI	0%	3%	10%	41%	38%	7%
SE*	16%	6%	19%	23%	26%	10%
UK*	5%	8%	12%	23%	37%	14%
EU-14	6%	7%	14%	25%	34%	14%

* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005

There are more child fatalities between noon and 8pm than at all other times of the day

Figure 6: Distribution of child fatalities by time of day, EU-14, 2003¹



Source: CARE Database / EC
 Date of query: September 2005



Day of Week

Table 9 shows the distribution of child fatalities by the day of the week, with the totals displayed in Figure 7. Friday, Saturday and Sunday are the days with the most fatalities; Mondays and Thursdays have the fewest.

Table 9: Distribution of child fatalities by day of week, 2003¹

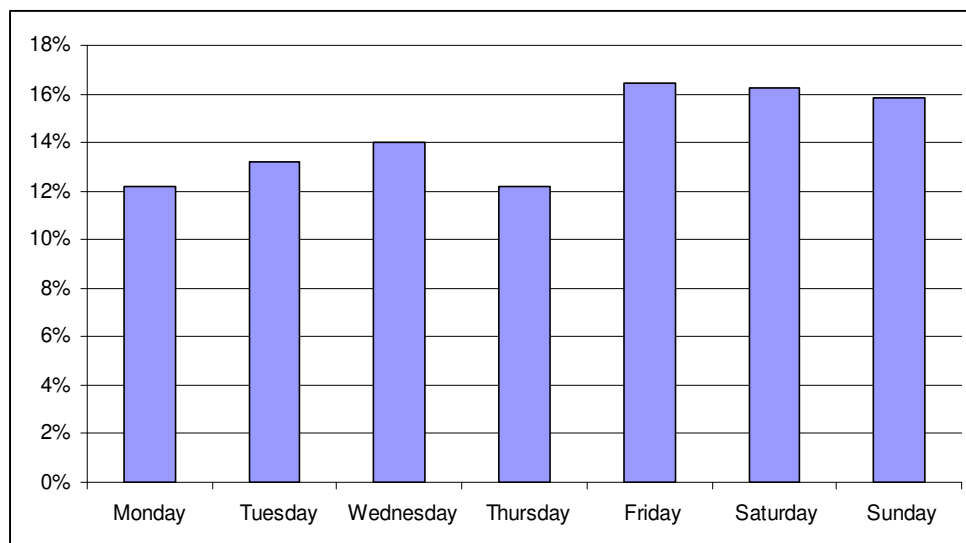
	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
BE**	15%	13%	13%	11%	21%	14%	13%
DK	20%	20%	12%	8%	8%	16%	16%
EL	10%	17%	22%	10%	10%	12%	19%
ES	11%	10%	11%	8%	16%	22%	21%
FR	13%	12%	16%	14%	14%	14%	17%
IE	6%	0%	18%	18%	24%	24%	12%
IT***	12%	17%	17%	13%	11%	17%	12%
LU*	67%	0%	33%	0%	0%	0%	0%
NL	8%	15%	15%	21%	17%	15%	7%
AT	20%	9%	9%	2%	20%	20%	20%
PT	3%	13%	2%	15%	15%	28%	23%
FI	17%	0%	17%	8%	17%	8%	33%
SE*	7%	15%	15%	4%	48%	7%	4%
UK*	13%	15%	14%	14%	20%	12%	13%
EU-14	12%	13%	14%	12%	16%	16%	16%

* Data from 2002
 ** Data from 2001
 *** Data from 1998

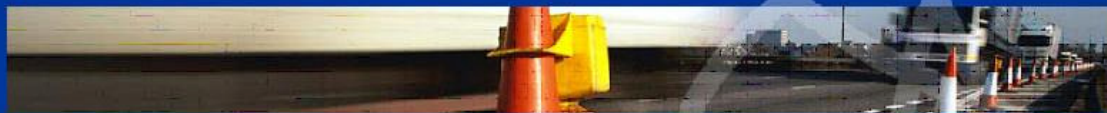
Source: CARE Database / EC
 Date of query: September 2005

The number of child fatalities per day is highest on Fridays, Saturdays and Sundays

Figure 7: Distribution of child fatalities by weekday, EU-14, 2003¹



Source: CARE Database / EC
 Date of query: September 2005



Seasonality

Table 10 shows the distribution of child fatalities through the year, using pairs of months, with the totals displayed in Figure 8. The peak period is July / August, though Denmark and Finland peak in May / June, whilst Sweden peaks in January / February and the U.K. peaks in March / April. Fewest fatalities occur in November / December, though only May / June and July / August have many more fatalities.

Table 10: Distribution of child fatalities by month, 2003¹

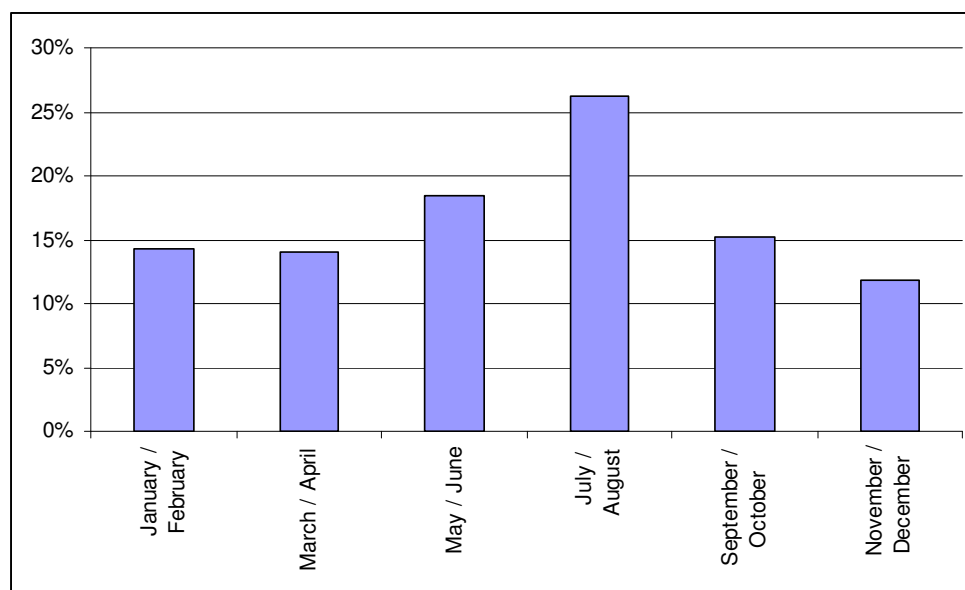
	January/ February	March/ April	May/ June	July/ August	September/ October	November/ December
BE**	10%	17%	11%	24%	18%	20%
DK	16%	12%	24%	20%	8%	20%
EL	14%	14%	12%	25%	22%	14%
ES	8%	14%	20%	38%	9%	10%
FR	15%	12%	19%	23%	17%	14%
IE	0%	18%	29%	35%	18%	0%
IT***	11%	17%	17%	26%	19%	10%
LU*	0%	0%	0%	67%	33%	0%
NL	14%	18%	21%	21%	18%	7%
AT	13%	18%	20%	24%	13%	11%
PT	12%	10%	19%	31%	16%	12%
FI	13%	17%	29%	13%	8%	21%
SE*	33%	11%	30%	15%	4%	7%
UK*	12%	22%	13%	19%	17%	18%
EU-14	14%	14%	18%	26%	15%	12%

* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005

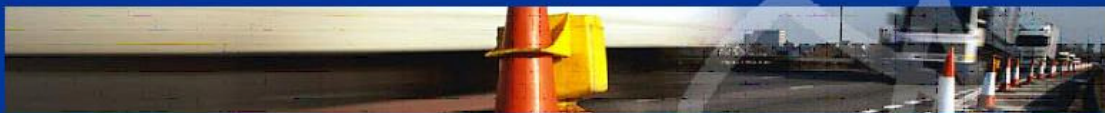
Fatalities amongst children fluctuate with the seasons, with summer being the riskiest time and winter the safest

Figure 8: Distribution of child fatalities by month, EU-14, 2003¹



* Data from 2002
 ** Data from 2001
 *** Data from 1998

Source: CARE Database / EC
 Date of query: September 2005



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 child 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:

- Children (Aged <16)
- Young People (Aged 16-24)
- The Elderly
- Pedestrians
- Motorcycle and Mopeds
- Car-Occupants
- Motorways

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 SafetyNet Integrated Project, co-financed by the European Commission, Directorate-General Energy and Transport is available at the SafetyNet Website:

<http://safetynet.swov.nl/>.

Authors:

Jeremy Broughton, Brian Lawton, Louise Walter	TRL, United Kingdom
Stefan Hoeglinger	KfV, Austria
George Yannis and Petros Evgenikos	NTUA, Greece
Niels Bos	SWOV, The Netherlands